

BOARD OF SUPERVISORS
Yolo County, California

Meeting Date: January 24, 2023

To: Comm. Svcs. ✓

26.

Hold a public hearing to consider a recommendation by the Planning Commission to adopt a resolution amending the 2030 Countywide General Plan to address Environmental Justice and Climate Action policies, as mandated by State law and find that the project is exempt from the California Environmental Quality Act (CEQA). The amendments would update the Land Use and Community Character Element, Conservation and Open Space Element, and Health and Safety Element of the General Plan. (No general fund impact) (Lindbo/Trebec)

Minute Order No. 23-07: Held public hearing and approved recommend action by **Resolution No. 23-13**.

MOVED BY: Frerichs / SECONDED BY: Barajas
AYES: Frerichs, Sandy, Provenza, Barajas, Villegas.
NOES: None.
ABSTAIN: None.
ABSENT: None.

ATTACHMENT E

RESOLUTION NO. 2023- 13

RESOLUTION OF THE YOLO COUNTY BOARD OF SUPERVISORS AMENDING THE YOLO COUNTY GENERAL PLAN TO ADOPT STATE MANDATED CLIMATE ADAPTATION AND RESILIENCE, ENVIRONMENTAL JUSTICE, AND ASSOCIATED POLICIES

WHEREAS, on September 3rd, 2021, the County of Yolo Board of Supervisors adopted the 6th Cycle Housing Element as an amendment to the 2030 Yolo Countywide General Plan (“General Plan”) in accordance with State law; and

WHEREAS, California Senate Bills 379 and 1000 require that all cities and counties include climate adaptation and resiliency strategies as well as environmental justice policies following a revision of the General Plan (Gov. Code § 65302); and

WHEREAS, an assessment by DeNovo Consulting Group determined that areas of the General Plan to be amended include fire hazards, emergency response and preparedness, environmental justice and climate change exposure and vulnerability; and

WHEREAS, the proposed amendment to the Land Use Element and Community Character Element, Conservation and Open Space Element, and Health and Safety Element of the General Plan will (i) address climate adaption and resiliency strategies, (ii) include a vulnerability assessment that identifies climate change-related risks, a set of adaptation resilience goals, policies, and objectives, and a set of implementation measures to avoid or minimize climate change impacts, locate essential public facilities outside of at-risk areas, designate adequate and feasible infrastructure in an at-risk area, guidelines for working cooperatively with relevant agencies, and identification of natural infrastructure that may be used in adaptation projects, and (iii) address evacuation routes, including addressing residential developments in any hazard area identified in the safety element that does not have at least two emergency evacuation routes, among other things; and

WHEREAS, the proposed Amendment is exempt from the California Environmental Quality Act (“CEQA”) under the “common sense” exemption found in Section 15061(b)(3) of the CEQA Guidelines because “it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment.”

NOW, THEREFORE, BE IT RESOLVED that the Board of Supervisors approves the amendment to the Land Use Element, Conservation and Open Space Element, and Health and Safety Element of the General Plan as shown on Exhibit A (Redlines provided on Exhibit B).

PASSED AND ADOPTED by the Board of Supervisors of the County of Yolo following a noticed public hearing on the 24th day of January, 2023, by the following vote:

AYES: **Frerichs, Sandy, Provenza, Barajas, Villegas.**

NOES: **None.**

ABSENT: **None.**

ABSTAIN: **None.**

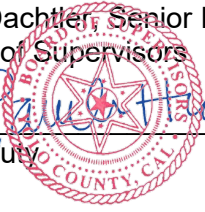


Oscar Villegas, Chair
Yolo County Board of Supervisors

ATTEST:

Julie Dachtler, Senior Deputy Clerk
Board of Supervisors

By  _____
Deputy (Seal)



APPROVED AS TO FORM:

Philip J. Pogledich, County Counsel

By  _____
Eric May, Senior Deputy County Counsel

**EXHIBIT A. AMENDED LAND USE AND COMMUNITY CHARACTER ELEMENT,
CONSERVATION AND OPEN SPACE ELEMENT, AND HEALTH AND SAFETY ELEMENT OF
THE GENERAL PLAN**

3 LAND USE AND COMMUNITY CHARACTER ELEMENT



Countryside Community Church in Esparto

Source: April Farnham-Morrison

This element seeks to preserve and foster the rural character of the County. The County has challenged itself to determine how small its communities can remain and yet still be sustainable in terms of infrastructure, balanced in terms of housing and jobs, and healthy in terms of quality of life and community services. Each existing rural town was examined in this manner and a modest amount of growth has been proposed for some areas. This element also establishes goals for regional collaboration and equity, green building standards, sustainable community design and net community benefits from new growth. Growth boundaries have been established for every community and each of the four cities.



A. Introduction

1. Context

From a land use perspective, this General Plan continues the County's strong focus on protecting our agricultural and open space resources, commodities and identity; resisting urbanization; and directing growth into the existing incorporated cities and towns. For the past 50 years, these policies have been tremendously successful. Over 93 percent of the County remains in farmland and open space, despite intense development pressures from both the Sacramento and Bay Area metropolitan areas. Although Yolo County is 39th in size among the 58 California counties, as of 2006 it ranked 23rd in total crop value. In particular, the County continues to be among the State leaders in tomato, hay, honeydew, and organic crop production, and has a rapidly growing wine grape industry. The management of growth has been equally successful. The cities and towns in the County house 93 percent of the population, but account for less than 6 percent of the total area. As a result, Yolo County has retained and strengthened its identity as a place of small and modest urban areas, vast open lands and innovative government.

As Yolo County looks ahead to the next 20 years, these issues will become even more important to ensure sustainable communities, a reliable food supply and a healthy environment. However, this vision needs to expand to address new challenges. First, the small unincorporated towns require significant new investment in basic infrastructure and amenities to serve existing populations and revitalize existing commercial areas. Second, the local economy needs to diversify beyond its reliance on agriculture, to provide a more stable job market and increase government revenue streams. Third, the County and local special districts need to improve the cost-effectiveness of service delivery. Fourth, Yolo County needs to adopt development standards and designs that account for and help to reduce future climate change. Consequently, this General Plan embraces the following strategies:

1. Modest managed growth within specified existing unincorporated communities, where accompanied by improvements to existing infrastructure and services, as well as by suitable new infrastructure and services.
2. Opportunities for revenue-producing and job-producing agricultural, industrial and commercial growth in limited locations and along key transportation corridors.
3. Thresholds that allow for effective and efficient provision of services, consistent with rural values and expectations.
4. New emphasis on community and neighborhood design requirements that reflect "smart growth" principles and complement the character of existing developed areas.



2. Contents

This element addresses land use issues throughout Yolo County including:

1. Range and balance of land uses (Goal LU-1)
2. Agricultural preservation¹ (Goal LU-2)
3. Growth management (Goal LU-3)
4. Delta land use and resource management (Goal LU-4)
5. Equitable land use decisions (Goal LU-5)
6. Intra-County coordination (Goal LU-6)
7. Regional coordination (Goal LU-7)
8. Environmental justice (Goal LU-8)

This element addresses community character issues throughout Yolo County including:

1. Preservation of rural character (Goal CC-1)
2. Community planning (Goal CC-2)
3. Planned growth (Goal CC-3)
4. Project design (Goal CC-4)

This element contains the following sections: Introduction, Regulatory Framework, Policy Framework and Implementation Program. Within the Policy Framework and Implementation Program sections, policies and actions related to climate change are denoted with the symbol “🌍”.

3. Background Information

The 1983 General Plan included 75 separate land use designations for the unincorporated county. Table LU-1 (1983 Yolo County General Plan Land Use Designations and Acreages) is provided at the end of this Element and identifies acreages assigned to each of these designations in the prior General Plan and groups them by category.

Table LU-2 (1983 Yolo County General Plan Land Use Designations by Community Area) provides a breakdown of planned land uses under the prior General Plan, grouped by land use type and community area.

Table LU-3 (Summary of General Plan Land Use Designations and Acreages Countywide) provides countywide background information showing the current General Plan land use buildout for each of the four cities, with the 1983 General Plan land use buildout for the County unincorporated area.

¹ Also addressed in greater detail in the Agriculture and Economic Development Element.



Table LU-2 **1983 YOLO COUNTY GENERAL PLAN LAND USE DESIGNATIONS BY COMMUNITY AREA**

	Residential ^a	Jobs and Services ^b	Agriculture and Open Space	Totals
Community Areas				
Capay Valley ^c	70.5	1,010.7	102,730.0	103,811.2
Clarksburg	101.4	141.3	34,703.3	34,946.1
Dunnigan	408.0	280.1	3,179.5	3,867.6
Esparto	355.9	226.4	2,900.3	3,482.6
Knights Landing	104.4	240.0	3.1	347.6
Madison	26.9	23.7	30.3	80.9
Monument Hills	1,258.6	85.3	252.0	1,595.9
Yolo	76.8	34.1	2.0	112.9
Zamora	14.3	2.5	6.5	23.3
<i>Subtotals</i>	<i>2,416.8</i>	<i>2,044.1</i>	<i>143,807.0</i>	<i>148,268.0</i>
Other Areas				
Davis Area ^e	615.2	479.4	4,353.1	5,447.7
Outlying ^d	123.0	490.0	1,521.7	2,134.7
West Sac Area	0	0	0	0
Winters ^f	33.6	33.1	0	66.7
Woodland Area ^g	48.2	513.9	508.5	1,070.6
<i>Subtotals</i>	<i>820.0</i>	<i>1,516.4</i>	<i>6,383.3</i>	<i>8,719.7</i>
Remaining Unincorporated	0	8,160.2	456,077.1	464,237.3
Acreage Totals	3,236.8	11,720.7	606,267.4^h	621,224.0ⁱ

Notes: Units are in acres.

^a Residential = Residential Rural, Residential Low, Residential Medium and Residential High.

^b Jobs and Services = Commercial General, Commercial Local, Industrial, Public and Quasi-Public, Mixed, Parks and Recreation and Other.

^c Includes land uses in the towns of Capay, Guinda, Rumsey and Tribal lands.

^d Cache Creek Open Space, County Airport and Elkhorn.

^e Covell/Pole Line Road, Binning Farms, North Davis Meadows, Patwin Road, Jury Industrial, UC Davis, Royal Oaks MHP, Willow Bank, El Macero and Chiles Road.

^f El Rio Villa and Putah Creek Recreational Vehicle Park.

^g Spreckels, North Woodland, Willow Oak and East Woodland.

^h As allowed under the existing General Plan and based on past trends. General Plan buildout is assumed to include approximately 1,610 farm dwellings and approximately 520 acres of agricultural industrial or agricultural commercial development on Agricultural land.

ⁱ Minor differences in total due to rounding.

Source: 1983 Yolo County General Plan.



**Table LU-3 SUMMARY OF GENERAL PLAN LAND USE DESIGNATIONS AND ACREAGES
COUNTYWIDE (AS OF 2007)**

Land Use Categories	Incorporated Area (Current)						Unincorp.		
	Davis	W. Sac	Winters	Woodland	Incorp. Subtotal	%	Area (1983)	Acreage Total	%
Open Space	299	2,185	104	754	3,342	10.3	2,722	6,064	1.0
Agriculture	0	0	0	0	0	0.0	603,544	603,544	92.3
Recreation	402	322	45	252	1,021	3.2	1,121	2,142	0.3
Residential	3,940	4,316	770	4,169	13,195	40.8	3,237	16,432	2.5
Commercial	493	633	122	727	1,975	6.1	406	2,381	0.4
Industrial	433	2,656	75	2,281	5,445	16.8	1,195	6,640	1.0
Public	548	730	370	1,329	2,977	9.4	694	3,671	0.6
Mixed Use	11	889	50	0	950	2.9	145	1,095	0.2
Other	229	2,992	93	106	3,420	10.6	8,160	11,580	1.8
Subtotals	6,355	14,723	1,629	9,618	32,325	100%	621,224	653,549	100%

Notes: Units are in acres.

Source: City Planning Directors and 1983 Yolo County General Plan.

B. Regulatory Framework

1. State General Plan Requirements

State law (Section 65302a of the Government Code) mandates that the land use element contain the following key topics:

- Proposed general distribution, location and extent of land uses.
- Population density and building intensity by land use.
- Areas subject to flooding, including annual review of those areas.
- A designated land use category for timberland production.
- A consideration of the impact of new growth on land adjacent to military facilities and underlying military airspace.

State law (Section 65302.4 of the Government Code) also allows land use elements to address urban form and design including:

- Differentiating between neighborhoods, districts and corridors.
- Providing for a mixture of land uses and housing types within neighborhoods, districts and corridors.
- Providing specific measures for regulating relationships between buildings and between buildings and outdoor public areas including streets.



State law requires that General Plans address environmental justice, either as a stand-alone element or integrated into other elements. The environmental justice goals, policies, and objectives shall:

- Identify objectives and policies to reduce the unique or compounded health risks in disadvantaged communities (*a disadvantaged community is an area identified by the California Environmental Protection Agency (CalEPA) pursuant to Section 39711 of the Health and Safety Code or an area that is a low-income area that is disproportionately affected by environmental pollution and other hazards that can lead to negative health effects, exposure, or environmental degradation*) by means that include, but are not limited to, the reduction of pollution exposure, including the improvement of air quality, and the promotion of public facilities, food access, safe and sanitary homes, and physical activity.
- Identify objectives and policies to promote civic engagement in the public decision-making process.
- Identify objectives and policies that prioritize improvements and programs that address the needs of disadvantaged communities.

State law provides that the County can address these items in any format and is required to address them only to the extent that they are relevant in the County. Section 65301a of the Government Code indicates that the General Plan may be adopted in any format deemed appropriate or convenient by the Board of Supervisors, including the combining of elements. Section 65301c goes on to clarify that the County is required to address each of these items only to the extent that the subject of the element exists in the planning area.

In light of this, Yolo County has addressed all of the above items within this element, with the following exceptions:

- Flooding: Areas subject to flooding from a major (100 or 200-year) event and the requirement for annual review are addressed in the Health and Safety Element. Localized flood issues and storm drainage are addressed in the Public Facilities and Services Element.
- Timber Harvesting: A land use category for timberland production is not provided as the County has no timberland production areas.
- Military Facilities: The impact of new growth on military readiness activities is not addressed as the only military facility in the County, the McClellan/Davis Telecommunication Site, has been declared surplus by the Army and is now closed. Discussion regarding this facility and plans to convert it to a County open space facility are addressed in the Conservation and Open Space Element
- Land Use Planning Boundaries: All lands within the Yolo County boundary are within the Yolo County General Plan Area. However, the County does not have jurisdiction over the following, even though they are within the County boundary: federal lands,



State lands, University of California land, tribal trust land, incorporated cities, and, in many cases, lands owned by special districts such as school districts.

2. Land Use Designations

The land use designations listed below are utilized in this General Plan. Table LU-4 (Land Use Designations) is provided at the end of this Element and identifies the allowed uses, densities and intensities for each proposed new land use designation.

- Open Space (OS)
- Agriculture (AG)
- Parks and Recreation (PR)
- Residential Rural (RR)
- Residential Low (RL)
- Residential Medium (RM)
- Residential High (RH)
- Commercial General (CG)
- Commercial Local (CL)
- Industrial (IN)
- Public and Quasi-Public (PQ)
- Specific Plan (SP)
- Delta Protection Overlay (DPO)
- Natural Heritage Overlay (NHO)
- Agricultural District Overlay (ADO)
- Mineral Resource Overlay (MRO)
- Tribal Trust Overlay (TTO)

These base land uses consolidate and replace land use designations used in the 1983 General Plan and in many cases consolidate and replace designations used in various area plans. Table LU-1 identifies how the prior 1983 land use designations correspond to the new proposed land use designations. The 1983 combining designations are replaced with the overlay designations defined in this table.

3. Land Use Maps and Tables

Figure LU-1A is the Land Use Diagram for Yolo County. Figures LU-1B through LU-1G show each community in the County and are found at the end of the Element. This figure depicts the assignment of land use designations to all land within the County. Interpretive guidance and administrative procedures to assist with utilization of this figure are provided in Chapter 1.0 (Introduction and Administration) of this General Plan. Table LU-5 (2030



Yolo County General Plan Land Use Designations and Acreages) provides acreages assigned to each land use designation in this General Plan.

4. Spheres of Influence

This General Plan includes lands that are in unincorporated Yolo County but fall within the “spheres of influence” (SOIs) of the four incorporated cities. Every city in California has an SOI, although in some cases it is coterminous with the city’s corporate boundaries. Figure LU-1.1 provides the Spheres of Influence for each of the four Yolo County cities.

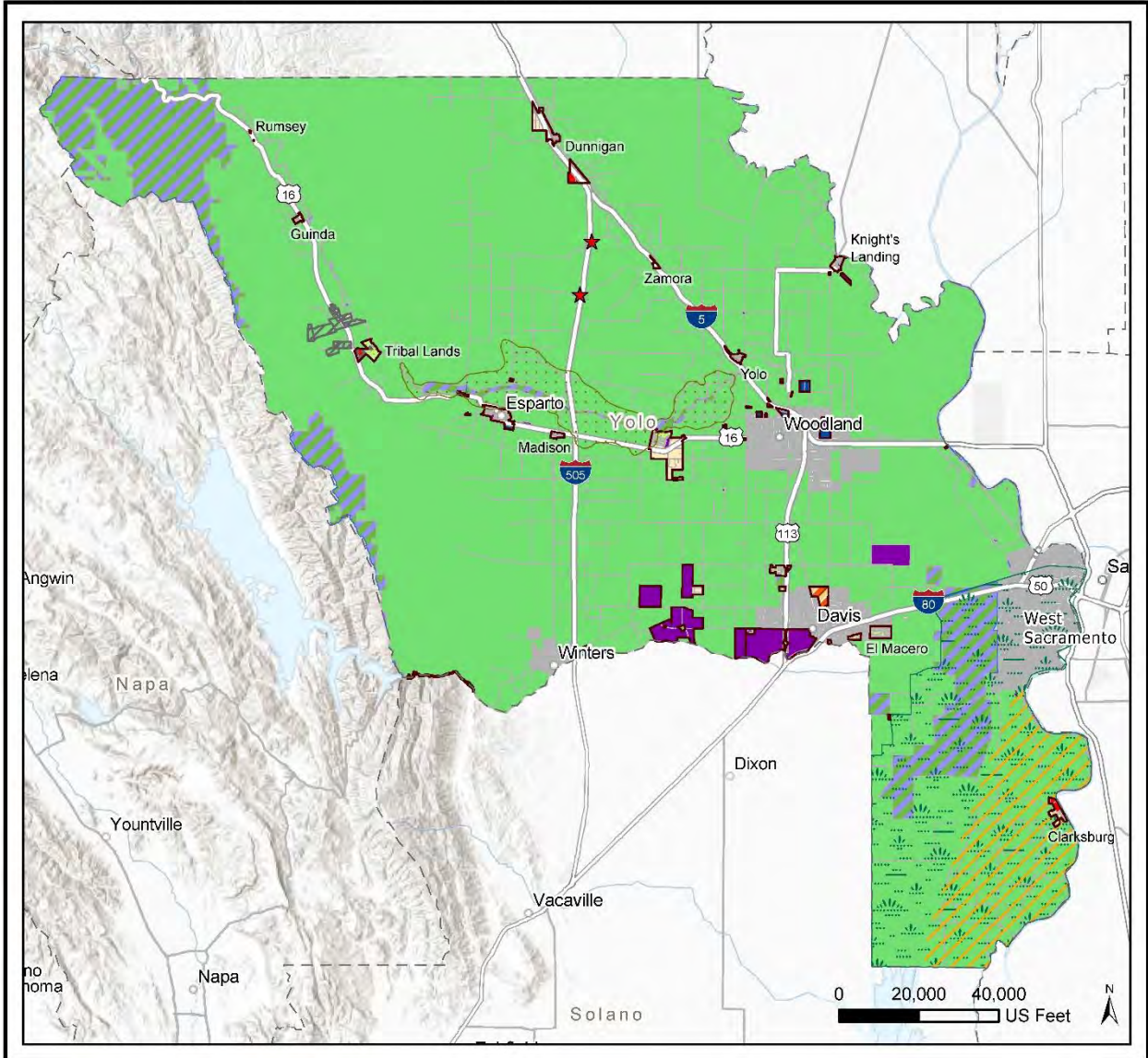
SOIs are adopted by the Local Agency Formation Commission (LAFCO) in each County. County LAFCOs were created by the State in 1963 to coordinate logical changes in local governmental boundaries in order to promote efficient provision of services, prevent urban sprawl and preserve agriculture and open space. Each LAFCO is responsible for adopting a sphere of influence for each city and special district in its County to represent “the probable physical boundaries and service area,” as required by California Government Code Section 56076.²

² State of California General Plan Guidelines, Governor’s Office of Planning and Research, 2003, page 10.



COUNTY OF YOLO
2030 COUNTYWIDE GENERAL PLAN
LAND USE AND COMMUNITY CHARACTER ELEMENT

FIGURE LU-1A GENERAL PLAN LAND USE MAP



- | | | |
|---|---|---|
| Agriculture (AG) | Commercial General (CG) | Tribal Trust Overlay (TTO) |
| Open Space (OS) | Commercial Local (CL) | Clarksburg Agricultural District Overlay (ADO) |
| Parks and Recreation (PR) | Industrial (IN) | Delta Protection Overlay (DPO) |
| Residential Rural (RR) | Public and Quasi-Public (PQ) | Mineral Resource Overlay (MRO) |
| Residential Low (RL) | Specific Plan (SP) | |
| Residential Medium (RM) | Cities | |
| Residential High (RH) | Growth Boundaries | |
| | | 15 acres of Commercial General will be located at one of these two sites |

Source: Yolo County GIS

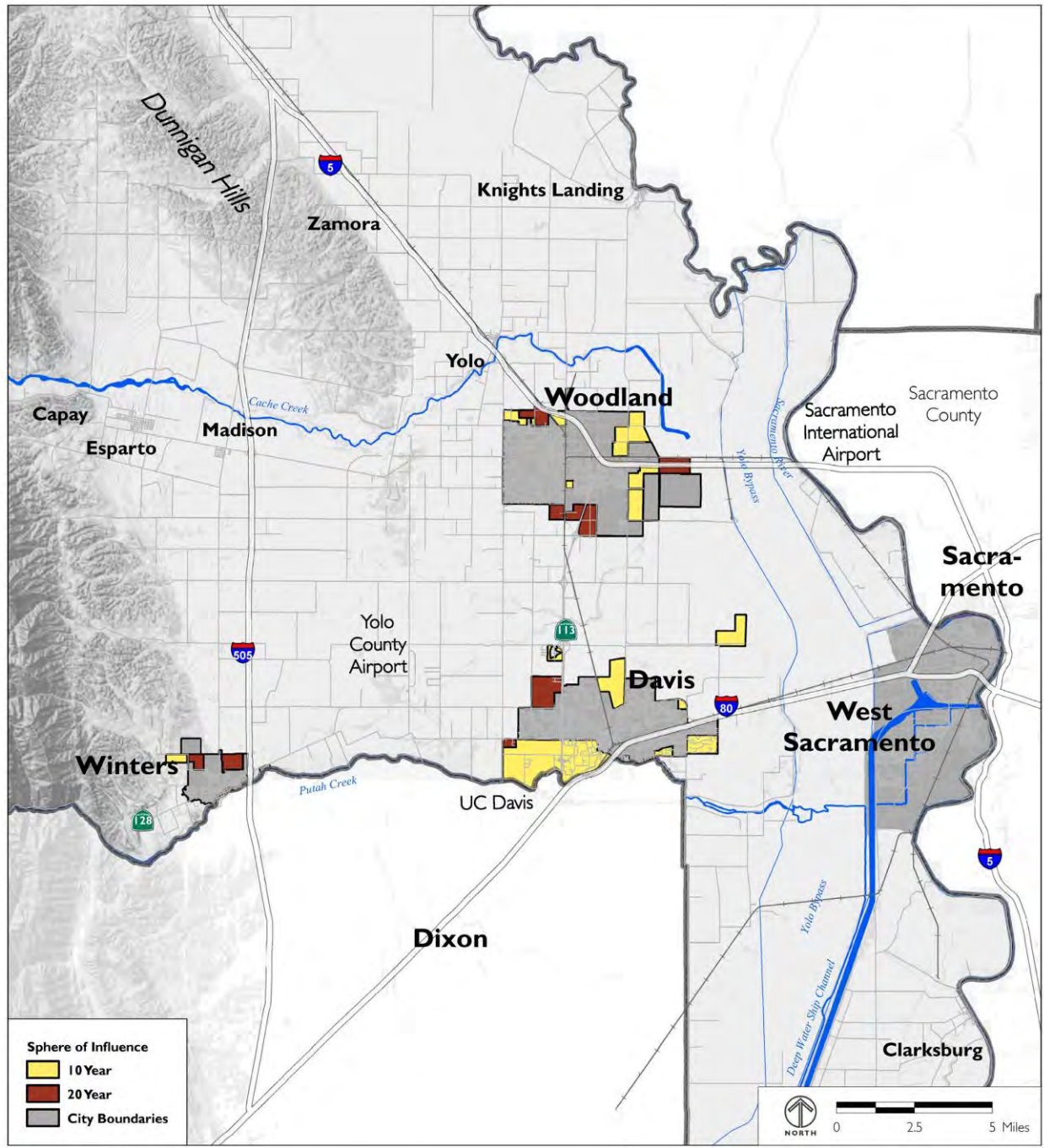


Table LU-5 2030 YOLO COUNTY GENERAL PLAN LAND USE DESIGNATIONS AND
ACREAGES

Land Use Designation	Acreage
Open Space	51,445
Agriculture	546,195
Parks and Recreation	890
Residential Rural	1,783
Residential Low	1,163
Residential Medium	162
Residential High	28
Commercial General	529
Commercial Local	118
Industrial	658
Public and Quasi-Public	7,334
Specific Plan	384
<i>Subtotal</i>	<i>610,689</i>
Incorporated Cities	32,325
Rights-of-Way	8,589
County Total	653,549
Specific Plan Area	
Covell Specific Plan	384
<i>Specific Plan Area Total</i>	<i>384</i>
Overlays	
Tribal Trust Overlay	483
Mineral Resource Overlay	18,452
Clarksburg Agricultural Overlay	35,171
Delta Protection Overlay	73,053



FIGURE LU-1.1 SPHERE OF INFLUENCE BOUNDARIES



Source: Yolo County GIS, 2009.



Many cities choose to designate land uses within their SOI areas on their General Plan Land Use Designation Map in order to express desired municipal land uses for those areas. The General Plans for West Sacramento, Davis, Woodland and Winters include land use designations for lands outside of their city limits, but inside their respective SOIs. Because these lands are legally under the County's jurisdiction, they are also included in the Yolo County General Plan and given land use designations in this General Plan. The designation in the County General Plan of lands within the SOI may differ from the designations shown in the City General Plan. Until SOI areas are annexed into a city's boundaries, the controlling land use designations for purposes of development are those of the County.

5. Growth Boundaries

This General Plan includes identified growth boundaries for all community and other outlying areas of the unincorporated County. These growth boundaries are shown in Figures LU-2A through LU-1H and defined as a boundary around the outer perimeter of each area of non-agriculturally designated land within the County. For the incorporated cities, the SOI boundaries are identified as the growth boundary for that City.

6. Relationship to the Yolo County Zoning Code

Title 8 (Land Development and Zoning) of the Yolo County Code contains the primary land development regulations of the County, including the Zoning Code. These regulations implement the General Plan and must be consistent. Inconsistencies between the two documents must be resolved in favor of the General Plan. The Zoning Code will be revised to bring it into conformance with this General Plan.

The Zoning Code, in particular, contains further refinements of the land use designations established in the General Plan, in the form of land use zones. Table LU-6 provides a matrix that correlates the land use zones of the existing Zoning Code with the land use designations of this General Plan update.

7. Land Use and Resources Management Plan for the Primary Zone of the Delta

The Land Use and Resources Management Plan for the Primary Zone of the Delta (LURMP) was developed in response to the Delta Protection Act of 1992, by the State Delta Protection Commission. The plan was adopted by the State in 1995 for the purpose of providing direction to local jurisdictions in the Delta region on land use decisions. The Plan addresses the environment, utilities and infrastructure, land use, agriculture, water, recreation and access, levees and boater safety. The General Plans for all jurisdictions within the Delta primary zone, including portions of Yolo County, are required to be consistent with this plan. The LURMP was adopted by the County as a General Plan amendment on March 18, 1997 by Resolution No. 97-34. The State is currently engaged in a process to update this plan. Upon completion, the County will be required to review this General Plan for consistency and make amendments as necessary.

8. Environmental Justice

Environmental justice is discussed in the Safety and Environmental Justice White Paper that was prepared in 2022 in support of a focused General Plan Amendment. The County



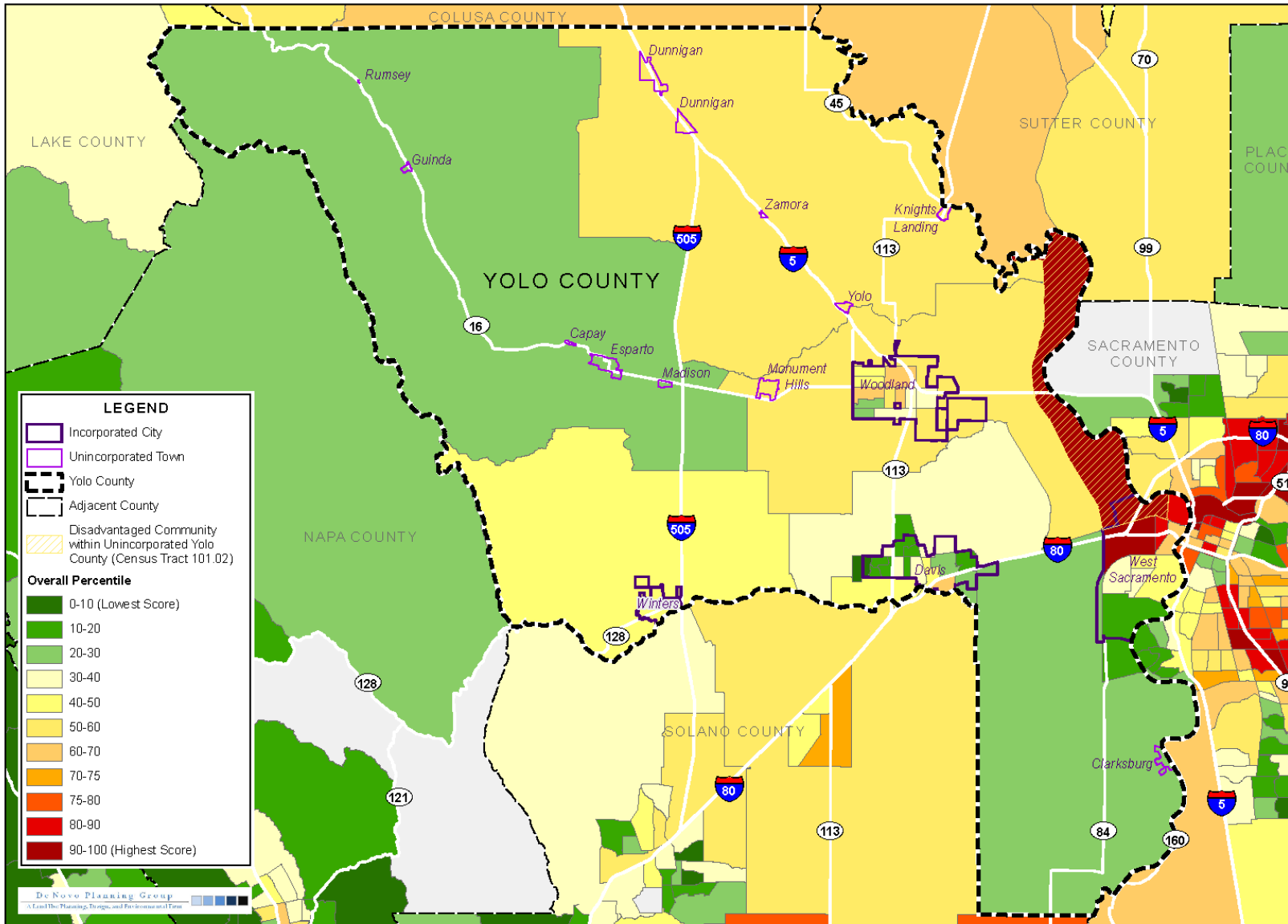
has a single census tract (6113010102) in the unincorporated area that is a disadvantaged community. 6113010102 is located primarily within the City of West Sacramento and includes a portion of the unincorporated County north of West Sacramento. As shown in Figure LU-1.2, the portion in the unincorporated County is largely undeveloped and sparsely populated with primarily agricultural uses.

In addition to addressing environmental justice in the Land Use Element, the 2030 General Plan also addresses topics related to environmental justice through:

- Circulation Element: Plans for a multimodal circulation system with equitable access to convenient, non-vehicle travel modes, including safe and well-connected pedestrian, bicycle, and transit routes to services, schools, parks, and community destinations
- Health and Safety Element. Takes actions to reduce exposure to environmental hazards and excessive noise and to increase access to health care resources, including supporting basic health care and mental health services and access to healthy foods in each community.
- Housing Element. Ensures a range of safe, affordable housing types accessible to the community, particularly disadvantaged and special needs groups, increases access to affordable housing in areas with higher economic, educational, environmental, and affirmatively furthers fair housing.
- Public Facilities and Services. Increases opportunities for recreational, social, and community services and ensure that high-quality community facilities and services are available to all members of the community
- Conservation and Open Space Element. Ensures a sustainable approach to clean water, clean air, access to open space, and conservation of natural resources and energy.



FIGURE LU 1-2 DISADVANTAGED COMMUNITY



Sources: OEHA CalEnviroScreen 4.0;
Yolo County GIS.
Map date: December 6, 2021.





TABLE LU-6 ZONING/GENERAL PLAN CONSISTENCY

General Plan Land Use Designation	General Plan Symbol	Zone Designation	Zone Symbol
Residential Land Use Designations			
Residential Rural	RR	Residential Rural – 2 acre Residential Rural – 5 acre	RR-2 RR-5
Residential Low	RL	Low Density Residential	R-L
Residential Medium	RM	Medium Density Residential	R-M
Residential High	RH	High Density Residential	R-H
Commercial Land Use Designations			
Commercial Local	CL	Local Commercial Downtown Mixed Use	C-L DMX
Commercial General	CG	General Commercial Downtown Mixed Use Highway Service Commercial	C-G DMX C-H
Industrial Land Use Designations			
Industrial	IN	Light Industrial Heavy Industrial Office Park Research and Development	I-L I-H OPRD
Other Land Use Designations			
Agriculture	AG	Agricultural Intensive Agricultural Extensive Agricultural Commercial Agricultural Industrial Agricultural Residential Sand and Gravel Overlay Sand and Gravel Reserve Overlay	A-N A-E A-C A-I A-R SG-O SGR-O
Open Space	OS	Public Open Space	POS
Parks and Recreation	PR	Parks and Recreation	P-R
Public/Quasi-Public	PQ	Public/Quasi-Public	PQP
Specific Plan	SP	Specific Plan	S-P
Overlay Land Use Designations			
Natural Heritage Overlay	NHO	Natural Heritage Overlay	NH-O
Agricultural District Overlay	ADO	Agricultural District Overlay	AD-O
Delta Protection Overlay	DPO	Delta Protection Overlay	DP-O
Mineral Resource Overlay	MRO	Sand and Gravel Overlay Sand and Gravel Reserve Overlay	SG-O SGR-O
Tribal Trust Overlay	TTO	Tribal Trust Overlay	TT-O

Note: The following zone overlays may be combined with any residential, commercial, industrial, or agriculture land use designation:

- B Special Building Overlay
- A-O Airport Overlay
- PD Planned Development Overlay



C. Policy Framework

1. Land Use Policies

GOAL LU-1	<u>Range and Balance of Land Uses.</u> Maintain an appropriate range and balance of land uses to maintain the variety of activities necessary for a diverse, healthy and sustainable society.
------------------	--

Policy LU-1.1 Assign the following range of land use designations throughout the County, as presented in detail in Table LU-4 (Land Use Designations):

Open Space (OS) includes public open space lands, major natural water bodies, agricultural buffer areas, and habitat. The primary land use is characterized by “passive” and/or very low-intensity management, as distinguished from AG or PR land use designations, which involve more intense management of the land. Detention basins are allowed as an ancillary use when designed with naturalized features and native landscaping, compatible with the open space primary use.

Agriculture (AG) includes the full range of cultivated agriculture, such as row crops, cannabis cultivation, cannabis nurseries, cannabis processing, 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; cannabis manufacturing, testing, and distribution; cannabis retail – non-storefront; cannabis microbusiness; 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. Agriculture also includes farmworker housing, surface mining, and incidental habitat.

Parks and Recreation (PR) includes developed (or “active”) park facilities, such as regional, community and neighborhood parks, tot lots, sports fields, and public pools. Also may include agricultural buffer areas. Detention basins are allowed as an ancillary use when designed with recreational or sports features.

Residential Rural (RR) includes large lot rural homes with primarily detached single-family units, although attached and/or detached second units or duplexes are allowed. Density range: 1du/5ac to <0.5 du/ac.



Residential Low (RL) includes traditional neighborhoods with primarily detached single-family units, although attached and/or detached second units or duplexes are allowed. Triplexes and four-plexes allowed when designed to be compatible with adjoining single-family homes. Small compatible neighborhood serving retail and office allowed as ancillary use. Density range: 1 du/ac to <10 du/ac.

Residential Medium (RM) includes dense neighborhoods with primarily attached single family and multi-family units, although detached single-family units are allowed. Small compatible neighborhood serving retail and office allowed as ancillary use. Density range: 10 du/ac to <20 du/ac.

Residential High (RH) includes apartments, condominiums, townhouses and other attached multi-family units. Small compatible neighborhood serving retail and office allowed as ancillary use. Density range: ≥ 20 du/ac.

Commercial General (CG) includes regional and highway-serving retail, offices, service retail and agricultural commercial uses. Research and development is allowed where offices and service support uses are the primary use (accounting for more than 50 percent of the total square footage). There is no limit on the amount of ground floor square footage. Upper floor and accessory attached residential uses are allowed. This designation also includes indoor and mixed-light cannabis cultivation, cannabis processing, cannabis manufacturing – packaging and labeling; cannabis distribution, cannabis retail, and cannabis microbusiness.

Commercial Local (CL) includes a range of goods and services to meet the everyday needs of residents within a community, such as retail, offices, service uses and agricultural commercial uses. There is a limit of 40,000 square feet allowed on the ground floor for any one user. Upper floor and ancillary attached residential uses are allowed. This designation also includes cannabis retail-storefront.

Industrial (IN) includes the full range of light to heavy industrial/manufacturing, including agricultural industrial uses (e.g. storage facilities, contractor's yards, corporation yards, dismantling, etc.). This designation also includes indoor and mixed light cannabis cultivation, cannabis nurseries, cannabis processing, cannabis manufacturing, cannabis testing, cannabis distribution cannabis retail, and cannabis microbusiness. Research and development, including biotechnology, is allowed where manufacturing is the primary use (accounting for more than 50 percent of the total square footage).



Public and Quasi-Public (PQ) includes public/governmental offices, places of worship, schools, libraries, and other community and/or civic uses. Also includes public airports, including related visitor services, and infrastructure including wastewater treatment facilities, municipal wells, landfills, and stormwater detention basins. May include agricultural buffer areas.

Specific Plan (SP) allows uses in the AG designation to continue temporarily until such time as the Specific Plan has been adopted, or the land use designation is otherwise amended. Ultimate land uses must be consistent with the adopted Specific Plan. Capital intensive agricultural uses are discouraged in lands designated Specific Plan so as not to preclude later planned uses.

Natural Heritage Overlay (NHO) applies to focused conservation areas identified in the Yolo Natural Heritage Program. Allowed land uses are limited to those consistent with the adopted Yolo Natural Heritage Program.

Agricultural District Overlay (ADO) applies to designated agricultural districts. Land uses consistent with the base designation and the district specifications are allowed.

Delta Protection Overlay (DPO) applies to the State designated “primary zone” of the Sacramento-San Joaquin Delta, as defined in the Delta Protection Act. Land uses consistent with the base designation and the Delta Protection Commission’s Land Use and Resource Management Plan are allowed.

Mineral Resource Overlay (MRO) applies to State designated mineral resource zones (MRZ-2) containing critical geological deposits needed for economic use, as well as existing mining operations.

Tribal Trust Overlay (TTO) applies to tribal trust lands held by the federal government for recognized tribal governments.

Policy LU-1.2 Figure LU-1, as it may be amended from time to time, is the Land Use Diagram for Yolo County.

Policy LU-1.3 The residential density ranges identified in Policy LU-1.1 are increased over the ranges in the prior (1983) General Plan and therefore allow for an increased yield of units on vacant or underutilized land throughout the County. In the communities of Dunnigan (+608 units), Esparto (-69 units), Knights Landing (+420 units), and Madison (+108 units) this has been determined to be an acceptable outcome. In all other instances



where this could occur, it is the intent of the County to hold the number of units to no more than would have originally been allowed.

Policy LU-1.4 Personal cultivation of cannabis, outdoor and indoor, compliant with all applicable state and local regulations, is an allowed land use in all agricultural, residential, commercial, and industrial general plan land use designations.

GOAL LU-2 Agricultural Preservation. Preserve farm land and expand opportunities for related business and infrastructure to ensure a strong local agricultural economy. (See the Agriculture and Economic Development Element for a more comprehensive treatment of this issue.)

Policy LU-2.1 The intent of this policy is to protect existing farm operations from impacts related to the encroachment of urban uses. The expertise of the County Agricultural Commissioner shall be used in applying this policy. Urban development shall bear the primary burden of this policy. 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 or 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 interface 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. Agricultural commercial and/or agricultural industrial development is anticipated as shown in Table LU-7 (Anticipated Agricultural Commercial and/or Agricultural Industrial Growth) and in Figure LU-2 (New Targeted Future Agricultural Commercial and Agricultural Industrial Sites).

Manage home site development on smaller agricultural parcels that have been recognized through antiquated subdivisions and/or Certificates of Compliance where appropriate, to create compatibility with surrounding agricultural uses to the greatest extent possible, including: 1) discourage residential development; 2) encourage lot mergers to achieve larger parcel sizes; 3) encourage clustering of units either within



parcels or near existing homes on adjoining parcels to preserve farmland and natural resources; 4) encourage transfers of development rights to areas where additional farm dwellings are desired (e.g. organic farms that are labor intensive); 5) encourage deed restrictions, site design and development themes that support the agricultural use of the land; and 6) aggressively limit the impact of residential development where it does occur. 🌍



FIGURE LU-2 TARGETED FUTURE AGRICULTURAL COMMERCIAL AND AGRICULTURAL INDUSTRIAL SITES

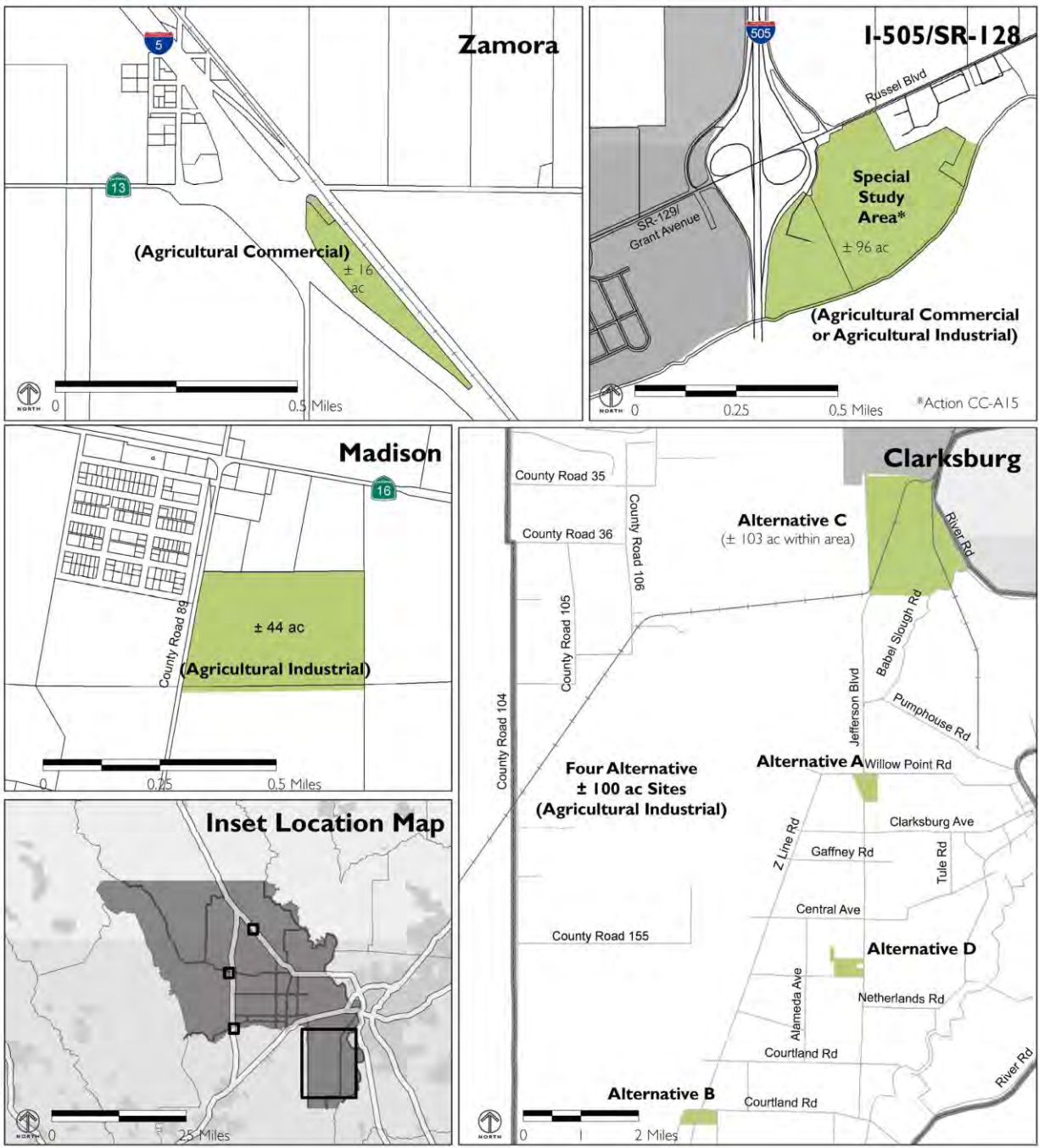




TABLE LU-7 ANTICIPATED AGRICULTURAL COMMERCIAL AND/OR AGRICULTURAL INDUSTRIAL GROWTH

Town	Existing Developed Acres ^a	Assumed Future Under 83 GP (Acres)	New Targeted Future Sites (Acres)	Other New Added Future (Acres)	Total
Clarksburg ^b	0	0	103.0	0	103.0
Madison ^c	0	0	44.0	0	44.0
Zamora ^d	0	0	16.0	0	16.0
I-505/SR 128 ^e	0	0	96.0	0	96.0
Unincorporated County	324.0	520.0		75.0	919.0
Total	324.0	520.0	259.0	75.0	1,178.0

Notes: In acres.

^a Very gross estimate based on data from Assessor's Office for agricultural preserves as modified by Planning staff to account for other facilities outside of agricultural preserves. This number is presumed to be significantly underestimated.

^b Four alternative agricultural industrial sites.

^c Agricultural industrial site.

^d Agricultural commercial site.

^e Agricultural industrial or agricultural commercial site.

- Policy LU-2.3 Prohibit the division of land in an agricultural area if the division is for non-agricultural purposes, if the division is for cannabis crops or activities, 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. (DEIR MM AG-2)
- 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.



GOAL LU-3 Growth Management. Manage growth to preserve and enhance Yolo County’s agriculture, environment, rural setting and small town character.

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, as depicted on the Land Use Diagram in Figure LU-1, with the exception of individual farm dwellings (houses allowed on agricultural land), other allowed units (e.g. second units, ancillary dwellings, houses allowed in mixed-use commercial areas, etc.) and housing allowed on existing residentially designated land. 🌍

Policy LU-3.2 With the exception of allowed ancillary residential units (e.g. second units, houses allowed in mixed-use commercial areas, etc.), residential growth within the growth boundaries is allowed as follows, subject to all required County approvals. (See Table LU-8, Allowed Residential Growth.)

TABLE LU-8 ALLOWED RESIDENTIAL GROWTH (IN UNITS)

Town	Existing Units ^a	Buildout Under 1983 GP ^b	New Added Units ^c	Total Allowed Units ^d
Capay	576	53	0	629
Clarksburg	177	22	0	199
Dunnigan	340	173	0	513
Esparto	905	985	521	2,411
Knights Landing	380	993	0	1,373
Madison	137	83	78	298
Monument Hills	583	25	0	608
Yolo	155	56	0	211
Zamora	14	14	0	28
Remaining Unincorporated	3,996 ^e	1,610 ^f	322	5,928
Total	7,263^g	4,014	921^h	12,198

^a Yolo County Planning and Public Works Department estimates of existing “on-the-ground” units based on County address data for 2007.

^b Based on vacant residentially designated land at allowed yields.

^c Communities/locations where additional residential growth (beyond that allowed under the 1983 General Plan) is allowed under the 2030 General Plan.

^d Sum of existing on-the-ground units + buildout allowed under 1983 General Plan + added new units under this General Plan update.

^e Difference between DOF unit total and numbers for each community.

^f This does not represent potential “full” buildout but rather a projection of the number of future farm dwellings through 2030 based on past trends. Assumes an average of 70 farm dwellings annually over 23 years.

^g California Department of Finance, 2007.

^h Total includes additional units that would be allowed per residential density range increases in Madison (108 units – 30 units from land use change on Reyes 3 acs), and Esparto (loss of 69 units). Also includes 322 farm dwellings countywide assumed with 20 percent density bonus for Agricultural TDR Program (see Action AG-A25).



- Policy LU-3.3 Allow commercial and industrial growth (not including agricultural commercial or agricultural industrial) as shown in Table LU-9 (Allowed Commercial and Industrial Growth), subject to all required County approvals. Within the areas designated for commercial and industrial land uses, where appropriate, the County shall target the following:
- A. Biotechnology facilities development, including development of “high tech” research and development campuses, as well as regional office, business park and light manufacturing nodes.
 - B. Research and development space to serve private businesses that result from UC Davis research activities.
 - C. Highway-oriented and regional commercial development, particularly along Interstate 5 and Interstate 505 and specialized retail to serve regional populations.
- Policy LU-3.4 Locate and design services and infrastructure to only serve existing and planned land uses. Actions that will induce growth beyond planned levels are prohibited. 🌐
- Policy LU-3.5 Avoid or minimize conflicts and/or incompatibilities between land uses.
- Policy LU-3.6 Maintain the compatibility of surrounding land uses and development, so as not to impede the existing and planned operation of public airports, landfills and related facilities and community sewage treatment facilities.
- Policy LU-3.7 Prohibit the designation of new urban development in places with one or more of the following characteristics: 🌐
- Areas without adequate emergency services and utility capacity and where there is no capital improvement plans to pay for and construct new facilities that can accommodate the proposed development.
 - Areas where there are significant hazards and where there are no plans to adequately mitigate the risk (e.g. floodplains, high fire hazard areas, unstable soils, known seismic faults, etc.).
 - Areas where there are significant natural resources (e.g. groundwater recharge, wildlife habitat, mineral or timber resources, scenic areas, etc.).
 - Areas not contiguous to existing urban development.
- 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.



TABLE LU-9 ALLOWED COMMERCIAL AND INDUSTRIAL GROWTH (IN ACRES)

Town	Existing Developed Acres ^a	Remaining Under 1983 GP ^b	New Added Acres ^c	Total Designated Acres ^{e,g}
Capay Valley	4.0	12.5	115.1	131.6
Clarksburg	134.0	3.0	0.3	137.3
Dunnigan	26.2	250.0	96.2	372.4
Esparto	6.0	123.3	-69.3 ^f	60.0
Knights Landing	11.0	103.4	-92.0	22.4
Madison	19.0	4.7	3.0	26.7
Monument Hills	6.0 ^g	16.0 ^g	2.7	24.7 ^g
Yolo	26.0	8.1	11.8	45.9
Zamora	1.0	0.9	12.9	14.8
Elkhorn Property	1.8	0	0	1.8
County Airport	66.0 ^e	236.0 ^e	0	302.0 ^e
I-505/CR14 or 12A	0	0	15.1	15.1
Spreckels Property	87.0	4.0	51.6	142.6
Covell/Pole Line	0	383.7 ^h	0	383.7 ^{h,i}
Remaining Unincorporated	43.3	385.4	-91.4	337.3
Total	431.3	1,531.0	56.0	2,018.3

^a Yolo County Planning and Public Works Department estimates of existing “on-the-ground” commercial and industrial land uses based on County address data for 2007.

^b Vacant commercially designated or industrially designated land.

^c Communities/locations where additional commercial or industrial growth (beyond that allowed under the 1983 General Plan) is allowed under the 2030 General Plan update. Does not include agricultural commercial and/or agricultural industrial acreage (see Table LU-7).

^d Sum of existing developed industrial and commercial acres + vacant industrial and commercial acreage under the 1983 General Plan + added new acreage under this General Plan update. See exception for airport property in footnote “e” and “g” below.

^e The County airport is designated “airport” under the 1983 General Plan which is a PQ designation under the 2030 General Plan. However, the non-runway portions of this facility function similar to an industrial or commercial land use. Therefore the non-runway acreage (302.0 acres) has been included here.

^f Primarily 79-acre industrial site south of SR-16 converted to other mixed uses.

^g The Watts-Woodland airport in Monument Hills is designated “airport” under the 1983 General Plan which is a PQ designation under the 2030 General Plan. However, the non-runway portions of this facility function similar to an industrial or commercial land use. Therefore the non-runway acreage (22.0 acres) has been included here.

^h Includes acreage from Specific Plan development capacities.

ⁱ Industrial and commercial acreages to be determined through the specific plan process and subsequent CEQA review.

Policy LU-3.9 Prohibit the creation of a ring of rural residential development around existing growth boundaries. 🌐

Policy LU-3.10 Conservations easements located within community growth boundaries will not be accepted for mitigation purposes.



GOAL LU-4 **Delta Land Use and Resource Management. Within the Delta Primary Zone, ensure the compatibility of land uses and decision-making with applicable policies of the Land Use and Resource Management Plan of the Delta Protection Commission.**

- Policy LU-4.1 Recognize the unique land use constraints and interests of the Delta area.
- Policy LU-4.2 Continue active involvement with State and regional efforts to establish policy, regulation and management for the Delta, to promote the economic and social sustainability of the town of Clarksburg, the viability of the Agricultural District, the habitat needs of the Yolo Natural Heritage Program and the water resources needed for the success of each of these efforts.

GOAL LU-5 **Equitable Land Use Decisions. Ensure inclusion, fair treatment and equitable outcomes in local land use decisions and regulations.**

- Policy LU-5.1 Balance land use decisions and land use burdens countywide so that there is not a disproportionate impact to any one group of residents because of age, culture, ethnicity, gender, race, socio-economic status, or other arbitrary factor.
- Policy LU-5.2 Allow for meaningful participation in the planning process by affected and interested groups or individuals.
- Policy LU-5.3 Employ strategies to overcome linguistic, institutional, cultural, economic and historic barriers to effective public participation in the planning process.
- Policy LU-5.4 Use existing community-based organizations, where available, to involve the public in the planning process.
- Policy LU-5.5 Ensure that public facilities, services and amenities are distributed equitably and in locations that enhance the quality of life for the broadest number of county residents.
- Policy LU-5.6 Assist existing communities to obtain the services, support and infrastructure needed to thrive and be successful.
- Policy LU-5.7 Support the Community Advisory Committees to ensure direct, local input on land use issues and on project applications.



Policy LU-5.8 Ensure that respect for and protection of private property rights is balanced with all other factors considered by the County in making land use decisions.

GOAL LU-6	<u>Intra-County Coordination.</u> Ensure inclusion, fair treatment and equitable outcomes for the County in land use planning matters involving other local government entities.
------------------	---

Policy LU-6.1 Continue to develop strong working relationships and effective inter-governmental review procedures with the Rumsey Band of Wintun Indians regarding their landholdings and interests, including the Cache Creek Casino Resort, to achieve the best possible outcomes consistent with the General Plan.

Policy LU-6.2 Coordinate with the University of California at Davis regarding the Long Range Development Plan (LRDP), campus facilities, housing, off-campus agricultural and open space property and joint venture development with the private sector to achieve the best possible outcomes consistent with the General Plan.

Policy LU-6.3 Coordinate with community college districts and tribal colleges within Yolo County regarding their long-term development plans for campus facilities and property, to achieve the best possible outcomes consistent with the General Plan.

Policy LU-6.4 Negotiate with each of the cities to achieve mutually beneficial outcomes related to, among other things: planning within spheres of influence; development impact fees for funding of regional parks and open space, regional roadways, government services that benefit the entire County (including incorporated areas), “replacement” funding for revenues foregone to protect agriculture and rural character, water resources, and flood protection.

Policy LU-6.5 Encourage schools and other special districts to locate new schools and other appropriate service facilities within the growth boundaries of the unincorporated communities. 🌐

Policy LU-6.6 Encourage independent special districts to locate offices and other facilities (where appropriate) within the downtown areas of the communities being served. 🌐

Policy LU-6.7 Revenue sharing agreements, redevelopment pass-through agreements and development impact fees shall provide for sufficient revenues to cover County revenue losses and costs.



- Policy LU-6.8 Negotiate annexation agreements with each city to ensure revenue neutrality and account for and fully reimburse the County for maintenance and operation of all relevant programs and services.
- Policy LU-6.9 Require that development agreements, tribal agreements, memoranda of understanding and other similar arrangements add community value by securing “net” public benefits over and above CEQA mitigation requirements and conditions of approval.
- Policy LU-6.10 Coordinate with other jurisdictions to create projects that result in mutually beneficial revenue generating land uses that result in fiscal benefits to the County and to its partners.
- Policy LU-6.11 Coordinate with the City of Davis to explore mutual opportunities regarding the following projects:
- a) Special needs housing, including housing for seniors in the area north of Covell Boulevard and west of State Route 113.
 - b) Land uses that complement UC Davis, the University Retirement Community, Sutter-Davis Hospital and other nearby social services in the area north of Covell Boulevard and west of State Route 113.
 - c) Alternatives for the Binning Estates project, including the clustering of residential units and increased densities. 🌍
 - d) Extension of water and sewer infrastructure to the Binning Farms community.
 - e) Life science, biotechnology and related research uses.
 - f) The possibility of commercial and mixed uses at Covell Boulevard/Pole Line Road and the possibility of coordinated planning with the Hunt Wesson site.
- Policy LU-6.12 Coordinate with and encourage the Rumsey Band of Wintun Indians to prepare, adopt, and implement a long-range tribal general plan for tribal trust land and meet or exceed a vehicle miles traveled (VMT) threshold of 44 miles generated per household per weekday. (DEIR MM LU-4g)
- Policy LU-6.13 Coordinate with and encourage the federal government for D-Q University and the University of California Regents for UC Davis to provide for a mix of uses on their land that would achieve a jobs/housing balance and meet or exceed a vehicle miles traveled (VMT) threshold of 44 miles generated per household per weekday. (DEIR MM LU-4h)



GOAL LU-7 Regional Coordination. Ensure inclusion, fair treatment and equitable outcomes for the County and its residents in regional land use planning efforts.

- Policy LU-7.1 Seek recognition, reimbursement and reward for foregone revenues and opportunities associated with the active preservation of agriculture, open space and important natural resources.
- Policy LU-7.2 Support and participate in countywide, regional and other multi-agency planning efforts related to housing, tourism, air quality, open space, green infrastructure, recreation, agriculture, habitat conservation, energy, emergency preparedness and flood protection. 🌍
- Policy LU-7.3 Coordinate with other stakeholder agencies and entities to continue local and regional planning efforts to preserve agriculture, open space and natural resources while meeting housing needs, basic infrastructure and service levels, County economic development goals and County fiscal objectives.
- Policy LU-7.4 Work with SACOG and its other member jurisdictions to develop a mutually-acceptable plan for open space conservation, habitat protection and mitigation banking, to ensure that Yolo County is appropriately compensated when its land is used to achieve region-wide environmental benefits.
- Policy LU-7.5 Support efforts to adopt a regional tax measure that would fund agricultural and open space acquisition, protection and maintenance.
- Policy LU-7.6 Coordinate with Napa, Lake, Colusa, Sutter, Sacramento and Solano Counties to mitigate the impacts of development in these jurisdictions on Yolo County.
- Policy LU-7.7 Pursue full funding of in-lieu tax payments for all state-owned public lands.
- Policy LU-7.8 Work with federal, State, and local agencies, and other interests to as part of a public-private partnership to develop and pursue site facilities that benefit and expand training opportunities for forensic sciences.

GOAL LU-8. Environmental Justice. Ensure an equitable distribution of public facilities and services, a safe and healthy environment, including access to healthy foods, recreation and activity, and public services, with an emphasis on equity for disadvantaged and vulnerable communities, and provide fair treatment and opportunities for meaningful involvement for all people.



- Policy LU-8.1 Require future planning decisions, development, and infrastructure and public projects to consider the effects of planning decisions on the overall health and well-being of the community and its residents, with specific consideration that emphasizes ensuring equitable access to facilities and amenities and addresses health and quality of life impacts.
- Policy LU-8.2 Ensure that land use, development, infrastructure, and other County decisions are conducted through an open and engaging process inclusive of community residents.
- Policy LU-8.3 As part of land use decisions, ensure that environmental justice issues related to potential adverse health impacts associated with land use decisions, including methods to reduce exposure to hazardous materials, industrial activity, vehicle exhaust, other sources of pollution, and excessive noise on residents regardless of age, culture, gender, race, socioeconomic status, or geographic location, are considered and addressed.
- Policy LU-8.4 Promote the rehabilitation or redevelopment of distressed properties, taking into consideration anti-gentrification strategies and addressing the potential for displacement of members of a disadvantaged community.



2. Community Character Policies

GOAL CC-1 **Preservation of Rural Character. Ensure that the rural character of the County is protected and enhanced, including the unique and distinct character of the unincorporated communities.**

- Policy CC-1.1 Encourage private landowners of both residential and commercial properties to maintain their property in a way that contributes to the attractive appearance of Yolo County, while recognizing that many of the land uses in the County, including agriculture and light industry, require a variety of on-site structures, equipment, machinery and vehicles in order to operate effectively.
- Policy CC-1.2 Preserve and enhance the rural landscape as an important scenic feature of the County.
- Policy CC-1.3 Protect the rural night sky as an important scenic feature to the greatest feasible extent where lighting is needed.
- Policy CC-1.4 Identify and preserve, where possible, landmarks and icons which contribute to the identity and character of the rural areas.
- Policy CC-1.5 Significant site features, such as trees, water courses, rock outcroppings, historic structures and scenic views shall be used to guide site planning and design in new development. Where possible, these features shall become focal points of the development.
- Policy CC-1.6 New freestanding off-site advertising along rural roads shall be limited. Existing non-conforming advertising shall be eliminated whenever possible.
- Policy CC-1.7 Reinforce the growth boundaries for each community through appropriate mechanisms including greenbelts, buffers, conservation easements and other community separators. 🌍

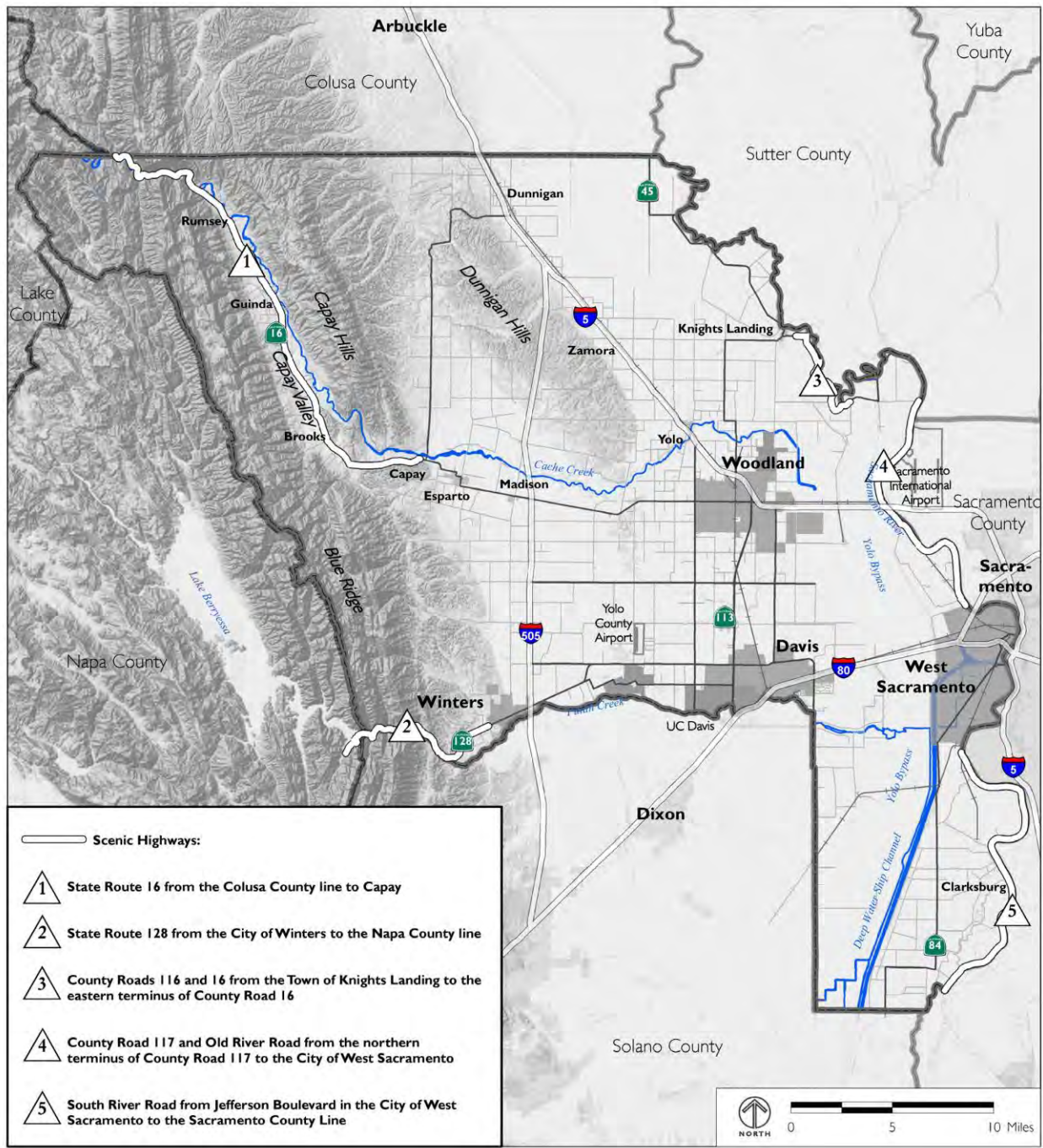




- Policy CC-1.8 Screen visually obtrusive activities and facilities such as infrastructure and utility facilities, storage yards, outdoor parking and display areas, along highways, freeways, roads and trails.
- Policy CC-1.9 In communities, place both new and existing line utilities and telecommunications infrastructure underground where feasible. Where underground utilities are not feasible, minimize the aesthetic impact by co-locating new improvements within existing lines and facilities where possible.
- Policy CC-1.10 Protect existing ridgelines and hillsides from visually incompatible development.
- Policy CC-1.11 Require the development of open space corridors, bicycle paths and trails integrating waterways, scenic areas and County parks where appropriate, in collaboration with affected land owners as a part of project approval. The intent is to connect each community and city and other special places and corridors, throughout the County. 🌍
- Policy CC-1.12 Preserve and enhance the scenic quality of the County's rural roadway system. Prohibit projects and activities that would obscure, detract from, or negatively affect the quality of views from designated scenic roadways or scenic highways.
- Policy CC-1.13 The following routes are designated as local scenic roadways, as shown in Figure LU-3 (Scenic Highways):
- State Route 16 (Colusa County line to Capay)
 - State Route 128 (Winters to Napa County line)
 - County Roads 116 and 116B (Knights Landing to eastern terminus of County Road 16)
 - County Roads 16 and 117 and Old River Road (County Road 107 to West Sacramento)
 - South River Road (West Sacramento City Limits to Sacramento County line)
- Policy CC-1.14 Designate other scenic roadways or routes where appropriate using the following criteria: the roadway or route traverses a scenic corridor, water feature, open space area or other interesting or unique areas, both urban and rural and may include bikeways, hiking and riding trails and pedestrian ways.



FIGURE LU-3 SCENIC HIGHWAYS



Source: Yolo County GIS, 2009.



Policy CC-1.15 The following features shall be protected and preserved along designated scenic roadways and routes, except where there are health and safety concerns:

- Trees and other natural or unique vegetation
- Landforms and natural or unique features
- Views and vistas
- Historic structures (where feasible), including buildings, bridges and signs

Policy CC-1.16 The following features shall be stringently regulated along designated scenic roadways and routes with the intent of preserving and protecting the scenic qualities of the roadway or route:

- Signage
- Architectural design of adjoining structures
- Construction, repair and maintenance operations
- Landscaping
- Litter control
- Water quality
- Power poles, towers, above-ground wire lines, wind power and solar power devices and antennae

Policy CC-1.17 Existing trees and vegetation and natural landforms along scenic roadways and routes shall be retained to the greatest feasible extent. Landscaping shall be required to enhance scenic qualities and/or screen unsightly views and shall emphasize the use of native plants and habitat restoration to the extent possible. Removal of trees, particularly those with scenic and/or historic value, shall be generally prohibited along the roadway or route.

Policy CC-1.18 Electric towers, solar power facilities, wind power facilities, communication transmission facilities and/or above ground lines shall be avoided along scenic roadways and routes, to the maximum feasible extent.

Policy CC-1.19 Unscreened outdoor storage of industrial and commercial parts and materials, salvage or junk, dismantled vehicles, used or new vehicle sales or, building materials for sale and similar materials, uses and things along designated scenic roadways and routes shall be prohibited.



GOAL CC-2 **Community Planning. Protect, enhance and redevelop existing communities.**

- Policy CC-2.1 Require planned growth to pay the full cost of new development, as well as, to the greatest feasible extent, benefit residents in each existing community through efforts that, among other things, result in basic urban services and community sustainability.
- Policy CC-2.2 Ensure that the appropriate base level of rural services and infrastructure for existing development in each community is required in connection with new development.
- Policy CC-2.3 Include open space corridors and trails throughout each community to provide off-street bicycle and pedestrian access, as well as connections to intra-county corridors and trails. 🌍
- Policy CC-2.4 Emphasize the unincorporated communities as retail, service and employment centers for local residents, as well as residents of surrounding rural (agricultural) areas. Where appropriate, include economic development in the unincorporated communities that serves intra-county and regional tourism. 🌍
- Policy CC-2.5 Plan future land uses within communities so that more dense/intense uses are located within the downtown area and/or at neighborhood centers, transitioning to less dense/intense uses at the growth boundary edge. There is no intent to create or allow a ring of “transitional” rural residential development outside the growth boundaries. 🌍
- Policy CC-2.6 Encourage infill development and the appropriate redevelopment of vacant and underutilized properties within existing unincorporated communities and prioritize infill projects over development on land at the planned community edge. 🌍
- Policy CC-2.7 Provide for higher density housing and mixed-use development in the downtown areas of the unincorporated communities to support commercial uses, create more pedestrian travel, extend activity into the evening, increase the variety of housing opportunities to include affordable and special needs housing, enhance safety, reduce traffic and support regular, frequent fixed-route transit service. 🌍
- Policy CC-2.8 Encourage a range of commercial, civic and cultural uses in the downtown areas of the unincorporated communities to encourage pedestrian travel, extend activity into the evening hours and create activities that involve all ages and groups. This shall include a diversity of retail uses within downtown areas, including retail shops that serve



daily household needs, essential services and tourism, such as a bank or post office, lodging, restaurants and entertainment. 🌍

- Policy CC-2.9 Locate County offices and other civic facilities in the downtown area of the unincorporated communities, whenever possible. 🌍
- Policy CC-2.10 Strive to achieve a minimum jobs/housing balance of 1.2 jobs for every dwelling unit on average within each unincorporated community, to the greatest extent feasible. (DEIR MM LU-4a) 🌍
- Policy CC-2.11 Strive to achieve a match between the prices of dwelling units and the salaries of the jobs provided within each unincorporated community, to the greatest extent feasible. (DEIR MM LU-4b) 🌍
- Policy CC-2.12 Strive to create an average yield community-wide of 16 jobs per acre for industrial, commercial and other job-generating land uses. 🌍
- Policy CC-2.13 Require 5 acres of turn-key neighborhood parks for every 1,000 people within each unincorporated community, proximate to residential neighborhoods. Ensure that the provision of neighborhood parks is phased concurrently with residential growth in the specific plan and community plan areas to meet and maintain this threshold. (DEIR MM PUB-3a)
- Policy CC-2.14 Encourage local hiring and buying practices within local communities and within the County as a whole, including County operations, where legally and economically feasible. 🌍
- Policy CC-2.15 Develop all services, parks, buffers and infrastructure within identified community growth boundaries. Mitigation lands for the loss of agricultural land and wildlife habitat are the only component of community development that are allowed to be located outside of the growth boundaries. 🌍
- Policy CC-2.16 Require the following sustainable design standards as appropriate for projects located within the growth boundaries of the unincorporated communities: 🌍
- A. Imaginative and comprehensive planning that seeks to make best use of existing community features and fully integrate new development.
 - B. Compact and cohesive communities that promote walking, bicycling and public transit.
 - C. Well defined neighborhoods served by parks, schools, greenbelts and trails.



- D. The fiscal impacts of development projects shall be revenue neutral or positive in terms of impacts to the County General Fund. Appropriate exceptions for socially beneficial projects such as affordable housing, parks, etc. may be allowed.
- E. Distinct neighborhood focal points such as a park and/or school and/or small neighborhood-serving retail site.
- F. Narrow streets lined with evenly-spaced trees of the same or alternating species forming a shade canopy.
- G. Vertical curbs and sidewalks separated from the street by landscaping.
- H. Street lighting and trail lighting, as appropriate, at a scale appropriate for pedestrians and bicycles.
- I. Maximum block lengths of 600 feet.
- J. Schools within walking distance of a majority of the homes served.
- K. A wide range of housing types, densities, sizes and affordability.
- L. Where housing is not near the downtown area, allow small neighborhood commercial nodes that provide retail and small office opportunities for neighborhood residents with the goal of accommodating routine daily needs within walking distance of most residents.
- M. Incorporate a grid street network that provides safe and efficient travel for all modes throughout the community with multiple connections to exterior routes.
- N. Orient the grid pattern of new streets to align north/south and east/west, to give a sense of place and direction in new community areas, as well as to maximize solar access.
- O. Downtown streets shall have parking on both sides.
- P. Downtown areas shall have one or more civic nodes such as a central park, town square, fountain plaza, etc.
- Q. Homes that do not back onto roads, parks, schools, greenbelts, trails, or water bodies. Instead, homes that front on these features shall access by way of single-loaded streets or other designs to improve public aesthetics and neighborhood security.
- R. Development regulations and design standards shall emphasize healthy community design and safe neighborhoods.
- S. Avoid noise walls to the greatest possible extent.
- T. Entry features shall be provided at all main community entrances and exits and shall announce the community by name.



- U. Except for parking provided onsite for individual residential lots, parking shall be located to the rear of the facility being served and screened from public view. Parking shall be landscaped to achieve a minimum of 50 percent shading.
- V. Development and incorporation of community art and activities.
- W. Encourage specific land uses and designs that support community diversity.
- X. Protect and preserve to the greatest feasible extent creeks, riparian areas and other biological values within or adjoining an area.
- Y. Incorporate low-water use appliances, drought tolerant landscaping and other water efficient features.
- Z. Provide convenient and secure bicycle parking in downtown areas.
- AA. To the greatest possible extent, avoid cul-de-sacs that create barriers for pedestrian and bicycle access to adjacent areas.
- BB. Include recharging stations, preferred parking, and other incentives for alternative energy vehicles.
- CC. Limit the amount of turf in yards for new residential developments to a maximum of 25 percent of the yard area.
- DD. Require the installation of low output sprinklers, such as drip, soaker hoses, and microspray in new residential development whenever possible.
- EE. Use recycling systems for chillers and cooling towers.
- FF. Demonstrate adherence to LEED Neighborhood Design Standards or the equivalent, for new development, including Specific Plans.
- GG. Demonstrate consistency with the County's Greenhouse Gas Emissions Reduction/Climate Action Plan(s), upon adoption.
- HH. Provide multiple connections for all modes through the community and with existing and planned development so that individual development projects are integrated with the surrounding communities. (DEIR MM LU-1a)



GOAL CC-3 Planned Development. Ensure that new growth addresses the challenges and opportunities unique to each community.

Policy CC-3.1 Update the Area General Plans for Capay Valley, Clarksburg, Esparto and Monument Hills in the form of new or updated Area Community Plans or Specific Plans. Prepare an area community plan for Yolo/Zamora.

Policy CC-3.2 Reconsider and rebalance the land use designations in Esparto in an effort to attain a jobs/housing ratio of 1.2 during preparation of the new or updated Area/Community Plan or Specific Plan for Esparto. (DEIR MM LU-1c)

Policy CC-3.3 Prepare a Specific Plan for the Covell/Pole Line Road property. (DEIR MM LU-2a)


Policy CC-3.4 During the planning process, require that target land uses and development capacities identified for the Specific Plan areas be modified to ensure that the community park threshold of 5 acres/1,000 population is met. (DEIR MM LU-2a)

Policy CC-3.5 Ensure the consistency of Specific Plans with the County General Plan. Project specific goals and policies for new development will be established in the Specific Plan, as well as design standards that address the character of the existing community.

Policy CC-3.6 Ensure that jobs are created concurrent with housing to the greatest feasible extent. Include requirements to ensure a reasonable ongoing balance between housing and jobs by phase. Strive to match overall wages to home prices.

For areas within Specific Plans the amount of land designated for residential and job generating uses shall be evaluated during the Specific Plan process, and land uses must be “re-balanced” within each phase in order to achieve a jobs/housing balance of 1.2 jobs per household. A jobs/housing monitoring program shall be established as part of each Specific Plan for its planning area. The jobs/housing relationship (balance, phasing, and match) for each Specific Plan area shall be monitored by phase. If, at the end of any phase, the required jobs/housing relationships are not achieved, the County shall require immediate and effective actions to be taken by the developer to ensure that the required jobs/housing relationship is achieved as a part of any subsequent phase. Such actions may include, but are not limited to, the following: changes in the amounts of land uses in remaining phases; financial/regulatory incentives to accelerate the development of underdeveloped land uses; smaller phases; limitations of permits for









overdeveloped land uses; and/or other actions as may be required. (DEIR MM LU-4c) 

- Policy CC-3.7 Encourage developers to show significant net benefit to the community, after accounting for all mandated capital and operational costs, to provide minimum quality of life services and sustainability standards.
- Policy CC-3.8 The community has identified two potential future growth areas in Dunnigan to be studied and considered as funds become available: the area west of the I-5/County Road 6 interchange, between CR 5 and CR6; and the west of the I-5/County Road 6 interchange and CR 7, between I-5 and CR 99W.
- Policy CC-3.9 There are four alternative identified sites for location of a future winery-related agricultural industrial facility in Clarksburg (see Figure LU-2). Only one site is intended for the described development. The project is intended to complement the Old Sugar Mill and to assist in establishing a successful critical mass of grape processing facilities to support emerging wineries.
- Policy CC-3.10 There are two alternative identified sites for location of highway commercial or agricultural commercial uses at Interstate 505 and County Road 14 or Interstate 505 and County Road 12A. Only one is intended for the described development.
- Policy CC-3.11 Encourage the development of life sciences, biotechnology and related research uses in appropriate commercial and industrial areas located along highway corridors throughout the county.
- Policy CC-3.12 Establish benefit assessment districts, where appropriate, to fund community infrastructure and services.
- Policy CC-3.13 Coordinate with Community Service Districts (CSDs) to ensure that new development will have access to quality infrastructure and services.
- Policy CC-3.14 Require buffers between new residential development and Interstates 5, 80, and 505 to protect residents from impacts related to air quality, noise, and other incompatibilities. See Action CO-106.
- Policy CC-3.15 Development of the Covell Specific Plan land uses, development capacities, other guidance for the specific plan (including Policy LU-6.11f), and applicable community planning guidelines per Table LU-11 shall occur pursuant to a subsequent public planning and environmental review process.



GOAL CC-4 **Project Design. Require project design that incorporates “smart growth” planning principles and “green” building standards that reflect the County’s commitment to sustainable development (see also Goal CO-7).**

- Policy CC-4.1 Reduce dependence upon fossil fuels, extracted underground metals, minerals and other non-renewable resources by: 
- Requiring projects to take advantage of shade, prevailing winds, landscaping and sun screens to reduce energy use.
 - Encouraging projects to use regenerative energy heating and cooling source alternatives to fossil fuels.
 - Encouraging projects to select building materials that require less energy-intensive production methods and long-distance transport, in compliance with Leadership in Energy and Environmental Design (LEED) or equivalent standards.
- Policy CC-4.2 Reduce dependence upon chemicals and unnatural substances through encouraging: 
- Use of chemical-free and toxic-free building materials.
 - Landscape design standards that minimize the use of pesticides and herbicides.
- Policy CC-4.3 Reduce activities that encroach upon nature, through: 
- Reuse of existing buildings and sites for development.
 - Compact and clustered residential development, including reduced minimum lot sizes.
 - Reduction or elimination of impervious paving materials.
 - Development patterns that respect natural systems such as watersheds and wildlife corridors.
- Policy CC-4.4 Encourage all new construction to be zero net energy by combining building energy efficiency design features with on-site clean distributed generation so as to result in no net purchases from the electricity or gas grid. 
- Policy CC-4.5 Encourage individual and community-based wind and solar energy systems (micro-grids). 
- Policy CC-4.6 Encourage all new residences to exceed Title 24 energy standards by at least 15 percent, and encourage all new commercial buildings to exceed Title 24 by at least 20 percent. 



- Policy CC-4.7 Require energy efficient design for all buildings. 🌍
- Policy CC-4.8 Require measures to minimize “heat islands” by requiring light-colored and reflective roofing materials and paint; “green” roofs; light colored roads and parking lots; extensive numbers of shade trees in parking lots; and shade trees and/or overhangs on the south and west sides of new or renovated buildings. 🌍
- Policy CC-4.9 Encourage construction and other heavy equipment vehicles (e.g. mining, agriculture, etc.) to use retrofit emission control devices. 🌍
- Policy CC-4.10 Require project design to demonstrate adherence to sustainable and neo-traditional design as described in the Ahwahnee Principles and as provided in the SACOG Blueprint, including any amendments or successor documents thereto. 🌍
- Policy CC-4.11 Site specific information shall be required for each application, subject to site conditions and available technical information, as determined by the County lead department, in order to enable informed decision-making and ensure consistency with the General Plan and with the assumptions of the General Plan EIR. Technical information and surveys requested may include, but not be limited to, the following: air quality and/or greenhouse gas emissions calculations, agricultural resource assessment/agricultural and evaluation and site assessment (LESA), biological resources assessment, cultural resources assessment, fiscal impact analysis, flood risk analysis, hydrology and water quality analysis, geotechnical/soils study, land use compatibility analysis, noise analysis, Phase One environmental site assessment, sewer capacity and service analysis, storm drainage capacity and service analysis, title report, traffic and circulation study, visual simulation and lighting study, and water supply assessment.
- When a technical study is required, it must cover the entire acreage upon which development is being proposed including any off-site improvements (e.g. wells; pumps; force mains; new roads; dirt borrow sites; etc.) that may be necessary. Technical studies must meet CEQA standards and the standards in the applicable industry. As necessary, the technical studies shall include recommendations that are to be implemented as part of the project. (DEIR MM LU-2b)
- Policy CC-4.12 Require “green” design, construction and operation including: 🌍
- A. Site planning sensitive to the natural environment.
 - B. Efficiency in resource use (including energy, water, raw materials and land).
 - C. Building reuse and adaptive reuse.



- D. Selection of materials and products based on their life-cycle environmental impacts.
- E. Use of materials and products with recycled content.
- F. Use of materials provided from within the region.
- G. Recycling of construction and demolition waste.
- H. Reduction in the use of toxic and harmful substances in the manufacturing of materials and during construction.
- I. Use of passive and active solar strategies and efficient heating and cooling technologies.
- K. Reduction in water use for buildings and landscaping.
- L. Light pollution reduction to protect “dark skies.”
- M. Improvements to interior and exterior environments leading to increased health, comfort and productivity.
- N. Facility maintenance and operational practices that reduce or eliminate harmful effects on people and the natural environment during occupancy.
- O. Water reuse systems
- P. Other systems to capture energy sources that would otherwise be wasted.

Policy CC-4.13 Enhance public safety through implementation of Crime Prevention Through Environmental Design (CPTED) strategies. These include designing the placement of activities and physical features, such as buildings, entrances and exits, corridors, fences, pavement, signs, lighting and landscaping, in such a way as to clearly define public and private space, maximize visibility, control access and circulation and foster positive social interaction.

Policy CC-4.14 Reflect a human scale in architecture that is sensitive, compatible and distinctive to both the site and the community.

Policy CC-4.15 Encourage “visitability” accommodations in new residential development.

Policy CC-4.16 Avoid the repetition of residential facades/designs within subdivisions and abrupt changes in facades between adjoining developments.

Policy CC-4.17 Front exterior living spaces of a usable size (e.g. front porches, large front-facing windows, balconies, etc.) are highly desirable.

Policy CC-4.18 Within community areas, houses shall front on the street.



- Policy CC-4.19 Discourage garage-forward and/or garage-dominated residential design.
- Policy CC-4.20 Discourage gated and/or walled communities.
- Policy CC-4.21 Encourage and promote multi-story and mixed-use buildings within the downtown areas of the unincorporated communities. 🌍
- Policy CC-4.22 Except for approved plazas, seating areas and entry nooks, buildings in downtown areas shall have zero front setbacks and on-site parking shall be to the rear of the lot. 🌍
- Policy CC-4.23 Usable public open spaces shall be included in new private commercial development, such as plazas, interior courtyards connected by pathways and outdoor seating areas.
- Policy CC-4.24 Incorporate art into the public open spaces of both public and private developments.
- Policy CC-4.25 Locate and design civic buildings as significant structures that help anchor and provide focus to the downtown area, with a character that fosters community identity and pride.
- Policy CC-4.26 Downtown architecture shall have a pedestrian scale, with varied and articulated facades. Entries must be oriented to the sidewalk. Front facades shall include numerous windows and covered arcades. 🌍
- 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.
- Policy CC-4.28 Provide appropriate buffers or barriers between incompatible residential and non-residential uses. The last-built use shall be responsible for design and construction (and/or other related costs) of the buffer/barrier.
- Policy CC-4.29 Non-residential corner lots in the downtown and other “gateway” settings shall receive special design treatment which may include enhanced landscaping, entry features that establish community identity, fountains, plazas, enhanced pedestrian furniture (bench and arbor) or similar features. Corner residential lots are encouraged to have duplex or other multi-family units with entries on each street face.
- Policy CC-4.30 Encourage clustering of allowed residential units to protect resources and/or improve efficiency of services. 🌍
- Policy CC-4.31 Require the use of regionally native drought-tolerant plants for landscaping where appropriate. 🌍



- Policy CC-4.32 Encourage mixed uses on vacant and underutilized land designated for development, particularly ancillary residential units and childcare facilities. 🌍
- Policy CC-4.33 Encourage mixed use development in commercial areas in order to create ancillary residential opportunities, particularly in the upper floors of multi-story buildings. 🌍
- Policy CC-4.34 Encourage the location of ancillary employee services (including childcare, restaurants, banking facilities and convenience markets) at employment centers, for the purpose of reducing midday vehicle trips. 🌍
- Policy CC-4.35 Encourage the use of private roads within new development.
- Policy CC-4.36 Where an agricultural industrial project or an agricultural commercial project is allowed adjoining an existing residential neighborhood, an appropriate buffer shall be provided. Any project intended for the site at Interstate 505 and State Route 128 shall include a buffer for the adjoining existing El Rio Villa project and shall proceed only if it will result in a net fiscal benefit to the County.
- Policy CC-4.37 Each community shall have a “town center” where the public has access to meeting and event space (e.g., school, library, fire department, community center, social organization, etc.).

D. Implementation Program

- Action CC-A1 Update the County Zoning Code to reflect appropriate zoning consistent with each land use designation and to establish appropriate new zone categories and regulations to implement the goals, policies and actions of this General Plan. The update shall include development of a form-based zoning code. (Policy LU-1.1, Policy LU-2.3, Policy LU-2.5, Policy LU-3.1, Policy LU-3.2, Policy LU-3.3, Policy LU-3.9, Policy CC-2.7, Policy CC-2.16)
Responsibility: Planning and Public Works Department
Timeframe: 2009/2011
- Action CC-A2 Continue to implement the County Development Agreement ordinance which requires net gains from new development. (Policy LU-6.7, Policy LU-6.8, Policy LU-6.9, Policy LU-6.10, Policy CC-2.1, Policy CC-2.2)
Responsibility: Planning and Public Works Department
Timeframe: 2009/2010
- Action CC-A3 Complete a market study to determine how the County can capitalize on specific locations where revenue-generating uses might best fit and



how the County can better position itself relative to competing jurisdictions. (Policy LU-3.3, Policy LU-4.2, Policy LU-6.4, Policy LU-6.10, Policy LU-6.11, Policy LU-7.3)

Responsibility: County Administrator's Office

Timeframe: 2010/2011

Action CC-A4 Engage in regular discussions and collaboration with each of the cities regarding policies, projects and opportunities of mutual interest. (Policy LU-3.8, Policy LU-6.4, Policy LU-6.8, Policy LU-6.10, Policy LU-6.11)

Responsibility: County Administrator's Office

Timeframe: Ongoing

Action CC-A5 Annually review revenue sharing agreements, redevelopment pass-through agreements, annexation agreements, development agreements, tribal agreements and other existing agreements to ensure that they accurately respond to changing County circumstances. (Policy LU-3.8, Policy LU-6.4, Policy LU-6.7, Policy LU-6.8, Policy LU-6.9, Policy LU-6.10, Policy LU-6.11)

Responsibility: County Administrator's Office

Timeframe: Annually

Action CC-A6 Seek executed cooperative agreements with adjoining jurisdictions on issues of mutual importance. (Policy LU-7.1, Policy LU-7.2, Policy LU-7.3, Policy LU-7.4, Policy LU-7.5, Policy LU-7.6)

Responsibility: County Administrator's Office

Timeframe: 2009/2010

Action CC-A7 Establish formal buffers between cities and between communities. Create a plan to establish buffer areas between cities and between unincorporated communities within which conservation easements could be directed to reinforce community separation and keep each town distinct and unique. (Policy CC-1.7)

Responsibility: Planning and Public Works Department

Timeframe: Ongoing

Action CC-A8 Develop Specific Plan guidelines including requirements for contents, minimum standards and development regulations. (Policy CC-2.16, Policy CC-3.1, Policy CC-3.4)

Responsibility: Planning and Public Works Department


Timeframe: 2009/2010

Action CC-A9 Prepare and implement design guidelines and minimum design requirements (standards) that ensure sustainable and attractive growth. (Policies CC-2.16, and CC-4.1 through CC-4.36)

Responsibility: Planning and Public Works Department

Timeframe: 2010/2011



- Action CC-A10 Adopt a “Green Building Program” to promote green building standards. Require energy efficient appliances and equipment in all new development. (Policy CC-4.13, Policy CC-4.14) 
Responsibility: Planning and Public Works Department
Timeframe: 2011/2012
- Action CC-A11 Seek voter approval of an intra-county and/or regional fee or tax for the preservation of agricultural, habitat, or open space land in Yolo County. (Policy LU-6.4, Policy LU-7.1, Policy LU-7.3, Policy LU-7.4, Policy LU-7.5, Policy LU-7.6)
Responsibility: County Administrator’s Office, Parks and Resources Department
Timeframe: 2010/2011
- Action CC-A12 Recommend one of the alternative Clarksburg sites to be zoned Agricultural-Industrial. (Policy CC-3.14)
Responsibility: Planning and Public Works Department, County Administrator’s Office
Timeframe: 2009/2010
- Action CC-A13 Based on an economic analysis, recommend one of the alternative Interstate 505 sites (County Road 14 or County Road 12A) to be zoned Highway Commercial. (Policy CC-3.15)
Responsibility: County Administrator’s Office, Planning and Public Works Department
Timeframe: 2009/2010
- Action CC-A14 Collaborate with the City of Winters to explore revenue producing uses and opportunities for the “special study area” (see Figure LU-2) identified for agricultural industrial and/or agricultural commercial uses at Interstate 505 and State Route 128. (Policy LU-2.2)
Responsibility: County Administrator’s Office, Planning and Public Works Department
Timeframe: 2010/2011
- Action CC-A15 Establish a countywide system of consistent “comment” areas for each of the existing Citizens Advisory Committees, to ensure that all discretionary projects are forwarded to the appropriate Advisory Committee. (Policy LU-5.7)
Responsibility: Planning and Public Works Department
Timeframe: 2009/2010
- Action CC-A16 Prepare the Covell/Pole Line Specific Plan. (Policy CC-3.3, Policy CC-3.25)
Responsibility: Planning and Public Works Department



Timeframe: 2009/2015

- Action CC-A21 Prepare the Yolo-Zamora Community Plan. (Policy CC-3.1)
Responsibility: Planning and Public Works Department
Timeframe: 2015/2016
- Action CC-A22 Update other long range plans to ensure consistency with General Plan. Develop a priority order, work plan, schedule and budget for each. (Policy CC-3.1)
Responsibility: Planning and Public Works Department
Timeframe: 2016/2017
- Action CC-A23 Establish intra-county impact fees for funding of regional parks and open space, regional roadways and other government services that benefit all County residents. (Policy LU-6.4, Policy LU-7.2, Policy LU-7.4)
Responsibility: County Administrator's Office
Timeframe: 2011/2012
- Action CC-A24 Evaluate parking standards to minimize land devoted to parking. (Policy CC-4.3, Policy CC-4.13) 🌐
Responsibility: Planning and Public Works Department
Timeframe: 2010/2011
- Action CC-A25 Coordinate with Caltrans regarding alternative uses for the Interstate 505 rest stop near Dunnigan, should that facility be relocated or closed. (Policy LU-7.3, Policy CC-3.4)
Responsibility: Planning and Public Works Department
Timeframe: ongoing
- Action CC-A26 Update the County Zoning Code to prohibit the location of new homes on or near the top of ridgelines, where they would adversely affect nearby views. (Policy CC-1.10)
Responsibility: Planning and Public Works Department
Timeframe: 2010/2011
- Action CC-A27 Create financial incentives programs to encourage the remodel of older homes to reduce energy use and incorporate "green" building materials. (Policy CC-4.13)
Responsibility: County Administrator's Office, Planning and Public Works Department
Timeframe: 2011/2012



- Action CC-A28 Orient the grid pattern of new streets to align north/south and east/west, to give a sense of place and direction in new community areas, as well as to maximize solar access. (Policy CC-4.13)
Responsibility: Planning and Public Works Department
Timeframe: Ongoing
- Action CC-A29 Develop and enforce bike parking standards and design criteria for all land uses identified in zoning code, including number of spaces, location and type of facilities. (Policy CC-2.16) 🌐
Responsibility: Planning and Public Works Department
Timeframe: 2009/2010
- Action CC-A30 Amend the County Code to remove the Williamson Act as a basis for the Agricultural Preserve Zone. (Policy LU-2.5)
Responsibility: Planning and Public Works Department
Timeframe: 2009/2010
- Action CC-A31 Amend the County Code to incorporate “smart growth” planning principles and design guidelines that emphasize compact, walkable neighborhoods, open space, alternative transportation, public safety, sustainable design, and sensitivity to natural resources. (Policy CC-4.3, Policy CC-4.11, Policy CC-4.15) 🌐
Responsibility: Planning and Public Works Department
Timeframe: 2010/2011
- Action CC-A32 Allow for rolled curbs in Rural Residential designated areas. (Policy CC-2.16)
Responsibility: Planning and Public Works Department
Timeframe: 2009/2010
- Action CC-A33 Reduce permitting requirements and costs for projects that incorporate green design features and construction. (Policy CC-4.12) 🌐
Responsibility: Planning and Public Works Department
Timeframe: 2009/2010
- Action CC-A34 The discretionary review of development proposals shall evaluate and address impacts on the rural landscapes and views. This review shall also evaluate the potential for land use incompatibilities and require incorporation of design features to reduce potential impacts, to the greatest extent feasible. (DEIR MM LU-2c) (Policies CC-1.1 through CC-1.19)
Responsibility: Planning and Public Works Department
Timeframe: 2009/2010
- Action CC-A35 Identify and provide incentives for infill over peripheral development. (Policy CC-2.6) 🌐



Responsibility: Planning and Public Works Department
Timeframe: 2010/2011

Action CC-A36 Pursue designation of the state of State Route 16 as a scenic highway.
(Policy CC-1.14)

Responsibility: Planning and Public Works Department
Timeframe: 2012/2013

Action CC-A37 Review all development proposals, planning projects, and infrastructure projects to ensure that potential adverse impacts to disadvantaged communities and vulnerable populations, including exposure to hazards, pollutants, including toxic air contaminants, and unacceptable levels of noise and vibration are reduced to the extent feasible and that measures to improve quality of life, such as connections to bicycle and pedestrian paths, community services, schools, and recreation facilities, access to healthy foods, and improvement of air quality are emphasized. The review shall address both the construction and operation phases of the project. (Policy LU-8.1)

Responsibility: Planning and Public Works Department
Timeframe: Ongoing

Action CC-A38 Build strong ties, especially with disadvantaged communities, to ensure local residents can make impactful contributions to planning decisions through:

- Use of culturally appropriate approaches,
- Consideration of timing, location, and virtual participation to make meetings more accessible to community members,
- Provision of translation services and translated materials when needed, and
- Partnering with local organizations and nonprofits who are active in the County. (Policy LU-8.2)

Responsibility: Planning and Public Works Department
Timeframe: Ongoing

Action CC-A39 Coordinate with state, regional, and local agencies, community members, and community organizations to address environmental justice issues, including ensuring access to healthy foods, recreation opportunities, safe and affordable housing, health and social services, and community amenities, reducing exposure to environmental hazards, including air pollution, excessive noise, and hazardous materials, and ensuring access to a complete multi-modal transportation systems. (Policy LU 8.1, Policy LU-8.3)

Responsibility: Planning and Public Works Department
Timeframe: Ongoing



Table LU-1 1983 YOLO COUNTY GENERAL PLAN LAND USE DESIGNATIONS AND ACREAGES

Row #	1983 General Plan (GP) ^a Land Use Designations ^b	Acreage ^f
OPEN SPACE (OS)		
1	Open Space (OS) ^c (83 GP)	2,653.6
2	Public Open Spaces (PO) (83 GP)	0
3	Public Open Spaces (POS) (83 GP; Capay Valley)	2.6
4	Public Open Space (PO1) (83 GP)	0
5	Public Open Space (PO2) (83 GP)	7.2
6	Agricultural Buffer/Setbacks from Major Roads (Esparto)	0
7	Agricultural/Urban Buffer (Knights Landing)	0
8	Major Waterways (Knights Landing) ^c	58.9
9	Riverbed and Riparian (Capay)	0
10	Chaparral and Woodland (Capay)	0
	<i>Subtotal</i>	2,722.3
AGRICULTURE (AG)		
11	Agricultural (AG) ^c (83 GP)	503,130.2
12	Agricultural Exclusive (AE) (83 GP)	0
13	A-1 (Capay Valley)	0
14	A-P (Capay Valley)	0
15	Agricultural Intensive (AG-IN) (Capay Valley)	11,209.3
16	Agricultural General Foothills (AG-G-F) (Capay Valley)	9,746.7
17	Agricultural-Related Industrial (Dunnigan)	0
18	Agricultural/Residential, Low Density (Woodland)	239.2
19	Agricultural/Residential, Medium Density (Woodland)	94.6
20	Watershed (Capay Valley)	79,081.8
21	Residential, Low Density (10 ac min) (RL10) (83 GP; Clarksburg)	42.4
	<i>Subtotal</i>	603,544.2
PARKS and RECREATION (PR)		
22	Recreation (R) (Dunnigan)	679.0
23	Parks and Recreation (PR) (83 GP; Capay Valley; Clarksburg)	442.4
24	Parks/Schools/Agricultural Buffer (Esparto)	0
	<i>Subtotal</i>	1,121.4
RESIDENTIAL		
Residential Rural (RR)		
25	Rural Residential Agricultural (RRA) (83 GP)	0
26	Rural Residential (Woodland)	1,178.8
27	Residential, Very Low Density (VLR) (1du/net ac) (Dunnigan)	332.0
28	Very Low Density Residential (1-3 du/gross ac) (Esparto)	34.4
29	Residential, Very Low Density (83 GP – Plainfield)	123.0
	<i>Subtotal</i>	1,668.2
Residential Low (RL)		
30	Suburban Residential (RS) (83 GP)	139.0
31	Residential, Low Density (Dunnigan) (RL) (83 GP)	0
32	Residential Low Density (R-L) (1-3 du/ac) (Capay Valley; Clarksburg)	70.5
33	Residential Low Density—Public Open Space (RL-PO1) (Clarksburg)	0
34	Residential, Low Density (1-4 du/ac) (Dunnigan) (RL2) (83 GP)	0



Row #	1983 General Plan (GP) ^a Land Use Designations ^b	Acreage ^f
35	Residential, Low Density (1-5 du/ac) (Dunnigan) (RL1) (83 GP)	0
36	Low Density Residential (RL-1) (Clarksburg)	19.7
37	Residential Low Density (RL) (\leq 6 du/net ac) (83 GP)	598.0
38	Residential Low Density (RL) (6 du/net ac average) (Knights Landing)	88.6
39	Residential Low Density (RL) (4-10 du/net ac) (Esparto)	426.5
	<i>Subtotal</i>	<i>1,342.3</i>
Residential Medium (RM)		
40	Residential, Medium Density (RM) (10 to 19 du/net ac) (83 GP)	92.0
41	Residential Medium (RM) (Clarksburg)	19.6
42	Residential Medium Density (RM) (12du/net ac) (Dunnigan; Knights Landing)	84.2
43	Residential Medium Density (5-8 du/ac) (Esparto) (RM1) (83 GP)	0
44	Residential Medium Density (5-10 du/ac) (Esparto) (RM1) (83 GP)	0
45	Mobile Home Park (MHP) (8 du/net ac) (83 GP)	0
	<i>Subtotal</i>	<i>195.8</i>
Residential High (RH)		
46	Residential, High Density (RH) (20+ du/net ac) (83 GP)	30.6
47	Residential, High Density Historic (RHH) (83 GP)	0
	<i>Subtotal</i>	<i>30.6</i>
	Residential Subtotal	3,236.9
COMMERCIAL		
Commercial General (CG)		
48	Highway Service Commercial (HSC) (83 GP)	115.0
49	Truck-Related Highway Commercial (Dunnigan)	148.1
	<i>Subtotal</i>	<i>263.1</i>
Commercial Local (CL)		
50	Commercial (C) (83 GP; Capay; Madison)	62.7
51	Commercial, Low Density (LC) (83 GP; Dunnigan)	22.6
52	Neighborhood Commercial (NC) (83 GP; Knights Landing; Woodland)	8.2
53	Local Commercial (Dunnigan; Esparto)	0
54	Community Commercial (Knights Landing)	0
55	General Commercial (GC) (83 GP; Esparto)	14.5
56	Central Business District (CBD) (83 GP)	0
57	Downtown Mixed Use (Esparto)	34.6
58	Commercial Multi-Family Planned Development (C-RH/PD) (83 GP)	0
	<i>Subtotal</i>	<i>142.6</i>
	Commercial Subtotal	405.7
INDUSTRIAL (IN)		
59	Industrial (I) (83 GP)	709.1 ^e
60	Light Industrial (Li) (83 GP)	9.9
61	Industrial Limited (Davis)	383.7
62	Industrial, Planned Development, Type 1 (I-PD-1) (83 GP)	0
63	Industrial, Planned Development, Type 2 (I-PD-2) (83 GP)	0
64	Industrial/Residential (Woodland)	23.8
65	Master Plan (MP) (Clarksburg)	16.5
66	Employment Reserve (Knights Landing)	51.6
	<i>Subtotal</i>	<i>1,194.6</i>
PUBLIC and QUASI-PUBLIC (PQ)		
67	Public and Quasi-Public (PQP) (83 GP)	101.6
68	Public (Esparto)	0
69	Public Semi Public (Capay Valley)	0
70	Public Facility (Knights Landing)	33.7



Row #	1983 General Plan (GP) ^a Land Use Designations ^b	Acreage ^f
71	School (S) (Capay Valley)	0
72	Airport (Monument Hills)	558.4
	<i>Subtotal</i>	<i>693.7</i>
SPECIFIC PLAN (SP)		
73	Mixed Use (MU) (83 GP)	0
74	Multiple Use (Knights Landing)	145.0 ^d
75	Specific Plan (SP) (Clarksburg)	0
	<i>Subtotal</i>	<i>145.0</i>
OTHER		
76	Roadways, Railroads, Highways	8,160.2
	<i>Subtotal</i>	<i>8,160.2</i>
UNINCORPORATED TOTAL		
77	GRAND TOTAL	621,224.0

Notes: The 1983 General Plan established the following “combining” designations, however, there is no acreage assigned to these overlay categories: Flood Plain (FP) (Capay Valley), Planned Development (PD) (83 GP), Water Related Uses (W) (83 GP), Recreational Vehicle Park (RVP) (83 GP), Other (x/x, Phased, xx/xx, x+x, etc) (83 GP), Waterfront Commercial/Recreation (Knights Landing).

^a Text in parentheses indicates 1903 General Plan area or Community General Plan.

^b Land use categories from 1983 General Plan (page 25c and d) and adopted community and area General Plans (text and diagrams), as amended.

^c Sacramento River, Cache Creek, Putah Creek and Yolo Bypass acreage fall within these designations.

^d This acreage is consistent with application information provided by the landowner. The County GIS parcelized database shows the acreage total as 147.0.

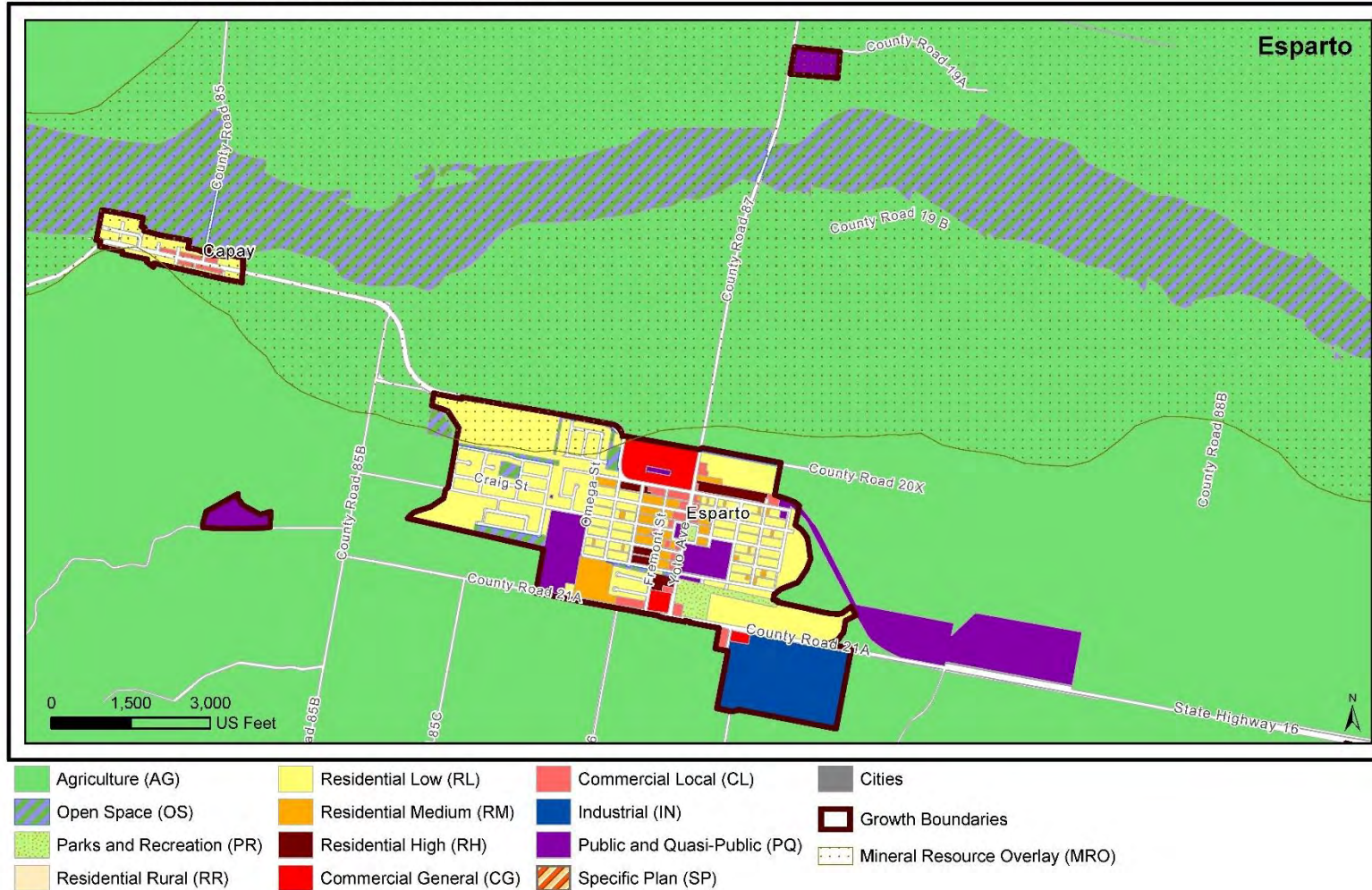
^e This acreage includes 105.4 acres for the Clarksburg Old Sugar Mill site which is consistent with application information provided by the landowner for the Old Sugar Mill Specific Plan. The County GIS parcelized database shows the acreage total as 103.7. The previous “Specific Plan” designation (see category 76) was voided by final action of the State Delta Protection Commission on May 22, 2008.

^f Rows 1 through 75 (with the exceptions noted above) are consistent with the County GIS parcelized database. Row 76 equates to the difference between the parcelized total acreage and the non-parcelized total acreage for the unincorporated area. Row 77 exceeds the GIS non-parcelized total for the unincorporated area by 9 acres. This is because the West Sacramento non-parcelized total acreage in the County GIS system exceeds the City’s own database total by 11 acres and the Winters non-parcelized total acreage in the County GIS system was 2 acres lower than the City’s own database total for a net difference of +9 acres. The data was adjusted to match the City data.



LAND USE AND COMMUNITY CHARACTER ELEMENT

FIGURE LU-1B GENERAL PLAN LAND USE MAP



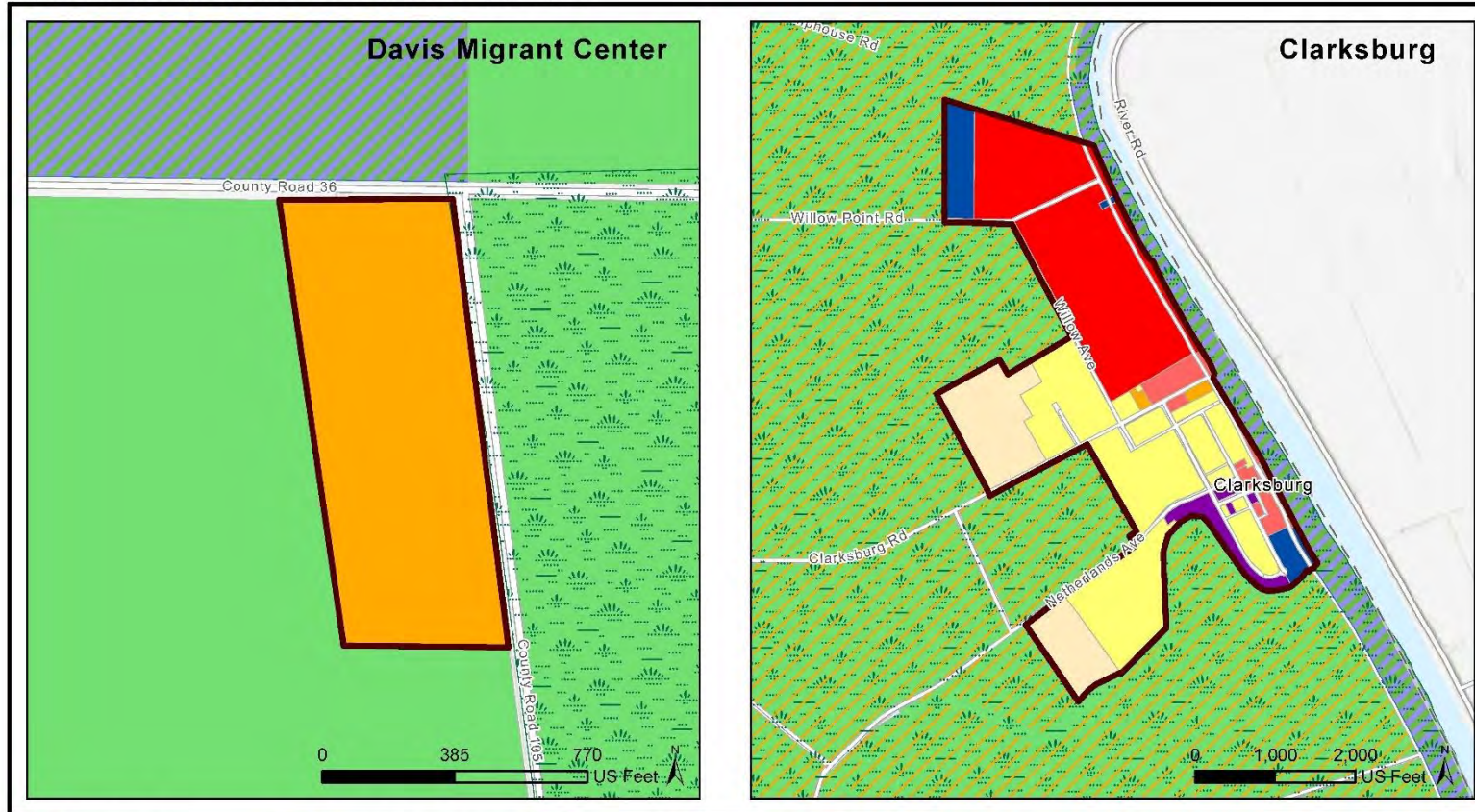
Source: Yolo County GIS

COUNTY OF YOLO 2030 COUNTYWIDE GENERAL PLAN



LAND USE AND COMMUNITY CHARACTER ELEMENT

FIGURE LU-1C GENERAL PLAN LAND USE MAP



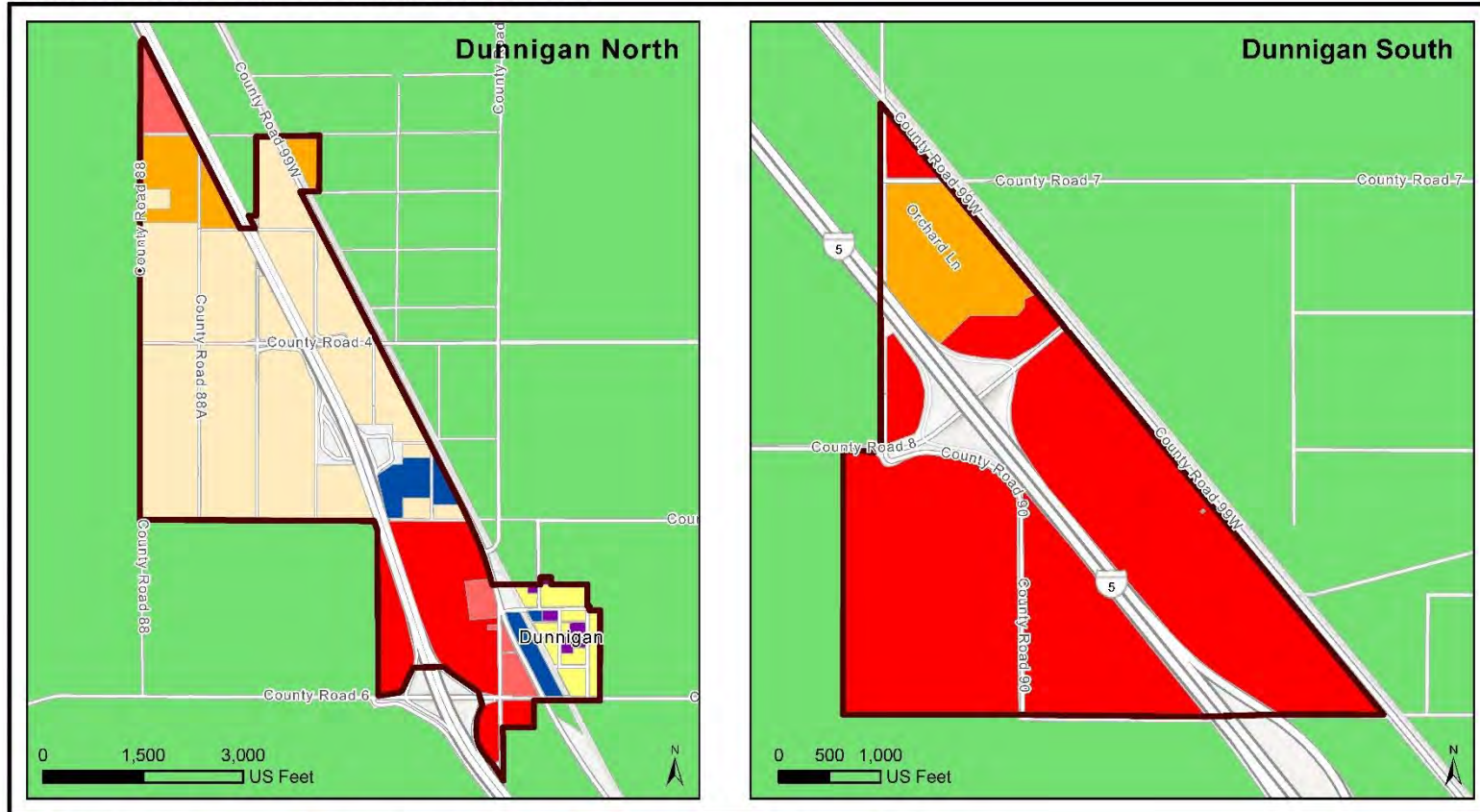
- | | | | |
|---------------------------|-------------------------|------------------------------|--|
| Agriculture (AG) | Residential Medium (RM) | Public and Quasi-Public (PQ) | Clarksburg Agricultural District Overlay |
| Open Space (OS) | Residential High (RH) | Specific Plan (SP) | Delta Protection Overlay |
| Parks and Recreation (PR) | Commercial General (CG) | Cities | |
| Residential Rural (RR) | Commercial Local (CL) | Growth Boundaries | |
| Residential Low (RL) | Industrial (IN) | | |

Source: Yolo County GIS



LAND USE AND COMMUNITY CHARACTER ELEMENT

FIGURE LU-1D GENERAL PLAN LAND USE MAP



- | | | | |
|---------------------------|-------------------------|------------------------------|-------------------|
| Agriculture (AG) | Residential Low (RL) | Commercial Local (CL) | Cities |
| Open Space (OS) | Residential Medium (RM) | Industrial (IN) | Growth Boundaries |
| Parks and Recreation (PR) | Residential High (RH) | Public and Quasi-Public (PQ) | |
| Residential Rural (RR) | Commercial General (CG) | Specific Plan (SP) | |

Source: Yolo County GIS

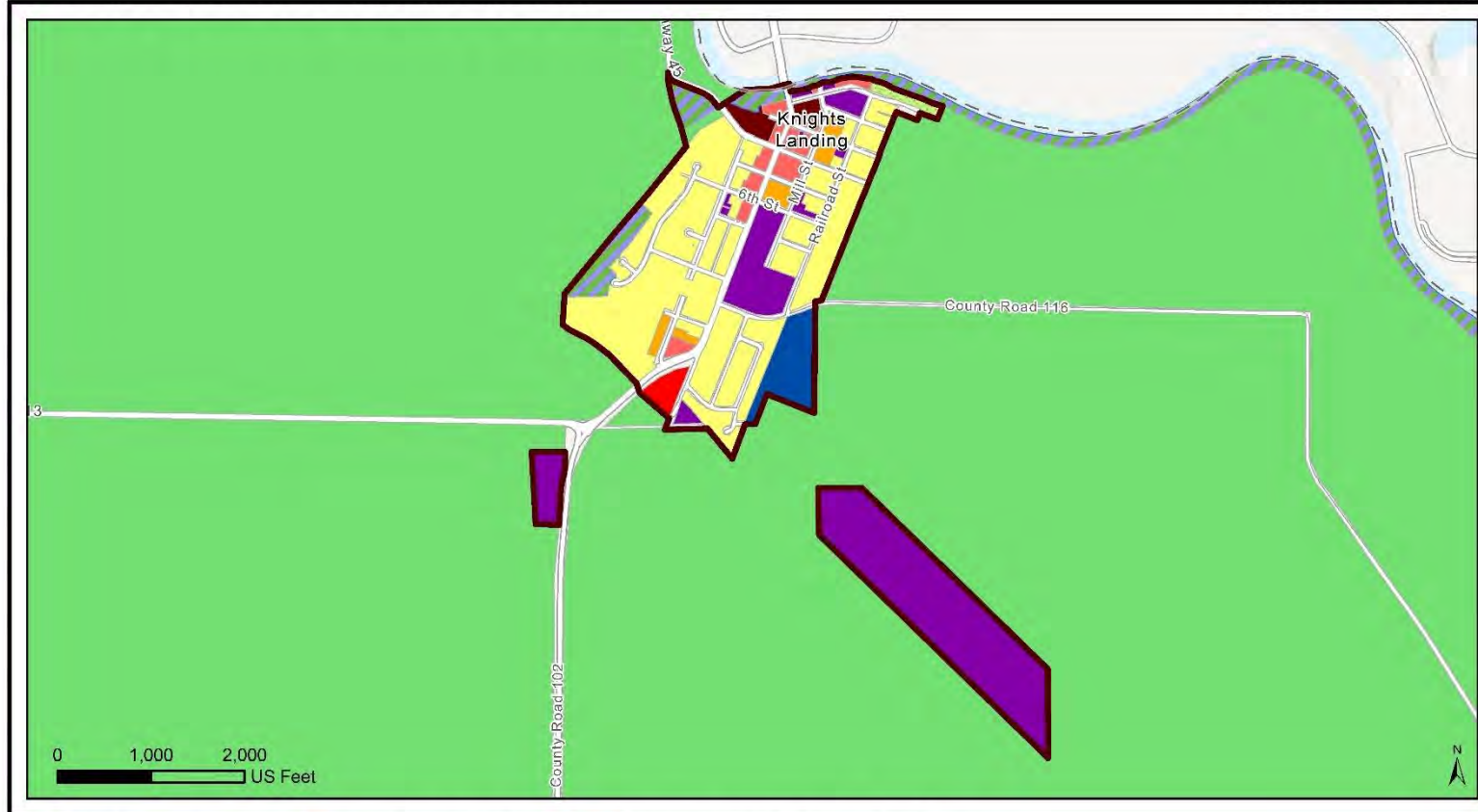
COUNTY OF YOLO 2030 COUNTYWIDE GENERAL PLAN



LAND USE AND COMMUNITY CHARACTER ELEMENT

FIGURE LU-1E GENERAL PLAN LAND USE MAP

Knights Landing



- | | | | |
|---------------------------|-------------------------|------------------------------|-------------------|
| Agriculture (AG) | Residential Low (RL) | Commercial Local (CL) | Cities |
| Open Space (OS) | Residential Medium (RM) | Industrial (IN) | Growth Boundaries |
| Parks and Recreation (PR) | Residential High (RH) | Public and Quasi-Public (PQ) | |
| Residential Rural (RR) | Commercial General (CG) | Specific Plan (SP) | |

Source: Yolo County GIS



LAND USE AND COMMUNITY CHARACTER ELEMENT

FIGURE LU-1F GENERAL PLAN LAND USE MAP

Madison



- | | | | |
|---------------------------|-------------------------|------------------------------|-------------------|
| Agriculture (AG) | Residential Low (RL) | Commercial Local (CL) | Cities |
| Open Space (OS) | Residential Medium (RM) | Industrial (IN) | Growth Boundaries |
| Parks and Recreation (PR) | Residential High (RH) | Public and Quasi-Public (PQ) | |
| Residential Rural (RR) | Commercial General (CG) | Specific Plan (SP) | |

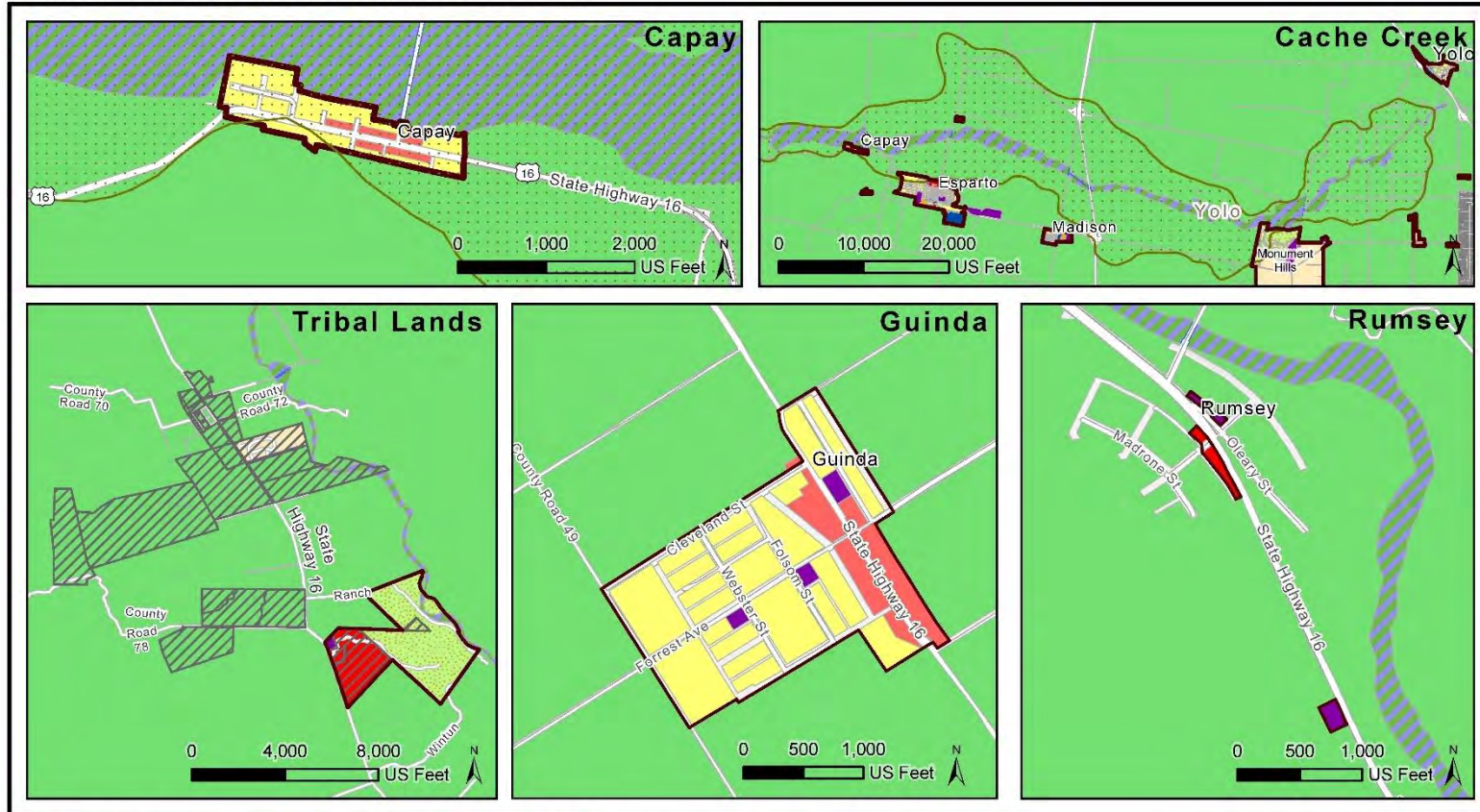
Source: Yolo County GIS

COUNTY OF YOLO 2030 COUNTYWIDE GENERAL PLAN



LAND USE AND COMMUNITY CHARACTER ELEMENT

FIGURE LU-1G GENERAL PLAN LAND USE MAP



- | | | | |
|---------------------------|-------------------------|------------------------------|--------------------------------|
| Agriculture (AG) | Residential Medium (RM) | Public and Quasi-Public (PQ) | Tribal Trust Overlay (TTO) |
| Open Space (OS) | Residential High (RH) | Specific Plan (SP) | Mineral Resource Overlay (MRO) |
| Parks and Recreation (PR) | Commercial General (CG) | Cities | |
| Residential Rural (RR) | Commercial Local (CL) | Growth Boundaries | |
| Residential Low (RL) | Industrial (IN) | | |

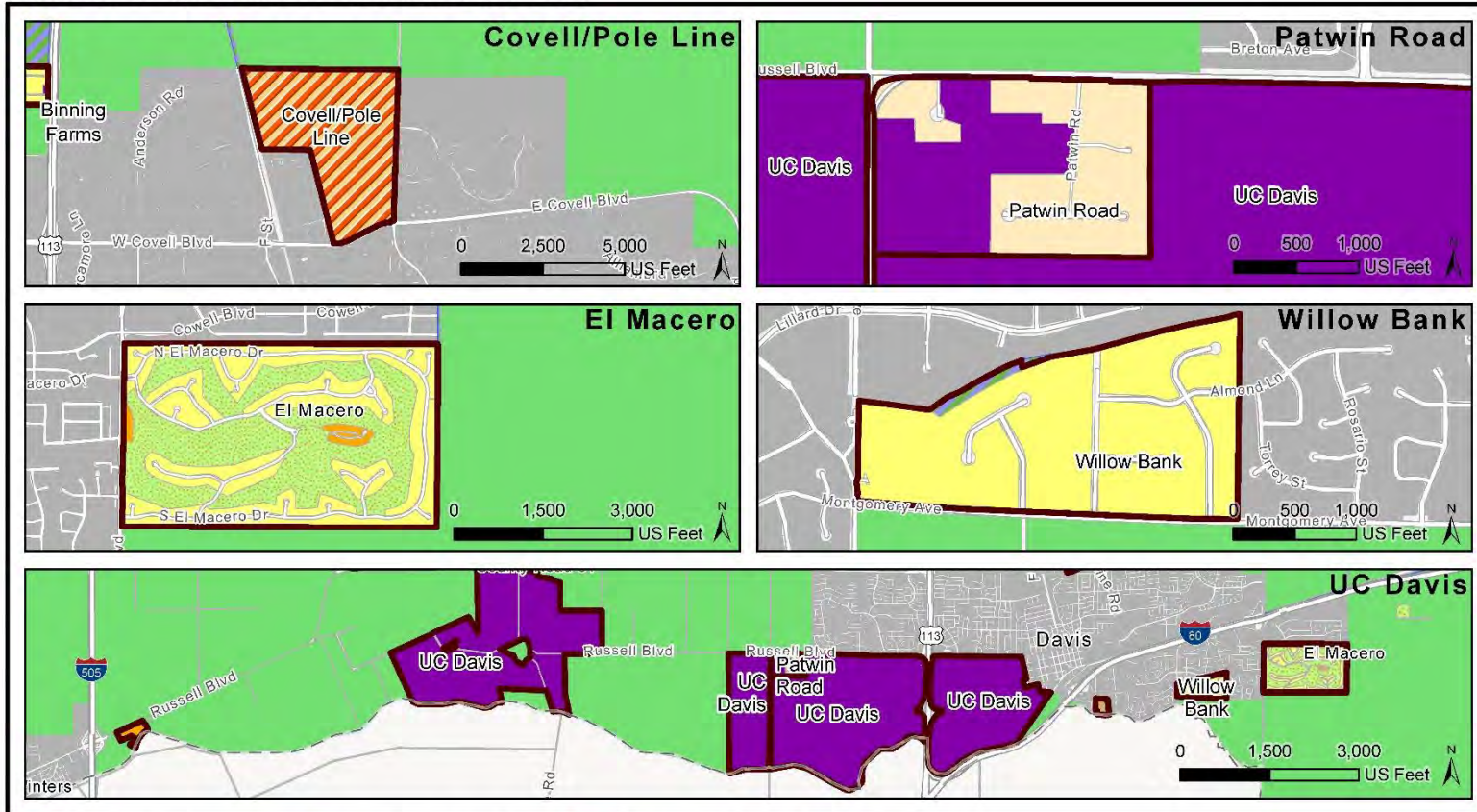
Source: Yolo County GIS

COUNTY OF YOLO 2030 COUNTYWIDE GENERAL PLAN



LAND USE AND COMMUNITY CHARACTER ELEMENT

FIGURE LU-1H GENERAL PLAN LAND USE MAP



- | | | | |
|---------------------------|-------------------------|------------------------------|-------------------|
| Agriculture (AG) | Residential Low (RL) | Commercial Local (CL) | Cities |
| Open Space (OS) | Residential Medium (RM) | Industrial (IN) | Growth Boundaries |
| Parks and Recreation (PR) | Residential High (RH) | Public and Quasi-Public (PQ) | |
| Residential Rural (RR) | Commercial General (CG) | Specific Plan (SP) | |

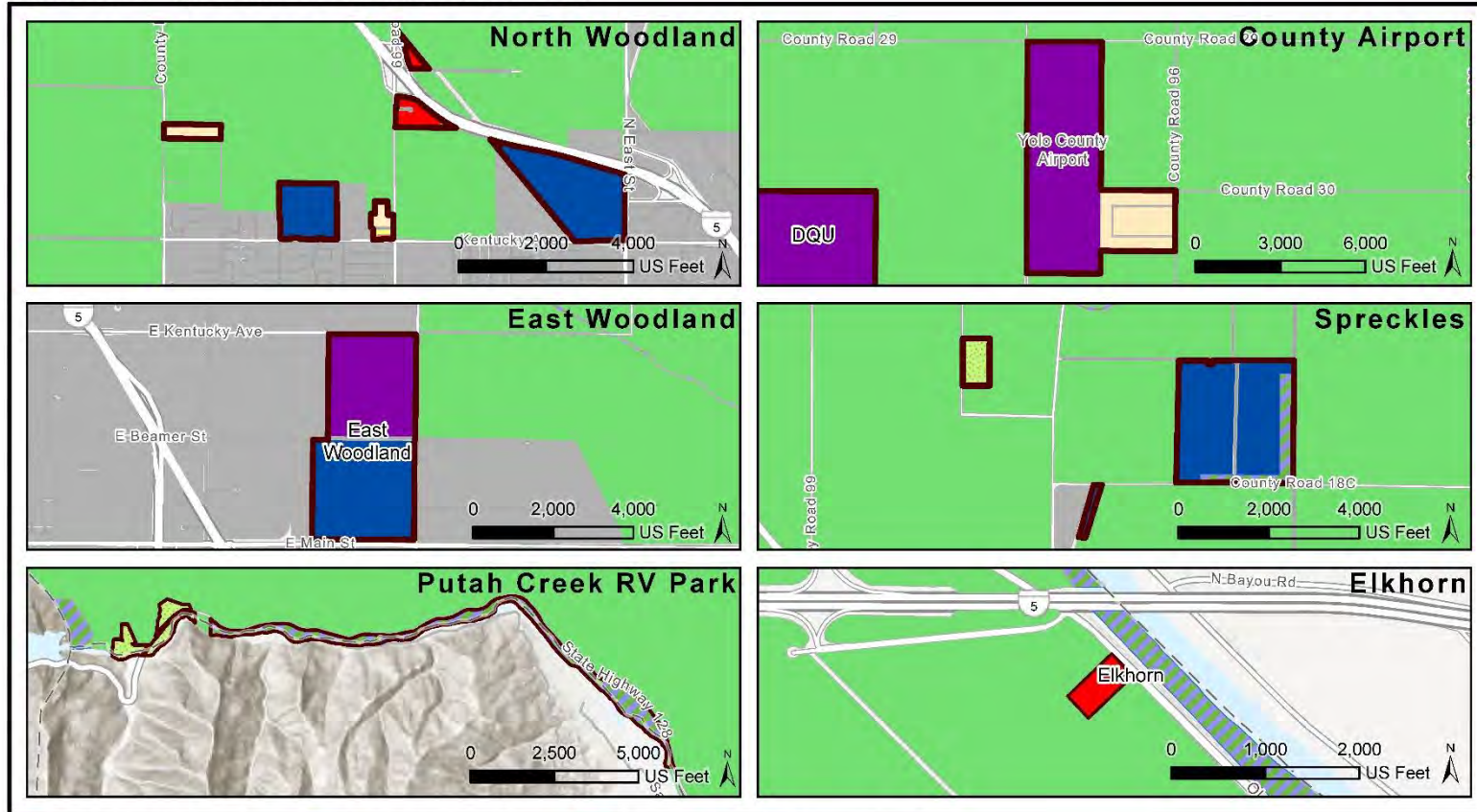
Source: Yolo County GIS

COUNTY OF YOLO 2030 COUNTYWIDE GENERAL PLAN



LAND USE AND COMMUNITY CHARACTER ELEMENT

FIGURE LU-11 GENERAL PLAN LAND USE MAP



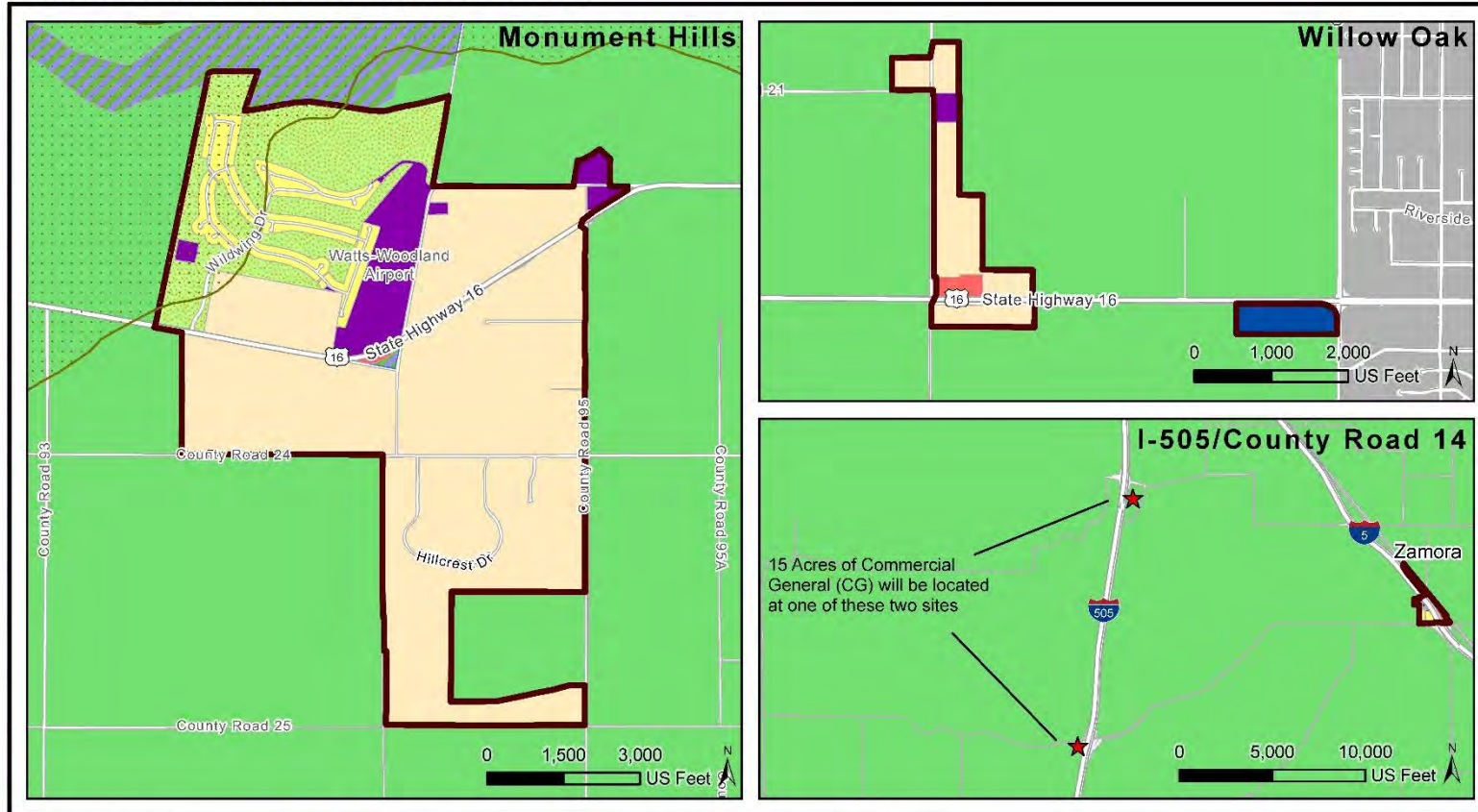
Source: Yolo County GIS

COUNTY OF YOLO 2030 COUNTYWIDE GENERAL PLAN



LAND USE AND COMMUNITY CHARACTER ELEMENT

FIGURE LU-1J GENERAL PLAN LAND USE MAP



Source: Yolo County GIS

COUNTY OF YOLO 2030 COUNTYWIDE GENERAL PLAN



LAND USE AND COMMUNITY CHARACTER ELEMENT

FIGURE LU-1K GENERAL PLAN LAND USE MAP

Zamora



- | | | | |
|---------------------------|-------------------------|-------------------------------|-------------------|
| Agriculture (AG) | Residential Low (RL) | Commercial Local (CL) | Cities |
| Open Space (OS) | Residential Medium (RM) | Industrial (IN) | Growth Boundaries |
| Parks and Recreation (PR) | Residential High (RH) | Public and Quasi-Public (PQP) | |
| Residential Rural (RR) | Commercial General (CG) | Specific Plan (SP) | |

Source: Yolo County GIS

COUNTY OF YOLO 2030 COUNTYWIDE GENERAL PLAN



LAND USE AND COMMUNITY CHARACTER ELEMENT

FIGURE LU-1L GENERAL PLAN LAND USE MAP

Yolo



- | | | | |
|---------------------------|-------------------------|------------------------------|-------------------|
| Agriculture (AG) | Residential Low (RL) | Commercial Local (CL) | Cities |
| Open Space (OS) | Residential Medium (RM) | Industrial (IN) | Growth Boundaries |
| Parks and Recreation (PR) | Residential High (RH) | Public and Quasi-Public (PQ) | |
| Residential Rural (RR) | Commercial General (CG) | Specific Plan (SP) | |

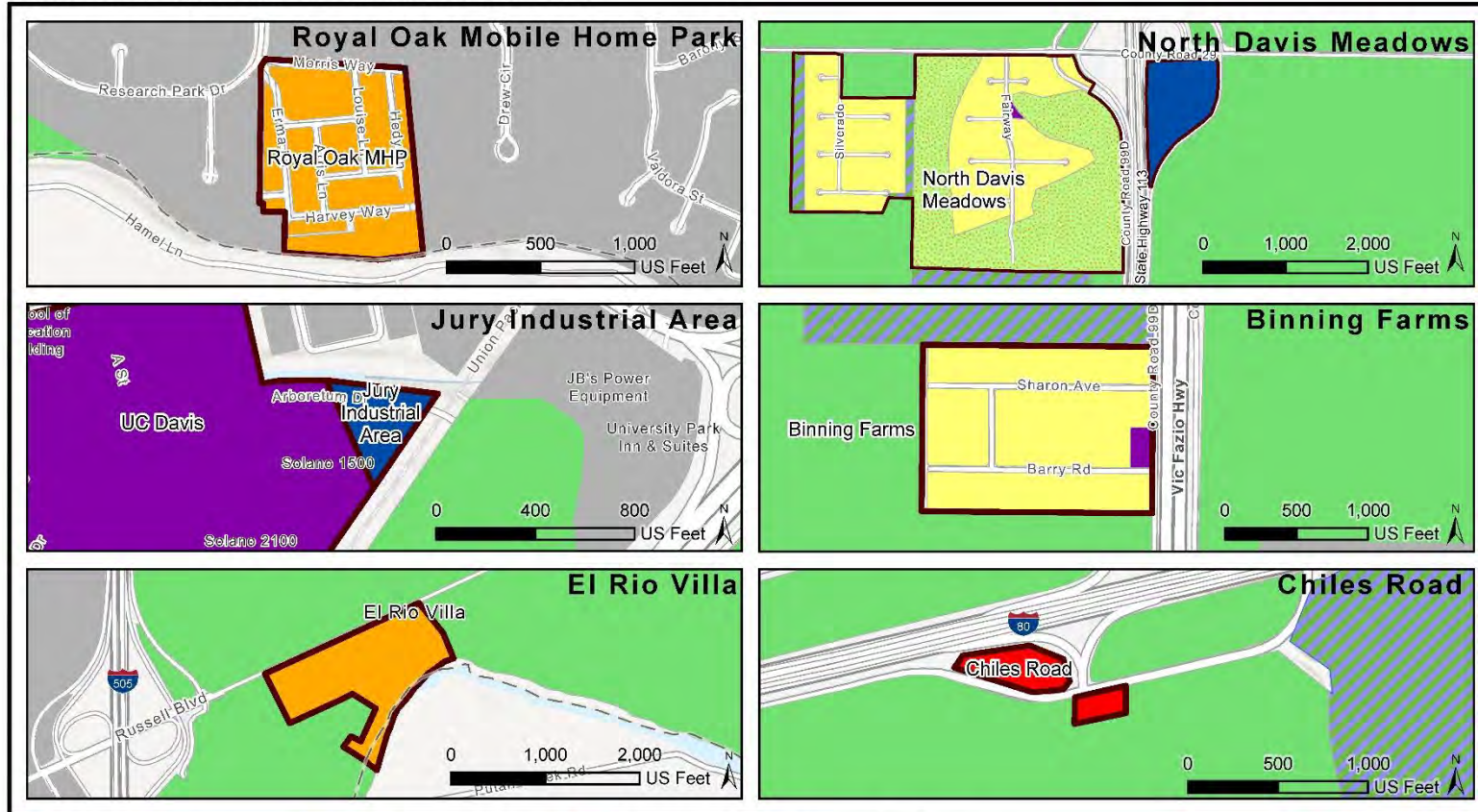
Source: Yolo County GIS

COUNTY OF YOLO 2030 COUNTYWIDE GENERAL PLAN



LAND USE AND COMMUNITY CHARACTER ELEMENT

FIGURE LU-1M GENERAL PLAN LAND USE MAP



- | | | | |
|---------------------------|-------------------------|------------------------------|-------------------|
| Agriculture (AG) | Residential Low (RL) | Commercial Local (CL) | Cities |
| Open Space (OS) | Residential Medium (RM) | Industrial (IN) | Growth Boundaries |
| Parks and Recreation (PR) | Residential High (RH) | Public and Quasi-Public (PQ) | |
| Residential Rural (RR) | Commercial General (CG) | Specific Plan (SP) | |

Source: Yolo County GIS

COUNTY OF YOLO 2030 COUNTYWIDE GENERAL PLAN



TABLE LU-4 Land Use Designations

Land Use Designation (XX)	Allowed Uses	Residential Density	Persons Per Acre ^a	FAR ^b Maximum	Maximum Impervious Surface
Open Space (OS)	Public open space lands, major natural water bodies, agricultural buffer areas, and habitat. Characterized by “passive” and/or very low management uses as the primary land use, as distinguished from AG or PR land use designations which involve more intense management of the land. Detention basins allowed as ancillary use if designed with naturalized features and native landscaping, compatible with the open space primary use.	One caretaker unit.	<0.1	0.001	>0.01%
Agriculture (AG)	Full range of cultivated agriculture such as row crops, orchards, vineyards, dryland farming, livestock grazing, forest products, confined animal facilities, and equestrian facilities. Agricultural industrial – agricultural research, processing and storage; crop dusting. Agricultural commercial – roadside stands, “Yolo Stores”, wineries, farm-based tourism (e.g. u-pick, dude ranch, lodging), horse shows, rodeos, crop-based seasonal events; agricultural chemical and equipment sales. Pre-existing isolated restaurants and/or stores (e.g. old stage stops and cross-roads) serving rural areas. Farmworker housing. Surface mining. Incidental habitat.	Two farm dwellings per legal parcel.	<0.1	0.1 ^c	20% ^c
Parks and Recreation (PR)	Developed (“active park”) facilities. Regional, community and neighborhood parks, tot lots, sports fields and public pools. Agricultural buffer areas. Detention basins allowed as ancillary use when designed with recreational or sports features.	Regional community parks and campgrounds are allowed one caretaker unit. No allowed residential uses for community or neighborhood parks and similar facilities.	<0.05	0.025	10%
Residential Rural (RR)	Large lot rural living. Detached single-family units. Attached and/or detached second unit or duplex allowed.	1 du/5ac to < 2 du/ac. Assume 1du/2.5ac typical yield.	Range: 0.6 to 1.0 Typical: 0.9	See zoning	See zoning.
Residential Low (RL)	Traditional neighborhood living. Detached single-family units. Attached and/or detached second unit or duplex allowed. Triplexes and four-plexes allowed when designed to be compatible with adjoining single-family homes. Small compatible neighborhood serving retail and office allowed as ancillary use.	1 du/ac to <10 du/ac. Assume 7du/ac typical yield.	Range: 2.8 to 27.7 Typical: 19.6	See zoning	See zoning
Residential Medium (RM)	Dense urban living. Detached and attached single family and multi-family units. Small compatible neighborhood serving retail and office allowed as ancillary use	10 du/ac to <20 du/ac. Assume 15 du/ac typical yield.	Range: 28 to 55.7 Typical: 42.0	See zoning	See zoning



Land Use Designation (XX)	Allowed Uses	Residential Density	Persons Per Acre ^a	FAR ^b Maximum	Maximum Impervious Surface
Residential High (RH)	Apartments and condominiums. Attached multi-family units. Small compatible neighborhood serving retail and office allowed as ancillary use	≥ 20 du/ac. Assume 25 du/ac typical yield.	>56 Typical: 70.0	See zoning	See zoning
Commercial General (CG)	Regional- and highway-serving retail, office and service. Regional- and highway-serving agricultural commercial allowed. No limit on floor plate (ground floor square footage). Research and Development with offices and service support as primary use (more than 50 percent of total square footage). Upper floor and accessory residential uses allowed.	Upper floor residential and ancillary attached residential at any density.	Range: 0 to 44.8 Avg. 22.4	1.0 for commercial 2.0 for mixed use with residential	85%
Commercial Local (CL)	Local-serving retail, office and service uses. Local-serving agricultural commercial allowed. Range of goods and services to meet everyday needs of residents within a community. Restricted to small floor plate users (less than 40,000 square feet ground floor). Upper floor and ancillary residential uses allowed.	Upper floor residential and ancillary attached residential at any density.	Range: 0 to 44.8 Avg. 22.4	0.5 for commercial 1.0 for mixed use with residential	90%
Industrial (IN)	Full range of light to heavy industrial/ manufacturing uses. Agricultural industrial allowed. Research and Development and biotechnology with manufacturing as primary use (more than 50 percent of total square footage). Storage facilities, contractor's yards, corporation yards, dismantling, etc.	One caretaker unit per operation.	<0.5	0.5	90%
Public and Quasi-Public (PQ)	Public/governmental offices, places of worship, schools, libraries and other civic uses. Public airports (including related visitor services). Infrastructure including wastewater treatment facilities, municipal wells, landfills, and storm water detention basins. Agricultural buffer areas.	None.	0	0.5	80%
Specific Plan (SP)	Interim land uses (until SP is in place) limited to those uses allowed in the AG designation. Ultimate land uses must be consistent with adopted SP. This designation limits development to AG uses until such time as a SP is processed and approved by the County, or the land use designation is otherwise amended. Land designated SP is discouraged from more capital intensive agricultural uses in favor of later planned uses.	Interim -- two farm dwellings per legal parcel. Ultimate -- as specified in the Specific Plan.	<0.1	Per the Specific Plan, using designations above as maximums.	Per the Specific Plan, using designations above as maximums.
Natural Heritage Overlay (NHO)	Applies to focused conservation areas identified in the Yolo Natural Heritage Program.	As allowed under the base designation and adopted Yolo Natural Heritage Program.	--	--	--



Land Use Designation (XX)	Allowed Uses	Residential Density	Persons Per Acre ^a	FAR ^b Maximum	Maximum Impervious Surface
Agricultural District Overlay (ADO)	Applies to designated agricultural districts. Land uses consistent with the base designation and the district specifications are allowed.	As defined for each district.	--	--	--
Delta Protection Overlay (DPO)	Applies to the State designated "primary zone" of the Sacramento-San Joaquin Delta, as defined in the Delta Protection Act. Land uses consistent with the base designation and the Delta Protection Commission's Land Use and Resource Management Plan are allowed.	As allowed under the base designation and applicable Delta Land Use and Resource Management Plan.	--	--	--
Mineral Resource Overlay (MRO)	Applies to State designated mineral resources (MRZ-2) and existing mining operations.	As allowed under the base designation.	--	--	--
Tribal Trust Overlay (TTO) ^d	Applies to tribal trust lands held by the federal government in favor of recognized tribal governments.	As defined by the sovereign government and/or appropriate applicable documents or agreements. The County does not have jurisdiction over these lands absent an applicable agreement with the federal government and/or sovereign entity.	--	--	--

Note: Densities are net of major water bodies, freeways and arterials.

^a Persons per household is calculated assuming 2.8 persons per household.

^b Floor area ratio.

^c For Agricultural Industrial see IN. For Agricultural Commercial see CG.

^d The County exercises no development or zoning control over properties designated as tribal trust lands in the General Plan. These properties are under the sole jurisdiction and control of the Rumsey Band of Wintun Indians of California. The Tribal Trust Overlay designation applies to properties within the County that are held in trust by federal agencies for the benefit of an Indian tribe. These lands can have important economic and environmental relationships to both the County and area residents. However, properties with this designation may not be subject to County planning, zoning and building regulations. Cooperative efforts between the County and local tribal governments are important to ensuring that areawide issues are appropriately addressed to the benefit of all local residents.

7 CONSERVATION AND OPEN SPACE ELEMENT



Vic Fazio Yolo Wildlife Area

Source: Dave Feliz

This element focuses on balanced management of the County's multiple natural and cultural resources. The goals and policies speak to a connected and accessible open space system with communities separated by agriculture and natural spaces, linked by a network of trails. Open spaces complement other land areas in a way that benefits both natural resources and the community. This element anticipates full integration of the Yolo Natural Heritage Program as a tool for multi-species protection. Future expansion of mineral resource extraction programs via the Cache Creek Area Plan and development of the future Cache Creek Parkway is addressed. Local actions to reduce greenhouse gases and promote alternative energy opportunities are also emphasized.

Uncertainty regarding future regulations and appropriate policy strategies for climate change are particularly challenging at the time of this update. In addition to a section on climate change within this element, policies and actions that address climate change appear throughout the entire General Plan and are identified by a small "🌍" icon. The County is committed to the reduction of greenhouse gases and has sought to balance this goal with other community values.

Similarly, the County faces uncertainty regarding future land uses and governance in the Delta. This section contains a section conservation and open space within the Delta region. In addition, there are numerous Delta-related goals, policies, and actions located throughout all the elements.



A. Introduction

1. Context

The land use designations used for purposes of categorizing, mapping, applying policy to land are identified and defined in the Land Use and Community Character Element. The County makes a distinction between Open Space (OS), Agriculture (AG), and Parks and Recreation (PR) land, as defined in that element. However, the state definition of “open space” (see Section B below) as used throughout this Conservation and Open Space Element, is more generic, and often refers to a combination of lands designated by the County as OS, AG, and PR.

Yolo County’s open spaces (including working agricultural and recreational landscapes) play a critical role in defining the identity of the County, incorporating many of the key natural and cultural heritage resources of local communities, and maintaining distinct boundaries between the cities and unincorporated communities. Protecting and enhancing this open space system and the natural, cultural and agricultural legacy it contains is of critical concern to the County.

The Conservation and Open Space Element provides direction regarding the preservation of open space and the conservation, continued enjoyment, and enhancement of natural resources in Yolo County. The County is committed to conserving its open spaces, biological resources, mineral, cultural resources, water resources, air quality, and energy resources, and to addressing climate change. This element provides for an integrated network of open space in Yolo County that is a framework to safeguard plant and wildlife habitat, provide for ongoing use of productive natural resources, protect archaeological and historical resources and heritage, and improve air quality in the Sacramento air basin. It provides for an ongoing commitment by the County to conserve energy and reduce the County’s contribution to greenhouse gas emissions.

2. Contents

This element is organized into subsections that specifically cover:

1. Natural Open Space (Goal CO-1)
2. Biological Resources (Goal CO-2)
3. Mineral Resources (Goal CO-3)
4. Cultural Resources (Goal CO-4)
5. Water Resources (Goal CO-5)
6. Air Quality (Goal CO-6)
7. Energy Conservation (Goal CO-7)
8. Climate Change (Goal CO-8)
9. Delta Region (Goal CO-9)



The subsection for each of these topics is formatted as follows: Background Information, Policy Framework, and Implementation Program. Within the Policy Framework and Implementation Program sections, policies and actions related to climate change are denoted with the symbol “🌍”.

3. Background Information

Summary background information for each topic of this element is provided with the relevant subsection below.

B. Regulatory Framework

1. State General Plan Requirements

This Conservation and Open Space Element combines two of the seven required elements of a General Plan: the Conservation Element, which is required to address the conservation, development and utilization of natural resources, and the Open Space Element, which is required to address open space lands used for a variety of purposes.

Specifically, State law (Sections 65302d.1 and 65302d.3 of the Government Code) mandates that the Conservation Element address the following:

- Water and its hydraulic force
- Forests
- Soils
- Rivers, creeks, streams, and other waters
- Harbors
- Fisheries
- Wildlife
- Minerals
- Other natural resources
- Effects of planned development on natural resources on public lands
- Effects of planned development on natural resources on military installations
- Flood corridors
- Riparian habitats
- Flood areas
- Groundwater recharge
- Stormwater management

State law (Section 65302d.2 of the Government Code) specifies that the Conservation Element may also address the following:

- Reclamation of land and waters
- Pollution of streams and other waters
- Regulation of stream channels
- Erosion of soils, beaches, and shores
- Protection of watersheds
- Rock, sand, and gravel resources



State law (Section 65560b of the Government Code and Sections 5097.9 and 5097.993 of the Public Resources Code) mandates that the Open Space Element address the following:

- Open space for preservation of natural resources, including:
 - Areas required for the preservation of plant and animal life
 - Habitat areas for fish and wildlife species
 - Areas required for ecologic and other scientific study purposes
 - Rivers, streams, bays, and estuaries
 - Coastal beaches, lakeshores, banks of rivers and streams
 - Watershed lands
- Open space for the managed production of resources, including:
 - Forest land
 - Range land
 - Agricultural lands
 - Areas of economic importance for the production of food and fiber
 - Areas required for recharge of groundwater basins
 - Bays, estuaries, marshes, rivers, and streams important for commercial fisheries
 - Areas containing mineral deposits
- Open space for outdoor recreation, including:
 - Areas of outstanding scenic, historic, and cultural value
 - Areas particularly suited for park and recreation purposes
 - Access to lakeshores, beaches, rivers, and streams
 - Areas that link major recreation and open space land such as utility easements, river banks, stream banks, and scenic highway corridors
- Open space for public health and safety, including:
 - Earthquake fault zones
 - Unstable soil areas
 - Floodplains
 - Watersheds
 - High fire risk areas
 - Areas required for the protection of water quality and water reservoirs
 - Areas required for the protection and enhancement of air quality
 - Other areas which require special management or regulation because of hazardous or special conditions
- Open space in support of the mission of military installations, including:
 - Areas adjacent to military installations and military training routes
 - Areas underlying restricted military airspace
- Open space for the protection of Native American places, features, and objects, including:



- Sanctified cemeteries
- Places of worship
- Religious or ceremonial sites
- Sacred shrines
- Historic, cultural or sacred sites
- Historic or prehistoric ruins
- Burial grounds
- Archeological or historic sites
- Inscription sites
- Rock art

Yolo County has addressed all of the above items within this element, with the following exceptions:

- Forests and forestlands are addressed in this element only as related to various woodland habitats as the County has no commercial forestland or timber resources. “Urban forestry” is addressed in this element, and in the Land Use and Community Character Element, as it relates to tree canopy in community areas. Orchards and other tree crops are addressed in the Agriculture and Economic Development Element.
- Soils as a resource are addressed primarily in the Agriculture and Economic Development Element. Soil characteristics such as erosion and stability are addressed primarily in the Health and Safety Element.
- The County has no harbors. The Port of Sacramento is addressed in the Circulation Element.
- The County essentially has no military installations and facilities. The only military facility in the County, the McClellan/Davis Telecommunication Site, has been declared surplus by the Air Force and is now closed. Discussion regarding this facility and plans to convert it to a County open space facility are addressed in this element.
- Areas subject to flooding, flood corridors, flood plains, and flood management are addressed primarily in the Health and Safety Element.
- Stormwater management and drainage service providers are addressed in the Public Facilities and Services Element.
- Agriculture, rangeland, and the production of food and fiber are addressed primarily in the Agriculture and Economic Development Element.
- Bays are not addressed in this General Plan, as the County does not have these resources; however other biological resources are addressed in this element. Policies relating to the Delta, which is an estuary, are addressed throughout the General Plan.
- Coastal beaches are not addressed in this General Plan, as the County does not have these resources. Other water resources and features are addressed in this element.



- Commercial fisheries are not addressed in this General Plan, as the County does not have a commercial fishery resource or industry. Other fishery resources are addressed in this element.
- Utility easements are addressed in the Public Facilities and Services Element.
- The County has no designated federal or State Scenic Highways. A portion of State Route 16 (from approximately the town of Capay at County Road 85, north to the County line) is identified by Caltrans as “eligible” for designation as a State Scenic Highway but is not officially designated. Locally designated scenic roadways are addressed in the Land Use and Community Character Element.
- Seismic, geological, and wildland fire hazards are addressed in the Health and Safety Element.

2. Other Related Efforts

The following local and regional plans, programs, and organizations are among those that affect or are involved in the implementation of conservation and open space protection in Yolo County:

- Yolo Natural Heritage Program (YNHP)
- Oak Woodlands Management Plan
- Parks and Open Space Master Plan
- Cache Creek Area Plan (CCAP)
- Integrated Regional Water Management Plan (IRWMP)
- SACOG Rural Urban Connection Strategy
- Sacramento River Conservation Area Forum
- Sacramento Valley Conservancy
- Yolo Bypass Working Group and Planning Forum
- Putah Creek Council and Plan
- Cache Creek Conservancy
- Lower Bypass Planning Forum
- Delta Vision
- Delta Protection Commission
- Bay Delta Conservation Plan
- Blue Ridge Berryessa Natural Area Conservation Partnership
- Yolo Land Trust
- Yolo County Resource Conservation District
- Tuleyome
- Yolo Basin Foundation
- Audubon California Landowners Stewardship Program
- Yolo County Flood Control and Water Conservation District
- Water Resources Association of Yolo County
- Lower Putah Creek Coordinating Committee
- Other private non-profit organizations



C. Natural Open Space

1. Background Information

a. Existing Resource Parks

This section addresses County “resource” parks including regional and open space parkland managed for multiple objectives. Existing parks and trails are shown in Figure CO-1. Community (neighborhood parks), such as those located in Esparto and Dunningan, and the County Historical Museum facility are discussed in the Public Facilities and Services Element. A complete list of existing County Parks is provided in Table CO-1. A map of proposed future park facilities is provided in Figure CO-2.



FIGURE CO-1 EXISTING PUBLIC PARKS AND TRAILS

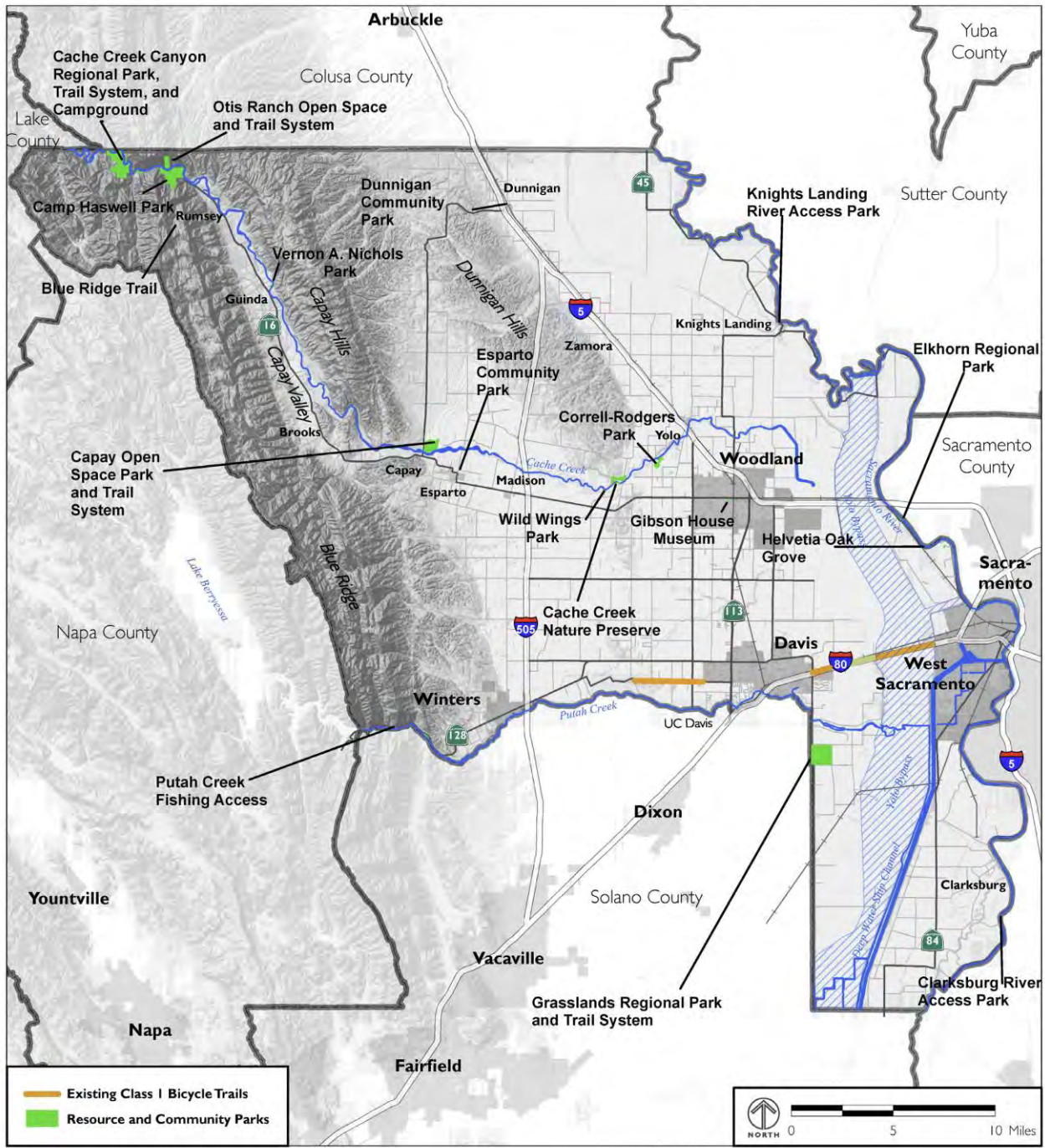


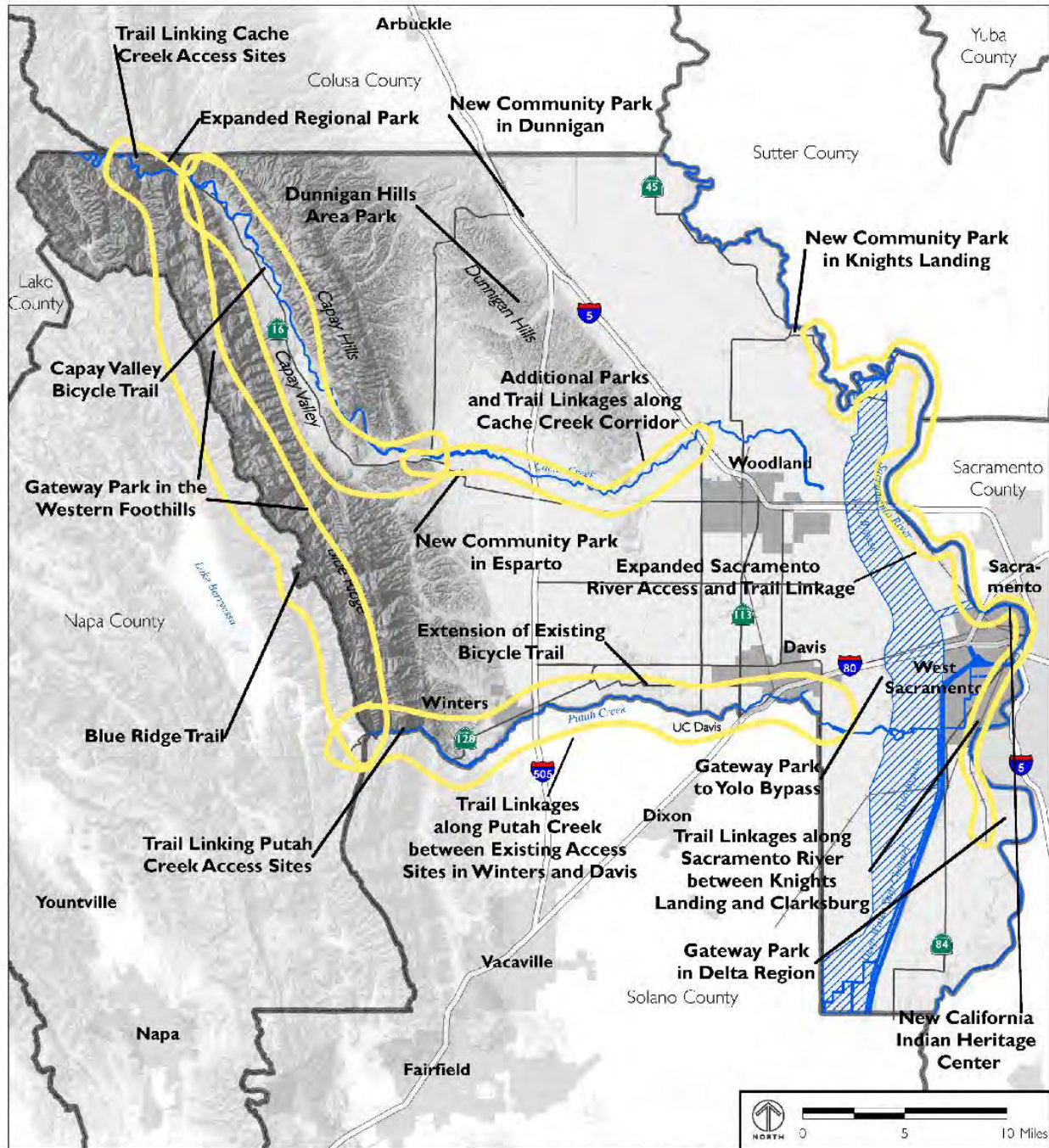


TABLE CO-1 EXISTING COUNTY PARKS

Park	Acreage	Location
Dunnigan Community Park	0.5	3640 County Road 89A, Dunnigan
Esparto Community Park	1	17001 Yolo Avenue, Esparto
Cache Creek Canyon Regional Park, Trail System and Campground	685	1475 State Route 16, Rumsey
Cache Creek Nature Preserve	119	Southwest corner of County Road 20X and 94B, north of Cache Creek, Woodland
Camp Haswell Park	7	1999 State Route 16, Rumsey
Capay Open Space Park and Trail System	41	15560 County Road 85, Capay
Clarksburg River Access Park	4	38125 Old River Road, Clarksburg
Correll-Rodgers Habitat Area	40	East of County Road 96 and south of Cache Creek, Woodland
Elkhorn Regional Park	49	18989 Old River Road, West Sacramento
Gibson House Museum	2	512 Gibson Road, Woodland
Grasslands Regional Park and Trail System	313	30475 County Road 104, Davis
Helvetia Oak Grove	12	20470 Old River Road, West Sacramento
Knights Landing River Access Park	4	9350 State Route 45, Knights Landing
Nichols Park	21	17195 County Road 57, Guinda
Otis Ranch Open Space and Trail System	587	West of State Route 16, Rumsey
Putah Creek Fishing Access	87	24135 State Route 128, Winters
Wild Wings Park	17	North of Goldeneye Street and south of Cache Creek, Woodland
TOTAL	1976.5	



FIGURE CO-2 FUTURE PARKS AND TRAILS





The term “resource” park is used herein to refer to regional and/or open space parkland, typically much larger in size than a community park, typically characterized by passive and/or very low-management uses, and intended to serve both the county population and outside visitors, rather than an individual community. In contrast community (or neighborhood) parks are small in area (less than 10 acres), usually located in or near small population centers, and developed for a variety of community uses, gatherings, and events. These parks are intended to provide active recreational areas, such as playgrounds, sports fields, and sports courts.

Yolo County owns and/or manages a number of resource parks; however, the vast majority of open space in the County remains in private ownership. Additional public and quasi-public landowners include non-profit organizations, tribal groups and non-County public agencies, including the incorporated cities, the University of California, the State and federal governments. Figure CO-3 shows the various existing publicly owned or managed open space lands in the county.

b. Existing Natural Open Space

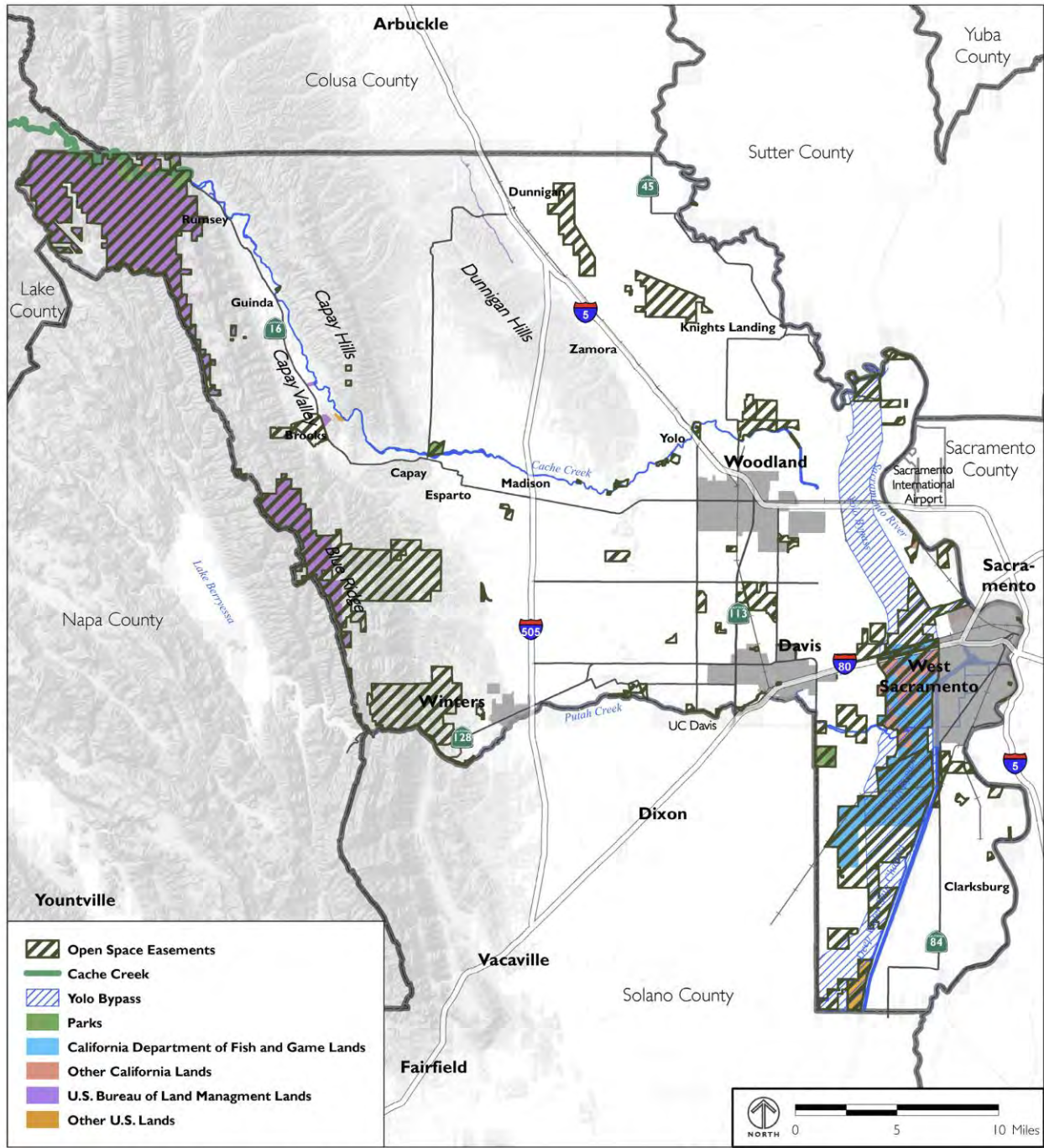
Large open space areas in Yolo County are owned and managed by a variety of entities including federal, State, and local government, non-governmental organizations, commercial mitigation banks, and other private interests. Publicly owned lands account for approximately six percent of the county land area. Large properties under public ownership and/or management in Yolo County include:

- The Yolo Bypass Wildlife Area (Wildlife Area) is 16,770 acres of managed wildlife habitat and agricultural land located within the southern floodway of the Yolo Bypass.¹ A portion of the Wildlife Area spans Interstate 80 adjacent to the Yolo Causeway, between the cities of Davis and West Sacramento. The Wildlife Area is a public and private restoration project managed by the California Department of Fish and Game (DFG) in consultation with the Yolo Basin Foundation. In 1997, the U.S. Army Corps of Engineers restored wetlands and associated habitats within the Wildlife Area. This project, originally named the Yolo Basin Wetlands, was re-named the Vic Fazio Yolo Wildlife Area. The entire wildlife area, however, is officially named the Yolo Bypass Wildlife Area.

¹ The Yolo Basin Foundation, *Land Management Plan for the Yolo Bypass Wildlife Area*, page 1-1.



FIGURE CO-3 PUBLICLY-OWNED OPEN SPACE AREAS



Sources: County of Yolo GIS, 2006; Department of Fish and Game, 2000.



The Blue Ridge Berryessa area consists of 785,000 acres along the spine of the western Blue Ridge Mountains in the northwestern part of Yolo County, and includes portions of Colusa, Solano, Napa and Lake Counties. The area remains primarily in private ownership and is not subject to State or federal management. The Blue Ridge Berryessa Natural Area Conservation Partnership (BRBNACP) is a collaboration involving various private land owners; businesses; local, state, and federal agencies; non-profit organizations; and supporters working to protect and enhance the 600,000 acre BRNBA. To date, 50,000 acres have been conserved through easements and purchases..

- The lower Cache Creek planning area includes over 28,000 acres of land with state designated mineral resources, which includes about 18,250 acres of known “significant” deposits (designated on the Land Use Map with the MRZ Overlay). Within the Cache Creek planning area the County has designated an Open Space area of about 5,000 primarily privately owned acres which fall under the management guidance and regulation of the Cache Creek Resources Management Plan (CCRMP). As a by-product of permitted aggregate mining within the Cache Creek planning area there is an increasing acreage of dedicated land transferring into public ownership. Public access to these areas is anticipated to increase over time pursuant to the CCRMP

The CCRMP is a component of the Cache Creek Area Plan (CCAP), which is an adopted part of this General Plan. The focus of the CCAP is groundwater protection, agricultural preservation, restoration of Cache Creek, and limitation and regulation of mining.

- The Cache Creek Wild and Scenic River Area includes 31 miles of upper Cache Creek in Lake and Yolo counties that were added to the State Wild and Scenic Rivers System in 2005. Designation of the upper reaches of the Creek as “wild and scenic” supports the creek’s scenic, recreational, wildlife, and fishery values and precludes new dams and water diversions.

The federal government owns 30,225 acres² and the State of California owns 17,257 acres³ of land in unincorporated Yolo County managed for open space purposes. Each of the four Yolo County cities also own public open space, mostly in the form of parkland within their boundaries. Notably, the City of Davis has acquired open space lands in a number of locations around its edge, and a number of open space areas are owned and managed by the University of California.

Agricultural lands are often considered informal open space, and indeed are treated by the State as Open Space for the Managed Production of Resources. Most agricultural lands are privately held and generally are not open to the public. As noted above, agriculture and rangeland are addressed in the Agriculture and Economic Development Element.

² Within the unincorporated area only. Does not include Tribal Trust land, DQ University, freeways, or highways.

³ Within the unincorporated area only. Does not include UC Davis, freeways, highways.



c. Future Natural Open Space

Yolo County has great potential for new open space acquisitions in the future. Expanding resource parks opportunities and other open space is important to the values of the County. As shown in Figure CO-2, the County plans to add new resources parks and other open space in key areas over time.

2. Policy Framework

GOAL CO-1 **Natural Open Space. Provide a diverse, connected and accessible network of open space, to enhance natural resources and their appropriate use.**

- Policy CO-1.1 Expand and enhance an integrated network of open space to support recreation, natural resources, historic and tribal resources, habitat, water management, aesthetics, and other beneficial uses.

- Policy CO-1.2 Develop a connected system of recreational trails to link communities and parks throughout the county. 🌍

- Policy CO-1.3 Create a network of regional parks and open space corridors that highlight unique resources and recreational opportunities for a variety of users. 🌍

- Policy CO-1.4 Provision of an appropriate level of public facilities and infrastructure shall be a priority for all County park facilities.

- Policy CO-1.5 Establish future resource parks close to population centers, where feasible. 🌍

- Policy CO-1.6 Develop “gateways” or trailheads that provide access for the public to County, State, and Federal lands. Where located on private land, gateways shall be developed working with willing landowners.

- Policy CO-1.7 Support efforts by willing landowners and non-profit groups to provide new opportunities for outdoor recreation. (Policy CO 1.29)

- Policy CO-1.8 Encourage responsible stewardship of private lands. Promote increased opportunities for public access to waterways and other natural areas.

- Policy CO-1.9 Promote the conservation of environmental resources in new and existing park and open space facilities.



- Policy CO-1.10 The target threshold for resource parks (regional and open space parks) shall be 20 acres per 1,000 total County population (both unincorporated and incorporated). Larger ratios may be appropriate in Specific Plan areas to accommodate important natural features and/or safety areas.
- Policy CO-1.11 Coordinate the development of recreation areas and public open space with regional trail planning. 🌍
- Policy CO-1.12 Create opportunities for ecotourism.
- Policy CO-1.13 Within the Delta Primary Zone, ensure compatibility of permitted land use activities with applicable, natural open space policies of the Land Use and Resource Management Plan of the Delta Protection Commission.
- Policy CO-1.14 Support the preservation of open space consistent with this General Plan, via acquisition of fee title or easement interest by land trusts, government agencies, and conservancies from willing landowners.
- Policy CO-1.15 Support efforts to acquire either fee title or easements on additional open space areas adjoining existing protected natural resource areas to increase the size, connectivity, and buffering of existing habitat. 🌍
- Policy CO-1.16 Coordinate open space acquisition with habitat acquisition that occurs pursuant to the Yolo Natural Heritage Program.
- Policy CO-1.17 Out-of-county mitigation easements in Yolo County for the loss of open space, agriculture, or habitat in other jurisdictions, and flood easements in Yolo County are allowed at the discretion of the Board of Supervisors provided the easement meets the requirements of the Habitat Mitigation Ordinance (ord. 1426).
- Policy CO-1.18 Work with the Blue Ridge Berryessa Natural Area Conservation Partnership, the Bureau of Land Management, Napa County, California Department of Fish and Game, and other landowners on a voluntary basis to complete the Blue Ridge Trail through voluntary acquisitions.
- Policy CO-1.19 Support the development of a new State Park in Yolo County, with emphasis on expanding opportunities for family camping and water-related recreation, protecting new lands, and incorporating an agricultural heritage park.
- Policy CO-1.20 Support development of a new off-highway vehicle (OHV) park at an appropriate location.



- Policy CO-1.21 Emphasize the use of native grasses, shrubs and trees as the primary focus of restoration within resource parks and other open spaces. 🌍
- Policy CO-1.22 Work with concessionaires and lessees to provide recreational amenities that do not conflict with other park uses or general public access.
- Policy CO-1.23 Increase public access and recreational uses along waterways wherever feasible, particularly Cache Creek, Lower Putah Creek, the Yolo Bypass, and the Sacramento River.
- Policy CO-1.24 Allow for specified areas of resource parks to be preserved, enhanced and/or restored as mitigation sites for public agencies only, consistent with the requirements of appropriate regulatory and funding agencies, provided that adequate compensation, including funding for operations and maintenance of the mitigation, is provided.
- Policy CO-1.25 Support development of the new California Indian Heritage Center in the City of West Sacramento.
- Policy CO-1.26 Support improved access for bank fishing.
- Policy CO-1.27 Support the relocation of the California Governor's mansion to Yolo County.
- Policy CO-1.28 Balance the needs of agriculture with recreation, flood management, and habitat, within the Yolo Bypass.
- Policy CO-1.29 Require clustering and creative site planning in new development areas to preserve and enhance areas of contiguous open space to the extent feasible.

3. Implementation Program

- Action CO-A1 Update the Parks Master Plan as necessary to implement the goals, policies, and actions of relevant portions of the Conservation and Open Space Element. 🌍 (Policy CO-1.1, Policy CO-1.2, Policy CO-1.3, Policy CO-1.12, Policy CO-1.25, Policy CO-1.26)
Responsibility: Parks and Resources Department
Timeframe: 2010/2011
- Action CO-A2 Establish permanent areas of agriculture and open space between cities and unincorporated towns to ensure the continued distinctiveness of each community. 🌍 (Policy CO-1.2)
Responsibility: Department of Community Services, Parks and Resources Department
Timeframe: 2012/2013



- Action CO-A3 Seek to acquire voluntary easements to ensure connectivity with the conservation areas established through the Blue Ridge Berryessa Natural Area Conservation Partnership. 🌍 (Policy CO-1.1, Policy CO-1.3, Policy CO-1.8, Policy CO-1.16, Policy CO-1.19)
Responsibility: Parks and Resources Department
Timeframe: Ongoing
- Action CO-A4 Pursuant to the Cache Creek Area Plan, develop a recreation plan for the Cache Creek Parkway including a range of public activities and uses. (Policy CO-1.25)
Responsibility: Parks and Resources Department
Timeframe: 2012/2013
- Action CO-A5 Clearly define boundaries between public open space and private agricultural lands through mapping, signage, fencing, and/or other appropriate means to discourage trespassing. (Policy CO-1.1)
Responsibility: Parks and Resources Department
Timeframe: Ongoing
- Action CO-A6 Connect the future Bay Delta Trail system, the future trail system in the lower Yolo Bypass, and the future Cache Creek Parkway system, and link those trails to the American River Bikeway system in Sacramento County. 🌍 (Policy CO-1.1, Policy CO-1.3, Policy CO-1.12, Policy CO-1.19, Policy CO-1.29)
Responsibility: Parks and Resources Department
Timeframe: 2029/2030
- Action CO-A7 Prioritize the construction of multi-use trails that provide links between already established trails and bicycle routes. 🌍 (Policy CO-1.1, Policy CO-1.2, Policy CO-1.4)
Responsibility: Parks and Resources Department
Timeframe: Ongoing
- Action CO-A8 Amend the Grasslands Park Master Plan to incorporate the McClellan/Davis Telecommunications Site, including the establishment of an endowment and ongoing monitoring of endangered species. (Policy CO-1.1, Policy CO-1.10)
Responsibility: County Administrator's Office, General Services Department, Parks and Resources Department
Timeframe: 2008/2009
- Action CO-A9 Pursue State grant funds to restore areas of the County impacted by illegal OHV activity, to protect areas from unauthorized use through enforcement, and to redirect users to an OHV park. (Policy CO-1.10, Policy CO-1.22)
Responsibility: Parks and Resources Department



Timeframe: 2019/2020

Action CO-A10 Pursue a countywide tax and/or bond assessment so that all residents contribute fairly to the planning, acquisition, operation, and maintenance of resource parks. (Policy CO-1.1, Policy CO-1.2, Policy CO-1.3, Policy CO-1.4)
Responsibility: County Administrator's Office
Timeframe: 2010/2011

Action CO-A11 Provide recreational uses that are river or creek dependent in locations directly on Cache Creek, Putah Creek, and the Sacramento River. Examples include fishing, canoeing, boating, and nature observation. With the exception of boat launches and docks, more active uses, such as parking, restrooms, and picnic areas, shall be located in areas away from the river and sensitive riparian habitat. (Policy CO-1.1, Policy CO-1.25, Policy CO-1.28, Policy CO-1.29)
Responsibility: Parks and Resources Department
Timeframe: Ongoing

Action CO-A12 Cluster recreational improvements at various locations along Cache Creek, Lower Putah Creek, and the Sacramento River, to reduce habitat disturbance and provide efficient and cost-effective management by the County. (Policy CO-1.10)
Responsibility: Parks and Resources Department
Timeframe: Ongoing

Action CO-A13 Design access to resource parks, whether by road or by trail, to go through a controlled entry point wherever feasible. (Policy CO-1.10)
Responsibility: Parks and Resources Department
Timeframe: Ongoing

Action CO-A14 Implement the Elkhorn Specific Plan to establish a resource park and public access to the Helvetia oak grove, create public access along the waterway north of County Road 22, and integrate management of both sites with the nearby Elkhorn Regional Park. (Policy CO-1.1, Policy CO-1.6, Policy CO-1.25)
Responsibility: Department of Community Services
Timeframe: 2019/2020

Action CO-A15 Combine parks and trails with open space and wildlife conservation areas where appropriate. (Policy CO-1.1, Policy CO-1.10)
Responsibility: Parks and Resources Department
Timeframe: Ongoing

Action CO-A16 Enhance parking and access at existing resource parks, including the Putah Creek fishing access, Cache Creek Canyon Regional Park, and



the Camp Haswell/Otis Ranch property. Encourage the use of alternative transportation by providing bike racks, bus stops, and other appropriate facilities. (Policy CO-1.4)

Responsibility: Parks and Resources Department

Timeframe: Ongoing

Action CO-A17 In order to strengthen an appreciation of natural resource values, local place, and identity, include educational programs, materials, and signs in resource parks that address water, geology, plants, animals, events, and people. (Policy CO-1.1)

Responsibility: Parks and Resources Department

Timeframe: Ongoing

Action CO-A18 Establish a program for camp hosts/docents at all resource parks, where feasible. (Policy CO-1.1, Policy CO-1.10)

Responsibility: Parks and Resources Department

Timeframe: Ongoing

Action CO-A19 Allow public agencies to establish, protect and/or enhance habitat for mitigation purposes within specific areas of resource parks, consistent with the requirements of appropriate regulatory agencies, where an endowment is created to fund the monitoring and maintenance of the habitat. Allow non-profit organizations to manage such areas, where appropriate. (Policy CO-1.1, Policy CO-1.15, Policy CO-1.26)

Responsibility: Parks and Resources Department

Timeframe: Ongoing

Action CO-A20 Develop and implement a system of open space corridors and trails that connects each community and city by integrating waterways, scenic areas, significant habitat areas, County parks, and other special resource areas. (Policy CO-1.1, Policy CO-1.2, Policy CO-1.3, Policy CO-1.12, Policy CO-1.25, Policy CO-1.26)

Responsibility: Parks and Resources Department

Timeframe: 2010/2011

Action CO-A21 Create “Friends of Yolo Parks” and “Adopt-A-Park” programs and encourage participation by non-profit organizations. (Policy PF-3.3, Policy PF-3.7)

Responsibility: Parks and Resources Department

Timeframe: 2010/2011

Action CO-A22 Maintain reasonable fee structures for the use of County parks and recreation facilities by resident and non-resident patrons. (Policy PF-3.7)

Responsibility: Parks and Resources Department

Timeframe: Ongoing



- Action CO-A23 Partner with the private sector and non-government organizations to provide services and/or maintain all or components of park facilities, wherever practical. (Policy PF-3.2, Policy PF-3.7)
Responsibility: Parks and Resources Department
Timeframe: Ongoing
- Action CO-A24 Develop a special area plan to govern land use management within the Yolo Bypass. (Policy CO-1.29)
Responsibility: Department of Community Services, Parks and Resources Department
Timeframe: 2013/2014

D. Biological Resources

1. Background Information

Yolo County is a biologically and topographically diverse landscape that extends from the agricultural areas of the Central Valley, westward into the chaparral and woodland communities of the Interior Coast Ranges, and southward into the wetlands and pastureslands of the northern Sacramento-San Joaquin River Delta.

In the broadest sense, Yolo County can be characterized by two main land uses, 1) agricultural lands occurring primarily in the lower elevations on the valley floor, and 2) natural lands occurring primarily in the Interior Coast Ranges on the western side of the county and interspersed within the agricultural landscape as narrow riparian corridors, remnant oak woodlands, and wetlands. Figure CO-4 illustrates five broad vegetation categories in Yolo County: agricultural lands, grasslands, woodlands, riparian areas, and wetlands. Each of these broad categories may represent a variety of plant communities and wildlife habitats. Other notable vegetation communities in the county include oak savannah, a transitional community between woodland and prairie grassland types; chaparral, a diverse and biologically rich woodland/shrub community found in the Interior Coast Ranges in association with the higher elevation oak woodlands; a variety of wetland communities including natural and managed seasonal wetlands and marshes; and remaining patches of valley oak woodland on the valley floor occurring within the agricultural landscape. Each of these communities and habitats provide important biological value, support numerous plant and wildlife species, and are all part of an interrelated ecological landscape. An effective conservation approach considers the interrelatedness of this system as a whole and strives to preserve and restore the functioning of ecologic processes by maintaining the necessary connectivity across the landscape.

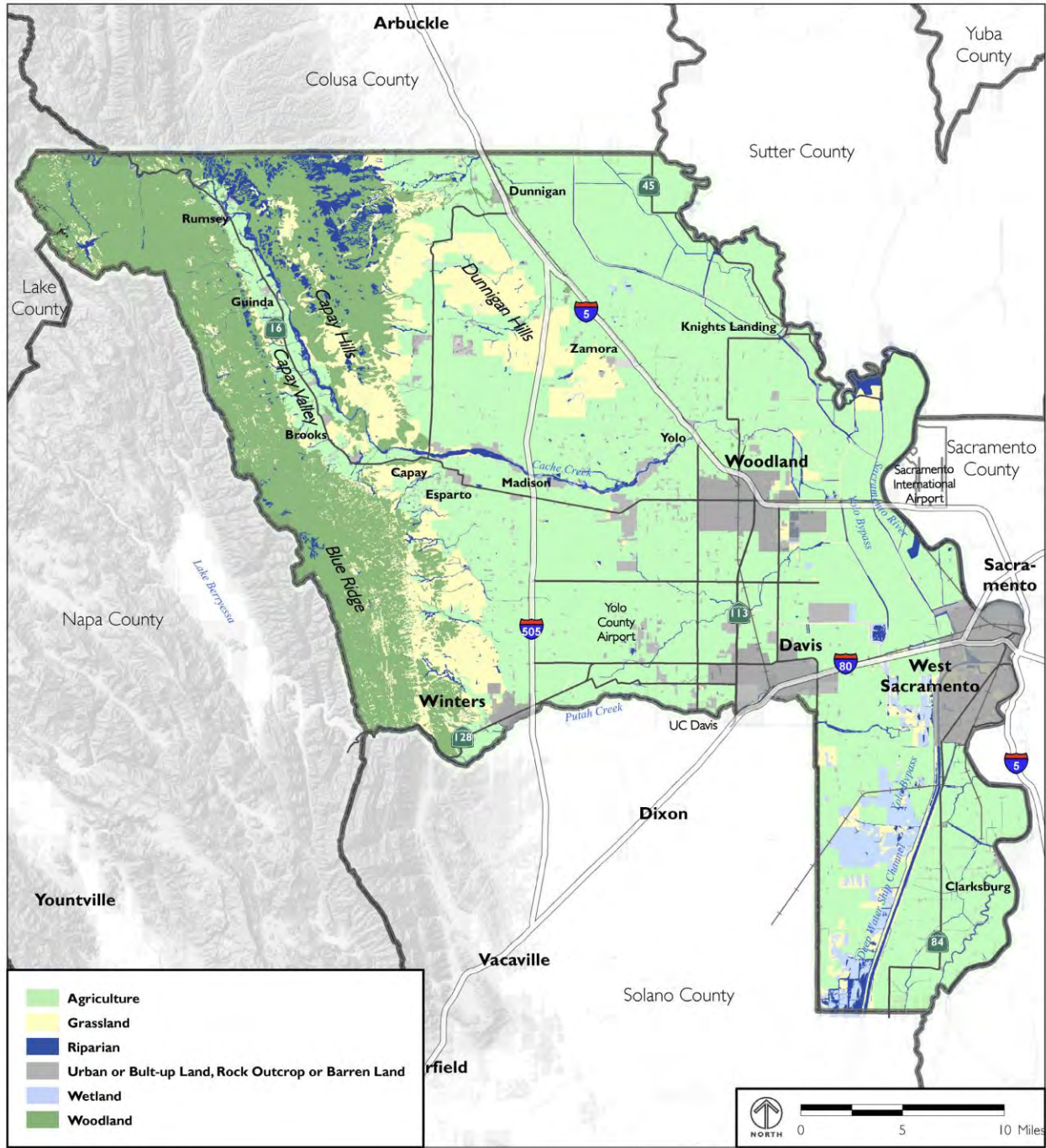
Climate change is anticipated to result in great changes to the biological resources within the county. Shifts in food sources, timing of natural processes (e.g. hibernation, migration, reproduction, and estivation) and active growing periods, chilling and heating, will all have direct links to shifting climate and will redefine many essential relationships



in natural communities. These shifts will also have the potential to dramatically impact agriculture, possibly changing pest complexes, water demands and even viability of some crops and cropping patterns. Traditional approaches to biological resource conservation have focused on defining habitat areas. With looming changes in climate, there is less confidence that a particular parcel will retain the habitat features needed to ensure maintenance of desired species.



FIGURE CO-4 VEGETATIVE TYPES



Source: County of Yolo GIS, 2009.



In the coming decades, a greater emphasis on corridors and gradients of conditions will need to be built into natural resource management in order to allow natural communities to adjust to forcing factors generated by climate change. Policies and practices associated with this emphasis are new and will require flexibility for agencies and land managers to adjust to the demands of managing a dynamic system.

a. Agricultural Lands

Yolo County has a diverse matrix of agricultural types including a variety of row and grain crops, hay crops, orchards and vineyards, and dryland and irrigated pasturelands that provide significant value to resident, migratory, and wintering wildlife. Agricultural lands are found primarily in the lower elevation portion of the county east of the Interior Coast Ranges and extending northwest through Capay Valley. Table CO-2 represents the total harvested acres of agricultural crops and land uses within the county in 2007, the most recently available data (Yolo County 2008). It indicates the relative abundance of the major crops and combines the crops with smaller amounts of harvested acreage into several miscellaneous categories. In 2007, approximately 70% of the county was under active agricultural production (including grazing land). Remaining areas included oak woodlands and other natural areas, urban areas, wetlands, idle lands, and other uses.

Table CO-2 indicates that dry pasture (primarily grazed annual grassland) was the dominant agricultural land use in the county (29.3%), occurring mainly in the foothills along the western edge of the Central Valley and the Dunnigan Hills. Nearly all of the irrigated cropland acreage is found on the valley floor east of the Interior Coast Ranges extending into the southeast panhandle. In 2007, the majority of the irrigated cropland acreage (48.7% of the total agricultural land use) included six crop types: alfalfa, tomatoes, rice, wheat, orchards, and sunflower. The remaining 22% of the agricultural land use was comprised of a wide variety of field and vegetable crop types, vineyards, seed crops, nursery products, and irrigated pasture.

Table CO-3 represents the change in agricultural crops and land uses in Yolo County between 1997 and 2007. Overall, the agricultural landscape has remained fairly constant over time and several major crop types have been a significant part of the agricultural landscape in Yolo County for many decades, including tomatoes, wheat, alfalfa, and field corn. However, there have been some notable changes in the percentages of harvested acres of several crops, even within the last 10 years (Table CO-3). Among these include a decrease in corn, safflower, and melons; an increase in vineyards, sunflower, and vegetables; and the elimination of sugar beets.



Table CO-2 Agricultural Cover Types in Yolo County (2007)

Crop Type	Acres	Percent of Total
Dry Pasture	135,775	29.3
Alfalfa Hay	53,959	11.6
Tomatoes	42,149	9.1
Rice	36,600	7.9
Wheat	35,613	7.7
Orchard	29,352	6.3
Sunflower	28,143	6.1
Misc. Field Crops**	26,029	5.6
Vineyard	11,898	2.6
Irr. Pasture	11,661	2.5
Field Corn	11,596	2.5
Grain Hay*	11,168	2.4
Other Seed Crops	9,545	2.1
Safflower	9,033	1.9
Organic Vegetable Crops	5,932	1.3
Misc. Vegetable Crops***	3,561	0.7
Melons	1,256	0.3
Nursery Products	492	0.1
Total	463,762	100

* includes barley, oat, ryegrass, sudangrass, and volunteer hay

** includes barley, dry beans, screenings, sorghum grain, and stubble.

***includes cabbage, cantaloupes, corn, cucumbers, lettuce, melons, peppers, pumpkins, squash, sweet corn, tomatoes, watermelon, and other truck crops

Yolo County, 2008



Table CO-3 Agricultural Crops Acreage in Yolo County (1997 to 2007)

Crop Type	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	Acres and % Δ 97-07
Dry Pasture	144,950	136,368	119,533	124,258	126,510	130,411	133,965	147,098	136,806	122,775	135,775	-9,175/-6.3
Wheat	54,836	39,014	33,832	43,144	43,774	33,076	56,227	44,098	34,647	20,976	35,613	-19,223/-35.1
Tomatoes	49,200	56,600	67,114	48,575	48,575	42,812	38,274	45,129	42,232	37,026	42,149	-7,051/-14.3
Field Corn	36,915	18,518	13,513	28,125	18,308	9,195	6,495	9,523	4,238	2,452	11,596	-25,319/-68.6
Alfalfa Hay	33,983	42,430	43,024	38,720	45,885	53,231	55,914	52,904	45,776	59,269	53,959	19,976/58.8
Safflower	27,040	24,278	29,545	24,558	27,650	20,765	20,674	9,991	12,955	10,176	9,033	-18,007/-66.6
Rice	25,800	17,816	24,483	36,229	28,717	32,446	37,303	45,655	34,670	29,997	36,600	10,800/41.9
Misc. Field	20,925	21,273	23,358	29,331	29,191	28,701	33,029	33,962	54,226	30,416	26,029	5,104/24.4
Other Seed	18,464	16,768	14,782	14,331	12,214	13,247	11,414	13,102	13,191	12,481	9,545	-8,919/-48.3
Orchard	18,368	18,039	17,023	18,889	18,056	18,478	19,364	19,313	21,777	22,988	29,352	10,984/59.8
Irr. Pasture	13,000	13,000	13,000	13,000	13,000	13,000	13,000	13,000	13,000	13,000	13,000	0/0
Vineyard	6,833	8,410	8,704	9,496	10,242	9,699	10,334	9,909	8,464	10,156	11,898	5,065/74.1
Oat Hay	6,018	8,802	7,340	7,566	7,826	13,466	10,958	7,383	7,855	*	*	1,837/30.5
Sunflower	5,679	5,831	10,381	4,377	4,540	3,372	9,294	13,403	13,615	16,623	28,143	22,464/395.6
Melons	5,324	2,333	4,575	4,342	3,364	3,613	4,005	2,585	1,949	1,778	1,256	-4,068/-76.4
Sugar Beets	4,526	1,570	1,871	1,029	0	0	0	0	0	0	0	-4,526/-100.0
Cotton	4,418	2,857	1,956	4,160	3,600	4,052	**	**	**	**	**	-366/-8.3
Misc. Veg	1,800	1,440	1,286	2,730	1,955	1,761	1,669	1,443	1,205	3,044	3,561	1,761/97.8
Organic Veg	1,556	2,425	2,830	3,335	6,253	5,405	4,692	4,998	4,515	6,003	5,932	4,376/281.2
NurseryCrops	524	293	406	440	584	502	515	489	505	571	492	-32/-6.1

* In 2006, oat hay was included under “grain hay”, which included barley, ryegrass, sudan grass, and volunteer hay. Prior to 2006, these other “grain hay” types were included under Miscellaneous Field (with the exception of sudan grass, which was identified separately from 2000 to 2002). Miscellaneous Field also included other types such as soybeans, sorghum grain, and dry beans.

** Cotton was included under Miscellaneous from 2003 to 2007.

7 CONSERVATION AND OPEN SPACE ELEMENT

While nearly entirely altered from its native condition, agricultural lands in Yolo County continue to represent an important landscape for numerous wildlife species. Raptors, waterfowl and other water birds, a variety of songbirds, and small mammals use agricultural fields for nesting and foraging; but to large extent, the enhanced value of agricultural habitats in Yolo County is due to the integration of natural communities within the agricultural landscape. Adjacent riparian corridors, roadside trees, windbreaks, woodlots, isolated trees, and field borders provide important nesting, roosting, and cover habitat for many local and migratory species that also use the agricultural fields as foraging habitat. The retention of these adjacent habitats has greatly enhanced the wildlife value of agricultural habitats in Yolo County and their continued retention and restoration is essential in maintaining this value over time.

Agricultural lands also provide seasonal value to wildlife due to growth and harvesting regimes and management practices. For example, the value of many crop types is enhanced during harvesting due to the exposure and accessibility of rodent prey for foraging raptors. Because of the diverse nature of Yolo County farmlands, harvesting operations occur from early summer to late fall, providing enhanced access to abundant prey for foraging raptors throughout most of the breeding season. Flood irrigation of alfalfa and other hay fields and irrigated pastures also enhances prey accessibility and attracts a variety of water birds and raptors.

Flooded rice lands are also particularly important during the breeding season for many wildlife species by providing aquatic habitat and invertebrate prey for a variety of water birds, amphibians, and reptiles. Other agricultural fields are flooded during the winter and managed as waterfowl habitat. These fields attract abundant wintering waterfowl and act to some extent as surrogate wetlands providing essential winter aquatic habitat along the Pacific Flyway.

b. Natural Lands

Approximately 21% of the county can be defined as natural lands. These include native oak woodlands, prairie grasslands, and chaparral communities in the western mountains and foothills, riparian woodlands, native and restored wetland communities, and remnant valley oak groves and valley oak trees on the valley floor.

Wetlands

Wetlands include permanent marsh communities that are inundated all or most of the year, and seasonal wetlands that are inundated only a part of the year, typically during winter and spring. Native seasonal wetlands are uncommon in Yolo County and include several remaining patches of alkali sink between Davis and Woodland, and vernal pools

associated with the prairie grasslands near Winters. Most seasonal wetlands in Yolo County are restored and managed to provide habitat for wintering waterfowl.

Significant areas of seasonal wetland and marsh communities are found primarily in the Yolo Basin, including the Yolo Bypass Wildlife Area, private lands in the southern panhandle, the Conaway Ranch north of Interstate 80, and the City of Davis Wetlands. Additional wetland habitats are found at the recently restored Roosevelt Ranch Preserve east of Zamora and in several other isolated locations throughout the central and eastern portions of the county.

Wetlands are among the most productive wildlife habitats, supporting many species of birds, mammals, reptiles, and amphibians. The presence of wetlands also enhances the biological value of the surrounding landscape because many species that find nesting and cover habitat in wetlands may forage more widely in agricultural or grassland habitats. Marsh communities, including non-tidal freshwater emergent wetland, tidal freshwater emergent wetland, and tidal perennial aquatic wetland provide nesting and cover habitat for many wetland- and aquatic-associated species. Seasonal wetlands provide important habitat for wintering waterfowl and other water birds; and during the dry summer and fall, seasonal wetlands are used by numerous raptor and songbird species.

Riparian

Riparian refers to streamside vegetation that occurs along rivers, creeks, and sloughs. In Yolo County, riparian woodland and shrub communities occur along several natural rivers, creeks, and sloughs and constructed water delivery canals in the county, including Sacramento River, Putah Creek, Cache Creek, Oat Creek, Bird Creek, Buckeye Creek, Willow Slough, Dry Slough, Elk Slough, Sutter Slough, Tule Canal, Deep Water Ship Channel, and the Knights Landing Ridge Cut. Most of the creeks in the county drain the Interior Coast Ranges and flow west to east toward the Sacramento River basin. The sloughs are backwater drainages of the Sacramento River; and the canals were constructed for water delivery or transport purposes. The most significant riparian communities occur along Putah Creek and Cache Creek. Both support relatively dense valley oak/cottonwood riparian forest and are significant wildlife movement corridors between the Interior Coast Ranges on the west and the Sacramento River basin on the east. Smaller creeks and sloughs also support significant remaining riparian corridors that interconnect the mountainous landscape on the west with the valley floor or extend north-south through the lower elevation agricultural landscape.

Riparian communities are often highly productive both in terms of vegetation and plant diversity, and wildlife use. Riparian habitat has declined dramatically since the late 1800s due mostly to agricultural conversion, and remaining riparian corridors are essential in maintaining natural linkages between geographic areas and migratory and dispersal corridors for wildlife. Some riparian woodland in the county supports a multi-structured canopy with a variety of native trees including cottonwood, valley oak, walnut, willow, Oregon ash, alder, and sycamore, and an understory that may include a variety of shrub species. Other riparian corridors support mostly shrub species with a sparse

over-story canopy. Riparian communities are also home to an abundance of wildlife from invertebrates to large mammals. They are essential habitat for many nesting and migratory birds and are considered to support the most diverse bird communities in the western United States.

Riparian vegetation is also essential in maintaining the quality of in-stream habitat by providing shade, food, and nutrients. Downed trees, willow mats, and other vegetation scour pools, form logjams and dams, and provide important habitats for fish, aquatic reptiles and amphibians, and aquatic insects.

Oak Woodlands/Chaparral

Oak woodland and chaparral communities occur in the higher elevations of the inner Coast Ranges. These oak woodlands are dominated by blue oak and live oak, and include a variety of mid- and understory species such as California buckeye, redbud, and deer brush. Interspersed within the oak woodland community are large and small patches of chaparral. In some areas, the chaparral community contains a variety of representative species, including manzanita, California buckeye, scrub oak, chamise, and toyon, and supports abundant wildlife, some of which is found solely or predominantly in chaparral habitats. In other areas, the chaparral is dominated by dense chamise and is less productive.

The oak woodland and chaparral community extends the length of the Interior Coast Ranges and provides essential habitat for an abundance of mid- and higher elevation wildlife species, including large mammals such as deer, gray fox, and mountain lion. This type is also home to many resident and migratory bird species, small mammals, and reptiles.

Grassland Prairies/Valley Oak Savannah

Prairie grasslands are found primarily in the foothills of the Interior Coast Ranges along the west side of the Central Valley, in open patches in the higher elevations, and in the Dunnigan Hills, a prominent anticlinal formation that extends from approximately the northern county border east of Interstate 5 southeast to Cache Creek. They also occur as valley oak savannah with scattered valley oak trees within the grassland community in the foothills immediately west of the Central Valley floor. While native species continue to persist in some areas, most of the prairie grasslands are dominated by non-native annual grasses.

Prairie grasslands provide important habitat for small rodents, ground-nesting birds, and a variety of reptiles and burrowing mammals.

Remnant Oak Trees, Groves, and Tree Rows

Several small remnant valley oak groves continue to persist in several patches on the valley floor within Yolo County. Some are remnant of historic pre-cultivation stands of valley oak woodland that occurred in portions of the lower elevation areas of the county. There are numerous remnant individual valley oak trees that continue to persist in agricultural fields, particularly in the northern portion of the county, north of Woodland. Tree

rows are also common along roadsides or field borders in agricultural areas consisting of native or non-native trees, including valley oak, walnut, or eucalyptus trees.

These habitats have become increasingly important to nesting and roosting birds and provide key nesting habitat for several raptor species that are found in relative abundance in Yolo County, including red-tailed hawk and the state-threatened Swainson's hawk. Species that use these habitats for nesting and roosting also use the adjacent agricultural habitats for foraging, and thus their presence enhances the overall value of the agricultural landscape.

c. Special-Status Species

Many special-status species (including state and federal threatened and endangered species, state species of special concern and fully protected species, and plants listed by the California Native Plant Society) occur or have potential to occur in Yolo County. These species are listed in Table CO-4. Special-status species occur throughout the county in all of the vegetation communities and habitats described above. However, while several species such as bald eagle, golden eagle, and Cooper's hawk are known to occur primarily in the mountainous regions on the western edge of the county, most are known to occur in the more disturbed agricultural landscape of the Central Valley.

As noted above, in many cases the retention of natural features within this landscape greatly enhances habitat conditions for species, such as the Swainson's hawk, that have successfully adapted to an agricultural landscape. Others continue to persist in smaller patches of suitable habitat, such as the state-threatened black rail, which has been detected in the wetlands on the Yolo Bypass Wildlife Area; and the western burrowing owl, which uses remaining grasslands, roadside edges, artificial berms, and some agricultural habitats. Some species have not been detected in the county for many years, such as the western yellow-billed cuckoo, due to limited habitat availability and quality. Preservation and restoration of suitable habitats for these species is key to their continued occurrence or reestablishment in Yolo County.

TABLE CO-4
SPECIAL-STATUS SPECIES KNOWN OR WITH POTENTIAL TO OCCUR IN YOLO COUNTY

Species Common Name	Federal Listed	State Listed
PLANTS		
Palmate-bracted birdsbeak	E	E
Colusa grass	T	E
Crampton's tuctoria	E	E
CRUSTACEANS		
Conservancy fairy shrimp	E	-
Vernal pool fairy shrimp	T	-
Vernal pool tadpole shrimp	E	-
INSECTS		
Valley elderberry longhorn beetle	T	-
AMPHIBIANS		
California tiger salamander	E	SSC
Foothill yellow-legged frog	-	SSC
Western spadefoot	-	SSC
REPTILES		
Giant garter snake	T	T
Western pond turtle	-	SSC
BIRDS		
Bald eagle	T	E
Golden eagle	-	SSC
Swainson's hawk	-	T
White-tailed kite	-	FP
Northern harrier	-	SSC
Cooper's hawk	-	SSC
American peregrine falcon	-	E
Prairie falcon	-	SSC
California black rail	-	T
Greater sandhill crane	SC	T
Western snowy plover	T	SSC
Western yellow-billed cuckoo	SC	E
Black tern	-	SSC
Short-eared owl	-	SSC
Western burrowing owl	-	SSC
Loggerhead shrike	-	SSC
Bank swallow	-	T
Purple martin	-	SSC
Tricolored blackbird	-	SSC

MAMMALS

Western red bat		SSC
Townsend's western big-eared bat		SSC
Pallid bat		SSC

FISH

Sacramento River Winter-run Chinook salmon	E	E
Delta smelt	T	T
Central Valley spring-run Chinook salmon	T	T
Central Valley steelhead	T	-

Notes: -- = no listing.

Federal-Listed

E = listed as endangered under the federal Endangered Species Act.

T = listed as threatened under the federal Endangered Species Act.

SC = species of concern; species for which existing information indicates it may warrant listing but for which substantial biological information to support a proposed rule is lacking.

State-Listed

E = listed as endangered under the California Endangered Species Act.

T = listed as threatened under the California Endangered Species Act.

SSC = species of special concern in California.

FP = fully protected.

d. Related Plans and Programs

Habitat Conservation Plan/Natural Communities Conservation Plan

The County is a member of the Yolo County Habitat joint powers authority (JPA), which is responsible for developing a combined Habitat Conservation Plan/Natural Communities Conservation Plan (HCP/NCCP), known as the Yolo Natural Heritage Program (Yolo NHP). Habitat conservation plans identify the most biologically significant regions and outline measures to protect the ecological integrity of valuable habitat areas. Conservation plans are required to address special-status species, which are those plants and animals that are considered sufficiently rare by the scientific community and qualify for legal protection under State and/or federal Endangered Species Acts. The purpose of the Yolo NHP is to identify and protect the county's most biologically significant regions and most valuable habitat areas, in amounts and locations sufficient to sustain target species. The JPA also manages the Swainson's Hawk Interim Fee Mitigation Program, which purchases conservation easements to provide habitat for the threatened Swainson's hawk.

e. Yolo County Oak Woodland Conservation and Enhancement Plan

In January 2007, the Parks and Natural Resources Management Division published the *Yolo County Oak Woodland Conservation and Enhancement Plan*. Since 87 percent of the county's oak woodlands are privately owned, the purpose of this plan is to help coordinate voluntary oak woodland conservation and enhancement efforts and guide oak woodland mitigation. The Plan establishes a program to identify areas in Yolo County with the highest value habitat. Conservation and enhancement of these high

value areas is addressed by encouraging landowners to preserve these areas from urban and rural development. With this plan, the County is able to apply for State money and other funding sources.

Programmatic Safe Harbor Agreement for the Restoration of Riparian and Wetland Habitat in Yolo County

The Programmatic Safe Harbor Agreement for the Restoration of Riparian and Wetland Habitat in Yolo County promotes ecosystem restoration, enhancement and management of native riparian and/or wetland habitats in Yolo County for the conservation of the federally threatened valley elderberry longhorn beetle and giant garter snake. It does so by providing regulatory assurances to landowners participating in restoration and management activities that their farming activities will not be negatively affected by introducing new habitat nearby. The agreement allows landowners to manage and create habitat for the valley elderberry longhorn beetle and giant garter snake without incurring additional regulatory restrictions on the use of their property. This program is administered by the Audubon California Landowner Stewardship Program.

f. Regulatory Framework

There are a variety of state and federal laws and regulations that have been implemented to protect special-status and other plant and wildlife species and their habitats, including the following.

Federal Endangered Species Act

USFWS and the National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NOAA Fisheries) administer the federal Endangered Species Act (ESA). The ESA requires USFWS and NOAA Fisheries to maintain lists of threatened and endangered species and affords substantial protection to listed species. NOAA Fisheries' jurisdiction under the ESA is limited to the protection of marine mammals, marine fishes, and anadromous fishes; all other species are subject to USFWS jurisdiction.

USFWS and NOAA Fisheries 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 (ESA Section 3[6]). A threatened species is likely to become endangered within the foreseeable future (ESA Section 3[19]). Section 9 of the ESA prohibits the take of any fish or wildlife species listed under the ESA as endangered and most species listed as threatened. Take, as defined by the ESA, 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." Section 9 also 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).

Federal Clean Water Act

The Clean Water Act (CWA) of 1977 established the basic structure for regulating discharges of pollutants into waters of the United States and gave the U.S. Environmental Protection Agency (EPA) the authority to implement pollution control programs and set water quality standards for all contaminants in surface waters. Relevant sections include Section 404 (discharge of dredged or fill material), Section 401 (water quality certification), and Section 402 (National Pollutant Discharge Elimination System (NPDES) program).

Federal Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) (Title 16, United States Code [USC], Part 703) enacts the provisions of treaties between the United States, Great Britain, Mexico, Japan, and the Soviet Union and authorizes the U.S. Secretary of the Interior to protect and regulate the taking of migratory birds. It establishes seasons and bag limits for hunted species and protects migratory birds, their occupied nests, and their eggs (16 USC 703, 50 CFR 21, 50 CFR 10). Most actions that result in taking or in permanent or temporary possession of a protected species constitute violations of MBTA.

Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act prohibits the taking or possession of and commerce in bald and golden eagles, with limited exceptions. Under this 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 pursuing, shooting, shooting at, poisoning, wounding, killing, capturing, trapping, collecting, molesting, and disturbing.

National Environmental Policy Act

A federal action, such as the issuance of a Right-of-Way Grant on federal lands, requires compliance with the National Environmental Policy Act (NEPA). 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 impact analysis and efforts to avoid or minimize the adverse effects of proposed actions must be made available for public notice and review.

California Endangered Species Act

The 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 California Fish and Game Code as any action or attempt to "hunt, pursue, catch, capture, or kill." Like the ESA, CESA allows exceptions to the take 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.

Natural Communities Conservation Act

The Natural Communities Conservation Act of 1991 was intended to provide an alternative and/or a collaborative approach to FESA and CESA. It was designed to represent a new approach to conservation. Instead of focusing on individual species (e.g., FESA/CESA), the NCCA focuses on protecting intact ecosystems across an entire region or landscape. NCCPs have become increasingly common in the development of regional plans that combine the HCP and NCCP processes.

California Environmental Quality Act

The California Environmental Quality Act (CEQA) requires that significant environmental impacts of proposed projects be reduced to a less-than-significant level through adoption of feasible avoidance, minimization, or mitigation measures unless overriding considerations are identified and documented.

California Fish and Game Code

The California Fish and Game Code establishes regulations that protect plant and wildlife resources in the state under the jurisdiction of the California Department of Fish and Game (DFG). Relevant sections include Sections 3511, 4700, 5050, and 5515 (Fully Protected Species); Sections 3503 and 3503.5 (Raptor and other Bird Nests); and Sections 1600–1607 (Streambed Alteration).


2. Policy Framework

GOAL CO-2	<u>Biological Resources.</u> Protect and enhance biological resources through the conservation, maintenance, and restoration of key habitat areas and corresponding connections that represent the diverse geography, topography, biological communities, and ecological integrity of the landscape.
------------------	---

Policy CO-2.1 Consider and maintain the ecological function of landscapes, connecting features, watersheds, and wildlife movement corridors.

Policy CO-2.2 Focus conservation efforts on high priority conservation areas (core reserves) that consider and promote the protection and enhancement of species diversity and habitat values, and that contribute to sustainable landscapes connected to each other and to regional resources.

Policy CO-2.3 Preserve and enhance those biological communities that contribute to the county’s rich biodiversity including blue oak and mixed oak woodlands, native grassland prairies, wetlands, riparian areas, aquatic habitat, agricultural lands, heritage valley oak trees, remnant valley oak groves, and roadside tree rows.

- Policy CO-2.4 Coordinate with other regional efforts (e.g., Yolo County HCP/NCCP) to sustain or recover special-status species populations by preserving and enhancing habitats for special-status species.
- Policy CO-2.5 Protect, restore and enhance habitat for sensitive fish species, so long as it does not result in the large-scale conversion of existing agricultural resources.
- Policy CO-2.6 Cooperate with the Department of Fish and Game in inventorying streams with spawning and rearing habitat, evaluating those streams' existing and potential habitat value, and determining current and potential fish population levels.
- Policy CO-2.7 Encourage streamside property owners and appropriate public agencies to participate in fishery enhancement projects.
- Policy CO-2.8 Encourage all public land management agencies to protect, restore, and enhance the fish habitat within their jurisdiction.
- Policy CO-2.9 Protect riparian areas to maintain and balance wildlife values.
- Policy CO-2.10 Encourage the restoration of native habitat.
- Policy CO-2.11 Ensure that open space buffers are provided between sensitive habitat and planned development.
- Policy CO-2.12 Support the use of controlled fire management where feasible and appropriate as a natural ecosystem process, to reduce the threat of catastrophic wildfire, to encourage oak recruitment, and to meet other resources management objectives in higher elevation woodland and chaparral communities.
- Policy CO-2.13 Promote the use of oak woodlands conservation banks to mitigate for losses due to development impacts and to provide carbon sequestration for greenhouse gas emissions under applicable State programs.

- Policy CO-2.14 Ensure no net loss of oak woodlands, alkali sinks, rare soils, vernal pools or geological substrates that support rare endemic species, with the following exception. The limited loss of blue oak woodland and grasslands may be acceptable, where the fragmentation of large forests exceeding 10 acres is avoided, and where losses are mitigated. (DEIR MM BIO-3a)
- Policy CO-2.15 Encourage the use of mosquito abatement methods that are compatible with protecting fish and wildlife, including native insect pollinators.

Policy CO-2.16 Existing native vegetation shall be conserved where possible and integrated into new development if appropriate.

Policy CO-2.17 Emphasize and encourage the use of wildlife-friendly farming practices within the County's Agricultural Districts and with private landowners, including:

- Establishing native shrub hedgerows and/or tree rows along field borders.
- Protecting remnant valley oak trees.
- Planting tree rows along roadsides, field borders, and rural driveways.
- Creating and/or maintaining berms.
- Winter flooding of fields.
- Restoring field margins (filter strips), ponds, and woodlands in non-farmed areas.
- Using native species and grassland restoration in marginal areas.
- Managing and maintaining irrigation and drainage canals to provide habitat, support native species, and serve as wildlife movement corridors.
- Managing winter stubble to provide foraging habitat.
- Discouraging the conversion of open ditches to underground pipes, which could adversely affect giant garter snakes and other wildlife that rely on open waters.
- Widening watercourses, including the use of setback levees.

Policy CO-2.18 Coordinate with the Yolo County Resource Conservation District, Natural Resource Conservation Service, UC Cooperative Extension, and other farm organizations to encourage farming practices and the management of private agricultural land that is supportive of wildlife habitat values.

Policy CO-2.19 Support the use of sustainable farming methods that minimize the use of products such as pesticides, fuels and petroleum-based fertilizers. 🌍

Policy CO-2.20 Encourage the use of wildlife-friendly Best Management Practices to minimize unintentional killing of wildlife, such as restricting mowing during nesting season for ground-nesting birds or draining of flooded fields before fledging of wetland species.

Policy CO-2.21 Promote wildlife-friendly farming through mechanisms such as farmland trusts, conservation easements and safe harbor-type agreements.

Policy CO-2.22 Prohibit development within a minimum of 100 feet from the top of banks for all lakes, perennial ponds, rivers, creeks, sloughs, and per-

ennial streams. A larger setback is preferred. The setback will allow for fire and flood protection, a natural riparian corridor (or wetland vegetation), a planned recreational trail where applicable, and vegetated landscape for stormwater to pass through before it enters the water body. Recreational trails and other features established in the setback should be unpaved and located along the outside of the riparian corridors whenever possible to minimize intrusions and maintain the integrity of the riparian habitat. Exceptions to this action include irrigation pumps, roads and bridges, levees, docks, public boat ramps, and similar uses, so long as these uses are sited and operated in a manner that minimizes impacts to aquatic and riparian features. (DEIR MM BIO-1b)

- Policy CO-2.23 Support efforts to coordinate the removal of non-native, invasive vegetation within watersheds and replacement with native plants. 🌍
- Policy CO-2.24 Promote floodplain management techniques that increase the area of naturally inundated floodplains and the frequency of inundated floodplain habitat, restore some natural flooding processes, river meanders, and widen riparian vegetation, where feasible.
- Policy CO-2.25 Support efforts to reduce water temperatures in streams for fish via habitat restoration (e.g. increase shading vegetation) and water management (e.g. control of flows) that are compatible with the Integrated Regional Water Management Plan.
- Policy CO-2.26 Coordinate with local watershed stewardship groups to identify opportunities for restoring or enhancing watershed, instream, and riparian biodiversity.
- Policy CO-2.27 Evaluate the need for additional water to support future riparian enhancement efforts, including the benefits of conjunctive management of groundwater and surface water resources.
- Policy CO-2.28 Balance the needs of aquatic and riparian ecosystem enhancement efforts with flood management objectives.
- Policy CO-2.29 Promote native perennial grass habitat restoration and controlled fire management in grazing lands to reduce invasive species cover and enhance rangeland forage.
- Policy CO-2.30 Protect and enhance streams, channels, seasonal and permanent marshland, wetlands, sloughs, riparian habitat and vernal pools in land planning and community design.
- Policy CO-2.31 Protect wetland ecosystems by minimizing erosion and pollution from grading, especially during grading and construction projects.

- Policy CO-2.32 Support completion of the CDFG Visitors and Interpretive Center near the Vic Fazio Wildlife Area.
- Policy CO-2.33 Create partnerships with landowners, non-government organizations, and other public agencies to implement the Yolo County Oak Woodland Conservation and Enhancement Plan.
- Policy CO-2.34 Recognize, protect and enhance the habitat value and role of wildlife migration corridors for the Sacramento River, Putah Creek, Willow Slough, the Blue Ridge, the Capay Hills, the Dunnigan Hills and Cache Creek.
- Policy CO-2.35 Consider potential effects of climate change on the locations and connections between wildlife migration routes.
- Policy CO-2.36 Habitat preserved as a part of any mitigation requirements shall be preserved in perpetuity through deed restrictions, conservation easement restrictions, or other method to ensure that the habitat remains protected. All habitat mitigation must have a secure, ongoing funding source for operation and maintenance. (DEIR MM BIO-1c)
- Policy CO-2.37 Where applicable in riparian areas, ensure that required state and federal permits/approvals are secured prior to development of approved projects. (DEIR MM BIO-1d)
- Policy CO-2.38 Avoid adverse impacts to wildlife movement corridors and nursery sites (e.g., nest sites, dens, spawning areas, breeding ponds). Preserve the functional value of movement corridors to ensure that essential habitat areas do not become isolated from one another due to the placement of either temporary or permanent barriers within the corridors. Encourage avoidance of nursery sites (e.g., nest sites, dens, and spawning areas, breeding ponds) during periods when the sites are actively used and that nursery sites which are used repeatedly over time are preserved to the greatest feasible extent or fully mitigated if they cannot be avoided. (DEIR MM BIO-4a)
- Policy CO-2.39 Require new or retrofitted bridges, and new or expanded roads to incorporate design and construction measures to maintain the functional value of wildlife movement corridors. (DEIR MM BIO-4b)
- Policy CO-2.40 Preserve grassland habitat within 2,100 feet of documented California tiger salamander breeding ponds or implement required mitigation (equivalent or more stringent) as imposed by appropriate agencies or through the County HCP/NCCP, to fully mitigate impacts consistent with local, State, and federal requirements. Implementation and funding of mitigation measures for projects that will be developed in phases over time may also be phased, with the applicable mitigation being im-

plemented and funded prior to the final approval of each phase or sub-phase. (DEIR MM BIO-4c)

- Policy CO-2.41 Require that impacts to species listed under the State or federal Endangered Species Acts, or species identified as special-status by the resource agencies, be avoided to the greatest feasible extent. If avoidance is not possible, fully mitigate impacts consistent with applicable local, State, and Federal requirements. (DEIR MM BIO-5a)
- Policy CO-2.42 Projects that would impact Swainson's hawk foraging habitat shall participate in the Agreement Regarding Mitigation for Impacts to Swainson's Hawk Foraging Habitat in Yolo County entered into by the CDFG and the Yolo County HIP/NCCP Joint Powers Agency, or satisfy other subsequent adopted mitigation requirements consistent with applicable local, State, and federal requirements. (DEIR MM BIO-5b)
- Policy CO-2.43 Projects that have the potential to impact California tiger salamander breeding or terrestrial habitat in the Dunnigan Hills area, shall conduct a project-level biological assessment to determine the potential to impact California tiger salamander upland or breeding habitat (if such assessment has not already been done as part of an approved HCP/NCCP). Such an assessment will be required for all projects located within 1.3 miles of a known or potential breeding site. Development activities that would result in isolation of the breeding or upland habitat will be required to mitigate for such impacts. Mitigation shall consist of two components: 1) habitat preservation and enhancement of suitable upland habitat, and 2) preservation and construction of new breeding habitat. CTS upland habitat must be mitigated at a ratio of 3:1 (preserved: impacted), located within 2,100 feet of an occupied habitat, and include at least one suitable breeding pond. Equivalent or more stringent mitigation may be implemented as determined by trustee and responsible agencies. Mitigation must be coordinated with the HCP/NCCP program if adopted. (DEIR MM BIO-5c)

3. Implementation Program

- Action CO-A25 Develop a conservation strategy that considers the preservation and protection of intact functioning landscapes, watersheds, and landscape corridors. The approach should be based on the initial identification of high value habitat areas (core areas) and how these areas could be physically linked across the landscape. Coordinate to ensure that the basic landscape-level conservation concepts are incorporated into the HCP/NCCP. (Policy CO-2.1 through 2.4, Policy CO-2.14, Policy CO-2.19 through CO-2.24, Policy CO-2.27, Policy CO-2.29, Policy CO-2.30, Policy CO-2.31, Policy CO-2.33, Policy CO-2.34)
Responsibility: Department of Community Services

Timeframe: 2009/2010

Action CO-A26 Adopt and implement the Habitat Conservation Plan/Natural Communities Conservation Plan developed through the Yolo Natural Heritage Program. Integrate the HCP/NCCP (Natural Heritage Program) into the General Plan as appropriate. Direct habitat mitigation to strategic areas that implement the Yolo Natural Heritage Program and are consistent with the County's conservation strategy. Avoid the conversion of agricultural areas and focus on lands where wildlife values and farming practices are complementary. (Policy CO-2.1 through CO-2.4, Policy CO-2.14)

Responsibility: Department of Community Services Timeframe: 2009/2010 and ongoing

Action CO-A27 Protect the habitat value and biological function of oak woodlands, grasslands, riparian areas, and wetland habitats. Avoid activities that remove or degrade these habitats and establish buffers to avoid encroachment into sensitive areas. (Policy CO-2.4, Policy CO-2.14, Policy CO-2.15, Policy CO-2.18, Policy CO-2.19, Policy CO-2.20 through CO-2.24)

Responsibility: Parks and Resources Department
Timeframe: Ongoing

Action CO-A28 Create a program to encourage the planting of new oak seedlings in appropriate locations and the protection of plantings from damage by animals, insects, and people until seedlings are of sufficient size. 🌍 (Policy CO-2.13, Policy CO-2.16, Policy CO-2.17)

Responsibility: Parks and Resources Department
Timeframe: Ongoing

Action CO-A29 Adopt a heritage tree preservation ordinance. 🌍 (Policy CO-2.17, Policy CO-2.37)

Responsibility: Parks and Resources Department
Timeframe: 2010/2011

Action CO-A30 Encourage landowners to participate in programs that restore degraded creek resources by:

- Removing exotic species and establishing native riparian vegetation. 🌍
- Managing the upland areas of watersheds to control erosion and overgrazing.
- Adding exclusionary fencing to keep livestock out of streams and stream bank areas. (Policy CO-2.12, Policy CO-2.20 through CO-2.24, Policy CO-2.25)

Responsibility: Parks and Resources Department
Timeframe: 2011/2012

- Action CO-A31 Establish criteria for the preservation of vernal pools that include the following:
- unusual features;
 - habitat quality;
 - watershed integrity;
 - defensibility and buffering;
 - size;
 - plant and animal species variety; and
 - presence of special status species.
- (Policy CO-2.20 through CO-2.24)
Responsibility: Parks and Resources Department
Timeframe: 2013/2014

- Action CO-A32 Prepare a complete inventory of identified streams, channels, seasonal and permanent marshland, wetlands, sloughs, riparian habitat and vernal pools for use in community plans, area plans and specific plans. (Policy CO-2.25, Policy CO-2.34, Policy CO-2.35)
Responsibility: Parks and Resources Department
Timeframe: 2013/2014

- Action CO-A33 Coordinate with State and Federal agencies to rehabilitate and/or improve watersheds for the benefit of salmon and steelhead by encouraging landowner cooperation and participation, and involving agencies and local groups. (Policy CO-2.5 through CO-2.11, Policy CO-2.26, Policy CO-2.28)
Responsibility: Parks and Resources Department
Timeframe: 2014/2015

- Action CO-A34 Identify stream sections with important fish and riparian habitat restoration needs. Seek funding and participate in programs to address needs. (Policy CO-2.5 through Policy CO-2.11, Policy CO-2.25, Policy CO-2.26, Policy CO-2.28)
Responsibility: Parks and Resources Department
Timeframe: 2014/2015

- Action CO-A35 Integrate biological and habitat conditions and constraints into the County Geographical Information System. (Policy CO-2.1 through CO-2.4)
Responsibility: Information Technology Department
Timeframe: 2010/2011

- Action CO-A36 Acquire fee title or easements from willing landowners to promote wild-life migration routes focusing on Cache Creek, Putah Creek, Dunnigan

Hills, Willow Slough, the Sacramento River, and the Capay Hills. (Policy CO-2.38, Policy CO-2.39)
 Responsibility: Parks and Resources Department
 Timeframe: Ongoing

E. Mineral Resources

1. Background Information

The mineral resources section of this chapter provides goals, policies and actions that guide Yolo County in ensuring continued productivity and conservation of the County’s geologic reserves.

Yolo County also has important soil resources, which can be inferred from the County’s high agricultural productivity. Soils are considered to be an agricultural resource and therefore are discussed in the Agriculture Element. Expansive soils and other geologic hazards are covered in the Geologic section of the Health and Safety Element.

Yolo County has two primary mineral resources, mined aggregate and natural gas. These resources are located throughout the County. There are six aggregate mines and 25 natural gas fields currently in operation in Yolo County (see Figure CO-5).

The Surface Mining and Reclamation Act (SMARA) of 1975 regulates mining in California. The purpose of SMARA is to identify the presence and significance of mineral resource deposits and to govern the excavation and reclamation of these areas. SMARA requires comprehensive management plans for operational mining areas. Mineral Resources Zones (MRZs) are used by the State to define areas containing valuable deposits. The California Division of Mines and Geology classifies MRZs according to the guidelines shown in Table CO-5.

There are 1,458 acres of MRZ-1, 18,452 acres of MRZ-2, and 8,220 acres of MRZ-3 in Yolo County. The Cache Creek MRZ-2 area is a significant high-grade aggregate deposit known to contain over 900 million tons of sand and gravel.

Table CO-5 **SMARA MINERAL RESOURCE ZONE CATEGORIES**

MRZ-1	Areas where adequate geologic information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence.
MRZ-2	Areas underlain by mineral deposits where geologic data show that significant measured or indicated resources are present. Such areas contain discovered mineral deposits that are either measured or indicated reserves as determined by such evidence as drilling records, sample analysis, surface exposure, and mine information; or such areas may be inferred reserves or deposits that are presently sub-economic as determined by limited sample analysis, exposure, and past mining history.
MRZ-3	Areas containing known mineral deposits that may qualify as mineral resources. Further exploration work within these areas could result in the reclassification of specific localities into the MRZ-2 category.

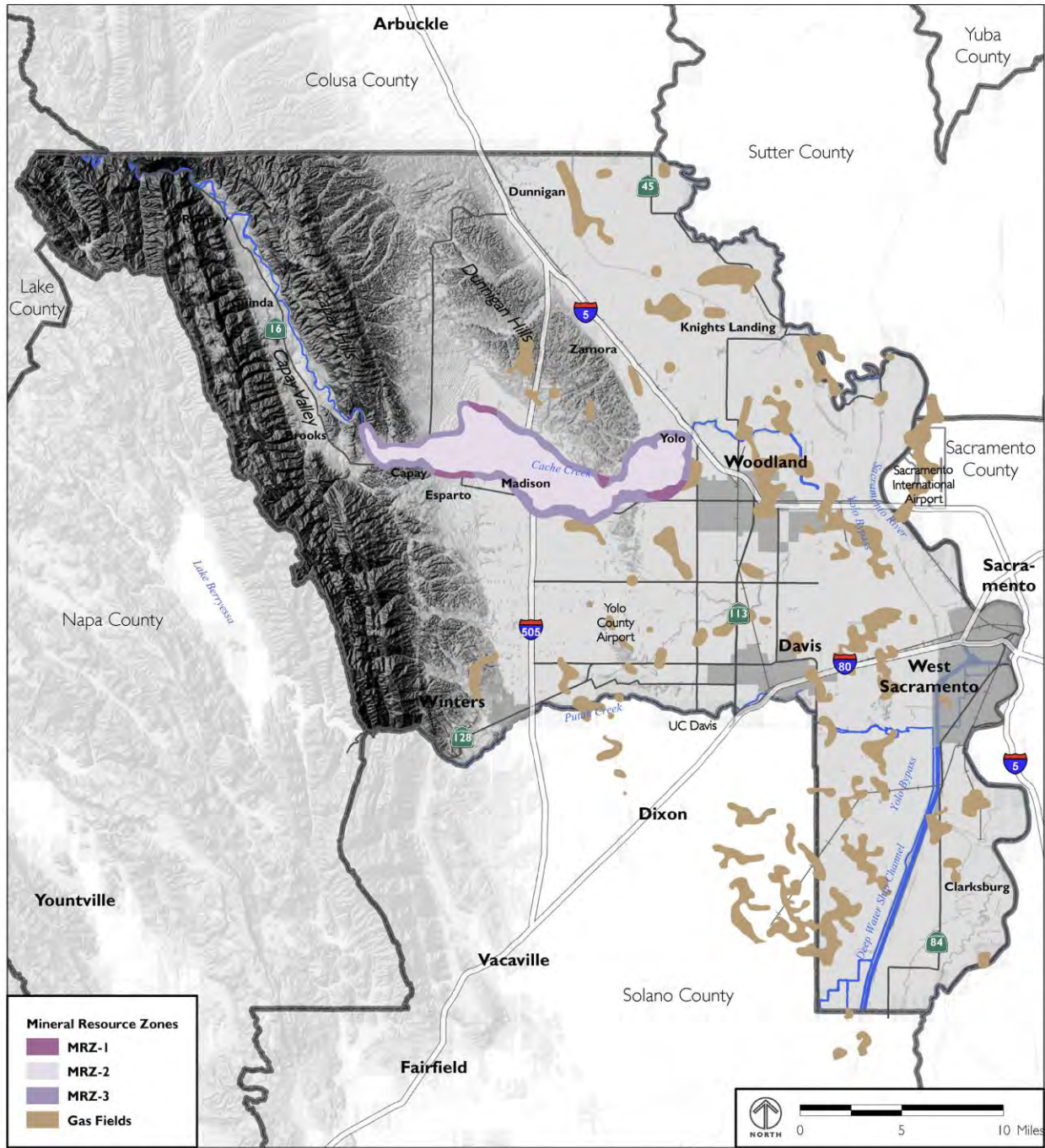
MRZ-4 Areas where geologic information does not rule out either the presence or absence of mineral resources. The distinction between the MRZ-1 and MRZ-4 categories is important for land-use considerations. It must be emphasized that MRZ-4 classification does not imply that there is little likelihood for the presence of mineral resources, but rather there is a lack of knowledge regarding mineral occurrence. Further exploration work could well result in the reclassification of land in MRZ-4 areas to MRZ-3 or MRZ-2 categories.

Source: Department of Conservation State Mining and Geology Board, Guidelines for Classification and Designation of Mineral Lands.

Mining in Yolo County is regulated by the Off Channel Mining Plan (OCMP), which is a component of the Cache Creek Area Plan (CCAP). The CCAP is incorporated into this General Plan. The focus of the CCAP is groundwater protection, agricultural preservation, restoration of Cache Creek, and limitation and regulation of mining.

The OCMP restricts the location and extent of new mining to lands outside of the riparian corridor, eliminates vested processing plants and facilities at the end of the mining period, creates a fund to address unforeseen environmental concerns, and adds various environmental protections and monitoring requirements to the base requirements of State law established by SMARA. The OCMP is implemented by two related ordinances: one regulates off-channel mining (mining outside of the creek channel) and one regulates the reclamation of mined areas.

FIGURE CO-5 MINERAL AND GAS RESOURCES



Source: County of Yolo GIS, 2009.

The CCAP also includes the Cache Creek Resources Management Plan (CCRMP), which includes policies and regulations to stabilize the channel, reduce erosion, protect infrastructure, improve habitat values, maintain flood capacity, and provide recreational opportunities. To support those goals, the County has adopted an In-Channel Maintenance Mining Ordinance. Although commercial mining is prohibited within Lower Cache Creek, carefully regulated and limited maintenance extraction is occasionally necessary to carry out the CCRMP.

Yolo County is one of the 28 counties in California that produce gas and oil. Most of the natural gas fields in Yolo County are located along the Yolo Bypass and the Sacramento River, with more fields located in the unincorporated area of Dunnigan Hills and at the foot of the Capay Hills (see Figure CO-5). Deep on-shore gas wells, reaching a depth of nearly 2 miles, are found near the Clarksburg area. In 2007, Yolo County produced over 3 million Mcf⁴ of natural gas and 187 barrels of oil.⁵ Further research is needed to determine the extent of present day natural gas reserves in Yolo County, particularly since natural gas has become a larger part of Yolo County's economy and an important tool to reduce vehicle air emissions as a part of the effort to address climate change.

2. Policy Framework

GOAL CO-3 Mineral Resources. Protect mineral and natural gas resources to allow for their continued use in the economy.

- Policy CO-3.1 Encourage the production and conservation of mineral resources, balanced by the consideration of important social values, including recreation, water, wildlife, agriculture, aesthetics, flood control, and other environmental factors.

- Policy CO-3.2 Ensure that mineral extraction and reclamation operations are compatible with land uses both on-site and within the surrounding area, and are performed in a manner that does not adversely affect the environment.

- Policy CO-3.3 Encourage the extraction of natural gas where compatible with both on-site and surrounding land uses, and when performed in a manner that does not adversely affect the environment.

- Policy CO-3.4 Within the Delta Primary Zone, ensure compatibility of permitted land use activities with applicable, natural gas policies of the Land Use and Resource Management Plan of the Delta Protection Commission.

⁴ Mcf is a gas standard equal to 1,000 cubic feet.

⁵ California State Department of Conservation Division of Oil, Gas and Geothermal Resources, Online Projection/Injection, accessed July 9, 2008.

Policy CO-3.5 Preserve and protect the County's unique geologic and physical features, which include geologic, or soil "type localities", and formations or outcrops of special interest. (DEIR MM GEO-1a)

3. Implementation Program

Action CO-A37 Designate and zone lands containing identified mineral deposits to protect them from the encroachment of incompatible land uses so that aggregate resources remain available for the future. (Policy CO-3.1)
Responsibility: Department of Community Services
Timeframe: 2009/2010

Action CO-A38 Amend the County Code to allow landowners to apply for redesignation of their property when it can be demonstrated that mineral resources are not present or are not economically feasible. (Policy CO-3.1)
Responsibility: Parks and Resources Department
Timeframe: 2010/2011

Action CO-A39 Encourage the responsible development of aggregate deposits along Cache Creek as significant both to the economy of Yolo County and the region. (Policy CO-3.1)
Responsibility: Parks and Resources Department
Timeframe: Ongoing

Action CO-A40 Encourage recycling of aggregate materials and products. 🌐 (Policy CO-3.1)
Responsibility: Parks and Resources Department, Department of Community Services
Timeframe: Ongoing

Action CO-A41 Regularly review regulations to ensure that they support an economically viable and competitive local aggregate industry. (Policy CO-3.1)
Responsibility: Parks and Resources Department, County Administrator's Office
Timeframe: Ongoing

Action CO-A42 Implement the Cache Creek Area Plan to ensure the carefully managed use and conservation of sand and gravel resources, riparian habitat, ground and surface water, and recreational opportunities. (Policy CO-3.1)
Responsibility: Parks and Resources Department
Timeframe: Ongoing

- Action CO-A43 Monitor updates to the State Mineral Resource classification map and incorporate any needed revisions to the County's zoning and land use map. (Policy CO-3.1)
Responsibility: Department of Community Services
Timeframe: Ongoing
- Action CO-A44 Coordinate individual surface mining reclamation plans so that the development of an expanded riparian corridor along Cache Creek may be achieved. (Policy CO-3.1)
Responsibility: Parks and Resources Department
Timeframe: Ongoing
- Action CO-A45 Prohibit commercial mining in or adjoining Putah Creek. (Policy CO-3.1, Policy CO-3.2)
Responsibility: Parks and Resources Department, Department of Community Services
Timeframe: Ongoing
- Action CO-A46 Maintain standards and procedures for regulating surface mining and reclamation operations so that potential hazards and adverse environmental effects are reduced or eliminated. (Policy CO-3.1, Policy CO-3.2)
Responsibility: Parks and Resources Department
Timeframe: Ongoing
- Action CO-A47 Ensure that mined areas are reclaimed to a usable condition that is readily adaptable for alternative land uses, such as agriculture, wildlife habitat, recreation, and groundwater management facilities.
Responsibility: Parks and Resources Department (Policy CO-3.1)
Timeframe: Ongoing
- Action CO-A48 Regularly update surface mining and reclamation standards to incorporate changes to State requirements, environment conditions, and County priorities. (Policy CO-3.1)
Responsibility: Parks and Resources Department
Timeframe: Ongoing
- Action CO-A49 Consider the exploration, drilling, and extraction of natural gas as compatible with agriculture and open space uses. (Policy CO-3.3)
Responsibility: Department of Community Services
Timeframe: Ongoing
- Action CO-A50 Evaluate any impacts to identified natural gas fields as part of the development review process. (Policy CO-3.3)
Responsibility: Department of Community Services
Timeframe: Ongoing

- Action CO-A51 Require that abandoned gas wells be sealed in accordance with State of California Division of Oil, Gas and Geothermal Resources regulations and that all drilling or production facilities be removed. Further require that the disturbed surface area be reincorporated into adjoining agricultural operations or revegetated with native vegetation within one year after abandonment. (Policy CO-3.3)
Responsibility: Department of Community Services
Timeframe: Ongoing
- Action CO-A52 Maintain and implement local and State criteria and development standards for the production, injection, and drilling of natural gas deposits. Ensure that the construction and operation of natural gas storage facilities meet all safety standards of the State of California Division of Oil, Gas and Geothermal Resources. (Policy CO-3.3)
Responsibility: Department of Community Services
Timeframe: 2010/2011
- Action CO-A53 The County's unique geologic or physical features, which include geologic or soil "type localities" and formations or outcrops of special interest, shall be researched, inventoried, mapped, and data added to the County GIS database. (DEIR MM GEO-1b) (Policy CO-3.5)
Responsibility: Department of Community Services
Timeframe: 2012/2013
- Action CO-A-54 Implement the Cache Creek Area Plan (Policy CO-3.2).
Responsibility: Parks and Resources Department
Timeframe: Ongoing.

F. Cultural Resources

1. Background Information

Cultural resources include archaeological, paleontological and historic resources, including cemeteries and burials outside of cemeteries. Yolo County has examples of all of these, including prehistoric Native American sites, fossilized dinosaur remains, and historical man-made artifacts, buildings, sites and landmarks.

Before the establishment of what we now know today as Yolo County, a variety of people occupied the area. The first people to inhabit the Yolo region were two Native American tribes, the Patwin and, to a lesser extent, the Plains Miwok. Euro-American explorers, specifically the Spanish, came to this area as early as 1808 in search of new land on which to establish missions. Hunter/trapper groups also came to the area in search of valuable animal pelts to sell on an international market.

Settlements in the Yolo County region began during the first quarter of the 19th Century. The first American settlers were granted land from the Mexican Cession of 1848, during which the U.S. bought the region as eleven Mexican land grants. In the beginning of U.S. control, the region was a stable, isolated farming community that was transformed into a booming agricultural area by the California Gold Rush. Fremont was the first town, founded in 1849, along the confluence of the Sacramento and Feather Rivers. It was also the first County seat, after the formal establishment of Yolo County in 1850. The County seat was moved to Washington (Broderick) in 1851, to Cacheville (Yolo) in 1857, and back to Washington in 1860. In 1862, the County seat was permanently moved to the City of Woodland.

The artifacts and legends left by these groups are important cultural resources. The preservation of cultural resources is important because they offer important educational opportunities and they provide the County with a unique sense of identity.

A countywide record search was conducted at the Northwest Information Center (NWIC) of California Historical Resources Information System at Sonoma State University, and additional sources were also used, to generate a list of over 1,200 recorded cultural resources within Yolo County. Of these, 270 are archeological resources. The locations of these resources have been kept confidential.

There are two tribes with registered traditional land in Yolo County, the Cortina Band of Indians and the Rumsey Band of Wintun Indians. The Cortina band is not known to currently own property nor be active within the County. The Rumsey Tribe is very active in the County. They are a significant landowner and employer as the operators of the Cache Creek Casino Resort in Brooks.

The Rumsey Band of Wintun Indians is a recognized sovereign nation. As such, the Department of the Interior, Bureau of Indian Affairs, holds approximately 267 acres in trust for the Rumsey Tribe (the Tribe). One site contains houses for the tribal members, a community center, and the Yocha-De-He Preparatory School. The other site is home to the Cache Creek Casino Resort. As sovereign lands, these areas are not a part of this General Plan. The Tribe also owns several thousand acres in and around the trust lands. These properties are not held in trust and are included within this General Plan.

In 1985, the Tribe began operation of a bingo hall on trust lands in the Capay Valley, which was expanded to include card games in 1993. Three years later, there was a second expansion of the bingo hall, including several restaurants. In 1999, following approval of the State Gaming Compact, the casino added slot machines and table games to its existing facility. A third expansion began in 2002 to create the Cache Creek Casino Resort, adding additional gaming space, restaurants, event center, club, 200-room hotel, spa, and a championship golf course. Today, the Resort is the second largest employer in Yolo County (after UC Davis) with more than 2,400 employees.

In 2002, the County and the Tribe approved an Intergovernmental Agreement to: (1) establish a mechanism for mitigation of the off-Reservation impacts expected to result

from the Casino Resort expansion; (2) provide financial resources to help fund those mitigation measures; and (3) strengthen the government-to-government relationship between the County and the Tribe. The Agreement committed the Tribe to a wide range of measures to reduce the environmental impact of the expansion, as well as payment of over five million annually to the County to reimburse for the costs of the impacts. The County committed to developing a mitigation program to address impacts that occurred outside of trust lands, paid for through the funds provided by the Tribe, as recommended by a County Advisory Committee for Tribal Matters. Both parties agreed to hold regularly scheduled 2x2 meetings, open to the public.

In April, 2008, the Rumsey Tribe released a Draft Tribal Environmental Impact Report (TEIR) for a new expansion of the Resort. The proposal includes 467 new hotel rooms and 27 casitas, four additional restaurants, an event/conference center, retail shops, an expansion of the spa, additional gaming floor and office space, three new swimming pools, an additional parking garage, and related support facilities and utilities. The Final TEIR has not yet been released for this project.

Yolo County has conducted consultation with Native American tribes to aid in the protection of traditional and cultural places, or sacred sites, as required by Senate Bill 18 (SB 18). For the purposes of this element, the term “sacred site” refers to any specific, discrete, narrowly delineated location that is identified by a Native American tribe, or Native American individual determined to be an appropriate authoritative representative of a Native American religion, as sacred by virtue of its established religious significance to, or ceremonial use by, a Native American religion. In coordination with the two regional tribes, no sacred sites have been disclosed to the County.

Section 7050.5 of the California Health and Safety Code states that, when human remains are discovered, no further site disturbance shall occur until the County Coroner has determined that the remains are not subject to the provisions of Section 27491 of the Government Code or any other related provisions of law concerning investigation of the circumstances, manner and cause of any death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible for the excavation, in the manner provided in Section 5097.98 of the Public Resources Code. If the coroner determines that the remains are not subject to his or her authority and the remains are recognized to be those of a Native American, the coroner shall contact the Native American Heritage Commission within 24 hours.

In addition to the archeological listings identified above, Yolo County maintains its own list of local historical landmarks (see Table CO-6). There are also county listings on the National Register of Historic Places, the list of California State Historical Landmarks, and the list of California Points of Historical Interest (see Table CO-7).

Individuals, various community groups and local organizations throughout Yolo County preserve historical resources. These groups include the County Planning Commission/Historic Preservation Commission and various volunteer historical

societies. The Planning Commission serves as the Historic Preservation Commission which is tasked with establishing criteria, guidelines and standards to pursue the goals outlined in the County's Historic Preservation Ordinance. The Commission is responsible for maintaining an inventory of all historical landmarks and districts within Yolo County and recommending future historic designations to the Board of Supervisors. The Planning Commission decides permits for demolition and for alterations to historic structures.

There are a number of repositories of historical artifacts and information in Yolo County, including the Yolo County Historical Museum, the Yolo County Archives and Record Center and the Hattie Weber Museum. The Yolo County Historical Museum is located in Woodland. The museum provides tours of the architecturally historic building and displays furnishings and artifacts from Yolo County's past, specifically between 1850 and 1930, and includes outbuildings that feature artifacts associated with the agricultural industry and farming lifestyle.

The Yolo County Archives and Record Center maintains a comprehensive archive of historical materials dating back from the County's beginnings in 1850. A broad range of materials are stored at the Archive and Record Center, including County documents, original tax records, old newspapers, probates, wills, civil and criminal cases, original maps of Mexican land grants, personal scrapbooks, video reels and a complete set of meeting notes from every meeting of the Yolo County Board of Supervisors.

TABLE CO-6 COUNTY-RECOGNIZED HISTORICAL RESOURCES IN UNINCORPORATED YOLO COUNTY

Common Name	Address
Yolo Library	37750 Sacramento Street, Yolo, CA (APN: 025-401-013)
Jerome Borach House	37617 Sacramento Street, Yolo, CA (APN: 025-402-005)
Yolo Town Hall	37735 Sacramento Street, Yolo, CA (APN: 025-404-009)
Joseph T. Cooper House	38450 CR 16A, Yolo, CA (APN: 027-200-012)
Samuel Carpenter Cottage	28450 CR 87D, Winters, CA95694 (APN: 030-190-018)
William L. Seawright House	27786 State Route 128, Winters, CA95694 (APN: 030-200-045)
Adolph Oeste House	27027 Patwin Road, Davis, CA 95616 (APN: 036-160-025)
French Residence	37858 Russell Blvd, Davis, CA 95616 (APN: 037-140-016)
Hext Brothers-Ranch	26810 CR 97D, Davis, CA 95616 (APN: 037-140-017)
Gotfried Schmeiser Home	32125 CR 31, Davis, CA 95616 (APN: 037-100-018)
James Carey Montgomery House	43029 Montgomery Avenue, Davis, (APN: 069-230-019)
“Yolanda”	20416 CR 99, Woodland, CA 95695 (041-010-014)
William Marcus Jackson House	20123 East Street, Woodland, CA 95695 (APN: 041-020-038)
Frank N. Bullard House	21868 CR 99, Woodland, CA (APN: 041-030-009)
Lorenz Heinz Ranch	38331-35 CR 29, Davis, CA (APN: 041-120-002)
B. F. Conaway Ranch House	21841 CR 103, Woodland, CA 95695 (APN: 042-060-005)
Nelson Bump House (Aka “Lydia” House)	41810 South River Road, Clarksburg, CA (APN: 043-040-020)
Hamilton S. Connor House	38461 CR 144, Clarksburg, CA (APN: 043-090-001)
Holland Land Company Headquarters	36533 Netherlands Road, Clarksburg, CA (APN: 043-160-035)
Lawlor & Cosby General Merchandise	36510 Riverview Drive, Clarksburg, CA (APN: 043-285-001)
Husick Hardware	36530 Riverview Drive, Clarksburg, CA (APN: 043-285-012)
St. Joseph’s Church and Rectory	32890 South River Road, Clarksburg, CA (APN: 044-070-003)
The Barn at Utter Ranch	50870 Babel Slough Road, Clarksburg, CA (044-040-033)
Brown/Munk House	54080 South River Road, Clarksburg, CA (APN: 044-130-022)
Gordon Cemetery	32853 CR 20, Yolo, CA 95697 (APN: 025-360-067)

Common Name	Address
Robert Baur House	26850 CR 23, Madison, CA 95653 (APN: 049-110-012)
Esparto Railroad Station	26580 Woodland Avenue, Esparto, CA (APN: 049-240-017)
Fred and Roy Wyatt Houses	26514 and 26526 Grafton, Esparto, CA (APNs: 049-296-001, -002)
Clarence Johnson Home & Shop	26621 Capay Street, Esparto, CA (APN: 049-301-001)
IIOF Building, Esparto	16651-63 Yolo Avenue, Esparto, CA (APN: 049-312-001)
Henry Mefford House	16043 Mefford Lane, Capay, CA (APN: 049-240-003)
Haines Store	29088 Main Street, Madison, CA (APN: 049-449-005)
Union Church of Dunnigan	3615 County Road 89A, Dunnigan, CA (051-210-003)
St. Agnes Church	9865 Main Street, Zamora, CA (APN: 055-130-007)
John Snowball Mansion	42485 Front Street, Knights Landing, CA (APN: 056-160-023)
Silas-Edson House	42334 3 rd Street, Knights Landing, CA (APN: 056-297-012)
Leithold's Drug Store, Knights Landing	9336 Mill Street, Knights Landing, CA (APN: 056-298-004)
First National & Home Savings Bank	9340 Mill Street, Knights Landing, CA (APN: 056-298-005)
Masonic Lodge, Knights Landing	42245 3 rd Street, Knights Landing, CA (APN: 056-303-008)
Mary La Due House	9511 Mill Street, Knights Landing, CA (APN: 056-315-001)
Guinda Corner Store (aka Corner Store/Steele Hall)	7530 State Route 16, Guinda, CA (APN: 060-141-001)
Rumsey Town Hall	14380 Manzanita Street, Rumsey, CA (APN: 060-252-017)

Table CO-7 NATIONALLY- AND STATE-RECOGNIZED HISTORICAL RESOURCES IN UNINCORPORATED YOLO COUNTY

Place Type	Location
National Register of Historic Places	
Yolo Branch Library	200 Sacramento Street, Yolo
Union Church of Dunnigan	3615 County Road 89A, Dunnigan
Rumsey Town Hall	State Route 16 at Manzanita Street, Rumsey
Nelson Ranch	41070 County Road 18C, Woodland
William B Gibson House	512 Gibson Road, Woodland
Canon School	0.5 mi. N of Brooks, Brooks
California State Historical Landmarks	
None in Unincorporated Yolo County	
California State Points of Historical Interest	
Russell Boulevard	Between Highway 113 and Road 98, Davis
Mary's Chapel	Intersection of County Roads 15 and 98
St. Agnes Church	County Road 98, Zamora
Capay School	State Route 16, Capay
Leonidas Taylor Monument	West bank of the Sacramento River, northwest of Sacramento
Yolo County Courthouse	725 Court Street, Woodland
Yolo County Historical Museum	512 Gibson Road, Woodland

Source: National Register of Historic Places, the list of California State Historical Landmarks, and the list of California Points of Historical Interest, 2008

2. Policy Framework

GOAL CO-4 Cultural Resources. Preserve and protect cultural resources within the County.

Policy CO-4.1 Identify and safeguard important cultural resources.

Policy CO-4.2 Implement the provisions of the State Historical Building Code and Uniform Code for Building Conservation to balance the requirements of

the Americans with Disabilities Act with preserving the architectural integrity of historic buildings and structures.

- Policy CO-4.3 Encourage owners of historic resources to preserve and rehabilitate their properties. 🌐
- Policy CO-4.4 Encourage historic resources to remain in their original use whenever possible. The adaptive use of historic resources is preferred when the original use can no longer be sustained. Older residences may be converted to office/retail use in commercial areas and to tourist use in agricultural areas, so long as their historical authenticity is maintained or enhanced.
- Policy CO-4.5 Increase knowledge of historic preservation through public education and outreach programs.
- Policy CO-4.6 Support historically oriented visitor programs at the local and regional level through the Yolo County Visitor's Bureau and similar efforts.
- Policy CO-4.7 Encourage the identification of historic resources through the integrated use of plaques and markers.
- Policy CO-4.8 Explore opportunities for promoting heritage tourism, including cooperation with regional and State marketing efforts.
- Policy CO-4.9 Promote the use of historic structures as museums, educational facilities, or other visitor-serving uses.
- Policy CO-4.10 Encourage voluntary landowner efforts to protect cultural resources consistent with State law.
- Policy CO-4.11 Honor and respect local tribal heritage.
- Policy CO-4.12 Work with culturally affiliated tribes to identify and appropriately address cultural resources and tribal sacred sites through the development review process.
- Policy CO-4.13 Avoid or mitigate to the maximum extent feasible the impacts of development on Native American archaeological and cultural resources.
- Policy CO-4.14 Within the Delta Primary Zone, ensure compatibility of permitted land use activities with applicable cultural resources policies of the Land Use and Resource Management Plan of the Delta Protection Commission.

2. Implementation Program

- Action CO-A55 Update the Historic Preservation Ordinance on a regular basis to be consistent with applicable federal, State and local Historic Preservation requirements. (Policy CO-4. Policy CO-4.2)
Responsibility: Department of Community Services Timeframe: Ongoing
- Action CO-A56 Update the historic resources surveys (including the Historic Features Inventory), as needed, to reflect changes due to the passage of time, loss of existing historic resources, and the availability of new or reinterpreted information. (Policy CO-4.1)
Responsibility: Department of Community Services
Timeframe: Ongoing
- Action CO-A57 Identify and establish historic districts, where appropriate, to better preserve individual historical resources and their context. (Policy CO-4.1, Policy CO-4.4)
Responsibility: Department of Community Services
Timeframe: Ongoing
- Action CO-A58 Establish an inventory and map of known significant historic and cultural resources, as well as sensitive areas where such resources are likely to occur. Work with the Rumsey and Cortina Tribes to identify sacred sites and develop a cultural sensitivity map. This information is protected as confidential under State law. (Policy CO-4.1)
Responsibility: Department of Community Services Timeframe: 2011/2012
- Action CO-A59 Conduct historic resource surveys as a part of community and specific plan preparation to document and identify those resources that meet the criteria for listing at the local level, on the California Register of Historical Resources, and on the National Register of Historic Places. (Policy CO-4.1)
Responsibility: Department of Community Services Timeframe: Ongoing
- Action CO-A60 Review and monitor demolition permits, grading permits, building permits, and other approval procedures to reinforce preservation goals. (Policy CO-4.1, Policy CO-4.2, Policy CO-4.3)
Responsibility: Department of Community Services
Timeframe: Ongoing
- Action CO-A61 Establish design guidelines for historic resources based on established federal and State standards and guidelines to address the adaptive re-

use and modification of historic resources. (Policy CO-4.1, Policy CO-4.2, Policy CO-4.4)

Responsibility: Department of Community Services Timeframe: Ongoing

Action CO-A62 Preserve historical records and make them accessible to the public by maintaining the Yolo County Archives and Record Center. (Policy CO-4.1, Policy CO-4.5)

- Provide additional space for accommodation of the growing Archives collections
- Ensure that the collection is housed in an appropriate archival manner

Responsibility: County Library, General Services Department
Timeframe: Ongoing

Action CO-A63 Require cultural resources inventories of all new development projects in areas where a preliminary site survey indicates a medium or high potential for archaeological, historical, or paleontological resources. In addition, require a mitigation plan to protect the resource before the issuance of permits. Mitigation may include:

- Having a qualified archaeologist or paleontologist present during initial grading or trenching;
- Redesign of the project to avoid historic or paleontological resources;
- Capping the site with a layer of fill; and/or
- Excavation and removal of the historical or paleontological resources and curation in an appropriate facility under the direction of a qualified professional. (Policy CO-4.1, Policy CO-4.13)

Responsibility: Department of Community Services Timeframe: Ongoing

Action CO-A64 Require that discretionary projects which involve earth disturbing activities on previously undisturbed soils in an area determined to be archaeologically sensitive perform the following:

- Enter into a cultural resources treatment agreement with the culturally affiliated tribe.
- Retain a qualified archaeologist to evaluate the site if cultural resources are discovered during the project construction. The archaeologist will have the authority to stop and redirect grading activities, in consultation with the culturally affiliated tribe and their designated monitors, to evaluate the significance of any archaeological resources discovered on the property.
- Consult with the culturally-affiliated tribe to determine the extent of impacts to archaeological resources and to create appropriate mitigation to address any impacts.

- Arrange for the monitoring of earth disturbing activities by members of the culturally affiliated tribe, including all archaeological surveys, testing, and studies, to be compensated by the developer.
- Implement the archaeologist's recommendations, subject to County approval.
- Agree to relinquish ownership of all artifacts that are found on the project area to the culturally affiliated tribe for proper treatment and disposition. (Policy CO-4.1, Policy CO-4.13)

Responsibility: Department of Community Services

Timeframe: Ongoing

Action CO-A65 Require that when cultural resources (including non-tribal archeological and paleontological artifacts, as well as human remains) are encountered during site preparation or construction, all work within the vicinity of the discovery is immediately halted and the area protected from further disturbance. The project applicant shall immediately notify the County Coroner and the Department of Community Services. Where human remains are determined to be Native American, the project applicant shall consult with the Native American Heritage Commission (NAHC) to determine the person most likely descended from the deceased. The applicant shall confer with the descendant to determine appropriate treatment for the human remains, consistent with State law. (Policy CO-4.1, Policy CO-4.11, Policy CO-4.12, Policy CO-4.13)
Responsibility: Department of Community Services, Sheriff-Coroner's Office

Timeframe: Ongoing

Action CO-A66 Prohibit the removal of cultural resources from the project site except by a qualified consultant and after the County planning staff have been notified. Prehistoric resources include chert or obsidian flakes, projectile points, mortars, pestles, dark friable soil containing shell and bone dietary debris, heat-affected rock, or human burials. Historic resources include stone or adobe foundations and walls, structures and features with square nails, and refuse deposits often in old wells and privies. (Policy CO-4.1, Policy CO-4.11)

Responsibility: Department of Community Services
Timeframe: Ongoing

Action CO-A67 Consult with culturally affiliated tribes prior to amending the General Plan and adopting or amending specific plans, consistent with State law. (Policy CO-4.12, Policy CO-4.13)

Responsibility: County Administrator's Office, Department of Community Services

Timeframe: Ongoing

- Action CO-A68 Confer with culturally affiliated tribes prior to designating open space that includes any identified cultural places and develop a treatment and management plan for their preservation. (Policy CO-4.12, Policy CO-4.13)
Responsibility: County Administrator's Office, Department of Community Services
Timeframe: Ongoing
- Action CO-A69 Refer all development proposals that may adversely affect cultural resources to the Northwest Information Center (NWIC) at Sonoma State University for review and comments. The NWIC will identify the presence or absence of known cultural resources and/or previously performed studies in or near a given project area and will offer recommendations regarding the need for additional studies, where necessary. If the NWIC recommends further study, the project applicant shall contract with a qualified professional to conduct the study and make recommendations designed to avoid or minimize adverse impacts on cultural or historic resources and indicate whether further investigation is needed. All studies shall be completed and submitted to the County prior to the completion of any environmental document for the project. (Policy CO-4.1, Policy CO-4.11)
Responsibility: Department of Community Services
Timeframe: Ongoing
- Action CO-A70 Refer draft environmental documents, including any studies and recommended mitigation measures, to the appropriate culturally-affiliated tribes for review and comment as part of the public review process. (Policy CO-4.1, Policy CO-4.11, Policy CO-4.12)
Responsibility: Department of Community Services
Timeframe: Ongoing

G. Water Resources

There are many significant water resources in Yolo County. Major rivers, creeks, streams, drainages and sloughs running through the county irrigate agricultural fields, control floods, transport water supplies to users throughout the county and provide wildlife habitat. This section discusses the major sources of surface and groundwater supply in the county, issues related to water quality, and the important planning and regulatory efforts that are concerned with these resources. Other water-related issues, including those related to water distributions systems, water treatment, and water-related infrastructure, are addressed in the Infrastructure and Services Element of this General Plan.

1. Background Information

a. Major Water Sources

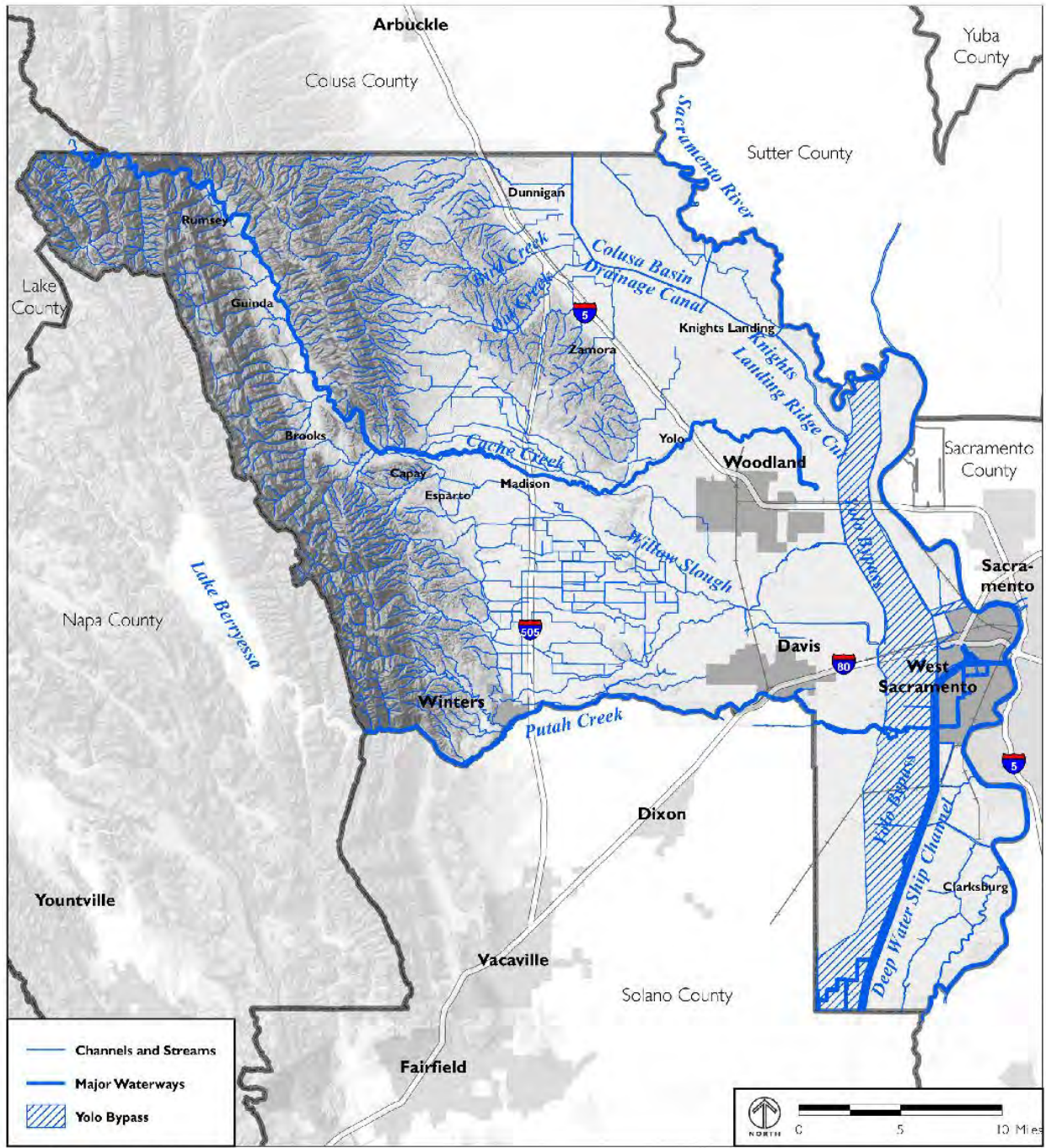
i. Surface Water

The major watersheds and surface water features in Yolo County include Cache Creek, Putah Creek, the Sacramento River, and the Yolo Bypass. These waterway areas are discussed below and are shown in Figure CO-6.

- **Cache Creek** is the outfall of Clear Lake, which is located in Lake County 50 miles northwest of Yolo County. The north fork of Cache Creek includes the 300,000-acre-foot Indian Valley Reservoir, also located in Lake County.
- **Putah Creek** begins in Lake County, flows through Napa County and the Lake Berryessa Reservoir into southern Yolo County, and eventually into the Yolo Bypass.
- **Sacramento River**, a 447-mile-long river, begins in Shasta County and passes west of the City of Sacramento. Its tributaries include the Pit, Feather, McCloud and American rivers.
- The **Yolo Bypass** is a 41-mile-long, several-mile-wide levied floodplain that carries flood flows from the Sacramento River to the Sacramento Delta. Its tributaries include Cache Creek, Putah Creek, Willow Slough and the Knights Landing Ridge Cut.

In addition to these natural sources, an extensive network of sloughs, irrigation canals and drainage ditches are located within the county. The major slough and canal facilities include:

FIGURE CO-6 MAJOR WATERWAYS AND SURFACE WATERS



Source: County of Yolo GIS, 2009.

- **Tehama-Colusa Canal** – transports water south from Tehama County into Yolo County, terminating near Dunnigan.
- **Colusa Basin Drain** – begins at Glenn County, carrying drainage water from the western side of the valley, to the Sacramento River at Knight’s Landing on through the Ridge Cut to the Yolo Bypass.
- **Willow Slough** – minor watercourse that drains much of the area between Cache and Putah Creeks.
- **Winters Canal** – primary source of irrigation for most of the County between Cache and Putah Creeks.
- **West Adams Canal** – carries water from Cache Creek north to Hungry Hollow and Yolo-Zamora area.
- **Elk Slough** – drains much of the area around Clarksburg.

Yolo County has no natural lakes. However, as a result of aggregate mining and reclamation activity along Cache Creek, several small reclaimed lakes will be created and eventually become a part of the future planned Cache Creek Parkway. The Cache Creek Area Plan contains policies and regulations addressing the management of these future resources.

ii. Water Quality

Dozens of organizations and agencies perform regular water quality monitoring in the county. Chemicals such as boron, diazinon, mercury and unknown toxics are pollutants found in Yolo County waterways. Studies on the physical and chemical characteristics of the Sacramento River and its tributaries within Yolo County have found high concentrations of nutrients and contaminants, particularly after major storms.

The Central Valley Regional Water Quality Control Board (CVRWQCB) has adopted Total Maximum Daily Load (TMDL) for mercury in Cache Creek. A separate TMDL is currently under review for mercury in the Sacramento-San Joaquin Delta. The CVRWQCB has also adopted TMDL for diazinon in the Sacramento River and the Delta.

iii. Groundwater

Yolo County has an extensive system of shallow and deep aquifers on which the county depends for domestic and agricultural water supply. Wells in Yolo County are increasingly tapping deeper aquifers due to issues of subsidence and contamination, which are discussed below.

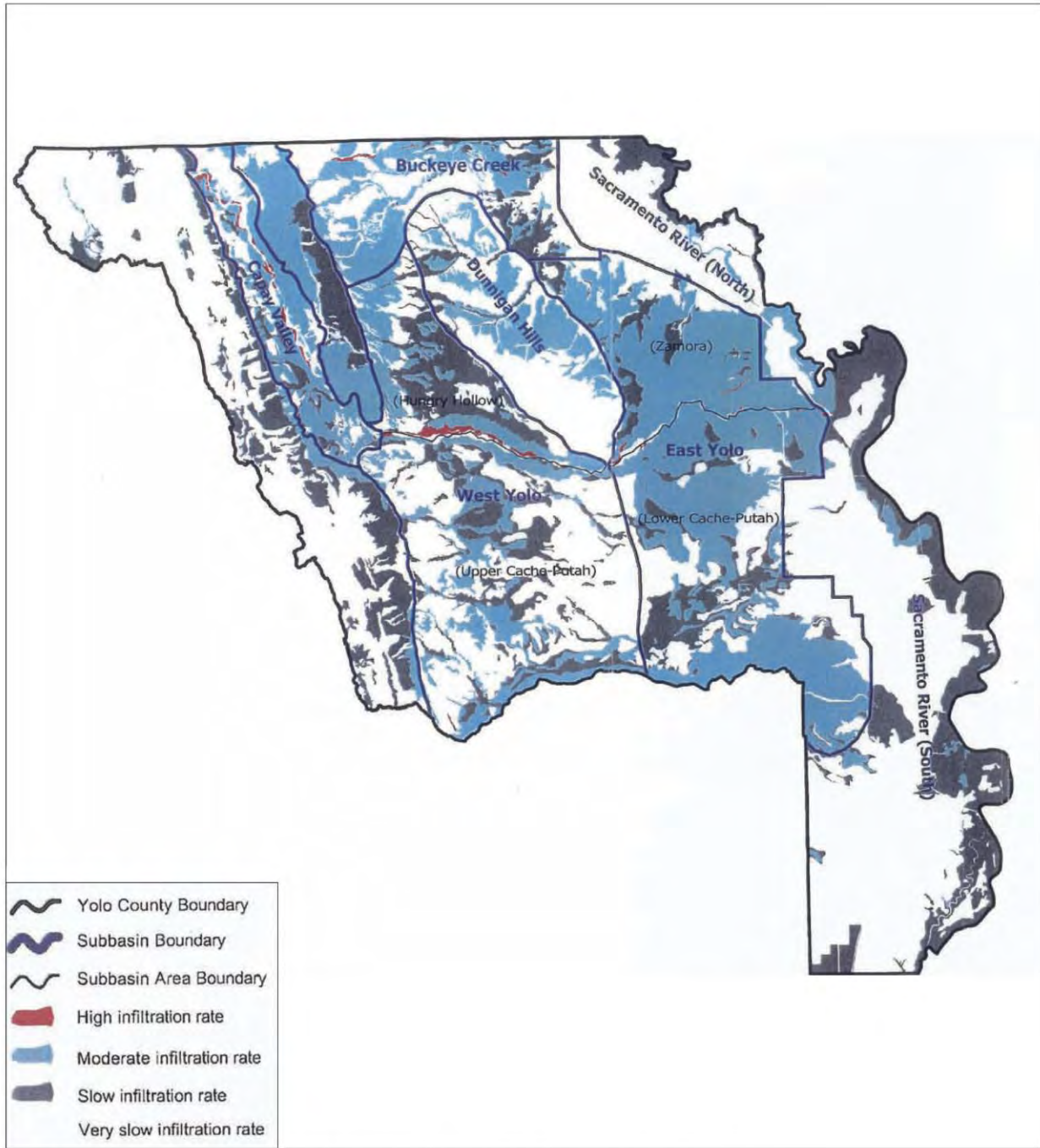
The County has six groundwater sub-basins, which are shown in Figure CO-7. The East Yolo sub-basin, which covers the eastern portion of the county from south of Dunnigan to Davis, provides the greatest supply of residential water extraction. The other five sub-basins are the Capay Valley, Buckeye Creek, Dunnigan Hills, West Yolo and Sacramento River sub-basins.

The primary source of groundwater recharge is applied irrigation water and direct rainfall. Recharge of aquifers typically occurs along the streambeds of creeks and canals. Recharge occurs naturally, and also through reservoir releases, such as the release of stored water from the Indian Valley Reservoir into Cache Creek during low flows periods. The Indian Valley Reservoir was built and is managed by the Yolo County Flood Control and Water Conservation District so that farmers could use surface water rather than pump groundwater, to reduce overdraft and subsidence.

Several issues face the county in its use of groundwater. Subsidence can cause permanent loss of aquifer capacity when upper soil layers collapse. Subsidence can also compromise wells, irrigation canals, levees and highways. The Yolo Subsidence Monitoring Project (YSMP) is a collaborative effort between the County, the Cities of Woodland and Davis, UC Davis, the U.S. Bureau of Reclamation, the Army Corps of Engineers, and the California Department of Water Resources. The YSMP includes 47 stations that are monitored to determine where subsidence may be occurring and to what extent. As a result of their work, it appears that land subsidence due to overdraft of the shallow aquifer is a significant concern in the East Yolo sub-basin and, to a lesser degree, throughout other parts of the county. The greatest amount of subsidence, approximately four feet over several decades, has occurred east of Zamora, where irrigation needs are supplied exclusively from groundwater because no surface water sources exist.

In addition to subsidence, contamination of groundwater is also an issue in parts of the County. Coliform, nitrates and dissolved salts are primary concerns. Coliform and nitrates are a consequence of failing, underperforming and/or over-concentration of septic systems, such as in Dunnigan, North Davis Meadows, Madison and rural areas around the County. Nitrate contamination is also associated with over-fertilization of agricultural crops, golf courses, parks, and landscaping, and may be associated with cemeteries, feed lots, and agricultural disposal areas. Dissolved salts are produced from evaporation of irrigation water and evapotranspiration of soil moisture and shallow groundwater. These salts can accumulate, resulting in groundwater contamination. Arsenic and other soil minerals are naturally occurring contaminants that leach into streams, such as along Cache Creek and particularly in the Wild Wings County Service Area. Although groundwater supplies in the county generally meet current drinking water standards, continued groundwater contamination is already a problem for some municipal, residential, and agricultural uses.

FIGURE CO-7 GROUNDWATER BASINS AND INFILTRATION RATES



Source: Soil Survey Geographic (SSURGO) Database, U.S. Department of Agriculture, Natural Resource Conservation Service.

Figure CO-7 also identifies all rivers, creeks, streams, and other areas where ground-water recharge occurs, based on degree of infiltration.

iv. Reclaimed Water

Reclaimed water from wastewater treatment facilities is used in Yolo County. Cache Creek Casino Resort and the Wild Wings County Service Area use treated tertiary wastewater for golf course irrigation. Other uses of reclaimed water include irrigation of agricultural fields and landscaping. The State regulates specific uses of reclaimed water. The level of prior treatment determines how the reclaimed water can be used. Tertiary treatment is generally required for human contact, as on golf courses and ornamental landscaping, or human consumption as on food crops. Secondary treatment may be adequate for other uses, such as fodder crops.⁶

The Regional Water Quality Control Board (RWQCB) also restricts discharge of reclaimed water to land. Where land discharge is allowed, it is regulated in order to protect groundwater resources. Nitrate removal is required in many cases where the reclaimed water will percolate to groundwater basins that are used for domestic water supply, although secondary treatment may be sufficient depending on soil conditions.⁷

b. Water Planning and Regulation

To ensure high quality and adequate supply, water resources in Yolo County are regulated by federal and State laws, as well as local water management plans. In 2007, the County adopted the Integrated Regional Water Management Plan (IRWMP). The IRWMP was developed by the Water Resources Association of Yolo County (WRA), in conjunction with the California Department of Water Resources (DWR). The IRWMP serves as an update to the County's 1992 water management plan, addressing major topics such as water supply, water quality, flood management, enhancement of aquatic and riparian habitat, and improvement of the County's recreational opportunities.

Besides the IRWMP, the County implements a number of planning documents to protect its water resources. The Yolo County Natural Heritage Program, previously mentioned in the Biological Resources section of this element, also serves as a water management plan with respect to wetlands and riparian corridors, in compliance with the Federal Endangered Species Act (ESA) and the California Endangered Species Act (CESA). The Yolo County NHP does not, however, address aquatic species or their habitat. This plan is currently being developed by the Yolo county Habitat Joint Powers Authority and is expected to be published in 2009.

The Cache Creek Area Plan is comprised of the Off Channel Mining Plan and the Cache Creek Resources Management Plan, which together regulate and protect the area and manage the Creek as an integrated system. It protects water supply and

⁶ California Code of Regulations, Title 22, Division 4, Chapter 3, Article 3.

⁷ California Code of Regulations, Title 22, Division 4, Chapter 3, Article 3.

aquatic habitat from contamination associated with mining. This plan, last updated in 2002, focuses on regulating off channel aggregate mining, improving channel stability, reducing erosion, maintaining flood capacity and restoring habitats.

The Yolo County Stormwater Management Program (SWMP) was developed by the Yolo County Planning and Public Works Department in conjunction with other Yolo County agencies. The SWMP analyzes various activities in urbanized areas that are sources of pollutants in stormwater and identifies Best Management Practices to reduce their levels. The SWMP responds to the issues and regulations of the 1987 Clean Water Act.

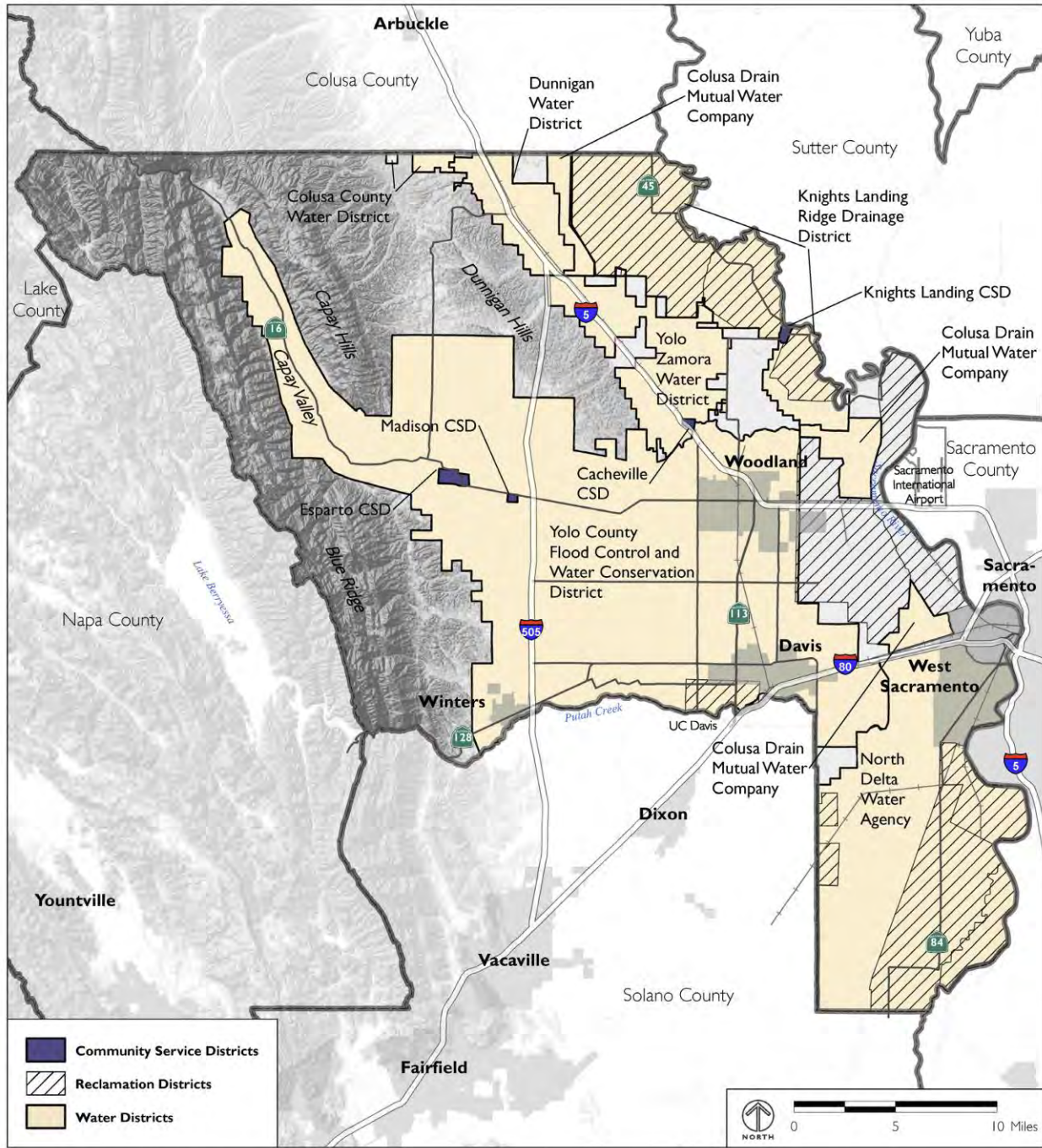
c. Domestic Water

Most of Yolo County's domestic water supplies originate from groundwater. West Sacramento is the only urban area that currently relies on surface water rather than groundwater as its primary source of water supply. The cities of Woodland and Davis, as well as UC Davis, are working on a joint proposal to obtain municipal water from surface supplies in the Sacramento River. Although the most common problem associated with groundwater in municipal supplies is the hardness (mineralization), contamination of the aquifer with coliform, nitrates, naturally occurring arsenic, and fuel from leaking underground storage tanks can be a serious issue in some parts of the County.

Table CO-8 shows current conditions with regards to domestic water systems in the unincorporated areas of the county. In addition, the Rio Villa public housing in Winters and the Davis Migrant Center both have private water systems. The rest of the county relies on private on-site wells. Yolo County has also has six major water districts that focus primarily on the delivery of irrigation water for agricultural purposes, although there has been discussion about one or more of the districts providing municipal water. The water districts are: Dunnigan Water District, Yolo-Zamora Water District, Yolo County Flood Control and Water Conservation District, North Delta Water Agency, Colusa Dain Mutual Water Company, Colusa Drain Water Users Association, Reclamation Districts 108, 730, 737, 2035 and 2068, and Colusa County Water District. Water agency boundaries are shown in Figure CO-8.

County regulations, contained in Title 7, Chapter 1, Section 7-1.04 of the Yolo County Code, require fire sprinkler systems in all new residential development and new non-residential buildings over 5,000 square feet or over three stories in height. Because most existing water systems in Yolo County do not operate at pressures sufficient to maintain a fire sprinkler system for commercial structures, every unincorporated community in the county needs to upgrade its water system to meet these requirements.

FIGURE CO-8 WATER AGENCY BOUNDARIES



Source: Yolo County LAFCO, 2008; Yolo County GIS, 2009.

TABLE CO-8 WATER SYSTEM CONDITIONS BY UNINCORPORATED AREA

Unincorporated Area(s)	Water System Conditions
Clarksburg	No community water system. Individual wells.
Dunnigan	No community water system. Private water systems serve the two mobile home parks. The Dunnigan Water District provides supplement non-potable fire flow for some customers. Nitrates have been a problem in the past with some wells in the community.
Esparto	Community water system based on groundwater, which is managed by a Community Services District. Water pressure has been a recent concern, especially regarding commercial fire flow.
Knights Landing	Community water system based on groundwater, which is managed by a Community Services District. Water pressure has been a recent concern, especially regarding commercial fire flow.
Madison	Community water system based on groundwater, which is managed by a Community Service District. New well recently installed to address previous problems with coliform and nitrate contamination. Water pressure has been a recent concern, especially regarding commercial fire flow.
Monument Hills	Wild Wings development has a community water system based on groundwater, which is managed by a County Service Area. Arsenic is a potential problem. The remainder of the Monument Hills area relies on individual wells.
West Kentucky	Private water system based on groundwater. System improvements needed.
Willowbank, El Macero, North Davis Meadows, Royal Oaks	Willowbank and El Macero have separate water systems managed by County Service Areas, which have been integrated with the City of Davis community water system. Royal Oaks is also served by the City of Davis. North Davis Meadows is also managed by a County Service Area, but is separate from the city's water system. Nitrate have been a problem in North Davis Meadows.
Yolo	Community water system based on groundwater, which is managed by a Community Service District. Water pressure has been a recent concern, especially regarding commercial fire flow.
Zamora, Binning Farms, Patwin Road, West Plainfield, Willow Oak	No community water system. Individual wells.

Other water supply and quality issues that Yolo County must address include increasingly stringent water quality regulations, availability of adequate water supplies during severe drought conditions, subsidence problems as a result of groundwater overdraft, rising costs of providing water services, and increasingly complex and expensive regulatory compliance. Many of these issues have been addressed through the Integrated Regional Water Management Plan (IWRMP) prepared by the Water Resources Association, a multi-agency effort to coordinate water policies among the various jurisdictions of Yolo County. Currently, the County is also considering additional ordinances and/or the formation of a countywide water agency to provide enhanced groundwater resource management.

2. Policy Framework

GOAL CO-5	<u>Water Resources.</u> Ensure an abundant, safe, and sustainable water supply to support the needs of existing and future generations.
------------------	--

- Policy CO-5.1 Coordinate with water purveyors and water users to manage supplies to avoid long-term overdraft, water quality degradation, land subsidence and other potential problems. 🌍
- Policy CO-5.2 Support projects that provide reliable and sustainable surface water from a variety of energy efficient sources. Sources should be sufficient to serve existing and planned land uses in prolonged drought periods and protect natural resources and surface water flows. 🌍
- Policy CO-5.3 Manage the County’s groundwater resources on a sustainable yield basis that can provide water purveyors and individual users with reliable, high quality groundwater to serve existing and planned land uses during prolonged drought periods. (DEIR MM HYD-1a) 🌍
- Policy CO-5.4 Support educational programs to educate the public about practices and programs to minimize water pollution and reduce water usage. 🌍
- Policy CO-5.5 Integrate balanced water management programs that emphasize multiple benefits and balance competing needs into all aspects of the planning and development process. 🌍
- Policy CO-5.6 Improve and protect water quality for municipal, agricultural, and environmental uses.
- Policy CO-5.7 Support mercury regulations that are based on good science and reflect an appropriate balancing of sometimes competing public values including health, food chain, reclamation and restoration of Cache Creek, sustainable and economically viable Delta agriculture, necessary mineral extraction, flood control, erosion control, water quality, and habitat restoration.
- Policy CO-5.8 Support efforts to reduce the accumulation of methyl mercury in fish tissue in Cache Creek and the Delta, as well as the consumption of fish with high levels of methyl mercury.
- Policy CO-5.9 Within the Delta Primary Zone, ensure compatibility of permitted land use activities with applicable water policies of the Land Use and Resource Management Plan of the Delta Protection Commission.

- Policy CO-5.10 Encourage water purveyors to develop plans for responding to droughts and the effects of global climate change, including contingency plans, the sharing of water resources to improve overall water supply reliability, and the allocation of water supply to priority users. 🌍
- Policy CO-5.11 Facilitate and encourage the development of new reliable future sources of supply consistent with local land use plans and regional water needs, including the completion of the Tehama-Colusa Canal.
- Policy CO-5.12 Support the integrated management of surface and groundwater, stormwater treatment and use, the development of highly treated wastewater, and desalinization where feasible.
- Policy CO-5.13 Ensure that regional, State, and federal water projects protect local water rights and areas of origin.
- Policy CO-5.14 Require that proposals to convert land to uses other than agriculture, open space, or habitat demonstrate that groundwater recharge will not be significantly diminished.
- Policy CO-5.15 Encourage new development and redevelopment to use reclaimed wastewater, where feasible, to augment water supplies and to conserve potable water for domestic purposes. 🌍
- Policy CO-5.16 Require all development to have an adequate water supply. Require significant discretionary projects to demonstrate adequate long-term and sustainable water supplies by preparing a verified water supply assessment. The assessment shall demonstrate a long-term, reliable water supply satisfactory under normal and above normal rainfall conditions, as well as drought conditions. Satisfy the requirements of CEQA Guidelines Section 15155 to consult with water agencies regarding water supply assessments. 🌍
- Policy CO-5.17 Require new development to be designed such that nitrates, lawn chemicals, oil, and other pollutants of concern do not impair groundwater quality.
- Policy CO-5.18 Encourage developers to build new homes to higher water-efficiency standards than already required. 🌍
- Policy CO-5.19 Strive for “water-neutral” development with new water demand offset by efficiency improvements elsewhere in the system. Require all new developments to offset new water demands to the greatest extent feasible. 🌍

- Policy CO-5.20 Encourage water purveyors to adopt conservation pricing strategies for existing and new development. 🌍
- Policy CO-5.21 Encourage the use of water management strategies, biological remediation, and technology to address naturally occurring water quality problems such as boron, mercury, and arsenic.
- Policy CO-5.22 Work with other agencies and non-profit organizations to provide educational and technical assistance programs to encourage farmers to adopt agricultural methods that improve water quality.
- Policy CO-5.23 Support efforts to meet applicable water quality standards for all surface and groundwater resources.
- Policy CO-5.24 Pursue funding to remediate historic mines and other sources of mercury contamination on the Cache Creek watershed.
- Policy CO-5.25 Support the efforts of Davis, Woodland and UC Davis to acquire surface supplies from the Sacramento River for domestic water uses.
- Policy CO-5.26 Provide financial and regulatory incentives for the installation of water conservation measures for agriculture.
- Policy CO-5.27 Encourage the development of groundwater management plans pursuant to the State Groundwater Management Act (Sections 10750-10756 of the California Water Code) for all regions of the County.
- Policy CO-5.28 Encourage the Water Resources Agency to implement and regularly update the Integrated Regional Water Management Plan.
- Policy CO-5.29 Vigorously protect all water rights related to lands within Yolo County, including areas of origin, riparian water rights, and other existing water rights.
- Policy CO-5.30 Anticipate and adapt to changes in the amount and timing of water availability due to predicted effects of global warming.
- Policy CO-5.31 Encourage the Esparto CSD to explore the availability of Cache Creek water via the Flood Control District as an alternative source of municipal water. (DEIR UTIL-2b)
- Policy CO-5.32 In water districts where there is insufficient water to serve new development, require new development to offset demand through one or more of the following measures as appropriate, so that there is no net increase in demand: use of reclaimed water, water catchments and reuse on site; water retention serving multiple sites; retrofits of existing uses in the district to offset increased demand; and other such means.



These measures should be achieved in partnership with the applicable water district. (DEIR MM UTIL 2c)

- Policy CO-5.33 Strive to increase artificial recharge of important aquifers with surplus surface water supplies. (DEIR MM HYD-1b)
- Policy CO-5.34 Require measures that reduce peak demand for water, and therefore allow for smaller pumps that use less energy overall.

3. Implementation Program

- Action CO-A71 Collaborate with the Water Resources Agency to collect data from public water suppliers and other water users which use groundwater sources to monitor and report groundwater levels and yields, where appropriate, to manage long term aquifer conditions. (Policy CO-5.1, Policy CO-5.3)
Responsibility: Parks and Resources Department
Timeframe: Ongoing
- Action CO-A72 Work cooperatively with water purveyors and with other land use planning agencies to share data on water supply availability, anticipated demand, land use, and population projections. (Policy CO-5.1, Policy CO-5.2, Policy CO-5.3)
Responsibility: Parks and Resources Department
Timeframe: Ongoing
- Action CO-A73 Create a central database for all jurisdictions within the County of proposed, pending, and approved development activity to be used in cumulative analyses and water supply assessments. (Policy CO-5.1, Policy CO-5.2, Policy CO-5.3)
Responsibility: Department of Community Services
Timeframe: Ongoing
- Action CO-A74 Work with water purveyors in the County to plan for possible changes to water supply and quality resulting from global warming. (Policy CO-5.1, Policy CO-5.2, Policy CO-5.3, Policy CO-5.10) 🌐
Responsibility: Parks and Resources Department
Timeframe: Ongoing
- Action CO-A75 Participate in regional planning efforts regarding surface water resources, including the Sacramento River, Cache Creek, Putah Creek, Tehama-Colusa Canal, Yolo Bypass, and Sacramento-San Joaquin Delta. (Policy CO-5.1, Policy CO-5.2, Policy CO-5.3)
Responsibility: Parks and Resources Department

Timeframe: Ongoing

- Action CO-A76 Oppose proposals for surface or groundwater exports to locations outside Yolo County that do not preserve both water quality and water supply for current and planned water users, including the environment. (Policy CO-5.2, Policy CO-5.3)
Responsibility: Parks and Resources Department, County Administrator's Office
Timeframe: Ongoing
- Action CO-A77 Coordinate with local water purveyors to develop a conjunctive use program, consistent with the Integrated Regional Water Management Plan, to make the most efficient use of surface and groundwaters. (Policy CO-5.1, Policy CO-5.3) 
Responsibility: Parks and Resources Department
Timeframe: 2010/2011
- Action CO-A78 Ensure the collection and maintenance of data on water use, water supplies, and water quality to avoid long-term overdraft, water quality degradation, land subsidence and other potential groundwater problems. (Policy CO-5.5, Policy CO-5.6)
Responsibility: Health Department, Parks and Resources Department
Timeframe: Ongoing
- Action CO-A79 Map operational and non-operational wells into the County's Geographic Information System. (Policy CO-5.3, Policy CO-5.5, Policy CO-5.6, Policy CO-5.7, Policy CO-5.8)
Responsibility: Health Department, Information Technology Department
Timeframe: 2010/2011
- Action CO-A80 Work with local water purveyors to develop and implement urban and agricultural water management plans to provide a 20 percent improvement in water use efficiency throughout the county by 2030. (Policy CO-5.1, Policy CO-5.5) 
Responsibility: Parks and Resources Department
Timeframe: 2011/2012
- Action CO-A81 Develop and implement an integrated wellhead protection program. (Policy CO-5.6)
Responsibility: Agriculture Department, Health Department
Timeframe: 2009/2010

- Action CO-A82 Develop a County grading ordinance that maintains existing terrain, channels, and vegetation to the extent possible, in order to minimize the disruption of natural systems. (Policy CO-5.5, Policy CO-5.6) 🌐
Responsibility: Department of Community Services
Timeframe: 2009/2010
- Action CO-A83 Adopt a Water Efficient Landscape Ordinance to require greater use of regionally native drought-tolerant vegetation, limitations on the amount of turf in residential development, computer controlled irrigation systems, and other measures as appropriate. (Policy CO-5.2, Policy CO-5.3, Policy CO-5.4) 🌐
Responsibility: Department of Community Services
Timeframe: 2011/2012
- Action CO-A84 Work with local agencies and non-profit organizations to provide educational and technical assistance to farmers to reduce sedimentation, provide on-site retention of irrigation water and flow attenuation, on-site detention of stormwater flows, and incorporate native vegetation. (Policy CO-5.4)
Responsibility: Agriculture Department
Timeframe: Ongoing
- Action CO-A85 Coordinate with water purveyors in the unincorporated areas to inform the public about practices and programs to minimize water pollution. (Policy CO-5.4)
Responsibility: Parks and Resources Department, Agriculture Department
Timeframe: Ongoing
- Action CO-A86 Consider adoption of an ordinance requiring that existing homes be retrofitted with water efficient appliances and fixtures prior to sale. (Policy CO-5.1, Policy CO-5.2, Policy CO-5.3, Policy CO-5.5) 🌐
Responsibility: Department of Community Services
Timeframe: 2011/2012
- Action CO-A87 Coordinate with the Yolo Resources Conservation District to create educational programs to inform agencies, stakeholders, and the public about groundwater Best Management Practices for efficient water use, water conservation, and recharge. (Policy CO-5.4) 🌐
Responsibility: Parks and Resources Department
Timeframe: 2011/2012
- Action CO-A88 Establish the cost of operating and maintaining potable water treatment and distribution disposal systems/facilities to ensure they are borne by those receiving benefit, through the establishment of an ap-

propriate maintenance entity and fees. (Policy CO-5.2, Policy CO-5.3, Policy CO-5.5)

Responsibility: Department of Community Services, LAFCO

Timeframe: Ongoing

- Action CO-A89 Adopt an ordinance to allow for shared water systems to facilitate the clustering of homes and preservation of agricultural land, where an entity is established to provide maintenance or financing for maintenance of the water system. (Policy CO-5.1, Policy CO-5.2, Policy CO-5.3) 🌐
Responsibility: Health Department
Timeframe: 2009/2010
- Action CO-A90 Encourage roof catchment and the use of rainwater for non-potable uses to reduce the need for groundwater. (Policy CO-5.1, Policy CO-5.2, Policy CO-5.3, Policy CO-5.4) 🌐
Responsibility: Parks and Resources Department, Department of Community Services
Timeframe: 2010/2011
- Action CO-A91 Adopt development design standards to reduce or eliminate impervious surfaces where possible. (Policy CO-5.6)
Responsibility: Department of Community Services
Timeframe: 2010/2011
- Action CO-A92 Support water purveyors in the implementation and continued refining of the “Memorandum of Understanding (MOU) Regarding Urban Water Conservation in California” in those areas where water suppliers are party to the MOU. (Policy CO-5.1, Policy CO-5.2, Policy CO-5.3)
Responsibility: Parks and Resources Department
Timeframe: Ongoing
- Action CO-A93 Implement and regularly update the County Stormwater Management Plan and associated programs. (Policy CO-5.5, Policy CO-5.6)
Responsibility: Department of Community Services
Timeframe: Ongoing
- Action CO-A94 Require the implementation of Best Management Practices (BMPs) to minimize erosion, sedimentation, and water quality degradation resulting from new development and increases in impervious surfaces. (Policy CO-5.5, Policy CO-5.6) 🌐
Responsibility: Department of Community Services
Timeframe: Ongoing
- Action CO-A95 Adopt development design standards that use low-impact development techniques that emulate the natural hydrologic regime and reduce the

amount of runoff and associated pollutants. Examples include vegetated swales, landscaped detention basins, permeable paving, and green roofs. (Policy CO-5.5, Policy CO-5.6) 🌍

Responsibility: Department of Community Services
Timeframe: 2012/2013

Action CO-A96 Work with the Central Valley Regional Water Quality Control Board and other State and federal agencies to implement mercury total maximum daily loads (TMDLs) for Cache Creek and to develop mercury TMDLs for the Delta and other Yolo County waterways where appropriate. (Policy CO-5.6, Policy CO-5.7)

Responsibility: Parks and Resources Department
Timeframe: Ongoing

Action CO-A97 Evaluate the creation of a countywide water authority or other governance structure to address water conservation, flood control, water conveyance, and discourage water exports. (Policy CO-5.1, Policy CO-5.2, Policy CO-5.3)

Responsibility: County Administrator's Office, County Counsel
Timeframe: 2009/2010

Action CO-A98 Continue to monitor water quality in Lower Cache Creek and annually make the resulting data publicly available. (Policy CO-5.6)

Responsibility: Parks and Resources Department
Timeframe: Ongoing

Action CO-A99 Require service hook-up for all non-agricultural water users within a community when new domestic water services are made available. (Policy CO-5.6, Policy CO-5.17, Policy CO-5.23)

Responsibility: Department of Community Services
Timeframe: Ongoing

Action CO-A100 Facilitate the extension of water service to nearby underserved existing unincorporated developments, such as Binning Farms. (Policy CO-5.6, Policy CO-5.17, Policy CO-5.23)

Responsibility: Department of Community Services
Timeframe: Ongoing

Action CO-A101 Develop a generalized water balance for the County that uses updated hydrologic and topographic information to describe where water comes from and how it flows through the County, including recharge and extraction of ground waters. (Policy CO-5.3, Policy CO-5.5)

Responsibility: Parks and Resources Department
Timeframe: 2012/2013

Action CO-A102 Use watershed assessment to evaluate storm water and flood management programs to ensure that management efforts are consistent with local watershed hydrologic features and natural resource needs. (Policy CO-5.3, Policy CO-5.5)
Responsibility: Parks and Resources Department
Timeframe: 2013/2014

Action CO-A103 Create guidelines for local water providers to enact programs that promote: investigations of new sustainable sources such as recycled water and graywater that match water quantity and quality to the beneficial uses; and the securing of additional water rights for the purveyors. (DEIR MM UTIL-2a) (Policy CO-5.1, Policy CO-5.2, Policy CO-5.11, Policy CO-5.15)
Responsibility: Parks and Resources Department
Timeframe: 2012/2013

H. Air Quality

1. Background Information

a. Air Basin and Meteorology

Yolo County is located in the Sacramento Valley Air Basin (SVAB), which also includes Sacramento, Shasta, Tehama, Butte, Glenn, Colusa, Sutter, Yuba and parts of Solano and Placer Counties. The SVAB is bounded by the Coast Ranges to the west, the Cascade Range to the north and the Sierra Nevada to the east. These mountain ranges channel wind through the Valley, but also limit dispersion of pollutant emissions from the Valley.

The SVAB is characterized by hot, dry summers and cool, rainy winters, with periods of dense and persistent low-level fog interspersed with the North Pacific storm track. The average summer daily temperatures for the Sacramento Valley air basin range from 50 to more than 90 degrees Fahrenheit. The winter average temperature is approximately 50 degrees Fahrenheit with winter low temperatures occasionally dropping below freezing.

The SVAB is subject to unique wind patterns, which can affect air quality by transporting pollutants. The ozone season in the SVAB, which occurs between May and October, is characterized by still air or light winds in the morning and an evening breeze that typically transports airborne pollutants out of the air basin. However, during part of the summer, wind patterns circle airborne pollutants back into the SVAB in a phenomenon referred to as an “inversion layer.” This phenomenon worsens the pollutant emission concentrations and contributes to violations of the air quality standards.

b. Regulatory Background

The Federal Clean Air Act (FCAA) governs air quality in the United States. In addition to being subject to federal requirements, air quality in California is also governed by more stringent regulations under the California Clean Air Act (CCAA).

At the federal level, the United States Environmental Protection Agency (U.S. EPA) administers the CAA. The CCAA is administered by the California Air Resources Board (ARB) at the State level and by the various air quality management districts at the regional levels. The Yolo-Solano Air Quality Management District (District) regulates air quality locally. The District's jurisdiction is the western portion of Lower Sacramento Valley Air Basin, comprised of Yolo County and the Northeast portion of Solano County.

The 1970 FCAA authorized the establishment of national health-based air quality standards and also set deadlines for their attainment. The FCAA Amendments of 1990 changed deadlines for attaining national standards as well as the remedial actions required of areas of the nation that exceed the standards. Under the CAA, State and local agencies in areas that exceed the national standards are required to develop State Implementation Plans (SIPs) to demonstrate how they will achieve the national standards by specified dates. SIPs are not single documents, but rather are a compilation of new and previously submitted plans, programs, district rules, State regulations and federal controls. ARB reviews and approves the SIP, then provides the SIP to EPA for approval and publication. The CAA requires that projects receiving federal funds demonstrate conformity to the approved SIP and local air quality attainment plan for the region. Conformity with the SIP requirements also satisfies the CAA requirements.

In 1988, the CCAA required that all air districts in the State endeavor to achieve and maintain California Ambient Air Quality Standards for carbon monoxide (CO), ozone (O₃), sulfur dioxide (SO₂) and nitrogen dioxide (NO₂) by the earliest practical date. The CCAA provides districts with authority to regulate indirect sources and mandates that air quality districts focus particular attention on reducing emissions from transportation and area-wide emission sources (Health and Safety Code Section 40716). Each district plan is to achieve a 5 percent annual reduction, averaged over consecutive three-year periods, in district-wide emissions of each nonattainment pollutant or its precursors (Health and Safety Code Section 40914).

Based on this framework, national and State ambient air quality standards have been established for six pollutants: ozone, CO, lead, nitrogen dioxide (NO₂), particulate matter less than or equal to 10 or 2.5 microns in diameter (PM₁₀ and PM_{2.5}), and sulfur dioxide (SO₂). Ambient air quality standards are designed to protect public health and welfare with a reasonable margin of safety. Because individuals vary widely in their sensitivity to air pollutants, standards are designed to protect more sensitive populations such as children and the elderly. Generally, California Ambient Air Quality Standards are more stringent than national standards.

Areas of California not meeting federal or State air quality standards are classified as nonattainment areas. Yolo County is designated as a nonattainment area for both the State and federal ozone standards and for the State inhalable particulate matter (PM₁₀) standards.

At both the federal and state level, control of greenhouse gases that contribute to global warming and other adverse climate changes is a relatively new area of policy and regulation. Please refer to Section J (Climate Change) of this Element for a discussion of this issue.

c. Applicable State and Federal Air Quality Plans and Transportation Plans

The CCAA requires areas that have not attained State ambient air quality standards to prepare plans to attain these standards by the earliest practicable date. The District is designated as nonattainment for ozone, and accordingly, the 1992 Air Quality Attainment Plan (AQAP) was developed pursuant to CCAA requirements to provide progress toward attaining the State ozone standard. The District's Board of Directors adopted the AQAP on February 19, 1992, and it was approved by ARB on May 28, 1992.

State law does not require attainment plans for State particulate matter standards. State law does require annual and triennial progress reports regarding implementation of control measures, and triennial plan revisions to reflect and respond to changing circumstances.

The FCAA required a non-attainment plan (i.e. SIP) in 1994. The 1994 State Implementation Plan (SIP) superseded the 1992 AQAP. The SIP was deemed by ARB to fulfill the requirements for the first Triennial Progress Report to the AQAP. Additional Triennial Progress Reports were completed in 1997, 2000, and 2003.

In addition to these federal and State air quality plans, the District developed the Transportation and Land Use Toolkit in 2003, in partnership with several regional transportation agencies. The Toolkit discusses projects for alternative transportation modes that may mitigate and reduce emissions. SACOG has also created a Preferred Blueprint Scenario, approved in 2003, which outlines a vision of growth that promotes compact land use patterns which would contribute to reduced vehicular emissions.

2. Policy Framework

GOAL CO-6	<u>Air Quality.</u> Improve air quality to reduce the health impacts caused by harmful emissions.
------------------	--

- Policy CO-6.1 Improve air quality through land use planning decisions. 🌍
- Policy CO-6.2 Support local and regional air quality improvement efforts. 🌍
- Policy CO-6.3 Encourage employers to increase telecommuting, telepresence, provide bicycle facilities, and enhance access to public transit for employees. 🌍
- Policy CO-6.4 Engage the public in efforts to increase awareness of the health risks associated with air pollution and to take voluntary actions that reduce emissions. 🌍
- Policy CO-6.5 Encourage community participation in air quality planning.
- Policy CO-6.6 Encourage implementation of YSAQMD Best Management Practices, such as those listed below, to reduce emissions and control dust during construction activities:
- Water all active construction areas at least twice daily.
 - Haul trucks shall maintain at least two feet of freeboard.
 - Cover all trucks hauling soil, sand, and other loose materials.
 - Apply non-toxic binders (e.g., latex acrylic copolymer) to exposed areas after cut-and-fill operations and hydroseed area.
 - Apply chemical soil stabilizers on inactive construction areas (disturbed lands within construction projects that are unused for at least four consecutive days).
 - Plant tree windbreaks on the windward perimeter of construction projects if adjacent to open land.
 - Plant vegetative ground cover in disturbed areas as soon as possible.
 - Cover inactive storage piles.
 - Sweep streets if visible soil material is carried out from the construction site.
 - Treat accesses to a distance of 100 feet from the paved road with a 6 to 12 inch layer of wood chips or mulch.
 - Treat accesses to a distance of 100 feet from the paved road with a 6-inch layer of gravel. (DEIR MM AIR-1)

Policy CO-6.7 Pursue legislation to assist farming operations with permitting bio-energy operations.

3. Implementation Program

Action CO-A104 Implement the guidelines of the Transportation and Land Use Toolkit, developed by the Yolo-Solano Air Quality Management District (YSAQMD). (Policy CO-6.1, Policy CO-6.2) 🌐

Responsibility: Department of Community Services

Timeframe: Ongoing

Action CO-A105 Require development proposals that introduce sources of toxic air pollutants to prepare a health risk assessment and, based on the results of the assessment, establish appropriate land use buffer zones around those uses posing substantial health risks. (Policy CO-6.1) 🌐

Responsibility: Department of Community Services

Timeframe: Ongoing

Action CO-A106 For discretionary permits, require agricultural Best Management Practices regarding odor control, stormwater drainage, and fugitive dust control where appropriate. (Policy CO-6.1) 🌐

Responsibility: Agriculture Department

Timeframe: Ongoing

Action CO-A107 Implement the regulations and programs established by the YSAQMD to bring local air quality into attainment with State and federal standards. (Policy CO-6.1, Policy CO-6.2) 🌐

Responsibility: Department of Community Services

Timeframe: Ongoing

Action CO-A108 Coordinate air quality planning efforts with other local, regional and State agencies. (Policy CO-6.1, Policy CO-6.2) 🌐

Responsibility: Department of Community Services Timeframe: Ongoing

Action CO-A109 Regulate the location and operation of land uses to avoid or mitigate harmful or nuisance levels of air emissions to the following sensitive receptors: residentially designated land uses; hospitals, nursing/convalescent homes, and similar board and care facilities; hotels and lodging; schools and day care centers; and neighborhood parks. Home occupation uses are excluded. New development shall follow the recommendations for siting new sensitive land uses consistent with the CARB's recommendation as shown in the table below. (DEIR MM AIR-3) (Policy CO-6.1, Policy CO-6.2)

Responsibility: Department of Community Services
 Timeframe: Ongoing

TABLE CO-9 Recommendations on Siting New Sensitive Land Uses

Source	Category Advisory Recommendations
Freeways and High-Traffic Roads	Avoid concentrating sensitive land uses within 500 feet of a freeway, urban roads with 100,000 vehicles/day, or rural roads with 50,000 vehicles/day.
Distribution Centers	Avoid concentrating sensitive land uses within 1,000 feet of a distribution center (that accommodates more than 100 trucks per day, more than 40 trucks with operating transport refrigeration units (TRUs) per day, or where TRU unit operations exceed 300 hours per week). Take into account the configuration of existing distribution centers and avoid concentrating residences and other new sensitive land uses near entry and exit points.
Rail Yards	Avoid concentrating sensitive land uses within 1,000 feet of a major service and maintenance rail yard. Within one mile of a rail yard, consider possible siting limitations and mitigation approaches.
Ports	Avoid concentrating sensitive land uses immediately downwind of ports in the most heavily impacted zones. Consult local air districts or the CARB on the status of pending analyses of health risks.
Refineries	Avoid concentrating sensitive land uses immediately downwind of petroleum refineries. Consult with local air districts and other local agencies to determine an appropriate separation.
Chrome Platers	Avoid concentrating sensitive land uses within 1,000 feet of a chrome plater.
Dry Cleaners Using Perchloroethylene	Avoid concentrating sensitive land uses within 300 feet of any dry cleaning operation. For operations with two or more machines, provide 500 feet. For operations with 3 or more machines, consult with the local air district. Do not concentrate sensitive land uses in the same building with perc dry cleaning operations.
Gasoline Dispensing Facilities	Avoid concentrating sensitive land uses within 300 feet of a large gas station (defined as a facility with a throughput of 3.6 million gallons per year or greater). A 50 foot separation is recommended for typical gas dispensing facilities.

Notes:

1. These recommendations are advisory. Land use agencies have to balance other considerations, including housing and transportation needs, economic development priorities, and other quality of life issues.
2. Recommendations are based primarily on data showing that the air pollution exposures addressed here (i.e., localized) can be reduced as much as 80% with the recommended separation.
3. The relative risk for these categories varies greatly. To determine the actual risk near a particular facility, a site-specific analysis would be required. Risk from diesel PM will decrease over time as cleaner technology phases in.
4. These recommendations are designed to fill a gap where information about existing facilities may not be readily available and are not designed to substitute for more specific information if it exists. The recommended distances take into account other factors in addition to available health risk data (see individual category descriptions).
5. Site-specific project design improvements may help reduce air pollution exposures and should also be considered when siting new sensitive land uses.
6. This table does not imply that mixed residential and commercial development in general are incompatible. Rather it focuses on known problems like dry cleaners using perchloroethylene that can be addressed with reasonable preventative actions.
7. A summary of the basis for the distance recommendations can be found in Table 1-2 (see ARB's *Land Use Handbook*).

Source: California Air Resources Board, 2005. *Air Quality and Land Use Handbook: A Community Health Perspective*. April and Tschudin Consulting Group, April 2009.

Action CO-A110 Establish additional air quality monitoring stations in consultation with the YSAQMD, where appropriate. (Policy CO-6.1, Policy CO-6.4)
Responsibility: Department of Community Services Timeframe: Ongoing

Action CO-A111 Prohibit wood-burning fireplaces in new residential developments. (Policy CO-6.1)
Responsibility: Department of Community Services Timeframe: Ongoing

I. Energy Conservation

The following discussion includes goals, policies and actions relating to energy production, usage and conservation within Yolo County. Other policies relating to energy conservation, particularly associated with green building, are also located in the Land Use and Community Character Element of this General Plan.

1. Background Information

Title 24, Part 6 of the California Code of Regulations sets forth the State energy efficiency standards for residential and non-residential buildings. Title 24 requirements address a wide range of design and energy performance features of development, including insulation; the use of energy-efficient heating, ventilation and air conditioning equipment; solar reflective roofing materials; and energy-efficient indoor and outdoor lighting systems.

Energy conservation has numerous benefits besides economic and financial savings for individual consumers. The combustion of fossil fuels to produce heat or electricity, or to power internal combustion engines, has been linked to poor air quality in the Sacramento Valley, global warming and negative impacts on crops. In Yolo County, energy conservation can be achieved via a reduction in electricity usage and private automobile use, encouraging efficient siting and exposure for buildings, and implementing land use and transportation policies that encourage fewer and shorter vehicle trips.

2. Policy Framework


GOAL CO-7	<u>Energy Conservation.</u> Promote energy efficiency and conservation.
------------------	--


Policy CO-7.1 Encourage conservation of natural gas, oil and electricity, and management of peak loads in existing land uses. 🌍


Policy CO-7.2 Support efforts to improve energy efficiency in existing irrigation systems. 🌍


- Policy CO-7.3 Require all projects to incorporate energy-conserving design, construction, and operation techniques and features into all aspects of the project including buildings, roofs, pavement, and landscaping. 🌍
- Policy CO-7.4 Require the use of Energy Star certified appliances, such as water heaters, swimming pool heaters, cooking equipment, refrigerators, furnaces and boiler units, where feasible. 🌍
- Policy CO-7.5 Require all new parking lots to significantly increase shading to relieve the potential for “heat islands.” 🌍
- Policy CO-7.6 Encourage the use of building materials and methods that increase energy efficiency a minimum of 15 percent beyond State Title-24 standards for residential buildings and 20 percent beyond State Title 24 standards for commercial buildings. 🌍
- Policy CO-7.7 Support farmers and landowners in their efforts to maximize the efficiency of agricultural end uses. 🌍
- Policy CO-7.8 Increase energy efficiency and alternative energy utilization in existing buildings where feasible. 🌍
- Policy CO-7.9 Require that new site and structure designs maximize energy efficiency. 🌍
- Policy CO-7.10 Encourage residents to retrofit existing residences to maximize energy efficiency. 🌍
- Policy CO-7.11 Strongly encourage LEED certification or equivalent for all public, private and existing buildings and strongly encourage LEED-Neighborhood Design (ND) certification or equivalent for other applicable projects, particularly within the Specific Plan areas. 🌍
- Policy CO-7.12 Consider lifecycle costs when identifying opportunities for the replacement and retrofit of energy efficient technologies when upgrading or maintaining County facilities. 🌍
- Policy CO-7.13 Support the production of alternative and renewable energy fueling stations in Yolo County. 🌍
- Policy CO-7.14 Consider incentive programs such as reduced fees, and permit expedition for projects that exceed mandatory energy requirements, incorporate alternative energy technologies, or support the County’s energy objectives. 🌍
- Policy CO-7.15 Promote incentives from local, state, and federal agencies for improving energy efficiency and expanding renewable energy installations. 🌍


3. Implementation Program

Action CO-A112 Amend the Zoning Code to streamline permitting for the production of biofuels, biomass, solar, wind and other energy alternatives to reduce dependency on fossil fuels. (Policy CO-7.1) 
Responsibility: Department of Community Services
Timeframe: 2010/2011

Action CO-A113 Require the use of Energy Star certified appliances, such as water heaters, swimming pool heaters, cooking equipment, refrigerators, furnaces and boiler units, in all new subdivisions. (Policy CO-7.1, Policy CO-7.4) 
Responsibility: Department of Community Services
Timeframe: Ongoing

Action CO-A114 Use development agreements to garner commitments from developers of new projects to increase the energy efficiency in existing development. . (Policy CO-7.1, Policy CO-7.8) 
Responsibility: Department of Community Services
Timeframe: Ongoing

Action CO-A115 Amend the Zoning Code to include regulations for all new parking lots to include tree plantings that will result in 50 percent shading of parking lot surface areas within 10 years. (Policy CO-7.1, Policy CO-7.5) 
Responsibility: Department of Community Services
Timeframe: 2010/2011

Action CO-A116 Use Development Agreements and/or adopt an ordinance to require the use of building materials and methods that increase energy efficiency a minimum of 15 percent beyond State Title-24 standards for residential construction and 20 percent beyond Title 24 for commercial construction, where feasible. (Policy CO-7.6) 
Responsibility: Department of Community Services, County Counsel
Timeframe: Ongoing


Action CO-A117 Streamline the permit process to promote energy production from agricultural bio-waste. (Policy CO-7.7)
Responsibility: Department of Community Services
Timeframe: Ongoing

Action CO-A118 Continue to support and participate in local Clean Energy Programs (such as the Valley Clean Energy (VCE)) whereby County-owned and maintained facilities will run on renewable energy sources like wind and solar, and educate and encourage residents and businesses to participate in Clean Energy programs to reduce greenhouse gas emissions and support statewide alternative energy use. (Policy CO-7.15)

Responsibility: County Administrator's Office, Department of Community Services

Timeframe: Ongoing

J. Climate Change

A summary of the issue of climate change is provided in this subsection, however climate change policies also occur in every element of this General Plan and are denoted by the symbol “”.

1. Background Information

A balance of naturally occurring greenhouse gases (GHGs) in the earth's atmosphere is responsible for maintaining a habitable climate. Emissions from human activities, such as electrical production, motor vehicle use, and some forms of agriculture are elevating the concentrations of greenhouse gases in the atmosphere, and have led to increasing instability in the earth's climate. This is known as climate change. Carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O) are the primary GHGs. Other greenhouse gases of concern include hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆). When concentrations of these gases exceed natural concentrations in the atmosphere, the greenhouse effect is enhanced and global warming occurs.

California's major initiatives for reducing climate change or GHG emissions are outlined in Assembly Bill 32 (signed into law 2006), 2005 Executive Order and a 2004 California Air Resources Board (CARB) regulation to reduce passenger car GHG emissions. Among other things, AB 32 establishes a statewide GHG emissions cap for 2020, based on 1990 emissions. The Executive Order and the CARB regulations also aim at reducing GHG emissions 80 percent below 1990 levels by 2050. Senate Bill (SB) 32 requires that statewide GHGs are reduced to at least 40% below the statewide GHG emissions limit (e.g., 1990 levels) by 2030. The CARB is tasked with implementation of these directives.

How California communities are designed and built has large consequences on the State's GHG emission levels, and as a result, has an impact on global climate change. The majority of the State's GHG emissions are the result of infrastructure and development decisions: how we build our buildings, where we put them, and the quality and types of infrastructure that are required to serve them. This General Plan addresses those issues for unincorporated Yolo County. Additional information

regarding GHG and climate change linkages, the State’s regulatory framework, a summary of the County’s climate adaptation planning efforts, and risks associated with climate change is provided in the Safety and Environmental Justice White Paper prepared to support a focused update to the General Plan in 2022.

This General Plan establishes the land use pattern that will accommodate the residents, businesses, and attendant infrastructure planned through 2030 in Yolo County. Decisions about the location of commercial, residential and civic buildings, roads and transit systems, water supply, building design, natural resources, open space, agriculture, and energy infrastructure determine the level of GHG emissions in the County. Thus, through the implementation of this General Plan it is possible to reduce in local GHG emissions. Local decisions regarding agricultural land preservation, transportation, air quality, water supply, economic development, environmental protection, and affordable housing need to be coordinated and balanced to achieve the County’s multiple policy objectives and still minimize GHG emissions.

Motor vehicle use creates a significant proportion of GHG emissions. There are three interrelated components that can contribute to transportation sector emission reductions: 1) vehicle technology, 2) fuels, and 3) vehicle use. Local government has the ability to affect only one area – vehicle use. Vehicle use is affected by providing transportation alternatives and by managing the demand for transportation.

Transportation demand management (TDM) and alternative mobility options, including walking, biking, and transit, require coordinated land use decisions and measures that maximize the efficient use of existing transportation systems and provide for the increased availability and use of efficient transit, as well as walking and biking infrastructure to increase mobility, improve health, and provide other economic and environmental benefits. The effectiveness of efforts to provide transportation alternatives to the automobile and to implement TDM policies and strategies can be measured in terms of reductions in vehicle miles traveled (VMT) or expected growth in VMT. VMT reductions (and speed stability) correlate directly with reductions in GHG emissions.

Land use patterns also have a direct relationship to GHG emissions. Studies have shown that the following land use characteristics lead to significantly higher average vehicle ownership, daily VMT per capita, annual traffic fatality rate, and maximum ozone level days.

- Population dispersed in low-density residential development.
- A lack of mixed uses (homes, shops, and workplaces).
- A lack of distinct, thriving activity centers, such as strong downtowns or town centers.
- A network of roads marked by very large block size and poor access from one place to another.

Research of the many factors that can be used to analyze the relationship between development and transportation implies that density may have the most significant relationship to travel and transportation outcomes. Controlling for other factors, the difference between the length and amount of trips, low density U.S. metropolitan areas have over 40 percent more daily VMT per capita than high density areas. In general, a doubling of neighborhood density can be expected to result in approximately a 5 percent reduction in both the number of vehicle trips and their length.

Overall VMT and vehicle trips per household decline as accessibility, density, and land-use mixing increase, which have historically been tenets of land use planning in Yolo County, as in this General Plan.

Yolo County has undertaken several actions to date to reduce greenhouse gases as related to County operations and programs:

- **Climate Change Working Group.** Yolo County has created a climate change team through the County Administrator's Office and has organized a climate change working group that includes the cities and various districts, to coordinate countywide climate change efforts.
- **Cool Counties.** The County has committed to the Cool Counties Climate Stabilization Declaration, a pledge to reduce greenhouse gas emissions from County operations by 80 percent by 2050.
- **California Climate Action Registry.** The County has prepared a baseline audit energy usage associated with County operations. This baseline will be used to measure energy usage over time. Through the registry the County will use a common GHG emission reporting system and will receive credit for reductions in emissions.
- **UC Davis Partnership.** The County has engaged civil and environmental engineering students to assist in studying its carbon generation from county operations, and develop policies and strategies to reduce emissions.
- **Increasing Energy Efficiency.** The County has taken steps to increase the energy efficiency of county operations including replacement of incandescent lights with compact fluorescent bulbs, retrofit of infrastructure in County buildings, installation of computerized climate control in all major county buildings, installation of cogeneration capacity at the Monroe Detention Facility, development of a building closure program to retire less energy-efficient buildings, and a countywide appliance replacement program for Energy Star appliances. The County has a goal of ten percent annual reduction in energy usage through 2013.
- **Full-Scale Landfill Bioreactor.** The County recovers methane gas, a potent greenhouse gas, from the Central Landfill to generate electricity.
- **LEED.** The County has adopted Leadership in Energy and Environmental Design (LEED) standards for new county buildings.

- **Recycling.** All County buildings recycle paper, cardboard, cans, bottles, fluorescent tubes, oil, computers, rigid plastics, agricultural plastics, PVC pipe, toner cartridges, cell phones, batteries, and electronic waste. The County has a goal of 50 percent recycling of all sorted material at the landfill. The County also has a Construction and Demolition Recycling Ordinance that requires diversion and recycling of construction and demolition debris.
- **Agricultural Marketing.** The Agriculture Commissioner has initiated an agricultural marketing program to reduce “food miles,” and therefore result in reductions in carbon dioxide emissions.
- **Transportation and Fleet Vehicles.** The County has installed charging stations for electric vehicles and uses electric vehicles for commuting between local facilities.
- **Personnel Training.** County staff attends classes on the California Environmental Quality Act (CEQA) and on climate change issues.
- **Tree Planting.** The County operates a small nursery that provides tree planting for County facilities.
- **Research.** The County is involved in a variety of research projects related to energy conservation and control of GHG emissions.

The County also requires energy efficient project design and landscaping design as a part of the development review process. Additionally, the Cache Creek Area Plan establishes monetary and regulatory incentives to encourage recycling of aggregate products.

2. Policy Framework

GOAL CO-8	<u>Climate Change.</u> Reduce greenhouse gas emissions and plan for adaptation to the future consequences of global climate change.
------------------	--

- | | |
|---------------|--|
| Policy CO-8.1 | Assess current greenhouse gas emission levels and adopt strategies based on scientific analysis to reduce global climate change impacts. 🌍 |
| Policy CO-8.2 | Use the development review process to achieve measurable reductions in greenhouse gas emissions through requiring new development to be consistent with the energy objectives and targets identified by the adopted Climate Action Plan. 🌍 |
| Policy CO-8.3 | Implement those strategies as described in the adopted Climate Action Plan to adapt to climate change based on sound scientific understanding of the potential impacts. 🌍 |

- Policy CO-8.4 Undertake an integrated and comprehensive approach to planning for climate change by collaborating with international, national, State, regional, and local organizations and entities. 🌐
- Policy CO-8.5 Integrate climate change planning and program implementation into County decision making. 🌐
- Policy CO-8.6 Increase public awareness about climate change and encourage county residents and businesses to become involved in activities and lifestyle changes that will aid in reduction of greenhouse gas emissions. 🌐
- Policy CO-8.7 Work with local, regional, State, and Federal jurisdictions, as well as private and non-profit organizations, to develop a regional greenhouse gas emissions inventory and emissions reduction plan. 🌐

3. Implementation Program

Action CO-A119 Update the Yolo County Climate Action Plan to achieve the greenhouse gas reduction targets for 2030, and 2050. Updates to the CAP should align the County's GHG reduction targets with the statewide GHG reduction targets of Assembly Bill 32, SB 375, and Executive Orders S-03-05 and B-30-15.
Responsibility: County Administrator's Office
Timeframe: 2024/2025

Action CO-A120 Pursuant to the adopted Climate Action Plan (CAP), the County shall take all feasible measures to reduce its total carbon dioxide equivalent (CO₂e) emissions within the unincorporated area (excluding those of other jurisdictions, e.g., UC-Davis, Yocha Dehe Wintun Nation, DQ University, school districts, special districts, reclamation districts, etc.) as follows:

- 27% below 1990 levels by 2030 (447,965 MT CO₂e/year)
- 53% below 1990 levels by 2040 (288,416 MT CO₂e/year)
- 80% below 1990 levels by 2050 (122,730 MT CO₂e/year)


Action CO-A121 These reductions shall be achieved through the measures and actions provided for in the adopted CAP, including those measures that address the need to adapt to climate change. (Policy CO-8.1) 🌐
Responsibility: County Administrator's Office
Timeframe: 2009/2011

Action CO-A122 Pursuant to and based on the CAP, the following thresholds shall be used for determining the significance of GHG emissions and climate change impacts associated with future projects:

- 1) Impacts associated with GHG emissions from projects that are consistent with the General Plan and otherwise exempt from CEQA are determined to be less than significant and further CEQA analysis for this area of impact is not required.
- 2) Impacts associated with GHG emissions from projects that are consistent with the General Plan, fall within the assumptions of the General Plan EIR, consistent with the CAP, and not exempt from CEQA are determined to be less than significant or mitigated to a less-than-significant level, and further CEQA analysis for this area of impact is generally not required.

To be determined consistent with the CAP, a project must demonstrate that it is included in the growth projections upon which the CAP modeling is based, and that it incorporates applicable strategies and measures from the CAP as binding and enforceable components of the project.

- 3) Impacts associated with GHG emissions from projects that are not consistent with the General Plan, do not fall within the assumptions of the General Plan EIR, and/or are not consistent with the CAP, and are subject to CEQA review are rebuttably presumed to be significant and further CEQA analysis is required. The applicant must demonstrate to the County's satisfaction how the project will achieve its fair share of the established targets including:
 - Use of alternative design components and/or operational protocols to achieve the required GHG reductions;
 - Use of real, additional, permanent, verifiable and enforceable offsets to achieve required GHG reductions. To the greatest feasible extent, offsets shall be: locally based, project relevant, and consistent with other long term goals of the County;

The project must also be able to demonstrate that it would not substantially interfere with implementation of CAP strategies, measures, or actions. (Policy CO-8.5). 

Responsibility: Department of Community Services; Parks and Resources Department

Timeframe: Ongoing

Action CO-A123 Monitor the development of GHG quantification protocol and guidance for local governments to refine the Climate Action Plan and ensure

compliance with appropriate state and federal requirements. (Policy CO-8.1) 🌐

Responsibility: Department of Community Services

Timeframe: Ongoing

Action CO-A124 Require the implementation of cost-effective and innovative GHG emission reduction technologies in building components and design. (Policy CO-8.5) 🌐

Responsibility: Department of Community Services, General Services Department

Timeframe: Ongoing

Action CO-A125 Adopt practices that encourage forestation as a means of storing carbon dioxide, including increasing the urban tree canopy, expanding riparian corridors, establishing hedge rows, and enlarging the acreage of permanent crops such as vineyards and orchards. (Policy CO-8.1) 🌐

Responsibility: Department of Community Services Parks and Resources Department

Timeframe: 2012/2013

Action CO-A126 Consider the provision of local housing for County employees to reduce commute travel time. (Policy CO-8.2) 🌐

Responsibility: Department of Community Services Timeframe: Ongoing

Action CO-A127 Require each county department to analyze how the predicted effects of climate change will affect its responsibilities and resources. Develop strategies and actions to addresses outcomes. (Policy CO-8.5) 🌐

Responsibility: County Administrator's Office

Timeframe: 2011/2012

Action CO-A128 Encourage Incorporation of the County's Greenhouse Gas Emissions Reduction Plan/Climate Action Plan into a regional climate action plan. The regional plan should strive to achieve its fair-share contribution towards a minimum 80 percent reduction below 1990 levels in regional greenhouse gas emissions by 2050. (Policy CO-8.7) 🌐

Responsibility: County Administrator's Office

Timeframe: 2011/2012

Action CO-A129 GHG emission reductions shall be monitored and reported to the Board of Supervisors biennially. The GHG emissions inventories shall be updated at least every five years beginning in 2010. (Policy 8.5) 🌐

Responsibility: Department of Community Services

Timeframe: Ongoing

K. Delta Region

The following discussion includes goals, policies and actions relating to the County's interests in the Delta region. Other policies relating to the Delta are also located in each of the other elements of this General Plan.

1. Background Information

In the past two years, the Delta has become an area of intense interest, with numerous planning and legislative efforts looking to redefine the policy and regulatory landscape. This General Plan will incorporate the timely results of these various state processes, where appropriate, once they are adopted. Other processes may be the subject of future Amendments to bring the General Plan into conformance with new laws and/or regulations.

Those areas of the Yolo Bypass, the City of West Sacramento, and the unincorporated area that lie south of Interstate 80 are located within the Primary and Secondary Zones of the Sacramento-San Joaquin Delta (see Figure CO-9, Delta Protection Zones). Land use in these areas must not only be consistent with this General Plan, they must also be consistent with the Land Use and Resource Management Plan (LURMP), as adopted by the Delta Protection Commission (DPC). The DPC is currently in the process of updating the LURMP, to address a wide range of issues, including recent court decisions related to water export, studies that indicate serious problems with the health of the Delta ecosystem, concerns about the ability of levees to withstand significant flood and/or seismic events, and the effects of future global climate change. This review may include areas outside of the Delta as currently defined. The updated Draft LURMP is expected to be released in 2009.

Similarly, in 2006, the Governor issued an Executive Order creating the Delta Vision process. The Delta Vision Blue Ribbon Task Force (DVBRTF) is a group of public officials, experts, and stakeholders, charged with developing recommendations on the overall management and governance of the Delta, including goals related to improving safety, ensuring water supply and water quality, expanding recreation, coordinating emergency response, and protecting infrastructure and public safety. The DVBRTF is currently conducting their strategic planning process, which is expected to be completed by early 2009.

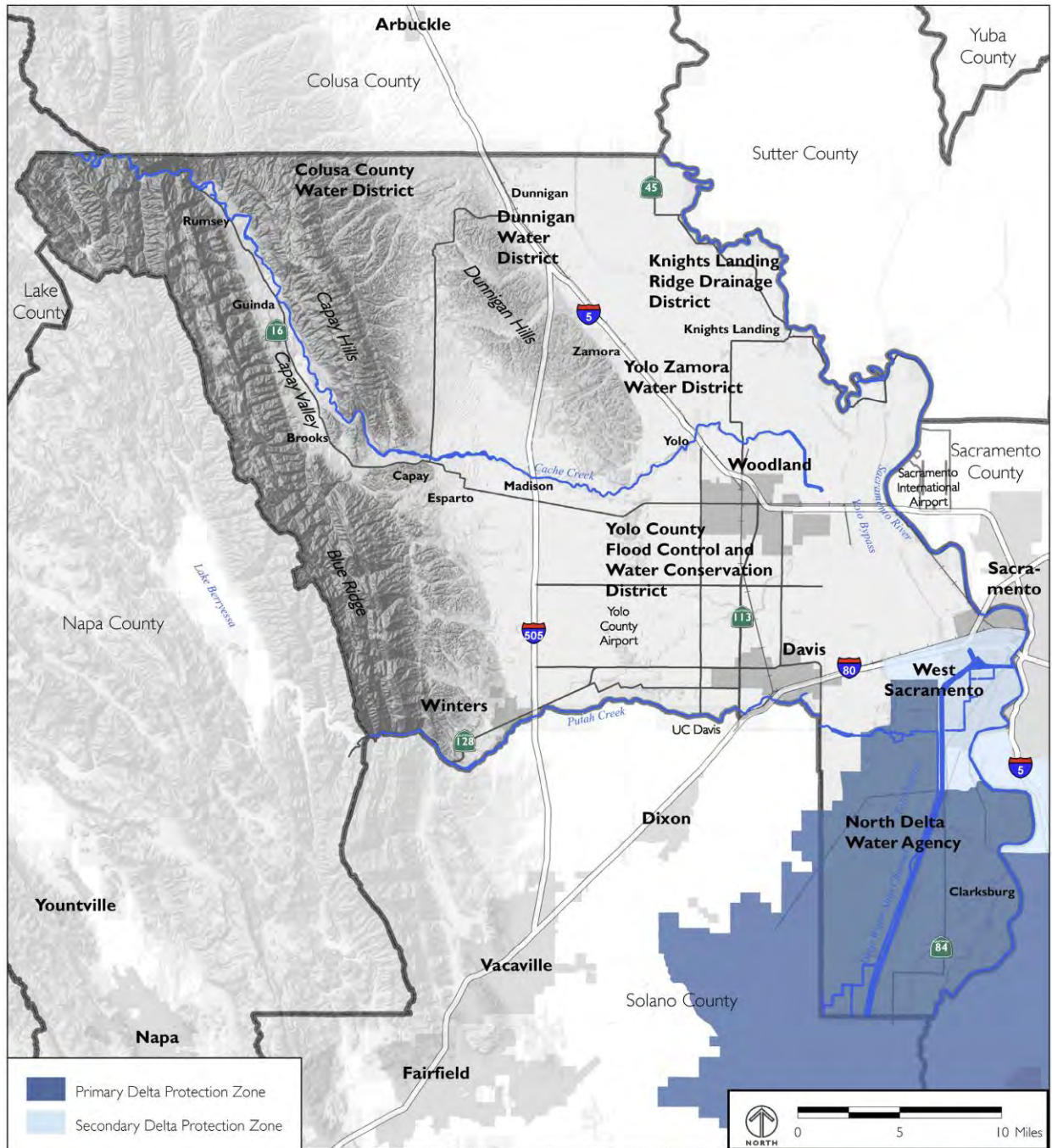
The Bay Delta Conservation Plan (BDCP) is a collaborative effort between Federal and State agencies, water districts, environmental organizations, and the California Farm Bureau to help recover endangered/sensitive species and their habitats in the Delta, while ensuring sufficient and reliable water supplies for Central and Southern California. Primary among their recommendations is the construction of a new facility to convey water from the North Delta to the South Delta. There are two potential alignments for an alternative conveyance: one going through Sacramento County and one through

Yolo and Solano Counties. Extensive habitat restoration to mitigate for the plan is also under consideration, including the lower Yolo Bypass and the Clarksburg region. The BDCP is expected to be completed by 2010.

The Central Valley Regional Water Quality Control Board (CVRWQCB) is in the process of developing Total Maximum Daily Loads (TMDLs) for mercury. Both refined and elemental mercury are contaminants in the Delta, the result of natural deposits and the ongoing effects of gold mining in the 18th century. Mercury becomes more concentrated as it is carried up the food chain, adversely affecting development in the young. It is of particular concern to the health of fish species and people who consume large amounts of Delta fish. The TMDLs will strictly regulate the amounts of mercury that can be discharged into the Delta and its tributaries.

The Lower Bypass Planning Forum provides a stakeholder process to assess a broad range of issues concerning the southerly portion of the Yolo Bypass. A State-funded planning process, it includes participation by the DPC, Yolo Basin Foundation, Metropolitan Water District, and Westlands Water District.

FIGURE CO-9 DELTA PROTECTION ZONES



Source: Delta Protection Commission, 2008.

2. Policy Framework

GOAL CO-9	<u>Delta Governance.</u> Participate in State and regional efforts to establish governance, policy, and regulations for the Delta, to ensure the consideration of Yolo County's interests.
------------------	---

- Policy CO-9.1 Advocate for the establishment of funding mechanisms independent of the State budget for payment to the County of in-lieu property taxes and other fees on land acquired in the Delta for habitat restoration and water conveyance.
- Policy CO-9.2 Ensure that the acquisition of new municipal water for the City of Davis, City of Woodland, and UC Davis from the Sacramento River is not precluded.
- Policy CO-9.3 Pursue the establishment of dedicated State and federal funding sources to remediate mercury, in the various sources located in the upper Cache Creek watershed, in the sediments and waterways of both Cache Creek (including the Settling Basin) and the Yolo Bypass, and where it methylizes in the Delta.
- Policy CO-9.4 Ensure that the design and construction of habitat restoration projects within riparian areas do not result in increased levels of mercury bi-methylization within the Yolo Bypass and Delta.
- Policy CO-9.5 Encourage funding to maintain and strengthen flood capacity along the Sacramento River and Yolo Bypass, including support from beneficiaries of the State and Central Valley Water Projects, which have changed flow regimes to the detriment of levee integrity.
- Policy CO-9.6 Support efforts to provide a minimum 100-year flood protection for the community of Clarksburg.
- Policy CO-9.7 Protect water quality in the Sacramento River, its tributaries, and groundwater aquifers from excess salinity due to decreased fresh water inflow from Delta projects.
- Policy CO-9.8 Work to implement high priority projects in Yolo County's Integrated Regional Water Management Plan, especially related to flood management on Cache Creek.
- Policy CO-9.9 Ensure existing and future operations of the Port of Sacramento as an industrial and transport hub for the region, including protection and im-

provement of the levees along the deep-water ship channel, as well as deepening the ship channel.

- Policy CO-9.10 Support improvements necessary to ensure the continued transportation of agricultural products along State Route 84 for the Clarksburg region.
- Policy CO-9.11 Ensure that proposed changes to the operation of the Sacramento Weir fully mitigate any potential adverse impacts to Old River Road (County Road 22).
- Policy CO-9.12 Work to ensure that changes to the operation of the Yolo Bypass, including the Fremont Weir, toe drain, and/or increased frequency of intentional flooding do not adversely affect Yolo County interests. These may include: the economic viability of agriculture within the Bypass, the feasibility of planned development for the Elkhorn Specific Plan, the use of County Road 22 as an alternative route during closures of Interstate 5, and the continued operation of Interstates 5 and 80, and the Union Pacific Railroad across the Bypass.
- Policy CO-9.13 Encourage funding for the construction and operation of the Pacific Flyway Center at a site located next to the Yolo Bypass.
- Policy CO-9.14 Establish Clarksburg as a gateway entry for visitors to the Delta region seeking agricultural tourism, ecotourism, and recreational opportunities.
- Policy CO-9.15 Pursue funding to assist non-governmental organizations acquire agricultural conservation easements within Yolo County, where appropriate.
- Policy CO-9.16 Pursue funding to assist non-governmental organizations acquire habitat conservation easements within Yolo County, where appropriate.
- Policy CO-9.17 Support the establishment of a Delta Conservancy to provide funding and work with federal, State and local governments, local Habitat Conservation Programs, nonprofit organizations, and landowners on improvements to Delta land use management.
- Policy CO-9.18 Work to ensure recognition by the Central Valley Regional Water Quality Control Board (CVRWQCB) of the economic, habitat, water resources, and flood management impacts associated with developing Total Maximum Daily Loads (TMDLs) for mercury within the Delta.
- Policy CO-9.19 Recognize the special character of “heritage” or “legacy” communities in the Delta (such as Clarksburg) and promote their economic vitality.

Policy CO-9.20 Seek to ensure that future changes to the boundaries of the Delta, including the boundaries of the Primary and Secondary Zones, are consistent with the goals and policies of this General Plan.

Policy CO-9.21 Work to ensure that State and federal habitat restoration efforts recognize and support the Yolo Natural Heritage Program.

Policy CO-9.22 Pursue policy and legislative strategies to ensure that the Clarksburg Agricultural District can be fully implemented within the Delta Protection Commission Land Use and Resource Management Plan, Delta Vision, Bay-Delta Conservation Plan, and other regional efforts.

3. Implementation Program

Action CO-A130 Pursue recognition and compensation from the State and other appropriate entities, public or private, for the economic effects of changes to the management and governance of the Delta on Yolo County. (Policy CO-9.1, Policy CO-9.3, Policy CO-9.20, Policy CO-9.21)

Responsibility: County Administrator's Office, Parks and Resources Department

Timeframe: Ongoing

Action CO-A131 Actively participate in State and regional efforts to establish land use policy, regulation, and governance for the Delta to ensure the consideration of Yolo County's interests. (Policy LU-4.2, Policy CO-20, Policy CO-9.21)

Responsibility: Department of Community Services, County Administrator's Office, Parks and Resources Department

Timeframe: Ongoing

8 HEALTH AND SAFETY ELEMENT



Yolo Fire Protection District

Source: April Farnham-Morrison

This element ensures that appropriate consideration of both natural and human-made hazards and risks are factored into land use decision-making. Several of the County's existing communities (such as Clarksburg, Knights Landing, and Madison) face issues regarding flood protection and/or levee stability. Recent legislation on the issue of flood protection, management, and control has changed the regulatory landscape and the goals, policies, and actions of this element address this. General emergency preparedness is also addressed. Appropriate control of noise environment is an important issue for the County, especially given that many normal agricultural practices emit considerable noise at times. The Noise section addresses this issue. Policies addressing the link between community design and individual health are also included, as are policies in support of accessible health care, especially for vulnerable populations.



A. Introduction

1. Context

The Health and Safety Element provides information about the potential risks in Yolo County associated with natural and human-made hazards. It specifically addresses the protection of the community from any unreasonable risks associated with these hazards and also contains information and policies regarding general emergency preparedness. The goals, policies, and actions in the Element seek to reduce death, injuries, and damage to property from natural and human-made hazards and minimize the negative effects of natural disasters such as flooding, fires and seismic events.

2. Contents

The Health and Safety Element is organized into three sections:

- Safety
- Noise
- Health Care

The subsection for each of these topics is formatted as follows: Background Information, Policy Framework, and Implementation Program. Within the Policy Framework and Implementation Program sections, policies and actions related to climate change are denoted with the symbol “🌍”.

3. Background Information

Summary background information for each topic of this element is provided in the relevant subsection below.

B. Regulatory Framework

1. State General Plan Requirements

This Health and Safety Element combines two of the seven required elements of a General Plan: the Noise Element and the Safety Element. It also addresses other topics of importance to Yolo County including emergency preparedness and community health care.

State law (Section 65302g of the Government Code) mandates that the safety element address the following:

- Seismically induced surface rupture.
- Ground shaking.
- Ground failure.
- Tsunami.
- Seiche.
- Dam failure.
- Slope instability.
- Mudslides.



- Landslides.
- Subsidence.
- Liquefaction.
- Other seismic hazards.
- Other geologic hazards.
- Flooding.
- Wildland and urban fires.
- Mapping of known seismic and other geologic hazards.
- Evacuation routes as related to fire and geologic hazards.
- Military installations as related to fire and geologic hazards.
- Peak load water supply requirements as related to fire and geologic hazards (“fire flow”).
- Minimum road widths as related to fire and geologic hazards.
- Clearances around structures as related to fire and geologic hazards.
- Flood hazard zones.
- National Flood Insurance Program maps published by FEMA.
- US Army Corps of Engineers information about flood hazards not addressed.
- Central Valley Flood Protection Board designated floodway maps.
- Dam failure inundation maps.
- DWR Awareness Floodplain Mapping Program maps.
- DWR 200-year floodplain maps.
- Maps of levee protection zones.
- Areas subject to inundation with failure of project or non-project levees or floodwalls not addressed.
- Historic data on flooding including areas subject to flooding, areas vulnerable to flooding after wildfires, and sites that have been repeatedly damaged by flooding not addressed.
- Existing and planned development in flood hazard zones including structures, roads, utilities, and essential public facilities not addressed.
- A listing of local, state, and federal agencies with responsibility for flood protection, including special districts and local offices of emergency services not addressed.
- Climate adaptation and resiliency strategies, including a vulnerability assessment of climate change risks
- Climate adaptation and resilience goals, policies and objectives.
- Feasible implementation measures to carry out the climate adaptation goals, policies, and objectives, including:
 - Feasible methods to avoid or minimize climate change impacts associated with new uses of land.
 - The location, when feasible, of new essential public facilities outside of at-risk areas, including or identifying construction methods or other methods to minimize damage if these facilities are located in at-risk areas.
 - The designation of adequate and feasible infrastructure located in an at-risk area.
 - Guidelines for working cooperatively with relevant local, regional, state, and federal agencies.



- The identification of natural infrastructure that may be used in adaptation projects, where feasible.

State law (Section 65302f of the Government Code) mandates that the Noise element analyze and quantify current and projected noise levels from all of the following:

- Highways, freeways, primary arterials and major local streets.
- Rail lines and ground rapid transit.
- General aviation, heliports, military airports, aircraft overflights, jet engine test stands, and all other ground and maintenance functions related to airport operations.
- Industrial plants and railyards.
- Military installations.
- Other ground stationary sources.

That same section of the Government Code state law also requires the County to recognize the State Noise Element Guidelines, and provide noise contours for all of the noise sources listed above using Community Noise Equivalent Levels (CNEL) or Day/Night Average Sound Level (L_{dn}) measurement levels, and based on monitoring or acceptable modeling. The noise contours are to be used to determine land use so that exposure to excessive noise can be minimized. The noise element must include actions that avoid existing and foreseeable noise problems, and address the State's noise insulation standards.

Yolo County has addressed all of the above items within this element, with the following exceptions:

- Tsunamis – As defined in the General Plan Guidelines, this phenomenon is a large ocean wave generated by an earthquake in or near the ocean. Yolo County has no coastline nor is it proximate to the ocean, and therefore, the General Plan does not address this particular type of event.
- Military Installations – The County essentially has no military installations or facilities. The only military facility in the County, the McClellan/Davis Telecommunication Site, has been declared surplus by the Army and is now closed. Discussion regarding this facility and plans to convert it to a County open space facility are addressed in the Conservation and Open Space Element.
- Peak Load Water Supply – Also known as “fire flow,” this issue is addressed in the Public Facilities and Services Element under Section G, Fire and Emergency Medical Service.
- Minimum Road Widths – This topic is addressed in the Circulation Element.

It should be noted as well that the topic of wildland fire suppression is also discussed in the Public Facilities and Services Element.



2. Other Requirements

Other regulatory requirements specific to the topics addressed in this element are discussed within the applicable subsections.

C. Safety

This section discusses safety in Yolo County as it pertains to naturally occurring hazards as well as hazards relating to human operations. The six topics listed below are included in this section:

1. Geologic and Seismic Hazards (Goal HS-1)
2. Flood Hazards (Goal HS-2)
3. Wildland Fires (Goal HS-3)
4. Hazardous Materials (Goal HS-4)
5. Airport Operations (Goal HS-5)
6. Emergency Preparedness (Goal HS-6)

1. Geologic and Seismic Hazards

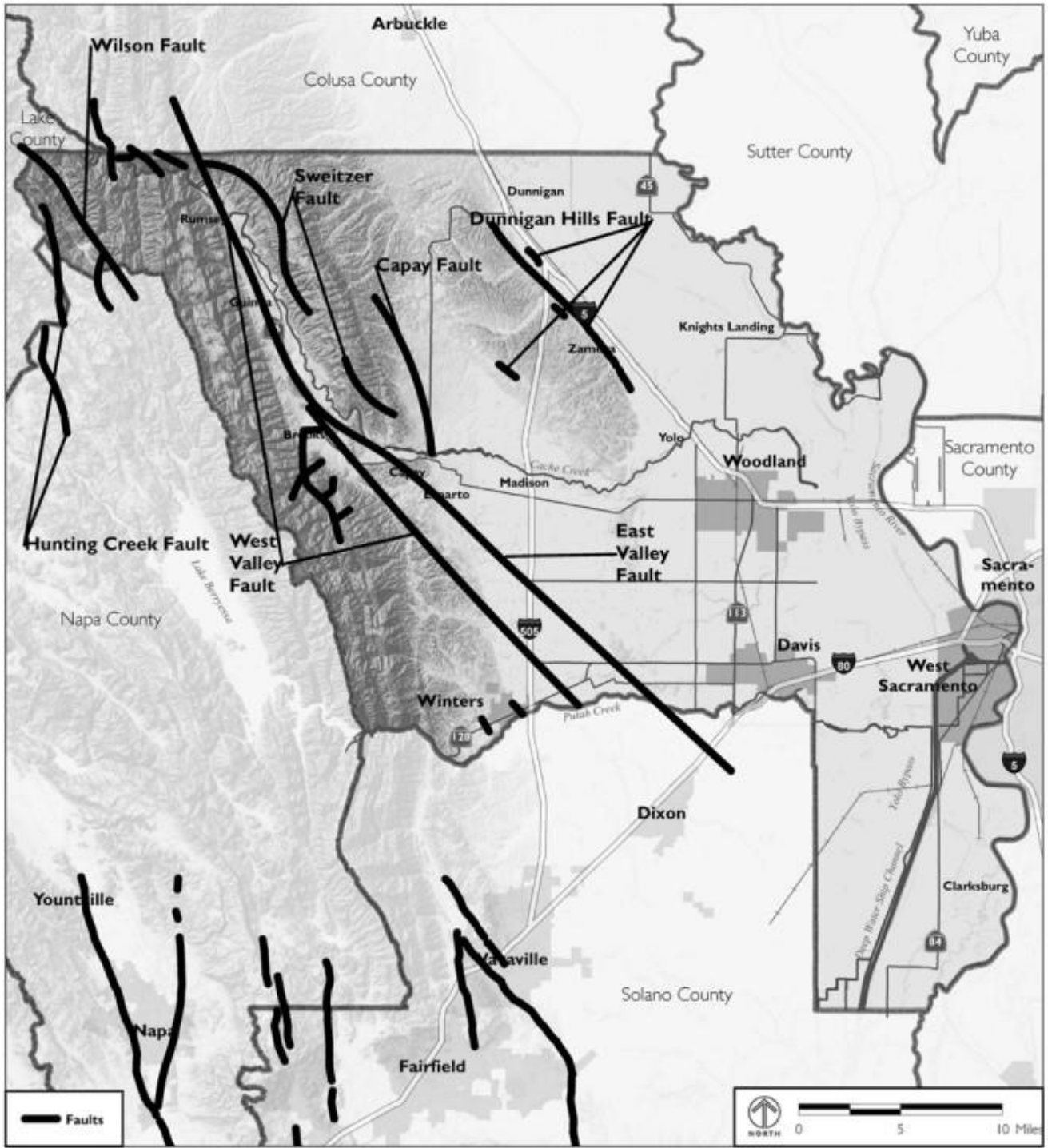
The Geologic and Seismic Hazards section of this element provides goals, policies, and actions that guide Yolo County in ensuring adequate safety from seismic activity and unstable geologic conditions.

a. Background Information

There are two known faults in Yolo County, the Hunting Creek Fault and the Dunnigan Hills Fault, as shown in Figure HS-1. The Dunnigan Hills Fault is not active and the Hunting Creek Fault is located within a sparsely populated area of the county. While Yolo County has a low probability for earthquake hazards compared to the rest of California, it is subject to seismic activity both within and near the County and thus, there is a risk of damage to structures and property as a result.



FIGURE HS-1 FAULTS



Source: USGS, 1996; Yolo County GIS, 2009; Cotton/Bridges/Associates, 2004.



The Hunting Creek Fault is located in the far northwestern portion of the County, which is the only fault in the County subject to surface rupture. As shown in Figure HS-1, only a small portion of the fault lies within Yolo County, and is in an area that is sparsely populated and not planned for any growth or development other than individual farm dwellings that might be built in the future. Development near a fault subject to surface rupture is regulated by the Alquist-Priolo Act. The Act requires a detailed fault-rupture hazard investigation and prohibits development directly over any traces of the active fault line.

The other active or potentially active fault is the Dunnigan Hills Fault, which extends west of Interstate 5 between the town of Dunnigan and northwest of the town of Yolo. This fault has been active in the last 10,000 years, but has not been active in historic times.

In addition to the Hunting Creek and Dunnigan Hills faults, major faults in the Coast Ranges and in the Sierra Nevada foothills are capable of producing groundshaking that could affect Yolo County residents. The April 1892 Vacaville-Winters earthquake that caused severe damage to Winters and lesser damage to Davis, Woodland, and other parts of the County, is believed to have originated from a segment of a complex zone of blind thrust faults that lie to the south in Solano County on the western side of the lower Sacramento Valley.¹

The effects of groundshaking during a maximum intensity earthquake is likely to involve structural damage to stucco, masonry walls and chimneys, which could expose people to falling objects and possible building collapse. The degree of such hazards is controlled by the nature of the underlying soil and rock materials, the magnitude of and distance from the quake, the duration of ground motion and the structural characteristics of the building.

Another risk from seismic activity is liquefaction, which is the rapid transformation of saturated, loose, fine-grained sediment to a fluid-like state because of earthquake ground shaking. Liquefaction can result in substantial loss of life, injury, and damage to property. In addition, liquefaction increases the hazard of fires because of explosions induced when underground gas lines break, and because the breakage of water mains substantially reduces fire suppression capability.

Landslides are another risk associated with seismic activity. Landsliding is the natural process of relatively rapid downslope movement of soil, rock and rock debris as a mass. The rate of landsliding is affected by the type and extent of vegetation, slope angle, degree of water saturation, strength of the rocks, and the mass and thickness of the deposit. Some of the natural causes of this instability are earthquakes, weak materials, stream and coastal erosion, and heavy rainfall. In addition, certain human activities

¹ Yolo County General Plan Update Background Report, January 2005, page 3-5; Yolo County OES.



tend to make the earth materials less stable and increase the chance of ground failure. Activities contributing to instability include extensive irrigation, poor drainage or groundwater withdrawal, removal of stabilizing vegetation and over-steepening of slopes by undercutting them or overloading them with artificial fill. These activities cause slope failure, which normally produce landslides and differential settlement and are augmented during earthquakes by strong ground motion.

In Lake County, northwest of Yolo County, a landslide along the south bank of the North Fork of Cache Creek was discovered in 1998. This landslide is located approximately 1.5 miles downstream of the Indian Valley Dam. The landslide mostly affects Lake County. Also the Capay Valley area is particularly susceptible to landslides, as it is composed of poorly consolidated marine sediments, on either side of a rapidly moving watercourse (Cache Creek) with significant uncontrolled flood volumes. Elsewhere in the County however, landslides are generally not a significant hazard. Figure HS-2 identifies areas with higher potential for landslides, based on soil stability characteristics.

Yolo County faces exposure to mudslides primarily along Cache Creek, in the same areas where landslides are a risk. At the Yolo County/Colusa County boundary, State Route 16 passes through the open preserve area of the Cache Creek Regional Park. For about a mile, the highway is bordered by Cache Creek on the west and canyon walls on the east. The canyon walls are subject to rock and mud slides during heavy winter rains. The rock and mudslides create traffic hazards by occasionally blocking the highway. A road closure gate is along that segment of the highway. This gate prohibits traffic from entering this segment when major rock and mudslides occur.

Areas of Yolo County also experience land subsidence. Subsidence, the decrease of ground elevation, has natural causes and human induced causes. Since the 1950's, the most common cause of subsidence in Yolo County has been groundwater withdrawal, which has resulted in as much as 4 feet of elevation change in some parts of the County. The East Yolo subbasin area has been affected most dramatically, with communities near Zamora, Knights Landing and Woodland having experienced damage and loss of structural integrity to highways, levees, wells and irrigation canals.

Additional information on this topic is provided in the General Plan Background Report (see pages 2-20 and 2-21, Figure Hydro-7, and pages 3-6 and 3-7).

Some soils in Yolo County expand and contract depending on the level of moisture that they contact, impacting their suitability for safe development. These soils vary in distribution and degree of expansiveness. As shown in Figure HS-3, Yolo County soils are characterized by low, moderate, high, and very high expansiveness. Soils with "low" to "moderate" expansiveness have the potential to change up to 6 percent in volume between moist and dry conditions. Soils with "high" and "very high" expansiveness have the potential to change between 6 and 30 percent in volume. Soils rated "high" or "very high" require structural accommodations to ensure soil suitability for



roads, bridges, structures and other types of development. Figure HS-3 identifies expansive soils in the County.



FIGURE HS-2 LANDSLIDE SUSCEPTIBILITY

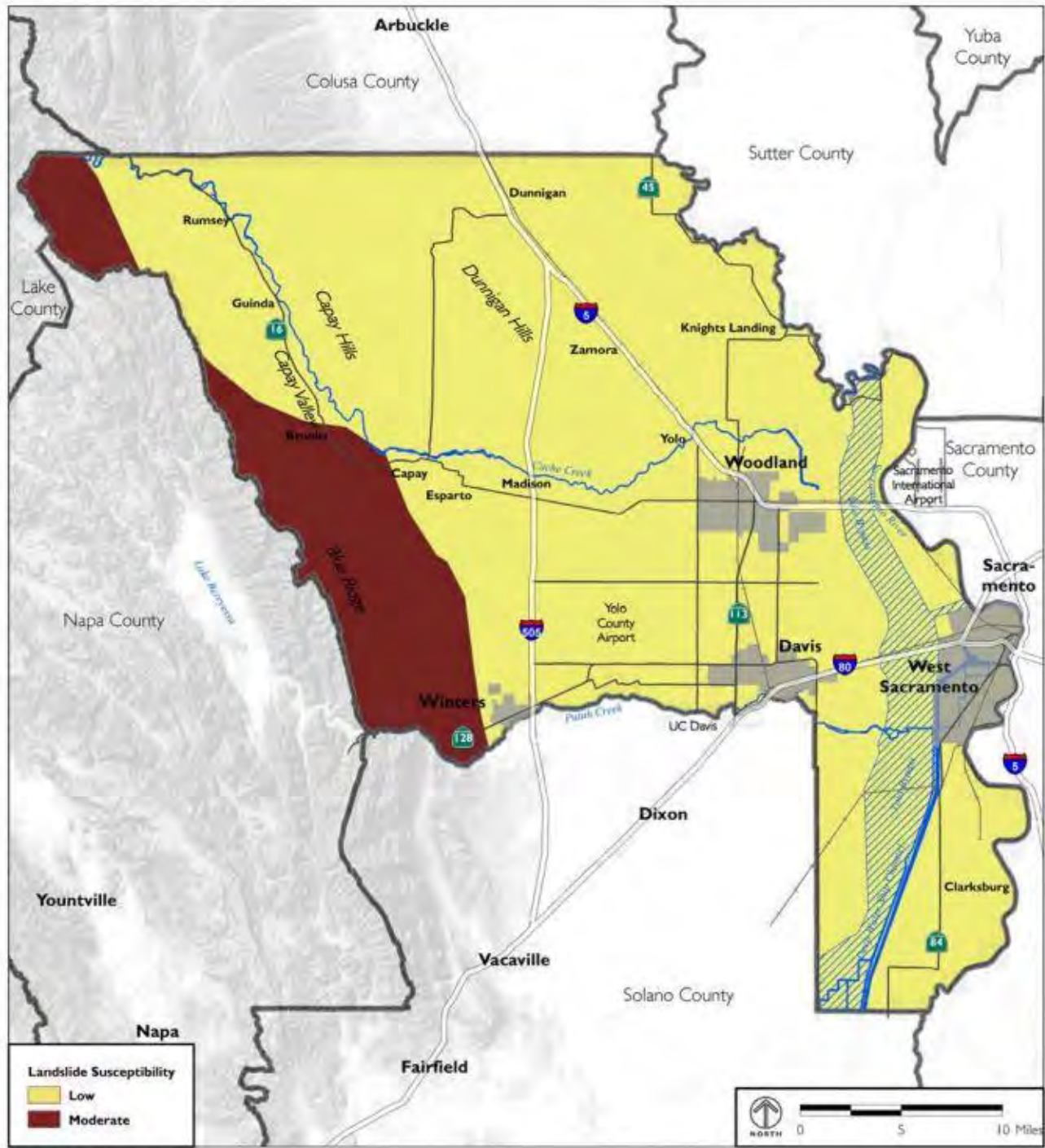
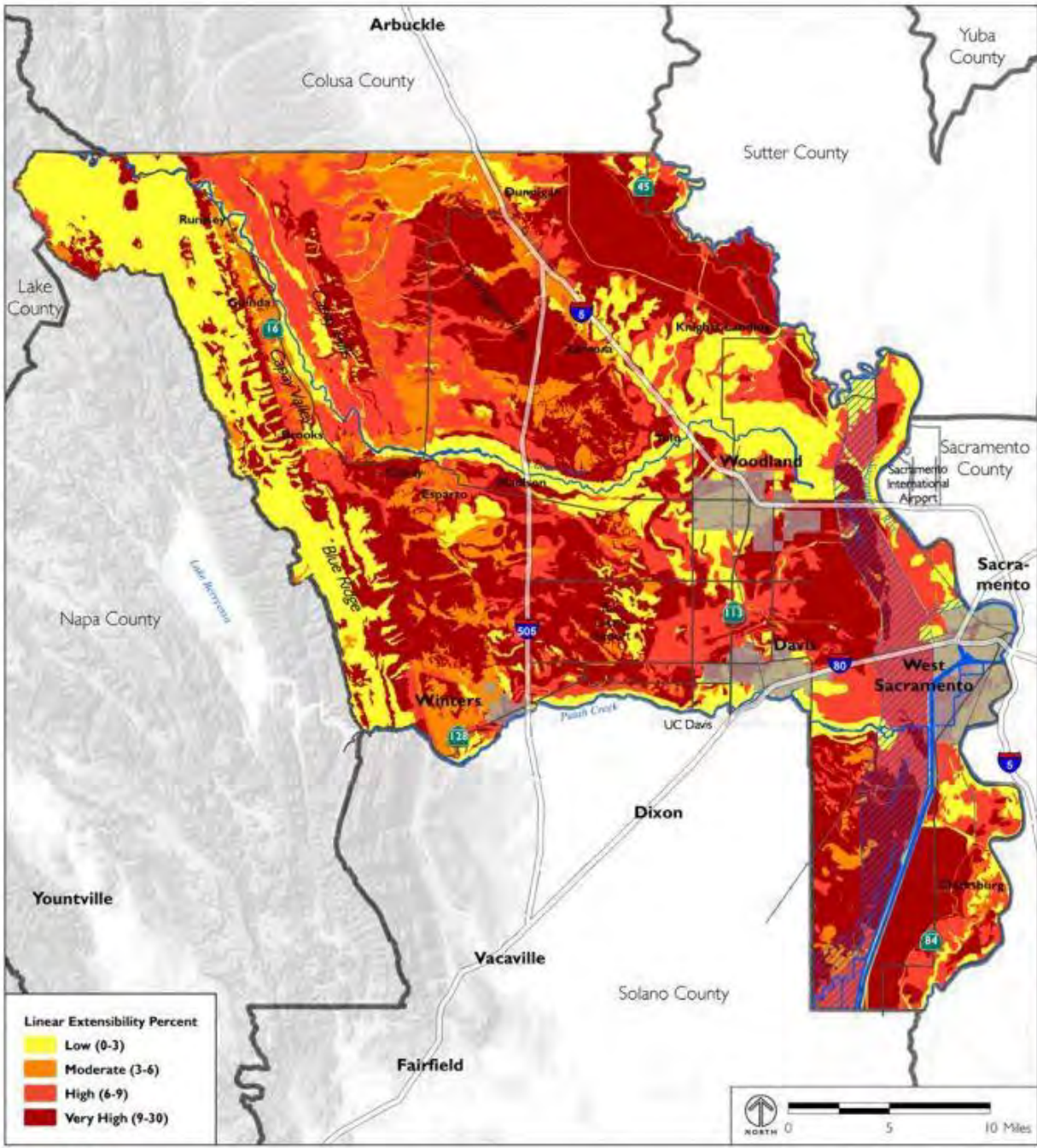




FIGURE HS-3 EXPANSIVE SOILS



Source: Natural Resources Conservation Service, 2007.



In addition to the natural hazards addressed above, the County faces potential risk from a possible eruptive event at Mount Konockti located in Lake County. Although an eruption is possible, historic events associated with this volcano were non-explosive, and generally involved air fall tuff activity. As with any active geologic system, there is no sound predictive method for assessing risk associated renewed activity in a dormant volcanic system with no recent eruptive history.

b. Policy Framework

GOAL HS-1	<u>Geologic Hazards.</u> Protect the public and reduce damage to property from earthquakes and other geologic hazards.
------------------	---

- Policy HS-1.1 Regulate land development to avoid unreasonable exposure to geologic hazards.
- Policy HS-1.2 All development and construction proposals shall be reviewed by the County to ensure conformance to applicable building standards.
- Policy HS-1.3 Require environmental documents prepared in connection with CEQA to address seismic safety issues and to provide adequate mitigation for existing and potential hazards identified.

c. Implementation Program

- Action HS-A1 Require a geotechnical analysis for construction in areas with potential geological hazards and/or for purposes of environmental analysis. Recommendations of the geotechnical analysis shall be implemented. (Policy HS-1.1, Policy HS-1.2, Policy HS-1.3)
Responsibility: Department of Community Services
Timeframe: Ongoing
- Action HS-A2 Rely upon the most current and comprehensive geological hazard mapping available in the evaluation of potential seismic hazards associated with proposed new development. (Policy HS-1.3)
Responsibility: Department of Community Services
Timeframe: Ongoing
- Action HS-A3 Continue to participate in the Yolo County Subsidence Network and implement its recommendations. (Policy HS-1.2, Policy HS-1.3)
Responsibility: Department of Community Services
Timeframe: Ongoing
- Action HS-A4 Integrate geologic hazard information into the County Geographical Information System. (Policy HS-1.1)



Responsibility: Information Technology Department
Timeframe: 2010/2011



Indian Valley Reservoir

Source: Yolo County Flood Control & Water Conservation District

2. Flood Hazards

The Flood Hazards section of this General Plan provides goals, policies, and actions that guide Yolo County in ensuring adequate safety from flooding for Yolo County communities.

a. Background Information

Yolo County has five primary watersheds with the potential to impact unincorporated communities: Cache Creek Basin; the Sacramento River corridor including the Yolo Bypass (Clarksburg and Knights Landing); Willow Slough (Madison and Esparto),



Colusa Basin Drain (Knights Landing) and Dry Slough (West Plainfield, North Davis Meadows and Binning Farms).

100- and 200-Year Floodplains

The threshold for unacceptable flood risk has traditionally been associated with the “100-year flood”. The Federal Emergency Management Agency (FEMA) creates Flood Insurance Rate Maps (FIRMs) that designate 100-year floodplain zones. A 100-year floodplain zone is the area that has a one in one hundred (1 percent) chance of being flooded in any one year based on historical data. Figure HS-4 identifies the existing 100-year floodplain contours as identified by FEMA for Yolo County. These maps reflect recent climate assumptions, as well as assumptions regarding the likelihood of flooding due to levee failure. State law requires that urban areas, defined as those exceeded a population of 10,000, shall provide 200-year flood protection. The FIRMs do not show the 200-year floodplain; however, maps have been created by the State Department of Water Resources (DWR) showing these areas. Figure HS-5 identifies the existing 200-year floodplain contours as identified by DWR. Because of the generally flat terrain in Yolo County, and the relatively small difference between the volumes of 100- and 200-year flood events, the two floodplains are very similar in extent. Affected communities include Clarksburg, Davis, Esparto, Knights Landing, Madison, West Sacramento, Woodland, and Yolo.

Dam Inundation Zones

In addition to hazards from natural flood events, portions of Yolo County are also located downstream of several dams with large inundation areas, as shown in Figure HS-6. In the unlikely event that any of these dams were to fail, the inundation zones indicate areas that could potentially be flooded. If the dams at Indian Valley Reservoir, Lake Berryessa or along the Sacramento, Feather or American rivers were to fail, the cities of West Sacramento, Winters and Davis would be entirely inundated by floodwaters, as would much of the city of Woodland. The unincorporated communities of Rumsey, Capay, Madison, Knights Landing and Clarksburg and parts of Guinda, Esparto, Monument Hills and Yolo are also located entirely within dam inundation zones.

Levee Flood Protection Zones

Yolo County has approximately 215 miles of project levees, managed by various agencies, including the County, 13 reclamation districts, one levee district, one drainage district, and the California Department of Water Resources. These levees provide flood protection to West Sacramento, Woodland, Knights Landing, Clarksburg, Davis and important agricultural lands. In



FIGURE HS-4 100-YEAR FLOODPLAIN

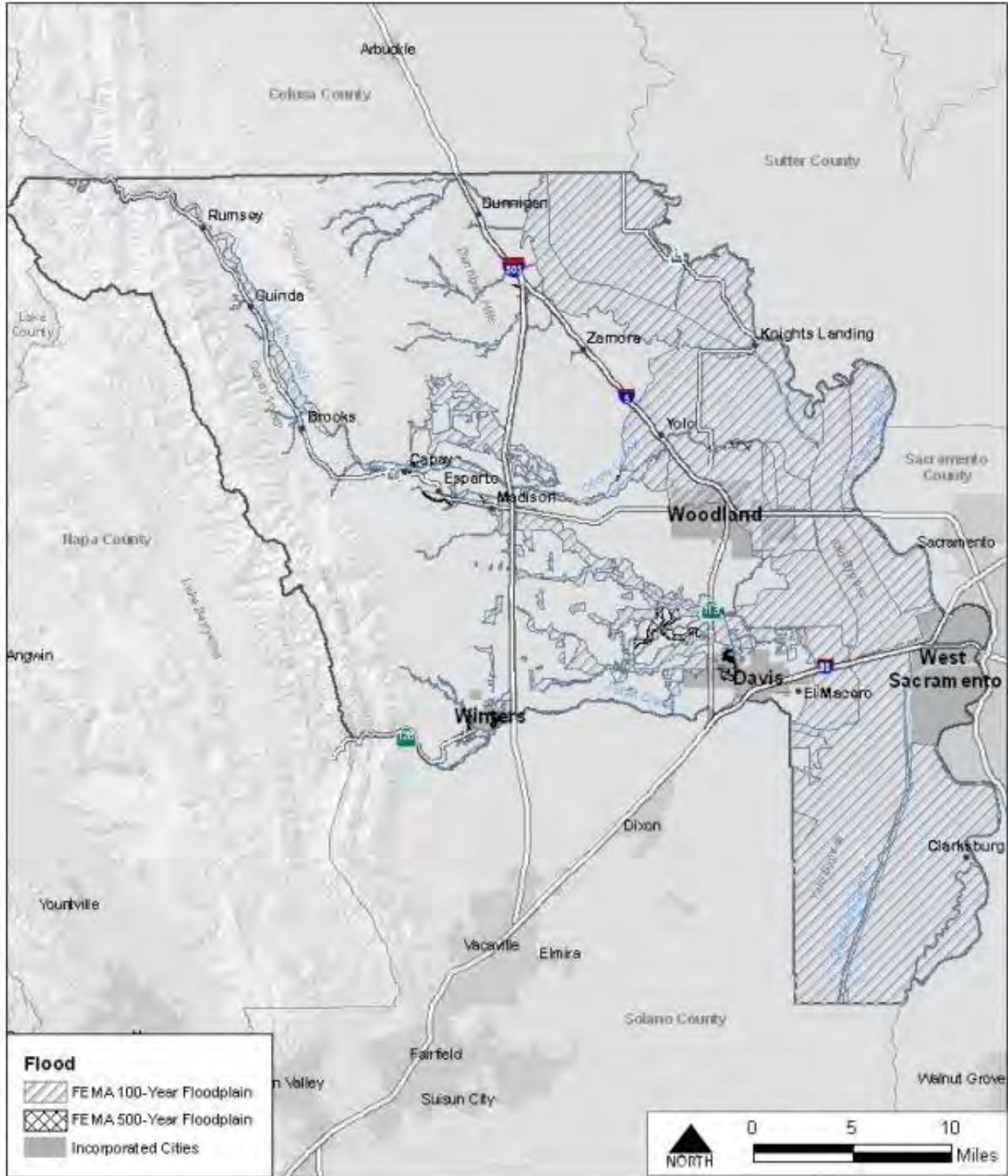




FIGURE HS-5 200-YEAR FLOODPLAIN

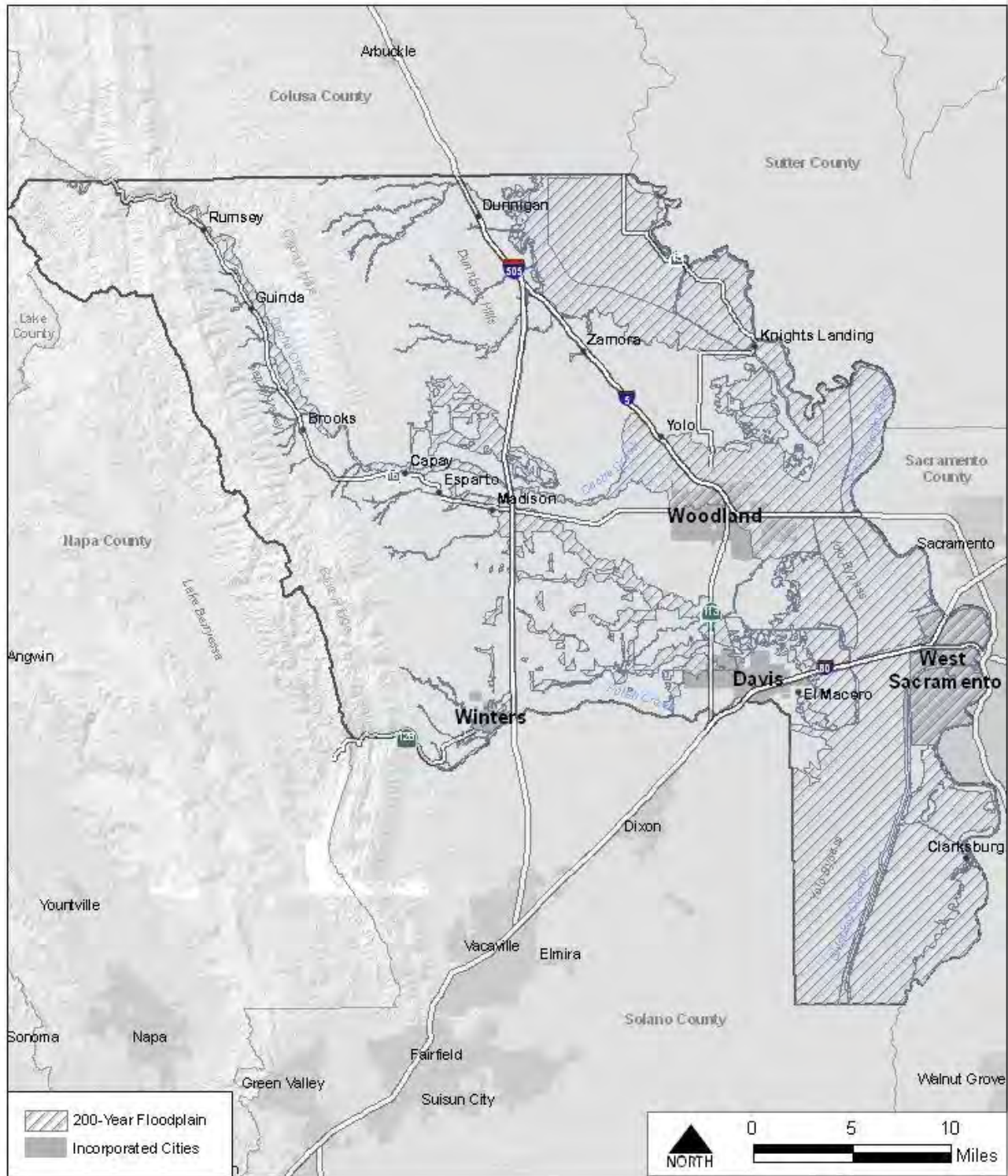
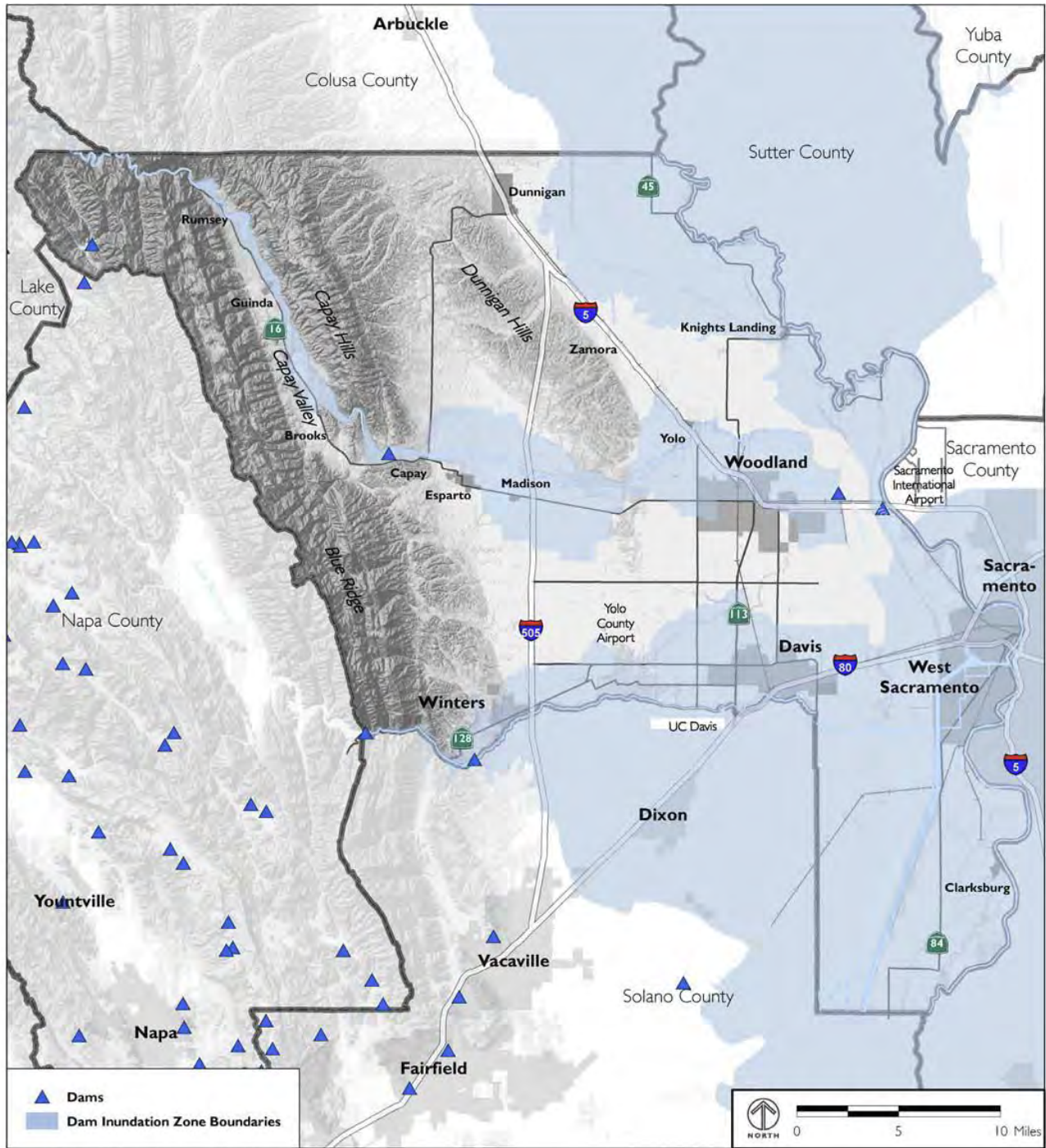




FIGURE HS-6 DAM INUNDATION



Source: California Office of Emergency Services, 2000.



FIGURE HS-7 LEVEE PROTECTION ZONES

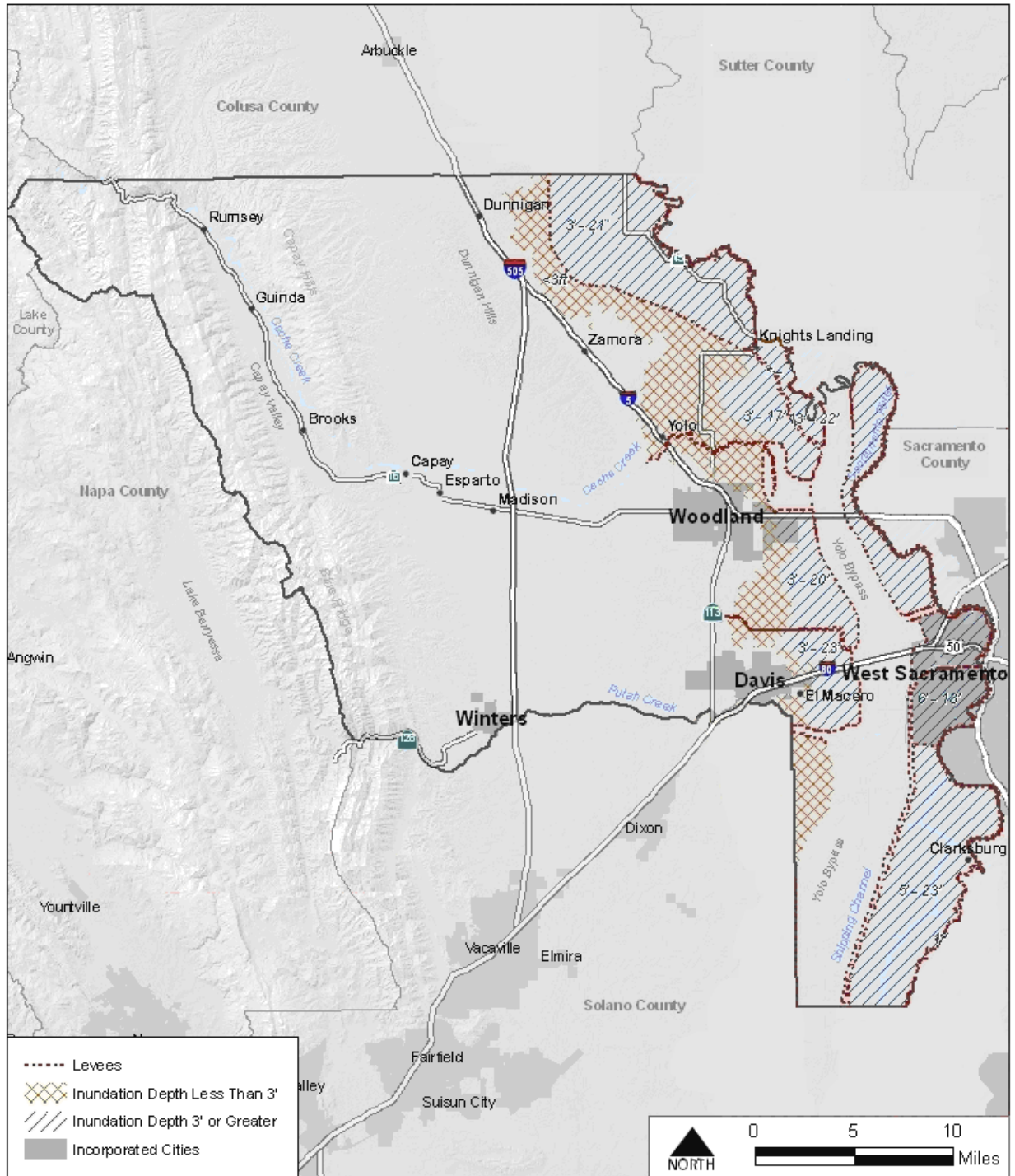




FIGURE HS-8 AWARENESS FLOODPLAINS

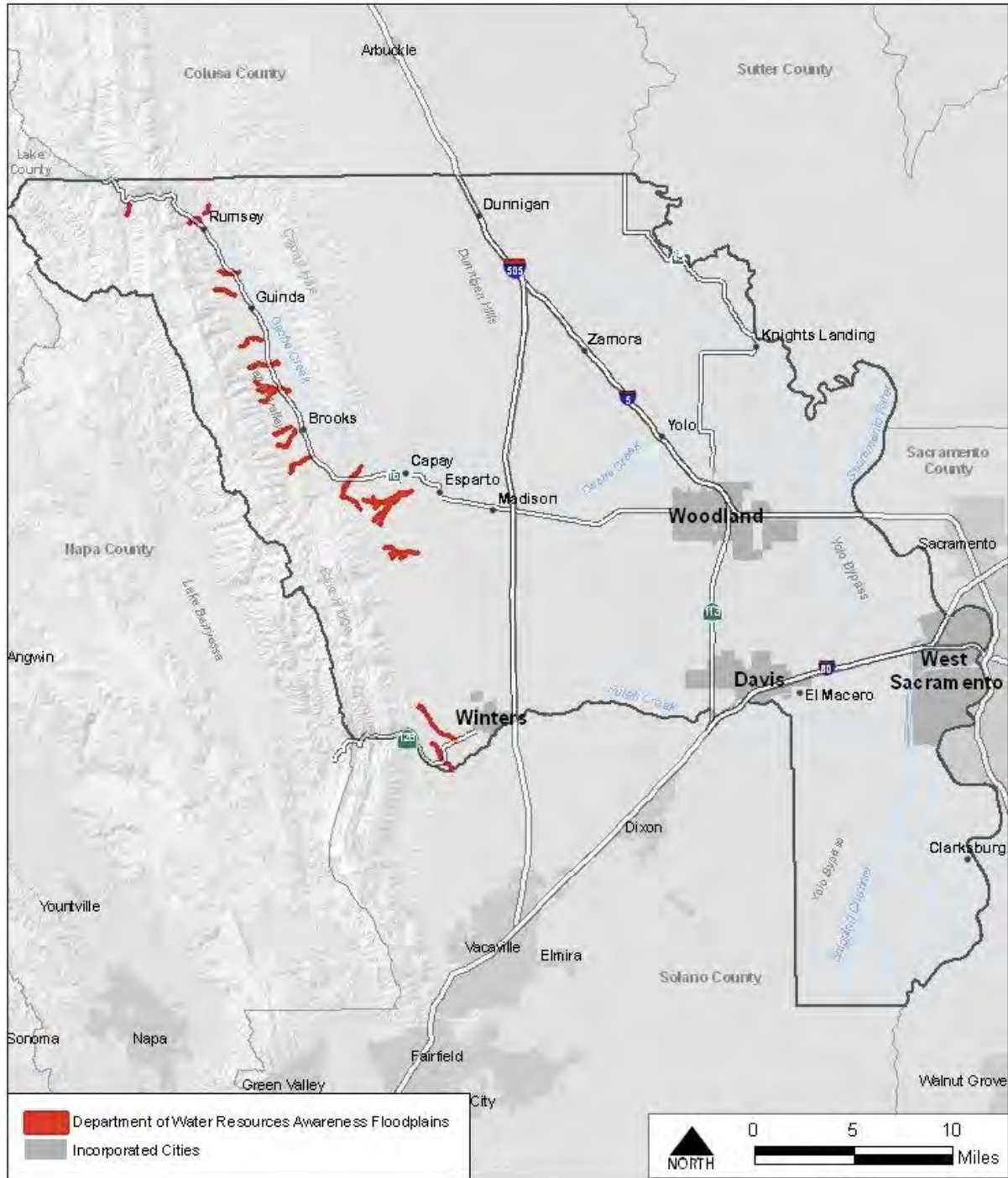




FIGURE HS-9 DESIGNATED FLOODWAYS

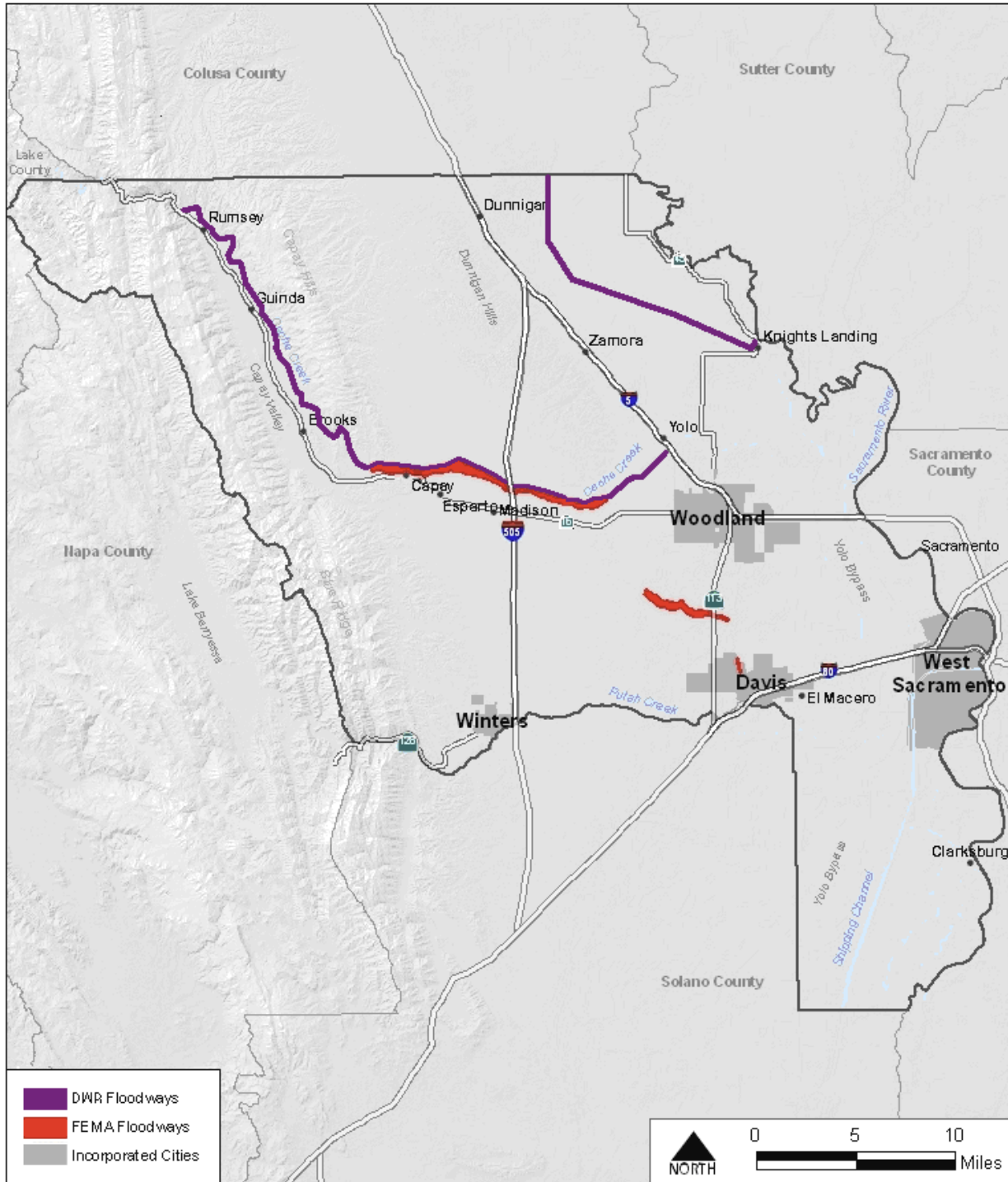




FIGURE HS-10 EXISTING DEVELOPMENT WITHIN THE 100-YEAR FLOODPLAIN

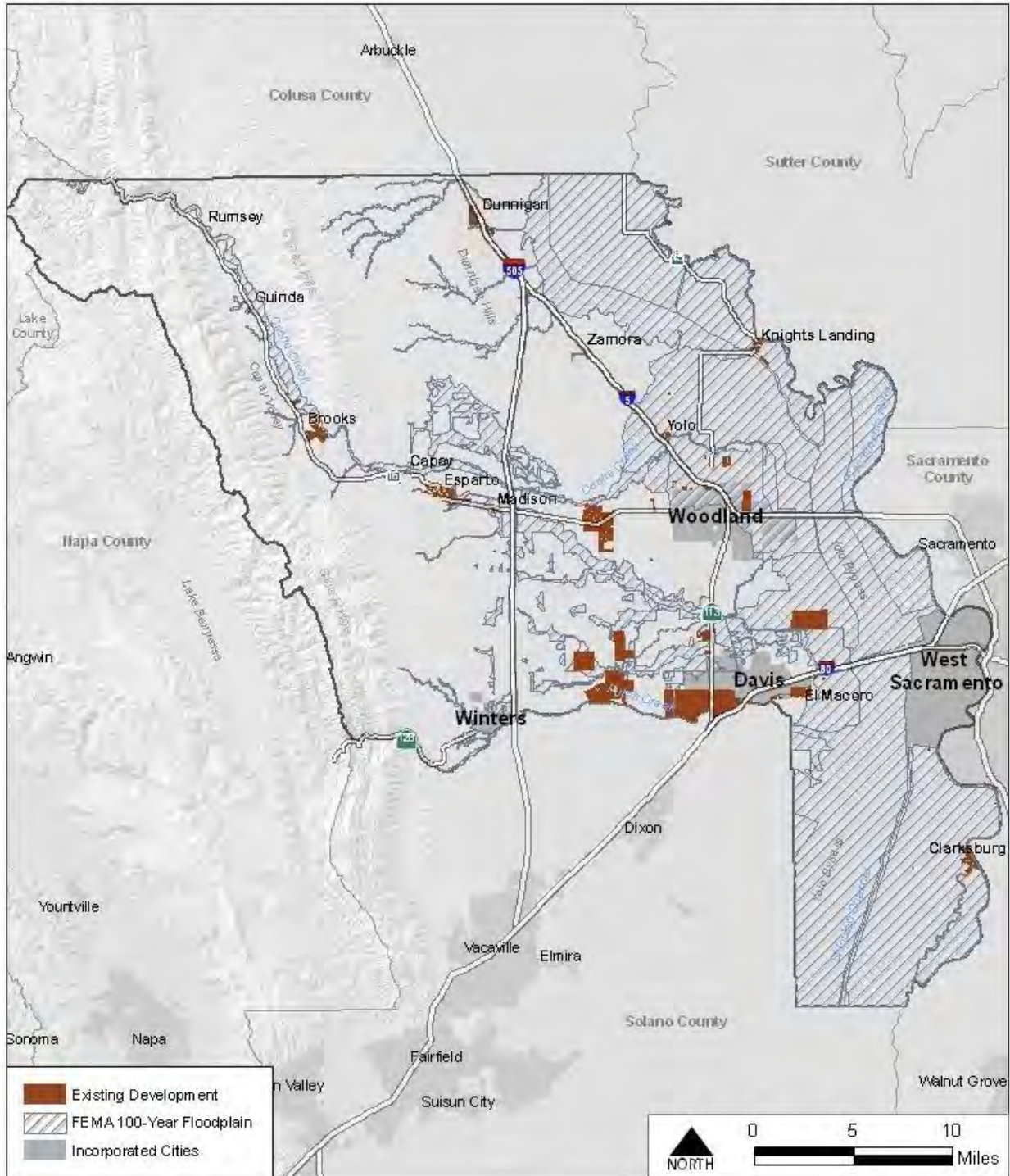
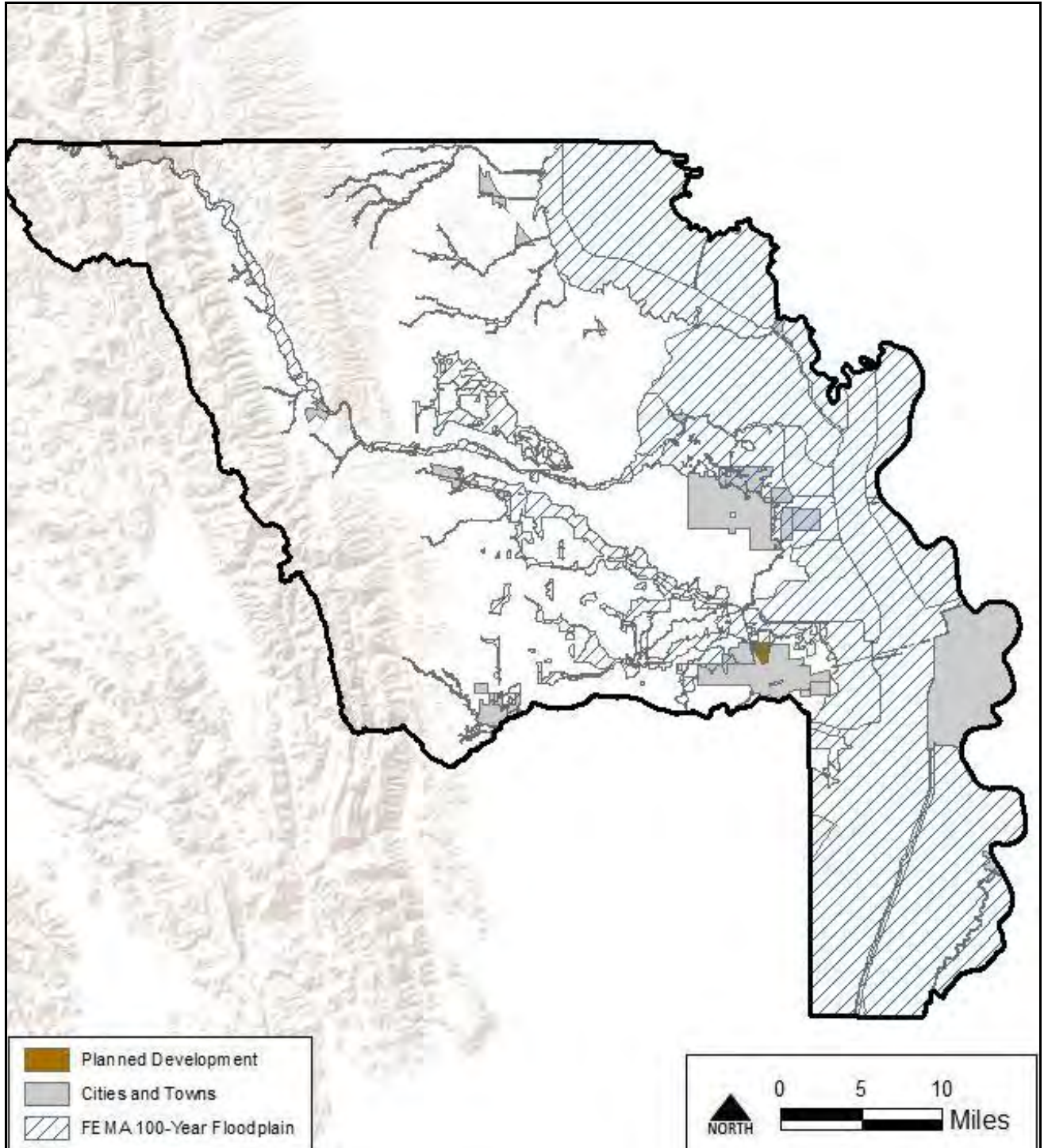




FIGURE HS-11 PLANNED DEVELOPMENT WITHIN THE 100-YEAR FLOODPLAIN





addition, the Yolo Bypass, the Sacramento Weir, and the Fremont Weir help protect Sacramento and other urban communities in the region from flooding by the Sacramento River. Some levees, particularly the project levees that protect parts of the City of Woodland and unincorporated Yolo County, the vicinity of Cache Creek and the town of Yolo, only provide a 10-year level of flood protection rather than the 100-year federal standard. Without work to improve these levees, additional development in Yolo County's floodplain could put more residents at risk of flooding hazards.

The local levees have been assumed to provide adequate protection since their acceptance into the Sacramento River Flood Control Project in 1918. Recently, where insufficient geotechnical information exists to evaluate the integrity of the levees, the State Department of Water Resources has taken the position, in conjunction with FEMA, that levees are not certified. DWR has completed geotechnical evaluations of the urban Sacramento River Flood Control Project levees within the county, and has proposed to do additional evaluations of non-urban levees in the coming years.

Figure HS-7 shows the extent of those areas that are protected by decertified levees and are currently subject to flooding. This map uses the best available information to identify those areas where flooding would be more than three feet deep if a project levee were to fail, assuming maximum capacity flows. Not surprisingly, levee flood protection zones are concentrated in eastern Yolo County, in areas adjoining levees for lower Cache Creek, Putah Creek, the Colusa Basin Drain, the Yolo Bypass, and the Sacramento River. Affected communities include Clarksburg, Davis, Knights Landing, West Sacramento, Woodland, and Yolo.

Responsibility for flood protection is distributed among many agencies at various levels of government. At the federal level the three primary agencies are the Army Corps of Engineers, the FEMA, and the Bureau of Reclamation. At the state level the primary agencies are Department of Water Resources and the Central Valley Flood Protection Board. At the local level in Yolo County and the region these agencies include: the County of Yolo and each of its four cities; the Yolo County Flood Control and Conservation District, 15 local reclamation districts, the Knights Landing Ridge Drainage District, the Madison Esparto Regional County Service Area, the Snowball Levee County Service Area, other CSAs, various Community Service Districts and the Sacramento River West Side Levee District.

Awareness Floodplains

Figure HS-8 shows the extent of awareness floodplains. The Awareness Floodplain Mapping project is an effort by the California Department of Water Resources to identify all flood hazard areas that are not mapped by the Federal Agency Management Agency's (FEMA). These maps are intended to provide communities with additional information regarding potential flood hazards that are not currently identified. The awareness floodplain maps use approximate assessment procedures, relying on aerial photos and general flood models, to identify potential 100-year flood hazard areas. These areas are shown simply as flood prone areas and do not include specific depths and/or other flood hazard data.

Awareness floodplains do not result in any restrictions on building or development. However, if requested by the local jurisdiction, FEMA can incorporate them into National Flood Insurance Program maps where they would become regulatory. Awareness floodplains have been



generally identified along minor drainages within the Capay Valley and Putah Creek, as well as Lamb Valley Slough and upper Willow Slough.

Designated Floodways

Figure HS-9 shows the location of floodways, both designated and regulatory. The Central Valley Flood Protection Board (CVFPB) has the authority to designate floodways in the Central Valley and regulate their uses. The CVFPB defines a Designated Floodway as that portion of the stream channel and adjoining floodplain which is reasonably required to accommodate a design flood event. It can also refer to the floodway between existing levees, as designated by the CVFPB or the State Legislature. The only floodways designated by the CVFPB in Yolo County are: (1) the Colusa Basin Drain; and (2) that portion of Cache Creek located between the Lake County line and the town of Yolo.

For FEMA, a "regulatory floodway" is defined as that portion of the watercourse and adjacent lands that are needed to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height. FEMA requires local cities and counties to regulate development within floodways to prevent any increases in upstream flood elevations. FEMA has designated a portion of Cache Creek as a regulatory floodway, between the towns of Capay and Yolo. A portion of Willow Slough is also considered a regulatory floodway, between County Road 27 and the Southern Pacific Railroad, as is a small portion of Union Pacific Railroad Drain located within the City of Davis.

Existing and New Development within the Floodplain

As a result of rapid population growth and escalating housing costs in the past ten years, there has been increasing pressure in the Sacramento Valley to build homes and other structures in natural floodplains. There has been limited growth within the floodplains of unincorporated Yolo County, however, due to policies that have restricted growth in general within the unincorporated area.

Development within the floodplain can have negative environmental implications that can both lead to increased risk of flooding and expose people and property to flooding risks. Urban development increases the amount of impervious surface and therefore increases surface water runoff and accelerates the timing of peak runoff flows. This results in increased erosion, sedimentation and water quality problems in surface runoff, as well as increased risk of flooding.

Figure HS-10 shows existing development located in the 100-year floodplain. Communities that are currently subject to flooding include the Central Landfill, Clarksburg, east Woodland, Knights Landing, Madison, North Woodland, Spreckles, and Yolo. In addition, portions of the County Airport, Covell, DQ University, Esparto, North David Meadows, Patwin Road, and UC Davis are also located within the floodplain. Historically, nearly all of these communities have been considered outside the floodplain. However, recent changes in FEMA mapping, particularly regarding the protection provided by uncertified levees, has designated large portions of the County in the floodplain that were not previously considered to be at risk from flooding.

Figure HS-11 shows where planned development is located in relation to the 100-year floodplain. The Covell Specific Plan is partially located within the floodplain. As a result, new development located within the floodplain must either elevate improvements and structures or provide a means of community-wide flood protection acceptable to FEMA, such as certified levees, bypasses, or similar measures.



Responsibility for flood protection is distributed among many agencies at various levels of government. At the federal level the three primary agencies are the Army Corps of Engineers, the FEMA, and the Bureau of Reclamation. At the state level the primary agencies are Department of Water Resources and the Central Valley Flood Protection Board. At the local level in Yolo County and the region these agencies include: the County of Yolo and each of its four cities; the Yolo County Flood Control and Conservation District, 15 local reclamation districts, the Knights Landing Ridge Drainage District, the Madison Esparto Regional County Service Area, the Snowball Levee County Service Area, other CSAs, various Community Service Districts and the Sacramento River West Side Levee District.

Yolo County has approximately 215 miles of project levees, managed by various agencies, including the County, 13 reclamation districts, one levee district, one drainage district, and the California Department of Water Resources. These levees provide flood protection to West Sacramento, Woodland, Knights Landing, Clarksburg, Davis and important agricultural lands. In addition, the Yolo Bypass, the Sacramento Weir, and the Fremont Weir help protect Sacramento and other urban communities in the region from flooding by the Sacramento River. Some levees, particularly the project levees that protect parts of the City of Woodland and unincorporated Yolo County, the vicinity of Cache Creek and the town of Yolo, only provide a 10-year level of flood protection rather than the 100-year federal standard. Without work to improve these levees, additional development in Yolo County's floodplain could put more residents at risk of flooding hazards.

The local levees have been assumed to provide adequate protection since their acceptance into the Sacramento River Flood Control Project in 1918. Recently, where insufficient geotechnical information exists to evaluate the integrity of the levees, the State Department of Water Resources has taken the position, in conjunction with FEMA, that levees may not be recertified. DWR has completed geotechnical evaluations of the urban Sacramento River Flood Control Project levees within the county, and proposed to do additional (as yet unknown) evaluations of non-urban levees in the next two years. Preliminary indications are that local levees will not be considered adequate to protect against the 100-year flood.

Legislation

The State Assembly and Senate, in 2006 and 2007, produced legislation governing various aspects of flood planning. The following list includes legislation applicable to Yolo County:

- AB 5 – Flood Management. Renames the Department of Water Resources (DWR) Reclamation Board as the Central Valley Flood Protection Board (CVFPB), and expands its size, duties, and powers. Makes clarifying and technical changes to the State's new flood planning legislation.
- AB 70 – Flood Liability. Requires a city or county to contribute its fair share to property damage caused by a flood, to the extent that the jurisdiction increased the



State’s exposure to liability by approving new development within the boundary of a state flood control project.

- AB 162 – Requires cities and counties to address flood-related matters in the land use, conservation, safety, and housing elements of their General Plans.
- AB 930 – Flood Management. Expands the powers of the Sacramento Area Flood Control Agency to include the acquisition of land easements.
- SB 5 – Flood Management. Requires DWR and the CVFPB to prepare and adopt a Central Valley Flood Protection Plan by 2012. Requires cities and counties in the Sacramento–San Joaquin Valley to amend their General Plan and Zoning Ordinances to be consistent with a newly adopted Flood Management Plan within 36 months of flood plan adoption. Establishes other flood protection requirements for local land-use decisions consistent with the Central Valley Flood Protection Plan.

Senate Bill 5 (2007) establishes higher standards of flood protection (generally 200 year protection) for urban and urbanizing areas (defined as areas of at least 10,000 residents, or which will grow to 10,000 or more within the next 10 years). Other areas remain subject to the pre-existing 100-year standard for protection. Yolo County’s unincorporated communities are all well under the 10,000 population threshold at this time and therefore are generally not affected by this new legislation. Future planned growth in Dunnigan will be required to meet the higher 200-year standard; however, it is not currently located within a floodplain.

b. Policy Framework


GOAL HS-2	<u>Flood Hazards</u>. Protect the public and reduce damage to property from flood hazards.
------------------	---

- Policy HS-2.1 Manage the development review process to protect people, structures, and personal property from unreasonable risk from flooding and flood hazards.
- Policy HS-2.2 Ensure and enhance the maintenance and integrity of flood control levees.
- Policy HS-2.3 Actively update and maintain policies and programs to ensure consistency with State and federal requirements.
- Policy HS-2.4 Clearly communicate the risks, requirements, and options available to those who own land and live within the floodplain.
- Policy HS-2.5 Within the Delta Primary Zone, ensure compatibility of permitted land use activities with applicable flood control and protection policies of the Land Use and Resource Management Plan of the Delta Protection Commission.



- Policy HS-2.6 Maintain the structural and operational integrity of essential public facilities during flooding, including climate-related flood events.
- Policy HS-2.7 Manage the floodplain to improve the reliability and quality of water supplies.
- Policy HS-2.8 Consider and allow for the ecological benefits of flooding within historic watercourses while balancing public safety and the protection of property.

c. Implementation Program

- Action HS-A5 Require a minimum of 100-year flood protection for new construction, and strive to achieve 200-year flood protection for existing unincorporated communities. Require a minimum of 200-year flood protection for new construction in urbanizing areas. Where 100-year flood levels of protection are not provided in nonurbanized areas, require new development to adhere to the requirements of FEMA, State law and the County Flood Protection Ordinance (Chapter 4 of Title 8 of the Yolo County Code). (Policy HS-2.1) 
Responsibility: Department of Community Services
Timeframe: Ongoing
- Action HS-A6 Continue to require habitable or any other structures in the 100-year floodplain to be designed and constructed so that they do not significantly contribute to cumulative flooding that could pose a hazard to surrounding landowners and/or the public. (Policy HS-2.1)
Responsibility: Department of Community Services Timeframe: Ongoing
- Action HS-A7 Yolo County shall not approve any discretionary permit, or ministerial permit, that would result in the construction of a new residence, for a project located within a flood hazard zone, unless the County can make the findings identified in Section 65962a of the Government Code. (Policy HS-2.1)
Responsibility: Department of Community Services
Timeframe: Ongoing
- Action HS-A8 Locate new essential public facilities outside of flood hazard zones, including hospitals and health care facilities, emergency shelters, fire stations, emergency command centers, and emergency communications facilities. Where such location is not feasible, incorporate methods to minimize potential flood damage to the facility. (Policy HS-2.6)



Responsibility: Department of Community Services, General Services Department, Office of Emergency Services
Timeframe: Ongoing

Action HS-A9 Require new developments to detain the stormwater runoff created on-site by a 100-year storm event. (Policy HS-2.1)
Responsibility: Department of Community Services
Timeframe: Ongoing

Action HS-A10 Limit the construction of extensive impermeable surfaces and promote the use of permeable materials for surfaces such as driveways, and parking lots. (Policy HS-2.1)
Responsibility: Department of Community Services
Timeframe: Ongoing

Action HS-A11 Locate new structures outside of the floodplain, where feasible, and implement appropriate methods to minimize potential damage where new construction occurs within flood hazard zones. (Policy HS-2.1)
Responsibility: Department of Community Services
Timeframe: Ongoing

Action HS-A12 Evaluate the feasibility of designating land as open space for future bypass systems to prevent flooding hazards. Work with State and Federal agencies to include such bypasses in the Central Valley Flood Protection Plan, where appropriate. Ensure that responsible agencies fund the purchase of flood easements where bypass systems are designated. (Policy HS-2.1)
Responsibility: Parks and Resources Department
Timeframe: Ongoing

Action HS-A13 Review development proposals to ensure that the need to maintain flood control capacity is balanced with consideration of the environmental health of watercourses that convey floodwaters so as not to cause significant erosion, sedimentation, water quality problems, or loss of habitat. (Policy HS-2.1)
Responsibility: Department of Community Services
Timeframe: Ongoing

Action HS-A14 Require a minimum 50-foot setback for all permanent improvements from the toe of any flood control levee. (Policy HS-2.2)
Responsibility: Department of Community Services
Timeframe: Ongoing

Action HS-A15 Restrict proposed land uses within 500 feet of the toe of any flood control levee, including but not limited to the items listed below, unless



site-specific engineering evidence demonstrates an alternative action that would not jeopardize public health or safety:

- Prohibit permanent unlined excavations;
- Large underground spaces (such as basements, cellars, swimming pools, etc) must be engineered to withstand the uplift forces of shallow groundwater;
- Prohibit below-grade septic leach systems;
- Engineered specifications for buried utility conduits and wiring;
- Prohibit new water wells;
- Prohibit new gas or oil wells;
- Engineered specifications for levee penetrations; and
- Require landscape root barriers within 50 feet of the toe. (Policy HS-2.2)

Responsibility: Department of Community Services

Timeframe: Ongoing

Action HS-A16 Support the efforts of levee maintenance districts with efforts to secure State and Federal funding for geotechnical studies of levees and implementation of associated improvements, as well as their ongoing maintenance. (Policy HS-2.2)

Responsibility: County Administrator's Office

Timeframe: Ongoing

Action HS-A17 Encourage flood hazard reduction projects along the Sacramento River to be consistent with the guidelines of the Sacramento River Corridor Floodway Management Plan. (Policy HS-2.2)

Responsibility: Parks and Resources Department

Timeframe: Ongoing

Action HS-A18 Coordinate with local, State and Federal agencies to define existing and potential flood problem areas, including the possible impacts associated with global climate change, and to maintain and improve levees and other flood control features. (Policy HS-2.2) 🌍

Responsibility: Department of Community Services

Timeframe: 2012/2013

Action HS-A19 Develop a detailed maintenance and funding plan for levees under County control, to ensure that levee safety is maintained. (Policy HS-2.2)

Responsibility: Department of Community Services

Timeframe: Ongoing



- Action HS-A20 Support and encourage responsible agencies to site new levees or major rehabilitation of levees at a distance from the river and from existing levees, where feasible. These setback levees would provide a degree of redundancy in the system, increase the land available for habitat and flood storage, reduce operation and maintenance costs, and help to ensure the integrity of the structures. (Policy HS-2.2)
Responsibility: Department of Community Services
Timeframe: Ongoing
- Action HS-A21 Private development of levees should be limited to those cases where the construction meets national levee standards, the project is in conformance with the State's comprehensive plan for flood damage reduction, and a public agency agrees to provide long-term maintenance of the levee. (Policy HS-2.2)
Responsibility: Department of Community Services
Timeframe: Ongoing
- Action HS-A22 Ensure that the upgrade, expansion, or construction of any flood control levee demonstrates that it will not adversely divert flood water or increase flooding. (Policy HS-2.2)
Responsibility: Department of Community Services
Timeframe: Ongoing
- Action HS-A23 Work cooperatively with other local agencies and interested parties to develop funding mechanisms to finance the local share of design, construction, and capital costs for repairs and improvements to flood control levees. (Policy HS-2.2)
Responsibility: Parks and Resources Department
Timeframe: Ongoing
- Action HS-A24 Improve the county's classification within the Federal Emergency Management Agency Community Rating System. (Policy HS-2.3)
Responsibility: Department of Community Services Timeframe: 2009/2010
- Action HS-A25 Pursuant to Sections 65302.9, 65860.1, and 65865.5 of the Government Code, amend the Zoning Ordinance and General Plan, as appropriate, to be consistent with the adopted Central Valley Flood Protection Plan. (Policy HS-2.3) 🌐
Responsibility: Department of Community Services Timeframe: Ongoing
- Action HS-A26 Review on an annual basis those portions of the unincorporated area that are subject to flooding, based on mapping prepared by the Federal Emergency Management Agency and/or the Department of Water



Resources, and amend the General Plan as appropriate to reflect any changes. (Policy HS-2.3) 🌐

Responsibility: Department of Community Services

Timeframe: Ongoing

Action HS-A27 Revise the Health and Safety Element, concurrently with the regular update to the Housing Element, to include new information regarding floodplain mapping and/or regulation. (Policy HS-2.1, Policy HS-2.3) 🌐

Responsibility: Department of Community Services

Timeframe: Ongoing

Action HS-A28 Take all reasonable and feasible actions to mitigate potential flood damage for new construction on agriculturally designated land in areas protected by the Sacramento River Flood Control Project and related flood protection efforts. (Policy HS-2.1)

Responsibility: Department of Community Services Timeframe: Ongoing

Action HS-A29 Pursuant to Section 8201 of the State Water Code, develop local plans for flood protection, including analysis of financing options to construct and maintain any needed improvements, to address how 100-year floodplain protection for each community may be provided. Those communities that are economically disadvantaged and at greatest risk shall have priority in developing flood protection plans. The cities shall be consulted in development of the plans, which shall be consistent with the Central Valley Flood Protection Plan. (Policy HS-2.1, Policy HS-2.2) 🌐

Responsibility: Parks and Resources Department, Department of Community Services

Timeframe: 2014/2015

Action HS-A30 Maintain and update on a regular basis the County Flood Damage Prevention Ordinance, to ensure its conformity with the State Model Flood Ordinance and all Federal Emergency Management Agency requirements. (Policy HS-2.1, Policy HS-2.3) 🌐

Responsibility: Department of Community Services

Timeframe: Ongoing

Action HS-A31 Inform the public about the specific risks of living in areas at risk of flooding, and provide steps property owners can take to reduce their exposure to flood damages. Encourage all landowners within the 100- or 200-year floodplain, and/or within areas protected by levees, to purchase and maintain flood insurance. (Policy HS-2.4)

Responsibility: Department of Community Services

Timeframe: Ongoing



- Action HS-A32 Require that all residential development projects located within floodplains include a signed waiver regarding the potential flood risk to future buyers. (Policy HS-2.4)
Responsibility: Department of Community Services
Timeframe: Ongoing
- Action HS-A33 Develop and implement a public outreach campaign to notify landowners and tenants of their flood status, options for flood insurance, evacuation plans, flood protection programs, locally responsible flood agencies, and other related topics. (Policy HS-2.4)
Responsibility: Parks and Resources Department, Department of Community Services, Office of Emergency Services
Timeframe: 2010/2011
- Action HS-A34 Amend the County's Development Agreement enabling ordinance to include the applicable restrictions from Section 65865.5 of the Government Code. (Policy HS-2.3)
Responsibility: Department of Community Services
Timeframe: Ongoing
- Action HS-A35 Develop emergency response plans and systems for floodplain evacuation and flood emergency management. Educate the public regarding these plans. (Policy HS-2.4)
Responsibility: Office of Emergency Services
Timeframe: Ongoing
- Action HS-A36 Evaluate the creation of a countywide agency to provide flood control and protection. (Policy HS-2.2, Policy HS-2.4, Policy HS-2.6)
Responsibility: County Counsel, County Administrator's Office, Parks and Resources Department
Timeframe: 2009
- Action HS-A37 Continue to work with the Flood Control District, the City of Woodland, other appropriate agencies and private landowners to develop strategies and pursue funding for the implementation of projects to improve flood protection for urban and rural residents along lower Cache Creek. (Policy HS-2.2)
Responsibility: County Administrator's Office, Parks and Resources Department, Department of Community Services
Timeframe: Ongoing

3. Wildland Fires

The Wildland Fires section of the Health and Safety Element establishes goals, policies, and actions to ensure safety from wildland fires in and around the County of Yolo.



a. Background Information

Wildland fire danger varies throughout Yolo County. The County is characterized by relatively level valley floor landscapes to the south and east; this lack of topography and complex fuels leads to very little severe fire behavior. In the increasingly hilly landscapes rising to the north and west, the rugged topography creates a landscape where fires can spread rapidly upslope and access for suppression equipment is limited.

The Safety and Environmental Justice White Paper prepared for a focused General Plan Amendment in 2022 addresses the regulatory framework related to wildfire and evacuation planning for General Plans, the County's local wildfire protection and response system, and fire hazard severity zones present in Yolo County.

To quantify the potential risk from wildland fires, the California Department of Forestry and Fire Protection (CalFire) has developed a Fire Hazard Severity Scale that uses three criteria in order to evaluate and designate potential fire hazards in wildland areas. The criteria are fuel loading (vegetation), fire weather (winds, temperatures, humidity levels and fuel moisture contents) and topography (degree of slope). These criteria are used to determine Fire Hazard Severity Zone (FHSZ) ratings. According to CalFire maps for Yolo County, the western portion of the county, west of Esparto and Winters, is designated as a Very High FHSZ, as shown in Figure HS-12. The Very High FHSZ in Yolo County is in a State Responsibility Area (SRA), meaning that fire suppression is under the control of CalFire.

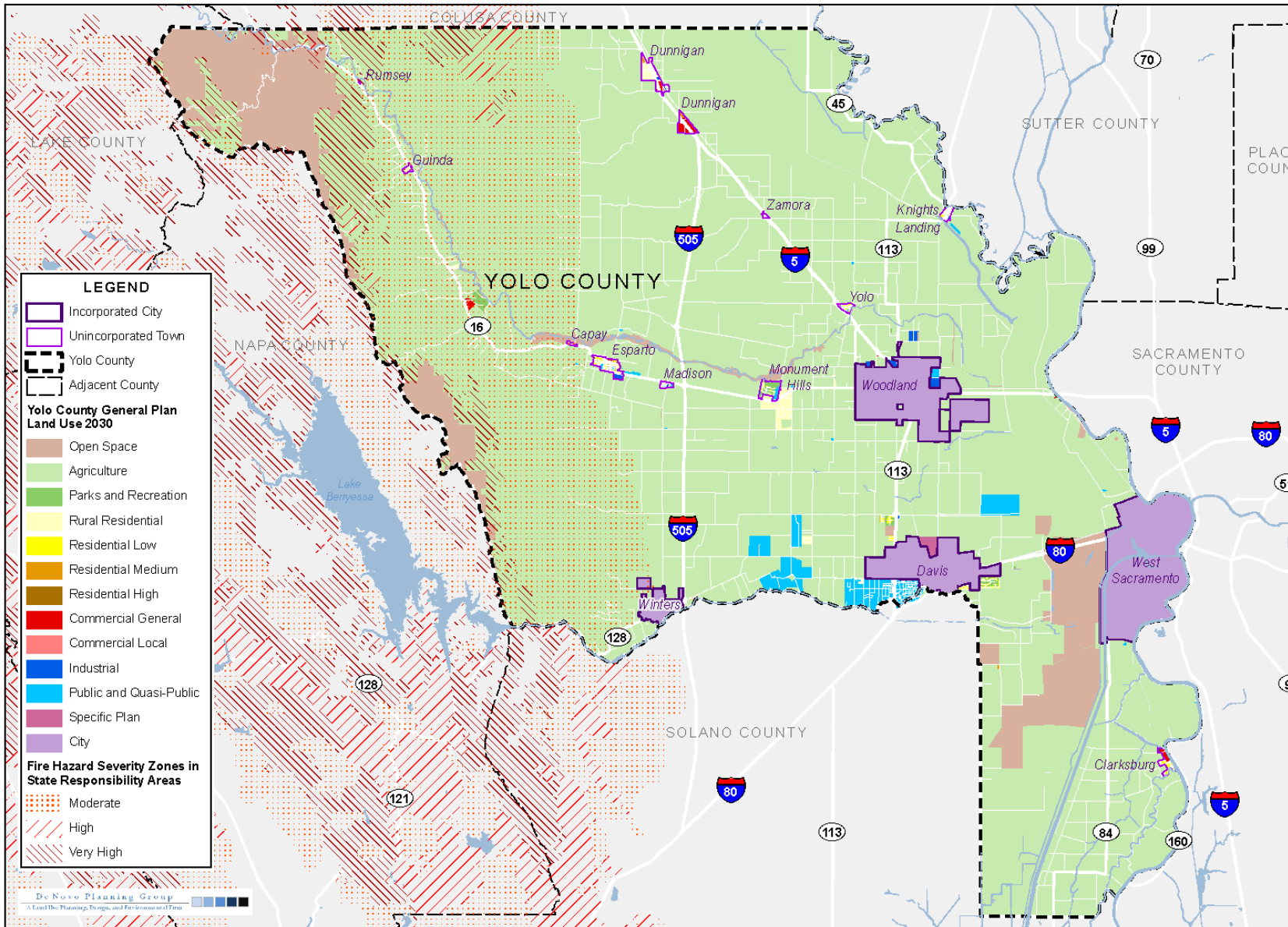
Government Code Sections 51175 through 51189 require the State to identify and classify fire hazards and to designate Very High FHSZs in Local Responsibility Areas (LRAs), or areas where local agencies are responsible for fire suppression rather than the State. Since the Very High FHSZs in Yolo County are in a SRA rather than an LRA, they are not subject to the aforementioned Government Code.

Figure HS-12 identifies the areas in Yolo County that are in the Very High, High, and Moderate FHSZs.

Fire districts in Yolo County are shown in Figure HS-13.

The County and its municipalities do fight a large number of vegetation fires, particularly during the summer. These fires tend to occur along major highways and railroads, and usually do not damage structures. However, fires can be exacerbated by hot north winds during periods of extremely low humidity. In addition, if they are fed by dry grass and vegetation they can easily grow out of control. Wildland fires can damage structures and facilities, and the County must be prepared for protection from dangerous wildland fires, especially where urban and non-urban landscapes meet. Historical fire data is presented in Figure HS-14, which identifies historical fires greater than 2,000 acres since 2000, and Figure HS-15, which identifies historical fires by burn count.

FIGURE HS-12 FIRE HAZARD SEVERITY ZONES IN STATE RESPONSIBILITY AREAS



Sources: CalFire/Office of the State Fire Marshal; Yolo County GIS.
Map date: December 10, 2021.

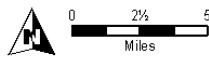
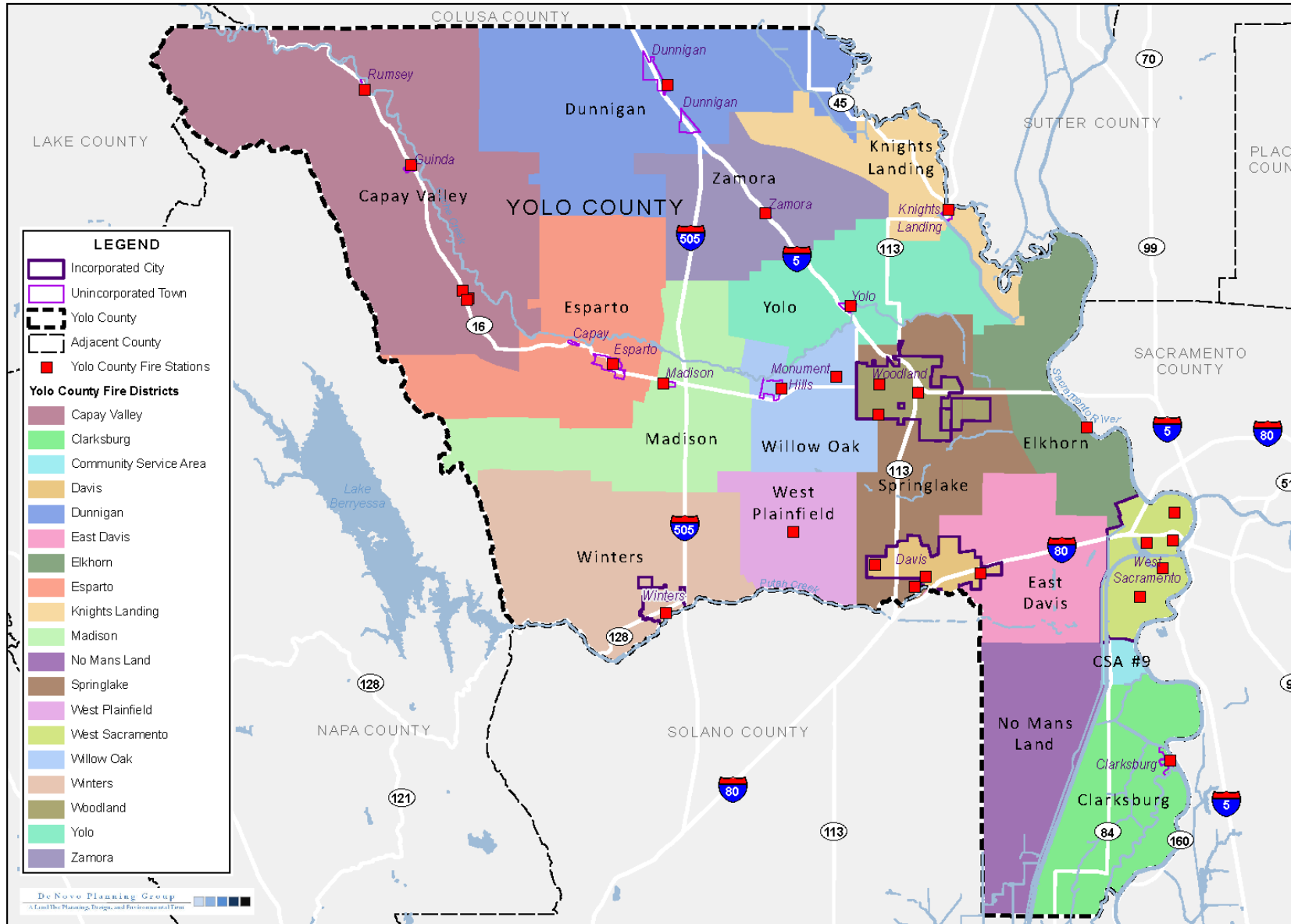




FIGURE HS-13 FIRE DISTRICTS AND STATIONS



Sources: Yolo County GIS.
 Map date: December 10, 2021.

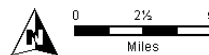
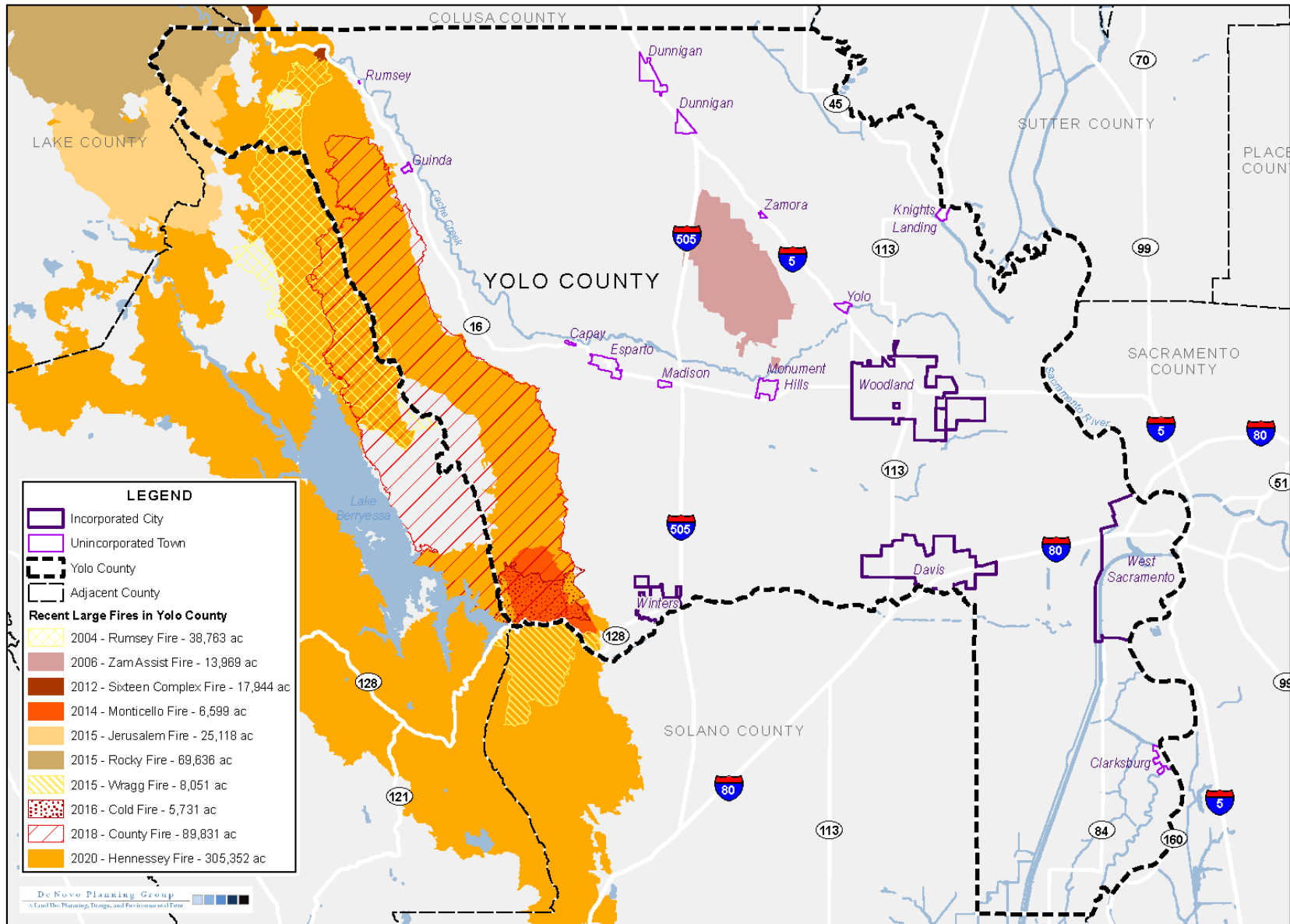




FIGURE HS-14 HISTORICAL FIRES GREATER THAN 2,000 ACRES SINCE 2000

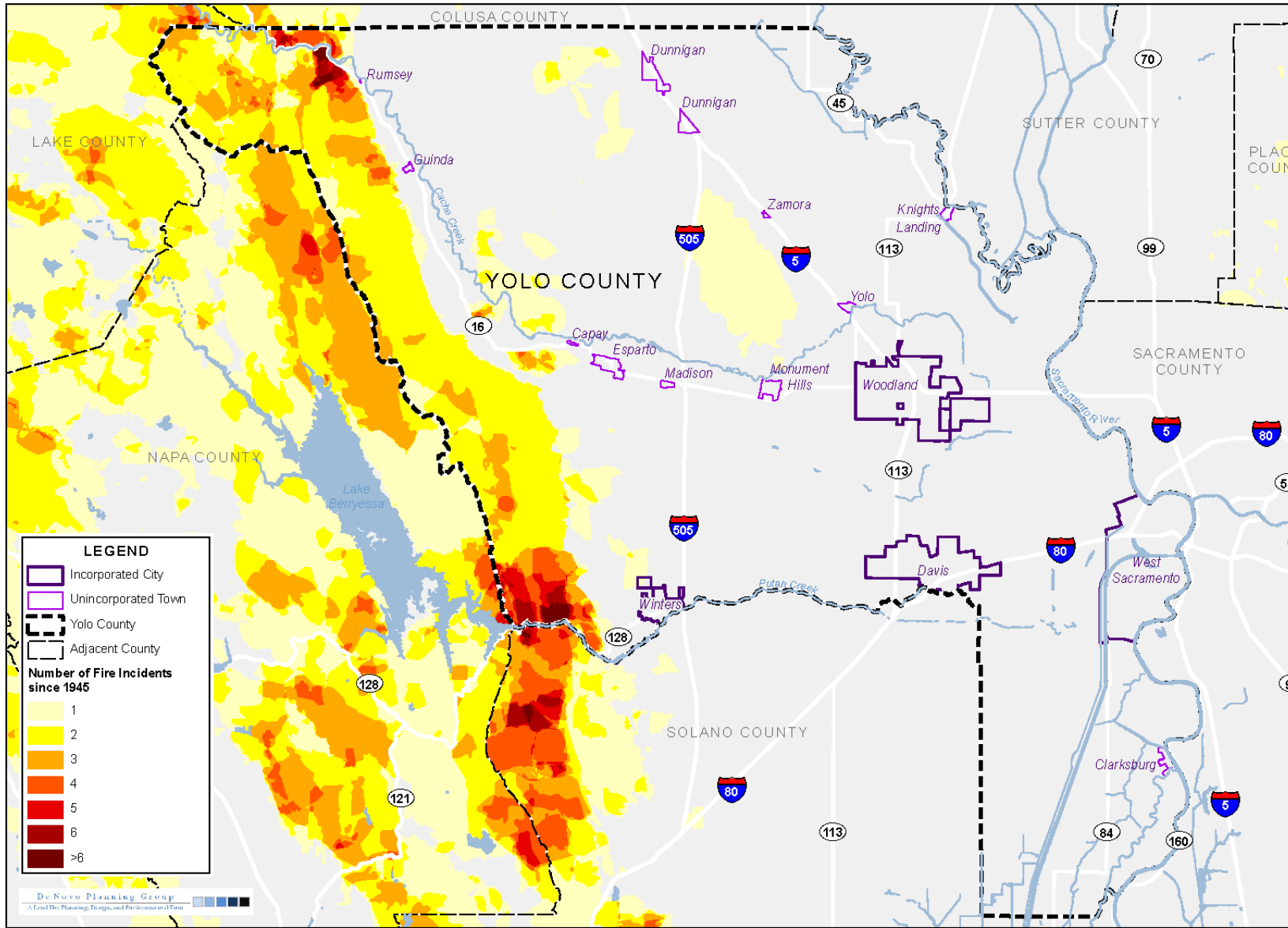


Sources: CalFire; Yolo County GIS.
Map date: December 10, 2021.





FIGURE HS-15 HISTORICAL FIRES BY BURN COUNT



Sources: CalFire; Yolo County GIS.
 Map date: December 10, 2021.





b. Policy Framework

GOAL HS-3	<u>Wildland Fires.</u> Protect the public and reduce damage to property from wildfire hazard.
------------------	--

- Policy HS-3.1 Manage the development review process to protect people, structures, and personal property from unreasonable risk from wildland fires.
- Policy HS-3.2 Encourage well-organized and efficient coordination between fire agencies and the County.
- Policy HS-3.3 Clearly communicate the risks, requirements, and options available to those who own land and live in wildfire hazard areas.
- Policy HS-3.4 Ensure that new essential public facilities are located in areas that minimize exposure to potential natural hazards including wildfire events. Essential public facilities should be planned to accommodate evacuees from hazard events requiring evacuations.

c. Implementation Program

- Action HS-A38 Require new and/or existing development to establish “defensible space” by providing for clearance around structures, using fire-resistant ground cover, building with fire-resistant roofing materials, fuel load reduction, and taking other appropriate measures. 🌐 (Policy HS-3.1)
Responsibility: Department of Community Services
Timeframe: Ongoing
- Action HS-A39 Require the design and construction of new roadways and driveways in fire hazard areas to be of sufficient width, radius and grade to facilitate access by fire-fighting apparatus. (Policy HS-3.1)
Responsibility: Department of Community Services Timeframe: Ongoing
- Action HS-A40 Require land divisions and developments within the very high and high risk Fire Hazard Severity Zones to prepare and implement a wildland fire management and protection plan that demonstrates the following:
- analysis of wildland fire risks;
 - fire response capabilities;
 - wildfire education;
 - guaranteed availability of adequate water;
 - provision of more than one access point for firefighting equipment;



- permanent maintenance of defensible space around all buildings;
 - mitigation measures and design considerations for any non-conforming fuel modification; and
 - use of fire-resistant materials in construction. 🌐 (Policy HS-3.1)
- Responsibility: Department of Community Services Timeframe: Ongoing

Action HS-A41 Cluster residential units located in areas of high fire risk with adequate access to maintained emergency evacuation routes to ensure adequate access for firefighting equipment and escape routes for residents in rural areas. 🌐 (Policy HS-3.1)
Responsibility: Department of Community Services
Timeframe: Ongoing

Action HS-A42 As part of the development review process, consult with the local fire department/district in order to ensure that the project provides adequate emergency access (ingress, egress) and evacuation routes. All development within VHFHSZs shall be evaluated at that time to see if they have at least two emergency evacuation routes.
Responsibility: Department of Community Services
Timeframe: Ongoing

Action HS-A43 Review existing developments within VHFHSZs and identify areas that have limited emergency access and do not contain two evacuation routes. These areas should be prioritized (as feasible) for improvements as part of improvement plans to enhance access in emergency situations.
Responsibility: Department of Community Services
Timeframe: 2023/2024

Action HS-A44 Assist dependent fire districts with development impact fees, legal counsel, grant applications, and fee waivers, where feasible. (Policy HS-3.2)
Responsibility: County Administrator's Office, County Counsel
Timeframe: Ongoing

Action HS-A45 Coordinate with the Clarksburg Fire District to ensure compatibility of permitted land use activities within the Delta Primary Zone with applicable fire safe policies of the Land Use and Resource Management Plan of the Delta Protection Commission. (Policy HS-3.2)
Responsibility: Department of Community Services Timeframe: Ongoing



Action HS-A46 Implement State recommendations for fire prevention in Fire Hazard Severity Zones. (Policy HS-3.1)
Responsibility: Department of Community Services Timeframe: 2009/2010

Action HS-A47 Coordinate with fire districts to ensure fire safe design and construction of new development. (Policy HS-3.2)
Responsibility: Department of Community Services
Timeframe: Ongoing

4. Hazardous Materials

The Hazardous Materials section of the Health and Safety Element establishes goals, policies, and actions to ensure safety from hazardous materials in and around the County of Yolo.

a. Background Information

There are several forms of hazardous materials in Yolo County. Common products such as gasoline, paint solvents, household cleaning products and refrigerants are categorized as hazardous materials and are present throughout Yolo County. Industrial operations, often employing hazardous substances, may leave behind contaminating underground storage tanks and/or residual pollutants that infiltrate the County's natural resources. "Brownfield" sites are those where expansion or redevelopment is complicated by real or perceived contamination from prior or current uses². Superfund sites are significantly contaminated properties as designated by the federal Environmental Protection Agency (EPA) list.

The County regulates the construction, operation, repair and removal of underground storage tanks (USTs) in Yolo County through its Underground Storage Tank program. Leaking USTs in the County are common, and are often associated with airports, farms and abandoned railroad lines. The Environmental Health Division (EHD) maintains a list of leaking USTs.³

There are several brownfield sites identified in the community of Esparto that are polluted with hazardous substances and/or where petroleum leakage has been identified. The County has two \$200,000 grants from the EPA's Brownfields Program to prevent, assess, safely clean up, and sustainably reuse these sites. These funds will also be used to create a brownfield inventory and conduct up to five Phase I and three Phase II environmental site assessments in the Esparto community. The grant funds will also be used to conduct community outreach activities.

² Environmental Protection Agency, *Brownfields and Land Revitalization*, <http://www.epa.gov/brownfields/>, accessed on June 30, 2008.

³ Yolo County Department of Environmental Health, *Underground Storage Tank Program*, <http://www.yolocounty.org/Index.aspx?page=109>, accessed June 30, 2008.



There is one Superfund site located in the unincorporated County, which is the landfill at UC Davis. The Frontier Fertilizer Company site is a second listed Superfund site, but is located with the City of Davis.

The handling, transportation and disposal of hazardous waste is of concern to all communities and residents. Proper regulation of hazardous materials will ensure that detrimental effects of human exposure and environmental contamination are minimized. Hazardous materials and wastes are regulated through various federal, state and local agencies. The EHD is part of the County Health Department and regulates hazardous materials in Yolo County. In case of an emergency, the *Yolo Operational Area Hazardous Materials Emergency Response Plan* provides for an organized and structured response. This plan defines the structure of the emergency response effort made by the county Hazardous Materials Response Team. This team becomes active when deemed necessary by a fire department officer, and combines the forces of the UC Davis, Davis, West Sacramento and Woodland fire departments and the EHD.

The EHD maintains the Hazardous Materials Business Plan and Inventory Program. The program enforces the State “right-to-know” laws passed in 1984, and requires local businesses to provide public access to information about the types and amounts of chemicals being used on their property. Businesses must plan and prepare for a chemical emergency through the preparation of a Hazardous Materials Inventory that is certified annually and a Hazardous Materials Business Emergency Response Plan that is certified annually and inventory of hazardous materials updated annually. EHD also regulates the use, storage, and treatment of hazardous wastes and above-ground storage tanks.

b. Policy Framework

GOAL HS-4	<u>Hazardous Materials.</u> Protect the community and the environment from hazardous materials and waste.
------------------	--

- Policy HS-4.1 Minimize exposure to the harmful effects of hazardous materials and waste.
- Policy HS-4.2 Inspect businesses regularly for compliance with their Hazardous Materials Inventory and Hazardous Materials Business Emergency Response Plan.
- Policy HS-4.3 Encourage the reduction of solid and hazardous wastes generated in the county. 🌍

c. Implementation Program

Action HS-A48 Provide adequate separation between areas where hazardous materials are present and sensitive uses. The following land uses are



considered sensitive receptors for the purpose of exposure to hazardous materials: residentially designated land uses; hospitals, nursing/convalescent homes, and similar board and care facilities; hotels and lodging; schools and day care centers; and neighborhood parks. Home occupation uses are excluded. (Policy HS-4.1)
Responsibility: Department of Community Services
Timeframe: Ongoing

- Action HS-A49 New development and redevelopment in areas previously used for agricultural, commercial, or industrial uses shall ensure that soils, groundwater, and buildings affected by hazardous material releases from prior land uses, as well as lead paint and/or asbestos potentially present in building materials, will not have the potential to affect the environment or health and safety of future property owners or users, and any affected areas shall be properly abated. A Phase I Environmental Site Assessment (ESA) to American Society for Testing and Materials (ASTM) standards shall be required where appropriate and a Phase II ESA may be required in certain circumstances based on the recommendations/results of the Phase I. Where the Phase I report has identified agricultural cultivation prior to the 1980s, a shallow soil investigation shall be performed at the property in accordance with DTSC guidance for sampling agricultural properties. (DEIR MM HAZ-1) (Policy HS-4.1)
Responsibility: Department of Community Services
Timeframe: Ongoing
- Action HS-A50 Develop a GIS-based map from the information submitted in the filed Hazardous Materials Inventories and Hazardous Materials Business Emergency Response Plans so that emergency responders are aware of potential dangers and can prepare accordingly. (Policy HS-4.2)
Responsibility: Health Department
Timeframe: 2010/2011
- Action HS-A51 Promote public education about the safe disposal of used syringes and needles, household hazardous waste, such as motor oil, florescent bulbs, sharps/syringes, and batteries, including the locations of disposal sites. (Policy HS-4.3)
Responsibility: Department of Community Services
Timeframe: Ongoing
- Action HS-A52 Cooperate with other agencies in the prevention and control of potential oil spills, including coordination with the State Oil Spill Program (SOSP). The SOSP shall be incorporated into local emergency and safety plans, standards, and ordinances. (Policy HS-4.1)
Responsibility Health Department, Office of Emergency Services



Timeframe: Ongoing

Action HS-A53 Complete the remediation and reclamation of the County's former burn dump sites. (Policy HS-4.1)
Responsibility: Department of Community Services
Timeframe: Ongoing

5. Airport Operations

The Airport Operations section of the Health and Safety Element provides goals, policies, and actions that guide Yolo County in ensuring adequate airport safety.

a. Background Information

Yolo County owns and operates the Yolo County Airport, one of four general aviation airports in the County. Two of the other airports, Watts-Woodland Airport and Borges-Clarksburg Airport, are privately-owned, while the University Airport is owned by UC Davis. The County is also affected by a fifth airport, Sacramento International, which lies just outside the County boundaries.

Yolo County Airport, located four miles west of the City of Davis, is the largest airport in the County based on runway size. Seventy aircraft are based at the field and, on average, 165 aircraft operations occur per day.⁴

The Sacramento International Airport is located immediately outside Yolo County in Sacramento County, and is the largest airport in the vicinity. With more than 150 flights departing daily on 14 commercial airlines, the airport offers international flights. While the airport is not inside Yolo County, noise, safety and land use compatibility concerns do extend into Yolo County and must be addressed in this General Plan.

The Sacramento Area Council of Governments has been designated the Airport Land Use Commission (ALUC) for the counties of Sacramento, Sutter, Yolo, and Yuba. Under the authority of the Airport Land Use Commission Law, Chapter 4, Article 3.5 of the California Public Utilities Code, the ALUC has prepared airport comprehensive land use plans (CLUPs) for four of the airports that affect Yolo County. The University Airport is required to have an Airport Layout Plan (ALP) which has been prepared by UCD.

The purpose of Airport Land Use Commission Law is to protect public health and safety by adopting land use standards that minimize exposure to safety hazards and excessive levels of noise and to prevent the encroachment of incompatible land uses around airports. The law designates airport safety zones around each of the airports and has specific land use compatibility requirements that are consistent with this General Plan as described in the Land Use Element.

⁴ Source: Background Report for the Yolo County General Plan Update, January 2005. Updated data provided by <http://www.airnav.com>, assessed August 15, 2007.



b. Policy Framework

GOAL HS-5	<u>Airport Operations.</u> Protect the community from the risks associated with airport operations and protect airports from the economic impacts of encroachment from incompatible land uses.
------------------	---

Policy HS-5.1 Ensure that land uses within the vicinity of airports are compatible with airport restrictions and operations.

Policy HS-5.2 Ensure that new development near commercial and public use airports is consistent with setbacks, height, and land use restrictions as determined by the Federal Aviation Administration and the Sacramento Area Council of Governments Airport Land Use Commission. Ensure that development proximate to private airstrips addresses compatibility issues. (DEIR MM HAZ-3)

Policy HS-5.3 Respect and conservatively enforce airport safety zones as identified in airports CLUPs.

Policy HS-5.4 Within the Delta Primary Zone, ensure compatibility of permitted land use activities with applicable airport policies of the Land Use and Resource Management Plan of the Delta Protection Commission.

c. Implementation Program

Action HS-A54 Develop appropriate Aviation Disaster Response Plans. (Policy 5.1, Policy HS-5.2, Policy HS-5.3)
Responsibility: Office of Emergency Services
Timeframe: 2010/2011

6. Emergency Preparedness

a. Introduction

The Yolo County Office of Emergency Services (OES) is responsible for coordinating the County government's role in preparation and response to a disaster or large scale emergency within Yolo County. The OES works closely with other emergency management operations in the cities of Davis, West Sacramento, Winters, and Woodland, and with UC Davis, the Rumsey Tribe, various special districts, authorities and joint-power authorities within County boundaries. In the event of an emergency, the OES is charged with responding to the unincorporated areas of Yolo County, providing support to jurisdictions within Yolo County, or both. To assist with such efforts, the Office coordinates local volunteers through the Disaster Service Worker (DSW) Program.

Emergency evacuation is an integral component of the County emergency management system. The OES also conducts ongoing evaluation of potential evacuation routes,



including capacity and condition of roadways and potential barriers to the use of roadways, such as flooding. There are no set evacuation routes; rather, they are established for particular events based on circumstances at the time.

The main focus is on three operational concerns: 1) Local/community evacuation; 2) Area wide evacuation; and 3) Large scale traffic management during regional evacuations. Primary state and local arterial and secondary ground transportation routes have been identified and are included in general preparedness and response planning efforts. The following primary egress points are recognized:

- Interstate 5 – North towards Redding and south into Sacramento
- Interstate 80 – East into Sacramento and west toward Solano County and the San Francisco Bay Area
- Interstate 505 – South to the junction of E/WB Interstate 80
- State Route 16 – West from Woodland into the Capay Valley and then north into Colusa County.
- State Route 45 – North from Knights Landing into Colusa County
- State Route 84 – South from West Sacramento into Solano County with two crossings east into Sacramento County across the Sacramento River
- State Route 113/County Road 102 – North from Woodland into Sutter County and south from Davis
- State Route 128 – West from Winters into Napa County
- County Road 22 – East from Woodland into West Sacramento and then into Sacramento at two locations across the Sacramento River
- County Road 98 – South from Woodland into Solano County

In addition, the County collaborates with neighboring counties and the State to prepare for regional evacuation and movement of people during emergencies. This includes evaluation of en route support to emigrating traffic, designation of major highway traffic capacities, and implementation of traffic control protocols to ensure the rapid, unobstructed, safe, and efficient movement of vehicles engaged in regional evacuations.

Countywide emergency preparedness plans outline procedures that reduce death and injuries or damage to property and minimize the economic and social dislocation resulting from natural and human-made hazards. Emergency preparedness procedures must be FEMA-approved to be eligible for disaster recovery assistance and mitigation funding. In January 2006, Yolo County released a FEMA-approved, multi-jurisdictional local multi-hazard mitigation plan entitled the Yolo Operational Area Multi-Hazard Mitigation Plan (MHMP). The MHMP provides the framework for coordination with agencies and plans required for eligibility of Federal disaster assistance.



The MHMP is a living document that must be officially updated every five years in order for the County and each of its jurisdictions to be eligible for hazard mitigation assistance grant funding from FEMA. A first draft to update the plan was completed by the County and approved by FEMA in 2013. On November 6, 2018, the County approved an update to the Yolo County Operational Area Multi-Jurisdictional Hazard Mitigation Plan, following approval by FEMA in August of 2018.

According to this plan, hazard mitigation is any sustained action taken to eliminate or reduce long-term risk to human life, property, and the environment posed by a hazard. The purpose of the MHMP is to integrate hazard mitigation strategies into the activities and programs of the local jurisdictions and special districts, and to the extent practical, into the activities of private sector organizations.

The Federal Disaster Mitigation Act of 2000 (DMA 2000), Section 322 (a-d) requires that local governments, as a condition of receiving federal disaster mitigation funds, have a mitigation plan that describes the process for identifying hazards, risks and vulnerabilities, identify and prioritize mitigation actions, encourage the development of local mitigation and provide technical support for those efforts. Section 65302.6 of the California Government Code specifies the required elements of such a plan. The adopted MHMP provides the framework for coordination with agencies and plans required to meet eligibility for Federal disaster assistance, and satisfies the State requirements for content.

b. Regulatory Framework

GOAL HS-6	<u>Emergency Preparedness.</u> Provide timely and effective emergency response to reduce the potential loss of life and property.
------------------	--

- Policy HS-6.1 Respond to catastrophic emergencies by:
- Continuing and restoring critical services.
 - Maintaining order.
 - Supporting evacuations.
 - Distributing emergency supplies.
 - Ensuring search/rescue operations and medical care.
 - Saving lives and protecting property.
 - Repairing and restoring essential public infrastructure.
 - Mobilize the necessary resources to carry out emergency response efforts.
 - Coordinating operations with other jurisdictions.
 - Disseminating emergency public information.



- Establishing emergency operation centers and maintaining communications.
- Notifying vulnerable populations (e.g., seniors, schoolchildren, disabled, non-English speaking households, etc.)

Policy HS-6.2 Provide continuous advance planning to anticipate potential threats and improve emergency response effectiveness.

Policy HS-6.3 Ensure the compatibility of permitted land use activities within the Delta Primary Zone with applicable emergency preparedness policies of the Land Use and Resource Management Plan of the Delta Protection Commission.

Policy HS-6.4 Encourage adequate infrastructure and resources to provide for local food security in emergencies and to restore food system integrity and operation after an emergency.

Policy HS-6.5 Work with the Yolo Emergency Communications Agency to seek funding for emergency communications, evacuation planning and recovery planning.

c. Implementation Program

Action HS-A55 Develop a disaster response program to enhance the short-term and long-range recovery of affected areas, assist in the return to normal life for local residents, and expedite the reconstruction of homes, businesses, and public facilities. (Policy HS-6.1, Policy HS-6.2)
Responsibility: Office of Emergency Services
Timeframe: 2009/2010

Action HS-A56 Prepare and update emergency access/evacuation routes, including the removal of potential traffic impediments. (Policy HS-6.1, Policy HS-6.2)
Responsibility: Office of Emergency Services
Timeframe: 2009/2010

Action HS-A57 Implement the programs and procedures in the Yolo Operational Area Multi-Hazard Mitigation Plan. (Policy HS-6.1)
Responsibility: Office of Emergency Services
Timeframe: Ongoing

Action HS-A58 Conduct ongoing public outreach efforts regarding procedures and plans to be followed in the event of an emergency. (Policy HS-6.2)
Responsibility: Office of Emergency Services
Timeframe: Ongoing



- Action HS-A59 Develop multiple stress scenarios on a regular basis where key evacuation routes are blocked and/or alternative communication methods are inoperable, and refine emergency response plans accordingly. (Policy HS-6.2)
Responsibility: Office of Emergency Services
Timeframe: Ongoing
- Action HS-A60 Create an inventory of significant urban, rural, and natural hazards and provide standards for avoidance and/or mitigation of such hazards in an emergency. (Policy HS-6.2)
Responsibility: Office of Emergency Services
Timeframe: 2010/2011
- Action HS-A61 Study the implications of climate change for future emergencies, including the increased risk and severity of fires; increased frequency and intensity of drought; expanded and deeper areas of flooding; and associated changes in disease vectors. 🌍 (Policy HS-6.2)
Responsibility: Office of Emergency Services
Timeframe: Ongoing
- Action HS-A62 Ensure well-organized and efficient coordination between government, health, and community emergency response agencies. (Policy HS-6.2)
Responsibility: Office of Emergency Services
Timeframe: Ongoing

7. Climate Adaptation and Resiliency

a. Introduction

This section establishes goals, policies, and actions to address risks associated with climate change. The Safety and Environmental Justice White Paper prepared for the focused General Plan Amendment in 2022 to address climate adaptation provides background information related to climate change, including climate change risks and vulnerabilities anticipated for Yolo County. These climate change risks and vulnerabilities include increasing temperature and associated heat-related illness, reduced air quality, uncertain precipitation levels, an increase in extreme weather events, including flooding, reduced certainty regarding water supply, an increase in wildfires, and the potential for increased vector-borne diseases.

Methods to reducing the contribution of land use and development to greenhouse gas emissions discussed in the Conservation and Open Space Element.



b. Regulatory Framework

GOAL HS-7 Climate Adaptation. Minimize risks to people, property, the economy, and the environment through climate adaptation strategies that enhance and promote community resilience.

- Policy HS-7.1 Address climate change scenarios, anticipated risks, and adaptive responses in all long-term planning activities, including hazard mitigation planning and infrastructure planning, and in development decisions to protect people, structures, and personal property from unreasonable exposure to projected climate change risks.
- Policy HS-7.2 Ensure that climate impacts and climate adaptation measures aimed at reducing climate risks do not lead to disproportionately adverse effects on vulnerable populations.
- Policy HS-7.3 Participate in local and regional climate adaptation planning efforts.
- Policy HS-7.4 Ensure access to essential public facilities and essential public infrastructure, including evacuation routes, during disasters associated with climate change.
- Policy HS-7.5 Support and prioritize adaptation through green infrastructure and natural measures (e.g., wetland/marsh/habitat restoration, greenspaces, fire resistant landscaping etc.) that build capacity to adapt to increased flooding and wildfire hazards and provide for carbon sequestration, where feasible.
- Policy HS-7.6 Collaborate with utility providers to ensure that infrastructure and resource management plans account for anticipated effects of climate change, such as increased heat days, changes to flood hazard areas/inundation depths, and changes to precipitation and water supply.

c. Implementation Program

- Action HS-A63 When updating master plans for infrastructure, including water supply, flood control and drainage, and critical facilities, review relevant climate change scenarios and ensure that the plans consider the potential effects of climate change and include measures that provide for resilience to climate impacts. Climate change resiliency shall include consideration of ensuring new and existing essential public facilities and essential public infrastructure, including evacuation routes, are located outside of areas anticipated to be vulnerable to risks



associated with climate change, to the extent feasible, or are designed to withstand risks associated with climate change.

Responsibility: Department of Community Services

Timeframe: Ongoing

Action HS-A64 Upon the next revision to the Yolo Operational Area Multi-Hazard Mitigation Plan; identify and designate public buildings, specific private buildings, or institutions with air conditioning as public cooling shelters. Extend hours at air-conditioned sites during periods of extreme heat or power outage and ensure sites are also supported by backup battery storage or generators.

Responsibility: Office of Emergency Services

Timeframe: Ongoing

Action HS-A65 Update emergency response plans and training programs to address climate-related risks and strategies identified in the Hazard Mitigation Plan to ensure residents, infrastructure, and facilities are protected during emergencies and extreme weather events, and other climate related impacts.

Responsibility: Office of Emergency Services

Timeframe: Ongoing

Action HS-A66 Extend hours at air-conditioned spaces during periods of extreme heat or power outage and as feasible ensure sites are also supported by backup battery storage or generators.

Responsibility: County Administrator's Office

Timeframe: Ongoing

D. Noise

To control noise and to protect sensitive uses from excessive noise is a concern throughout Yolo County. Although the county's rural setting and predominantly agricultural character generally afford a quieter environment, there are a number of significant sources of environmental noise, including noise associated with various modes of transportation, and industrial and agricultural operations.

1. Background Information

This section describes some of the key concepts and terms utilized in noise analysis.

a. Understanding Noise

Noise can be defined as a sound or series of sounds that are intrusive, irritating, objectionable and/or disruptive to daily life. Noise varies widely in its scope, source, and volume. For instance, noise ranges from individual occurrences, such as a lawn mower, to the intermittent disturbances of train whistles, to the fairly constant noise generated by traffic on freeways. Noise is primarily a concern when generated in the



vicinity of noise-sensitive uses such as residential subdivisions, schools and daycare centers, places of worship and hospitals.

The objectionable nature of sound could be caused by its pitch or its loudness. Pitch is the height or depth of a tone or sound, depending on the relative frequency of the vibrations by which it is produced. Higher pitched signals sound louder to humans than sounds with a lower pitch. Loudness depends on the intensity of sound waves and how your ear receives them.

In addition to the concepts of pitch and loudness, there are several noise measurement scales which are used to describe noise in a particular location. These are listed in Table HS-1. The most basic unit of measurement is the decibel (dB), which is a unit of measurement which indicates the relative amplitude of a sound. The zero on the decibel scale is based on the lowest sound level that the healthy, unimpaired human ear can detect. Sound levels in decibels are calculated on a logarithmic basis. An increase of 10 decibels represents a 10-fold increase in acoustic energy, while 20 decibels is 100 times more intense, 30 decibels is 1,000 times more intense, etc. There is a relationship between the subjective noisiness or loudness of a sound and its intensity. Each 10 decibel increase in sound level is perceived as approximately a doubling of loudness over a fairly wide range of intensities. Generally, the human ear cannot perceive a difference between two noises that are less than three decibels different from one another.

There are several methods of characterizing sound. In California, the *A-weighted sound level* or *dBA* is commonly used. Representative outdoor and indoor noise levels in units of dBA are shown in Table HS-2. Most commonly, environmental sounds are described in terms of an average level that has the same acoustical energy over an average period of one hour. This energy-equivalent sound/noise descriptor is called the Equivalent Continuous Noise Level, and is abbreviated L_{eq} .

Since the sensitivity to noise increases during the evening and at night—because excessive noise interferes with the ability to sleep—24-hour descriptors have been developed that incorporate artificial noise penalties added to quiet-time noise events. The *Community Noise Equivalent Level (CNEL)* is a measure of the cumulative noise exposure in a community, with a 5 dB penalty added to evening (7:00 pm to 10:00 pm) and a 10 dB addition to nocturnal (10:00 pm to 7:00 am) noise levels. The *Day/Night Average Sound Level (L_{dn})*, is essentially the same as CNEL, with the exception that the evening time period is grouped into the daytime period.

b. Sound Propagation

When sound propagates over a distance, it changes in level and frequency content. The manner in which noise reduces with distance depends on the following factors:

- **Geometric Spreading.** Geometric spreading is the effect of noise attenuation (reduction) based on whether a noise comes from a single localized source (a point source), or occurs over a distance, such as in the case of highway noise.



TABLE HS-1 DEFINITIONS OF ACOUSTICAL TERMS

Term	Definitions
Decibel, dB	A unit describing the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure, which is 20 micropascals (20 micronewtons per square meter).
Frequency, Hz	The number of complete pressure fluctuations per second above and below atmospheric pressure.
A-Weighted Sound Level, dBA	Sound pressure level in decibels as measured on a sound level meter using the A-weighting filter network, which de-emphasizes very low and very high frequency components of the sound in a manner similar to the frequency response of the human ear and correlates well with subjective reactions to noise. All sound levels in this report are A-weighted, unless reported otherwise.
L ₀₁ , L ₁₀ , L ₅₀ , L ₉₀	The A-weighted noise levels that are exceeded 1%, 10%, 50%, and 90% (respectively) of the time during the measurement period.
Equivalent Noise Level, L _{eq}	The average A-weighted noise level during the measurement period.
Community Noise Equivalent Level, CNEL	The Average A-weighted noise level during a 24-hour day, obtained after adding 5 decibels to measurements taken in the evening (7 to 10 pm) and 10 decibels to measurements taken between 10 pm and 7 am.
Day/Night Noise Level, L _{dn}	The average A-weighted noise level during a 24-hour day, obtained after addition of 10 decibels to levels measured in the night between 10:00 pm and 7:00 am.
L _{max} , L _{min}	The maximum and minimum A-weighted noise level during the measurement period.
Ambient Noise Level	The composite of noise from all sources near and far. The normal or existing level of environmental noise at a given location.
Intrusive	That noise which intrudes over and above the existing ambient noise at a given location. The relative intrusiveness of a sound depends upon its amplitude, duration, frequency, and time of occurrence and tonal or informational content as well as the prevailing ambient noise level.

Source: 2003 General Plan Guidelines, Governor's Office of Planning and Research.



TABLE HS-2 TYPICAL SOUND LEVELS MEASURED IN THE ENVIRONMENT

Noise Generators (At a Given Distance from Noise Source)	A-Weighted Sound Level in Decibel	Noise Environments	Subjective Impression
Near jet engine	140		
	130		Pain threshold
	120	Rock music concert	
Auto horn (10 feet)	100		Very loud
	90	Noisy urban street	
School cafeteria	80		Moderately loud
Freeway traffic	60		
	50	Department store	
	30	Quiet bedroom	Quiet
Whisper	20		
Rustle of leaves in wind	10		
	0		Threshold of hearing

Source: U.S. Department of Housing and Urban Development, Noise Guidebook, Washington D.C., page 1.

- **Ground Absorption.** Ground absorption occurs when the noise path is close to the ground, as it is in the case of highway noise, and the nature of the ground surface has a significant effect on the amount of noise reflected. In particular, hard surfaces and smooth water bodies reflect more noise than soft surfaces such as dirt, grass, or low vegetation.
- **Atmospheric Effects.** Atmospheric conditions can have a significant effect on noise propagation. Wind has been shown to be the most important meteorological factor within approximately 500 feet of the source, whereas vertical changes in air-temperature are more important for greater distances. Other factors, such as humidity and turbulence, also have significant effects.
- **Shielding.** Large objects or barriers in the path between a noise source and a receiver can substantially lower noise levels at the receiver. Natural features, such as hills or other terrain features, and man-made features, such as walls or berms, contribute to shielding. Although the amount of reduction varies depending on the size of the object and the frequency content of the noise source, a barrier that



breaks the line of sight between a source and a receiver will typically result in a decrease of at least 5 dBs, and a taller barrier may provide as much as a 20 dB decrease in noise.

c. State Regulations

California's noise insulation standards became effective in 1974. In 1988, the Building Standards Commission approved revisions to these standards (Title 24, Part 2, California Code of Regulations). The ruling states, "Interior noise levels attributable to exterior sources shall not exceed 45 dBA in any habitable room. The noise metric shall be measured in either CNEL or L_{dn} , consistent with the noise element of the local General Plan." Additionally, the commission specifies that residential buildings or structures proposed to be located within exterior L_{dn} contours of 60 dBA or greater, generated by an existing or planned freeway, expressway, parkway, major street, thoroughfare, rail line, rapid transit line or industrial noise source, shall require an acoustical analysis showing that the building has been designed to limit intruding noise to an interior L_{dn} of 45 dBA.

The State Office of Noise Control has developed guidelines showing the compatibility of a range of noise levels for various land use categories. The noise standards are intended to provide guidelines for the development of noise elements. These basic guidelines may be tailored to reflect the existing noise and land use characteristics of a particular community.

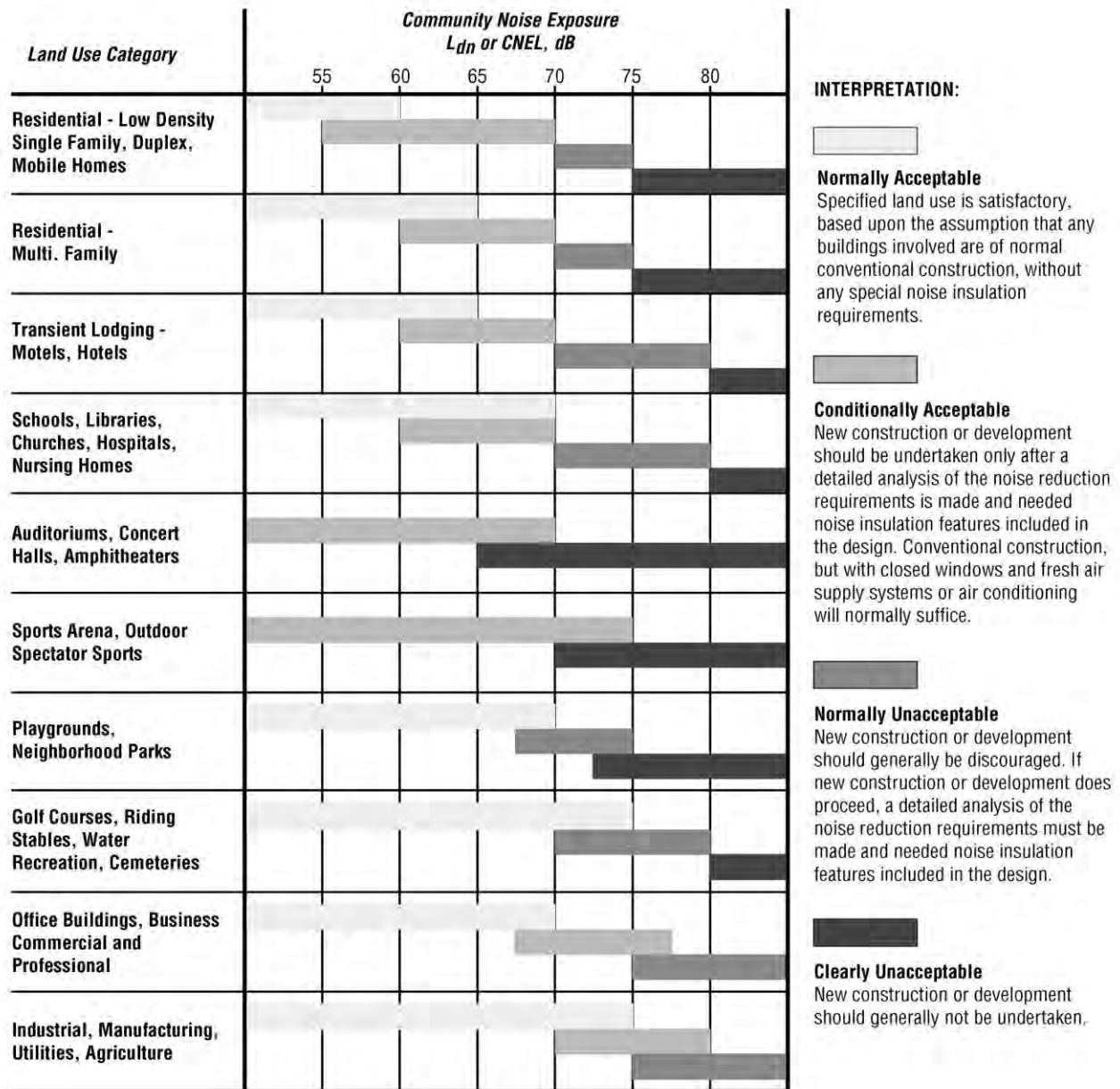
d. Exterior Noise Standards

The Noise Compatibility Guidelines in Figure HS-16 describes the exterior noise standards (excluding airport noise sources which are addressed later in this element) recommended by the State for new development projects according to land use. The guidelines define noise in terms of L_{dn} expressed in decibel units, with outdoor L_{dn} described by four primary categories: normally acceptable, conditionally acceptable, normally unacceptable, and clearly unacceptable. Where the chart shows overlapping L_{dn} ranges for two or more compatibility categories, local conditions should be considered in evaluating land use compatibility at specific locations.

The noise compatibility matrix is to be used as a guideline to achieve long-term noise compatibility for land uses in the unincorporated county. These guidelines assist in determining the compatibility of various land uses within a certain noise environment, and for the location of development and transportation system projects that may impact existing uses.



FIGURE HS-16 NOISE COMPATIBILITY GUIDELINES



Source: 2003 General Plan Guidelines, Governor's Office of Planning and Research.



The standards identified are consistent with the State Office of Noise Control Guidelines and California State Noise Insulation Standards.⁵

e. Interior Noise Standards

California's noise insulation standards were officially adopted by the California Commission of Housing and Community Development in 1974 and became effective in August 1974. They apply to the construction of new hotels, motels, apartment houses, and dwellings other than detached single-family, and are intended to limit the extent of noise transmitted into habitable space. In November 1988, the Building Standards Commission approved revisions to these standards (Title 24, Part 2, California Code of Regulations). The ruling states, "Interior noise levels attributable to exterior sources shall not exceed 45 dB in any habitable room. The noise metric shall be measured in either CNEL or L_{dn} , consistent with the noise element of the local General Plan."

Additionally, the commission specifies that residential buildings or structures (other than detached single-family dwellings) to be located within exterior L_{dn} contours of 60 dBA or greater of an existing or adopted freeway, expressway, parkway, major street, thoroughfare, rail line, rapid transit line or industrial noise source shall require an acoustical analysis showing that the building has been designed to limit intruding noise to an interior L_{dn} of 45 dB.

2. Existing Noise Environment

Before developing an effective noise program, it is important to understand the nature and extent of local noise problems, including the locations of major noise sources, sensitive uses which might be affected by noise, and current levels of noise exposure. This information can be used by the County to develop measures to avoid or mitigate noise exposure to the extent feasible.

Existing noise conditions in Yolo County were assessed as part of the General Plan update, in order to document existing noise sources, and, to the extent possible, quantify noise from these sources. The dominant sources of noise in Yolo County are mobile, related to automobile and truck traffic, aircraft and train transportation. Stationary sources in the county include farming activities, mining activities, commercial and industrial facilities, and construction sites.

3. Mobile Noise Sources

Mobile noise sources generally include those associated with various modes of transportation, including roadway traffic, trains, and aircraft operations.

a. Roadway Traffic

The County has eight highways and a number of arterials and major streets. As required by State law, existing noise levels on these roadways have been assessed

⁵ These standards are found in the California Code of Regulations, Title 24 (known as the Building Standards Administrative Code), Part 2 (known as the California Building Code), Appendix Chapters 12 and 12A.



using traffic noise modeling based on existing traffic volumes and the FHWA Highway Traffic Noise Prediction Model (FHWA RD-77-108), the standard model recommended by the FHWA and Caltrans for traffic noise prediction.

Table HS-3 provides a summary of traffic noise modeling results for the freeways and highways in the County, based on existing traffic conditions, which consider allowed vehicle speeds, and average daily traffic volumes. As shown in the table, noise volumes are highest along the most heavily traveled roadways, particularly the State and Interstate highways.

- **Interstate 80.** Interstate 80, which traverses a portion of the county from Davis to the Sacramento County line, is the major source of roadway noise in Yolo County. Noise levels along Interstate 80 range from 73 to 75 dBA L_{dn} at 100 feet from the road centerline.
- **Interstate 5.** Interstate 5 travels through eastern Yolo County. Noise levels along Interstate 5 at 100 feet from the road centerline of Interstate 5 range from 65 to 70 dBA L_{dn} , with the highest noise levels along roadway segments closest to the Sacramento County line.
- **Interstate 505.** Interstate 505 is also a major source of roadway noise. Noise levels at 100 feet from the roadway centerline range between 61 and 64 dBA L_{dn} . The segment near Winters experiences the highest volumes of traffic and levels of roadway noise along Interstate 505.
- **Highway 113.** Highway 113 provides a key north-south connection from Davis to Woodland, and north to Knights Landing. Along its most heavily traveled southern portions, noise levels at 100 feet from the roadway centerline are 54 to 70 dBA L_{dn} , with the noisiest segments found close to the Solano County line.
- **Highway 16.** Highway 16 provides the major connection from Interstate 5 through Woodland, and northwest through the Capay Valley. Noise levels at 100 feet from the roadway centerline range from 63 to 65 dBA L_{dn} . The highest noise levels along the roadway are generally found on segments west of Interstate 505.
- **Highway 128.** Highway 128 connects from the Napa County line west through Winters to Interstate 505. Noise levels at 100 feet from the roadway centerline vary from 62 to 63 dBA L_{dn} , with highest volumes found to the immediate east of the Interstate 505 interchange.
- **Highway 84.** Highway 84 connects West Sacramento to the Clarksburg Area. The more southerly portions of the highway see much lower traffic volumes than in West Sacramento and noise levels are correspondingly lower, at an estimated 57 dBA L_{dn} at 100 feet from the roadway centerline.
- **Highway 45.** Highway 45 branches off from Highway 113 in Knights Landing and parallels Highway 5 in northern Yolo County. The southern section of this highway between Country Road 108 and Country Road 98A experiences traffic noise levels at 100 feet from the centerline of up to 54 dBA L_{dn} .



Table HS-3 Existing Highway Traffic Noise Levels

Roadway Segment	ADT ^a	Center-line to 70 L _{dn} ^b (feet)	Center-line to 65 L _{dn} (feet)	Center-line to 60 L _{dn} (feet)	L _{dn} (dBA) 100 feet from Centerline
Interstate 80					
State Route 50 to County Road 32A	55,400	189	402	864	75.2
Mace Boulevard to Solano County Line	44,200	164	347	743	74.2
Interstate 5					
Sacramento County Line to County Road 102	21,100	101	212	455	71.2
State Route 113 to County Road 13	12,200	72	148	316	68.8
County Road 13 to Interstate 505	7,700	< 50 ^c	110	233	66.8
Interstate 505 to Colusa County Line	10,400	66	134	284	68.1
Interstate 505					
State Route 128 to State Route 16	4,900	< 50	83	173	64.8
State Route 16 to County Road 14	3,000	< 50	62	126	62.7
State Route 113					
Solano County Line to Covell Blvd	22,700	105	223	477	71.5
Covell Boulevard to Gibson Road	15,300	83	172	367	69.8
Interstate 5 to County Road 17	3,200	< 50	65	131	63.0
County Road 17 to County Road 13	900	< 50	< 50	< 50	56.2
County Road 13 to Sutter County Line	1,500	< 50	< 50	59	58.5
State Route 16					
County Road 98 to County Road 94B	10,000	< 50	97	208	66.7
County Road 94B to Interstate 505	9,700	< 50	95	204	66.6
Interstate 505 to County Road 87	8,400	< 50	86	185	65.9
County Road 87 to County Road 78	6,700	< 50	74	160	65.0
State Route 128					
Interstate 505 to Winters	9,300	< 50	66	142	64.2
Winters to County Road 86	7,000	< 50	76	164	65.1
State Route 84					
Clarksburg Road to West Sacramento	1,600	< 50	< 50	62	58.7
West Sacramento to State Route 50	18,900	69	148	318	69.5
State Route 50 to Interstate 80	14,700	58	125	269	68.4
State Route 45					
State Route 113 to Country Road 98A	700	< 50	< 50	< 50	55.1

^a Average Daily Traffic.

^b The 24 hour A-weighted average sound level from midnight to midnight, obtained after the addition of 10 decibels to sound levels occurring in the night between 10:00 p.m. and 7:00 a.m.

^c Traffic noise levels within 50 feet of roadway centerline requires site specific analysis.

Source: LSA Associates, Inc., 2009.

In addition to these routes, a number of County roads are heavily traveled and generate relatively high noise levels along some or all of their length. Table HS-4 provides a summary of traffic noise modeling results for the County roads, based on existing traffic conditions, which consider allowed vehicle speeds, and average daily traffic volumes. As shown in the table, County roads with noise levels greater than 60 L_{dn} include County Road 98, which parallels Highway 113 to the west, between Davis and



Table HS-4 Existing County Roadway Traffic Noise Levels

Roadway Segment	ADT ^a	Center-line to 70 L _{dr} (feet)	Center-line to 65 L _{dr} (feet)	Center-line to 60 L _{dr} (feet)	L _{dn} (dBA) 100 feet from Centerline
County Road 85 - State Route 16 to County Road 14	400	< 50	< 50	< 50	48.6
County Road 85 - County Road 14 to County Road 8	100	< 50	< 50	< 50	42.6
County Road 87 - State Route 16 to County Road 19	200	< 50	< 50	< 50	45.6
County Road 89 - County Road 29A to County Road 27	1,100	< 50	< 50	< 50	53.0
County Road 89 - County Road 27 to County Road 24A	1,300	< 50	< 50	< 50	53.8
County Road 89 - County Road 24A to State Route 16	1,000	< 50	< 50	< 50	52.6
County Road 94B - State Route 16 to County Road 19	600	< 50	< 50	< 50	50.4
County Road 98 - Solano County to County Road 31	2,400	< 50	< 50	58	56.4
County Road 98 - County Road 31 to County Road 29	3,300	< 50	< 50	71	57.8
County Road 98 - County Road 29 to County Road 27	4,000	< 50	< 50	81	58.6
County Road 98 - County Road 27 to County Road 24	5,200	< 50	< 50	97	59.8
County Road 98 - County Road 24 to State Route 16	7,800	< 50	59	126	61.5
County Road 98 - Main Street to Interstate 5	4,600	< 50	< 50	89	59.2
County Road 99 - County Road 31 to County Road 27	1,800	< 50	< 50	< 50	55.2
County Road 99 - County Road 27 to Gibson Road	3,100	< 50	< 50	68	57.5
County Road 101A - West Covell Blvd to County Road 29	2,400	< 50	< 50	58	56.4
County Road 102 - East Covell lvd to County Road 29	6,500	< 50	52	112	60.7
County Road 102 - County Road 29 to County Road 27	5,600	< 50	< 50	101	60.1
County Road 102 - County Road 27 to Gibson Road	4,900	< 50	< 50	93	59.5
County Road 102 - Gibson Road to Interstate 5	11,900	< 50	78	167	63.4
County Road 102 - Interstate 5 to County Road 17	4,900	< 50	< 50	93	59.5
County Road 102 - County Road 17 to County Road 113	6,100	< 50	< 50	107	60.5
County Road 105 - County Road 32A to County Road 28H	600	< 50	< 50	< 50	50.4
Old River Road - County Road 127 to County Road 118	3,900	< 50	< 50	80	58.5
Russell Boulevard - Interstate 505 to County Road 31	4,400	< 50	< 50	86	59.0
County Road 31 - County Road 93A to County Road 95	3,900	< 50	< 50	80	58.5
County Road 31 - County Road 95 to County Road 98	4,900	< 50	< 50	93	59.5
County Road 29A - Interstate 505 to County Road 95	300	< 50	< 50	< 50	47.4
County Road 29 - County Road 95 to County Road 98	600	< 50	< 50	< 50	50.4
County Road 29 - State Route 113 to County Road 102	4,000	< 50	< 50	81	58.6
County Road 28H - County Road 102 to County Road 105	700	< 50	< 50	< 50	51.1
County Road 27 - Interstate 505 to County Road 95	900	< 50	< 50	< 50	52.2
County Road 27 - County Road 95 to County Road 98	1,100	< 50	< 50	< 50	53.0
County Road 27 - County Road 98 to State Route 113	1,700	< 50	< 50	< 50	54.9
County Road 24 - County Road 90 to County Road 95	800	< 50	< 50	< 50	51.6
County Road 24 - County Road 95 to County Road 98	2,100	< 50	< 50	53	55.8
County Road 23 - County Road 85B to County Road 89	1,100	< 50	< 50	< 50	53.0
County Road 19 - County Road 87 to Interstate 505	700	< 50	< 50	< 50	51.1
County Road 19 - Interstate 505 to County Road 94B	600	< 50	< 50	< 50	50.4
County Road 16A - Interstate 5 to State Route 113	300	< 50	< 50	< 50	47.4
County Road 17 - State Route 113 to County Road 102	1,100	< 50	< 50	< 50	53.0
County Road 14 - County Road 85 to Interstate 505	400	< 50	< 50	< 50	48.6
County Road 14 - Interstate 505 to Interstate 5	900	< 50	< 50	< 50	52.2
County Road 13 - Interstate 5 to State Route 113	1,100	< 50	< 50	< 50	53.0
County Road 12A - County Road 85 to Interstate 505	100	< 50	< 50	< 50	42.6
County Road 12A - Interstate 505 to County Road 99W	100	< 50	< 50	< 50	42.6

^a Average Daily Traffic.

^b Traffic noise levels within 50 feet of roadway centerline requires site specific analysis.

Source: LSA Associates, Inc., 2009.



Woodland, and County Road 102, which parallels Highway 113 to the east, connecting Davis and Knights Landing. Based on existing traffic volumes, all other roadway segments within Yolo County that are shown in the Circulation Element of this General Plan have existing traffic noise levels well below 60 dBA L_{dn} at 100 feet from the roadway centerline.

b. Aircraft

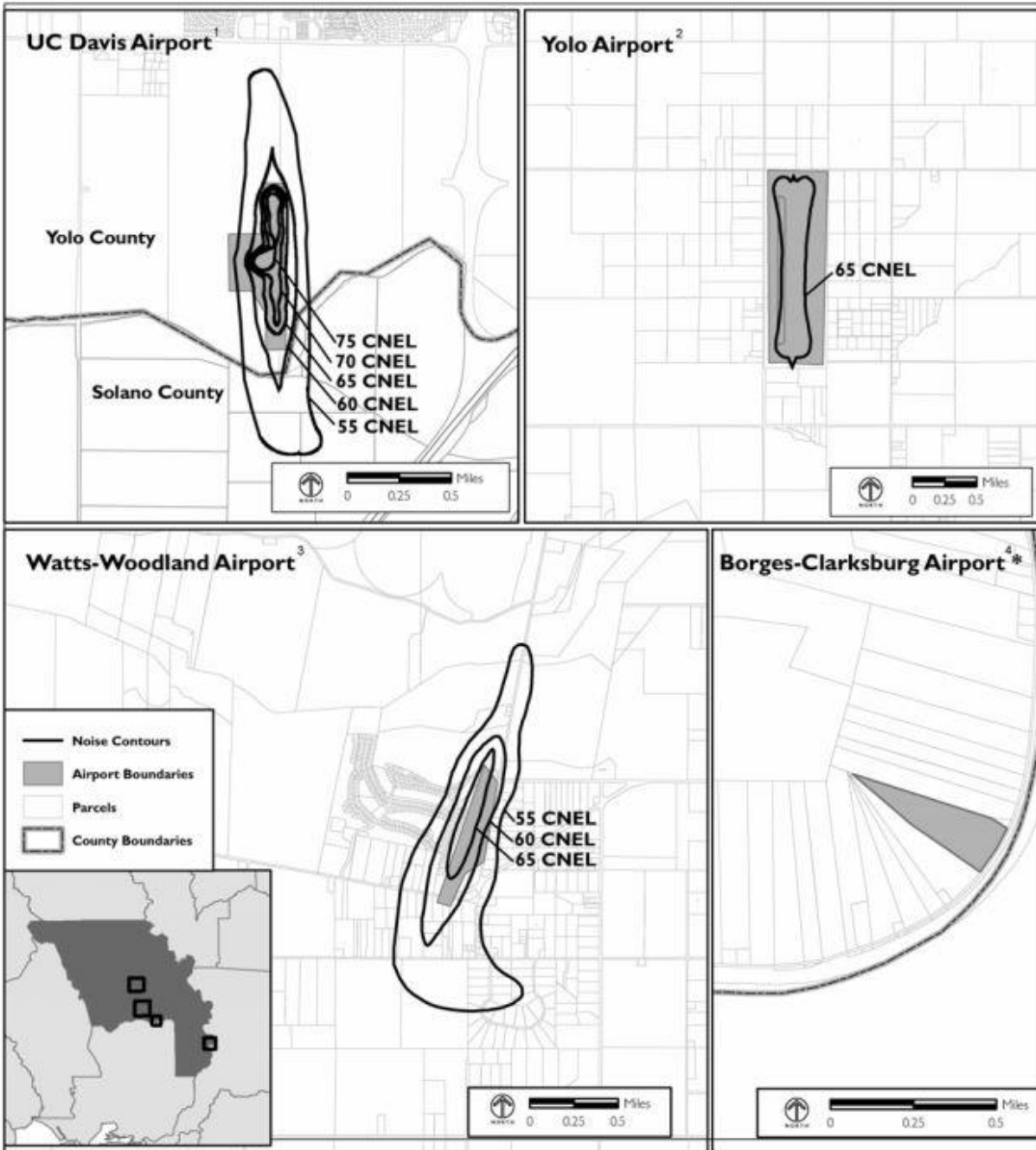
Aircraft operations in the vicinity of airports can be a significant source of noise. There are four airports located within the county, as shown in Figures HS-17 and HS-18. In addition, Sacramento International Airport is situated outside of Yolo County, but generates noise that affects county lands.

- Yolo County Airport is owned by Yolo County and serves Davis, Woodland, Winters and the wider county area. The facility is located about 6 miles from Davis, Woodland and Winters. Noise contours for the Yolo County Airport are depicted in Figure HS-17.
- Watts-Woodland Airport is a privately owned aviation facility located west of Woodland. Noise contours for the Watts-Woodland Airport are depicted in Figure HS-17.
- University Airport is owned by the University of California and serves Davis and Yolo County. The facility is located about two miles south of the City of Davis. Noise contours for the University Airport are depicted in Figure HS-17.
- Borges-Clarksburg Airport is a privately owned airport just north of Clarksburg. According to airport staff, airplane activity is variable, but typically very minimal, averaging one aircraft operation a day. This airport has no affect on County property, as the 65 CNEL line lies within the privately owned property. A map of the Borges-Clarksburg Airport property is shown in Figure HS-17.
- Sacramento International Airport is a large, commercial airport located just west of the Yolo County line, providing hundreds of daily domestic and international departures. Although located in Sacramento County, noise from the operation of this airport does affect Yolo County. The approximate area of affect is illustrated in Figure HS-18.

As indicated earlier in this element, the Sacramento Area Council of Governments has been designated the Airport Land Use Commission (ALUC) for the counties of Sacramento, Sutter, Yolo, and Yuba. SACOG has prepared a Comprehensive Land Use Plan (CLUP) for the Sacramento International Airport, Yolo County Airport, Watts-Woodland Airport, and Borges-Clarksburg Airport. The University Airport is required to have an Airport Layout Plan (ALP), which has been prepared by UCD. The purpose of these plans is to protect public health and safety by adopting land use standards that minimize exposure to safety hazards and excessive levels of noise, and to prevent the encroachment of incompatible land uses around airports per the Airport Land Use Commission Law.



FIGURE HS-17 LOCAL AIRPORT CURRENT NOISE CONTOURS



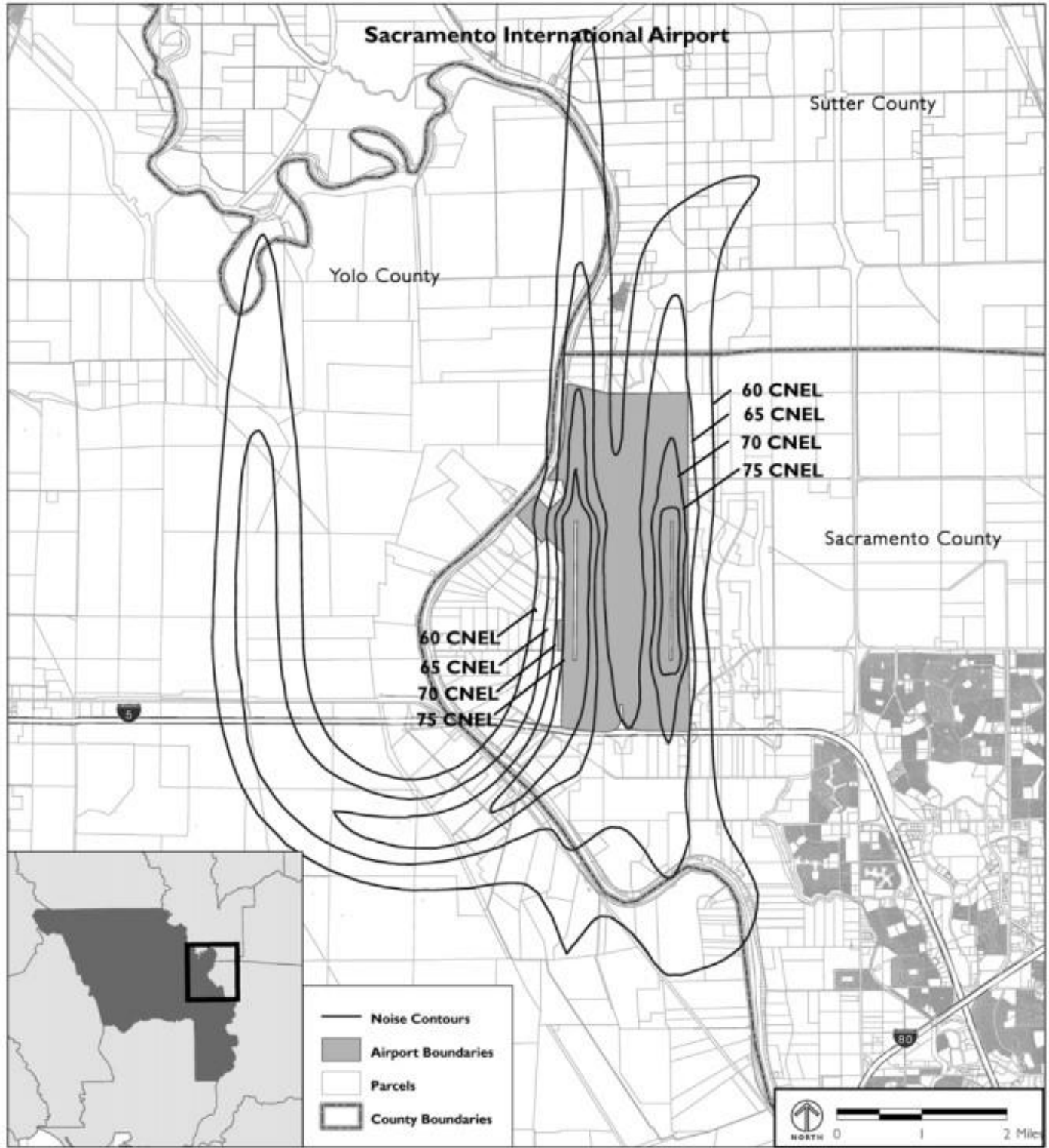
* No noise contours currently exist for the Borges-Clarksburg Airport

Sources:

- ¹UC Davis Long Range Development Plan 2003-2015 Final EIR, October 2003
- ²Yolo County Airport Comprehensive Land Use Plan, November 1998
- ³Watts-Woodland Airport Comprehensive Land Use Plan, September 2003
- ⁴Borges-Clarksburg Airport Comprehensive Land Use Plan, April 1994



FIGURE HS-18 SACRAMENTO INTERNATIONAL AIRPORT CURRENT NOISE CONTOURS



Source: Sacramento Airport Comprehensive Land Use Plan, September 2003



c. Trains

Yolo County has three active rail lines, one of which, the Union Pacific Railroad line, carries both freight and passenger trains. The train noise contours were calculated following Federal Transportation Administration guidelines: *Transit Noise and Vibration Impact Assessment*, 2006 and are summarized in Table HS-5.

Table HS-5 Train Noise Contours

Railroad Line	Centerline to 65 dBA L _{dn} (feet)	Noise Level (dBA L _{dn}) 100 feet from center of rail line
Union Pacific	930	89
California Northern	11	45
Sacramento River Train	10	44

Source: LSA Associates, Inc., 2009.

- Union Pacific Railroad (UPRR).** The UPRR maintains a rail line that runs through Yolo County from West Sacramento to Davis. The rail line carries both freight trains and Amtrak passenger trains. According to Union Pacific personnel, 35 daily freight train passages typically occur on the line. Freight train lengths vary widely, from as few as four to as many as 120 rail cars and from two to eight locomotives, operating at an average speed of 70 miles per hour.

Amtrak passenger rail service also uses the UPRR rail line. An average of 21 daily eastbound trains and 21 daily westbound trains utilize the line. Each train typically uses four rail cars and one locomotive per train, traveling an average speed of 79 miles per hour.

Assuming the worst case of 35 daily freight trains, each with eight locomotives and 120 cars traveling at 70 miles per hour, and assuming the worst case of 42 daily passenger trains, each with one locomotive and four cars traveling at 79 miles per hour, the estimated combined railroad noise levels at 100 feet from the railroad centerline is approximately 89 dBA L_{dn}. The estimated distance to the 65 L_{dn} contour is 930 feet for this worst case condition for freight and passenger train operations on this rail line.

- California Northern Railroad Company.** The California Northern rail line is a freight line that runs through Davis and Woodland, and along Interstate 5 past Dunnigan. The freight line schedule varies depending on seasonal demands. The rail line carries an average of two trains daily, using between one and 50 rail cars and one or two locomotives, traveling at an average speed of 15 mile per hour. The estimated railroad noise level at 100 feet from the railroad centerline is approximately 45 dBA L_{dn}. The estimated distance to the 65L_{dn} contour is 11 feet from the rail line.
- Sacramento River Train.** The Sacramento River Train is operated by the Sierra Northern Railroad Company that runs freight and an entertainment passenger train from Woodland to West Sacramento. According to Sierra Northern Railroad personnel, typically one round trip runs per day. The trains typically have between two and 25 rail cars with one or two locomotives, traveling at an average speed



estimated at 15 miles per hour.⁶ Assuming the worst case of two daily train bypasses, each with 25 cars and two locomotive traveling at 15 miles per hour, the estimated railroad noise levels at 100 feet from the railroad centerline is approximately 44 dBA L_{dn} . The estimated distance to the 65 L_{dn} contour is 10 feet from the rail line.

4. Stationary Noise Sources

Stationary noise sources generally include those associated with stationary (non-mobile) operations such as farming, mining, industry and food processing, and construction.

a. Farming Activities

The primary sources of noise related to farming activity in Yolo County are nighttime diesel pump operations, nighttime harvesting, crop-dusting aircraft, and bird deflection devices. Typical noise levels from tractors as measured at a distance of 50 feet range from about 78 dBA to 106 dBA L_{max} , with an average of about 84 dBA L_{max} . These noise levels are considered to be reasonably representative of noise levels from other wheeled and tracked farm equipment.⁷

b. Mining Activities

Mining activities in Yolo County mostly comprise sand and gravel extraction operations, and are limited to locations along the Cache Creek corridor that are generally isolated from residential subdivisions and other sensitive land uses.

Primary noise sources associated with mining activities include heavy equipment operations for material extraction, processing activities and material trucking. Table HS-6 provides a summary of typical noise level produced by common mining operations, although the actual noise generated from mining activities will vary based on the type and intensity of the operations.

The Off Channel Mining Plan (OCMP) establishes the following noise standards:

- 80 dBA- L_{eq} at property boundaries (6:00 a.m. to 6:00 p.m.)
- 60 dBA- L_{eq} at off-site residences or noise-sensitive uses (6:00 a.m. to 6:00 p.m.)
- 65 dBA- L_{eq} at property boundaries (6:00 p.m. to 6:00 a.m.)

Five mining locations in the County were monitored for noise. The locations and the results are shown in Tables HS-7 and HS-8. All five locations were monitored during their daytime operations, primarily within or near to the property boundaries. Each operation was found to be within the 80 dBA- L_{eq} standard set out by the OCMP.

⁶ David Magaw, President, Sierra Northern Railway. Personal Communication with Jones and Stokes, October 12, 2004.

⁷ Bolt, Beranek & Newman, 1987. *Noise Control for Buildings and Manufacturing Plants*.



TABLE HS-6 NOISE PRODUCED BY TYPICAL MINING OPERATIONS AT 500 FEET

Activity	Range of Maximum Sound Levels (dBA at 50 feet)	Suggested Maximum Sound Levels for Analysis (dBA at 50 feet)	L50
Loading and Batching	80 to 85	83	58
Rock Plant Operations	87 to 103	98	67
Excavator/Haul Truck	83 to 94	88	50
Scrapers	83 to 91	87	60

Source: Bolt, Beranek & Newman, 1987. *Noise Control for Buildings and Manufacturing Plants*.

c. Other Commercial/Industrial Facilities and Plants

Food processing, winery, olive oil processing, and other commercial/industrial facilities are also a source of noise in the County. Mechanical equipment and trucking are the primary sources of noise associated with these facilities. Associated trucking trips on County roads are accounted for in the traffic noise analysis.

Seven facilities of this type were monitored for noise during their daytime operations. The locations and the results are shown in Tables HS-7 and HS-8.

d. Construction

Two types of short-term noise are emitted during construction. First, construction crew commutes and the transport of construction equipment and materials to construction sites would incrementally increase noise levels on access roads leading to the sites. Although there would be a relatively high single event noise exposure potential causing intermittent noise nuisance (passing trucks at 50 feet would generate up to a maximum of 86 dBA L_{max}), the effect on longer term (hourly or daily) ambient noise levels would be minimal. Second, noise would be generated during excavation, grading, and erection of buildings. Construction typically occurs in discrete steps, each of which has a distinctive mix of equipment and, consequently, distinctive noise characteristics. These various sequential phases would change the character of the noise generated on each site and, therefore, the noise levels surrounding these sites as construction progresses. Despite the variety in the type and size of construction equipment, similarities in the dominant noise sources and patterns of operation allow construction related noise ranges to be categorized by work phase. Table HS-9 lists typical construction equipment noise levels recommended for noise impact assessments, based on a distance of 50 feet between the equipment and a noise receptor.



TABLE HS-7 SHORT-TERM AMBIENT NOISE MONITORING LOCATIONS AND PRIMARY NOISE SOURCES

Site Number	Facility	Monitoring Location	Primary Noise Sources
1	RH Phillips - (winery) 26800-44 County Road 12A	18 ft east of parking lot entrance, 22 ft west of steam boilers	Compressor, steam boilers
2	Granite - Esparto (sand and gravel mine), 15560 County Road 87	142 ft southeast of rock plant	Rock plant operations, bull dozer
3	Teichert - Esparto (sand and gravel mine), 27940-44 County Road 19A	39 ft south of end of parking lot, 54 ft northeast of machinery	Gravel equipment/ machinery
4	Cemex - Madison (sand and gravel mine), 30288 State Route 16	36 ft southwest of asphalt loading ramp, 98 ft south of asphalt plant	Asphalt plant (rock plant not in operation)
5	Syar - Madison (sand and gravel mine) – 16560 County Road 89	65 ft southeast of sand plan, 92 ft south of gravel plant	Sand plant, soft gravel plant, occasional trucks/loaders/scrapers
6	Mariani – Winters (ag-ricultural processing), 30455 County Road 31	82 ft southwest of transporting tunnel, 96 ft southeast of warehouse & cylinder processors	Processing at warehouse & materials moving through tunnels
7	Teichert - Woodland (sand and gravel mine), 35460-68 County Road 20	62 ft southwest of rock plant, 122 ft south of sand plant	Rock & sand plant operations
8	Pirmi - Woodland (rice mill), 854 Kentucky Avenue	27 ft south of Tank 51, 42 ft east of Tank 8, 82 ft southeast of Pit 4	Operations in Pit 4, processing
9	Syar - Woodland (batch plant), 39820 Kentucky Avenue	96 ft west of fuel tanks, 46 ft northwest of batch plant	Batch plant operations, on-site trucks
10	Medland Field Airport - Davis (crop duster private airport), 41155-71 County Road 27	48 ft north of driveway, 4 ft east of end of runway	Maintenance operations in hangar, on-site trucks
11	County Landfill - Davis (solid waste disposal), 44082-90 County Road 28H	144 ft north of landfill	Equipment operating in landfill, trucks
12	Clark Pacific ^a - Woodland (concrete plant), 40600 County Road 18C	100 ft from batch plant	Batch plant operation, concrete transfer trucks, vibrators, forklifts, grinders

^a This noise monitoring data taken from *Initial Study/Mitigated Negative Declaration Zone File #2007-078, Clark Precast, LLC's "Sugarland" Project*. February 22, 2008.
 Source: LSA Associates, Inc., 2008.



TABLE HS-8 SHORT-TERM AMBIENT NOISE MONITORING RESULTS^a

Site Number	Date	Start Time	dBA L _{eq}	dBA L _{max}	dBA L _{min}
1	8/19/08	9:00 a.m.	66.3	82.7	62.4
2	8/19/08	9:55 a.m.	59.5	76.5	53.0
3	8/19/08	10:55 a.m.	71.2	77.1	68.3
4	8/19/08	12:05 p.m.	78.3	89.9	67.0
5	8/19/08	12:55 p.m.	74.0	85.7	54.0
6	8/19/08	1:45 p.m.	75.5	87.2	55.5
7	8/20/08	10:20 a.m.	76.6	79.3	73.7
8	8/20/08	11:05 a.m.	82.0	86.7	74.4
9	8/20/08	11:40 a.m.	64.5	82.4	61.2
10	8/20/08	12:55 p.m.	56.2	72.8	36.2
11	8/20/08	1:28 p.m.	75.2	91.2	64.1
12	11/15/07	24 hr	75 L _{dn} ^b	ND ^c	ND ^c

^a This noise monitoring data taken from *Initial Study/Mitigated Negative Declaration Zone File #2007-078, Clark Precast, LLC's "Sugarland" Project*. February 22, 2008.

^b L_{dn} is the 24-hour A-weighted average sound level, obtained after the addition of 10 decibels to sound levels occurring in the night between 10:00 p.m. and 7:00 a.m.

^c ND = No Data available.

Source: LSA Associates, Inc., 2008.



TABLE HS-9 TYPICAL CONSTRUCTION EQUIPMENT MAXIMUM NOISE LEVELS

Type of Equipment	Range of Maximum Sound Levels (dBA at 50 feet)	Suggested Maximum Sound Levels for Analysis (dBA at 50 feet)
Pile Drivers	81 to 96	93
Rock Drills	83 to 99	96
Jackhammers	75 to 85	82
Pneumatic Tools	78 to 88	85
Pumps	68 to 80	77
Scrapers	83 to 91	87
Haul Trucks	83 to 94	88
Electric Saws	66 to 72	70
Portable Generators	71 to 87	80
Rollers	75 to 82	80
Dozers	85 to 90	88
Tractors	77 to 82	80
Front-End Loaders	86 to 90	88
Hydraulic Backhoe	81 to 90	86
Hydraulic Excavators	81 to 90	86
Graders	79 to 89	85
Air Compressors	76 to 89	85
Trucks	81 to 87	85

Source: Bolt, Beranek & Newman, 1987. *Noise Control for Buildings and Manufacturing Plants.*

5. Future Noise Environment

a. Mobile Noise Sources

i. Roadway Traffic

The FHWA highway traffic noise prediction model (FHWA RD-77-108) was used to evaluate future traffic-related noise conditions on highways and major roadways throughout the County. The resultant noise levels were weighed and summed over a 24-hour period in order to determine the L_{dn} values. The future average daily traffic (ADT) volumes for roadway segments in the project vicinity were used in the traffic noise impact analysis with the modeled receiver located 100 feet from the roadway centerline. The projected noise levels for highway traffic in the horizon year of 2030 are summarized in Table HS-10 and for major roadways are summarized in Table HS-11.



Table HS-10 FUTURE HIGHWAY TRAFFIC NOISE LEVELS*

Roadway Segment	ADT	Center-line to 70 L _{dn} (feet)	Center-line to 65 L _{dn} (feet)	Center-line to 60 L _{dn} (feet)	L _{dn} (dBA) 100 feet from Centerline	Increase in L _{dn} (dBA) over Cumulative No Project
Interstate 80						
State Route 50 to County Road 32A	127,000	325	698	1,501	78.8	0.1
Mace Boulevard to Solano County Line	102,300	282	604	1,299	77.8	0.0
Interstate 5						
Sacramento County Line to County Road 102	85,100	249	535	1,150	77.2	0.9
State Route 113 to County Road 13	59,600	197	422	907	75.7	1.1
County Road 13 to Interstate 505	45,600	165	353	759	74.5	2.4
Interstate 505 to Colusa County Line	71,500	222	476	1,024	76.5	3.2
Interstate 505						
State Route 128 to State Route 16	28,000	121	256	549	72.4	1.7
State Route 16 to County Road 14	26,400	116	246	528	72.2	4.0
State Route 113						
Solano County Line to Covell Boulevard	51,700	179	384	825	75.1	0.3
Covell Boulevard to Gibson Road	49,800	175	374	805	74.9	0.5
Interstate 5 to County Road 17	15,800	84	175	375	69.9	1.0
County Road 17 to County Road 13	5,200	< 50	63	135	63.9	0.6
County Road 13 to Sutter County Line	9,400	< 50	93	200	66.4	1.2
State Route 16						
County Road 98 to County Road 94B	16,400	63	135	290	68.8	0.6
County Road 94B to Interstate 505	13,900	56	121	259	68.1	1.0
Interstate 505 to County Road 87	23,000	78	168	363	70.3	0.5
County Road 87 to County Road 78	20,000	71	154	330	69.7	0.2
State Route 128						
Interstate 505 to Winters	12,500	< 50	80	173	65.5	-0.4
Winters to County Road 86	9,300	< 50	92	198	66.4	-0.3
State Route 84						
Clarksburg Road to West Sacramento	4,500	< 50	57	122	63.2	0.2
West Sacramento to State Route 50	35,400	104	225	484	72.2	0.0
State Route 50 to Interstate 80	28,400	90	194	417	71.2	0.1
State Route 45						
State Route 113 to Country Road 98A	1,300	< 50	< 50	54	57.8	0.0

*Cumulative (2030) Highway Traffic Noise Levels With Build-Out of Draft General Plan
 Source: LSA Associates, Inc., March 2009.



Table HS-11 FUTURE COUNTY ROADWAY TRAFFIC NOISE LEVELS*

Roadway Segment	ADT	Center-line to 70 L _{dr} (feet)	Center-line to 65 L _{dr} (feet)	Center-line to 60 L _{dr} (feet)	L _{dn} (dBA) 100 feet from Centerline	Increase in L _{dn} (dBA) over Cumulative No Project
County Road 85 - State Route 16 to County Road 14	2,000	< 50	< 50	5	55.6	5.2
County Road 85 - County Road 14 to County Road 8	1,000	< 50	< 50	< 50	52.6	1.5
County Road 87 - State Route 16 to County Road 19	600	< 50	< 50	< 50	50.4	0.0
County Road 89 - County Road 29A to County Road 27	10,300	< 50	7	152	62.7	2.8
County Road 89 - County Road 27 to County Road 24A	14,300	< 50	88	189	64.2	4.3
County Road 89 - County Road 24A to State Route 16	16,300	< 50	96	206	64.7	8.9
County Road 94B - State Route 16 to County Road 19	1,200	< 50	< 50	< 50	53.4	1.8
County Road 98 - Solano County to County Road 31	4,700	< 50	< 50	90	59.3	-0.2
County Road 98 - County Road 31 to County Road 29	7,000	< 50	55	118	61.1	0.2
County Road 98 - County Road 29 to County Road 27	8,000	< 50	60	128	61.6	0.4
County Road 98 - County Road 27 to County Road 24	7,900	< 50	59	127	61.6	0.6
County Road 98 - County Road 24 to State Route 16	9,200	< 50	66	141	62.3	0.4
County Road 98 - Main Street to Interstate 5	9,300	< 50	66	142	62.3	1.8
County Road 99 - County Road 31 to County Road 27	2,100	< 50	< 50	5	55.8	0.2
County Road 99 - County Road 27 to Gibson Road	2,700	< 50	< 50	6	56.9	0.0
County Road 101A - West Covell Blvd to County Road 29	7,200	< 50	56	120	61.2	0.3
County Road 102 - East Covell Blvd to County Road 29	11,400	< 50	76	163	63.2	0.1
County Road 102 - County Road 29 to County Road 27	14,900	< 50	90	194	64.3	0.3
County Road 102 - County Road 27 to Gibson Road	18,000	< 50	102	220	65.2	0.1
County Road 102 - Gibson Road to Interstate 5	28,900	65	140	302	67.2	-0.1
County Road 102 - Interstate 5 to County Road 17	17,600	< 50	101	217	65.1	0.8
County Road 102 - County Road 17 to County Road 113	12,900	< 50	82	177	63.7	0.3
County Road 105 - County Road 32A to County Road 28H	4,900	< 50	< 50	9	59.5	2.1
Old River Road - County Road 127 to County Road 118	15,200	< 50	92	197	64.4	2.0
Russell Boulevard - Interstate 505 to County Road 31	6,700	< 50	53	114	60.9	-0.2
County Road 31 - County Road 93A to County Road 95	7,300	< 50	56	121	61.2	0.1
County Road 31 - County Road 95 to County Road 98	8,200	< 50	61	131	61.8	0.3
County Road 29A - Interstate 505 to County Road 95	700	< 50	< 50	< 50	51.1	0.0
County Road 29 - County Road 95 to County Road 98	2,600	< 50	< 50	6	56.8	2.1
County Road 29 - State Route 113 to County Road 102	5,700	< 50	< 50	103	60.2	1.0
County Road 28H - County Road 102 to County Road 105	4,900	< 50	< 50	9	59.5	2.1
County Road 27 - Interstate 505 to County Road 95	3,900	< 50	< 50	80	58.5	0.6
County Road 27 - County Road 95 to County Road 98	3,500	< 50	< 50	74	58.1	-0.3
County Road 27 - County Road 98 to State Route 113	7,300	< 50	56	121	61.2	0.4
County Road 24 - County Road 90 to County Road 95	6,700	< 50	53	114	60.9	6.8
County Road 24 - County Road 95 to County Road 98	7,500	< 50	57	123	61.4	2.1
County Road 23 - County Road 85B to County Road 89	4,400	< 50	< 50	86	59.0	1.1
County Road 19 - County Road 87 to Interstate 505	4,400	< 50	< 50	86	59.0	3.2
County Road 19 - Interstate 505 to County Road 94B	2,500	< 50	< 50	59	56.6	0.8
County Road 16A - Interstate 5 to State Route 113	2,200	< 50	< 50	53	56.0	3.0
County Road 17 - State Route 113 to County Road 102	1,200	< 50	< 50	< 50	53.4	0.0
County Road 14 - County Road 85 to Interstate 505	2,300	< 50	< 50	56	56.2	3.6
County Road 14 - Interstate 505 to Interstate 5	1,700	< 50	< 50	< 50	54.9	2.3
County Road 13 - Interstate 5 to State Route 113	2,400	< 50	< 50	58	56.4	-1.0
County Road 12A - County Road 85 to Interstate 505	200	< 50	< 50	< 50	45.6	0.0
County Road 12A - Interstate 505 to County Road 99W	200	< 50	< 50	< 50	45.6	0.0

*Cumulative (2030) County Roadway Traffic Noise Levels With Build-Out of Draft General Plan
 Source: LSA Associates, Inc., March 2009.



- **Interstate 80.** Interstate 80, which traverses a portion of the county from Davis to the Sacramento County line, is projected to continue as the major source of roadway noise in Yolo County. Noise levels along Interstate 80 range from 74 to 75 dBA L_{dn} at 100 feet from the road centerline.
- **Interstate 5.** Interstate 5 travels through eastern Yolo County. Noise levels along Interstate 5 at 100 feet from the road centerline of Interstate 5 will range from 71 to 73 dBA L_{dn} , with the highest noise levels along roadway segments closest to the Sacramento County line.
- **Interstate 505.** Interstate 505 will continue to be a major source of roadway noise. Noise levels at 100 feet from the roadway centerline will range between 68 and 69 dBA L_{dn} . The segment near Winters experiences the highest volumes of traffic and levels of roadway noise along Interstate 505.
- **Highway 113.** Highway 113 provides a key north-south connection from Davis to Woodland, and north to Knights Landing. Its heavily traveled southern portions are expected to continue to be the greatest source of noise, with noise levels at 100 feet from the roadway centerline are 61 to 71 dBA L_{dn} . The noisiest segments will found close to the Solano County line.
- **Highway 16.** Highway 16 provides the major connection from Interstate 5 through Woodland, and northwest through the Capay Valley. Noise levels at 100 feet from the roadway centerline will range from 66 to 70 dBA L_{dn} . The highest noise levels will continue to be generally found on segments west of Interstate 505.
- **Highway 128.** Highway 128 connects from the Napa County line west through Winters to Interstate 505. Noise levels at 100 feet from the roadway centerline vary from 62 to 63 dBA L_{dn} , with highest volumes found to the immediate east of the Interstate 505 interchange.
- **Highway 84.** Highway 84 connects West Sacramento to the Clarksburg Area. The more southerly portions of the highway will continue to see much lower traffic volumes than in West Sacramento with correspondingly lower noise levels, at an estimated 60 dBA L_{dn} at 100 feet from the roadway centerline.
- **Highway 45.** Highway 45 branches off from Highway 113 in Knights Landing and parallels Highway 5 in northern Yolo County. The southern section of this highway between Country Road 108 and Country Road 98A will continue to experience low traffic noise levels at 100 feet from the centerline of up to 60 dBA L_{dn} .

In addition to these routes, a number of County roads will continue to be heavily traveled and generate relatively high noise levels along some or all of their length. Table HS-11 provides a summary of traffic noise modeling results for the County roads, based on projected traffic conditions, which consider allowed vehicle speeds, and average daily traffic volumes. As shown in the table, County roads with noise levels greater than 60 L_{dn} are expected to include County Roads 98, 101A, 102, 105, 31, 27, 19, and 13, in addition to Old River Road and Russell Boulevard. However, all of these



roadways are expected to be below 65 L_{dn}. Based on projected traffic volumes, all other roadway segments within Yolo County that are shown in the Circulation Element of this General Plan are expected to have existing traffic noise levels below 60 dBA L_{dn} at 100 feet from the roadway centerline.

ii. Aircraft

The Sacramento International Airport is expected to grow its services through 2020, the Airport's current planning horizon. The Airport plans to physically expand into neighboring properties, increase flight frequency for both passenger and cargo aircraft, and provide additional airport related infrastructure. As shown in Figure HS-19, the CNEL 65 dB contour is projected to cover 3,382 acres in 2020, all of which lies within Sacramento County.

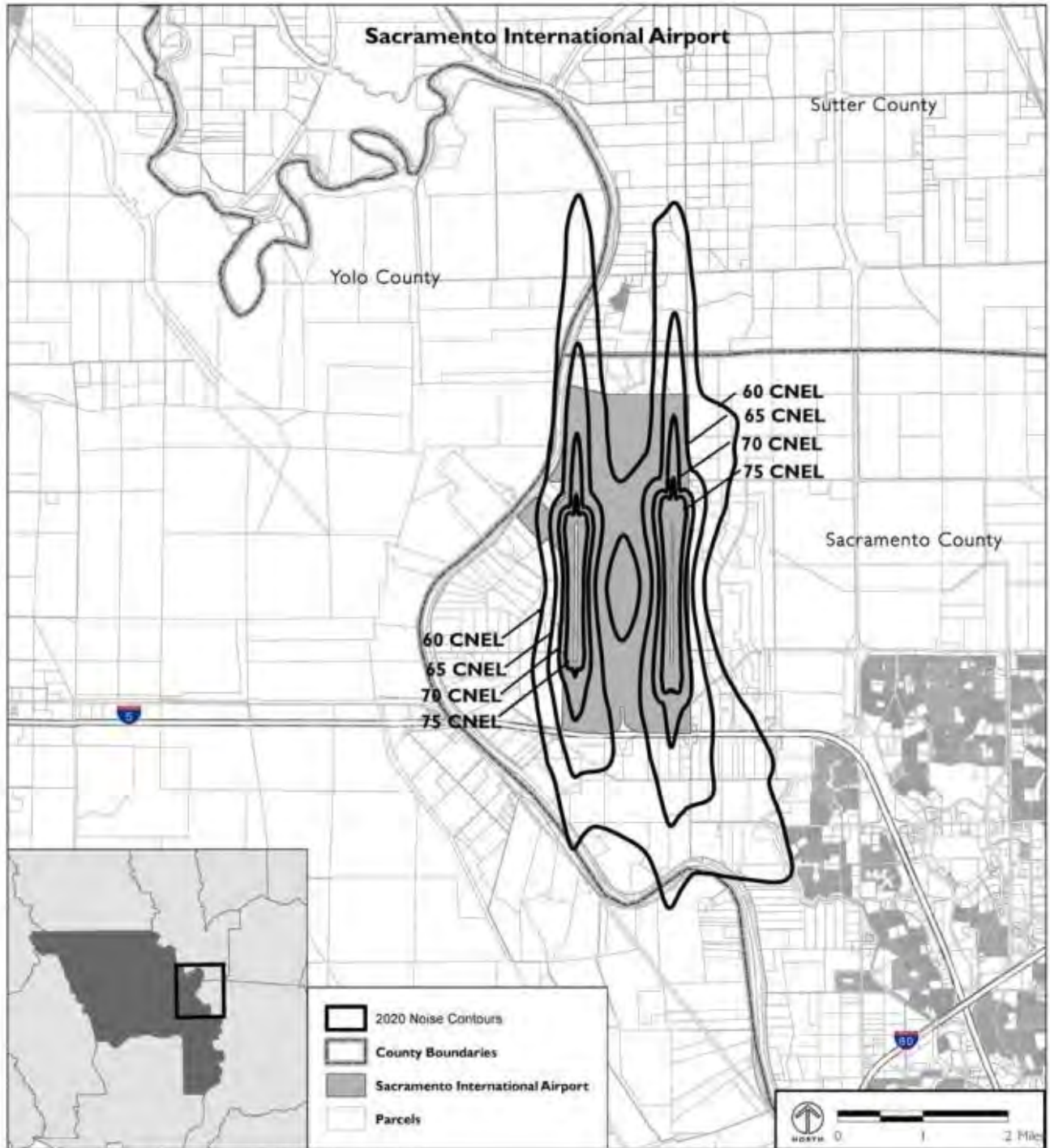
The Yolo County Airport is in its third and final stage of development, including expansion and improvements to the airport facility. The final phase of the project includes the development of a parallel connecting taxiway and holding apron, expected to be complete in 2015. It is expected that 145 airplanes will utilize the airport annually, operating some 101,000 incoming and outgoing flights each year. There are no incompatible uses located or planned within the CNEL 65 dB noise contours.⁸

As identified in the comprehensive land use plans for the Borges-Clarksburg Airport and the Watts-Woodland Airport, neither facility expects to add any substantial new facilities or increase airport traffic by a significant level. In addition, the University Airport has no planned expansions or increases of level of service.

⁸ Sacramento Area Council of Governments, Yolo County Airport Comprehensive Land Use Plan, October 1999, page 18.



FIGURE HS-19 SACRAMENTO INTERNATIONAL AIRPORT FUTURE NOISE CONTOURS





iii. Trains

There are no known plans for train traffic in Yolo County to increase during the time of this General Plan. However, in the event that train traffic does increase, noise associated with trains is unlikely to exceed that described in Section 3.c. of this element. The calculated existing conditions railroad noise levels evaluated a conservative scenario that assumed a “worst case” railroad operations scenario. The analysis assumed that the maximum estimated number of locomotives, rail cars, and train-passings per day for each of the railroad operators. Future railroad noise levels are not expected to increase over these calculated conservative existing conditions train-related noise levels.

b. Stationary Noise Sources

i. Mining Activities

The sand and gravel mining activities described in Section 8.b. of this element are expected to continue through 2027 under the existing off-channel mining permits approved for a 30-year period in 1997. Therefore, mining-related noise levels are not expected to increase over the levels discussed in Section 4.b. of this element. Prior to the completion of the 30-year period, the County is likely to consider the extension of off-channel mining into new aggregate reserves along Cache Creek. If the permits are extended, they will be subject to the goals, policies and actions of this element and to the noise regulations of the Off-Channel Mining Plan (OCMP).

ii. Farming Activities

Farming activities on agricultural land in Yolo County are strongly promoted in the General Plan and therefore expected to expand. Table LU-7 in the Land Use and Community Character Element estimates an increase of about 820 acres of stationery agricultural industrial and commercial uses e.g. grain operations, feed stores, wineries, etc) over the 320 acres of existing such uses operating within the County’s current base of about 600,000 acres of agriculturally designated land. There may also be resulting increases in intensity of agricultural activity and/or changes in crops or operations that may occur. This is not accounted for in Table LU-7. The sum total of this expected increase in all types of agricultural activity would have to result in an approximate doubling of existing noise sources for there to be a perceptible resulting increase in ambient noise levels above existing conditions. For example, twice the number of pieces of farming equipment operating at the same time on agricultural land would be necessary to produce a perceivable increase in ambient noise levels. This level of activity increase is not anticipated to occur.

c. Other

i. Commercial/Industrial Facilities and Plants

Commercial and industrial facilities, particularly related to processing of agricultural products, are expected to expand during the lifetime of this General Plan. They are likely to exceed the levels described in Section 4.c. of this element, but are unlikely to double on any particular site, making it unlikely that the expansion would result in a



perceivable increase in ambient noise levels. Expansion will be subject to the policies and actions in this element, which are designed to reduce conflicts between commercial and industrial uses and sensitive receptors.

ii. Construction

The amount of construction that will take place in Yolo County under this General Plan is likely to exceed the current amount of construction. However, the same types of construction noise described in Section 4.d. of this element is expected to occur with the construction that takes place in the future. New commercial, industrial and residential construction will be focused in Dunnigan, Esparto, Knights Landing, Madison, Elkhorn and around highway interchanges, with more limited development in Monument Hills, Yolo and Zamora. In each of these locations, construction noise will be within the limits described in Section 4.d. of this element and subject to the policies of this element.

6. Policy Framework

GOAL HS-7	<u>Noise Compatibility.</u> Protect people from the harmful effects of excessive noise.
------------------	--

Policy HS-7.1 Ensure that existing and planned land uses are compatible with the current and projected noise environment. However, urban development generally experiences greater ambient (background) noise than rural areas. Increased density, as supported by the County in this General Plan, generally results in even greater ambient noise levels. It is the County's intent to meet specified indoor noise thresholds, and to create peaceful backyard living spaces where possible, but particular ambient outdoor thresholds may not always be achievable. Where residential growth is allowed pursuant to this general plan, these greater noise levels are acknowledged and accepted, notwithstanding the guidelines in Figure HS-16.

Policy HS-7.2 Ensure the compatibility of permitted land use activities within the Primary Delta Zone with applicable noise policies of the Land Use and Resource Management Plan of the Delta Protection Commission.

Policy HS-7.3 Protect important agricultural, commercial, industrial, and transportation uses from encroachment by land uses sensitive to noise and air quality impacts.

Policy HS-7.4 For proposed new discretionary development, where it is not possible to reduce noise levels in outdoor activity areas to 60 dB CNEL or less using practical application of the best-available noise reduction measures, greater exterior noise levels may be allowed, provided that all available reasonable and feasible exterior noise level reduction measures have been implemented.



- Policy HS-7.5 Minimize the impact of noise from transportation sources including roads, rail lines, and airports on nearby sensitive land uses.
- Policy HS-7.6 Support improvements to at-grade crossings to eliminate the need for train whistle blasts in, near, or through communities.
- Policy HS-7.7 Encourage railroad companies to adopt operational strategies that reduce the potential for noise and interrupted traffic flow.
- Policy HS-7.8 Encourage local businesses to reduce vehicle and equipment noise through fleet and equipment modernization or retrofits, use of alternative fuel vehicles and installation of mufflers or other noise reducing equipment.

7. Implementation Program

Action HS-A61 Adopt a comprehensive Noise Ordinance that includes the following components:

- Standards for acceptable exterior and interior noise levels, their applicability and any specific exceptions to those standards.
- Guidelines and technical requirements for noise measurements and acoustical studies to determine conformance with provisions of the ordinance.
- Standards for construction equipment and noise-emitting construction activities.
- Regulations for the noise generated by events, including truck loading and unloading, operation of construction equipment, and amplified music.
- Standards to implement “quiet” pile driving technology (such as pre-drilling of piles, the use of auger cast piles, or similar technology) where feasible in consideration of geotechnical and structural requirements and conditions. (DEIR MM NOI-4) (Policy HS-7.1, Policy HS-7.4, Policy HS-7.5)

Responsibility: Department of Community Services

Timeframe: 2010/2011

Action HS-A62 Regulate the location and operation of land uses to avoid or mitigate harmful or nuisance levels of noise to the following sensitive receptors: residentially designated land uses; hospitals, nursing/convalescent homes, and similar board and care facilities; hotels and lodging; schools and day care centers; and neighborhood parks. Home occupation uses are excluded. (Policy HS-7.1, Policy HS-7.4)



Responsibility: Department of Community Services
Timeframe: Ongoing

Action HS-A63 Review proposed development projects for compatibility with surrounding and planned uses in accordance with the Noise Compatibility Guidelines and the County's Right to Farm Ordinance; however these guidelines shall not be applied to outdoor activity areas nor shall they be used to prohibit or preclude otherwise allowed density and intensity of development. (Policy HS-7, Policy HS-7.4)

Responsibility: Department of Community Services
Timeframe: Ongoing

Action HS-A64 Require the preparation of a noise analysis/acoustical study, including recommendations for attenuation, for all proposed projects which may result in potentially significant noise impacts to nearby sensitive land uses. (Policy HS-7.1, Policy HS-7.4)

Responsibility: Department of Community Services
Timeframe: Ongoing

Action HS-A65 Require a noise analysis/acoustical study, with recommendations for attenuation, for all proposed development within noise-impacted areas that may reasonably be expected to be exposed to levels that exceed the appropriate Noise Compatibility Guidelines standards. (Policy HS-7.1, Policy HS-7.4)

Responsibility: Department of Community Services
Timeframe: Ongoing

Action HS-A66 Require architectural design and site planning techniques to meet interior noise attenuation requirements in a manner that does not discourage allowed density or intensity, architectural quality, or pedestrian connectivity, such as:

- Locating noise-sensitive interior spaces, such as living rooms and bedrooms, furthest from noise sources.
- Orienting buildings to shield noise sensitive outdoor spaces from a noise source.
- Using noise insulating windows and building materials.
- Providing open space, berms or walls, or landscaped areas between occupied dwellings and noise generators.
- Locating dwellings as far as possible from noise generators.
- Requiring effective sound barriers for new residential developments adjacent to existing freeways and highways.



- Avoid sound wall to the greatest possible extent. Where used, sound walls shall be screened with vegetation, berms and similar methods of mitigation, and shall be screened with a landscape buffer. (Policy HS-7.1, Policy HS-7.4)

Responsibility: Department of Community Services

Timeframe: Ongoing

Action HS-A67 Limit land uses, consistent with adopted Comprehensive Land Use Plans (CLUP), within identified airport safety zones. (Policy HS-7.1)

Responsibility: Department of Community Services

Timeframe: Ongoing

Action HS-A68 Refer proposed development projects within areas requiring airport land use compatibility review to the Airport Land Use Commission. (Policy HS-7.1)

Responsibility: Department of Community Services

Timeframe: Ongoing

Action HS-A69 Designate appropriate zoning that avoids placing significant new noise sensitive land uses in proximity of existing or planned commercial and industrial uses. (Policy HS-7.1)

Responsibility: Department of Community Services

Timeframe: Ongoing

Action HS-A70 Minimize noise conflicts between current and proposed transportation networks by encouraging compatible land uses around critical segments with higher noise potential. (Policy HS-7.1)

Responsibility: Department of Community Services

Timeframe: Ongoing

Action HS-A71 Designate and maintain established truck routes where noise conflicts with land uses are least likely to occur. (Policy HS-7.1, Policy HS-7.5)

Responsibility: Department of Community Services

Timeframe: Ongoing

Action HS-A72 Identify locations and work with the California Department of Transportation to mitigate freeway noise that adversely affects unincorporated residential land uses. (Policy HS-7.5)

Responsibility: Department of Community Services

Timeframe: Ongoing

Action HS-A73 Minimize potential noise conflicts by establishing compatible land uses and larger setbacks adjoining truck routes and other critical transportation corridors that tend to generate greater levels of noise. (Policy HS-7.1, Policy HS-7.5)



Responsibility: Department of Community Services Timeframe:
Ongoing

Action HS-A74 Where feasible, utilize alternative road surfacing materials that minimize vehicle noise. (Policy HS-7.1, Policy HS-7.5)
Responsibility: Department of Community Services
Timeframe: Ongoing



Herbert Bauer Building

Source: Yolo County

E. Health Care

1. Background Information

The Yolo County Health Department provides detection and prevention of communicable diseases, public health laboratory services, emergency preparedness, health education, immunizations, and registration of births and deaths; it also supports and monitors special programs for families with children, senior citizens and other populations with special health needs and provides medical care to the medically indigent residents of Yolo County. In addition, the Yolo County Department of Alcohol, Drug and Mental Health Services provides such services through outpatient clinics and Regional Resource Centers in Woodland, West Sacramento, and Davis, school-based sites, and through a network of community agencies and independent providers.



The County has two main hospitals and multiple smaller medical clinics. The locations of medical facilities in Yolo County are shown in Figure PF-5. The two hospitals in Yolo County are:

- Woodland Memorial Hospital, run by Catholic Healthcare West
- Sutter Davis Hospital

These two hospitals are non-profit, provide emergency services and feature state-of-the-art medical technology.

Non-profit medical clinics in Yolo County include CommuniCare Health Centers, Esparto Family Practice, Winters Healthcare and the Cowell Student Health Center. CommuniCare Health Centers, Winters Healthcare and Esparto Family Practice offer affordable and culturally appropriate health care services for Yolo County residents who are low-income and uninsured or underinsured. Each city in Yolo County has one of these clinics. The CommuniCare Health Care Center in Knights Landing is closing due to state funding cuts. The Cowell Student Health Center, on the UC Davis Campus, provides basic services to University students. Multiple private clinics and health care providers, most associated with Woodland Healthcare, Sutter Davis Hospital, Kaiser or UC Davis Medical Center, offer outpatient care in each of the cities in Yolo County. Most of their subspecialty care is referred to higher level facilities in Sacramento.

Yolo County's residents are generally healthy, with lower incidence of disease and other health indicators in Yolo County in comparison with the State at large.⁹ However, this is variable by city, with Davis, which is a university city, having a much healthier and better insured population. A list of prominent health issues in Yolo County include:

- Mental health care access for children
- Dental care for low-income children
- Access to medical specialists for under or uninsured residents
- Drug and alcohol use
- Obesity
- Lack of transportation from rural areas
- Lack of affordable housing
- Lack of affordable childcare
- Lack of transportation as a health access issue
- Lack of organized after-school activities for teens
- Lack of affordable health care for farm families, agricultural workers, and undocumented workers.

This General Plan addresses transportation (in the Circulation Element), housing (in the Housing Element), childcare (in the Public Facilities and Services Element), and general community health and fitness (in this element and in the Land Use and Community Character Element).

⁹ California Department of Public Health, *2007 County Health Status Profiles*, Yolo County Data Sheet.



2. Policy Framework

GOAL HS-8	<u>Health Care.</u> Create a community environment that supports individual and social health.
------------------	---

- Policy HS-8.1 Require community design that provides opportunities for safe, healthy, and easily accessible community interaction.
- Policy HS-8.2 Support efforts to provide basic health care and mental health services in each community.
- Policy HS-8.3 Strive to ensure that reasonable access to adequate primary, preventative and specialty health, dental and mental care is available throughout Yolo County.
- Policy HS-8.4 Accommodate the health needs of special populations, including the elderly and disabled.
- Policy HS-8.5 Encourage supportive housing, residential board and care, group homes, and hospice care in all communities.
- Policy HS-8.6 Maintain a range of social services for families and individuals.
- Policy HS-8.7 Protect vulnerable populations including youth, the elderly, and disabled.
- Policy HS-8.8 Design communities to promote an active healthy lifestyle, personal fitness, and access to healthy foods.
- Policy HS-8.9 Encourage builders to incorporate universal building design techniques that enable seniors and persons with disabilities to remain in their homes.
- Policy HS-8.10 Support State and Federal efforts to provide health care for all populations.
- Policy HS-8.11 Ensure that the County is prepared for health emergencies or disasters which affect the health of the community.

3. Implementation Program

- Action HS-A75 Promote and support cross-cultural education and awareness of the importance of a regular healthcare provider and preventive health care. (Policy HS-8.2, Policy HS-8.7)



Responsibility: Health Department
Timeframe: Ongoing

Action HS-A76 Work with non-profit and other service providers to expand priority services identified in the upcoming Maternal, Child and Adolescent Health (MCAH) 5-Year Action Plan and other health-oriented community assessments. (Policy HS-8.2, Policy HS-8.3, Policy HS-8.7)

Responsibility: Health Department, Department of Alcohol, Drug and Mental Health Services Department
Timeframe: Ongoing

Action HS-A77 Coordinate with hospitals and local physicians to expand the availability of health care services within the County's unincorporated communities and services to all residents throughout the County, especially the medically indigent. (Policy HS-8.2, Policy HS-8.3) 🌐

Responsibility: Health Department
Timeframe: Ongoing

Action HS-A78 Allow for services and housing for special populations to be linked to ensure convenient access. (Policy HS-8.4) 🌐

Responsibility: Department of Employment and Social Services, Department of Alcohol, Drug and Mental Health Services Department, Health Department
Timeframe: Ongoing

Action HS-A79 Provide opportunities to expand in-home care, assisted living opportunities, and services for low-income seniors and disabled households. (Policy HS-8.4)

Responsibility: Department of Employment and Social Services
Timeframe: Ongoing

Action HS-A80 Expand support services for aging members of the population to meet the needs of the county's growing older population. (Policy HS-8.4)

Responsibility: Department of Employment and Social Services
Timeframe: Ongoing

Action HS-A81 Accommodate pedestrian, bicycle, and transit needs in public rights-of-way and streetscape design. (Policy HS-8.1, Policy HS-8.8) 🌐

Responsibility: Department of Community Services
Timeframe: Ongoing

Action HS-A82 Adopt infrastructure standards for residential neighborhoods and downtown commercial areas that are designed to decrease traffic



speeds and increase pedestrian and bicycle safety. (Policy HS-8.1, Policy HS-8.8) 🌐

Responsibility: Department of Community Services

Timeframe: Ongoing

Action HS-A83 Require that new development incorporates a diversity of housing types that address residents with different incomes, family sizes, ages, and accessibility needs. (Policy HS-8.9)

Responsibility: Department of Community Services

Timeframe: Ongoing

Action HS-A84 Emphasize pedestrian oriented neighborhoods with connected sidewalks and trails that provide convenient access to goods, services, and community resources. (Policy HS-8.1, Policy HS-8.8) 🌐

Responsibility: Department of Community Services

Timeframe: Ongoing

Action HS-A85 Promote community design that creates a compatible and integrated balance of residential density, green space, and job centers. (Policy HS-8.1) 🌐

Responsibility: Department of Community Services

Timeframe: Ongoing

Action HS-A86 Consider the health consequences of proposed project design, as a part of the development review process. (Policy HS-8.1, Policy HS-8.8) 🌐

Responsibility: Department of Community Services, Health Department

Timeframe: Ongoing

Action HS-A87 Ensure that zoning requirements accommodate and encourage opportunities for services to be established in each community to serve vulnerable populations. (Policy HS-8.4) 🌐

Responsibility: Department of Community Services

Timeframe: Ongoing

Action HS-A88 Work with local organizations to promote health education and recreational activities for youth. (Policy HS-8.2 through HS-8.4, Policy HS-8.6, Policy HS-8.7)

Responsibility: Health Department

Timeframe: Ongoing

Action HS-A89 Ensure that zoning requirements promote access to healthy foods by including neighborhood locations for markets, restaurants and other food sources. (Policy HS-8.1, Policy HS-8.8)



Responsibility: Department of Community Services, Health Department

Timeframe: 2009/2011 Action HS-A90 Encourage patterns of development that provide ready access to healthy foods through farmer's markets, community gardens, edible landscaping, etc. (Policy HS-8.1, Policy HS-8.8)

Responsibility: Department of Community Services, Health Department

Timeframe: Ongoing

Action HS-A91 Ensure training in public health competencies for all appropriate County staff to serve as public health disaster workers. (Policy HS-8.11)

Responsibility: Health Department

Timeframe: Ongoing

Action HS-A92 Ensure well-organized and efficient emergency coordination between health organizations, government, and community emergency response agencies. (Policy HS-8.11)

Responsibility: Health Department

Timeframe: Ongoing

Action HS-A93 Prepare for and coordinate expanding public health and medical services capacity in times of emergency and surge demands. (Policy HS-8.11)

Responsibility: Health Department

Timeframe: Ongoing

Action HS-A94 Encourage schools, hospitals, colleges, government agencies, businesses and private food outlets such as grocery stores and restaurants, to provide health care information, education, and services to the community. (Policy HS-8.2)

Responsibility: Health Department

Timeframe: Ongoing

EXHIBIT B. REDLINED VERSIONS OF CURRENT LAND USE AND COMMUNITY CHARACTER ELEMENT, CONSERVATION AND OPEN SPACE ELEMENT, AND HEALTH AND SAFETY ELEMENT OF THE GENERAL PLAN

3 LAND USE AND COMMUNITY CHARACTER ELEMENT



Countryside Community Church in Esparto

Source: April Farnham-Morrison

This element seeks to preserve and foster the rural character of the County. The County has challenged itself to determine how small its communities can remain and yet still be sustainable in terms of infrastructure, balanced in terms of housing and jobs, and healthy in terms of quality of life and community services. Each existing rural town was examined in this manner and a modest amount of growth has been proposed for some areas. This element also establishes goals for regional collaboration and equity, green building standards, sustainable community design and net community benefits from new growth. Growth boundaries have been established for every community and each of the four cities.



A. Introduction

1. Context

From a land use perspective, this General Plan continues the County's strong focus on protecting our agricultural and open space resources, commodities and identity; resisting urbanization; and directing growth into the existing incorporated cities and towns. For the past 50 years, these policies have been tremendously successful. Over 93 percent of the County remains in farmland and open space, despite intense development pressures from both the Sacramento and Bay Area metropolitan areas. Although Yolo County is 39th in size among the 58 California counties, as of 2006 it ranked 23rd in total crop value. In particular, the County continues to be among the State leaders in tomato, hay, honeydew, and organic crop production, and has a rapidly growing wine grape industry. The management of growth has been equally successful. The cities and towns in the County house 93 percent of the population, but account for less than 6 percent of the total area. As a result, Yolo County has retained and strengthened its identity as a place of small and modest urban areas, vast open lands and innovative government.

As Yolo County looks ahead to the next 20 years, these issues will become even more important to ensure sustainable communities, a reliable food supply and a healthy environment. However, this vision needs to expand to address new challenges. First, the small unincorporated towns require significant new investment in basic infrastructure and amenities to serve existing populations and revitalize existing commercial areas. Second, the local economy needs to diversify beyond its reliance on agriculture, to provide a more stable job market and increase government revenue streams. Third, the County and local special districts need to improve the cost-effectiveness of service delivery. Fourth, Yolo County needs to adopt development standards and designs that account for and help to reduce future climate change. Consequently, this General Plan embraces the following strategies:

1. Modest managed growth within specified existing unincorporated communities, where accompanied by improvements to existing infrastructure and services, as well as by suitable new infrastructure and services.
2. Opportunities for revenue-producing and job-producing agricultural, industrial and commercial growth in limited locations and along key transportation corridors.
3. Thresholds that allow for effective and efficient provision of services, consistent with rural values and expectations.
4. New emphasis on community and neighborhood design requirements that reflect "smart growth" principles and complement the character of existing developed areas.



2. Contents

This element addresses land use issues throughout Yolo County including:

1. Range and balance of land uses (Goal LU-1)
2. Agricultural preservation¹ (Goal LU-2)
3. Growth management (Goal LU-3)
4. Delta land use and resource management (Goal LU-4)
5. Equitable land use decisions (Goal LU-5)
6. Intra-County coordination (Goal LU-6)
7. Regional coordination (Goal LU-7)
8. Environmental justice (Goal LU-8)

This element addresses community character issues throughout Yolo County including:

1. Preservation of rural character (Goal CC-1)
2. Community planning (Goal CC-2)
3. Planned growth (Goal CC-3)
4. Project design (Goal CC-4)

This element contains the following sections: Introduction, Regulatory Framework, Policy Framework and Implementation Program. Within the Policy Framework and Implementation Program sections, policies and actions related to climate change are denoted with the symbol “🌍”.

3. Background Information

The 1983 General Plan included 75 separate land use designations for the unincorporated county. Table LU-1 (1983 Yolo County General Plan Land Use Designations and Acreages) is provided at the end of this Element and identifies acreages assigned to each of these designations in the prior General Plan and groups them by category.

Table LU-2 (1983 Yolo County General Plan Land Use Designations by Community Area) provides a breakdown of planned land uses under the prior General Plan, grouped by land use type and community area.

Table LU-3 (Summary of General Plan Land Use Designations and Acreages Countywide) provides countywide background information showing the current General Plan land use buildout for each of the four cities, with the 1983 General Plan land use buildout for the County unincorporated area.

¹ Also addressed in greater detail in the Agriculture and Economic Development Element.



Table LU-2 **1983 YOLO COUNTY GENERAL PLAN LAND USE DESIGNATIONS BY COMMUNITY AREA**

	Residential ^a	Jobs and Services ^b	Agriculture and Open Space	Totals
Community Areas				
Capay Valley ^c	70.5	1,010.7	102,730.0	103,811.2
Clarksburg	101.4	141.3	34,703.3	34,946.1
Dunnigan	408.0	280.1	3,179.5	3,867.6
Esparto	355.9	226.4	2,900.3	3,482.6
Knights Landing	104.4	240.0	3.1	347.6
Madison	26.9	23.7	30.3	80.9
Monument Hills	1,258.6	85.3	252.0	1,595.9
Yolo	76.8	34.1	2.0	112.9
Zamora	14.3	2.5	6.5	23.3
<i>Subtotals</i>	<i>2,416.8</i>	<i>2,044.1</i>	<i>143,807.0</i>	<i>148,268.0</i>
Other Areas				
Davis Area ^e	615.2	479.4	4,353.1	5,447.7
Outlying ^d	123.0	490.0	1,521.7	2,134.7
West Sac Area	0	0	0	0
Winters ^f	33.6	33.1	0	66.7
Woodland Area ^g	48.2	513.9	508.5	1,070.6
<i>Subtotals</i>	<i>820.0</i>	<i>1,516.4</i>	<i>6,383.3</i>	<i>8,719.7</i>
Remaining Unincorporated	0	8,160.2	456,077.1	464,237.3
Acreage Totals	3,236.8	11,720.7	606,267.4^h	621,224.0ⁱ

Notes: Units are in acres.

^a Residential = Residential Rural, Residential Low, Residential Medium and Residential High.

^b Jobs and Services = Commercial General, Commercial Local, Industrial, Public and Quasi-Public, Mixed, Parks and Recreation and Other.

^c Includes land uses in the towns of Capay, Guinda, Rumsey and Tribal lands.

^d Cache Creek Open Space, County Airport and Elkhorn.

^e Covell/Pole Line Road, Binning Farms, North Davis Meadows, Patwin Road, Jury Industrial, UC Davis, Royal Oaks MHP, Willow Bank, El Macero and Chiles Road.

^f El Rio Villa and Putah Creek Recreational Vehicle Park.

^g Spreckels, North Woodland, Willow Oak and East Woodland.

^h As allowed under the existing General Plan and based on past trends. General Plan buildout is assumed to include approximately 1,610 farm dwellings and approximately 520 acres of agricultural industrial or agricultural commercial development on Agricultural land.

ⁱ Minor differences in total due to rounding.

Source: 1983 Yolo County General Plan.



**Table LU-3 SUMMARY OF GENERAL PLAN LAND USE DESIGNATIONS AND ACREAGES
COUNTYWIDE (AS OF 2007)**

Land Use Categories	Incorporated Area (Current)						Unincorp.		
	Davis	W. Sac	Winters	Woodland	Incorp. Subtotal	%	Area (1983)	Acreage Total	%
Open Space	299	2,185	104	754	3,342	10.3	2,722	6,064	1.0
Agriculture	0	0	0	0	0	0.0	603,544	603,544	92.3
Recreation	402	322	45	252	1,021	3.2	1,121	2,142	0.3
Residential	3,940	4,316	770	4,169	13,195	40.8	3,237	16,432	2.5
Commercial	493	633	122	727	1,975	6.1	406	2,381	0.4
Industrial	433	2,656	75	2,281	5,445	16.8	1,195	6,640	1.0
Public	548	730	370	1,329	2,977	9.4	694	3,671	0.6
Mixed Use	11	889	50	0	950	2.9	145	1,095	0.2
Other	229	2,992	93	106	3,420	10.6	8,160	11,580	1.8
Subtotals	6,355	14,723	1,629	9,618	32,325	100%	621,224	653,549	100%

Notes: Units are in acres.

Source: City Planning Directors and 1983 Yolo County General Plan.

B. Regulatory Framework

1. State General Plan Requirements

State law (Section 65302a of the Government Code) mandates that the land use element contain the following key topics:

- Proposed general distribution, location and extent of land uses.
- Population density and building intensity by land use.
- Areas subject to flooding, including annual review of those areas.
- A designated land use category for timberland production.
- A consideration of the impact of new growth on land adjacent to military facilities and underlying military airspace.

State law (Section 65302.4 of the Government Code) also allows land use elements to address urban form and design including:

- Differentiating between neighborhoods, districts and corridors.
- Providing for a mixture of land uses and housing types within neighborhoods, districts and corridors.
- Providing specific measures for regulating relationships between buildings and between buildings and outdoor public areas including streets.



State law requires that General Plans address environmental justice, either as a stand-alone element or integrated into other elements. The environmental justice goals, policies, and objectives shall:

- Identify objectives and policies to reduce the unique or compounded health risks in disadvantaged communities (a disadvantaged community is an area identified by the California Environmental Protection Agency (CalEPA) pursuant to Section 39711 of the Health and Safety Code or an area that is a low-income area that is disproportionately affected by environmental pollution and other hazards that can lead to negative health effects, exposure, or environmental degradation) by means that include, but are not limited to, the reduction of pollution exposure, including the improvement of air quality, and the promotion of public facilities, food access, safe and sanitary homes, and physical activity.
- Identify objectives and policies to promote civic engagement in the public decision-making process.
- Identify objectives and policies that prioritize improvements and programs that address the needs of disadvantaged communities.

State law provides that the County can address these items in any format and is required to address them only to the extent that they are relevant in the County. Section 65301a of the Government Code indicates that the General Plan may be adopted in any format deemed appropriate or convenient by the Board of Supervisors, including the combining of elements. Section 65301c goes on to clarify that the County is required to address each of these items only to the extent that the subject of the element exists in the planning area.

In light of this, Yolo County has addressed all of the above items within this element, with the following exceptions:

- Flooding: Areas subject to flooding from a major (100 or 200-year) event and the requirement for annual review are addressed in the Health and Safety Element. Localized flood issues and storm drainage are addressed in the Public Facilities and Services Element.
- Timber Harvesting: A land use category for timberland production is not provided as the County has no timberland production areas.
- Military Facilities: The impact of new growth on military readiness activities is not addressed as the only military facility in the County, the McClellan/Davis Telecommunication Site, has been declared surplus by the Army and is now closed. Discussion regarding this facility and plans to convert it to a County open space facility are addressed in the Conservation and Open Space Element
- Land Use Planning Boundaries: All lands within the Yolo County boundary are within the Yolo County General Plan Area. However, the County does not have jurisdiction over the following, even though they are within the County boundary: federal lands,



State lands, University of California land, tribal trust land, incorporated cities, and, in many cases, lands owned by special districts such as school districts.

2. Land Use Designations

The land use designations listed below are utilized in this General Plan. Table LU-4 (Land Use Designations) is provided at the end of this Element and identifies the allowed uses, densities and intensities for each proposed new land use designation.

- Open Space (OS)
- Agriculture (AG)
- Parks and Recreation (PR)
- Residential Rural (RR)
- Residential Low (RL)
- Residential Medium (RM)
- Residential High (RH)
- Commercial General (CG)
- Commercial Local (CL)
- Industrial (IN)
- Public and Quasi-Public (PQ)
- Specific Plan (SP)
- Delta Protection Overlay (DPO)
- Natural Heritage Overlay (NHO)
- Agricultural District Overlay (ADO)
- Mineral Resource Overlay (MRO)
- Tribal Trust Overlay (TTO)

These base land uses consolidate and replace land use designations used in the 1983 General Plan and in many cases consolidate and replace designations used in various area plans. Table LU-1 identifies how the prior 1983 land use designations correspond to the new proposed land use designations. The 1983 combining designations are replaced with the overlay designations defined in this table.

3. Land Use Maps and Tables

Figure LU-1A is the Land Use Diagram for Yolo County. Figures LU-1B through LU-1G show each community in the County and are found at the end of the Element. This figure depicts the assignment of land use designations to all land within the County. Interpretive guidance and administrative procedures to assist with utilization of this figure are provided in Chapter 1.0 (Introduction and Administration) of this General Plan. Table LU-5 (2030



Yolo County General Plan Land Use Designations and Acreages) provides acreages assigned to each land use designation in this General Plan.

4. Spheres of Influence

This General Plan includes lands that are in unincorporated Yolo County but fall within the “spheres of influence” (SOIs) of the four incorporated cities. Every city in California has an SOI, although in some cases it is coterminous with the city’s corporate boundaries. Figure LU-1.1 provides the Spheres of Influence for each of the four Yolo County cities.

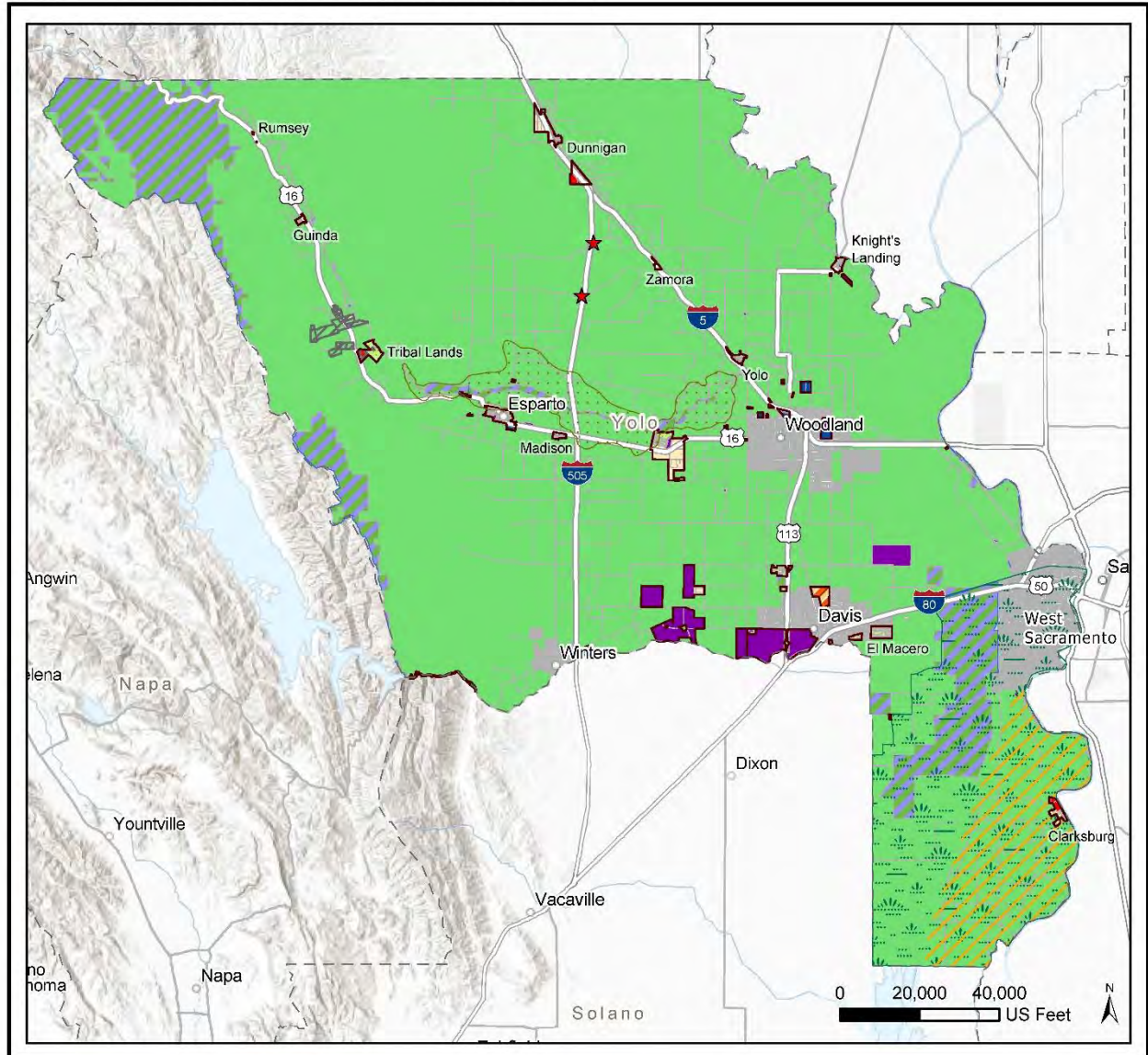
SOIs are adopted by the Local Agency Formation Commission (LAFCO) in each County. County LAFCOs were created by the State in 1963 to coordinate logical changes in local governmental boundaries in order to promote efficient provision of services, prevent urban sprawl and preserve agriculture and open space. Each LAFCO is responsible for adopting a sphere of influence for each city and special district in its County to represent “the probable physical boundaries and service area,” as required by California Government Code Section 56076.²

² State of California General Plan Guidelines, Governor’s Office of Planning and Research, 2003, page 10.



COUNTY OF YOLO
2030 COUNTYWIDE GENERAL PLAN
LAND USE AND COMMUNITY CHARACTER ELEMENT

FIGURE LU-1A GENERAL PLAN LAND USE MAP



- | | | |
|---|---|--|
| Agriculture (AG) | Commercial General (CG) | Tribal Trust Overlay (TTO) |
| Open Space (OS) | Commercial Local (CL) | Clarksburg Agricultural District Overlay (ADO) |
| Parks and Recreation (PR) | Industrial (IN) | Delta Protection Overlay (DPO) |
| Residential Rural (RR) | Public and Quasi-Public (PQ) | Mineral Resource Overlay (MRO) |
| Residential Low (RL) | Specific Plan (SP) | |
| Residential Medium (RM) | Cities | |
| Residential High (RH) | Growth Boundaries | |
| | | ★ 15 acres of Commercial General will be located at one of these two sites |

Source: Yolo County GIS

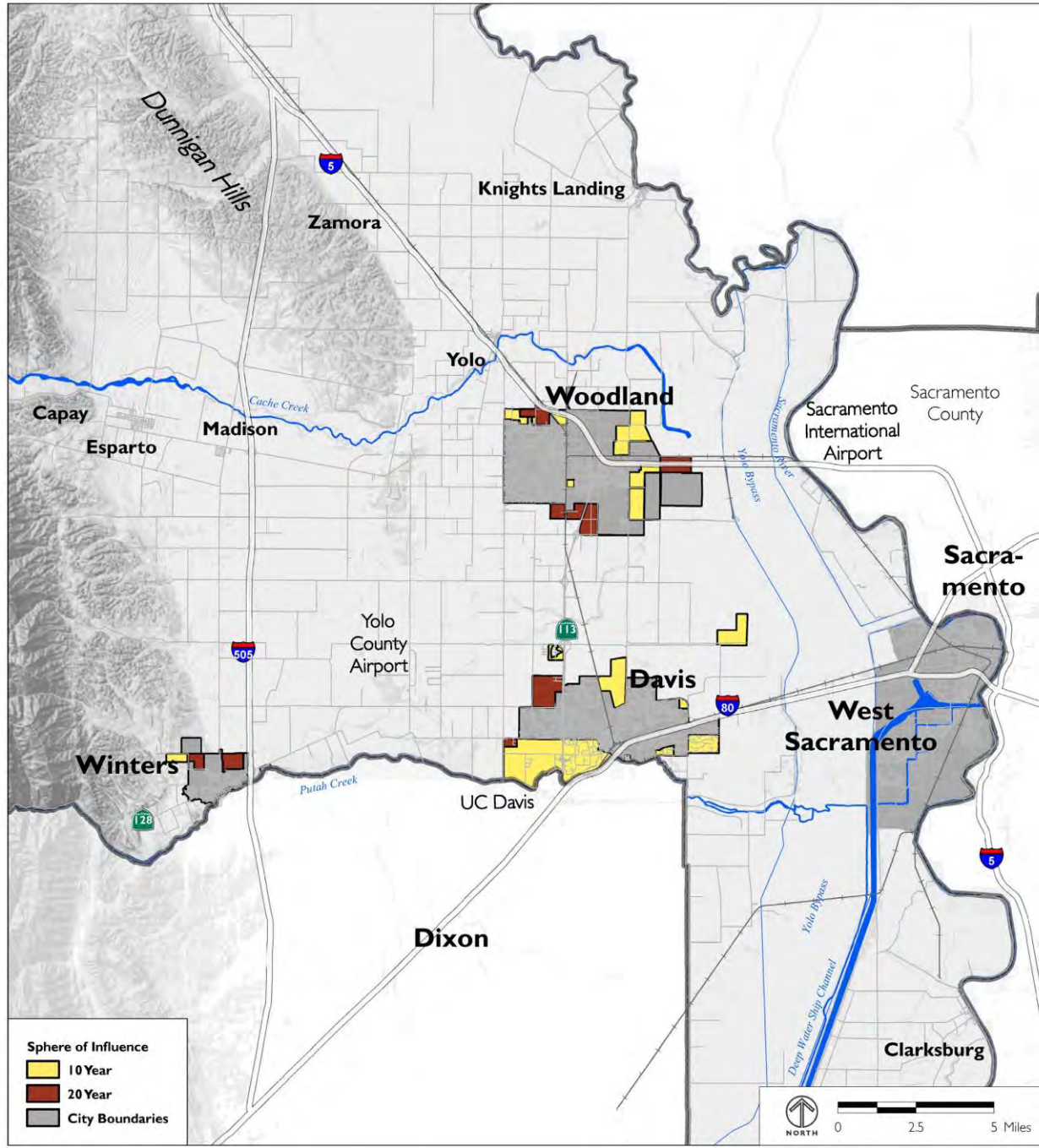


Table LU-5 2030 YOLO COUNTY GENERAL PLAN LAND USE DESIGNATIONS AND
ACREAGES

Land Use Designation	Acreage
Open Space	51,445
Agriculture	546,195
Parks and Recreation	890
Residential Rural	1,783
Residential Low	1,163
Residential Medium	162
Residential High	28
Commercial General	529
Commercial Local	118
Industrial	658
Public and Quasi-Public	7,334
Specific Plan	384
<i>Subtotal</i>	<i>610,689</i>
Incorporated Cities	32,325
Rights-of-Way	8,589
County Total	653,549
Specific Plan Area	
Covell Specific Plan	384
<i>Specific Plan Area Total</i>	<i>384</i>
Overlays	
Tribal Trust Overlay	483
Mineral Resource Overlay	18,452
Clarksburg Agricultural Overlay	35,171
Delta Protection Overlay	73,053



FIGURE LU-1.1 SPHERE OF INFLUENCE BOUNDARIES



Source: Yolo County GIS, 2009.



Many cities choose to designate land uses within their SOI areas on their General Plan Land Use Designation Map in order to express desired municipal land uses for those areas. The General Plans for West Sacramento, Davis, Woodland and Winters include land use designations for lands outside of their city limits, but inside their respective SOIs. Because these lands are legally under the County's jurisdiction, they are also included in the Yolo County General Plan and given land use designations in this General Plan. The designation in the County General Plan of lands within the SOI may differ from the designations shown in the City General Plan. Until SOI areas are annexed into a city's boundaries, the controlling land use designations for purposes of development are those of the County.

5. Growth Boundaries

This General Plan includes identified growth boundaries for all community and other outlying areas of the unincorporated County. These growth boundaries are shown in Figures LU-2A through LU-1H and defined as a boundary around the outer perimeter of each area of non-agriculturally designated land within the County. For the incorporated cities, the SOI boundaries are identified as the growth boundary for that City.

6. Relationship to the Yolo County Zoning Code

Title 8 (Land Development and Zoning) of the Yolo County Code contains the primary land development regulations of the County, including the Zoning Code. These regulations implement the General Plan and must be consistent. Inconsistencies between the two documents must be resolved in favor of the General Plan. The Zoning Code will be revised to bring it into conformance with this General Plan.

The Zoning Code, in particular, contains further refinements of the land use designations established in the General Plan, in the form of land use zones. Table LU-6 provides a matrix that correlates the land use zones of the existing Zoning Code with the land use designations of this General Plan update.

7. Land Use and Resources Management Plan for the Primary Zone of the Delta

The Land Use and Resources Management Plan for the Primary Zone of the Delta (LURMP) was developed in response to the Delta Protection Act of 1992, by the State Delta Protection Commission. The plan was adopted by the State in 1995 for the purpose of providing direction to local jurisdictions in the Delta region on land use decisions. The Plan addresses the environment, utilities and infrastructure, land use, agriculture, water, recreation and access, levees and boater safety. The General Plans for all jurisdictions within the Delta primary zone, including portions of Yolo County, are required to be consistent with this plan. The LURMP was adopted by the County as a General Plan amendment on March 18, 1997 by Resolution No. 97-34. The State is currently engaged in a process to update this plan. Upon completion, the County will be required to review this General Plan for consistency and make amendments as necessary.

8. Environmental Justice

[Environmental justice is discussed in the Safety and Environmental Justice White Paper that was prepared in 2022 in support of a focused General Plan Amendment. The County](#)



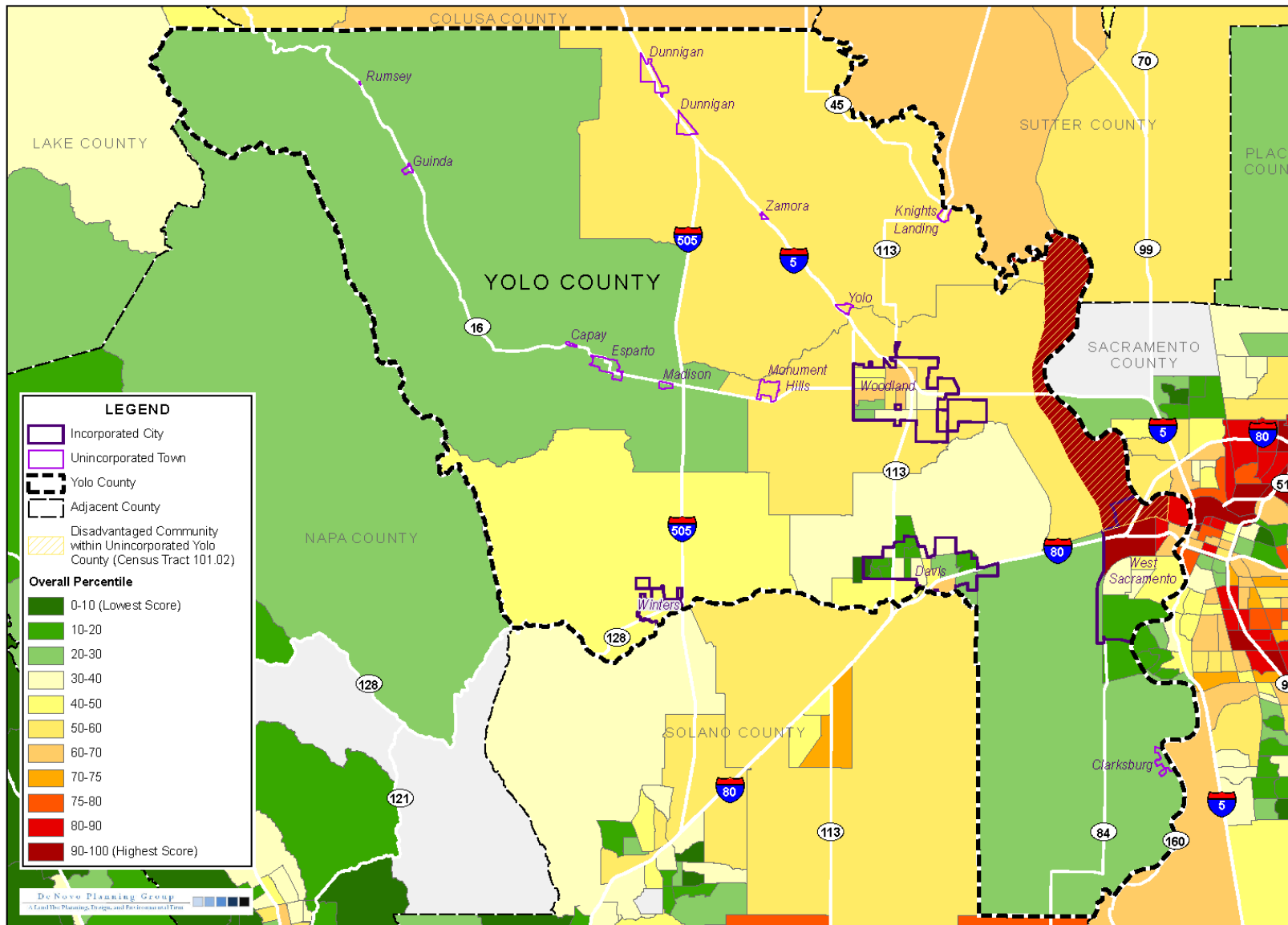
has a single census tract (6113010102) in the unincorporated area that is a disadvantaged community. 6113010102 is located primarily within the City of West Sacramento and includes a portion of the unincorporated County north of West Sacramento. As shown in Figure LU-1.2, the portion in the unincorporated County is largely undeveloped and sparsely populated with primarily agricultural uses.

In addition to addressing environmental justice in the Land Use Element, the 2030 General Plan also addresses topics related to environmental justice through:

- Circulation Element: Plans for a multimodal circulation system with equitable access to convenient, non-vehicle travel modes, including safe and well-connected pedestrian, bicycle, and transit routes to services, schools, parks, and community destinations
- Health and Safety Element. Takes actions to reduce exposure to environmental hazards and excessive noise and to increase access to health care resources, including supporting basic health care and mental health services and access to healthy foods in each community.
- Housing Element. Ensures a range of safe, affordable housing types accessible to the community, particularly disadvantaged and special needs groups, increases access to affordable housing in areas with higher economic, educational, environmental, and affirmatively furthers fair housing.
- Public Facilities and Services. Increases opportunities for recreational, social, and community services and ensure that high-quality community facilities and services are available to all members of the community
- Conservation and Open Space Element. Ensures a sustainable approach to clean water, clean air, access to open space, and conservation of natural resources and energy.



FIGURE LU 1-2 DISADVANTAGED COMMUNITY



Sources: OEHA CalEnviroScreen 4.0;
Yolo County GIS.
Map date: December 6, 2021.





TABLE LU-6 ZONING/GENERAL PLAN CONSISTENCY

General Plan Land Use Designation	General Plan Symbol	Zone Designation	Zone Symbol
Residential Land Use Designations			
Residential Rural	RR	Residential Rural – 2 acre Residential Rural – 5 acre	RR-2 RR-5
Residential Low	RL	Low Density Residential	R-L
Residential Medium	RM	Medium Density Residential	R-M
Residential High	RH	High Density Residential	R-H
Commercial Land Use Designations			
Commercial Local	CL	Local Commercial Downtown Mixed Use	C-L DMX
Commercial General	CG	General Commercial Downtown Mixed Use Highway Service Commercial	C-G DMX C-H
Industrial Land Use Designations			
Industrial	IN	Light Industrial Heavy Industrial Office Park Research and Development	I-L I-H OPRD
Other Land Use Designations			
Agriculture	AG	Agricultural Intensive Agricultural Extensive Agricultural Commercial Agricultural Industrial Agricultural Residential Sand and Gravel Overlay Sand and Gravel Reserve Overlay	A-N A-E A-C A-I A-R SG-O SGR-O
Open Space	OS	Public Open Space	POS
Parks and Recreation	PR	Parks and Recreation	P-R
Public/Quasi-Public	PQ	Public/Quasi-Public	PQP
Specific Plan	SP	Specific Plan	S-P
Overlay Land Use Designations			
Natural Heritage Overlay	NHO	Natural Heritage Overlay	NH-O
Agricultural District Overlay	ADO	Agricultural District Overlay	AD-O
Delta Protection Overlay	DPO	Delta Protection Overlay	DP-O
Mineral Resource Overlay	MRO	Sand and Gravel Overlay Sand and Gravel Reserve Overlay	SG-O SGR-O
Tribal Trust Overlay	TTO	Tribal Trust Overlay	TT-O

Note: The following zone overlays may be combined with any residential, commercial, industrial, or agriculture land use designation:

- B Special Building Overlay
- A-O Airport Overlay
- PD Planned Development Overlay



C. Policy Framework

1. Land Use Policies

GOAL LU-1	<u>Range and Balance of Land Uses.</u> Maintain an appropriate range and balance of land uses to maintain the variety of activities necessary for a diverse, healthy and sustainable society.
------------------	--

Policy LU-1.1 Assign the following range of land use designations throughout the County, as presented in detail in Table LU-4 (Land Use Designations):

Open Space (OS) includes public open space lands, major natural water bodies, agricultural buffer areas, and habitat. The primary land use is characterized by “passive” and/or very low-intensity management, as distinguished from AG or PR land use designations, which involve more intense management of the land. Detention basins are allowed as an ancillary use when designed with naturalized features and native landscaping, compatible with the open space primary use.

Agriculture (AG) includes the full range of cultivated agriculture, such as row crops, cannabis cultivation, cannabis nurseries, cannabis processing, 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; cannabis manufacturing, testing, and distribution; cannabis retail – non-storefront; cannabis microbusiness; 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. Agriculture also includes farmworker housing, surface mining, and incidental habitat.

Parks and Recreation (PR) includes developed (or “active”) park facilities, such as regional, community and neighborhood parks, tot lots, sports fields, and public pools. Also may include agricultural buffer areas. Detention basins are allowed as an ancillary use when designed with recreational or sports features.

Residential Rural (RR) includes large lot rural homes with primarily detached single-family units, although attached and/or detached second units or duplexes are allowed. Density range: 1du/5ac to <0.5 du/ac.



Residential Low (RL) includes traditional neighborhoods with primarily detached single-family units, although attached and/or detached second units or duplexes are allowed. Triplexes and four-plexes allowed when designed to be compatible with adjoining single-family homes. Small compatible neighborhood serving retail and office allowed as ancillary use. Density range: 1 du/ac to <10 du/ac.

Residential Medium (RM) includes dense neighborhoods with primarily attached single family and multi-family units, although detached single-family units are allowed. Small compatible neighborhood serving retail and office allowed as ancillary use. Density range: 10 du/ac to <20 du/ac.

Residential High (RH) includes apartments, condominiums, townhouses and other attached multi-family units. Small compatible neighborhood serving retail and office allowed as ancillary use. Density range: ≥ 20 du/ac.

Commercial General (CG) includes regional and highway-serving retail, offices, service retail and agricultural commercial uses. Research and development is allowed where offices and service support uses are the primary use (accounting for more than 50 percent of the total square footage). There is no limit on the amount of ground floor square footage. Upper floor and accessory attached residential uses are allowed. This designation also includes indoor and mixed-light cannabis cultivation, cannabis processing, cannabis manufacturing – packaging and labeling; cannabis distribution, cannabis retail, and cannabis microbusiness.

Commercial Local (CL) includes a range of goods and services to meet the everyday needs of residents within a community, such as retail, offices, service uses and agricultural commercial uses. There is a limit of 40,000 square feet allowed on the ground floor for any one user. Upper floor and ancillary attached residential uses are allowed. This designation also includes cannabis retail-storefront.

Industrial (IN) includes the full range of light to heavy industrial/manufacturing, including agricultural industrial uses (e.g. storage facilities, contractor's yards, corporation yards, dismantling, etc.). This designation also includes indoor and mixed light cannabis cultivation, cannabis nurseries, cannabis processing, cannabis manufacturing, cannabis testing, cannabis distribution cannabis retail, and cannabis microbusiness. Research and development, including biotechnology, is allowed where manufacturing is the primary use (accounting for more than 50 percent of the total square footage).



Public and Quasi-Public (PQ) includes public/governmental offices, places of worship, schools, libraries, and other community and/or civic uses. Also includes public airports, including related visitor services, and infrastructure including wastewater treatment facilities, municipal wells, landfills, and stormwater detention basins. May include agricultural buffer areas.

Specific Plan (SP) allows uses in the AG designation to continue temporarily until such time as the Specific Plan has been adopted, or the land use designation is otherwise amended. Ultimate land uses must be consistent with the adopted Specific Plan. Capital intensive agricultural uses are discouraged in lands designated Specific Plan so as not to preclude later planned uses.

Natural Heritage Overlay (NHO) applies to focused conservation areas identified in the Yolo Natural Heritage Program. Allowed land uses are limited to those consistent with the adopted Yolo Natural Heritage Program.

Agricultural District Overlay (ADO) applies to designated agricultural districts. Land uses consistent with the base designation and the district specifications are allowed.

Delta Protection Overlay (DPO) applies to the State designated “primary zone” of the Sacramento-San Joaquin Delta, as defined in the Delta Protection Act. Land uses consistent with the base designation and the Delta Protection Commission’s Land Use and Resource Management Plan are allowed.

Mineral Resource Overlay (MRO) applies to State designated mineral resource zones (MRZ-2) containing critical geological deposits needed for economic use, as well as existing mining operations.

Tribal Trust Overlay (TTO) applies to tribal trust lands held by the federal government for recognized tribal governments.

Policy LU-1.2 Figure LU-1, as it may be amended from time to time, is the Land Use Diagram for Yolo County.

Policy LU-1.3 The residential density ranges identified in Policy LU-1.1 are increased over the ranges in the prior (1983) General Plan and therefore allow for an increased yield of units on vacant or underutilized land throughout the County. In the communities of Dunnigan (+608 units), Esparto (-69 units), Knights Landing (+420 units), and Madison (+108 units) this has been determined to be an acceptable outcome. In all other instances



where this could occur, it is the intent of the County to hold the number of units to no more than would have originally been allowed.

Policy LU-1.4

Personal cultivation of cannabis, outdoor and indoor, compliant with all applicable state and local regulations, is an allowed land use in all agricultural, residential, commercial, and industrial general plan land use designations.

GOAL LU-2

Agricultural Preservation. Preserve farm land and expand opportunities for related business and infrastructure to ensure a strong local agricultural economy. (See the Agriculture and Economic Development Element for a more comprehensive treatment of this issue.)

Policy LU-2.1

The intent of this policy is to protect existing farm operations from impacts related to the encroachment of urban uses. The expertise of the County Agricultural Commissioner shall be used in applying this policy. Urban development shall bear the primary burden of this policy. 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 or 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 interface 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. Agricultural commercial and/or agricultural industrial development is anticipated as shown in Table LU-7 (Anticipated Agricultural Commercial and/or Agricultural Industrial Growth) and in Figure LU-2 (New Targeted Future Agricultural Commercial and Agricultural Industrial Sites).

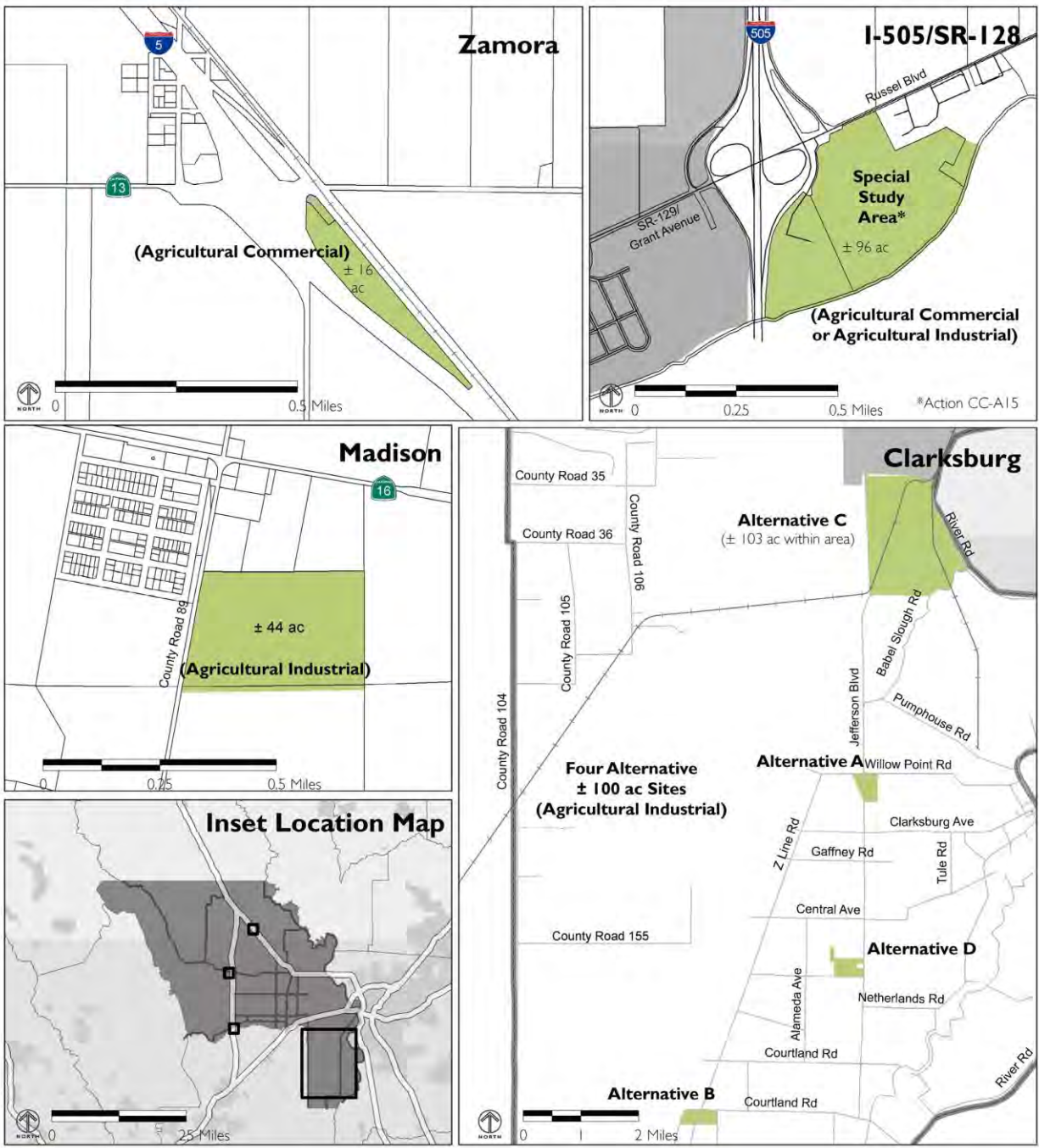
Manage home site development on smaller agricultural parcels that have been recognized through antiquated subdivisions and/or Certificates of Compliance where appropriate, to create compatibility with surrounding agricultural uses to the greatest extent possible, including: 1) discourage residential development; 2) encourage lot



mergers to achieve larger parcel sizes; 3) encourage clustering of units either within parcels or near existing homes on adjoining parcels to preserve farmland and natural resources; 4) encourage transfers of development rights to areas where additional farm dwellings are desired (e.g. organic farms that are labor intensive); 5) encourage deed restrictions, site design and development themes that support the agricultural use of the land; and 6) aggressively limit the impact of residential development where it does occur. 🌍



FIGURE LU-2 TARGETED FUTURE AGRICULTURAL COMMERCIAL AND AGRICULTURAL INDUSTRIAL SITES



Source: Yolo County GIS, 2009.



TABLE LU-7 ANTICIPATED AGRICULTURAL COMMERCIAL AND/OR AGRICULTURAL INDUSTRIAL GROWTH

Town	Existing Developed Acres ^a	Assumed Future Under 83 GP (Acres)	New Targeted Future Sites (Acres)	Other New Added Future (Acres)	Total
Clarksburg ^b	0	0	103.0	0	103.0
Madison ^c	0	0	44.0	0	44.0
Zamora ^d	0	0	16.0	0	16.0
I-505/SR 128 ^e	0	0	96.0	0	96.0
Unincorporated County	324.0	520.0		75.0	919.0
Total	324.0	520.0	259.0	75.0	1,178.0

Notes: In acres.

^a Very gross estimate based on data from Assessor's Office for agricultural preserves as modified by Planning staff to account for other facilities outside of agricultural preserves. This number is presumed to be significantly underestimated.

^b Four alternative agricultural industrial sites.

^c Agricultural industrial site.

^d Agricultural commercial site.

^e Agricultural industrial or agricultural commercial site.

- Policy LU-2.3 Prohibit the division of land in an agricultural area if the division is for non-agricultural purposes, if the division is for cannabis crops or activities, 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. (DEIR MM AG-2)

- 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.



GOAL LU-3 Growth Management. Manage growth to preserve and enhance Yolo County’s agriculture, environment, rural setting and small town character.

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, as depicted on the Land Use Diagram in Figure LU-1, with the exception of individual farm dwellings (houses allowed on agricultural land), other allowed units (e.g. second units, ancillary dwellings, houses allowed in mixed-use commercial areas, etc.) and housing allowed on existing residentially designated land. 🌍

Policy LU-3.2 With the exception of allowed ancillary residential units (e.g. second units, houses allowed in mixed-use commercial areas, etc.), residential growth within the growth boundaries is allowed as follows, subject to all required County approvals. (See Table LU-8, Allowed Residential Growth.)

TABLE LU-8 ALLOWED RESIDENTIAL GROWTH (IN UNITS)

Town	Existing Units ^a	Buildout Under 1983 GP ^b	New Added Units ^c	Total Allowed Units ^d
Capay	576	53	0	629
Clarksburg	177	22	0	199
Dunnigan	340	173	0	513
Esparto	905	985	521	2,411
Knights Landing	380	993	0	1,373
Madison	137	83	78	298
Monument Hills	583	25	0	608
Yolo	155	56	0	211
Zamora	14	14	0	28
Remaining Unincorporated	3,996 ^e	1,610 ^f	322	5,928
Total	7,263^g	4,014	921^h	12,198

^a Yolo County Planning and Public Works Department estimates of existing “on-the-ground” units based on County address data for 2007.

^b Based on vacant residentially designated land at allowed yields.

^c Communities/locations where additional residential growth (beyond that allowed under the 1983 General Plan) is allowed under the 2030 General Plan.

^d Sum of existing on-the-ground units + buildout allowed under 1983 General Plan + added new units under this General Plan update.

^e Difference between DOF unit total and numbers for each community.

^f This does not represent potential “full” buildout but rather a projection of the number of future farm dwellings through 2030 based on past trends. Assumes an average of 70 farm dwellings annually over 23 years.

^g California Department of Finance, 2007.

^h Total includes additional units that would be allowed per residential density range increases in Madison (108 units – 30 units from land use change on Reyes 3 acs), and Esparto (loss of 69 units). Also includes 322 farm dwellings countywide assumed with 20 percent density bonus for Agricultural TDR Program (see Action AG-A25).



- Policy LU-3.3 Allow commercial and industrial growth (not including agricultural commercial or agricultural industrial) as shown in Table LU-9 (Allowed Commercial and Industrial Growth), subject to all required County approvals. Within the areas designated for commercial and industrial land uses, where appropriate, the County shall target the following:
- A. Biotechnology facilities development, including development of “high tech” research and development campuses, as well as regional office, business park and light manufacturing nodes.
 - B. Research and development space to serve private businesses that result from UC Davis research activities.
 - C. Highway-oriented and regional commercial development, particularly along Interstate 5 and Interstate 505 and specialized retail to serve regional populations.
- Policy LU-3.4 Locate and design services and infrastructure to only serve existing and planned land uses. Actions that will induce growth beyond planned levels are prohibited. 🌐
- Policy LU-3.5 Avoid or minimize conflicts and/or incompatibilities between land uses.
- Policy LU-3.6 Maintain the compatibility of surrounding land uses and development, so as not to impede the existing and planned operation of public airports, landfills and related facilities and community sewage treatment facilities.
- Policy LU-3.7 Prohibit the designation of new urban development in places with one or more of the following characteristics: 🌐
- Areas without adequate emergency services and utility capacity and where there is no capital improvement plans to pay for and construct new facilities that can accommodate the proposed development.
 - Areas where there are significant hazards and where there are no plans to adequately mitigate the risk (e.g. floodplains, high fire hazard areas, unstable soils, known seismic faults, etc.).
 - Areas where there are significant natural resources (e.g. groundwater recharge, wildlife habitat, mineral or timber resources, scenic areas, etc.).
 - Areas not contiguous to existing urban development.
- 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.



TABLE LU-9 ALLOWED COMMERCIAL AND INDUSTRIAL GROWTH (IN ACRES)

Town	Existing Developed Acres ^a	Remaining Under 1983 GP ^b	New Added Acres ^c	Total Designated Acres ^{e,g}
Capay Valley	4.0	12.5	115.1	131.6
Clarksburg	134.0	3.0	0.3	137.3
Dunnigan	26.2	250.0	96.2	372.4
Esparto	6.0	123.3	-69.3 ^f	60.0
Knights Landing	11.0	103.4	-92.0	22.4
Madison	19.0	4.7	3.0	26.7
Monument Hills	6.0 ^g	16.0 ^g	2.7	24.7 ^g
Yolo	26.0	8.1	11.8	45.9
Zamora	1.0	0.9	12.9	14.8
Elkhorn Property	1.8	0	0	1.8
County Airport	66.0 ^e	236.0 ^e	0	302.0 ^e
I-505/CR14 or 12A	0	0	15.1	15.1
Spreckels Property	87.0	4.0	51.6	142.6
Covell/Pole Line	0	383.7 ^h	0	383.7 ^{h,i}
Remaining Unincorporated	43.3	385.4	-91.4	337.3
Total	431.3	1,531.0	56.0	2,018.3

^a Yolo County Planning and Public Works Department estimates of existing “on-the-ground” commercial and industrial land uses based on County address data for 2007.

^b Vacant commercially designated or industrially designated land.

^c Communities/locations where additional commercial or industrial growth (beyond that allowed under the 1983 General Plan) is allowed under the 2030 General Plan update. Does not include agricultural commercial and/or agricultural industrial acreage (see Table LU-7).

^d Sum of existing developed industrial and commercial acres + vacant industrial and commercial acreage under the 1983 General Plan + added new acreage under this General Plan update. See exception for airport property in footnote “e” and “g” below.

^e The County airport is designated “airport” under the 1983 General Plan which is a PQ designation under the 2030 General Plan. However, the non-runway portions of this facility function similar to an industrial or commercial land use. Therefore the non-runway acreage (302.0 acres) has been included here.

^f Primarily 79-acre industrial site south of SR-16 converted to other mixed uses.

^g The Watts-Woodland airport in Monument Hills is designated “airport” under the 1983 General Plan which is a PQ designation under the 2030 General Plan. However, the non-runway portions of this facility function similar to an industrial or commercial land use. Therefore the non-runway acreage (22.0 acres) has been included here.

^h Includes acreage from Specific Plan development capacities.

ⁱ Industrial and commercial acreages to be determined through the specific plan process and subsequent CEQA review.

Policy LU-3.9 Prohibit the creation of a ring of rural residential development around existing growth boundaries. 🌐

Policy LU-3.10 Conservations easements located within community growth boundaries will not be accepted for mitigation purposes.



GOAL LU-4 **Delta Land Use and Resource Management. Within the Delta Primary Zone, ensure the compatibility of land uses and decision-making with applicable policies of the Land Use and Resource Management Plan of the Delta Protection Commission.**

Policy LU-4.1 Recognize the unique land use constraints and interests of the Delta area.

Policy LU-4.2 Continue active involvement with State and regional efforts to establish policy, regulation and management for the Delta, to promote the economic and social sustainability of the town of Clarksburg, the viability of the Agricultural District, the habitat needs of the Yolo Natural Heritage Program and the water resources needed for the success of each of these efforts.

GOAL LU-5 **Equitable Land Use Decisions. Ensure inclusion, fair treatment and equitable outcomes in local land use decisions and regulations.**

Policy LU-5.1 Balance land use decisions and land use burdens countywide so that there is not a disproportionate impact to any one group of residents because of age, culture, ethnicity, gender, race, socio-economic status, or other arbitrary factor.

Policy LU-5.2 Allow for meaningful participation in the planning process by affected and interested groups or individuals.

Policy LU-5.3 Employ strategies to overcome linguistic, institutional, cultural, economic and historic barriers to effective public participation in the planning process.

Policy LU-5.4 Use existing community-based organizations, where available, to involve the public in the planning process.

Policy LU-5.5 Ensure that public facilities, services and amenities are distributed equitably and in locations that enhance the quality of life for the broadest number of county residents.

Policy LU-5.6 Assist existing communities to obtain the services, support and infrastructure needed to thrive and be successful.

Policy LU-5.7 Support the Community Advisory Committees to ensure direct, local input on land use issues and on project applications.



Policy LU-5.8 Ensure that respect for and protection of private property rights is balanced with all other factors considered by the County in making land use decisions.

GOAL LU-6	<u>Intra-County Coordination.</u> Ensure inclusion, fair treatment and equitable outcomes for the County in land use planning matters involving other local government entities.
------------------	---

Policy LU-6.1 Continue to develop strong working relationships and effective inter-governmental review procedures with the Rumsey Band of Wintun Indians regarding their landholdings and interests, including the Cache Creek Casino Resort, to achieve the best possible outcomes consistent with the General Plan.

Policy LU-6.2 Coordinate with the University of California at Davis regarding the Long Range Development Plan (LRDP), campus facilities, housing, off-campus agricultural and open space property and joint venture development with the private sector to achieve the best possible outcomes consistent with the General Plan.

Policy LU-6.3 Coordinate with community college districts and tribal colleges within Yolo County regarding their long-term development plans for campus facilities and property, to achieve the best possible outcomes consistent with the General Plan.

Policy LU-6.4 Negotiate with each of the cities to achieve mutually beneficial outcomes related to, among other things: planning within spheres of influence; development impact fees for funding of regional parks and open space, regional roadways, government services that benefit the entire County (including incorporated areas), “replacement” funding for revenues foregone to protect agriculture and rural character, water resources, and flood protection.

Policy LU-6.5 Encourage schools and other special districts to locate new schools and other appropriate service facilities within the growth boundaries of the unincorporated communities. 🌐

Policy LU-6.6 Encourage independent special districts to locate offices and other facilities (where appropriate) within the downtown areas of the communities being served. 🌐

Policy LU-6.7 Revenue sharing agreements, redevelopment pass-through agreements and development impact fees shall provide for sufficient revenues to cover County revenue losses and costs.



- Policy LU-6.8 Negotiate annexation agreements with each city to ensure revenue neutrality and account for and fully reimburse the County for maintenance and operation of all relevant programs and services.
- Policy LU-6.9 Require that development agreements, tribal agreements, memoranda of understanding and other similar arrangements add community value by securing “net” public benefits over and above CEQA mitigation requirements and conditions of approval.
- Policy LU-6.10 Coordinate with other jurisdictions to create projects that result in mutually beneficial revenue generating land uses that result in fiscal benefits to the County and to its partners.
- Policy LU-6.11 Coordinate with the City of Davis to explore mutual opportunities regarding the following projects:
- a) Special needs housing, including housing for seniors in the area north of Covell Boulevard and west of State Route 113.
 - b) Land uses that complement UC Davis, the University Retirement Community, Sutter-Davis Hospital and other nearby social services in the area north of Covell Boulevard and west of State Route 113.
 - c) Alternatives for the Binning Estates project, including the clustering of residential units and increased densities. 🌍
 - d) Extension of water and sewer infrastructure to the Binning Farms community.
 - e) Life science, biotechnology and related research uses.
 - f) The possibility of commercial and mixed uses at Covell Boulevard/Pole Line Road and the possibility of coordinated planning with the Hunt Wesson site.
- Policy LU-6.12 Coordinate with and encourage the Rumsey Band of Wintun Indians to prepare, adopt, and implement a long-range tribal general plan for tribal trust land and meet or exceed a vehicle miles traveled (VMT) threshold of 44 miles generated per household per weekday. (DEIR MM LU-4g)
- Policy LU-6.13 Coordinate with and encourage the federal government for D-Q University and the University of California Regents for UC Davis to provide for a mix of uses on their land that would achieve a jobs/housing balance and meet or exceed a vehicle miles traveled (VMT) threshold of 44 miles generated per household per weekday. (DEIR MM LU-4h)



GOAL LU-7 Regional Coordination. Ensure inclusion, fair treatment and equitable outcomes for the County and its residents in regional land use planning efforts.

- Policy LU-7.1 Seek recognition, reimbursement and reward for foregone revenues and opportunities associated with the active preservation of agriculture, open space and important natural resources.
- Policy LU-7.2 Support and participate in countywide, regional and other multi-agency planning efforts related to housing, tourism, air quality, open space, green infrastructure, recreation, agriculture, habitat conservation, energy, emergency preparedness and flood protection. 🌍
- Policy LU-7.3 Coordinate with other stakeholder agencies and entities to continue local and regional planning efforts to preserve agriculture, open space and natural resources while meeting housing needs, basic infrastructure and service levels, County economic development goals and County fiscal objectives.
- Policy LU-7.4 Work with SACOG and its other member jurisdictions to develop a mutually-acceptable plan for open space conservation, habitat protection and mitigation banking, to ensure that Yolo County is appropriately compensated when its land is used to achieve region-wide environmental benefits.
- Policy LU-7.5 Support efforts to adopt a regional tax measure that would fund agricultural and open space acquisition, protection and maintenance.
- Policy LU-7.6 Coordinate with Napa, Lake, Colusa, Sutter, Sacramento and Solano Counties to mitigate the impacts of development in these jurisdictions on Yolo County.
- Policy LU-7.7 Pursue full funding of in-lieu tax payments for all state-owned public lands.
- Policy LU-7.8 Work with federal, State, and local agencies, and other interests to as part of a public-private partnership to develop and pursue site facilities that benefit and expand training opportunities for forensic sciences.

GOAL LU-8. Environmental Justice. Ensure an equitable distribution of public facilities and services, a safe and healthy environment, including access to healthy foods, recreation and activity, and public services, with an emphasis on equity for disadvantaged and vulnerable communities, and provide fair treatment and opportunities for meaningful involvement for all people.



- Policy LU-8.1 Require future planning decisions, development, and infrastructure and public projects to consider the effects of planning decisions on the overall health and well-being of the community and its residents, with specific consideration that emphasizes ensuring equitable access to facilities and amenities and addresses health and quality of life impacts.
- Policy LU-8.2 Ensure that land use, development, infrastructure, and other County decisions are conducted through an open and engaging process inclusive of community residents.
- Policy LU-8.3 As part of land use decisions, ensure that environmental justice issues related to potential adverse health impacts associated with land use decisions, including methods to reduce exposure to hazardous materials, industrial activity, vehicle exhaust, other sources of pollution, and excessive noise on residents regardless of age, culture, gender, race, socioeconomic status, or geographic location, are considered and addressed.
- Policy LU-8.4 Promote the rehabilitation or redevelopment of distressed properties, taking into consideration anti-gentrification strategies and addressing the potential for displacement of members of a disadvantaged community.



2. Community Character Policies

GOAL CC-1	<u>Preservation of Rural Character.</u> Ensure that the rural character of the County is protected and enhanced, including the unique and distinct character of the unincorporated communities.
------------------	--

- Policy CC-1.1 Encourage private landowners of both residential and commercial properties to maintain their property in a way that contributes to the attractive appearance of Yolo County, while recognizing that many of the land uses in the County, including agriculture and light industry, require a variety of on-site structures, equipment, machinery and vehicles in order to operate effectively.
- Policy CC-1.2 Preserve and enhance the rural landscape as an important scenic feature of the County.
- Policy CC-1.3 Protect the rural night sky as an important scenic feature to the greatest feasible extent where lighting is needed.
- Policy CC-1.4 Identify and preserve, where possible, landmarks and icons which contribute to the identity and character of the rural areas.
- Policy CC-1.5 Significant site features, such as trees, water courses, rock outcroppings, historic structures and scenic views shall be used to guide site planning and design in new development. Where possible, these features shall become focal points of the development.
- Policy CC-1.6 New freestanding off-site advertising along rural roads shall be limited. Existing non-conforming advertising shall be eliminated whenever possible.
- Policy CC-1.7 Reinforce the growth boundaries for each community through appropriate mechanisms including greenbelts, buffers, conservation easements and other community separators. 🌍

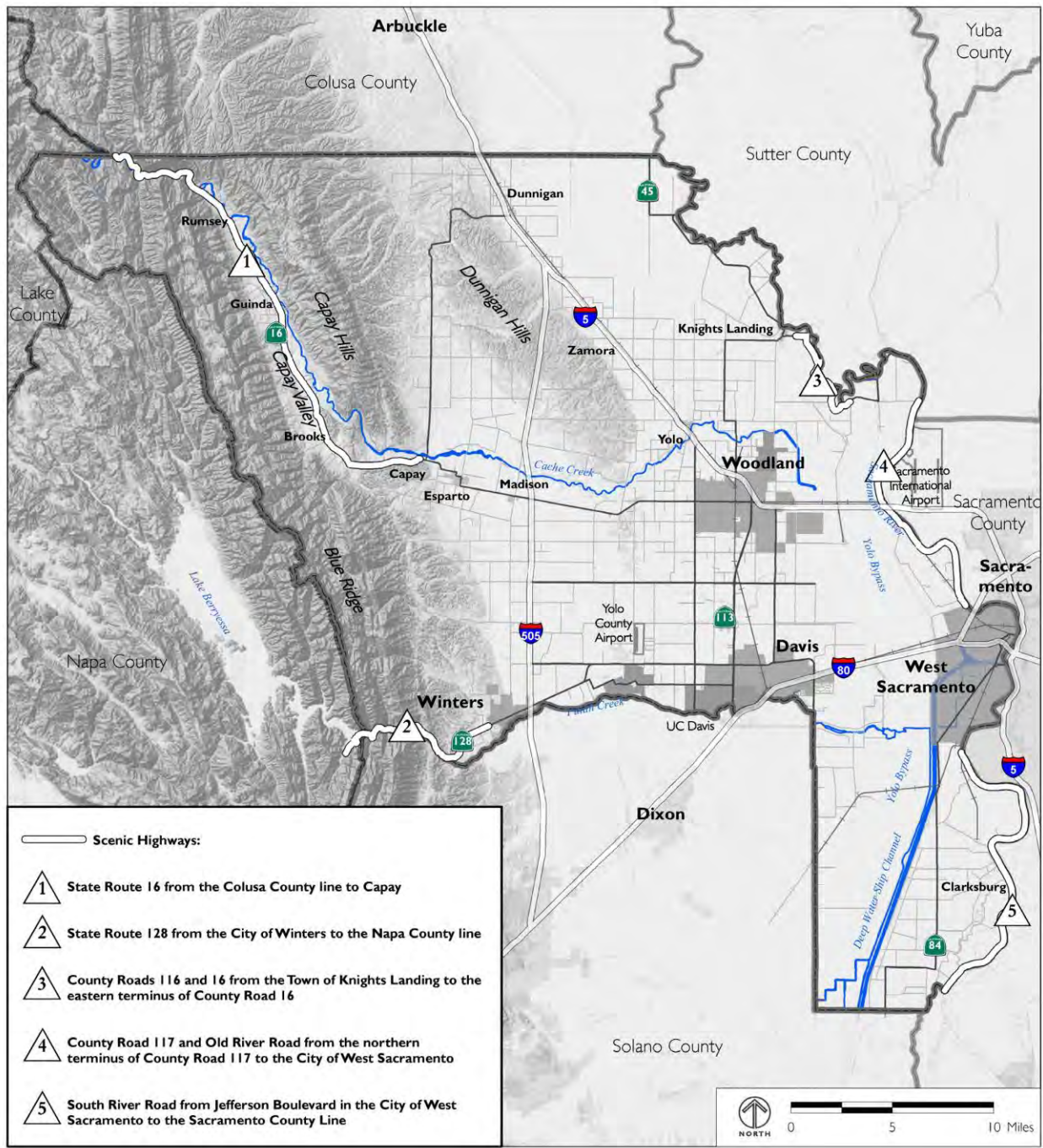




- Policy CC-1.8 Screen visually obtrusive activities and facilities such as infrastructure and utility facilities, storage yards, outdoor parking and display areas, along highways, freeways, roads and trails.
- Policy CC-1.9 In communities, place both new and existing line utilities and telecommunications infrastructure underground where feasible. Where underground utilities are not feasible, minimize the aesthetic impact by co-locating new improvements within existing lines and facilities where possible.
- Policy CC-1.10 Protect existing ridgelines and hillsides from visually incompatible development.
- Policy CC-1.11 Require the development of open space corridors, bicycle paths and trails integrating waterways, scenic areas and County parks where appropriate, in collaboration with affected land owners as a part of project approval. The intent is to connect each community and city and other special places and corridors, throughout the County. 🌍
- Policy CC-1.12 Preserve and enhance the scenic quality of the County's rural roadway system. Prohibit projects and activities that would obscure, detract from, or negatively affect the quality of views from designated scenic roadways or scenic highways.
- Policy CC-1.13 The following routes are designated as local scenic roadways, as shown in Figure LU-3 (Scenic Highways):
- State Route 16 (Colusa County line to Capay)
 - State Route 128 (Winters to Napa County line)
 - County Roads 116 and 116B (Knights Landing to eastern terminus of County Road 16)
 - County Roads 16 and 117 and Old River Road (County Road 107 to West Sacramento)
 - South River Road (West Sacramento City Limits to Sacramento County line)
- Policy CC-1.14 Designate other scenic roadways or routes where appropriate using the following criteria: the roadway or route traverses a scenic corridor, water feature, open space area or other interesting or unique areas, both urban and rural and may include bikeways, hiking and riding trails and pedestrian ways.



FIGURE LU-3 SCENIC HIGHWAYS



Source: Yolo County GIS, 2009.



Policy CC-1.15 The following features shall be protected and preserved along designated scenic roadways and routes, except where there are health and safety concerns:

- Trees and other natural or unique vegetation
- Landforms and natural or unique features
- Views and vistas
- Historic structures (where feasible), including buildings, bridges and signs

Policy CC-1.16 The following features shall be stringently regulated along designated scenic roadways and routes with the intent of preserving and protecting the scenic qualities of the roadway or route:

- Signage
- Architectural design of adjoining structures
- Construction, repair and maintenance operations
- Landscaping
- Litter control
- Water quality
- Power poles, towers, above-ground wire lines, wind power and solar power devices and antennae

Policy CC-1.17 Existing trees and vegetation and natural landforms along scenic roadways and routes shall be retained to the greatest feasible extent. Landscaping shall be required to enhance scenic qualities and/or screen unsightly views and shall emphasize the use of native plants and habitat restoration to the extent possible. Removal of trees, particularly those with scenic and/or historic value, shall be generally prohibited along the roadway or route.

Policy CC-1.18 Electric towers, solar power facilities, wind power facilities, communication transmission facilities and/or above ground lines shall be avoided along scenic roadways and routes, to the maximum feasible extent.

Policy CC-1.19 Unscreened outdoor storage of industrial and commercial parts and materials, salvage or junk, dismantled vehicles, used or new vehicle sales or, building materials for sale and similar materials, uses and things along designated scenic roadways and routes shall be prohibited.



GOAL CC-2	<u>Community Planning.</u> Protect, enhance and redevelop existing communities.
------------------	--

- Policy CC-2.1 Require planned growth to pay the full cost of new development, as well as, to the greatest feasible extent, benefit residents in each existing community through efforts that, among other things, result in basic urban services and community sustainability.
- Policy CC-2.2 Ensure that the appropriate base level of rural services and infrastructure for existing development in each community is required in connection with new development.
- Policy CC-2.3 Include open space corridors and trails throughout each community to provide off-street bicycle and pedestrian access, as well as connections to intra-county corridors and trails. 🌍
- Policy CC-2.4 Emphasize the unincorporated communities as retail, service and employment centers for local residents, as well as residents of surrounding rural (agricultural) areas. Where appropriate, include economic development in the unincorporated communities that serves intra-county and regional tourism. 🌍
- Policy CC-2.5 Plan future land uses within communities so that more dense/intense uses are located within the downtown area and/or at neighborhood centers, transitioning to less dense/intense uses at the growth boundary edge. There is no intent to create or allow a ring of “transitional” rural residential development outside the growth boundaries. 🌍
- Policy CC-2.6 Encourage infill development and the appropriate redevelopment of vacant and underutilized properties within existing unincorporated communities and prioritize infill projects over development on land at the planned community edge. 🌍
- Policy CC-2.7 Provide for higher density housing and mixed-use development in the downtown areas of the unincorporated communities to support commercial uses, create more pedestrian travel, extend activity into the evening, increase the variety of housing opportunities to include affordable and special needs housing, enhance safety, reduce traffic and support regular, frequent fixed-route transit service. 🌍
- Policy CC-2.8 Encourage a range of commercial, civic and cultural uses in the downtown areas of the unincorporated communities to encourage pedestrian travel, extend activity into the evening hours and create activities that involve all ages and groups. This shall include a diversity of retail uses within downtown areas, including retail shops that serve



daily household needs, essential services and tourism, such as a bank or post office, lodging, restaurants and entertainment. 🌐

- Policy CC-2.9 Locate County offices and other civic facilities in the downtown area of the unincorporated communities, whenever possible. 🌐
- Policy CC-2.10 Strive to achieve a minimum jobs/housing balance of 1.2 jobs for every dwelling unit on average within each unincorporated community, to the greatest extent feasible. (DEIR MM LU-4a) 🌐
- Policy CC-2.11 Strive to achieve a match between the prices of dwelling units and the salaries of the jobs provided within each unincorporated community, to the greatest extent feasible. (DEIR MM LU-4b) 🌐
- Policy CC-2.12 Strive to create an average yield community-wide of 16 jobs per acre for industrial, commercial and other job-generating land uses. 🌐
- Policy CC-2.13 Require 5 acres of turn-key neighborhood parks for every 1,000 people within each unincorporated community, proximate to residential neighborhoods. Ensure that the provision of neighborhood parks is phased concurrently with residential growth in the specific plan and community plan areas to meet and maintain this threshold. (DEIR MM PUB-3a)
- Policy CC-2.14 Encourage local hiring and buying practices within local communities and within the County as a whole, including County operations, where legally and economically feasible. 🌐
- Policy CC-2.15 Develop all services, parks, buffers and infrastructure within identified community growth boundaries. Mitigation lands for the loss of agricultural land and wildlife habitat are the only component of community development that are allowed to be located outside of the growth boundaries. 🌐
- Policy CC-2.16 Require the following sustainable design standards as appropriate for projects located within the growth boundaries of the unincorporated communities: 🌐
- A. Imaginative and comprehensive planning that seeks to make best use of existing community features and fully integrate new development.
 - B. Compact and cohesive communities that promote walking, bicycling and public transit.
 - C. Well defined neighborhoods served by parks, schools, greenbelts and trails.



- D. The fiscal impacts of development projects shall be revenue neutral or positive in terms of impacts to the County General Fund. Appropriate exceptions for socially beneficial projects such as affordable housing, parks, etc. may be allowed.
- E. Distinct neighborhood focal points such as a park and/or school and/or small neighborhood-serving retail site.
- F. Narrow streets lined with evenly-spaced trees of the same or alternating species forming a shade canopy.
- G. Vertical curbs and sidewalks separated from the street by landscaping.
- H. Street lighting and trail lighting, as appropriate, at a scale appropriate for pedestrians and bicycles.
- I. Maximum block lengths of 600 feet.
- J. Schools within walking distance of a majority of the homes served.
- K. A wide range of housing types, densities, sizes and affordability.
- L. Where housing is not near the downtown area, allow small neighborhood commercial nodes that provide retail and small office opportunities for neighborhood residents with the goal of accommodating routine daily needs within walking distance of most residents.
- M. Incorporate a grid street network that provides safe and efficient travel for all modes throughout the community with multiple connections to exterior routes.
- N. Orient the grid pattern of new streets to align north/south and east/west, to give a sense of place and direction in new community areas, as well as to maximize solar access.
- O. Downtown streets shall have parking on both sides.
- P. Downtown areas shall have one or more civic nodes such as a central park, town square, fountain plaza, etc.
- Q. Homes that do not back onto roads, parks, schools, greenbelts, trails, or water bodies. Instead, homes that front on these features shall access by way of single-loaded streets or other designs to improve public aesthetics and neighborhood security.
- R. Development regulations and design standards shall emphasize healthy community design and safe neighborhoods.
- S. Avoid noise walls to the greatest possible extent.
- T. Entry features shall be provided at all main community entrances and exits and shall announce the community by name.



- U. Except for parking provided onsite for individual residential lots, parking shall be located to the rear of the facility being served and screened from public view. Parking shall be landscaped to achieve a minimum of 50 percent shading.
- V. Development and incorporation of community art and activities.
- W. Encourage specific land uses and designs that support community diversity.
- X. Protect and preserve to the greatest feasible extent creeks, riparian areas and other biological values within or adjoining an area.
- Y. Incorporate low-water use appliances, drought tolerant landscaping and other water efficient features.
- Z. Provide convenient and secure bicycle parking in downtown areas.
- AA. To the greatest possible extent, avoid cul-de-sacs that create barriers for pedestrian and bicycle access to adjacent areas.
- BB. Include recharging stations, preferred parking, and other incentives for alternative energy vehicles.
- CC. Limit the amount of turf in yards for new residential developments to a maximum of 25 percent of the yard area.
- DD. Require the installation of low output sprinklers, such as drip, soaker hoses, and microspray in new residential development whenever possible.
- EE. Use recycling systems for chillers and cooling towers.
- FF. Demonstrate adherence to LEED Neighborhood Design Standards or the equivalent, for new development, including Specific Plans.
- GG. Demonstrate consistency with the County's Greenhouse Gas Emissions Reduction/Climate Action Plan(s), upon adoption.
- HH. Provide multiple connections for all modes through the community and with existing and planned development so that individual development projects are integrated with the surrounding communities. (DEIR MM LU-1a)




GOAL CC-3 Planned Development. Ensure that new growth addresses the challenges and opportunities unique to each community.

- Policy CC-3.1 Update the Area General Plans for Capay Valley, Clarksburg, Esparto and Monument Hills in the form of new or updated Area Community Plans or Specific Plans. Prepare an area community plan for Yolo/Zamora.
- Policy CC-3.2 Reconsider and rebalance the land use designations in Esparto in an effort to attain a jobs/housing ratio of 1.2 during preparation of the new or updated Area/Community Plan or Specific Plan for Esparto. (DEIR MM LU-1c)
- Policy CC-3.3 Prepare a Specific Plan for the Covell/Pole Line Road property. (DEIR MM LU-2a)
- Policy CC-3.4 During the planning process, require that target land uses and development capacities identified for the Specific Plan areas be modified to ensure that the community park threshold of 5 acres/1,000 population is met. (DEIR MM LU-2a)
- Policy CC-3.5 Ensure the consistency of Specific Plans with the County General Plan. Project specific goals and policies for new development will be established in the Specific Plan, as well as design standards that address the character of the existing community.
- Policy CC-3.6 Ensure that jobs are created concurrent with housing to the greatest feasible extent. Include requirements to ensure a reasonable ongoing balance between housing and jobs by phase. Strive to match overall wages to home prices.

For areas within Specific Plans the amount of land designated for residential and job generating uses shall be evaluated during the Specific Plan process, and land uses must be “re-balanced” within each phase in order to achieve a jobs/housing balance of 1.2 jobs per household. A jobs/housing monitoring program shall be established as part of each Specific Plan for its planning area. The jobs/housing relationship (balance, phasing, and match) for each Specific Plan area shall be monitored by phase. If, at the end of any phase, the required jobs/housing relationships are not achieved, the County shall require immediate and effective actions to be taken by the developer to ensure that the required jobs/housing relationship is achieved as a part of any subsequent phase. Such actions may include, but are not limited to, the following: changes in the amounts of land uses in remaining phases; financial/regulatory incentives to accelerate the development of underdeveloped land uses; smaller phases; limitations of permits for









overdeveloped land uses; and/or other actions as may be required.
(DEIR MM LU-4c) 

- Policy CC-3.7 Encourage developers to show significant net benefit to the community, after accounting for all mandated capital and operational costs, to provide minimum quality of life services and sustainability standards.
- Policy CC-3.8 The community has identified two potential future growth areas in Dunnigan to be studied and considered as funds become available: the area west of the I-5/County Road 6 interchange, between CR 5 and CR6; and the west of the I-5/County Road 6 interchange and CR 7, between I-5 and CR 99W.
- Policy CC-3.9 There are four alternative identified sites for location of a future winery-related agricultural industrial facility in Clarksburg (see Figure LU-2). Only one site is intended for the described development. The project is intended to complement the Old Sugar Mill and to assist in establishing a successful critical mass of grape processing facilities to support emerging wineries.
- Policy CC-3.10 There are two alternative identified sites for location of highway commercial or agricultural commercial uses at Interstate 505 and County Road 14 or Interstate 505 and County Road 12A. Only one is intended for the described development.
- Policy CC-3.11 Encourage the development of life sciences, biotechnology and related research uses in appropriate commercial and industrial areas located along highway corridors throughout the county.
- Policy CC-3.12 Establish benefit assessment districts, where appropriate, to fund community infrastructure and services.
- Policy CC-3.13 Coordinate with Community Service Districts (CSDs) to ensure that new development will have access to quality infrastructure and services.
- Policy CC-3.14 Require buffers between new residential development and Interstates 5, 80, and 505 to protect residents from impacts related to air quality, noise, and other incompatibilities. See Action CO-106.
- Policy CC-3.15 Development of the Covell Specific Plan land uses, development capacities, other guidance for the specific plan (including Policy LU-6.11f), and applicable community planning guidelines per Table LU-11 shall occur pursuant to a subsequent public planning and environmental review process.



GOAL CC-4 **Project Design.** Require project design that incorporates “smart growth” planning principles and “green” building standards that reflect the County’s commitment to sustainable development (see also Goal CO-7).

- Policy CC-4.1 Reduce dependence upon fossil fuels, extracted underground metals, minerals and other non-renewable resources by: 
- Requiring projects to take advantage of shade, prevailing winds, landscaping and sun screens to reduce energy use.
 - Encouraging projects to use regenerative energy heating and cooling source alternatives to fossil fuels.
 - Encouraging projects to select building materials that require less energy-intensive production methods and long-distance transport, in compliance with Leadership in Energy and Environmental Design (LEED) or equivalent standards.
- Policy CC-4.2 Reduce dependence upon chemicals and unnatural substances through encouraging: 
- Use of chemical-free and toxic-free building materials.
 - Landscape design standards that minimize the use of pesticides and herbicides.
- Policy CC-4.3 Reduce activities that encroach upon nature, through: 
- Reuse of existing buildings and sites for development.
 - Compact and clustered residential development, including reduced minimum lot sizes.
 - Reduction or elimination of impervious paving materials.
 - Development patterns that respect natural systems such as watersheds and wildlife corridors.
- Policy CC-4.4 Encourage all new construction to be zero net energy by combining building energy efficiency design features with on-site clean distributed generation so as to result in no net purchases from the electricity or gas grid. 
- Policy CC-4.5 Encourage individual and community-based wind and solar energy systems (micro-grids). 
- Policy CC-4.6 Encourage all new residences to exceed Title 24 energy standards by at least 15 percent, and encourage all new commercial buildings to exceed Title 24 by at least 20 percent. 



- Policy CC-4.7 Require energy efficient design for all buildings. 🌍
- Policy CC-4.8 Require measures to minimize “heat islands” by requiring light-colored and reflective roofing materials and paint; “green” roofs; light colored roads and parking lots; extensive numbers of shade trees in parking lots; and shade trees and/or overhangs on the south and west sides of new or renovated buildings. 🌍
- Policy CC-4.9 Encourage construction and other heavy equipment vehicles (e.g. mining, agriculture, etc.) to use retrofit emission control devices. 🌍
- Policy CC-4.10 Require project design to demonstrate adherence to sustainable and neo-traditional design as described in the Ahwahnee Principles and as provided in the SACOG Blueprint, including any amendments or successor documents thereto. 🌍
- Policy CC-4.11 Site specific information shall be required for each application, subject to site conditions and available technical information, as determined by the County lead department, in order to enable informed decision-making and ensure consistency with the General Plan and with the assumptions of the General Plan EIR. Technical information and surveys requested may include, but not be limited to, the following: air quality and/or greenhouse gas emissions calculations, agricultural resource assessment/agricultural and evaluation and site assessment (LESA), biological resources assessment, cultural resources assessment, fiscal impact analysis, flood risk analysis, hydrology and water quality analysis, geotechnical/soils study, land use compatibility analysis, noise analysis, Phase One environmental site assessment, sewer capacity and service analysis, storm drainage capacity and service analysis, title report, traffic and circulation study, visual simulation and lighting study, and water supply assessment.

When a technical study is required, it must cover the entire acreage upon which development is being proposed including any off-site improvements (e.g. wells; pumps; force mains; new roads; dirt borrow sites; etc.) that may be necessary. Technical studies must meet CEQA standards and the standards in the applicable industry. As necessary, the technical studies shall include recommendations that are to be implemented as part of the project. (DEIR MM LU-2b)

- Policy CC-4.12 Require “green” design, construction and operation including: 🌍
- A. Site planning sensitive to the natural environment.
 - B. Efficiency in resource use (including energy, water, raw materials and land).
 - C. Building reuse and adaptive reuse.



- D. Selection of materials and products based on their life-cycle environmental impacts.
- E. Use of materials and products with recycled content.
- F. Use of materials provided from within the region.
- G. Recycling of construction and demolition waste.
- H. Reduction in the use of toxic and harmful substances in the manufacturing of materials and during construction.
- I. Use of passive and active solar strategies and efficient heating and cooling technologies.
- K. Reduction in water use for buildings and landscaping.
- L. Light pollution reduction to protect “dark skies.”
- M. Improvements to interior and exterior environments leading to increased health, comfort and productivity.
- N. Facility maintenance and operational practices that reduce or eliminate harmful effects on people and the natural environment during occupancy.
- O. Water reuse systems
- P. Other systems to capture energy sources that would otherwise be wasted.

Policy CC-4.13 Enhance public safety through implementation of Crime Prevention Through Environmental Design (CPTED) strategies. These include designing the placement of activities and physical features, such as buildings, entrances and exits, corridors, fences, pavement, signs, lighting and landscaping, in such a way as to clearly define public and private space, maximize visibility, control access and circulation and foster positive social interaction.

Policy CC-4.14 Reflect a human scale in architecture that is sensitive, compatible and distinctive to both the site and the community.

Policy CC-4.15 Encourage “visitability” accommodations in new residential development.

Policy CC-4.16 Avoid the repetition of residential facades/designs within subdivisions and abrupt changes in facades between adjoining developments.

Policy CC-4.17 Front exterior living spaces of a usable size (e.g. front porches, large front-facing windows, balconies, etc.) are highly desirable.

Policy CC-4.18 Within community areas, houses shall front on the street.



- Policy CC-4.19 Discourage garage-forward and/or garage-dominated residential design.
- Policy CC-4.20 Discourage gated and/or walled communities.
- Policy CC-4.21 Encourage and promote multi-story and mixed-use buildings within the downtown areas of the unincorporated communities. 🌐
- Policy CC-4.22 Except for approved plazas, seating areas and entry nooks, buildings in downtown areas shall have zero front setbacks and on-site parking shall be to the rear of the lot. 🌐
- Policy CC-4.23 Usable public open spaces shall be included in new private commercial development, such as plazas, interior courtyards connected by pathways and outdoor seating areas.
- Policy CC-4.24 Incorporate art into the public open spaces of both public and private developments.
- Policy CC-4.25 Locate and design civic buildings as significant structures that help anchor and provide focus to the downtown area, with a character that fosters community identity and pride.
- Policy CC-4.26 Downtown architecture shall have a pedestrian scale, with varied and articulated facades. Entries must be oriented to the sidewalk. Front facades shall include numerous windows and covered arcades. 🌐
- 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.
- Policy CC-4.28 Provide appropriate buffers or barriers between incompatible residential and non-residential uses. The last-built use shall be responsible for design and construction (and/or other related costs) of the buffer/barrier.
- Policy CC-4.29 Non-residential corner lots in the downtown and other “gateway” settings shall receive special design treatment which may include enhanced landscaping, entry features that establish community identity, fountains, plazas, enhanced pedestrian furniture (bench and arbor) or similar features. Corner residential lots are encouraged to have duplex or other multi-family units with entries on each street face.
- Policy CC-4.30 Encourage clustering of allowed residential units to protect resources and/or improve efficiency of services. 🌐
- Policy CC-4.31 Require the use of regionally native drought-tolerant plants for landscaping where appropriate. 🌐



- Policy CC-4.32 Encourage mixed uses on vacant and underutilized land designated for development, particularly ancillary residential units and childcare facilities. 🌐
- Policy CC-4.33 Encourage mixed use development in commercial areas in order to create ancillary residential opportunities, particularly in the upper floors of multi-story buildings. 🌐
- Policy CC-4.34 Encourage the location of ancillary employee services (including childcare, restaurants, banking facilities and convenience markets) at employment centers, for the purpose of reducing midday vehicle trips. 🌐
- Policy CC-4.35 Encourage the use of private roads within new development.
- Policy CC-4.36 Where an agricultural industrial project or an agricultural commercial project is allowed adjoining an existing residential neighborhood, an appropriate buffer shall be provided. Any project intended for the site at Interstate 505 and State Route 128 shall include a buffer for the adjoining existing El Rio Villa project and shall proceed only if it will result in a net fiscal benefit to the County.
- Policy CC-4.37 Each community shall have a “town center” where the public has access to meeting and event space (e.g., school, library, fire department, community center, social organization, etc.).

D. Implementation Program

- Action CC-A1 Update the County Zoning Code to reflect appropriate zoning consistent with each land use designation and to establish appropriate new zone categories and regulations to implement the goals, policies and actions of this General Plan. The update shall include development of a form-based zoning code. (Policy LU-1.1, Policy LU-2.3, Policy LU-2.5, Policy LU-3.1, Policy LU-3.2, Policy LU-3.3, Policy LU-3.9, Policy CC-2.7, Policy CC-2.16)
Responsibility: Planning and Public Works Department
Timeframe: 2009/2011
- Action CC-A2 Continue to implement the County Development Agreement ordinance which requires net gains from new development. (Policy LU-6.7, Policy LU-6.8, Policy LU-6.9, Policy LU-6.10, Policy CC-2.1, Policy CC-2.2)
Responsibility: Planning and Public Works Department
Timeframe: 2009/2010
- Action CC-A3 Complete a market study to determine how the County can capitalize on specific locations where revenue-generating uses might best fit and



how the County can better position itself relative to competing jurisdictions. (Policy LU-3.3, Policy LU-4.2, Policy LU-6.4, Policy LU-6.10, Policy LU-6.11, Policy LU-7.3)

Responsibility: County Administrator's Office

Timeframe: 2010/2011

Action CC-A4 Engage in regular discussions and collaboration with each of the cities regarding policies, projects and opportunities of mutual interest. (Policy LU-3.8, Policy LU-6.4, Policy LU-6.8, Policy LU-6.10, Policy LU-6.11)

Responsibility: County Administrator's Office

Timeframe: Ongoing

Action CC-A5 Annually review revenue sharing agreements, redevelopment pass-through agreements, annexation agreements, development agreements, tribal agreements and other existing agreements to ensure that they accurately respond to changing County circumstances. (Policy LU-3.8, Policy LU-6.4, Policy LU-6.7, Policy LU-6.8, Policy LU-6.9, Policy LU-6.10, Policy LU-6.11)

Responsibility: County Administrator's Office

Timeframe: Annually

Action CC-A6 Seek executed cooperative agreements with adjoining jurisdictions on issues of mutual importance. (Policy LU-7.1, Policy LU-7.2, Policy LU-7.3, Policy LU-7.4, Policy LU-7.5, Policy LU-7.6)

Responsibility: County Administrator's Office

Timeframe: 2009/2010

Action CC-A7 Establish formal buffers between cities and between communities. Create a plan to establish buffer areas between cities and between unincorporated communities within which conservation easements could be directed to reinforce community separation and keep each town distinct and unique. (Policy CC-1.7)

Responsibility: Planning and Public Works Department

Timeframe: Ongoing

Action CC-A8 Develop Specific Plan guidelines including requirements for contents, minimum standards and development regulations. (Policy CC-2.16, Policy CC-3.1, Policy CC-3.4)

Responsibility: Planning and Public Works Department


Timeframe: 2009/2010

Action CC-A9 Prepare and implement design guidelines and minimum design requirements (standards) that ensure sustainable and attractive growth. (Policies CC-2.16, and CC-4.1 through CC-4.36)

Responsibility: Planning and Public Works Department

Timeframe: 2010/2011



- Action CC-A10 Adopt a “Green Building Program” to promote green building standards. Require energy efficient appliances and equipment in all new development. (Policy CC-4.13, Policy CC-4.14) 
Responsibility: Planning and Public Works Department
Timeframe: 2011/2012
- Action CC-A11 Seek voter approval of an intra-county and/or regional fee or tax for the preservation of agricultural, habitat, or open space land in Yolo County. (Policy LU-6.4, Policy LU-7.1, Policy LU-7.3, Policy LU-7.4, Policy LU-7.5, Policy LU-7.6)
Responsibility: County Administrator’s Office, Parks and Resources Department
Timeframe: 2010/2011
- Action CC-A12 Recommend one of the alternative Clarksburg sites to be zoned Agricultural-Industrial. (Policy CC-3.14)
Responsibility: Planning and Public Works Department, County Administrator’s Office
Timeframe: 2009/2010
- Action CC-A13 Based on an economic analysis, recommend one of the alternative Interstate 505 sites (County Road 14 or County Road 12A) to be zoned Highway Commercial. (Policy CC-3.15)
Responsibility: County Administrator’s Office, Planning and Public Works Department
Timeframe: 2009/2010
- Action CC-A14 Collaborate with the City of Winters to explore revenue producing uses and opportunities for the “special study area” (see Figure LU-2) identified for agricultural industrial and/or agricultural commercial uses at Interstate 505 and State Route 128. (Policy LU-2.2)
Responsibility: County Administrator’s Office, Planning and Public Works Department
Timeframe: 2010/2011
- Action CC-A15 Establish a countywide system of consistent “comment” areas for each of the existing Citizens Advisory Committees, to ensure that all discretionary projects are forwarded to the appropriate Advisory Committee. (Policy LU-5.7)
Responsibility: Planning and Public Works Department
Timeframe: 2009/2010
- Action CC-A16 Prepare the Covell/Pole Line Specific Plan. (Policy CC-3.3, Policy CC-3.25)
Responsibility: Planning and Public Works Department



Timeframe: 2009/2015

- Action CC-A21 Prepare the Yolo-Zamora Community Plan. (Policy CC-3.1)
Responsibility: Planning and Public Works Department
Timeframe: 2015/2016
- Action CC-A22 Update other long range plans to ensure consistency with General Plan. Develop a priority order, work plan, schedule and budget for each. (Policy CC-3.1)
Responsibility: Planning and Public Works Department
Timeframe: 2016/2017
- Action CC-A23 Establish intra-county impact fees for funding of regional parks and open space, regional roadways and other government services that benefit all County residents. (Policy LU-6.4, Policy LU-7.2, Policy LU-7.4)
Responsibility: County Administrator's Office
Timeframe: 2011/2012
- Action CC-A24 Evaluate parking standards to minimize land devoted to parking. (Policy CC-4.3, Policy CC-4.13) 🌐
Responsibility: Planning and Public Works Department
Timeframe: 2010/2011
- Action CC-A25 Coordinate with Caltrans regarding alternative uses for the Interstate 505 rest stop near Dunnigan, should that facility be relocated or closed. (Policy LU-7.3, Policy CC-3.4)
Responsibility: Planning and Public Works Department
Timeframe: ongoing
- Action CC-A26 Update the County Zoning Code to prohibit the location of new homes on or near the top of ridgelines, where they would adversely affect nearby views. (Policy CC-1.10)
Responsibility: Planning and Public Works Department
Timeframe: 2010/2011
- Action CC-A27 Create financial incentives programs to encourage the remodel of older homes to reduce energy use and incorporate "green" building materials. (Policy CC-4.13)
Responsibility: County Administrator's Office, Planning and Public Works Department
Timeframe: 2011/2012



- Action CC-A28 Orient the grid pattern of new streets to align north/south and east/west, to give a sense of place and direction in new community areas, as well as to maximize solar access. (Policy CC-4.13)
Responsibility: Planning and Public Works Department
Timeframe: Ongoing
- Action CC-A29 Develop and enforce bike parking standards and design criteria for all land uses identified in zoning code, including number of spaces, location and type of facilities. (Policy CC-2.16) 🌐
Responsibility: Planning and Public Works Department
Timeframe: 2009/2010
- Action CC-A30 Amend the County Code to remove the Williamson Act as a basis for the Agricultural Preserve Zone. (Policy LU-2.5)
Responsibility: Planning and Public Works Department
Timeframe: 2009/2010
- Action CC-A31 Amend the County Code to incorporate “smart growth” planning principles and design guidelines that emphasize compact, walkable neighborhoods, open space, alternative transportation, public safety, sustainable design, and sensitivity to natural resources. (Policy CC-4.3, Policy CC-4.11, Policy CC-4.15) 🌐
Responsibility: Planning and Public Works Department
Timeframe: 2010/2011
- Action CC-A32 Allow for rolled curbs in Rural Residential designated areas. (Policy CC-2.16)
Responsibility: Planning and Public Works Department
Timeframe: 2009/2010
- Action CC-A33 Reduce permitting requirements and costs for projects that incorporate green design features and construction. (Policy CC-4.12) 🌐
Responsibility: Planning and Public Works Department
Timeframe: 2009/2010
- Action CC-A34 The discretionary review of development proposals shall evaluate and address impacts on the rural landscapes and views. This review shall also evaluate the potential for land use incompatibilities and require incorporation of design features to reduce potential impacts, to the greatest extent feasible. (DEIR MM LU-2c) (Policies CC-1.1 through CC-1.19)
Responsibility: Planning and Public Works Department
Timeframe: 2009/2010
- Action CC-A35 Identify and provide incentives for infill over peripheral development. (Policy CC-2.6) 🌐



Responsibility: Planning and Public Works Department
Timeframe: 2010/2011

Action CC-A36 Pursue designation of the state of State Route 16 as a scenic highway. (Policy CC-1.14)
Responsibility: Planning and Public Works Department
Timeframe: 2012/2013

Action CC-A37 Review all development proposals, planning projects, and infrastructure projects to ensure that potential adverse impacts to disadvantaged communities and vulnerable populations, including exposure to hazards, pollutants, including toxic air contaminants, and unacceptable levels of noise and vibration are reduced to the extent feasible and that measures to improve quality of life, such as connections to bicycle and pedestrian paths, community services, schools, and recreation facilities, access to healthy foods, and improvement of air quality are emphasized. The review shall address both the construction and operation phases of the project. (Policy LU-8.1)
Responsibility: Planning and Public Works Department
Timeframe: Ongoing

Action CC-A38 Build strong ties, especially with disadvantaged communities, to ensure local residents can make impactful contributions to planning decisions through:

- Use of culturally appropriate approaches,
- Consideration of timing, location, and virtual participation to make meetings more accessible to community members,
- Provision of translation services and translated materials when needed, and
- Partnering with local organizations and nonprofits who are active in the County. Policy LU-8.2)

Responsibility: Planning and Public Works Department
Timeframe: Ongoing

Action CC-A39 Coordinate with state, regional, and local agencies, community members, and community organizations to address environmental justice issues, including ensuring access to healthy foods, recreation opportunities, safe and affordable housing, health and social services, and community amenities, reducing exposure to environmental hazards, including air pollution, excessive noise, and hazardous materials, and ensuring access to a complete multi-modal transportation systems. (Policy LU 8.1, Policy LU-8.3)
Responsibility: Planning and Public Works Department
Timeframe: Ongoing



Table LU-1 1983 YOLO COUNTY GENERAL PLAN LAND USE DESIGNATIONS AND ACREAGES

Row #	1983 General Plan (GP) ^a Land Use Designations ^b	Acreage ^f
OPEN SPACE (OS)		
1	Open Space (OS) ^c (83 GP)	2,653.6
2	Public Open Spaces (PO) (83 GP)	0
3	Public Open Spaces (POS) (83 GP; Capay Valley)	2.6
4	Public Open Space (PO1) (83 GP)	0
5	Public Open Space (PO2) (83 GP)	7.2
6	Agricultural Buffer/Setbacks from Major Roads (Esparto)	0
7	Agricultural/Urban Buffer (Knights Landing)	0
8	Major Waterways (Knights Landing) ^c	58.9
9	Riverbed and Riparian (Capay)	0
10	Chaparral and Woodland (Capay)	0
	<i>Subtotal</i>	2,722.3
AGRICULTURE (AG)		
11	Agricultural (AG) ^c (83 GP)	503,130.2
12	Agricultural Exclusive (AE) (83 GP)	0
13	A-1 (Capay Valley)	0
14	A-P (Capay Valley)	0
15	Agricultural Intensive (AG-IN) (Capay Valley)	11,209.3
16	Agricultural General Foothills (AG-G-F) (Capay Valley)	9,746.7
17	Agricultural-Related Industrial (Dunnigan)	0
18	Agricultural/Residential, Low Density (Woodland)	239.2
19	Agricultural/Residential, Medium Density (Woodland)	94.6
20	Watershed (Capay Valley)	79,081.8
21	Residential, Low Density (10 ac min) (RL10) (83 GP; Clarksburg)	42.4
	<i>Subtotal</i>	603,544.2
PARKS and RECREATION (PR)		
22	Recreation (R) (Dunnigan)	679.0
23	Parks and Recreation (PR) (83 GP; Capay Valley; Clarksburg)	442.4
24	Parks/Schools/Agricultural Buffer (Esparto)	0
	<i>Subtotal</i>	1,121.4
RESIDENTIAL		
Residential Rural (RR)		
25	Rural Residential Agricultural (RRA) (83 GP)	0
26	Rural Residential (Woodland)	1,178.8
27	Residential, Very Low Density (VLR) (1du/net ac) (Dunnigan)	332.0
28	Very Low Density Residential (1-3 du/gross ac) (Esparto)	34.4
29	Residential, Very Low Density (83 GP – Plainfield)	123.0
	<i>Subtotal</i>	1,668.2
Residential Low (RL)		
30	Suburban Residential (RS) (83 GP)	139.0
31	Residential, Low Density (Dunnigan) (RL) (83 GP)	0
32	Residential Low Density (R-L) (1-3 du/ac) (Capay Valley; Clarksburg)	70.5
33	Residential Low Density—Public Open Space (RL-PO1) (Clarksburg)	0
34	Residential, Low Density (1-4 du/ac) (Dunnigan) (RL2) (83 GP)	0



Row #	1983 General Plan (GP) ^a Land Use Designations ^b	Acreage ^f
35	Residential, Low Density (1-5 du/ac) (Dunnigan) (RL1) (83 GP)	0
36	Low Density Residential (RL-1) (Clarksburg)	19.7
37	Residential Low Density (RL) (\leq 6 du/net ac) (83 GP)	598.0
38	Residential Low Density (RL) (6 du/net ac average) (Knights Landing)	88.6
39	Residential Low Density (RL) (4-10 du/net ac) (Esparto)	426.5
	<i>Subtotal</i>	<i>1,342.3</i>
Residential Medium (RM)		
40	Residential, Medium Density (RM) (10 to 19 du/net ac) (83 GP)	92.0
41	Residential Medium (RM) (Clarksburg)	19.6
42	Residential Medium Density (RM) (12du/net ac) (Dunnigan; Knights Landing)	84.2
43	Residential Medium Density (5-8 du/ac) (Esparto) (RM1) (83 GP)	0
44	Residential Medium Density (5-10 du/ac) (Esparto) (RM1) (83 GP)	0
45	Mobile Home Park (MHP) (8 du/net ac) (83 GP)	0
	<i>Subtotal</i>	<i>195.8</i>
Residential High (RH)		
46	Residential, High Density (RH) (20+ du/net ac) (83 GP)	30.6
47	Residential, High Density Historic (RHH) (83 GP)	0
	<i>Subtotal</i>	<i>30.6</i>
	Residential Subtotal	3,236.9
COMMERCIAL		
Commercial General (CG)		
48	Highway Service Commercial (HSC) (83 GP)	115.0
49	Truck-Related Highway Commercial (Dunnigan)	148.1
	<i>Subtotal</i>	<i>263.1</i>
Commercial Local (CL)		
50	Commercial (C) (83 GP; Capay; Madison)	62.7
51	Commercial, Low Density (LC) (83 GP; Dunnigan)	22.6
52	Neighborhood Commercial (NC) (83 GP; Knights Landing; Woodland)	8.2
53	Local Commercial (Dunnigan; Esparto)	0
54	Community Commercial (Knights Landing)	0
55	General Commercial (GC) (83 GP; Esparto)	14.5
56	Central Business District (CBD) (83 GP)	0
57	Downtown Mixed Use (Esparto)	34.6
58	Commercial Multi-Family Planned Development (C-RH/PD) (83 GP)	0
	<i>Subtotal</i>	<i>142.6</i>
	Commercial Subtotal	405.7
INDUSTRIAL (IN)		
59	Industrial (I) (83 GP)	709.1 ^e
60	Light Industrial (Li) (83 GP)	9.9
61	Industrial Limited (Davis)	383.7
62	Industrial, Planned Development, Type 1 (I-PD-1) (83 GP)	0
63	Industrial, Planned Development, Type 2 (I-PD-2) (83 GP)	0
64	Industrial/Residential (Woodland)	23.8
65	Master Plan (MP) (Clarksburg)	16.5
66	Employment Reserve (Knights Landing)	51.6
	<i>Subtotal</i>	<i>1,194.6</i>
PUBLIC and QUASI-PUBLIC (PQ)		
67	Public and Quasi-Public (PQP) (83 GP)	101.6
68	Public (Esparto)	0
69	Public Semi Public (Capay Valley)	0
70	Public Facility (Knights Landing)	33.7



Row #	1983 General Plan (GP) ^a Land Use Designations ^b	Acreage ^f
71	School (S) (Capay Valley)	0
72	Airport (Monument Hills)	558.4
	<i>Subtotal</i>	<i>693.7</i>
SPECIFIC PLAN (SP)		
73	Mixed Use (MU) (83 GP)	0
74	Multiple Use (Knights Landing)	145.0 ^d
75	Specific Plan (SP) (Clarksburg)	0
	<i>Subtotal</i>	<i>145.0</i>
OTHER		
76	Roadways, Railroads, Highways	8,160.2
	<i>Subtotal</i>	<i>8,160.2</i>
UNINCORPORATED TOTAL		
77	GRAND TOTAL	621,224.0

Notes: The 1983 General Plan established the following “combining” designations, however, there is no acreage assigned to these overlay categories: Flood Plain (FP) (Capay Valley), Planned Development (PD) (83 GP), Water Related Uses (W) (83 GP), Recreational Vehicle Park (RVP) (83 GP), Other (x/x, Phased, xx/xx, x+x, etc) (83 GP), Waterfront Commercial/Recreation (Knights Landing).

^a Text in parentheses indicates 1903 General Plan area or Community General Plan.

^b Land use categories from 1983 General Plan (page 25c and d) and adopted community and area General Plans (text and diagrams), as amended.

^c Sacramento River, Cache Creek, Putah Creek and Yolo Bypass acreage fall within these designations.

^d This acreage is consistent with application information provided by the landowner. The County GIS parcelized database shows the acreage total as 147.0.

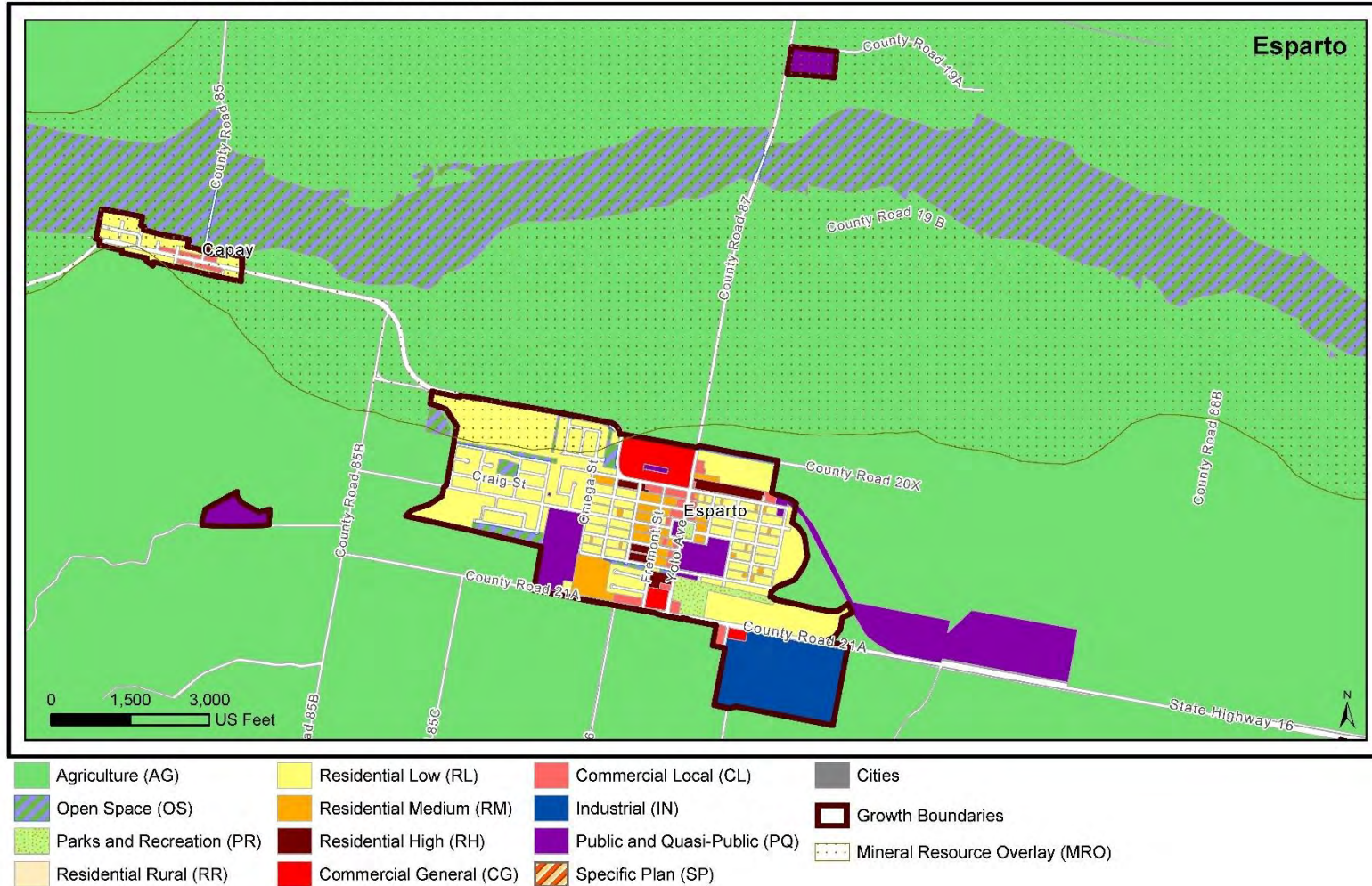
^e This acreage includes 105.4 acres for the Clarksburg Old Sugar Mill site which is consistent with application information provided by the landowner for the Old Sugar Mill Specific Plan. The County GIS parcelized database shows the acreage total as 103.7. The previous “Specific Plan” designation (see category 76) was voided by final action of the State Delta Protection Commission on May 22, 2008.

^f Rows 1 through 75 (with the exceptions noted above) are consistent with the County GIS parcelized database. Row 76 equates to the difference between the parcelized total acreage and the non-parcelized total acreage for the unincorporated area. Row 77 exceeds the GIS non-parcelized total for the unincorporated area by 9 acres. This is because the West Sacramento non-parcelized total acreage in the County GIS system exceeds the City’s own database total by 11 acres and the Winters non-parcelized total acreage in the County GIS system was 2 acres lower than the City’s own database total for a net difference of +9 acres. The data was adjusted to match the City data.



LAND USE AND COMMUNITY CHARACTER ELEMENT

FIGURE LU-1B GENERAL PLAN LAND USE MAP



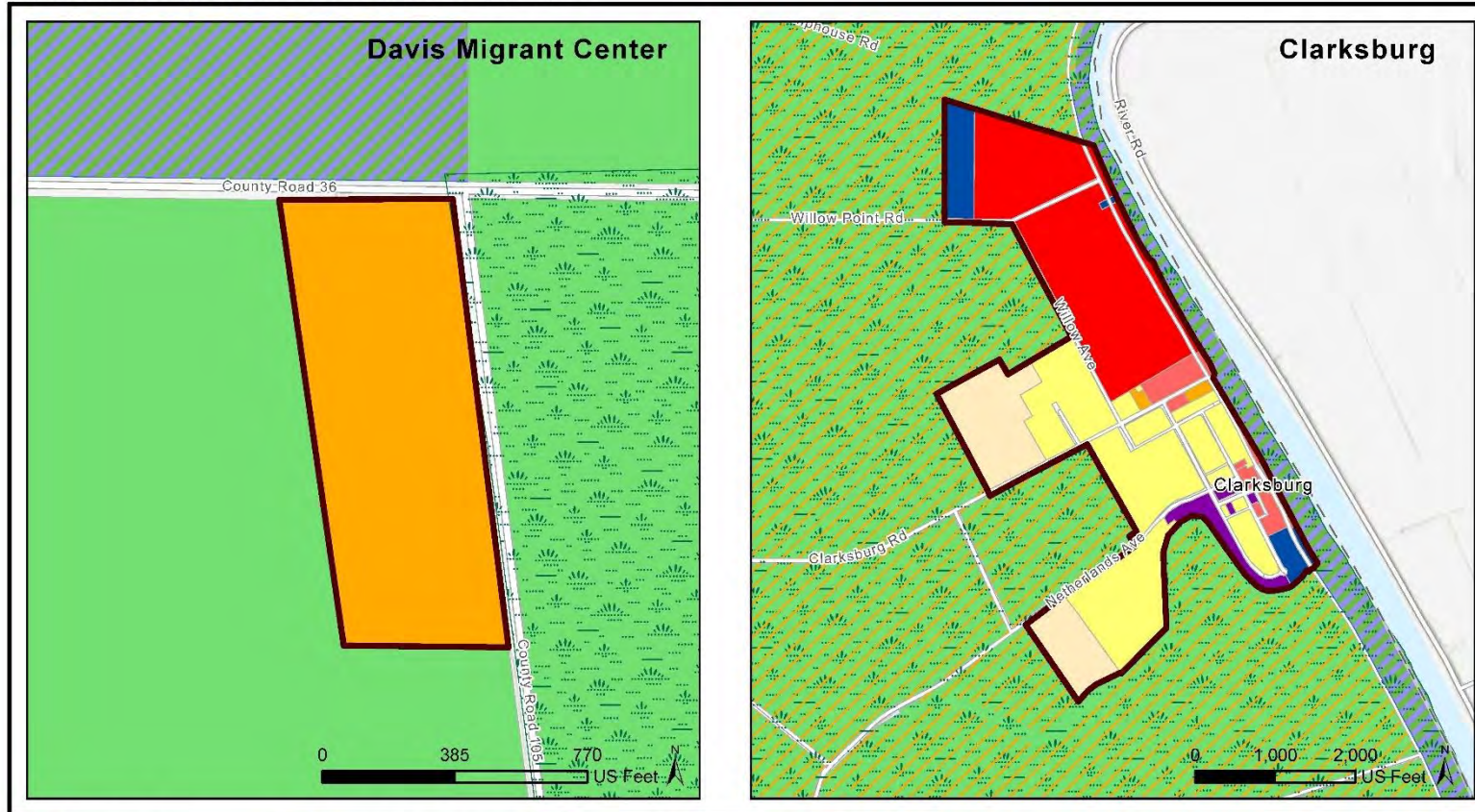
Source: Yolo County GIS

COUNTY OF YOLO 2030 COUNTYWIDE GENERAL PLAN



LAND USE AND COMMUNITY CHARACTER ELEMENT

FIGURE LU-1C GENERAL PLAN LAND USE MAP



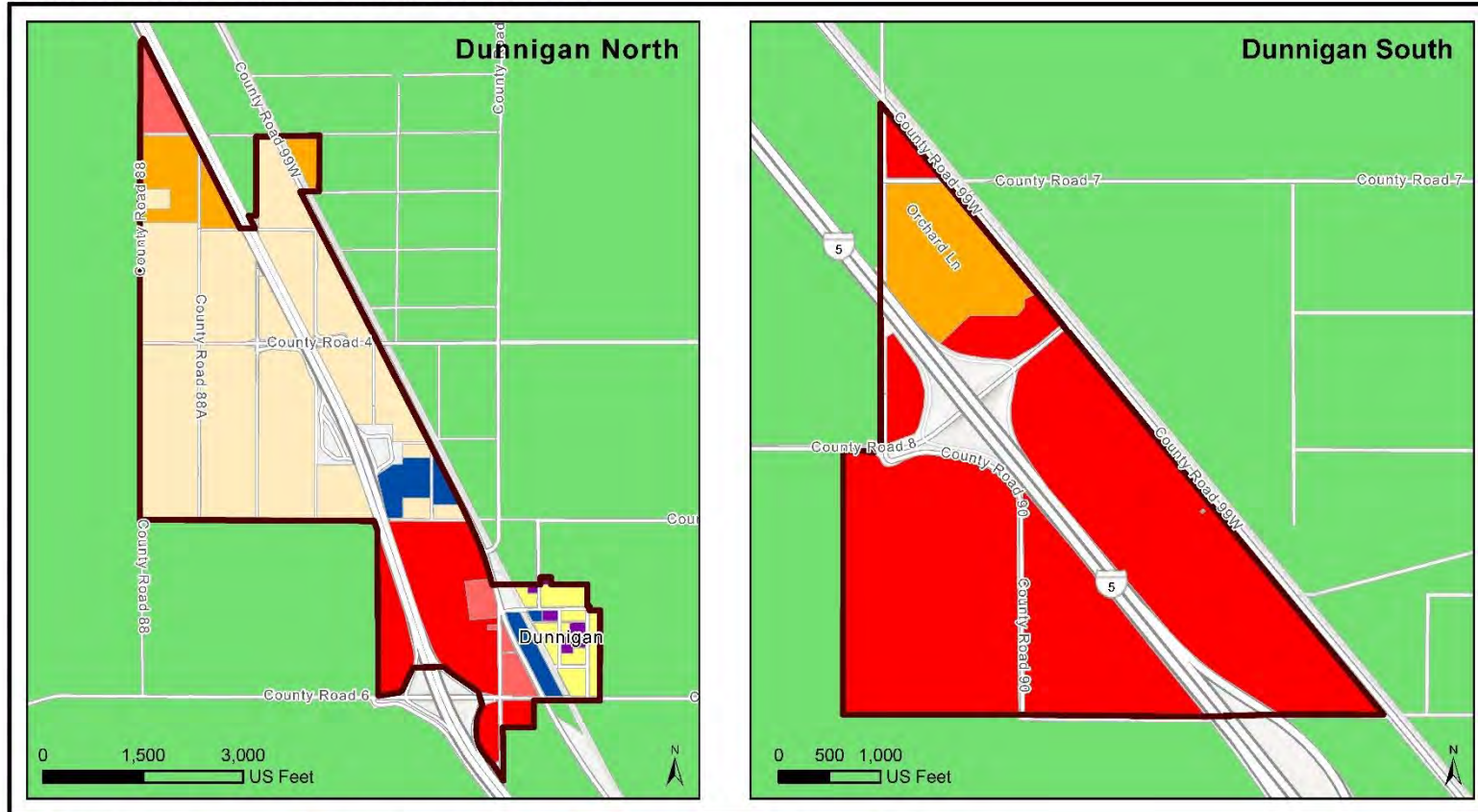
- | | | | |
|---------------------------|-------------------------|------------------------------|--|
| Agriculture (AG) | Residential Medium (RM) | Public and Quasi-Public (PQ) | Clarksburg Agricultural District Overlay |
| Open Space (OS) | Residential High (RH) | Specific Plan (SP) | Delta Protection Overlay |
| Parks and Recreation (PR) | Commercial General (CG) | Cities | |
| Residential Rural (RR) | Commercial Local (CL) | Growth Boundaries | |
| Residential Low (RL) | Industrial (IN) | | |

Source: Yolo County GIS



LAND USE AND COMMUNITY CHARACTER ELEMENT

FIGURE LU-1D GENERAL PLAN LAND USE MAP



- | | | | |
|---------------------------|-------------------------|------------------------------|-------------------|
| Agriculture (AG) | Residential Low (RL) | Commercial Local (CL) | Cities |
| Open Space (OS) | Residential Medium (RM) | Industrial (IN) | Growth Boundaries |
| Parks and Recreation (PR) | Residential High (RH) | Public and Quasi-Public (PQ) | |
| Residential Rural (RR) | Commercial General (CG) | Specific Plan (SP) | |

Source: Yolo County GIS

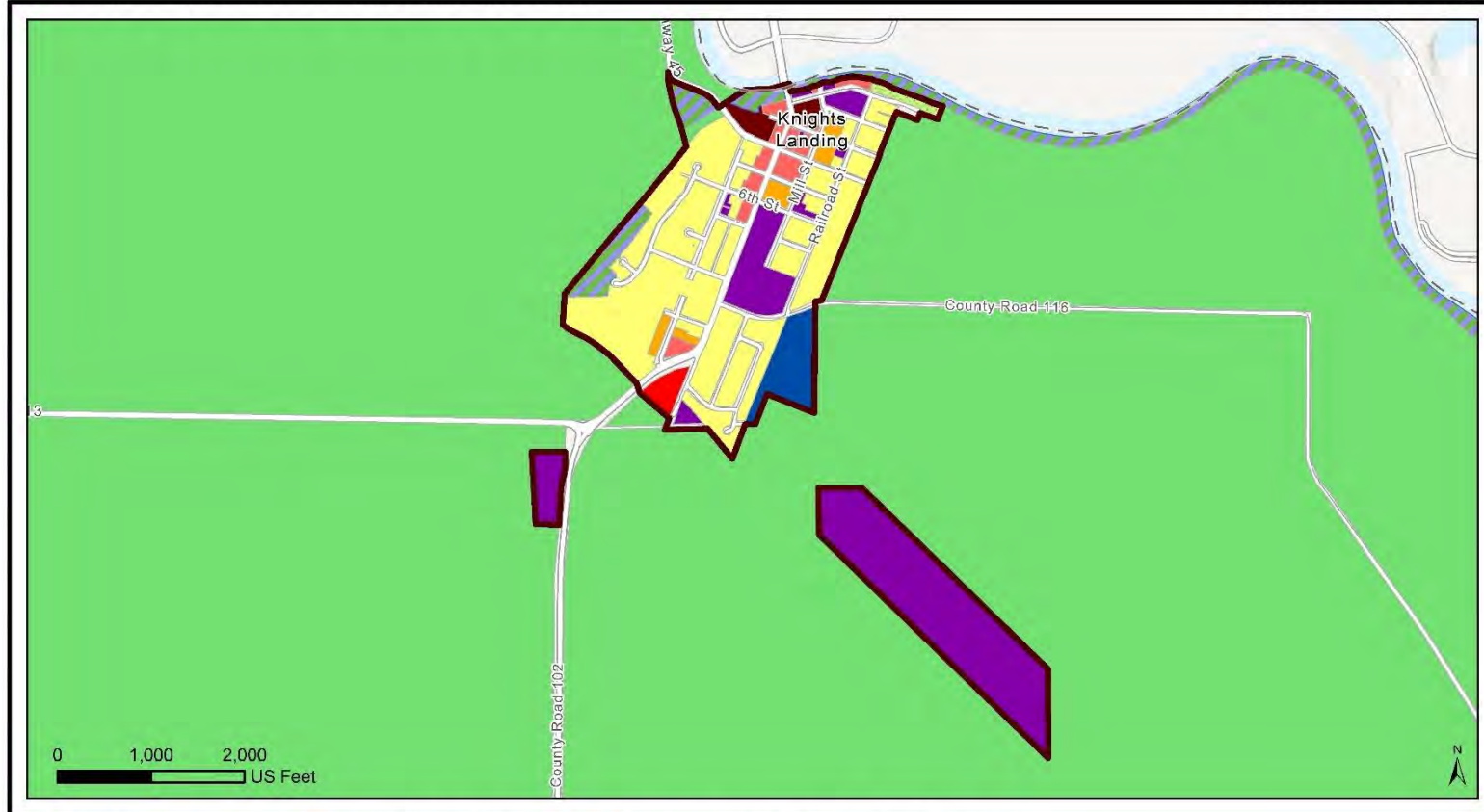
COUNTY OF YOLO 2030 COUNTYWIDE GENERAL PLAN



LAND USE AND COMMUNITY CHARACTER ELEMENT

FIGURE LU-1E GENERAL PLAN LAND USE MAP

Knights Landing



- | | | | |
|---------------------------|-------------------------|------------------------------|-------------------|
| Agriculture (AG) | Residential Low (RL) | Commercial Local (CL) | Cities |
| Open Space (OS) | Residential Medium (RM) | Industrial (IN) | Growth Boundaries |
| Parks and Recreation (PR) | Residential High (RH) | Public and Quasi-Public (PQ) | |
| Residential Rural (RR) | Commercial General (CG) | Specific Plan (SP) | |

Source: Yolo County GIS



LAND USE AND COMMUNITY CHARACTER ELEMENT

FIGURE LU-1F GENERAL PLAN LAND USE MAP

Madison



- | | | | |
|---------------------------|-------------------------|------------------------------|-------------------|
| Agriculture (AG) | Residential Low (RL) | Commercial Local (CL) | Cities |
| Open Space (OS) | Residential Medium (RM) | Industrial (IN) | Growth Boundaries |
| Parks and Recreation (PR) | Residential High (RH) | Public and Quasi-Public (PQ) | |
| Residential Rural (RR) | Commercial General (CG) | Specific Plan (SP) | |

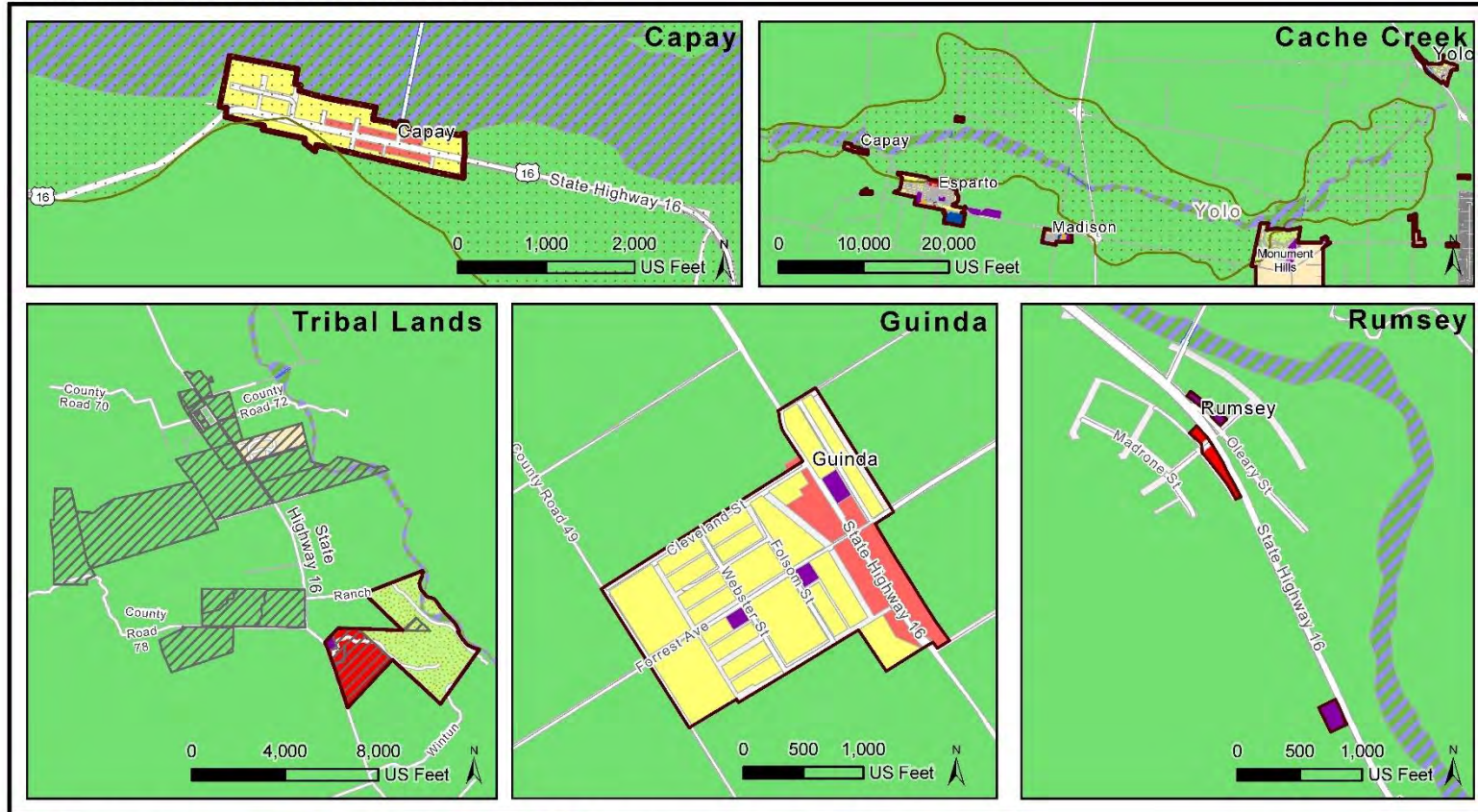
Source: Yolo County GIS

COUNTY OF YOLO 2030 COUNTYWIDE GENERAL PLAN



LAND USE AND COMMUNITY CHARACTER ELEMENT

FIGURE LU-1G GENERAL PLAN LAND USE MAP



- | | | | |
|---------------------------|-------------------------|------------------------------|--------------------------------|
| Agriculture (AG) | Residential Medium (RM) | Public and Quasi-Public (PQ) | Tribal Trust Overlay (TTO) |
| Open Space (OS) | Residential High (RH) | Specific Plan (SP) | Mineral Resource Overlay (MRO) |
| Parks and Recreation (PR) | Commercial General (CG) | Cities | |
| Residential Rural (RR) | Commercial Local (CL) | Growth Boundaries | |
| Residential Low (RL) | Industrial (IN) | | |

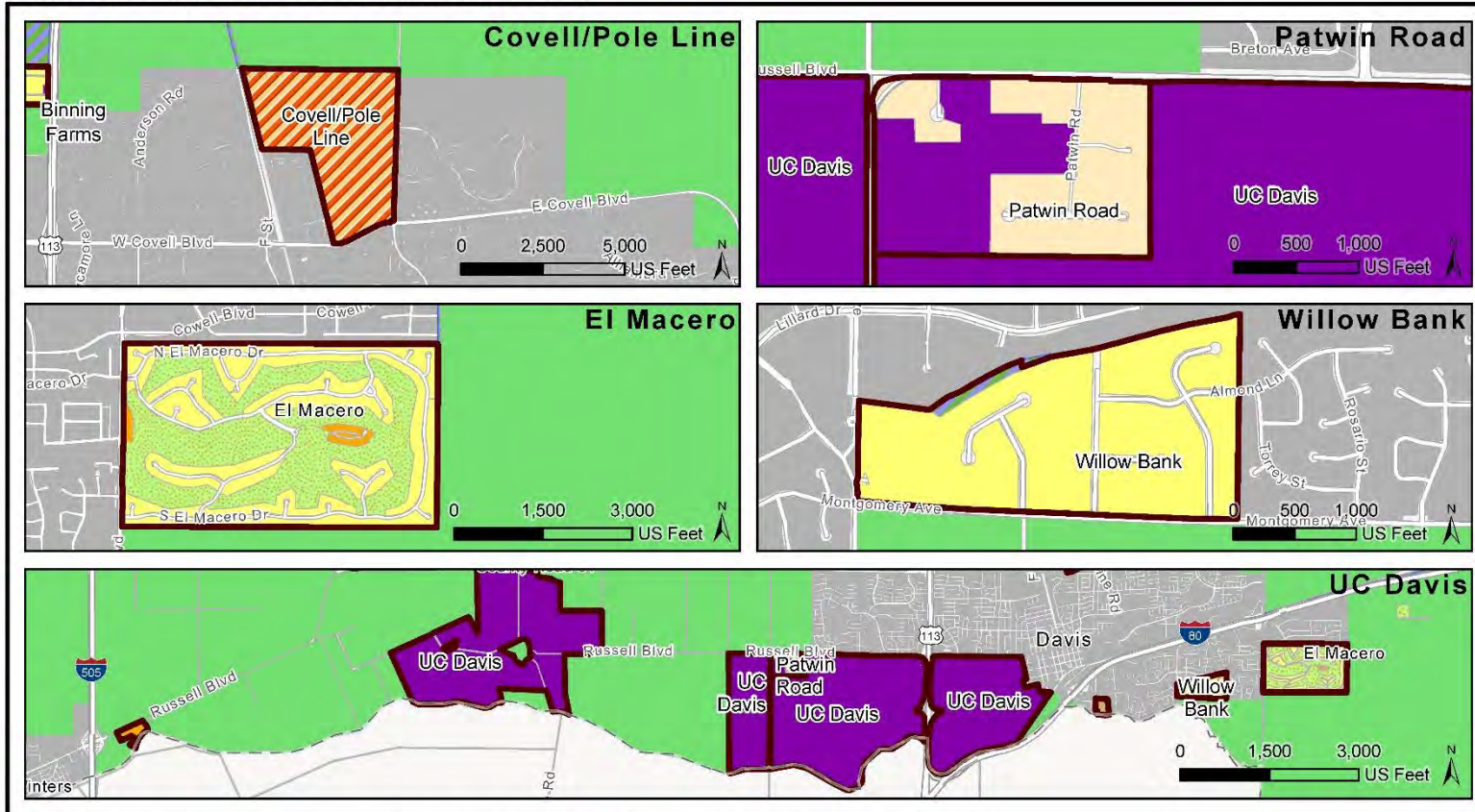
Source: Yolo County GIS

COUNTY OF YOLO 2030 COUNTYWIDE GENERAL PLAN



LAND USE AND COMMUNITY CHARACTER ELEMENT

FIGURE LU-1H GENERAL PLAN LAND USE MAP



- | | | | |
|---------------------------|-------------------------|------------------------------|-------------------|
| Agriculture (AG) | Residential Low (RL) | Commercial Local (CL) | Cities |
| Open Space (OS) | Residential Medium (RM) | Industrial (IN) | Growth Boundaries |
| Parks and Recreation (PR) | Residential High (RH) | Public and Quasi-Public (PQ) | |
| Residential Rural (RR) | Commercial General (CG) | Specific Plan (SP) | |

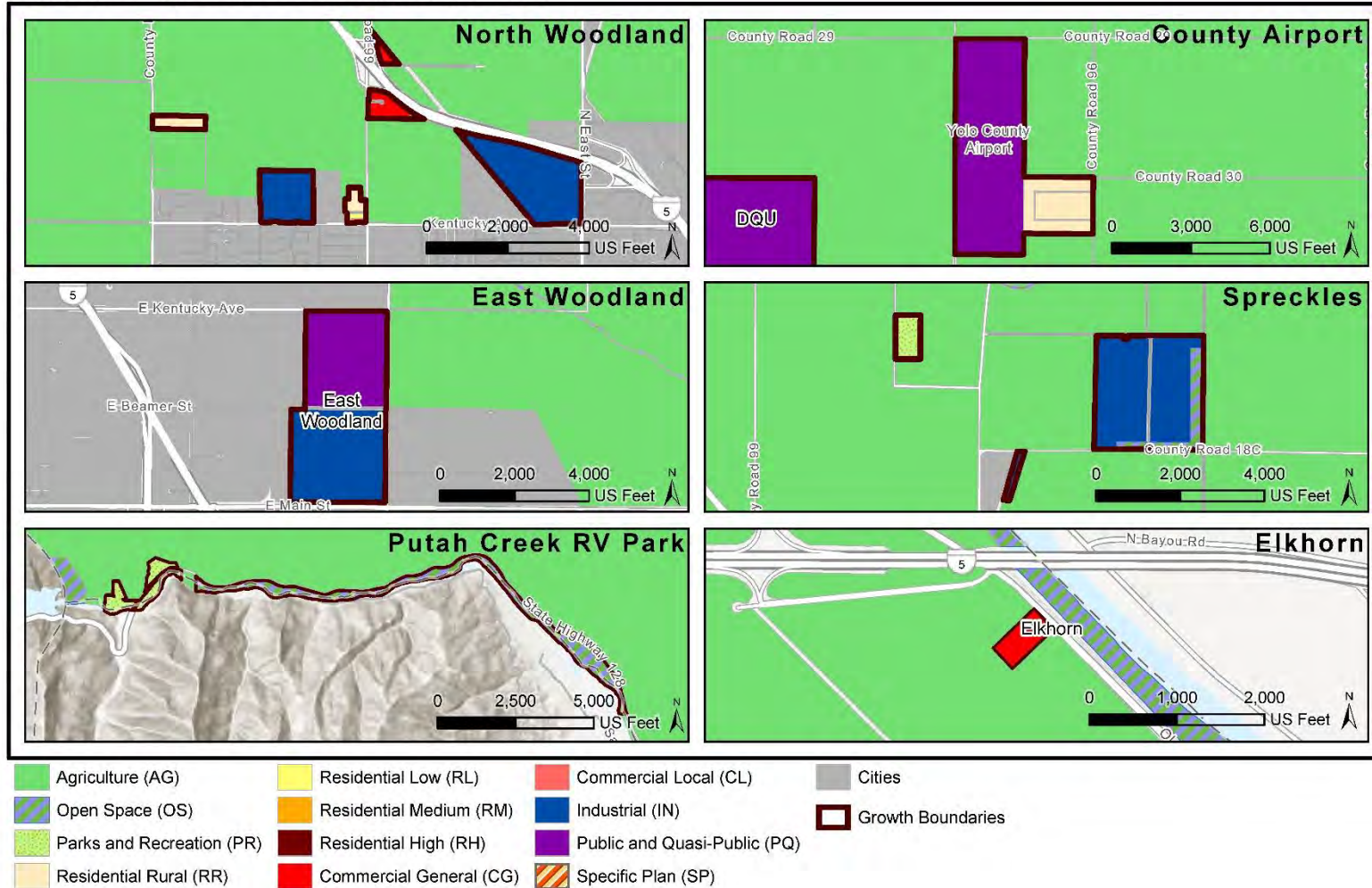
Source: Yolo County GIS

COUNTY OF YOLO 2030 COUNTYWIDE GENERAL PLAN



LAND USE AND COMMUNITY CHARACTER ELEMENT

FIGURE LU-11 GENERAL PLAN LAND USE MAP



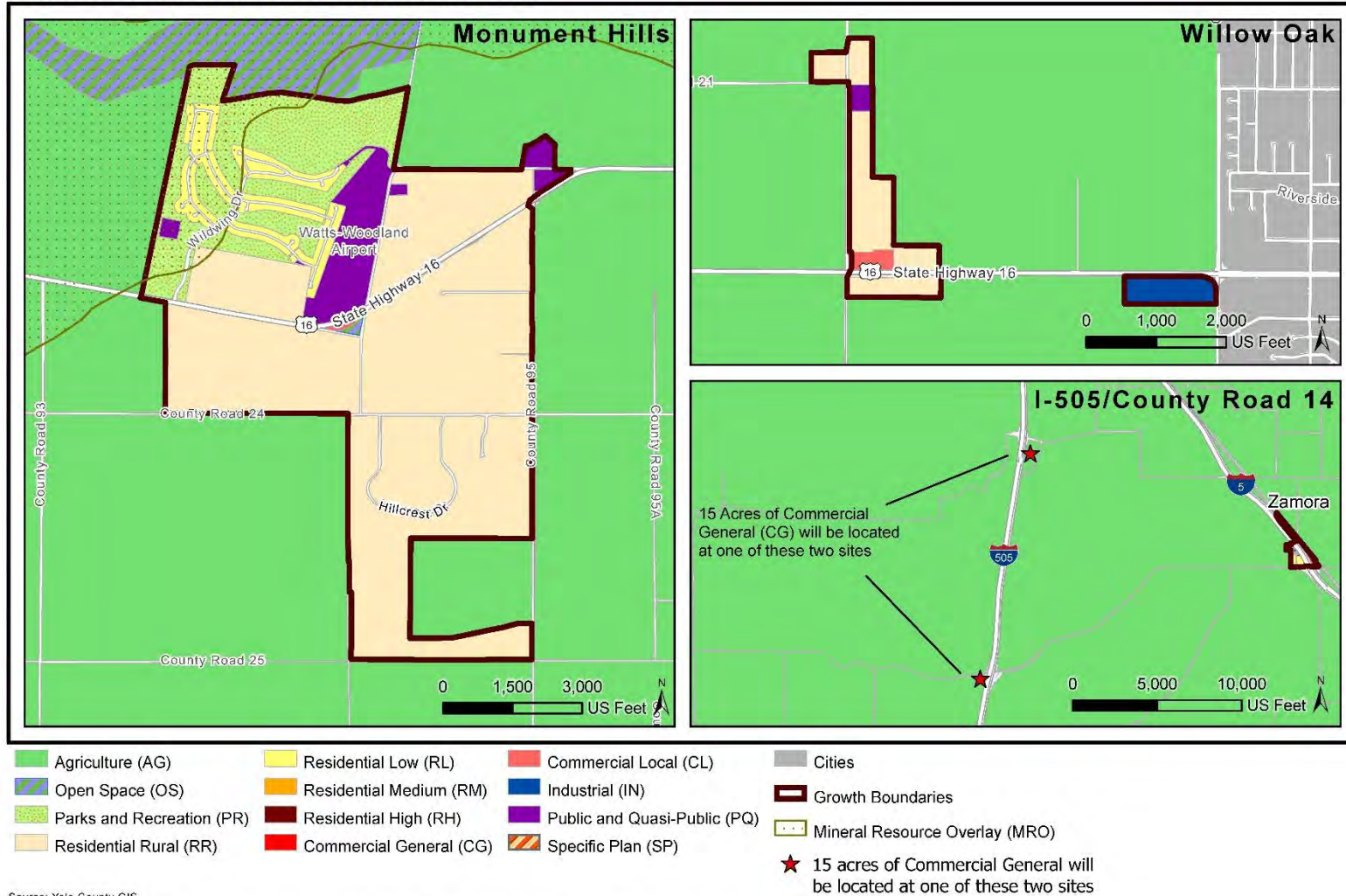
Source: Yolo County GIS

COUNTY OF YOLO 2030 COUNTYWIDE GENERAL PLAN



LAND USE AND COMMUNITY CHARACTER ELEMENT

FIGURE LU-1J GENERAL PLAN LAND USE MAP



Source: Yolo County GIS

COUNTY OF YOLO 2030 COUNTYWIDE GENERAL PLAN



LAND USE AND COMMUNITY CHARACTER ELEMENT

FIGURE LU-1K GENERAL PLAN LAND USE MAP

Zamora



- | | | | |
|---------------------------|-------------------------|-------------------------------|-------------------|
| Agriculture (AG) | Residential Low (RL) | Commercial Local (CL) | Cities |
| Open Space (OS) | Residential Medium (RM) | Industrial (IN) | Growth Boundaries |
| Parks and Recreation (PR) | Residential High (RH) | Public and Quasi-Public (PQP) | |
| Residential Rural (RR) | Commercial General (CG) | Specific Plan (SP) | |

Source: Yolo County GIS

COUNTY OF YOLO 2030 COUNTYWIDE GENERAL PLAN



LAND USE AND COMMUNITY CHARACTER ELEMENT

FIGURE LU-1L GENERAL PLAN LAND USE MAP

Yolo



- | | | | |
|---------------------------|-------------------------|------------------------------|-------------------|
| Agriculture (AG) | Residential Low (RL) | Commercial Local (CL) | Cities |
| Open Space (OS) | Residential Medium (RM) | Industrial (IN) | Growth Boundaries |
| Parks and Recreation (PR) | Residential High (RH) | Public and Quasi-Public (PQ) | |
| Residential Rural (RR) | Commercial General (CG) | Specific Plan (SP) | |

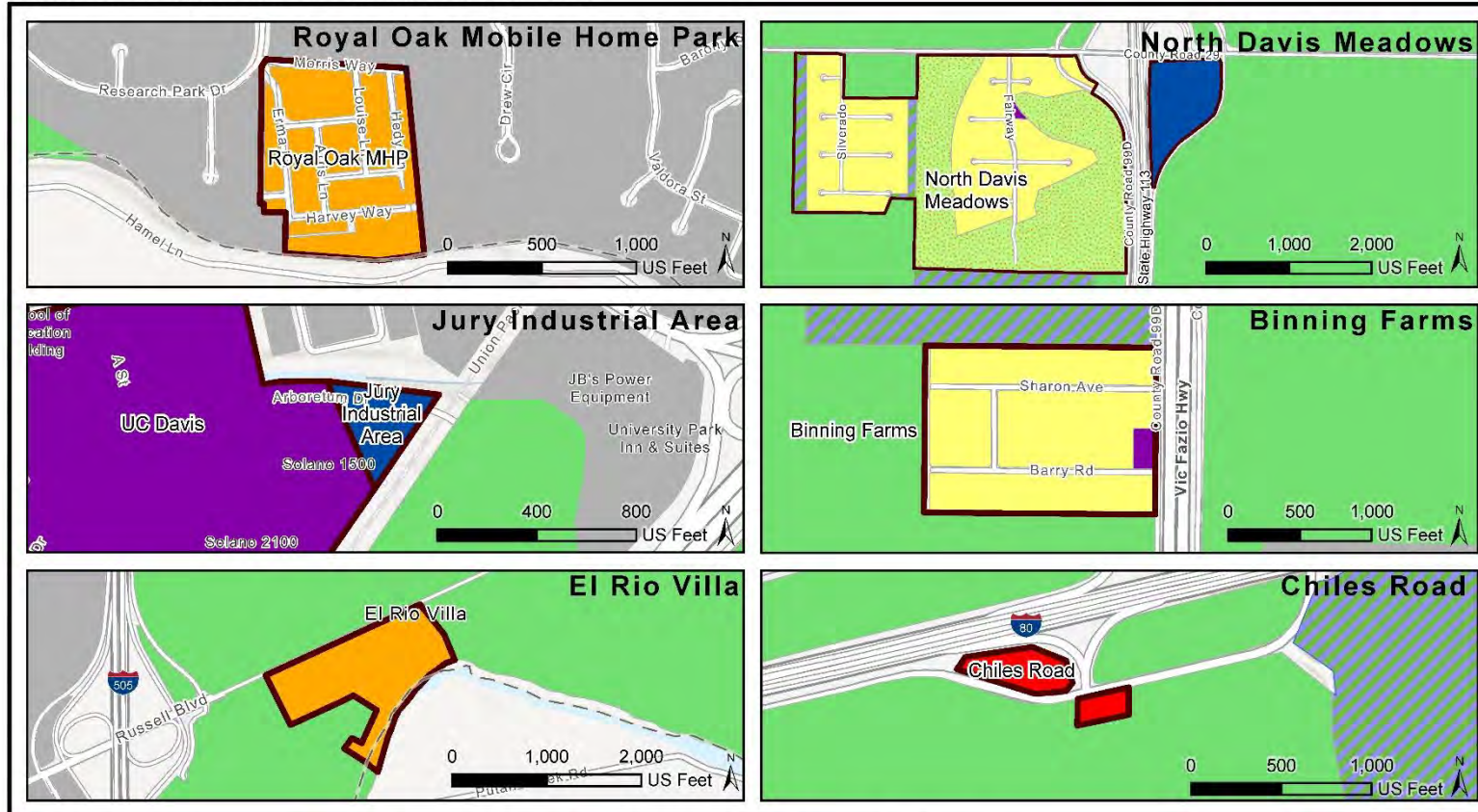
Source: Yolo County GIS

COUNTY OF YOLO 2030 COUNTYWIDE GENERAL PLAN



LAND USE AND COMMUNITY CHARACTER ELEMENT

FIGURE LU-1M GENERAL PLAN LAND USE MAP



Source: Yolo County GIS

COUNTY OF YOLO 2030 COUNTYWIDE GENERAL PLAN



TABLE LU-4 Land Use Designations

Land Use Designation (XX)	Allowed Uses	Residential Density	Persons Per Acre ^a	FAR ^b Maximum	Maximum Impervious Surface
Open Space (OS)	Public open space lands, major natural water bodies, agricultural buffer areas, and habitat. Characterized by “passive” and/or very low management uses as the primary land use, as distinguished from AG or PR land use designations which involve more intense management of the land. Detention basins allowed as ancillary use if designed with naturalized features and native landscaping, compatible with the open space primary use.	One caretaker unit.	<0.1	0.001	>0.01%
Agriculture (AG)	Full range of cultivated agriculture such as row crops, orchards, vineyards, dryland farming, livestock grazing, forest products, confined animal facilities, and equestrian facilities. Agricultural industrial – agricultural research, processing and storage; crop dusting. Agricultural commercial – roadside stands, “Yolo Stores”, wineries, farm-based tourism (e.g. u-pick, dude ranch, lodging), horse shows, rodeos, crop-based seasonal events; agricultural chemical and equipment sales. Pre-existing isolated restaurants and/or stores (e.g. old stage stops and cross-roads) serving rural areas. Farmworker housing. Surface mining. Incidental habitat.	Two farm dwellings per legal parcel.	<0.1	0.1 ^c	20% ^c
Parks and Recreation (PR)	Developed (“active park”) facilities. Regional, community and neighborhood parks, tot lots, sports fields and public pools. Agricultural buffer areas. Detention basins allowed as ancillary use when designed with recreational or sports features.	Regional community parks and campgrounds are allowed one caretaker unit. No allowed residential uses for community or neighborhood parks and similar facilities.	<0.05	0.025	10%
Residential Rural (RR)	Large lot rural living. Detached single-family units. Attached and/or detached second unit or duplex allowed.	1 du/5ac to < 2 du/ac. Assume 1du/2.5ac typical yield.	Range: 0.6 to 1.0 Typical: 0.9	See zoning	See zoning.
Residential Low (RL)	Traditional neighborhood living. Detached single-family units. Attached and/or detached second unit or duplex allowed. Triplexes and four-plexes allowed when designed to be compatible with adjoining single-family homes. Small compatible neighborhood serving retail and office allowed as ancillary use.	1 du/ac to <10 du/ac. Assume 7du/ac typical yield.	Range: 2.8 to 27.7 Typical: 19.6	See zoning	See zoning
Residential Medium (RM)	Dense urban living. Detached and attached single family and multi-family units. Small compatible neighborhood serving retail and office allowed as ancillary use	10 du/ac to <20 du/ac. Assume 15 du/ac typical yield.	Range: 28 to 55.7 Typical: 42.0	See zoning	See zoning



Land Use Designation (XX)	Allowed Uses	Residential Density	Persons Per Acre ^a	FAR ^b Maximum	Maximum Impervious Surface
Residential High (RH)	Apartments and condominiums. Attached multi-family units. Small compatible neighborhood serving retail and office allowed as ancillary use	≥ 20 du/ac. Assume 25 du/ac typical yield.	>56 Typical: 70.0	See zoning	See zoning
Commercial General (CG)	Regional- and highway-serving retail, office and service. Regional- and highway-serving agricultural commercial allowed. No limit on floor plate (ground floor square footage). Research and Development with offices and service support as primary use (more than 50 percent of total square footage). Upper floor and accessory residential uses allowed.	Upper floor residential and ancillary attached residential at any density.	Range: 0 to 44.8 Avg. 22.4	1.0 for commercial 2.0 for mixed use with residential	85%
Commercial Local (CL)	Local-serving retail, office and service uses. Local-serving agricultural commercial allowed. Range of goods and services to meet everyday needs of residents within a community. Restricted to small floor plate users (less than 40,000 square feet ground floor). Upper floor and ancillary residential uses allowed.	Upper floor residential and ancillary attached residential at any density.	Range: 0 to 44.8 Avg. 22.4	0.5 for commercial 1.0 for mixed use with residential	90%
Industrial (IN)	Full range of light to heavy industrial/ manufacturing uses. Agricultural industrial allowed. Research and Development and biotechnology with manufacturing as primary use (more than 50 percent of total square footage). Storage facilities, contractor's yards, corporation yards, dismantling, etc.	One caretaker unit per operation.	<0.5	0.5	90%
Public and Quasi-Public (PQ)	Public/governmental offices, places of worship, schools, libraries and other civic uses. Public airports (including related visitor services). Infrastructure including wastewater treatment facilities, municipal wells, landfills, and storm water detention basins. Agricultural buffer areas.	None.	0	0.5	80%
Specific Plan (SP)	Interim land uses (until SP is in place) limited to those uses allowed in the AG designation. Ultimate land uses must be consistent with adopted SP. This designation limits development to AG uses until such time as a SP is processed and approved by the County, or the land use designation is otherwise amended. Land designated SP is discouraged from more capital intensive agricultural uses in favor of later planned uses.	Interim -- two farm dwellings per legal parcel. Ultimate -- as specified in the Specific Plan.	<0.1	Per the Specific Plan, using designations above as maximums.	Per the Specific Plan, using designations above as maximums.
Natural Heritage Overlay (NHO)	Applies to focused conservation areas identified in the Yolo Natural Heritage Program.	As allowed under the base designation and adopted Yolo Natural Heritage Program.	--	--	--



Land Use Designation (XX)	Allowed Uses	Residential Density	Persons Per Acre ^a	FAR ^b Maximum	Maximum Impervious Surface
Agricultural District Overlay (ADO)	Applies to designated agricultural districts. Land uses consistent with the base designation and the district specifications are allowed.	As defined for each district.	--	--	--
Delta Protection Overlay (DPO)	Applies to the State designated "primary zone" of the Sacramento-San Joaquin Delta, as defined in the Delta Protection Act. Land uses consistent with the base designation and the Delta Protection Commission's Land Use and Resource Management Plan are allowed.	As allowed under the base designation and applicable Delta Land Use and Resource Management Plan.	--	--	--
Mineral Resource Overlay (MRO)	Applies to State designated mineral resources (MRZ-2) and existing mining operations.	As allowed under the base designation.	--	--	--
Tribal Trust Overlay (TTO) ^d	Applies to tribal trust lands held by the federal government in favor of recognized tribal governments.	As defined by the sovereign government and/or appropriate applicable documents or agreements. The County does not have jurisdiction over these lands absent an applicable agreement with the federal government and/or sovereign entity.	--	--	--

Note: Densities are net of major water bodies, freeways and arterials.

^a Persons per household is calculated assuming 2.8 persons per household.

^b Floor area ratio.

^c For Agricultural Industrial see IN. For Agricultural Commercial see CG.

^d The County exercises no development or zoning control over properties designated as tribal trust lands in the General Plan. These properties are under the sole jurisdiction and control of the Rumsey Band of Wintun Indians of California. The Tribal Trust Overlay designation applies to properties within the County that are held in trust by federal agencies for the benefit of an Indian tribe. These lands can have important economic and environmental relationships to both the County and area residents. However, properties with this designation may not be subject to County planning, zoning and building regulations. Cooperative efforts between the County and local tribal governments are important to ensuring that areawide issues are appropriately addressed to the benefit of all local residents.

7 CONSERVATION AND OPEN SPACE ELEMENT



Vic Fazio Yolo Wildlife Area

Source: Dave Feliz

This element focuses on balanced management of the County's multiple natural and cultural resources. The goals and policies speak to a connected and accessible open space system with communities separated by agriculture and natural spaces, linked by a network of trails. Open spaces complement other land areas in a way that benefits both natural resources and the community. This element anticipates full integration of the Yolo Natural Heritage Program as a tool for multi-species protection. Future expansion of mineral resource extraction programs via the Cache Creek Area Plan and development of the future Cache Creek Parkway is addressed. Local actions to reduce greenhouse gases and promote alternative energy opportunities are also emphasized.

Uncertainty regarding future regulations and appropriate policy strategies for climate change are particularly challenging at the time of this update. In addition to a section on climate change within this element, policies and actions that address climate change appear throughout the entire General Plan and are identified by a small "🌍" icon. The County is committed to the reduction of greenhouse gases and has sought to balance this goal with other community values.

Similarly, the County faces uncertainty regarding future land uses and governance in the Delta. This section contains a section conservation and open space within the Delta region. In addition, there are numerous Delta-related goals, policies, and actions located throughout all the elements.



A. Introduction

1. Context

The land use designations used for purposes of categorizing, mapping, applying policy to land are identified and defined in the Land Use and Community Character Element. The County makes a distinction between Open Space (OS), Agriculture (AG), and Parks and Recreation (PR) land, as defined in that element. However, the state definition of “open space” (see Section B below) as used throughout this Conservation and Open Space Element, is more generic, and often refers to a combination of lands designated by the County as OS, AG, and PR.

Yolo County’s open spaces (including working agricultural and recreational landscapes) play a critical role in defining the identity of the County, incorporating many of the key natural and cultural heritage resources of local communities, and maintaining distinct boundaries between the cities and unincorporated communities. Protecting and enhancing this open space system and the natural, cultural and agricultural legacy it contains is of critical concern to the County.

The Conservation and Open Space Element provides direction regarding the preservation of open space and the conservation, continued enjoyment, and enhancement of natural resources in Yolo County. The County is committed to conserving its open spaces, biological resources, mineral, cultural resources, water resources, air quality, and energy resources, and to addressing climate change. This element provides for an integrated network of open space in Yolo County that is a framework to safeguard plant and wildlife habitat, provide for ongoing use of productive natural resources, protect archaeological and historical resources and heritage, and improve air quality in the Sacramento air basin. It provides for an ongoing commitment by the County to conserve energy and reduce the County’s contribution to greenhouse gas emissions.

2. Contents

This element is organized into subsections that specifically cover:

1. Natural Open Space (Goal CO-1)
2. Biological Resources (Goal CO-2)
3. Mineral Resources (Goal CO-3)
4. Cultural Resources (Goal CO-4)
5. Water Resources (Goal CO-5)
6. Air Quality (Goal CO-6)
7. Energy Conservation (Goal CO-7)
8. Climate Change (Goal CO-8)
9. Delta Region (Goal CO-9)



The subsection for each of these topics is formatted as follows: Background Information, Policy Framework, and Implementation Program. Within the Policy Framework and Implementation Program sections, policies and actions related to climate change are denoted with the symbol “🌍”.

3. Background Information

Summary background information for each topic of this element is provided with the relevant subsection below.

B. Regulatory Framework

1. State General Plan Requirements

This Conservation and Open Space Element combines two of the seven required elements of a General Plan: the Conservation Element, which is required to address the conservation, development and utilization of natural resources, and the Open Space Element, which is required to address open space lands used for a variety of purposes.

Specifically, State law (Sections 65302d.1 and 65302d.3 of the Government Code) mandates that the Conservation Element address the following:

- Water and its hydraulic force
- Forests
- Soils
- Rivers, creeks, streams, and other waters
- Harbors
- Fisheries
- Wildlife
- Minerals
- Other natural resources
- Effects of planned development on natural resources on public lands
- Effects of planned development on natural resources on military installations
- Flood corridors
- Riparian habitats
- Flood areas
- Groundwater recharge
- Stormwater management

State law (Section 65302d.2 of the Government Code) specifies that the Conservation Element may also address the following:

- Reclamation of land and waters
- Pollution of streams and other waters
- Regulation of stream channels
- Erosion of soils, beaches, and shores
- Protection of watersheds
- Rock, sand, and gravel resources



State law (Section 65560b of the Government Code and Sections 5097.9 and 5097.993 of the Public Resources Code) mandates that the Open Space Element address the following:

- Open space for preservation of natural resources, including:
 - Areas required for the preservation of plant and animal life
 - Habitat areas for fish and wildlife species
 - Areas required for ecologic and other scientific study purposes
 - Rivers, streams, bays, and estuaries
 - Coastal beaches, lakeshores, banks of rivers and streams
 - Watershed lands
- Open space for the managed production of resources, including:
 - Forest land
 - Range land
 - Agricultural lands
 - Areas of economic importance for the production of food and fiber
 - Areas required for recharge of groundwater basins
 - Bays, estuaries, marshes, rivers, and streams important for commercial fisheries
 - Areas containing mineral deposits
- Open space for outdoor recreation, including:
 - Areas of outstanding scenic, historic, and cultural value
 - Areas particularly suited for park and recreation purposes
 - Access to lakeshores, beaches, rivers, and streams
 - Areas that link major recreation and open space land such as utility easements, river banks, stream banks, and scenic highway corridors
- Open space for public health and safety, including:
 - Earthquake fault zones
 - Unstable soil areas
 - Floodplains
 - Watersheds
 - High fire risk areas
 - Areas required for the protection of water quality and water reservoirs
 - Areas required for the protection and enhancement of air quality
 - Other areas which require special management or regulation because of hazardous or special conditions
- Open space in support of the mission of military installations, including:
 - Areas adjacent to military installations and military training routes
 - Areas underlying restricted military airspace
- Open space for the protection of Native American places, features, and objects, including:



- Sanctified cemeteries
- Places of worship
- Religious or ceremonial sites
- Sacred shrines
- Historic, cultural or sacred sites
- Historic or prehistoric ruins
- Burial grounds
- Archeological or historic sites
- Inscription sites
- Rock art

Yolo County has addressed all of the above items within this element, with the following exceptions:

- Forests and forestlands are addressed in this element only as related to various woodland habitats as the County has no commercial forestland or timber resources. “Urban forestry” is addressed in this element, and in the Land Use and Community Character Element, as it relates to tree canopy in community areas. Orchards and other tree crops are addressed in the Agriculture and Economic Development Element.
- Soils as a resource are addressed primarily in the Agriculture and Economic Development Element. Soil characteristics such as erosion and stability are addressed primarily in the Health and Safety Element.
- The County has no harbors. The Port of Sacramento is addressed in the Circulation Element.
- The County essentially has no military installations and facilities. The only military facility in the County, the McClellan/Davis Telecommunication Site, has been declared surplus by the Air Force and is now closed. Discussion regarding this facility and plans to convert it to a County open space facility are addressed in this element.
- Areas subject to flooding, flood corridors, flood plains, and flood management are addressed primarily in the Health and Safety Element.
- Stormwater management and drainage service providers are addressed in the Public Facilities and Services Element.
- Agriculture, rangeland, and the production of food and fiber are addressed primarily in the Agriculture and Economic Development Element.
- Bays are not addressed in this General Plan, as the County does not have these resources; however other biological resources are addressed in this element. Policies relating to the Delta, which is an estuary, are addressed throughout the General Plan.
- Coastal beaches are not addressed in this General Plan, as the County does not have these resources. Other water resources and features are addressed in this element.



- Commercial fisheries are not addressed in this General Plan, as the County does not have a commercial fishery resource or industry. Other fishery resources are addressed in this element.
- Utility easements are addressed in the Public Facilities and Services Element.
- The County has no designated federal or State Scenic Highways. A portion of State Route 16 (from approximately the town of Capay at County Road 85, north to the County line) is identified by Caltrans as “eligible” for designation as a State Scenic Highway but is not officially designated. Locally designated scenic roadways are addressed in the Land Use and Community Character Element.
- Seismic, geological, and wildland fire hazards are addressed in the Health and Safety Element.

2. Other Related Efforts

The following local and regional plans, programs, and organizations are among those that affect or are involved in the implementation of conservation and open space protection in Yolo County:

- Yolo Natural Heritage Program (YNHP)
- Oak Woodlands Management Plan
- Parks and Open Space Master Plan
- Cache Creek Area Plan (CCAP)
- Integrated Regional Water Management Plan (IRWMP)
- SACOG Rural Urban Connection Strategy
- Sacramento River Conservation Area Forum
- Sacramento Valley Conservancy
- Yolo Bypass Working Group and Planning Forum
- Putah Creek Council and Plan
- Cache Creek Conservancy
- Lower Bypass Planning Forum
- Delta Vision
- Delta Protection Commission
- Bay Delta Conservation Plan
- Blue Ridge Berryessa Natural Area Conservation Partnership
- Yolo Land Trust
- Yolo County Resource Conservation District
- Tuleyome
- Yolo Basin Foundation
- Audubon California Landowners Stewardship Program
- Yolo County Flood Control and Water Conservation District
- Water Resources Association of Yolo County
- Lower Putah Creek Coordinating Committee
- Other private non-profit organizations



C. Natural Open Space

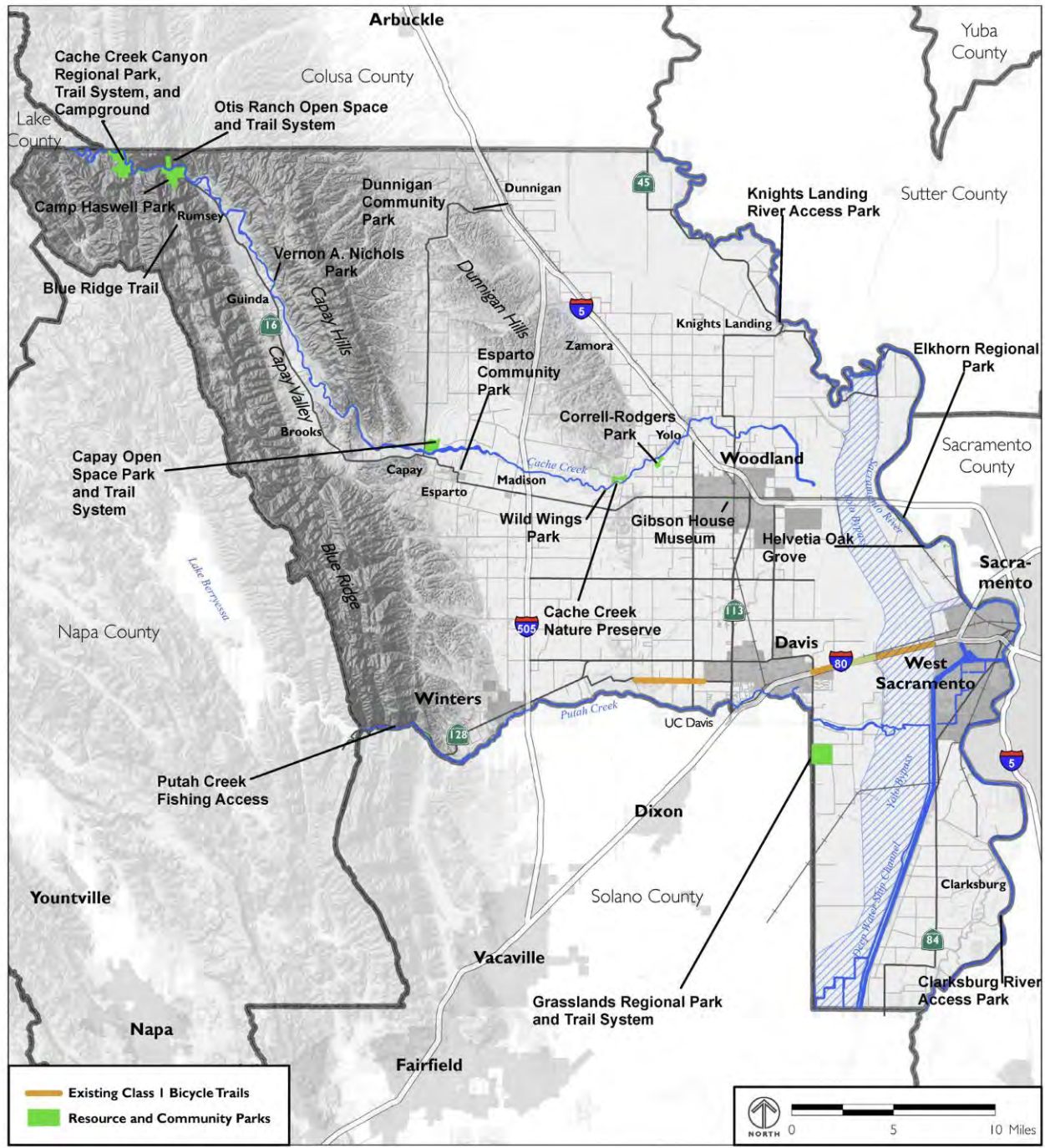
1. Background Information

a. Existing Resource Parks

This section addresses County “resource” parks including regional and open space parkland managed for multiple objectives. Existing parks and trails are shown in Figure CO-1. Community (neighborhood parks), such as those located in Esparto and Dunningan, and the County Historical Museum facility are discussed in the Public Facilities and Services Element. A complete list of existing County Parks is provided in Table CO-1. A map of proposed future park facilities is provided in Figure CO-2.



FIGURE CO-1 EXISTING PUBLIC PARKS AND TRAILS



Source: County of Yolo GIS, 2009.

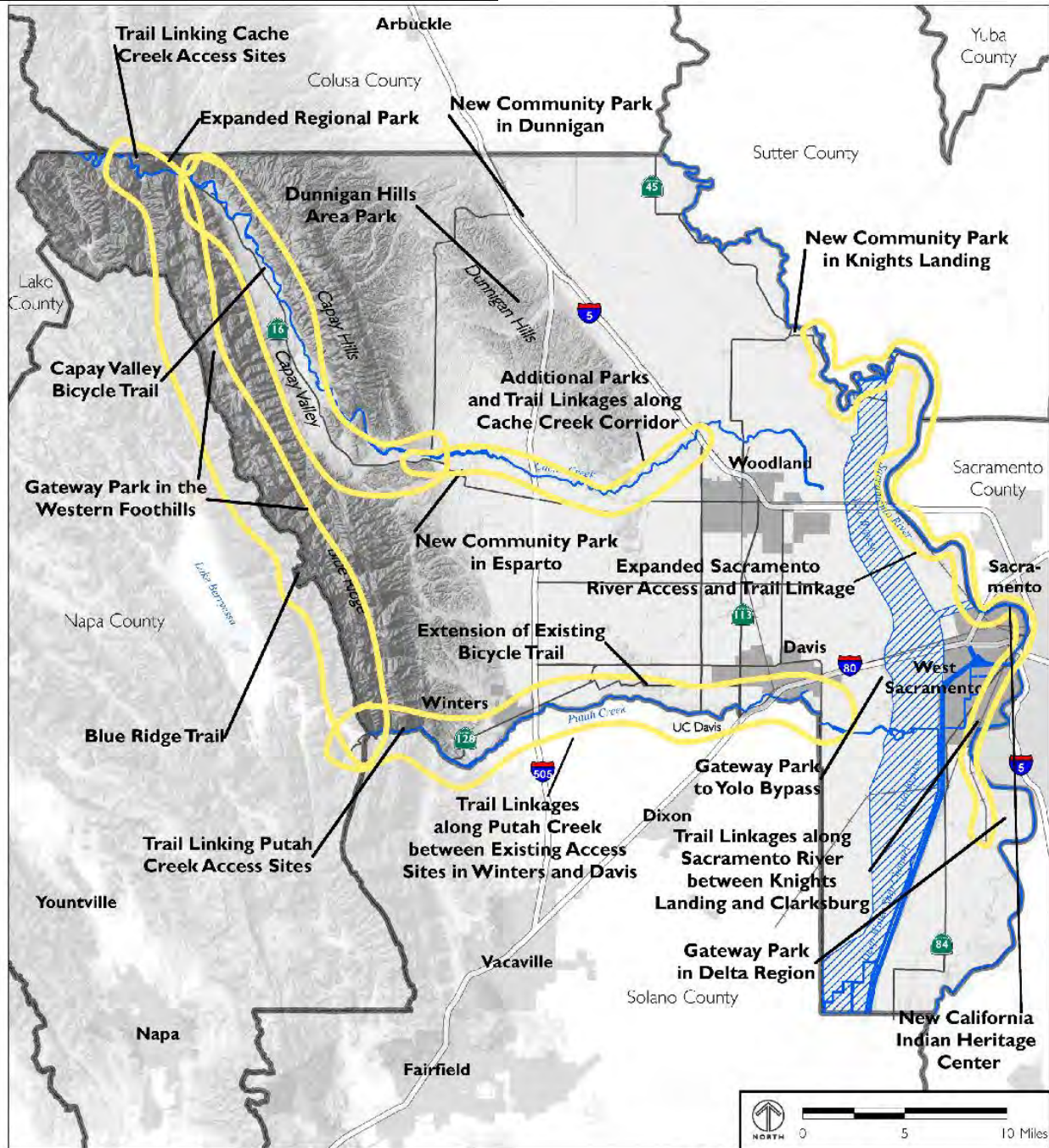


TABLE CO-1 EXISTING COUNTY PARKS

Park	Acreage	Location
Dunnigan Community Park	0.5	3640 County Road 89A, Dunnigan
Esparto Community Park	1	17001 Yolo Avenue, Esparto
Cache Creek Canyon Regional Park, Trail System and Campground	685	1475 State Route 16, Rumsey
Cache Creek Nature Preserve	119	Southwest corner of County Road 20X and 94B, north of Cache Creek, Woodland
Camp Haswell Park	7	1999 State Route 16, Rumsey
Capay Open Space Park and Trail System	41	15560 County Road 85, Capay
Clarksburg River Access Park	4	38125 Old River Road, Clarksburg
Correll-Rodgers Habitat Area	40	East of County Road 96 and south of Cache Creek, Woodland
Elkhorn Regional Park	49	18989 Old River Road, West Sacramento
Gibson House Museum	2	512 Gibson Road, Woodland
Grasslands Regional Park and Trail System	313	30475 County Road 104, Davis
Helvetia Oak Grove	12	20470 Old River Road, West Sacramento
Knights Landing River Access Park	4	9350 State Route 45, Knights Landing
Nichols Park	21	17195 County Road 57, Guinda
Otis Ranch Open Space and Trail System	587	West of State Route 16, Rumsey
Putah Creek Fishing Access	87	24135 State Route 128, Winters
Wild Wings Park	17	North of Goldeneye Street and south of Cache Creek, Woodland
TOTAL	1976.5	



FIGURE CO-2 FUTURE PARKS AND TRAILS





The term “resource” park is used herein to refer to regional and/or open space parkland, typically much larger in size than a community park, typically characterized by passive and/or very low-management uses, and intended to serve both the county population and outside visitors, rather than an individual community. In contrast community (or neighborhood) parks are small in area (less than 10 acres), usually located in or near small population centers, and developed for a variety of community uses, gatherings, and events. These parks are intended to provide active recreational areas, such as playgrounds, sports fields, and sports courts.

Yolo County owns and/or manages a number of resource parks; however, the vast majority of open space in the County remains in private ownership. Additional public and quasi-public landowners include non-profit organizations, tribal groups and non-County public agencies, including the incorporated cities, the University of California, the State and federal governments. Figure CO-3 shows the various existing publicly owned or managed open space lands in the county.

b. Existing Natural Open Space

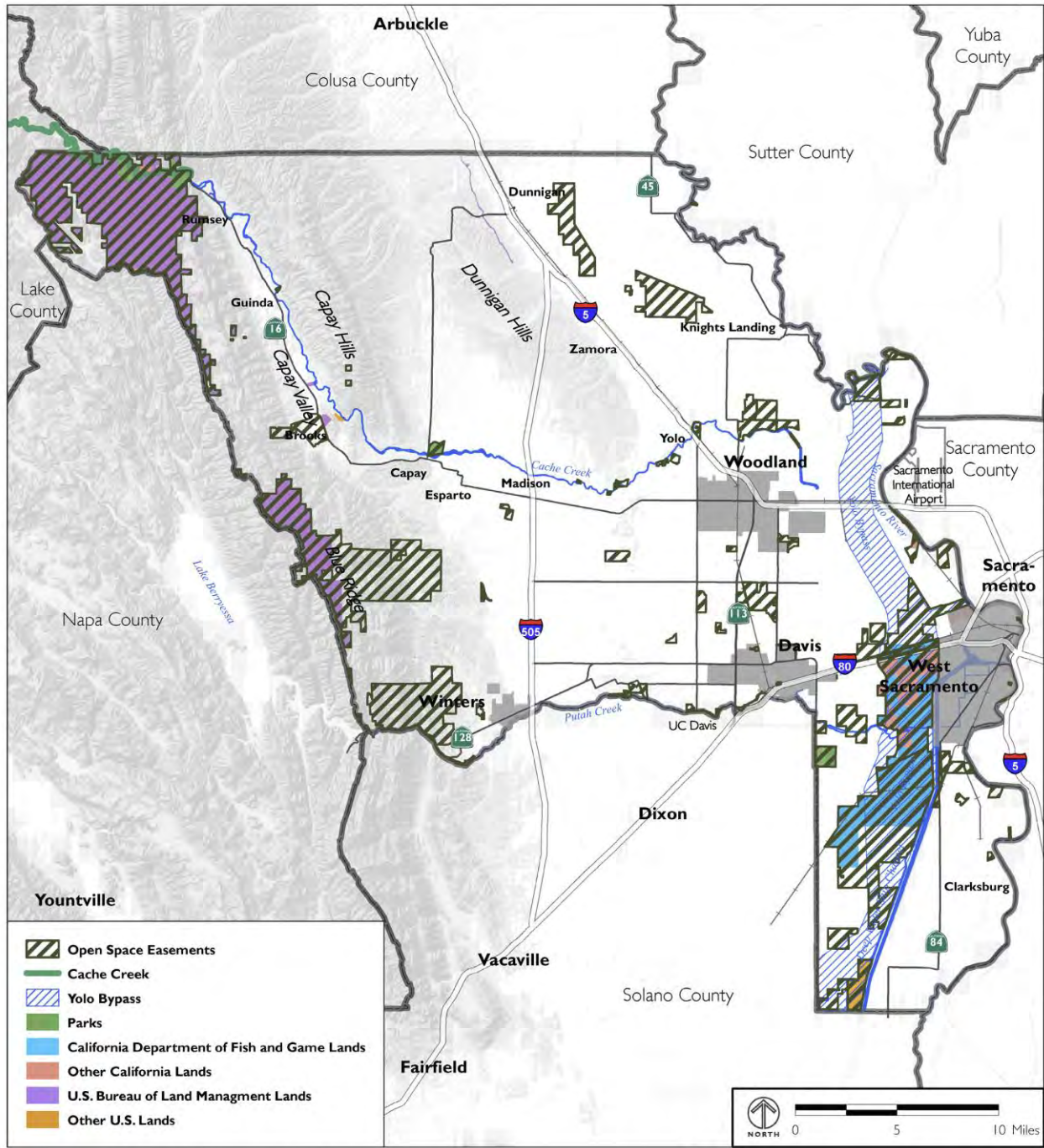
Large open space areas in Yolo County are owned and managed by a variety of entities including federal, State, and local government, non-governmental organizations, commercial mitigation banks, and other private interests. Publicly owned lands account for approximately six percent of the county land area. Large properties under public ownership and/or management in Yolo County include:

- The Yolo Bypass Wildlife Area (Wildlife Area) is 16,770 acres of managed wildlife habitat and agricultural land located within the southern floodway of the Yolo Bypass.¹ A portion of the Wildlife Area spans Interstate 80 adjacent to the Yolo Causeway, between the cities of Davis and West Sacramento. The Wildlife Area is a public and private restoration project managed by the California Department of Fish and Game (DFG) in consultation with the Yolo Basin Foundation. In 1997, the U.S. Army Corps of Engineers restored wetlands and associated habitats within the Wildlife Area. This project, originally named the Yolo Basin Wetlands, was re-named the Vic Fazio Yolo Wildlife Area. The entire wildlife area, however, is officially named the Yolo Bypass Wildlife Area.

¹ The Yolo Basin Foundation, *Land Management Plan for the Yolo Bypass Wildlife Area*, page 1-1.



FIGURE CO-3 PUBLICLY-OWNED OPEN SPACE AREAS



Sources: County of Yolo GIS, 2006; Department of Fish and Game, 2000.



The Blue Ridge Berryessa area consists of 785,000 acres along the spine of the western Blue Ridge Mountains in the northwestern part of Yolo County, and includes portions of Colusa, Solano, Napa and Lake Counties. The area remains primarily in private ownership and is not subject to State or federal management. The Blue Ridge Berryessa Natural Area Conservation Partnership (BRBNACP) is a collaboration involving various private land owners; businesses; local, state, and federal agencies; non-profit organizations; and supporters working to protect and enhance the 600,000 acre BRNBA. To date, 50,000 acres have been conserved through easements and purchases..

- The lower Cache Creek planning area includes over 28,000 acres of land with state designated mineral resources, which includes about 18,250 acres of known “significant” deposits (designated on the Land Use Map with the MRZ Overlay). Within the Cache Creek planning area the County has designated an Open Space area of about 5,000 primarily privately owned acres which fall under the management guidance and regulation of the Cache Creek Resources Management Plan (CCRMP). As a by-product of permitted aggregate mining within the Cache Creek planning area there is an increasing acreage of dedicated land transferring into public ownership. Public access to these areas is anticipated to increase over time pursuant to the CCRMP

The CCRMP is a component of the Cache Creek Area Plan (CCAP), which is an adopted part of this General Plan. The focus of the CCAP is groundwater protection, agricultural preservation, restoration of Cache Creek, and limitation and regulation of mining.

- The Cache Creek Wild and Scenic River Area includes 31 miles of upper Cache Creek in Lake and Yolo counties that were added to the State Wild and Scenic Rivers System in 2005. Designation of the upper reaches of the Creek as “wild and scenic” supports the creek’s scenic, recreational, wildlife, and fishery values and precludes new dams and water diversions.

The federal government owns 30,225 acres² and the State of California owns 17,257 acres³ of land in unincorporated Yolo County managed for open space purposes. Each of the four Yolo County cities also own public open space, mostly in the form of parkland within their boundaries. Notably, the City of Davis has acquired open space lands in a number of locations around its edge, and a number of open space areas are owned and managed by the University of California.

Agricultural lands are often considered informal open space, and indeed are treated by the State as Open Space for the Managed Production of Resources. Most agricultural lands are privately held and generally are not open to the public. As noted above, agriculture and rangeland are addressed in the Agriculture and Economic Development Element.

² Within the unincorporated area only. Does not include Tribal Trust land, DQ University, freeways, or highways.

³ Within the unincorporated area only. Does not include UC Davis, freeways, highways.



c. Future Natural Open Space

Yolo County has great potential for new open space acquisitions in the future. Expanding resource parks opportunities and other open space is important to the values of the County. As shown in Figure CO-2, the County plans to add new resources parks and other open space in key areas over time.

2. Policy Framework

GOAL CO-1 **Natural Open Space. Provide a diverse, connected and accessible network of open space, to enhance natural resources and their appropriate use.**

- Policy CO-1.1 Expand and enhance an integrated network of open space to support recreation, natural resources, historic and tribal resources, habitat, water management, aesthetics, and other beneficial uses.
- Policy CO-1.2 Develop a connected system of recreational trails to link communities and parks throughout the county. 🌍
- Policy CO-1.3 Create a network of regional parks and open space corridors that highlight unique resources and recreational opportunities for a variety of users. 🌍
- Policy CO-1.4 Provision of an appropriate level of public facilities and infrastructure shall be a priority for all County park facilities.
- Policy CO-1.5 Establish future resource parks close to population centers, where feasible. 🌍
- Policy CO-1.6 Develop “gateways” or trailheads that provide access for the public to County, State, and Federal lands. Where located on private land, gateways shall be developed working with willing landowners.
- Policy CO-1.7 Support efforts by willing landowners and non-profit groups to provide new opportunities for outdoor recreation. (Policy CO 1.29)
- Policy CO-1.8 Encourage responsible stewardship of private lands. Promote increased opportunities for public access to waterways and other natural areas.
- Policy CO-1.9 Promote the conservation of environmental resources in new and existing park and open space facilities.



- Policy CO-1.10 The target threshold for resource parks (regional and open space parks) shall be 20 acres per 1,000 total County population (both unincorporated and incorporated). Larger ratios may be appropriate in Specific Plan areas to accommodate important natural features and/or safety areas.
- Policy CO-1.11 Coordinate the development of recreation areas and public open space with regional trail planning. 🌍
- Policy CO-1.12 Create opportunities for ecotourism.
- Policy CO-1.13 Within the Delta Primary Zone, ensure compatibility of permitted land use activities with applicable, natural open space policies of the Land Use and Resource Management Plan of the Delta Protection Commission.
- Policy CO-1.14 Support the preservation of open space consistent with this General Plan, via acquisition of fee title or easement interest by land trusts, government agencies, and conservancies from willing landowners.
- Policy CO-1.15 Support efforts to acquire either fee title or easements on additional open space areas adjoining existing protected natural resource areas to increase the size, connectivity, and buffering of existing habitat. 🌍
- Policy CO-1.16 Coordinate open space acquisition with habitat acquisition that occurs pursuant to the Yolo Natural Heritage Program.
- Policy CO-1.17 Out-of-county mitigation easements in Yolo County for the loss of open space, agriculture, or habitat in other jurisdictions, and flood easements in Yolo County are allowed at the discretion of the Board of Supervisors provided the easement meets the requirements of the Habitat Mitigation Ordinance (ord. 1426).
- Policy CO-1.18 Work with the Blue Ridge Berryessa Natural Area Conservation Partnership, the Bureau of Land Management, Napa County, California Department of Fish and Game, and other landowners on a voluntary basis to complete the Blue Ridge Trail through voluntary acquisitions.
- Policy CO-1.19 Support the development of a new State Park in Yolo County, with emphasis on expanding opportunities for family camping and water-related recreation, protecting new lands, and incorporating an agricultural heritage park.
- Policy CO-1.20 Support development of a new off-highway vehicle (OHV) park at an appropriate location.



- Policy CO-1.21 Emphasize the use of native grasses, shrubs and trees as the primary focus of restoration within resource parks and other open spaces. 🌍
- Policy CO-1.22 Work with concessionaires and lessees to provide recreational amenities that do not conflict with other park uses or general public access.
- Policy CO-1.23 Increase public access and recreational uses along waterways wherever feasible, particularly Cache Creek, Lower Putah Creek, the Yolo Bypass, and the Sacramento River.
- Policy CO-1.24 Allow for specified areas of resource parks to be preserved, enhanced and/or restored as mitigation sites for public agencies only, consistent with the requirements of appropriate regulatory and funding agencies, provided that adequate compensation, including funding for operations and maintenance of the mitigation, is provided.
- Policy CO-1.25 Support development of the new California Indian Heritage Center in the City of West Sacramento.
- Policy CO-1.26 Support improved access for bank fishing.
- Policy CO-1.27 Support the relocation of the California Governor's mansion to Yolo County.
- Policy CO-1.28 Balance the needs of agriculture with recreation, flood management, and habitat, within the Yolo Bypass.
- Policy CO-1.29 Require clustering and creative site planning in new development areas to preserve and enhance areas of contiguous open space to the extent feasible.

3. Implementation Program

- Action CO-A1 Update the Parks Master Plan as necessary to implement the goals, policies, and actions of relevant portions of the Conservation and Open Space Element. 🌍 (Policy CO-1.1, Policy CO-1.2, Policy CO-1.3, Policy CO-1.12, Policy CO-1.25, Policy CO-1.26)
Responsibility: Parks and Resources Department
Timeframe: 2010/2011
- Action CO-A2 Establish permanent areas of agriculture and open space between cities and unincorporated towns to ensure the continued distinctiveness of each community. 🌍 (Policy CO-1.2)
Responsibility: Department of Community Services, Parks and Resources Department
Timeframe: 2012/2013



- Action CO-A3 Seek to acquire voluntary easements to ensure connectivity with the conservation areas established through the Blue Ridge Berryessa Natural Area Conservation Partnership. 🌍 (Policy CO-1.1, Policy CO-1.3, Policy CO-1.8, Policy CO-1.16, Policy CO-1.19)
Responsibility: Parks and Resources Department
Timeframe: Ongoing
- Action CO-A4 Pursuant to the Cache Creek Area Plan, develop a recreation plan for the Cache Creek Parkway including a range of public activities and uses. (Policy CO-1.25)
Responsibility: Parks and Resources Department
Timeframe: 2012/2013
- Action CO-A5 Clearly define boundaries between public open space and private agricultural lands through mapping, signage, fencing, and/or other appropriate means to discourage trespassing. (Policy CO-1.1)
Responsibility: Parks and Resources Department
Timeframe: Ongoing
- Action CO-A6 Connect the future Bay Delta Trail system, the future trail system in the lower Yolo Bypass, and the future Cache Creek Parkway system, and link those trails to the American River Bikeway system in Sacramento County. 🌍 (Policy CO-1.1, Policy CO-1.3, Policy CO-1.12, Policy CO-1.19, Policy CO-1.29)
Responsibility: Parks and Resources Department
Timeframe: 2029/2030
- Action CO-A7 Prioritize the construction of multi-use trails that provide links between already established trails and bicycle routes. 🌍 (Policy CO-1.1, Policy CO-1.2, Policy CO-1.4)
Responsibility: Parks and Resources Department
Timeframe: Ongoing
- Action CO-A8 Amend the Grasslands Park Master Plan to incorporate the McClellan/Davis Telecommunications Site, including the establishment of an endowment and ongoing monitoring of endangered species. (Policy CO-1.1, Policy CO-1.10)
Responsibility: County Administrator's Office, General Services Department, Parks and Resources Department
Timeframe: 2008/2009
- Action CO-A9 Pursue State grant funds to restore areas of the County impacted by illegal OHV activity, to protect areas from unauthorized use through enforcement, and to redirect users to an OHV park. (Policy CO-1.10, Policy CO-1.22)
Responsibility: Parks and Resources Department



Timeframe: 2019/2020

Action CO-A10 Pursue a countywide tax and/or bond assessment so that all residents contribute fairly to the planning, acquisition, operation, and maintenance of resource parks. (Policy CO-1.1, Policy CO-1.2, Policy CO-1.3, Policy CO-1.4)
Responsibility: County Administrator's Office
Timeframe: 2010/2011

Action CO-A11 Provide recreational uses that are river or creek dependent in locations directly on Cache Creek, Putah Creek, and the Sacramento River. Examples include fishing, canoeing, boating, and nature observation. With the exception of boat launches and docks, more active uses, such as parking, restrooms, and picnic areas, shall be located in areas away from the river and sensitive riparian habitat. (Policy CO-1.1, Policy CO-1.25, Policy CO-1.28, Policy CO-1.29)
Responsibility: Parks and Resources Department
Timeframe: Ongoing

Action CO-A12 Cluster recreational improvements at various locations along Cache Creek, Lower Putah Creek, and the Sacramento River, to reduce habitat disturbance and provide efficient and cost-effective management by the County. (Policy CO-1.10)
Responsibility: Parks and Resources Department
Timeframe: Ongoing

Action CO-A13 Design access to resource parks, whether by road or by trail, to go through a controlled entry point wherever feasible. (Policy CO-1.10)
Responsibility: Parks and Resources Department
Timeframe: Ongoing

Action CO-A14 Implement the Elkhorn Specific Plan to establish a resource park and public access to the Helvetia oak grove, create public access along the waterway north of County Road 22, and integrate management of both sites with the nearby Elkhorn Regional Park. (Policy CO-1.1, Policy CO-1.6, Policy CO-1.25)
Responsibility: Department of Community Services
Timeframe: 2019/2020

Action CO-A15 Combine parks and trails with open space and wildlife conservation areas where appropriate. (Policy CO-1.1, Policy CO-1.10)
Responsibility: Parks and Resources Department
Timeframe: Ongoing

Action CO-A16 Enhance parking and access at existing resource parks, including the Putah Creek fishing access, Cache Creek Canyon Regional Park, and



the Camp Haswell/Otis Ranch property. Encourage the use of alternative transportation by providing bike racks, bus stops, and other appropriate facilities. (Policy CO-1.4)

Responsibility: Parks and Resources Department

Timeframe: Ongoing

Action CO-A17 In order to strengthen an appreciation of natural resource values, local place, and identity, include educational programs, materials, and signs in resource parks that address water, geology, plants, animals, events, and people. (Policy CO-1.1)

Responsibility: Parks and Resources Department

Timeframe: Ongoing

Action CO-A18 Establish a program for camp hosts/docents at all resource parks, where feasible. (Policy CO-1.1, Policy CO-1.10)

Responsibility: Parks and Resources Department

Timeframe: Ongoing

Action CO-A19 Allow public agencies to establish, protect and/or enhance habitat for mitigation purposes within specific areas of resource parks, consistent with the requirements of appropriate regulatory agencies, where an endowment is created to fund the monitoring and maintenance of the habitat. Allow non-profit organizations to manage such areas, where appropriate. (Policy CO-1.1, Policy CO-1.15, Policy CO-1.26)

Responsibility: Parks and Resources Department

Timeframe: Ongoing

Action CO-A20 Develop and implement a system of open space corridors and trails that connects each community and city by integrating waterways, scenic areas, significant habitat areas, County parks, and other special resource areas. (Policy CO-1.1, Policy CO-1.2, Policy CO-1.3, Policy CO-1.12, Policy CO-1.25, Policy CO-1.26)

Responsibility: Parks and Resources Department

Timeframe: 2010/2011

Action CO-A21 Create “Friends of Yolo Parks” and “Adopt-A-Park” programs and encourage participation by non-profit organizations. (Policy PF-3.3, Policy PF-3.7)

Responsibility: Parks and Resources Department

Timeframe: 2010/2011

Action CO-A22 Maintain reasonable fee structures for the use of County parks and recreation facilities by resident and non-resident patrons. (Policy PF-3.7)

Responsibility: Parks and Resources Department

Timeframe: Ongoing



- Action CO-A23 Partner with the private sector and non-government organizations to provide services and/or maintain all or components of park facilities, wherever practical. (Policy PF-3.2, Policy PF-3.7)
Responsibility: Parks and Resources Department
Timeframe: Ongoing
- Action CO-A24 Develop a special area plan to govern land use management within the Yolo Bypass. (Policy CO-1.29)
Responsibility: Department of Community Services, Parks and Resources Department
Timeframe: 2013/2014

D. Biological Resources

1. Background Information

Yolo County is a biologically and topographically diverse landscape that extends from the agricultural areas of the Central Valley, westward into the chaparral and woodland communities of the Interior Coast Ranges, and southward into the wetlands and pastureslands of the northern Sacramento-San Joaquin River Delta.

In the broadest sense, Yolo County can be characterized by two main land uses, 1) agricultural lands occurring primarily in the lower elevations on the valley floor, and 2) natural lands occurring primarily in the Interior Coast Ranges on the western side of the county and interspersed within the agricultural landscape as narrow riparian corridors, remnant oak woodlands, and wetlands. Figure CO-4 illustrates five broad vegetation categories in Yolo County: agricultural lands, grasslands, woodlands, riparian areas, and wetlands. Each of these broad categories may represent a variety of plant communities and wildlife habitats. Other notable vegetation communities in the county include oak savannah, a transitional community between woodland and prairie grassland types; chaparral, a diverse and biologically rich woodland/shrub community found in the Interior Coast Ranges in association with the higher elevation oak woodlands; a variety of wetland communities including natural and managed seasonal wetlands and marshes; and remaining patches of valley oak woodland on the valley floor occurring within the agricultural landscape. Each of these communities and habitats provide important biological value, support numerous plant and wildlife species, and are all part of an interrelated ecological landscape. An effective conservation approach considers the interrelatedness of this system as a whole and strives to preserve and restore the functioning of ecologic processes by maintaining the necessary connectivity across the landscape.

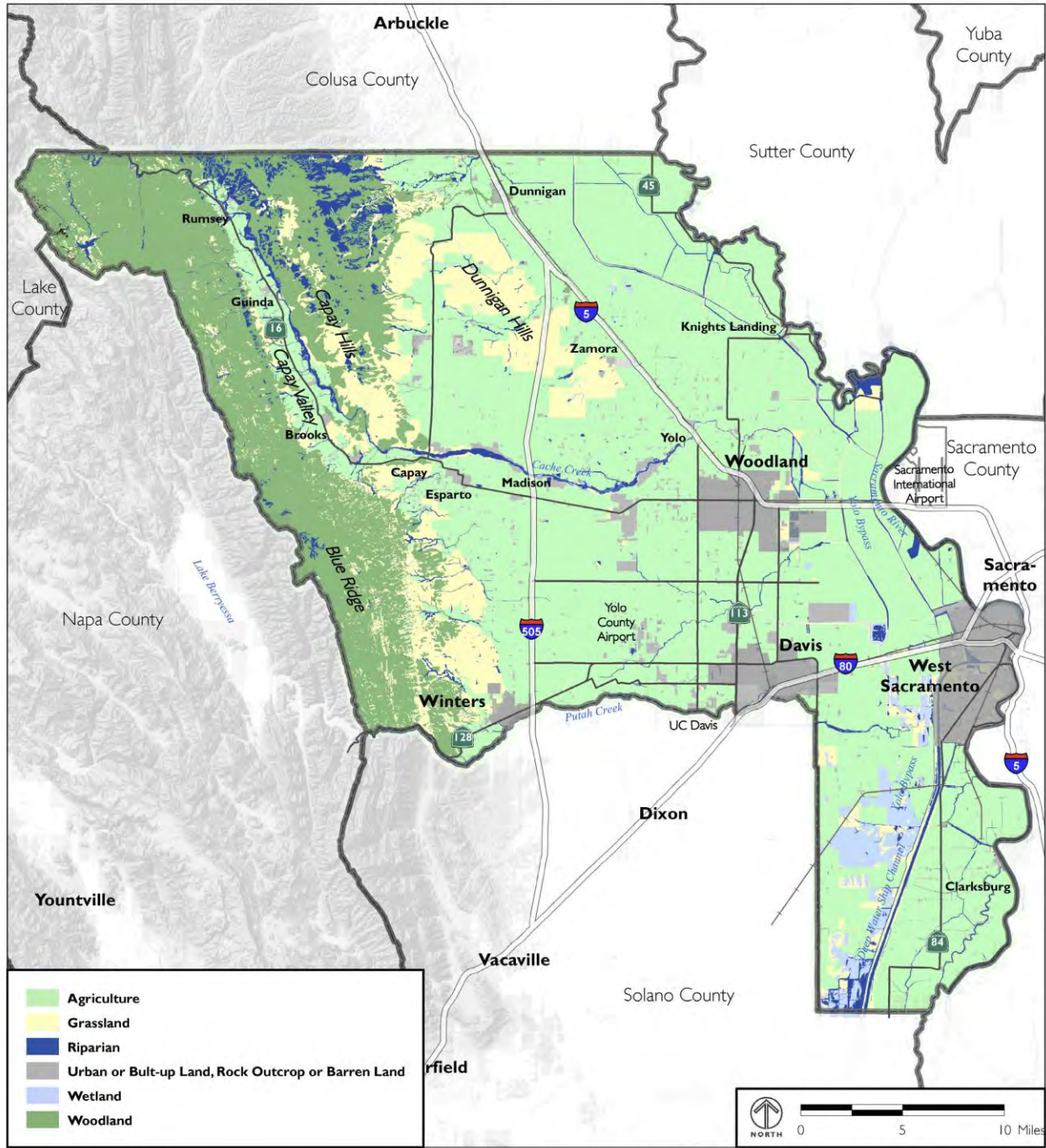
Climate change is anticipated to result in great changes to the biological resources within the county. Shifts in food sources, timing of natural processes (e.g. hibernation, migration, reproduction, and estivation) and active growing periods, chilling and heating, will all have direct links to shifting climate and will redefine many essential relationships



in natural communities. These shifts will also have the potential to dramatically impact agriculture, possibly changing pest complexes, water demands and even viability of some crops and cropping patterns. Traditional approaches to biological resource conservation have focused on defining habitat areas. With looming changes in climate, there is less confidence that a particular parcel will retain the habitat features needed to ensure maintenance of desired species.



FIGURE CO-4 VEGETATIVE TYPES



Source: County of Yolo GIS, 2009.



In the coming decades, a greater emphasis on corridors and gradients of conditions will need to be built into natural resource management in order to allow natural communities to adjust to forcing factors generated by climate change. Policies and practices associated with this emphasis are new and will require flexibility for agencies and land managers to adjust to the demands of managing a dynamic system.

a. Agricultural Lands

Yolo County has a diverse matrix of agricultural types including a variety of row and grain crops, hay crops, orchards and vineyards, and dryland and irrigated pasturelands that provide significant value to resident, migratory, and wintering wildlife. Agricultural lands are found primarily in the lower elevation portion of the county east of the Interior Coast Ranges and extending northwest through Capay Valley. Table CO-2 represents the total harvested acres of agricultural crops and land uses within the county in 2007, the most recently available data (Yolo County 2008). It indicates the relative abundance of the major crops and combines the crops with smaller amounts of harvested acreage into several miscellaneous categories. In 2007, approximately 70% of the county was under active agricultural production (including grazing land). Remaining areas included oak woodlands and other natural areas, urban areas, wetlands, idle lands, and other uses.

Table CO-2 indicates that dry pasture (primarily grazed annual grassland) was the dominant agricultural land use in the county (29.3%), occurring mainly in the foothills along the western edge of the Central Valley and the Dunnigan Hills. Nearly all of the irrigated cropland acreage is found on the valley floor east of the Interior Coast Ranges extending into the southeast panhandle. In 2007, the majority of the irrigated cropland acreage (48.7% of the total agricultural land use) included six crop types: alfalfa, tomatoes, rice, wheat, orchards, and sunflower. The remaining 22% of the agricultural land use was comprised of a wide variety of field and vegetable crop types, vineyards, seed crops, nursery products, and irrigated pasture.

Table CO-3 represents the change in agricultural crops and land uses in Yolo County between 1997 and 2007. Overall, the agricultural landscape has remained fairly constant over time and several major crop types have been a significant part of the agricultural landscape in Yolo County for many decades, including tomatoes, wheat, alfalfa, and field corn. However, there have been some notable changes in the percentages of harvested acres of several crops, even within the last 10 years (Table CO-3). Among these include a decrease in corn, safflower, and melons; an increase in vineyards, sunflower, and vegetables; and the elimination of sugar beets.



Table CO-2 Agricultural Cover Types in Yolo County (2007)

Crop Type	Acres	Percent of Total
Dry Pasture	135,775	29.3
Alfalfa Hay	53,959	11.6
Tomatoes	42,149	9.1
Rice	36,600	7.9
Wheat	35,613	7.7
Orchard	29,352	6.3
Sunflower	28,143	6.1
Misc. Field Crops**	26,029	5.6
Vineyard	11,898	2.6
Irr. Pasture	11,661	2.5
Field Corn	11,596	2.5
Grain Hay*	11,168	2.4
Other Seed Crops	9,545	2.1
Safflower	9,033	1.9
Organic Vegetable Crops	5,932	1.3
Misc. Vegetable Crops***	3,561	0.7
Melons	1,256	0.3
Nursery Products	492	0.1
Total	463,762	100

* includes barley, oat, ryegrass, sudangrass, and volunteer hay

** includes barley, dry beans, screenings, sorghum grain, and stubble.

***includes cabbage, cantaloupes, corn, cucumbers, lettuce, melons, peppers, pumpkins, squash, sweet corn, tomatoes, watermelon, and other truck crops

Yolo County, 2008



Table CO-3 Agricultural Crops Acreage in Yolo County (1997 to 2007)

Crop Type	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	Acres and % Δ 97-07
Dry Pasture	144,950	136,368	119,533	124,258	126,510	130,411	133,965	147,098	136,806	122,775	135,775	-9,175/-6.3
Wheat	54,836	39,014	33,832	43,144	43,774	33,076	56,227	44,098	34,647	20,976	35,613	-19,223/-35.1
Tomatoes	49,200	56,600	67,114	48,575	48,575	42,812	38,274	45,129	42,232	37,026	42,149	-7,051/-14.3
Field Corn	36,915	18,518	13,513	28,125	18,308	9,195	6,495	9,523	4,238	2,452	11,596	-25,319/-68.6
Alfalfa Hay	33,983	42,430	43,024	38,720	45,885	53,231	55,914	52,904	45,776	59,269	53,959	19,976/58.8
Safflower	27,040	24,278	29,545	24,558	27,650	20,765	20,674	9,991	12,955	10,176	9,033	-18,007/-66.6
Rice	25,800	17,816	24,483	36,229	28,717	32,446	37,303	45,655	34,670	29,997	36,600	10,800/41.9
Misc. Field	20,925	21,273	23,358	29,331	29,191	28,701	33,029	33,962	54,226	30,416	26,029	5,104/24.4
Other Seed	18,464	16,768	14,782	14,331	12,214	13,247	11,414	13,102	13,191	12,481	9,545	-8,919/-48.3
Orchard	18,368	18,039	17,023	18,889	18,056	18,478	19,364	19,313	21,777	22,988	29,352	10,984/59.8
Irr. Pasture	13,000	13,000	13,000	13,000	13,000	13,000	13,000	13,000	13,000	13,000	13,000	0/0
Vineyard	6,833	8,410	8,704	9,496	10,242	9,699	10,334	9,909	8,464	10,156	11,898	5,065/74.1
Oat Hay	6,018	8,802	7,340	7,566	7,826	13,466	10,958	7,383	7,855	*	*	1,837/30.5
Sunflower	5,679	5,831	10,381	4,377	4,540	3,372	9,294	13,403	13,615	16,623	28,143	22,464/395.6
Melons	5,324	2,333	4,575	4,342	3,364	3,613	4,005	2,585	1,949	1,778	1,256	-4,068/-76.4
Sugar Beets	4,526	1,570	1,871	1,029	0	0	0	0	0	0	0	-4,526/-100.0
Cotton	4,418	2,857	1,956	4,160	3,600	4,052	**	**	**	**	**	-366/-8.3
Misc. Veg	1,800	1,440	1,286	2,730	1,955	1,761	1,669	1,443	1,205	3,044	3,561	1,761/97.8
Organic Veg	1,556	2,425	2,830	3,335	6,253	5,405	4,692	4,998	4,515	6,003	5,932	4,376/281.2
NurseryCrops	524	293	406	440	584	502	515	489	505	571	492	-32/-6.1

* In 2006, oat hay was included under “grain hay”, which included barley, ryegrass, sudan grass, and volunteer hay. Prior to 2006, these other “grain hay” types were included under Miscellaneous Field (with the exception of sudan grass, which was identified separately from 2000 to 2002). Miscellaneous Field also included other types such as soybeans, sorghum grain, and dry beans.

** Cotton was included under Miscellaneous from 2003 to 2007.

7 CONSERVATION AND OPEN SPACE ELEMENT

While nearly entirely altered from its native condition, agricultural lands in Yolo County continue to represent an important landscape for numerous wildlife species. Raptors, waterfowl and other water birds, a variety of songbirds, and small mammals use agricultural fields for nesting and foraging; but to large extent, the enhanced value of agricultural habitats in Yolo County is due to the integration of natural communities within the agricultural landscape. Adjacent riparian corridors, roadside trees, windbreaks, woodlots, isolated trees, and field borders provide important nesting, roosting, and cover habitat for many local and migratory species that also use the agricultural fields as foraging habitat. The retention of these adjacent habitats has greatly enhanced the wildlife value of agricultural habitats in Yolo County and their continued retention and restoration is essential in maintaining this value over time.

Agricultural lands also provide seasonal value to wildlife due to growth and harvesting regimes and management practices. For example, the value of many crop types is enhanced during harvesting due to the exposure and accessibility of rodent prey for foraging raptors. Because of the diverse nature of Yolo County farmlands, harvesting operations occur from early summer to late fall, providing enhanced access to abundant prey for foraging raptors throughout most of the breeding season. Flood irrigation of alfalfa and other hay fields and irrigated pastures also enhances prey accessibility and attracts a variety of water birds and raptors.

Flooded rice lands are also particularly important during the breeding season for many wildlife species by providing aquatic habitat and invertebrate prey for a variety of water birds, amphibians, and reptiles. Other agricultural fields are flooded during the winter and managed as waterfowl habitat. These fields attract abundant wintering waterfowl and act to some extent as surrogate wetlands providing essential winter aquatic habitat along the Pacific Flyway.

b. Natural Lands

Approximately 21% of the county can be defined as natural lands. These include native oak woodlands, prairie grasslands, and chaparral communities in the western mountains and foothills, riparian woodlands, native and restored wetland communities, and remnant valley oak groves and valley oak trees on the valley floor.

Wetlands

Wetlands include permanent marsh communities that are inundated all or most of the year, and seasonal wetlands that are inundated only a part of the year, typically during winter and spring. Native seasonal wetlands are uncommon in Yolo County and include several remaining patches of alkali sink between Davis and Woodland, and vernal pools

associated with the prairie grasslands near Winters. Most seasonal wetlands in Yolo County are restored and managed to provide habitat for wintering waterfowl.

Significant areas of seasonal wetland and marsh communities are found primarily in the Yolo Basin, including the Yolo Bypass Wildlife Area, private lands in the southern panhandle, the Conaway Ranch north of Interstate 80, and the City of Davis Wetlands. Additional wetland habitats are found at the recently restored Roosevelt Ranch Preserve east of Zamora and in several other isolated locations throughout the central and eastern portions of the county.

Wetlands are among the most productive wildlife habitats, supporting many species of birds, mammals, reptiles, and amphibians. The presence of wetlands also enhances the biological value of the surrounding landscape because many species that find nesting and cover habitat in wetlands may forage more widely in agricultural or grassland habitats. Marsh communities, including non-tidal freshwater emergent wetland, tidal freshwater emergent wetland, and tidal perennial aquatic wetland provide nesting and cover habitat for many wetland- and aquatic-associated species. Seasonal wetlands provide important habitat for wintering waterfowl and other water birds; and during the dry summer and fall, seasonal wetlands are used by numerous raptor and songbird species.

Riparian

Riparian refers to streamside vegetation that occurs along rivers, creeks, and sloughs. In Yolo County, riparian woodland and shrub communities occur along several natural rivers, creeks, and sloughs and constructed water delivery canals in the county, including Sacramento River, Putah Creek, Cache Creek, Oat Creek, Bird Creek, Buckeye Creek, Willow Slough, Dry Slough, Elk Slough, Sutter Slough, Tule Canal, Deep Water Ship Channel, and the Knights Landing Ridge Cut. Most of the creeks in the county drain the Interior Coast Ranges and flow west to east toward the Sacramento River basin. The sloughs are backwater drainages of the Sacramento River; and the canals were constructed for water delivery or transport purposes. The most significant riparian communities occur along Putah Creek and Cache Creek. Both support relatively dense valley oak/cottonwood riparian forest and are significant wildlife movement corridors between the Interior Coast Ranges on the west and the Sacramento River basin on the east. Smaller creeks and sloughs also support significant remaining riparian corridors that interconnect the mountainous landscape on the west with the valley floor or extend north-south through the lower elevation agricultural landscape.

Riparian communities are often highly productive both in terms of vegetation and plant diversity, and wildlife use. Riparian habitat has declined dramatically since the late 1800s due mostly to agricultural conversion, and remaining riparian corridors are essential in maintaining natural linkages between geographic areas and migratory and dispersal corridors for wildlife. Some riparian woodland in the county supports a multi-structured canopy with a variety of native trees including cottonwood, valley oak, walnut, willow, Oregon ash, alder, and sycamore, and an understory that may include a variety of shrub species. Other riparian corridors support mostly shrub species with a sparse

over-story canopy. Riparian communities are also home to an abundance of wildlife from invertebrates to large mammals. They are essential habitat for many nesting and migratory birds and are considered to support the most diverse bird communities in the western United States.

Riparian vegetation is also essential in maintaining the quality of in-stream habitat by providing shade, food, and nutrients. Downed trees, willow mats, and other vegetation scour pools, form logjams and dams, and provide important habitats for fish, aquatic reptiles and amphibians, and aquatic insects.

Oak Woodlands/Chaparral

Oak woodland and chaparral communities occur in the higher elevations of the inner Coast Ranges. These oak woodlands are dominated by blue oak and live oak, and include a variety of mid- and understory species such as California buckeye, redbud, and deer brush. Interspersed within the oak woodland community are large and small patches of chaparral. In some areas, the chaparral community contains a variety of representative species, including manzanita, California buckeye, scrub oak, chamise, and toyon, and supports abundant wildlife, some of which is found solely or predominantly in chaparral habitats. In other areas, the chaparral is dominated by dense chamise and is less productive.

The oak woodland and chaparral community extends the length of the Interior Coast Ranges and provides essential habitat for an abundance of mid- and higher elevation wildlife species, including large mammals such as deer, gray fox, and mountain lion. This type is also home to many resident and migratory bird species, small mammals, and reptiles.

Grassland Prairies/Valley Oak Savannah

Prairie grasslands are found primarily in the foothills of the Interior Coast Ranges along the west side of the Central Valley, in open patches in the higher elevations, and in the Dunnigan Hills, a prominent anticlinal formation that extends from approximately the northern county border east of Interstate 5 southeast to Cache Creek. They also occur as valley oak savannah with scattered valley oak trees within the grassland community in the foothills immediately west of the Central Valley floor. While native species continue to persist in some areas, most of the prairie grasslands are dominated by non-native annual grasses.

Prairie grasslands provide important habitat for small rodents, ground-nesting birds, and a variety of reptiles and burrowing mammals.

Remnant Oak Trees, Groves, and Tree Rows

Several small remnant valley oak groves continue to persist in several patches on the valley floor within Yolo County. Some are remnant of historic pre-cultivation stands of valley oak woodland that occurred in portions of the lower elevation areas of the county. There are numerous remnant individual valley oak trees that continue to persist in agricultural fields, particularly in the northern portion of the county, north of Woodland. Tree

rows are also common along roadsides or field borders in agricultural areas consisting of native or non-native trees, including valley oak, walnut, or eucalyptus trees.

These habitats have become increasingly important to nesting and roosting birds and provide key nesting habitat for several raptor species that are found in relative abundance in Yolo County, including red-tailed hawk and the state-threatened Swainson's hawk. Species that use these habitats for nesting and roosting also use the adjacent agricultural habitats for foraging, and thus their presence enhances the overall value of the agricultural landscape.

c. Special-Status Species

Many special-status species (including state and federal threatened and endangered species, state species of special concern and fully protected species, and plants listed by the California Native Plant Society) occur or have potential to occur in Yolo County. These species are listed in Table CO-4. Special-status species occur throughout the county in all of the vegetation communities and habitats described above. However, while several species such as bald eagle, golden eagle, and Cooper's hawk are known to occur primarily in the mountainous regions on the western edge of the county, most are known to occur in the more disturbed agricultural landscape of the Central Valley.

As noted above, in many cases the retention of natural features within this landscape greatly enhances habitat conditions for species, such as the Swainson's hawk, that have successfully adapted to an agricultural landscape. Others continue to persist in smaller patches of suitable habitat, such as the state-threatened black rail, which has been detected in the wetlands on the Yolo Bypass Wildlife Area; and the western burrowing owl, which uses remaining grasslands, roadside edges, artificial berms, and some agricultural habitats. Some species have not been detected in the county for many years, such as the western yellow-billed cuckoo, due to limited habitat availability and quality. Preservation and restoration of suitable habitats for these species is key to their continued occurrence or reestablishment in Yolo County.

TABLE CO-4
SPECIAL-STATUS SPECIES KNOWN OR WITH POTENTIAL TO OCCUR IN YOLO COUNTY

Species Common Name	Federal Listed	State Listed
PLANTS		
Palmate-bracted birdsbeak	E	E
Colusa grass	T	E
Crampton's tuctoria	E	E
CRUSTACEANS		
Conservancy fairy shrimp	E	-
Vernal pool fairy shrimp	T	-
Vernal pool tadpole shrimp	E	-
INSECTS		
Valley elderberry longhorn beetle	T	-
AMPHIBIANS		
California tiger salamander	E	SSC
Foothill yellow-legged frog	-	SSC
Western spadefoot	-	SSC
REPTILES		
Giant garter snake	T	T
Western pond turtle	-	SSC
BIRDS		
Bald eagle	T	E
Golden eagle	-	SSC
Swainson's hawk	-	T
White-tailed kite	-	FP
Northern harrier	-	SSC
Cooper's hawk	-	SSC
American peregrine falcon	-	E
Prairie falcon	-	SSC
California black rail	-	T
Greater sandhill crane	SC	T
Western snowy plover	T	SSC
Western yellow-billed cuckoo	SC	E
Black tern	-	SSC
Short-eared owl	-	SSC
Western burrowing owl	-	SSC
Loggerhead shrike	-	SSC
Bank swallow	-	T
Purple martin	-	SSC
Tricolored blackbird	-	SSC

MAMMALS

Western red bat		SSC
Townsend's western big-eared bat		SSC
Pallid bat		SSC

FISH

Sacramento River Winter-run Chinook salmon	E	E
Delta smelt	T	T
Central Valley spring-run Chinook salmon	T	T
Central Valley steelhead	T	-

Notes: -- = no listing.

Federal-Listed

E = listed as endangered under the federal Endangered Species Act.

T = listed as threatened under the federal Endangered Species Act.

SC = species of concern; species for which existing information indicates it may warrant listing but for which substantial biological information to support a proposed rule is lacking.

State-Listed

E = listed as endangered under the California Endangered Species Act.

T = listed as threatened under the California Endangered Species Act.

SSC = species of special concern in California.

FP = fully protected.

d. Related Plans and Programs

Habitat Conservation Plan/Natural Communities Conservation Plan

The County is a member of the Yolo County Habitat joint powers authority (JPA), which is responsible for developing a combined Habitat Conservation Plan/Natural Communities Conservation Plan (HCP/NCCP), known as the Yolo Natural Heritage Program (Yolo NHP). Habitat conservation plans identify the most biologically significant regions and outline measures to protect the ecological integrity of valuable habitat areas. Conservation plans are required to address special-status species, which are those plants and animals that are considered sufficiently rare by the scientific community and qualify for legal protection under State and/or federal Endangered Species Acts. The purpose of the Yolo NHP is to identify and protect the county's most biologically significant regions and most valuable habitat areas, in amounts and locations sufficient to sustain target species. The JPA also manages the Swainson's Hawk Interim Fee Mitigation Program, which purchases conservation easements to provide habitat for the threatened Swainson's hawk.

e. Yolo County Oak Woodland Conservation and Enhancement Plan

In January 2007, the Parks and Natural Resources Management Division published the *Yolo County Oak Woodland Conservation and Enhancement Plan*. Since 87 percent of the county's oak woodlands are privately owned, the purpose of this plan is to help coordinate voluntary oak woodland conservation and enhancement efforts and guide oak woodland mitigation. The Plan establishes a program to identify areas in Yolo County with the highest value habitat. Conservation and enhancement of these high

value areas is addressed by encouraging landowners to preserve these areas from urban and rural development. With this plan, the County is able to apply for State money and other funding sources.

Programmatic Safe Harbor Agreement for the Restoration of Riparian and Wetland Habitat in Yolo County

The Programmatic Safe Harbor Agreement for the Restoration of Riparian and Wetland Habitat in Yolo County promotes ecosystem restoration, enhancement and management of native riparian and/or wetland habitats in Yolo County for the conservation of the federally threatened valley elderberry longhorn beetle and giant garter snake. It does so by providing regulatory assurances to landowners participating in restoration and management activities that their farming activities will not be negatively affected by introducing new habitat nearby. The agreement allows landowners to manage and create habitat for the valley elderberry longhorn beetle and giant garter snake without incurring additional regulatory restrictions on the use of their property. This program is administered by the Audubon California Landowner Stewardship Program.

f. Regulatory Framework

There are a variety of state and federal laws and regulations that have been implemented to protect special-status and other plant and wildlife species and their habitats, including the following.

Federal Endangered Species Act

USFWS and the National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NOAA Fisheries) administer the federal Endangered Species Act (ESA). The ESA requires USFWS and NOAA Fisheries to maintain lists of threatened and endangered species and affords substantial protection to listed species. NOAA Fisheries' jurisdiction under the ESA is limited to the protection of marine mammals, marine fishes, and anadromous fishes; all other species are subject to USFWS jurisdiction.

USFWS and NOAA Fisheries 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 (ESA Section 3[6]). A threatened species is likely to become endangered within the foreseeable future (ESA Section 3[19]). Section 9 of the ESA prohibits the take of any fish or wildlife species listed under the ESA as endangered and most species listed as threatened. Take, as defined by the ESA, 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." Section 9 also 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).

Federal Clean Water Act

The Clean Water Act (CWA) of 1977 established the basic structure for regulating discharges of pollutants into waters of the United States and gave the U.S. Environmental Protection Agency (EPA) the authority to implement pollution control programs and set water quality standards for all contaminants in surface waters. Relevant sections include Section 404 (discharge of dredged or fill material), Section 401 (water quality certification), and Section 402 (National Pollutant Discharge Elimination System (NPDES) program).

Federal Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) (Title 16, United States Code [USC], Part 703) enacts the provisions of treaties between the United States, Great Britain, Mexico, Japan, and the Soviet Union and authorizes the U.S. Secretary of the Interior to protect and regulate the taking of migratory birds. It establishes seasons and bag limits for hunted species and protects migratory birds, their occupied nests, and their eggs (16 USC 703, 50 CFR 21, 50 CFR 10). Most actions that result in taking or in permanent or temporary possession of a protected species constitute violations of MBTA.

Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act prohibits the taking or possession of and commerce in bald and golden eagles, with limited exceptions. Under this 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 pursuing, shooting, shooting at, poisoning, wounding, killing, capturing, trapping, collecting, molesting, and disturbing.

National Environmental Policy Act

A federal action, such as the issuance of a Right-of-Way Grant on federal lands, requires compliance with the National Environmental Policy Act (NEPA). 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 impact analysis and efforts to avoid or minimize the adverse effects of proposed actions must be made available for public notice and review.

California Endangered Species Act

The 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 California Fish and Game Code as any action or attempt to "hunt, pursue, catch, capture, or kill." Like the ESA, CESA allows exceptions to the take 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.

Natural Communities Conservation Act

The Natural Communities Conservation Act of 1991 was intended to provide an alternative and/or a collaborative approach to FESA and CESA. It was designed to represent a new approach to conservation. Instead of focusing on individual species (e.g., FESA/CESA), the NCCA focuses on protecting intact ecosystems across an entire region or landscape. NCCPs have become increasingly common in the development of regional plans that combine the HCP and NCCP processes.

California Environmental Quality Act

The California Environmental Quality Act (CEQA) requires that significant environmental impacts of proposed projects be reduced to a less-than-significant level through adoption of feasible avoidance, minimization, or mitigation measures unless overriding considerations are identified and documented.

California Fish and Game Code

The California Fish and Game Code establishes regulations that protect plant and wildlife resources in the state under the jurisdiction of the California Department of Fish and Game (DFG). Relevant sections include Sections 3511, 4700, 5050, and 5515 (Fully Protected Species); Sections 3503 and 3503.5 (Raptor and other Bird Nests); and Sections 1600–1607 (Streambed Alteration).


2. Policy Framework

GOAL CO-2	<u>Biological Resources.</u> Protect and enhance biological resources through the conservation, maintenance, and restoration of key habitat areas and corresponding connections that represent the diverse geography, topography, biological communities, and ecological integrity of the landscape.
------------------	---

Policy CO-2.1 Consider and maintain the ecological function of landscapes, connecting features, watersheds, and wildlife movement corridors.

Policy CO-2.2 Focus conservation efforts on high priority conservation areas (core reserves) that consider and promote the protection and enhancement of species diversity and habitat values, and that contribute to sustainable landscapes connected to each other and to regional resources.

Policy CO-2.3 Preserve and enhance those biological communities that contribute to the county’s rich biodiversity including blue oak and mixed oak woodlands, native grassland prairies, wetlands, riparian areas, aquatic habitat, agricultural lands, heritage valley oak trees, remnant valley oak groves, and roadside tree rows.

- Policy CO-2.4 Coordinate with other regional efforts (e.g., Yolo County HCP/NCCP) to sustain or recover special-status species populations by preserving and enhancing habitats for special-status species.
- Policy CO-2.5 Protect, restore and enhance habitat for sensitive fish species, so long as it does not result in the large-scale conversion of existing agricultural resources.
- Policy CO-2.6 Cooperate with the Department of Fish and Game in inventorying streams with spawning and rearing habitat, evaluating those streams' existing and potential habitat value, and determining current and potential fish population levels.
- Policy CO-2.7 Encourage streamside property owners and appropriate public agencies to participate in fishery enhancement projects.
- Policy CO-2.8 Encourage all public land management agencies to protect, restore, and enhance the fish habitat within their jurisdiction.
- Policy CO-2.9 Protect riparian areas to maintain and balance wildlife values.
- Policy CO-2.10 Encourage the restoration of native habitat.
- Policy CO-2.11 Ensure that open space buffers are provided between sensitive habitat and planned development.
- Policy CO-2.12 Support the use of controlled fire management where feasible and appropriate as a natural ecosystem process, to reduce the threat of catastrophic wildfire, to encourage oak recruitment, and to meet other resources management objectives in higher elevation woodland and chaparral communities.
- Policy CO-2.13 Promote the use of oak woodlands conservation banks to mitigate for losses due to development impacts and to provide carbon sequestration for greenhouse gas emissions under applicable State programs.

- Policy CO-2.14 Ensure no net loss of oak woodlands, alkali sinks, rare soils, vernal pools or geological substrates that support rare endemic species, with the following exception. The limited loss of blue oak woodland and grasslands may be acceptable, where the fragmentation of large forests exceeding 10 acres is avoided, and where losses are mitigated. (DEIR MM BIO-3a)
- Policy CO-2.15 Encourage the use of mosquito abatement methods that are compatible with protecting fish and wildlife, including native insect pollinators.

Policy CO-2.16 Existing native vegetation shall be conserved where possible and integrated into new development if appropriate.

Policy CO-2.17 Emphasize and encourage the use of wildlife-friendly farming practices within the County's Agricultural Districts and with private landowners, including:

- Establishing native shrub hedgerows and/or tree rows along field borders.
- Protecting remnant valley oak trees.
- Planting tree rows along roadsides, field borders, and rural driveways.
- Creating and/or maintaining berms.
- Winter flooding of fields.
- Restoring field margins (filter strips), ponds, and woodlands in non-farmed areas.
- Using native species and grassland restoration in marginal areas.
- Managing and maintaining irrigation and drainage canals to provide habitat, support native species, and serve as wildlife movement corridors.
- Managing winter stubble to provide foraging habitat.
- Discouraging the conversion of open ditches to underground pipes, which could adversely affect giant garter snakes and other wildlife that rely on open waters.
- Widening watercourses, including the use of setback levees.

Policy CO-2.18 Coordinate with the Yolo County Resource Conservation District, Natural Resource Conservation Service, UC Cooperative Extension, and other farm organizations to encourage farming practices and the management of private agricultural land that is supportive of wildlife habitat values.

Policy CO-2.19 Support the use of sustainable farming methods that minimize the use of products such as pesticides, fuels and petroleum-based fertilizers. 🌍

Policy CO-2.20 Encourage the use of wildlife-friendly Best Management Practices to minimize unintentional killing of wildlife, such as restricting mowing during nesting season for ground-nesting birds or draining of flooded fields before fledging of wetland species.

Policy CO-2.21 Promote wildlife-friendly farming through mechanisms such as farmland trusts, conservation easements and safe harbor-type agreements.

Policy CO-2.22 Prohibit development within a minimum of 100 feet from the top of banks for all lakes, perennial ponds, rivers, creeks, sloughs, and per-

ennial streams. A larger setback is preferred. The setback will allow for fire and flood protection, a natural riparian corridor (or wetland vegetation), a planned recreational trail where applicable, and vegetated landscape for stormwater to pass through before it enters the water body. Recreational trails and other features established in the setback should be unpaved and located along the outside of the riparian corridors whenever possible to minimize intrusions and maintain the integrity of the riparian habitat. Exceptions to this action include irrigation pumps, roads and bridges, levees, docks, public boat ramps, and similar uses, so long as these uses are sited and operated in a manner that minimizes impacts to aquatic and riparian features. (DEIR MM BIO-1b)

- Policy CO-2.23 Support efforts to coordinate the removal of non-native, invasive vegetation within watersheds and replacement with native plants. 🌍
- Policy CO-2.24 Promote floodplain management techniques that increase the area of naturally inundated floodplains and the frequency of inundated floodplain habitat, restore some natural flooding processes, river meanders, and widen riparian vegetation, where feasible.
- Policy CO-2.25 Support efforts to reduce water temperatures in streams for fish via habitat restoration (e.g. increase shading vegetation) and water management (e.g. control of flows) that are compatible with the Integrated Regional Water Management Plan.
- Policy CO-2.26 Coordinate with local watershed stewardship groups to identify opportunities for restoring or enhancing watershed, instream, and riparian biodiversity.
- Policy CO-2.27 Evaluate the need for additional water to support future riparian enhancement efforts, including the benefits of conjunctive management of groundwater and surface water resources.
- Policy CO-2.28 Balance the needs of aquatic and riparian ecosystem enhancement efforts with flood management objectives.
- Policy CO-2.29 Promote native perennial grass habitat restoration and controlled fire management in grazing lands to reduce invasive species cover and enhance rangeland forage.
- Policy CO-2.30 Protect and enhance streams, channels, seasonal and permanent marshland, wetlands, sloughs, riparian habitat and vernal pools in land planning and community design.
- Policy CO-2.31 Protect wetland ecosystems by minimizing erosion and pollution from grading, especially during grading and construction projects.

- Policy CO-2.32 Support completion of the CDFG Visitors and Interpretive Center near the Vic Fazio Wildlife Area.
- Policy CO-2.33 Create partnerships with landowners, non-government organizations, and other public agencies to implement the Yolo County Oak Woodland Conservation and Enhancement Plan.
- Policy CO-2.34 Recognize, protect and enhance the habitat value and role of wildlife migration corridors for the Sacramento River, Putah Creek, Willow Slough, the Blue Ridge, the Capay Hills, the Dunnigan Hills and Cache Creek.
- Policy CO-2.35 Consider potential effects of climate change on the locations and connections between wildlife migration routes.
- Policy CO-2.36 Habitat preserved as a part of any mitigation requirements shall be preserved in perpetuity through deed restrictions, conservation easement restrictions, or other method to ensure that the habitat remains protected. All habitat mitigation must have a secure, ongoing funding source for operation and maintenance. (DEIR MM BIO-1c)
- Policy CO-2.37 Where applicable in riparian areas, ensure that required state and federal permits/approvals are secured prior to development of approved projects. (DEIR MM BIO-1d)
- Policy CO-2.38 Avoid adverse impacts to wildlife movement corridors and nursery sites (e.g., nest sites, dens, spawning areas, breeding ponds). Preserve the functional value of movement corridors to ensure that essential habitat areas do not become isolated from one another due to the placement of either temporary or permanent barriers within the corridors. Encourage avoidance of nursery sites (e.g., nest sites, dens, and spawning areas, breeding ponds) during periods when the sites are actively used and that nursery sites which are used repeatedly over time are preserved to the greatest feasible extent or fully mitigated if they cannot be avoided. (DEIR MM BIO-4a)
- Policy CO-2.39 Require new or retrofitted bridges, and new or expanded roads to incorporate design and construction measures to maintain the functional value of wildlife movement corridors. (DEIR MM BIO-4b)
- Policy CO-2.40 Preserve grassland habitat within 2,100 feet of documented California tiger salamander breeding ponds or implement required mitigation (equivalent or more stringent) as imposed by appropriate agencies or through the County HCP/NCCP, to fully mitigate impacts consistent with local, State, and federal requirements. Implementation and funding of mitigation measures for projects that will be developed in phases over time may also be phased, with the applicable mitigation being im-

plemented and funded prior to the final approval of each phase or sub-phase. (DEIR MM BIO-4c)

- Policy CO-2.41 Require that impacts to species listed under the State or federal Endangered Species Acts, or species identified as special-status by the resource agencies, be avoided to the greatest feasible extent. If avoidance is not possible, fully mitigate impacts consistent with applicable local, State, and Federal requirements. (DEIR MM BIO-5a)
- Policy CO-2.42 Projects that would impact Swainson's hawk foraging habitat shall participate in the Agreement Regarding Mitigation for Impacts to Swainson's Hawk Foraging Habitat in Yolo County entered into by the CDFG and the Yolo County HIP/NCCP Joint Powers Agency, or satisfy other subsequent adopted mitigation requirements consistent with applicable local, State, and federal requirements. (DEIR MM BIO-5b)
- Policy CO-2.43 Projects that have the potential to impact California tiger salamander breeding or terrestrial habitat in the Dunnigan Hills area, shall conduct a project-level biological assessment to determine the potential to impact California tiger salamander upland or breeding habitat (if such assessment has not already been done as part of an approved HCP/NCCP). Such an assessment will be required for all projects located within 1.3 miles of a known or potential breeding site. Development activities that would result in isolation of the breeding or upland habitat will be required to mitigate for such impacts. Mitigation shall consist of two components: 1) habitat preservation and enhancement of suitable upland habitat, and 2) preservation and construction of new breeding habitat. CTS upland habitat must be mitigated at a ratio of 3:1 (preserved: impacted), located within 2,100 feet of an occupied habitat, and include at least one suitable breeding pond. Equivalent or more stringent mitigation may be implemented as determined by trustee and responsible agencies. Mitigation must be coordinated with the HCP/NCCP program if adopted. (DEIR MM BIO-5c)

3. Implementation Program

- Action CO-A25 Develop a conservation strategy that considers the preservation and protection of intact functioning landscapes, watersheds, and landscape corridors. The approach should be based on the initial identification of high value habitat areas (core areas) and how these areas could be physically linked across the landscape. Coordinate to ensure that the basic landscape-level conservation concepts are incorporated into the HCP/NCCP. (Policy CO-2.1 through 2.4, Policy CO-2.14, Policy CO-2.19 through CO-2.24, Policy CO-2.27, Policy CO-2.29, Policy CO-2.30, Policy CO-2.31, Policy CO-2.33, Policy CO-2.34)
Responsibility: Department of Community Services

Timeframe: 2009/2010

Action CO-A26 Adopt and implement the Habitat Conservation Plan/Natural Communities Conservation Plan developed through the Yolo Natural Heritage Program. Integrate the HCP/NCCP (Natural Heritage Program) into the General Plan as appropriate. Direct habitat mitigation to strategic areas that implement the Yolo Natural Heritage Program and are consistent with the County's conservation strategy. Avoid the conversion of agricultural areas and focus on lands where wildlife values and farming practices are complementary. (Policy CO-2.1 through CO-2.4, Policy CO-2.14)

Responsibility: Department of Community Services Timeframe: 2009/2010 and ongoing

Action CO-A27 Protect the habitat value and biological function of oak woodlands, grasslands, riparian areas, and wetland habitats. Avoid activities that remove or degrade these habitats and establish buffers to avoid encroachment into sensitive areas. (Policy CO-2.4, Policy CO-2.14, Policy CO-2.15, Policy CO-2.18, Policy CO-2.19, Policy CO-2.20 through CO-2.24)

Responsibility: Parks and Resources Department
Timeframe: Ongoing

Action CO-A28 Create a program to encourage the planting of new oak seedlings in appropriate locations and the protection of plantings from damage by animals, insects, and people until seedlings are of sufficient size. 🌍 (Policy CO-2.13, Policy CO-2.16, Policy CO-2.17)

Responsibility: Parks and Resources Department
Timeframe: Ongoing

Action CO-A29 Adopt a heritage tree preservation ordinance. 🌍 (Policy CO-2.17, Policy CO-2.37)

Responsibility: Parks and Resources Department
Timeframe: 2010/2011

Action CO-A30 Encourage landowners to participate in programs that restore degraded creek resources by:

- Removing exotic species and establishing native riparian vegetation. 🌍
- Managing the upland areas of watersheds to control erosion and overgrazing.
- Adding exclusionary fencing to keep livestock out of streams and stream bank areas. (Policy CO-2.12, Policy CO-2.20 through CO-2.24, Policy CO-2.25)

Responsibility: Parks and Resources Department
Timeframe: 2011/2012

Action CO-A31 Establish criteria for the preservation of vernal pools that include the following:

- unusual features;
- habitat quality;
- watershed integrity;
- defensibility and buffering;
- size;
- plant and animal species variety; and
- presence of special status species.

(Policy CO-2.20 through CO-2.24)

Responsibility: Parks and Resources Department
Timeframe: 2013/2014

Action CO-A32 Prepare a complete inventory of identified streams, channels, seasonal and permanent marshland, wetlands, sloughs, riparian habitat and vernal pools for use in community plans, area plans and specific plans. (Policy CO-2.25, Policy CO-2.34, Policy CO-2.35)

Responsibility: Parks and Resources Department
Timeframe: 2013/2014

Action CO-A33 Coordinate with State and Federal agencies to rehabilitate and/or improve watersheds for the benefit of salmon and steelhead by encouraging landowner cooperation and participation, and involving agencies and local groups. (Policy CO-2.5 through CO-2.11, Policy CO-2.26, Policy CO-2.28)

Responsibility: Parks and Resources Department
Timeframe: 2014/2015

Action CO-A34 Identify stream sections with important fish and riparian habitat restoration needs. Seek funding and participate in programs to address needs. (Policy CO-2.5 through Policy CO-2.11, Policy CO-2.25, Policy CO-2.26, Policy CO-2.28)

Responsibility: Parks and Resources Department
Timeframe: 2014/2015

Action CO-A35 Integrate biological and habitat conditions and constraints into the County Geographical Information System. (Policy CO-2.1 through CO-2.4)

Responsibility: Information Technology Department
Timeframe: 2010/2011

Action CO-A36 Acquire fee title or easements from willing landowners to promote wild-life migration routes focusing on Cache Creek, Putah Creek, Dunnigan

Hills, Willow Slough, the Sacramento River, and the Capay Hills. (Policy CO-2.38, Policy CO-2.39)
 Responsibility: Parks and Resources Department
 Timeframe: Ongoing

E. Mineral Resources

1. Background Information

The mineral resources section of this chapter provides goals, policies and actions that guide Yolo County in ensuring continued productivity and conservation of the County’s geologic reserves.

Yolo County also has important soil resources, which can be inferred from the County’s high agricultural productivity. Soils are considered to be an agricultural resource and therefore are discussed in the Agriculture Element. Expansive soils and other geologic hazards are covered in the Geologic section of the Health and Safety Element.

Yolo County has two primary mineral resources, mined aggregate and natural gas. These resources are located throughout the County. There are six aggregate mines and 25 natural gas fields currently in operation in Yolo County (see Figure CO-5).

The Surface Mining and Reclamation Act (SMARA) of 1975 regulates mining in California. The purpose of SMARA is to identify the presence and significance of mineral resource deposits and to govern the excavation and reclamation of these areas. SMARA requires comprehensive management plans for operational mining areas. Mineral Resources Zones (MRZs) are used by the State to define areas containing valuable deposits. The California Division of Mines and Geology classifies MRZs according to the guidelines shown in Table CO-5.

There are 1,458 acres of MRZ-1, 18,452 acres of MRZ-2, and 8,220 acres of MRZ-3 in Yolo County. The Cache Creek MRZ-2 area is a significant high-grade aggregate deposit known to contain over 900 million tons of sand and gravel.

Table CO-5 **SMARA MINERAL RESOURCE ZONE CATEGORIES**

MRZ-1	Areas where adequate geologic information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence.
MRZ-2	Areas underlain by mineral deposits where geologic data show that significant measured or indicated resources are present. Such areas contain discovered mineral deposits that are either measured or indicated reserves as determined by such evidence as drilling records, sample analysis, surface exposure, and mine information; or such areas may be inferred reserves or deposits that are presently sub-economic as determined by limited sample analysis, exposure, and past mining history.
MRZ-3	Areas containing known mineral deposits that may qualify as mineral resources. Further exploration work within these areas could result in the reclassification of specific localities into the MRZ-2 category.

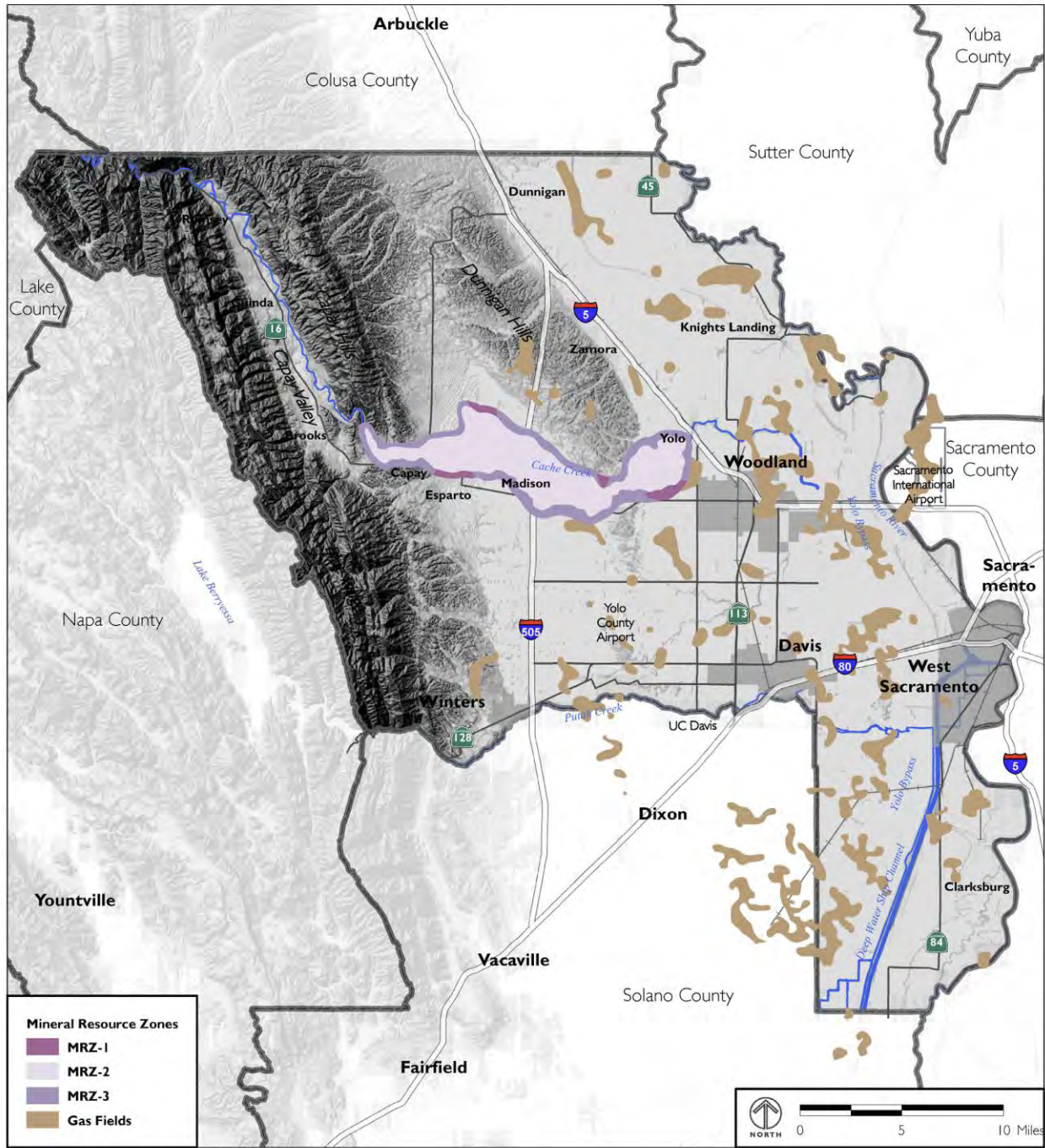
MRZ-4 Areas where geologic information does not rule out either the presence or absence of mineral resources. The distinction between the MRZ-1 and MRZ-4 categories is important for land-use considerations. It must be emphasized that MRZ-4 classification does not imply that there is little likelihood for the presence of mineral resources, but rather there is a lack of knowledge regarding mineral occurrence. Further exploration work could well result in the reclassification of land in MRZ-4 areas to MRZ-3 or MRZ-2 categories.

Source: Department of Conservation State Mining and Geology Board, Guidelines for Classification and Designation of Mineral Lands.

Mining in Yolo County is regulated by the Off Channel Mining Plan (OCMP), which is a component of the Cache Creek Area Plan (CCAP). The CCAP is incorporated into this General Plan. The focus of the CCAP is groundwater protection, agricultural preservation, restoration of Cache Creek, and limitation and regulation of mining.

The OCMP restricts the location and extent of new mining to lands outside of the riparian corridor, eliminates vested processing plants and facilities at the end of the mining period, creates a fund to address unforeseen environmental concerns, and adds various environmental protections and monitoring requirements to the base requirements of State law established by SMARA. The OCMP is implemented by two related ordinances: one regulates off-channel mining (mining outside of the creek channel) and one regulates the reclamation of mined areas.

FIGURE CO-5 MINERAL AND GAS RESOURCES



Source: County of Yolo GIS, 2009.

The CCAP also includes the Cache Creek Resources Management Plan (CCRMP), which includes policies and regulations to stabilize the channel, reduce erosion, protect infrastructure, improve habitat values, maintain flood capacity, and provide recreational opportunities. To support those goals, the County has adopted an In-Channel Maintenance Mining Ordinance. Although commercial mining is prohibited within Lower Cache Creek, carefully regulated and limited maintenance extraction is occasionally necessary to carry out the CCRMP.

Yolo County is one of the 28 counties in California that produce gas and oil. Most of the natural gas fields in Yolo County are located along the Yolo Bypass and the Sacramento River, with more fields located in the unincorporated area of Dunnigan Hills and at the foot of the Capay Hills (see Figure CO-5). Deep on-shore gas wells, reaching a depth of nearly 2 miles, are found near the Clarksburg area. In 2007, Yolo County produced over 3 million Mcf⁴ of natural gas and 187 barrels of oil.⁵ Further research is needed to determine the extent of present day natural gas reserves in Yolo County, particularly since natural gas has become a larger part of Yolo County's economy and an important tool to reduce vehicle air emissions as a part of the effort to address climate change.

2. Policy Framework

GOAL CO-3 Mineral Resources. Protect mineral and natural gas resources to allow for their continued use in the economy.

- Policy CO-3.1 Encourage the production and conservation of mineral resources, balanced by the consideration of important social values, including recreation, water, wildlife, agriculture, aesthetics, flood control, and other environmental factors.

- Policy CO-3.2 Ensure that mineral extraction and reclamation operations are compatible with land uses both on-site and within the surrounding area, and are performed in a manner that does not adversely affect the environment.

- Policy CO-3.3 Encourage the extraction of natural gas where compatible with both on-site and surrounding land uses, and when performed in a manner that does not adversely affect the environment.

- Policy CO-3.4 Within the Delta Primary Zone, ensure compatibility of permitted land use activities with applicable, natural gas policies of the Land Use and Resource Management Plan of the Delta Protection Commission.

⁴ Mcf is a gas standard equal to 1,000 cubic feet.

⁵ California State Department of Conservation Division of Oil, Gas and Geothermal Resources, Online Projection/Injection, accessed July 9, 2008.

Policy CO-3.5 Preserve and protect the County's unique geologic and physical features, which include geologic, or soil "type localities", and formations or outcrops of special interest. (DEIR MM GEO-1a)

3. Implementation Program

Action CO-A37 Designate and zone lands containing identified mineral deposits to protect them from the encroachment of incompatible land uses so that aggregate resources remain available for the future. (Policy CO-3.1)
Responsibility: Department of Community Services
Timeframe: 2009/2010

Action CO-A38 Amend the County Code to allow landowners to apply for redesignation of their property when it can be demonstrated that mineral resources are not present or are not economically feasible. (Policy CO-3.1)
Responsibility: Parks and Resources Department
Timeframe: 2010/2011

Action CO-A39 Encourage the responsible development of aggregate deposits along Cache Creek as significant both to the economy of Yolo County and the region. (Policy CO-3.1)
Responsibility: Parks and Resources Department
Timeframe: Ongoing

Action CO-A40 Encourage recycling of aggregate materials and products. 🌐 (Policy CO-3.1)
Responsibility: Parks and Resources Department, Department of Community Services
Timeframe: Ongoing

Action CO-A41 Regularly review regulations to ensure that they support an economically viable and competitive local aggregate industry. (Policy CO-3.1)
Responsibility: Parks and Resources Department, County Administrator's Office
Timeframe: Ongoing

Action CO-A42 Implement the Cache Creek Area Plan to ensure the carefully managed use and conservation of sand and gravel resources, riparian habitat, ground and surface water, and recreational opportunities. (Policy CO-3.1)
Responsibility: Parks and Resources Department
Timeframe: Ongoing

- Action CO-A43 Monitor updates to the State Mineral Resource classification map and incorporate any needed revisions to the County's zoning and land use map. (Policy CO-3.1)
Responsibility: Department of Community Services
Timeframe: Ongoing
- Action CO-A44 Coordinate individual surface mining reclamation plans so that the development of an expanded riparian corridor along Cache Creek may be achieved. (Policy CO-3.1)
Responsibility: Parks and Resources Department
Timeframe: Ongoing
- Action CO-A45 Prohibit commercial mining in or adjoining Putah Creek. (Policy CO-3.1, Policy CO-3.2)
Responsibility: Parks and Resources Department, Department of Community Services
Timeframe: Ongoing
- Action CO-A46 Maintain standards and procedures for regulating surface mining and reclamation operations so that potential hazards and adverse environmental effects are reduced or eliminated. (Policy CO-3.1, Policy CO-3.2)
Responsibility: Parks and Resources Department
Timeframe: Ongoing
- Action CO-A47 Ensure that mined areas are reclaimed to a usable condition that is readily adaptable for alternative land uses, such as agriculture, wildlife habitat, recreation, and groundwater management facilities.
Responsibility: Parks and Resources Department (Policy CO-3.1)
Timeframe: Ongoing
- Action CO-A48 Regularly update surface mining and reclamation standards to incorporate changes to State requirements, environment conditions, and County priorities. (Policy CO-3.1)
Responsibility: Parks and Resources Department
Timeframe: Ongoing
- Action CO-A49 Consider the exploration, drilling, and extraction of natural gas as compatible with agriculture and open space uses. (Policy CO-3.3)
Responsibility: Department of Community Services
Timeframe: Ongoing
- Action CO-A50 Evaluate any impacts to identified natural gas fields as part of the development review process. (Policy CO-3.3)
Responsibility: Department of Community Services
Timeframe: Ongoing

- Action CO-A51 Require that abandoned gas wells be sealed in accordance with State of California Division of Oil, Gas and Geothermal Resources regulations and that all drilling or production facilities be removed. Further require that the disturbed surface area be reincorporated into adjoining agricultural operations or revegetated with native vegetation within one year after abandonment. (Policy CO-3.3)
Responsibility: Department of Community Services Timeframe: Ongoing
- Action CO-A52 Maintain and implement local and State criteria and development standards for the production, injection, and drilling of natural gas deposits. Ensure that the construction and operation of natural gas storage facilities meet all safety standards of the State of California Division of Oil, Gas and Geothermal Resources. (Policy CO-3.3)
Responsibility: Department of Community Services
Timeframe: 2010/2011
- Action CO-A53 The County's unique geologic or physical features, which include geologic or soil "type localities" and formations or outcrops of special interest, shall be researched, inventoried, mapped, and data added to the County GIS database. (DEIR MM GEO-1b) (Policy CO-3.5)
Responsibility: Department of Community Services
Timeframe: 2012/2013
- Action CO-A-54 Implement the Cache Creek Area Plan (Policy CO-3.2).
Responsibility: Parks and Resources Department
Timeframe: Ongoing.

F. Cultural Resources

1. Background Information

Cultural resources include archaeological, paleontological and historic resources, including cemeteries and burials outside of cemeteries. Yolo County has examples of all of these, including prehistoric Native American sites, fossilized dinosaur remains, and historical man-made artifacts, buildings, sites and landmarks.

Before the establishment of what we now know today as Yolo County, a variety of people occupied the area. The first people to inhabit the Yolo region were two Native American tribes, the Patwin and, to a lesser extent, the Plains Miwok. Euro-American explorers, specifically the Spanish, came to this area as early as 1808 in search of new land on which to establish missions. Hunter/trapper groups also came to the area in search of valuable animal pelts to sell on an international market.

Settlements in the Yolo County region began during the first quarter of the 19th Century. The first American settlers were granted land from the Mexican Cession of 1848, during which the U.S. bought the region as eleven Mexican land grants. In the beginning of U.S. control, the region was a stable, isolated farming community that was transformed into a booming agricultural area by the California Gold Rush. Fremont was the first town, founded in 1849, along the confluence of the Sacramento and Feather Rivers. It was also the first County seat, after the formal establishment of Yolo County in 1850. The County seat was moved to Washington (Broderick) in 1851, to Cacheville (Yolo) in 1857, and back to Washington in 1860. In 1862, the County seat was permanently moved to the City of Woodland.

The artifacts and legends left by these groups are important cultural resources. The preservation of cultural resources is important because they offer important educational opportunities and they provide the County with a unique sense of identity.

A countywide record search was conducted at the Northwest Information Center (NWIC) of California Historical Resources Information System at Sonoma State University, and additional sources were also used, to generate a list of over 1,200 recorded cultural resources within Yolo County. Of these, 270 are archeological resources. The locations of these resources have been kept confidential.

There are two tribes with registered traditional land in Yolo County, the Cortina Band of Indians and the Rumsey Band of Wintun Indians. The Cortina band is not known to currently own property nor be active within the County. The Rumsey Tribe is very active in the County. They are a significant landowner and employer as the operators of the Cache Creek Casino Resort in Brooks.

The Rumsey Band of Wintun Indians is a recognized sovereign nation. As such, the Department of the Interior, Bureau of Indian Affairs, holds approximately 267 acres in trust for the Rumsey Tribe (the Tribe). One site contains houses for the tribal members, a community center, and the Yocha-De-He Preparatory School. The other site is home to the Cache Creek Casino Resort. As sovereign lands, these areas are not a part of this General Plan. The Tribe also owns several thousand acres in and around the trust lands. These properties are not held in trust and are included within this General Plan.

In 1985, the Tribe began operation of a bingo hall on trust lands in the Capay Valley, which was expanded to include card games in 1993. Three years later, there was a second expansion of the bingo hall, including several restaurants. In 1999, following approval of the State Gaming Compact, the casino added slot machines and table games to its existing facility. A third expansion began in 2002 to create the Cache Creek Casino Resort, adding additional gaming space, restaurants, event center, club, 200-room hotel, spa, and a championship golf course. Today, the Resort is the second largest employer in Yolo County (after UC Davis) with more than 2,400 employees.

In 2002, the County and the Tribe approved an Intergovernmental Agreement to: (1) establish a mechanism for mitigation of the off-Reservation impacts expected to result

from the Casino Resort expansion; (2) provide financial resources to help fund those mitigation measures; and (3) strengthen the government-to-government relationship between the County and the Tribe. The Agreement committed the Tribe to a wide range of measures to reduce the environmental impact of the expansion, as well as payment of over five million annually to the County to reimburse for the costs of the impacts. The County committed to developing a mitigation program to address impacts that occurred outside of trust lands, paid for through the funds provided by the Tribe, as recommended by a County Advisory Committee for Tribal Matters. Both parties agreed to hold regularly scheduled 2x2 meetings, open to the public.

In April, 2008, the Rumsey Tribe released a Draft Tribal Environmental Impact Report (TEIR) for a new expansion of the Resort. The proposal includes 467 new hotel rooms and 27 casitas, four additional restaurants, an event/conference center, retail shops, an expansion of the spa, additional gaming floor and office space, three new swimming pools, an additional parking garage, and related support facilities and utilities. The Final TEIR has not yet been released for this project.

Yolo County has conducted consultation with Native American tribes to aid in the protection of traditional and cultural places, or sacred sites, as required by Senate Bill 18 (SB 18). For the purposes of this element, the term “sacred site” refers to any specific, discrete, narrowly delineated location that is identified by a Native American tribe, or Native American individual determined to be an appropriate authoritative representative of a Native American religion, as sacred by virtue of its established religious significance to, or ceremonial use by, a Native American religion. In coordination with the two regional tribes, no sacred sites have been disclosed to the County.

Section 7050.5 of the California Health and Safety Code states that, when human remains are discovered, no further site disturbance shall occur until the County Coroner has determined that the remains are not subject to the provisions of Section 27491 of the Government Code or any other related provisions of law concerning investigation of the circumstances, manner and cause of any death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible for the excavation, in the manner provided in Section 5097.98 of the Public Resources Code. If the coroner determines that the remains are not subject to his or her authority and the remains are recognized to be those of a Native American, the coroner shall contact the Native American Heritage Commission within 24 hours.

In addition to the archeological listings identified above, Yolo County maintains its own list of local historical landmarks (see Table CO-6). There are also county listings on the National Register of Historic Places, the list of California State Historical Landmarks, and the list of California Points of Historical Interest (see Table CO-7).

Individuals, various community groups and local organizations throughout Yolo County preserve historical resources. These groups include the County Planning Commission/Historic Preservation Commission and various volunteer historical

societies. The Planning Commission serves as the Historic Preservation Commission which is tasked with establishing criteria, guidelines and standards to pursue the goals outlined in the County's Historic Preservation Ordinance. The Commission is responsible for maintaining an inventory of all historical landmarks and districts within Yolo County and recommending future historic designations to the Board of Supervisors. The Planning Commission decides permits for demolition and for alterations to historic structures.

There are a number of repositories of historical artifacts and information in Yolo County, including the Yolo County Historical Museum, the Yolo County Archives and Record Center and the Hattie Weber Museum. The Yolo County Historical Museum is located in Woodland. The museum provides tours of the architecturally historic building and displays furnishings and artifacts from Yolo County's past, specifically between 1850 and 1930, and includes outbuildings that feature artifacts associated with the agricultural industry and farming lifestyle.

The Yolo County Archives and Record Center maintains a comprehensive archive of historical materials dating back from the County's beginnings in 1850. A broad range of materials are stored at the Archive and Record Center, including County documents, original tax records, old newspapers, probates, wills, civil and criminal cases, original maps of Mexican land grants, personal scrapbooks, video reels and a complete set of meeting notes from every meeting of the Yolo County Board of Supervisors.

TABLE CO-6 COUNTY-RECOGNIZED HISTORICAL RESOURCES IN UNINCORPORATED YOLO COUNTY

Common Name	Address
Yolo Library	37750 Sacramento Street, Yolo, CA (APN: 025-401-013)
Jerome Borach House	37617 Sacramento Street, Yolo, CA (APN: 025-402-005)
Yolo Town Hall	37735 Sacramento Street, Yolo, CA (APN: 025-404-009)
Joseph T. Cooper House	38450 CR 16A, Yolo, CA (APN: 027-200-012)
Samuel Carpenter Cottage	28450 CR 87D, Winters, CA95694 (APN: 030-190-018)
William L. Seawright House	27786 State Route 128, Winters, CA95694 (APN: 030-200-045)
Adolph Oeste House	27027 Patwin Road, Davis, CA 95616 (APN: 036-160-025)
French Residence	37858 Russell Blvd, Davis, CA 95616 (APN: 037-140-016)
Hext Brothers-Ranch	26810 CR 97D, Davis, CA 95616 (APN: 037-140-017)
Gotfried Schmeiser Home	32125 CR 31, Davis, CA 95616 (APN: 037-100-018)
James Carey Montgomery House	43029 Montgomery Avenue, Davis, (APN: 069-230-019)
“Yolanda”	20416 CR 99, Woodland, CA 95695 (041-010-014)
William Marcus Jackson House	20123 East Street, Woodland, CA 95695 (APN: 041-020-038)
Frank N. Bullard House	21868 CR 99, Woodland, CA (APN: 041-030-009)
Lorenz Heinz Ranch	38331-35 CR 29, Davis, CA (APN: 041-120-002)
B. F. Conaway Ranch House	21841 CR 103, Woodland, CA 95695 (APN: 042-060-005)
Nelson Bump House (Aka “Lydia” House)	41810 South River Road, Clarksburg, CA (APN: 043-040-020)
Hamilton S. Connor House	38461 CR 144, Clarksburg, CA (APN: 043-090-001)
Holland Land Company Headquarters	36533 Netherlands Road, Clarksburg, CA (APN: 043-160-035)
Lawlor & Cosby General Merchandise	36510 Riverview Drive, Clarksburg, CA (APN: 043-285-001)
Husick Hardware	36530 Riverview Drive, Clarksburg, CA (APN: 043-285-012)
St. Joseph’s Church and Rectory	32890 South River Road, Clarksburg, CA (APN: 044-070-003)
The Barn at Utter Ranch	50870 Babel Slough Road, Clarksburg, CA (044-040-033)
Brown/Munk House	54080 South River Road, Clarksburg, CA (APN: 044-130-022)
Gordon Cemetery	32853 CR 20, Yolo, CA 95697 (APN: 025-360-067)

Common Name	Address
Robert Baur House	26850 CR 23, Madison, CA 95653 (APN: 049-110-012)
Esparto Railroad Station	26580 Woodland Avenue, Esparto, CA (APN: 049-240-017)
Fred and Roy Wyatt Houses	26514 and 26526 Grafton, Esparto, CA (APNs: 049-296-001, -002)
Clarence Johnson Home & Shop	26621 Capay Street, Esparto, CA (APN: 049-301-001)
IIOF Building, Esparto	16651-63 Yolo Avenue, Esparto, CA (APN: 049-312-001)
Henry Mefford House	16043 Mefford Lane, Capay, CA (APN: 049-240-003)
Haines Store	29088 Main Street, Madison, CA (APN: 049-449-005)
Union Church of Dunnigan	3615 County Road 89A, Dunnigan, CA (051-210-003)
St. Agnes Church	9865 Main Street, Zamora, CA (APN: 055-130-007)
John Snowball Mansion	42485 Front Street, Knights Landing, CA (APN: 056-160-023)
Silas-Edson House	42334 3 rd Street, Knights Landing, CA (APN: 056-297-012)
Leithold's Drug Store, Knights Landing	9336 Mill Street, Knights Landing, CA (APN: 056-298-004)
First National & Home Savings Bank	9340 Mill Street, Knights Landing, CA (APN: 056-298-005)
Masonic Lodge, Knights Landing	42245 3 rd Street, Knights Landing, CA (APN: 056-303-008)
Mary La Due House	9511 Mill Street, Knights Landing, CA (APN: 056-315-001)
Guinda Corner Store (aka Corner Store/Steele Hall)	7530 State Route 16, Guinda, CA (APN: 060-141-001)
Rumsey Town Hall	14380 Manzanita Street, Rumsey, CA (APN: 060-252-017)

Table CO-7 NATIONALLY- AND STATE-RECOGNIZED HISTORICAL RESOURCES IN UNINCORPORATED YOLO COUNTY

Place Type	Location
National Register of Historic Places	
Yolo Branch Library	200 Sacramento Street, Yolo
Union Church of Dunnigan	3615 County Road 89A, Dunnigan
Rumsey Town Hall	State Route 16 at Manzanita Street, Rumsey
Nelson Ranch	41070 County Road 18C, Woodland
William B Gibson House	512 Gibson Road, Woodland
Canon School	0.5 mi. N of Brooks, Brooks
California State Historical Landmarks	
None in Unincorporated Yolo County	
California State Points of Historical Interest	
Russell Boulevard	Between Highway 113 and Road 98, Davis
Mary's Chapel	Intersection of County Roads 15 and 98
St. Agnes Church	County Road 98, Zamora
Capay School	State Route 16, Capay
Leonidas Taylor Monument	West bank of the Sacramento River, northwest of Sacramento
Yolo County Courthouse	725 Court Street, Woodland
Yolo County Historical Museum	512 Gibson Road, Woodland

Source: National Register of Historic Places, the list of California State Historical Landmarks, and the list of California Points of Historical Interest, 2008

2. Policy Framework

GOAL CO-4 Cultural Resources. Preserve and protect cultural resources within the County.

Policy CO-4.1 Identify and safeguard important cultural resources.

Policy CO-4.2 Implement the provisions of the State Historical Building Code and Uniform Code for Building Conservation to balance the requirements of

the Americans with Disabilities Act with preserving the architectural integrity of historic buildings and structures.

- Policy CO-4.3 Encourage owners of historic resources to preserve and rehabilitate their properties. 🌐
- Policy CO-4.4 Encourage historic resources to remain in their original use whenever possible. The adaptive use of historic resources is preferred when the original use can no longer be sustained. Older residences may be converted to office/retail use in commercial areas and to tourist use in agricultural areas, so long as their historical authenticity is maintained or enhanced.
- Policy CO-4.5 Increase knowledge of historic preservation through public education and outreach programs.
- Policy CO-4.6 Support historically oriented visitor programs at the local and regional level through the Yolo County Visitor's Bureau and similar efforts.
- Policy CO-4.7 Encourage the identification of historic resources through the integrated use of plaques and markers.
- Policy CO-4.8 Explore opportunities for promoting heritage tourism, including cooperation with regional and State marketing efforts.
- Policy CO-4.9 Promote the use of historic structures as museums, educational facilities, or other visitor-serving uses.
- Policy CO-4.10 Encourage voluntary landowner efforts to protect cultural resources consistent with State law.
- Policy CO-4.11 Honor and respect local tribal heritage.
- Policy CO-4.12 Work with culturally affiliated tribes to identify and appropriately address cultural resources and tribal sacred sites through the development review process.
- Policy CO-4.13 Avoid or mitigate to the maximum extent feasible the impacts of development on Native American archaeological and cultural resources.
- Policy CO-4.14 Within the Delta Primary Zone, ensure compatibility of permitted land use activities with applicable cultural resources policies of the Land Use and Resource Management Plan of the Delta Protection Commission.

2. Implementation Program

- Action CO-A55 Update the Historic Preservation Ordinance on a regular basis to be consistent with applicable federal, State and local Historic Preservation requirements. (Policy CO-4. Policy CO-4.2)
Responsibility: Department of Community Services Timeframe: Ongoing
- Action CO-A56 Update the historic resources surveys (including the Historic Features Inventory), as needed, to reflect changes due to the passage of time, loss of existing historic resources, and the availability of new or reinterpreted information. (Policy CO-4.1)
Responsibility: Department of Community Services
Timeframe: Ongoing
- Action CO-A57 Identify and establish historic districts, where appropriate, to better preserve individual historical resources and their context. (Policy CO-4.1, Policy CO-4.4)
Responsibility: Department of Community Services
Timeframe: Ongoing
- Action CO-A58 Establish an inventory and map of known significant historic and cultural resources, as well as sensitive areas where such resources are likely to occur. Work with the Rumsey and Cortina Tribes to identify sacred sites and develop a cultural sensitivity map. This information is protected as confidential under State law. (Policy CO-4.1)
Responsibility: Department of Community Services Timeframe: 2011/2012
- Action CO-A59 Conduct historic resource surveys as a part of community and specific plan preparation to document and identify those resources that meet the criteria for listing at the local level, on the California Register of Historical Resources, and on the National Register of Historic Places. (Policy CO-4.1)
Responsibility: Department of Community Services Timeframe: Ongoing
- Action CO-A60 Review and monitor demolition permits, grading permits, building permits, and other approval procedures to reinforce preservation goals. (Policy CO-4.1, Policy CO-4.2, Policy CO-4.3)
Responsibility: Department of Community Services
Timeframe: Ongoing
- Action CO-A61 Establish design guidelines for historic resources based on established federal and State standards and guidelines to address the adaptive re-

use and modification of historic resources. (Policy CO-4.1, Policy CO-4.2, Policy CO-4.4)

Responsibility: Department of Community Services Timeframe: Ongoing

Action CO-A62 Preserve historical records and make them accessible to the public by maintaining the Yolo County Archives and Record Center. (Policy CO-4.1, Policy CO-4.5)

- Provide additional space for accommodation of the growing Archives collections
- Ensure that the collection is housed in an appropriate archival manner

Responsibility: County Library, General Services Department
Timeframe: Ongoing

Action CO-A63 Require cultural resources inventories of all new development projects in areas where a preliminary site survey indicates a medium or high potential for archaeological, historical, or paleontological resources. In addition, require a mitigation plan to protect the resource before the issuance of permits. Mitigation may include:

- Having a qualified archaeologist or paleontologist present during initial grading or trenching;
- Redesign of the project to avoid historic or paleontological resources;
- Capping the site with a layer of fill; and/or
- Excavation and removal of the historical or paleontological resources and curation in an appropriate facility under the direction of a qualified professional. (Policy CO-4.1, Policy CO-4.13)

Responsibility: Department of Community Services Timeframe: Ongoing

Action CO-A64 Require that discretionary projects which involve earth disturbing activities on previously undisturbed soils in an area determined to be archaeologically sensitive perform the following:

- Enter into a cultural resources treatment agreement with the culturally affiliated tribe.
- Retain a qualified archaeologist to evaluate the site if cultural resources are discovered during the project construction. The archaeologist will have the authority to stop and redirect grading activities, in consultation with the culturally affiliated tribe and their designated monitors, to evaluate the significance of any archaeological resources discovered on the property.
- Consult with the culturally-affiliated tribe to determine the extent of impacts to archaeological resources and to create appropriate mitigation to address any impacts.

- Arrange for the monitoring of earth disturbing activities by members of the culturally affiliated tribe, including all archaeological surveys, testing, and studies, to be compensated by the developer.
- Implement the archaeologist's recommendations, subject to County approval.
- Agree to relinquish ownership of all artifacts that are found on the project area to the culturally affiliated tribe for proper treatment and disposition. (Policy CO-4.1, Policy CO-4.13)

Responsibility: Department of Community Services

Timeframe: Ongoing

Action CO-A65 Require that when cultural resources (including non-tribal archeological and paleontological artifacts, as well as human remains) are encountered during site preparation or construction, all work within the vicinity of the discovery is immediately halted and the area protected from further disturbance. The project applicant shall immediately notify the County Coroner and the Department of Community Services. Where human remains are determined to be Native American, the project applicant shall consult with the Native American Heritage Commission (NAHC) to determine the person most likely descended from the deceased. The applicant shall confer with the descendant to determine appropriate treatment for the human remains, consistent with State law. (Policy CO-4.1, Policy CO-4.11, Policy CO-4.12, Policy CO-4.13)
Responsibility: Department of Community Services, Sheriff-Coroner's Office

Timeframe: Ongoing

Action CO-A66 Prohibit the removal of cultural resources from the project site except by a qualified consultant and after the County planning staff have been notified. Prehistoric resources include chert or obsidian flakes, projectile points, mortars, pestles, dark friable soil containing shell and bone dietary debris, heat-affected rock, or human burials. Historic resources include stone or adobe foundations and walls, structures and features with square nails, and refuse deposits often in old wells and privies. (Policy CO-4.1, Policy CO-4.11)

Responsibility: Department of Community Services
Timeframe: Ongoing

Action CO-A67 Consult with culturally affiliated tribes prior to amending the General Plan and adopting or amending specific plans, consistent with State law. (Policy CO-4.12, Policy CO-4.13)

Responsibility: County Administrator's Office, Department of Community Services

Timeframe: Ongoing

- Action CO-A68 Confer with culturally affiliated tribes prior to designating open space that includes any identified cultural places and develop a treatment and management plan for their preservation. (Policy CO-4.12, Policy CO-4.13)
Responsibility: County Administrator's Office, Department of Community Services
Timeframe: Ongoing
- Action CO-A69 Refer all development proposals that may adversely affect cultural resources to the Northwest Information Center (NWIC) at Sonoma State University for review and comments. The NWIC will identify the presence or absence of known cultural resources and/or previously performed studies in or near a given project area and will offer recommendations regarding the need for additional studies, where necessary. If the NWIC recommends further study, the project applicant shall contract with a qualified professional to conduct the study and make recommendations designed to avoid or minimize adverse impacts on cultural or historic resources and indicate whether further investigation is needed. All studies shall be completed and submitted to the County prior to the completion of any environmental document for the project. (Policy CO-4.1, Policy CO-4.11)
Responsibility: Department of Community Services
Timeframe: Ongoing
- Action CO-A70 Refer draft environmental documents, including any studies and recommended mitigation measures, to the appropriate culturally-affiliated tribes for review and comment as part of the public review process. (Policy CO-4.1, Policy CO-4.11, Policy CO-4.12)
Responsibility: Department of Community Services
Timeframe: Ongoing

G. Water Resources

There are many significant water resources in Yolo County. Major rivers, creeks, streams, drainages and sloughs running through the county irrigate agricultural fields, control floods, transport water supplies to users throughout the county and provide wildlife habitat. This section discusses the major sources of surface and groundwater supply in the county, issues related to water quality, and the important planning and regulatory efforts that are concerned with these resources. Other water-related issues, including those related to water distributions systems, water treatment, and water-related infrastructure, are addressed in the Infrastructure and Services Element of this General Plan.

1. Background Information

a. Major Water Sources

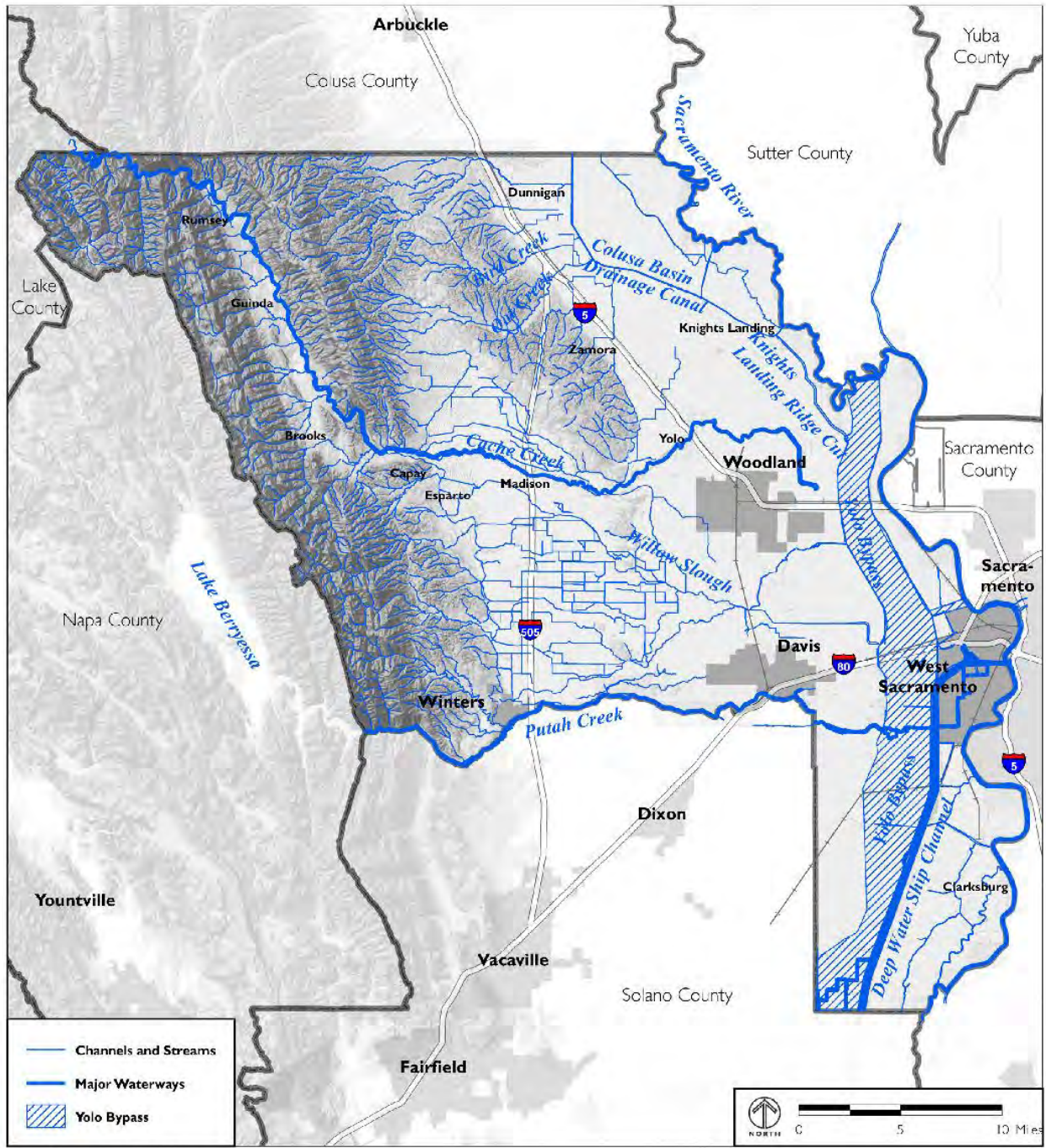
i. Surface Water

The major watersheds and surface water features in Yolo County include Cache Creek, Putah Creek, the Sacramento River, and the Yolo Bypass. These waterway areas are discussed below and are shown in Figure CO-6.

- **Cache Creek** is the outfall of Clear Lake, which is located in Lake County 50 miles northwest of Yolo County. The north fork of Cache Creek includes the 300,000-acre-foot Indian Valley Reservoir, also located in Lake County.
- **Putah Creek** begins in Lake County, flows through Napa County and the Lake Berryessa Reservoir into southern Yolo County, and eventually into the Yolo Bypass.
- **Sacramento River**, a 447-mile-long river, begins in Shasta County and passes west of the City of Sacramento. Its tributaries include the Pit, Feather, McCloud and American rivers.
- The **Yolo Bypass** is a 41-mile-long, several-mile-wide levied floodplain that carries flood flows from the Sacramento River to the Sacramento Delta. Its tributaries include Cache Creek, Putah Creek, Willow Slough and the Knights Landing Ridge Cut.

In addition to these natural sources, an extensive network of sloughs, irrigation canals and drainage ditches are located within the county. The major slough and canal facilities include:

FIGURE CO-6 MAJOR WATERWAYS AND SURFACE WATERS



Source: County of Yolo GIS, 2009.

- **Tehama-Colusa Canal** – transports water south from Tehama County into Yolo County, terminating near Dunnigan.
- **Colusa Basin Drain** – begins at Glenn County, carrying drainage water from the western side of the valley, to the Sacramento River at Knight’s Landing on through the Ridge Cut to the Yolo Bypass.
- **Willow Slough** – minor watercourse that drains much of the area between Cache and Putah Creeks.
- **Winters Canal** – primary source of irrigation for most of the County between Cache and Putah Creeks.
- **West Adams Canal** – carries water from Cache Creek north to Hungry Hollow and Yolo-Zamora area.
- **Elk Slough** – drains much of the area around Clarksburg.

Yolo County has no natural lakes. However, as a result of aggregate mining and reclamation activity along Cache Creek, several small reclaimed lakes will be created and eventually become a part of the future planned Cache Creek Parkway. The Cache Creek Area Plan contains policies and regulations addressing the management of these future resources.

ii. Water Quality

Dozens of organizations and agencies perform regular water quality monitoring in the county. Chemicals such as boron, diazinon, mercury and unknown toxics are pollutants found in Yolo County waterways. Studies on the physical and chemical characteristics of the Sacramento River and its tributaries within Yolo County have found high concentrations of nutrients and contaminants, particularly after major storms.

The Central Valley Regional Water Quality Control Board (CVRWQCB) has adopted Total Maximum Daily Load (TMDL) for mercury in Cache Creek. A separate TMDL is currently under review for mercury in the Sacramento-San Joaquin Delta. The CVRWQCB has also adopted TMDL for diazinon in the Sacramento River and the Delta.

iii. Groundwater

Yolo County has an extensive system of shallow and deep aquifers on which the county depends for domestic and agricultural water supply. Wells in Yolo County are increasingly tapping deeper aquifers due to issues of subsidence and contamination, which are discussed below.

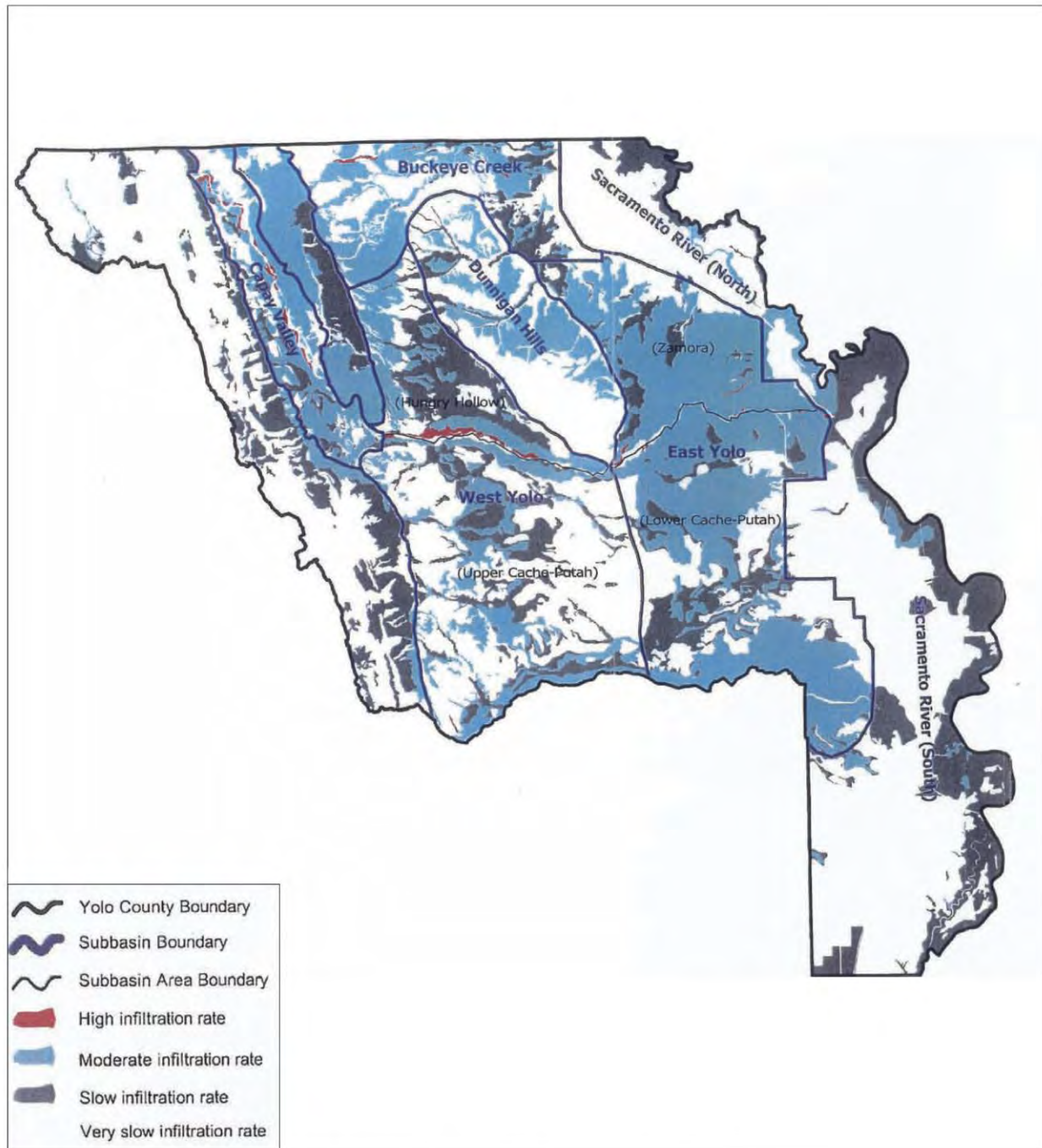
The County has six groundwater sub-basins, which are shown in Figure CO-7. The East Yolo sub-basin, which covers the eastern portion of the county from south of Dunnigan to Davis, provides the greatest supply of residential water extraction. The other five sub-basins are the Capay Valley, Buckeye Creek, Dunnigan Hills, West Yolo and Sacramento River sub-basins.

The primary source of groundwater recharge is applied irrigation water and direct rainfall. Recharge of aquifers typically occurs along the streambeds of creeks and canals. Recharge occurs naturally, and also through reservoir releases, such as the release of stored water from the Indian Valley Reservoir into Cache Creek during low flows periods. The Indian Valley Reservoir was built and is managed by the Yolo County Flood Control and Water Conservation District so that farmers could use surface water rather than pump groundwater, to reduce overdraft and subsidence.

Several issues face the county in its use of groundwater. Subsidence can cause permanent loss of aquifer capacity when upper soil layers collapse. Subsidence can also compromise wells, irrigation canals, levees and highways. The Yolo Subsidence Monitoring Project (YSMP) is a collaborative effort between the County, the Cities of Woodland and Davis, UC Davis, the U.S. Bureau of Reclamation, the Army Corps of Engineers, and the California Department of Water Resources. The YSMP includes 47 stations that are monitored to determine where subsidence may be occurring and to what extent. As a result of their work, it appears that land subsidence due to overdraft of the shallow aquifer is a significant concern in the East Yolo sub-basin and, to a lesser degree, throughout other parts of the county. The greatest amount of subsidence, approximately four feet over several decades, has occurred east of Zamora, where irrigation needs are supplied exclusively from groundwater because no surface water sources exist.

In addition to subsidence, contamination of groundwater is also an issue in parts of the County. Coliform, nitrates and dissolved salts are primary concerns. Coliform and nitrates are a consequence of failing, underperforming and/or over-concentration of septic systems, such as in Dunnigan, North Davis Meadows, Madison and rural areas around the County. Nitrate contamination is also associated with over-fertilization of agricultural crops, golf courses, parks, and landscaping, and may be associated with cemeteries, feed lots, and agricultural disposal areas. Dissolved salts are produced from evaporation of irrigation water and evapotranspiration of soil moisture and shallow groundwater. These salts can accumulate, resulting in groundwater contamination. Arsenic and other soil minerals are naturally occurring contaminants that leach into streams, such as along Cache Creek and particularly in the Wild Wings County Service Area. Although groundwater supplies in the county generally meet current drinking water standards, continued groundwater contamination is already a problem for some municipal, residential, and agricultural uses.

FIGURE CO-7 **GROUNDWATER BASINS AND INFILTRATION RATES**



Source: Soil Survey Geographic (SSURGO) Database, U.S. Department of Agriculture, Natural Resource Conservation Service.

Figure CO-7 also identifies all rivers, creeks, streams, and other areas where ground-water recharge occurs, based on degree of infiltration.

iv. Reclaimed Water

Reclaimed water from wastewater treatment facilities is used in Yolo County. Cache Creek Casino Resort and the Wild Wings County Service Area use treated tertiary wastewater for golf course irrigation. Other uses of reclaimed water include irrigation of agricultural fields and landscaping. The State regulates specific uses of reclaimed water. The level of prior treatment determines how the reclaimed water can be used. Tertiary treatment is generally required for human contact, as on golf courses and ornamental landscaping, or human consumption as on food crops. Secondary treatment may be adequate for other uses, such as fodder crops.⁶

The Regional Water Quality Control Board (RWQCB) also restricts discharge of reclaimed water to land. Where land discharge is allowed, it is regulated in order to protect groundwater resources. Nitrate removal is required in many cases where the reclaimed water will percolate to groundwater basins that are used for domestic water supply, although secondary treatment may be sufficient depending on soil conditions.⁷

b. Water Planning and Regulation

To ensure high quality and adequate supply, water resources in Yolo County are regulated by federal and State laws, as well as local water management plans. In 2007, the County adopted the Integrated Regional Water Management Plan (IRWMP). The IRWMP was developed by the Water Resources Association of Yolo County (WRA), in conjunction with the California Department of Water Resources (DWR). The IRWMP serves as an update to the County's 1992 water management plan, addressing major topics such as water supply, water quality, flood management, enhancement of aquatic and riparian habitat, and improvement of the County's recreational opportunities.

Besides the IRWMP, the County implements a number of planning documents to protect its water resources. The Yolo County Natural Heritage Program, previously mentioned in the Biological Resources section of this element, also serves as a water management plan with respect to wetlands and riparian corridors, in compliance with the Federal Endangered Species Act (ESA) and the California Endangered Species Act (CESA). The Yolo County NHP does not, however, address aquatic species or their habitat. This plan is currently being developed by the Yolo county Habitat Joint Powers Authority and is expected to be published in 2009.

The Cache Creek Area Plan is comprised of the Off Channel Mining Plan and the Cache Creek Resources Management Plan, which together regulate and protect the area and manage the Creek as an integrated system. It protects water supply and

⁶ California Code of Regulations, Title 22, Division 4, Chapter 3, Article 3.

⁷ California Code of Regulations, Title 22, Division 4, Chapter 3, Article 3.

aquatic habitat from contamination associated with mining. This plan, last updated in 2002, focuses on regulating off channel aggregate mining, improving channel stability, reducing erosion, maintaining flood capacity and restoring habitats.

The Yolo County Stormwater Management Program (SWMP) was developed by the Yolo County Planning and Public Works Department in conjunction with other Yolo County agencies. The SWMP analyzes various activities in urbanized areas that are sources of pollutants in stormwater and identifies Best Management Practices to reduce their levels. The SWMP responds to the issues and regulations of the 1987 Clean Water Act.

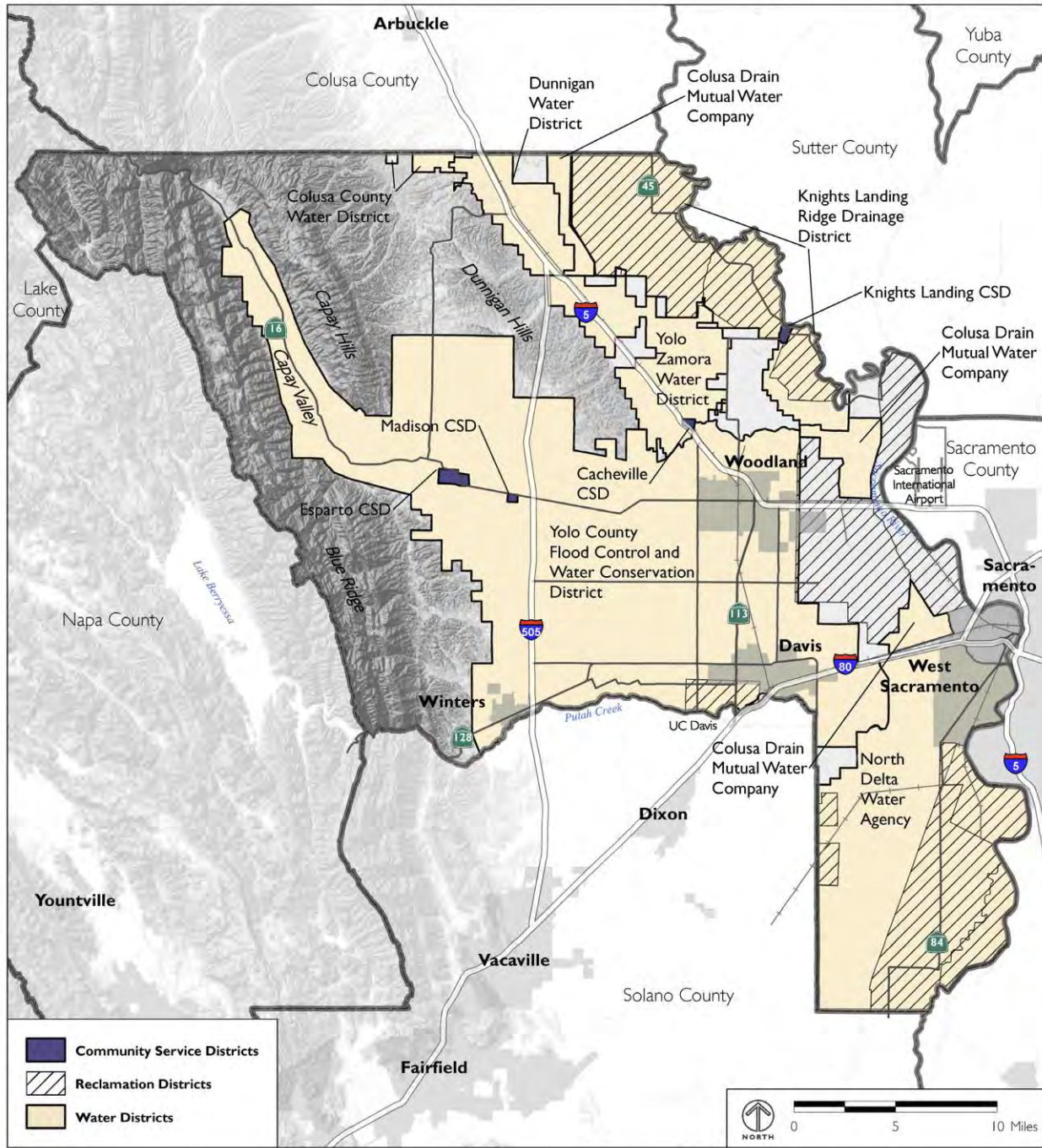
c. Domestic Water

Most of Yolo County's domestic water supplies originate from groundwater. West Sacramento is the only urban area that currently relies on surface water rather than groundwater as its primary source of water supply. The cities of Woodland and Davis, as well as UC Davis, are working on a joint proposal to obtain municipal water from surface supplies in the Sacramento River. Although the most common problem associated with groundwater in municipal supplies is the hardness (mineralization), contamination of the aquifer with coliform, nitrates, naturally occurring arsenic, and fuel from leaking underground storage tanks can be a serious issue in some parts of the County.

Table CO-8 shows current conditions with regards to domestic water systems in the unincorporated areas of the county. In addition, the Rio Villa public housing in Winters and the Davis Migrant Center both have private water systems. The rest of the county relies on private on-site wells. Yolo County has also has six major water districts that focus primarily on the delivery of irrigation water for agricultural purposes, although there has been discussion about one or more of the districts providing municipal water. The water districts are: Dunnigan Water District, Yolo-Zamora Water District, Yolo County Flood Control and Water Conservation District, North Delta Water Agency, Colusa Dain Mutual Water Company, Colusa Drain Water Users Association, Reclamation Districts 108, 730, 737, 2035 and 2068, and Colusa County Water District. Water agency boundaries are shown in Figure CO-8.

County regulations, contained in Title 7, Chapter 1, Section 7-1.04 of the Yolo County Code, require fire sprinkler systems in all new residential development and new non-residential buildings over 5,000 square feet or over three stories in height. Because most existing water systems in Yolo County do not operate at pressures sufficient to maintain a fire sprinkler system for commercial structures, every unincorporated community in the county needs to upgrade its water system to meet these requirements.

FIGURE CO-8 WATER AGENCY BOUNDARIES



Source: Yolo County LAFCO, 2008; Yolo County GIS, 2009.

TABLE CO-8 WATER SYSTEM CONDITIONS BY UNINCORPORATED AREA

Unincorporated Area(s)	Water System Conditions
Clarksburg	No community water system. Individual wells.
Dunnigan	No community water system. Private water systems serve the two mobile home parks. The Dunnigan Water District provides supplement non-potable fire flow for some customers. Nitrates have been a problem in the past with some wells in the community.
Esparto	Community water system based on groundwater, which is managed by a Community Services District. Water pressure has been a recent concern, especially regarding commercial fire flow.
Knights Landing	Community water system based on groundwater, which is managed by a Community Services District. Water pressure has been a recent concern, especially regarding commercial fire flow.
Madison	Community water system based on groundwater, which is managed by a Community Service District. New well recently installed to address previous problems with coliform and nitrate contamination. Water pressure has been a recent concern, especially regarding commercial fire flow.
Monument Hills	Wild Wings development has a community water system based on groundwater, which is managed by a County Service Area. Arsenic is a potential problem. The remainder of the Monument Hills area relies on individual wells.
West Kentucky	Private water system based on groundwater. System improvements needed.
Willowbank, El Macero, North Davis Meadows, Royal Oaks	Willowbank and El Macero have separate water systems managed by County Service Areas, which have been integrated with the City of Davis community water system. Royal Oaks is also served by the City of Davis. North Davis Meadows is also managed by a County Service Area, but is separate from the city's water system. Nitrate have been a problem in North Davis Meadows.
Yolo	Community water system based on groundwater, which is managed by a Community Service District. Water pressure has been a recent concern, especially regarding commercial fire flow.
Zamora, Binning Farms, Patwin Road, West Plainfield, Willow Oak	No community water system. Individual wells.

Other water supply and quality issues that Yolo County must address include increasingly stringent water quality regulations, availability of adequate water supplies during severe drought conditions, subsidence problems as a result of groundwater overdraft, rising costs of providing water services, and increasingly complex and expensive regulatory compliance. Many of these issues have been addressed through the Integrated Regional Water Management Plan (IWRMP) prepared by the Water Resources Association, a multi-agency effort to coordinate water policies among the various jurisdictions of Yolo County. Currently, the County is also considering additional ordinances and/or the formation of a countywide water agency to provide enhanced groundwater resource management.

2. Policy Framework

GOAL CO-5 **Water Resources. Ensure an abundant, safe, and sustainable water supply to support the needs of existing and future generations.**

- Policy CO-5.1 Coordinate with water purveyors and water users to manage supplies to avoid long-term overdraft, water quality degradation, land subsidence and other potential problems. 🌍

- Policy CO-5.2 Support projects that provide reliable and sustainable surface water from a variety of energy efficient sources. Sources should be sufficient to serve existing and planned land uses in prolonged drought periods and protect natural resources and surface water flows. 🌍

- Policy CO-5.3 Manage the County’s groundwater resources on a sustainable yield basis that can provide water purveyors and individual users with reliable, high quality groundwater to serve existing and planned land uses during prolonged drought periods. (DEIR MM HYD-1a) 🌍

- Policy CO-5.4 Support educational programs to educate the public about practices and programs to minimize water pollution and reduce water usage. 🌍

- Policy CO-5.5 Integrate balanced water management programs that emphasize multiple benefits and balance competing needs into all aspects of the planning and development process. 🌍

- Policy CO-5.6 Improve and protect water quality for municipal, agricultural, and environmental uses.

- Policy CO-5.7 Support mercury regulations that are based on good science and reflect an appropriate balancing of sometimes competing public values including health, food chain, reclamation and restoration of Cache Creek, sustainable and economically viable Delta agriculture, necessary mineral extraction, flood control, erosion control, water quality, and habitat restoration.

- Policy CO-5.8 Support efforts to reduce the accumulation of methyl mercury in fish tissue in Cache Creek and the Delta, as well as the consumption of fish with high levels of methyl mercury.

- Policy CO-5.9 Within the Delta Primary Zone, ensure compatibility of permitted land use activities with applicable water policies of the Land Use and Resource Management Plan of the Delta Protection Commission.

- Policy CO-5.10 Encourage water purveyors to develop plans for responding to droughts and the effects of global climate change, including contingency plans, the sharing of water resources to improve overall water supply reliability, and the allocation of water supply to priority users. 🌍
- Policy CO-5.11 Facilitate and encourage the development of new reliable future sources of supply consistent with local land use plans and regional water needs, including the completion of the Tehama-Colusa Canal.
- Policy CO-5.12 Support the integrated management of surface and groundwater, stormwater treatment and use, the development of highly treated wastewater, and desalinization where feasible.
- Policy CO-5.13 Ensure that regional, State, and federal water projects protect local water rights and areas of origin.
- Policy CO-5.14 Require that proposals to convert land to uses other than agriculture, open space, or habitat demonstrate that groundwater recharge will not be significantly diminished.
- Policy CO-5.15 Encourage new development and redevelopment to use reclaimed wastewater, where feasible, to augment water supplies and to conserve potable water for domestic purposes. 🌍
- Policy CO-5.16 Require all development to have an adequate water supply. Require significant discretionary projects to demonstrate adequate long-term and sustainable water supplies by preparing a verified water supply assessment. The assessment shall demonstrate a long-term, reliable water supply satisfactory under normal and above normal rainfall conditions, as well as drought conditions. Satisfy the requirements of CEQA Guidelines Section 15155 to consult with water agencies regarding water supply assessments. 🌍
- Policy CO-5.17 Require new development to be designed such that nitrates, lawn chemicals, oil, and other pollutants of concern do not impair groundwater quality.
- Policy CO-5.18 Encourage developers to build new homes to higher water-efficiency standards than already required. 🌍
- Policy CO-5.19 Strive for “water-neutral” development with new water demand offset by efficiency improvements elsewhere in the system. Require all new developments to offset new water demands to the greatest extent feasible. 🌍

- Policy CO-5.20 Encourage water purveyors to adopt conservation pricing strategies for existing and new development. 🌍
- Policy CO-5.21 Encourage the use of water management strategies, biological remediation, and technology to address naturally occurring water quality problems such as boron, mercury, and arsenic.
- Policy CO-5.22 Work with other agencies and non-profit organizations to provide educational and technical assistance programs to encourage farmers to adopt agricultural methods that improve water quality.
- Policy CO-5.23 Support efforts to meet applicable water quality standards for all surface and groundwater resources.
- Policy CO-5.24 Pursue funding to remediate historic mines and other sources of mercury contamination on the Cache Creek watershed.
- Policy CO-5.25 Support the efforts of Davis, Woodland and UC Davis to acquire surface supplies from the Sacramento River for domestic water uses.
- Policy CO-5.26 Provide financial and regulatory incentives for the installation of water conservation measures for agriculture.
- Policy CO-5.27 Encourage the development of groundwater management plans pursuant to the State Groundwater Management Act (Sections 10750-10756 of the California Water Code) for all regions of the County.
- Policy CO-5.28 Encourage the Water Resources Agency to implement and regularly update the Integrated Regional Water Management Plan.
- Policy CO-5.29 Vigorously protect all water rights related to lands within Yolo County, including areas of origin, riparian water rights, and other existing water rights.
- Policy CO-5.30 Anticipate and adapt to changes in the amount and timing of water availability due to predicted effects of global warming.
- Policy CO-5.31 Encourage the Esparto CSD to explore the availability of Cache Creek water via the Flood Control District as an alternative source of municipal water. (DEIR UTIL-2b)
- Policy CO-5.32 In water districts where there is insufficient water to serve new development, require new development to offset demand through one or more of the following measures as appropriate, so that there is no net increase in demand: use of reclaimed water, water catchments and reuse on site; water retention serving multiple sites; retrofits of existing uses in the district to offset increased demand; and other such means.



These measures should be achieved in partnership with the applicable water district. (DEIR MM UTIL 2c)

- Policy CO-5.33 Strive to increase artificial recharge of important aquifers with surplus surface water supplies. (DEIR MM HYD-1b)
- Policy CO-5.34 Require measures that reduce peak demand for water, and therefore allow for smaller pumps that use less energy overall.

3. Implementation Program

- Action CO-A71 Collaborate with the Water Resources Agency to collect data from public water suppliers and other water users which use groundwater sources to monitor and report groundwater levels and yields, where appropriate, to manage long term aquifer conditions. (Policy CO-5.1, Policy CO-5.3)
Responsibility: Parks and Resources Department
Timeframe: Ongoing
- Action CO-A72 Work cooperatively with water purveyors and with other land use planning agencies to share data on water supply availability, anticipated demand, land use, and population projections. (Policy CO-5.1, Policy CO-5.2, Policy CO-5.3)
Responsibility: Parks and Resources Department
Timeframe: Ongoing
- Action CO-A73 Create a central database for all jurisdictions within the County of proposed, pending, and approved development activity to be used in cumulative analyses and water supply assessments. (Policy CO-5.1, Policy CO-5.2, Policy CO-5.3)
Responsibility: Department of Community Services
Timeframe: Ongoing
- Action CO-A74 Work with water purveyors in the County to plan for possible changes to water supply and quality resulting from global warming. (Policy CO-5.1, Policy CO-5.2, Policy CO-5.3, Policy CO-5.10) 🌐
Responsibility: Parks and Resources Department
Timeframe: Ongoing
- Action CO-A75 Participate in regional planning efforts regarding surface water resources, including the Sacramento River, Cache Creek, Putah Creek, Tehama-Colusa Canal, Yolo Bypass, and Sacramento-San Joaquin Delta. (Policy CO-5.1, Policy CO-5.2, Policy CO-5.3)
Responsibility: Parks and Resources Department

Timeframe: Ongoing

- Action CO-A76 Oppose proposals for surface or groundwater exports to locations outside Yolo County that do not preserve both water quality and water supply for current and planned water users, including the environment. (Policy CO-5.2, Policy CO-5.3)
Responsibility: Parks and Resources Department, County Administrator's Office
Timeframe: Ongoing
- Action CO-A77 Coordinate with local water purveyors to develop a conjunctive use program, consistent with the Integrated Regional Water Management Plan, to make the most efficient use of surface and groundwaters. (Policy CO-5.1, Policy CO-5.3) 
Responsibility: Parks and Resources Department
Timeframe: 2010/2011
- Action CO-A78 Ensure the collection and maintenance of data on water use, water supplies, and water quality to avoid long-term overdraft, water quality degradation, land subsidence and other potential groundwater problems. (Policy CO-5.5, Policy CO-5.6)
Responsibility: Health Department, Parks and Resources Department
Timeframe: Ongoing
- Action CO-A79 Map operational and non-operational wells into the County's Geographic Information System. (Policy CO-5.3, Policy CO-5.5, Policy CO-5.6, Policy CO-5.7, Policy CO-5.8)
Responsibility: Health Department, Information Technology Department
Timeframe: 2010/2011
- Action CO-A80 Work with local water purveyors to develop and implement urban and agricultural water management plans to provide a 20 percent improvement in water use efficiency throughout the county by 2030. (Policy CO-5.1, Policy CO-5.5) 
Responsibility: Parks and Resources Department
Timeframe: 2011/2012
- Action CO-A81 Develop and implement an integrated wellhead protection program. (Policy CO-5.6)
Responsibility: Agriculture Department, Health Department
Timeframe: 2009/2010

- Action CO-A82 Develop a County grading ordinance that maintains existing terrain, channels, and vegetation to the extent possible, in order to minimize the disruption of natural systems. (Policy CO-5.5, Policy CO-5.6) 🌐
Responsibility: Department of Community Services
Timeframe: 2009/2010
- Action CO-A83 Adopt a Water Efficient Landscape Ordinance to require greater use of regionally native drought-tolerant vegetation, limitations on the amount of turf in residential development, computer controlled irrigation systems, and other measures as appropriate. (Policy CO-5.2, Policy CO-5.3, Policy CO-5.4) 🌐
Responsibility: Department of Community Services
Timeframe: 2011/2012
- Action CO-A84 Work with local agencies and non-profit organizations to provide educational and technical assistance to farmers to reduce sedimentation, provide on-site retention of irrigation water and flow attenuation, on-site detention of stormwater flows, and incorporate native vegetation. (Policy CO-5.4)
Responsibility: Agriculture Department
Timeframe: Ongoing
- Action CO-A85 Coordinate with water purveyors in the unincorporated areas to inform the public about practices and programs to minimize water pollution. (Policy CO-5.4)
Responsibility: Parks and Resources Department, Agriculture Department
Timeframe: Ongoing
- Action CO-A86 Consider adoption of an ordinance requiring that existing homes be retrofitted with water efficient appliances and fixtures prior to sale. (Policy CO-5.1, Policy CO-5.2, Policy CO-5.3, Policy CO-5.5) 🌐
Responsibility: Department of Community Services
Timeframe: 2011/2012
- Action CO-A87 Coordinate with the Yolo Resources Conservation District to create educational programs to inform agencies, stakeholders, and the public about groundwater Best Management Practices for efficient water use, water conservation, and recharge. (Policy CO-5.4) 🌐
Responsibility: Parks and Resources Department
Timeframe: 2011/2012
- Action CO-A88 Establish the cost of operating and maintaining potable water treatment and distribution disposal systems/facilities to ensure they are borne by those receiving benefit, through the establishment of an ap-

propriate maintenance entity and fees. (Policy CO-5.2, Policy CO-5.3, Policy CO-5.5)

Responsibility: Department of Community Services, LAFCO

Timeframe: Ongoing

- Action CO-A89 Adopt an ordinance to allow for shared water systems to facilitate the clustering of homes and preservation of agricultural land, where an entity is established to provide maintenance or financing for maintenance of the water system. (Policy CO-5.1, Policy CO-5.2, Policy CO-5.3) 🌐
Responsibility: Health Department
Timeframe: 2009/2010
- Action CO-A90 Encourage roof catchment and the use of rainwater for non-potable uses to reduce the need for groundwater. (Policy CO-5.1, Policy CO-5.2, Policy CO-5.3, Policy CO-5.4) 🌐
Responsibility: Parks and Resources Department, Department of Community Services
Timeframe: 2010/2011
- Action CO-A91 Adopt development design standards to reduce or eliminate impervious surfaces where possible. (Policy CO-5.6)
Responsibility: Department of Community Services
Timeframe: 2010/2011
- Action CO-A92 Support water purveyors in the implementation and continued refining of the “Memorandum of Understanding (MOU) Regarding Urban Water Conservation in California” in those areas where water suppliers are party to the MOU. (Policy CO-5.1, Policy CO-5.2, Policy CO-5.3)
Responsibility: Parks and Resources Department
Timeframe: Ongoing
- Action CO-A93 Implement and regularly update the County Stormwater Management Plan and associated programs. (Policy CO-5.5, Policy CO-5.6)
Responsibility: Department of Community Services
Timeframe: Ongoing
- Action CO-A94 Require the implementation of Best Management Practices (BMPs) to minimize erosion, sedimentation, and water quality degradation resulting from new development and increases in impervious surfaces. (Policy CO-5.5, Policy CO-5.6) 🌐
Responsibility: Department of Community Services
Timeframe: Ongoing
- Action CO-A95 Adopt development design standards that use low-impact development techniques that emulate the natural hydrologic regime and reduce the

amount of runoff and associated pollutants. Examples include vegetated swales, landscaped detention basins, permeable paving, and green roofs. (Policy CO-5.5, Policy CO-5.6) 🌍

Responsibility: Department of Community Services
Timeframe: 2012/2013

Action CO-A96 Work with the Central Valley Regional Water Quality Control Board and other State and federal agencies to implement mercury total maximum daily loads (TMDLs) for Cache Creek and to develop mercury TMDLs for the Delta and other Yolo County waterways where appropriate. (Policy CO-5.6, Policy CO-5.7)

Responsibility: Parks and Resources Department
Timeframe: Ongoing

Action CO-A97 Evaluate the creation of a countywide water authority or other governance structure to address water conservation, flood control, water conveyance, and discourage water exports. (Policy CO-5.1, Policy CO-5.2, Policy CO-5.3)

Responsibility: County Administrator's Office, County Counsel
Timeframe: 2009/2010

Action CO-A98 Continue to monitor water quality in Lower Cache Creek and annually make the resulting data publicly available. (Policy CO-5.6)

Responsibility: Parks and Resources Department
Timeframe: Ongoing

Action CO-A99 Require service hook-up for all non-agricultural water users within a community when new domestic water services are made available. (Policy CO-5.6, Policy CO-5.17, Policy CO-5.23)

Responsibility: Department of Community Services
Timeframe: Ongoing

Action CO-A100 Facilitate the extension of water service to nearby underserved existing unincorporated developments, such as Binning Farms. (Policy CO-5.6, Policy CO-5.17, Policy CO-5.23)

Responsibility: Department of Community Services
Timeframe: Ongoing

Action CO-A101 Develop a generalized water balance for the County that uses updated hydrologic and topographic information to describe where water comes from and how it flows through the County, including recharge and extraction of ground waters. (Policy CO-5.3, Policy CO-5.5)

Responsibility: Parks and Resources Department
Timeframe: 2012/2013

Action CO-A102 Use watershed assessment to evaluate storm water and flood management programs to ensure that management efforts are consistent with local watershed hydrologic features and natural resource needs. (Policy CO-5.3, Policy CO-5.5)

Responsibility: Parks and Resources Department

Timeframe: 2013/2014

Action CO-A103 Create guidelines for local water providers to enact programs that promote: investigations of new sustainable sources such as recycled water and graywater that match water quantity and quality to the beneficial uses; and the securing of additional water rights for the purveyors. (DEIR MM UTIL-2a) (Policy CO-5.1, Policy CO-5.2, Policy CO-5.11, Policy CO-5.15)

Responsibility: Parks and Resources Department

Timeframe: 2012/2013

H. Air Quality

1. Background Information

a. Air Basin and Meteorology

Yolo County is located in the Sacramento Valley Air Basin (SVAB), which also includes Sacramento, Shasta, Tehama, Butte, Glenn, Colusa, Sutter, Yuba and parts of Solano and Placer Counties. The SVAB is bounded by the Coast Ranges to the west, the Cascade Range to the north and the Sierra Nevada to the east. These mountain ranges channel wind through the Valley, but also limit dispersion of pollutant emissions from the Valley.

The SVAB is characterized by hot, dry summers and cool, rainy winters, with periods of dense and persistent low-level fog interspersed with the North Pacific storm track. The average summer daily temperatures for the Sacramento Valley air basin range from 50 to more than 90 degrees Fahrenheit. The winter average temperature is approximately 50 degrees Fahrenheit with winter low temperatures occasionally dropping below freezing.

The SVAB is subject to unique wind patterns, which can affect air quality by transporting pollutants. The ozone season in the SVAB, which occurs between May and October, is characterized by still air or light winds in the morning and an evening breeze that typically transports airborne pollutants out of the air basin. However, during part of the summer, wind patterns circle airborne pollutants back into the SVAB in a phenomenon referred to as an “inversion layer.” This phenomenon worsens the pollutant emission concentrations and contributes to violations of the air quality standards.

b. Regulatory Background

The Federal Clean Air Act (FCAA) governs air quality in the United States. In addition to being subject to federal requirements, air quality in California is also governed by more stringent regulations under the California Clean Air Act (CCAA).

At the federal level, the United States Environmental Protection Agency (U.S. EPA) administers the CAA. The CCAA is administered by the California Air Resources Board (ARB) at the State level and by the various air quality management districts at the regional levels. The Yolo-Solano Air Quality Management District (District) regulates air quality locally. The District's jurisdiction is the western portion of Lower Sacramento Valley Air Basin, comprised of Yolo County and the Northeast portion of Solano County.

The 1970 FCAA authorized the establishment of national health-based air quality standards and also set deadlines for their attainment. The FCAA Amendments of 1990 changed deadlines for attaining national standards as well as the remedial actions required of areas of the nation that exceed the standards. Under the CAA, State and local agencies in areas that exceed the national standards are required to develop State Implementation Plans (SIPs) to demonstrate how they will achieve the national standards by specified dates. SIPs are not single documents, but rather are a compilation of new and previously submitted plans, programs, district rules, State regulations and federal controls. ARB reviews and approves the SIP, then provides the SIP to EPA for approval and publication. The CAA requires that projects receiving federal funds demonstrate conformity to the approved SIP and local air quality attainment plan for the region. Conformity with the SIP requirements also satisfies the CAA requirements.

In 1988, the CCAA required that all air districts in the State endeavor to achieve and maintain California Ambient Air Quality Standards for carbon monoxide (CO), ozone (O₃), sulfur dioxide (SO₂) and nitrogen dioxide (NO₂) by the earliest practical date. The CCAA provides districts with authority to regulate indirect sources and mandates that air quality districts focus particular attention on reducing emissions from transportation and area-wide emission sources (Health and Safety Code Section 40716). Each district plan is to achieve a 5 percent annual reduction, averaged over consecutive three-year periods, in district-wide emissions of each nonattainment pollutant or its precursors (Health and Safety Code Section 40914).

Based on this framework, national and State ambient air quality standards have been established for six pollutants: ozone, CO, lead, nitrogen dioxide (NO₂), particulate matter less than or equal to 10 or 2.5 microns in diameter (PM₁₀ and PM_{2.5}), and sulfur dioxide (SO₂). Ambient air quality standards are designed to protect public health and welfare with a reasonable margin of safety. Because individuals vary widely in their sensitivity to air pollutants, standards are designed to protect more sensitive populations such as children and the elderly. Generally, California Ambient Air Quality Standards are more stringent than national standards.

Areas of California not meeting federal or State air quality standards are classified as nonattainment areas. Yolo County is designated as a nonattainment area for both the State and federal ozone standards and for the State inhalable particulate matter (PM₁₀) standards.

At both the federal and state level, control of greenhouse gases that contribute to global warming and other adverse climate changes is a relatively new area of policy and regulation. Please refer to Section J (Climate Change) of this Element for a discussion of this issue.

c. Applicable State and Federal Air Quality Plans and Transportation Plans

The CCAA requires areas that have not attained State ambient air quality standards to prepare plans to attain these standards by the earliest practicable date. The District is designated as nonattainment for ozone, and accordingly, the 1992 Air Quality Attainment Plan (AQAP) was developed pursuant to CCAA requirements to provide progress toward attaining the State ozone standard. The District's Board of Directors adopted the AQAP on February 19, 1992, and it was approved by ARB on May 28, 1992.

State law does not require attainment plans for State particulate matter standards. State law does require annual and triennial progress reports regarding implementation of control measures, and triennial plan revisions to reflect and respond to changing circumstances.

The FCAA required a non-attainment plan (i.e. SIP) in 1994. The 1994 State Implementation Plan (SIP) superseded the 1992 AQAP. The SIP was deemed by ARB to fulfill the requirements for the first Triennial Progress Report to the AQAP. Additional Triennial Progress Reports were completed in 1997, 2000, and 2003.

In addition to these federal and State air quality plans, the District developed the Transportation and Land Use Toolkit in 2003, in partnership with several regional transportation agencies. The Toolkit discusses projects for alternative transportation modes that may mitigate and reduce emissions. SACOG has also created a Preferred Blueprint Scenario, approved in 2003, which outlines a vision of growth that promotes compact land use patterns which would contribute to reduced vehicular emissions.

2. Policy Framework

GOAL CO-6	<u>Air Quality.</u> Improve air quality to reduce the health impacts caused by harmful emissions.
------------------	--

- Policy CO-6.1 Improve air quality through land use planning decisions. 🌍
- Policy CO-6.2 Support local and regional air quality improvement efforts. 🌍
- Policy CO-6.3 Encourage employers to increase telecommuting, telepresence, provide bicycle facilities, and enhance access to public transit for employees. 🌍
- Policy CO-6.4 Engage the public in efforts to increase awareness of the health risks associated with air pollution and to take voluntary actions that reduce emissions. 🌍
- Policy CO-6.5 Encourage community participation in air quality planning.
- Policy CO-6.6 Encourage implementation of YSAQMD Best Management Practices, such as those listed below, to reduce emissions and control dust during construction activities:
- Water all active construction areas at least twice daily.
 - Haul trucks shall maintain at least two feet of freeboard.
 - Cover all trucks hauling soil, sand, and other loose materials.
 - Apply non-toxic binders (e.g., latex acrylic copolymer) to exposed areas after cut-and-fill operations and hydroseed area.
 - Apply chemical soil stabilizers on inactive construction areas (disturbed lands within construction projects that are unused for at least four consecutive days).
 - Plant tree windbreaks on the windward perimeter of construction projects if adjacent to open land.
 - Plant vegetative ground cover in disturbed areas as soon as possible.
 - Cover inactive storage piles.
 - Sweep streets if visible soil material is carried out from the construction site.
 - Treat accesses to a distance of 100 feet from the paved road with a 6 to 12 inch layer of wood chips or mulch.
 - Treat accesses to a distance of 100 feet from the paved road with a 6-inch layer of gravel. (DEIR MM AIR-1)

Policy CO-6.7 Pursue legislation to assist farming operations with permitting bio-energy operations.

3. Implementation Program

Action CO-A104 Implement the guidelines of the Transportation and Land Use Toolkit, developed by the Yolo-Solano Air Quality Management District (YSAQMD). (Policy CO-6.1, Policy CO-6.2) 🌐

Responsibility: Department of Community Services

Timeframe: Ongoing

Action CO-A105 Require development proposals that introduce sources of toxic air pollutants to prepare a health risk assessment and, based on the results of the assessment, establish appropriate land use buffer zones around those uses posing substantial health risks. (Policy CO-6.1) 🌐

Responsibility: Department of Community Services

Timeframe: Ongoing

Action CO-A106 For discretionary permits, require agricultural Best Management Practices regarding odor control, stormwater drainage, and fugitive dust control where appropriate. (Policy CO-6.1) 🌐

Responsibility: Agriculture Department

Timeframe: Ongoing

Action CO-A107 Implement the regulations and programs established by the YSAQMD to bring local air quality into attainment with State and federal standards. (Policy CO-6.1, Policy CO-6.2) 🌐

Responsibility: Department of Community Services

Timeframe: Ongoing

Action CO-A108 Coordinate air quality planning efforts with other local, regional and State agencies. (Policy CO-6.1, Policy CO-6.2) 🌐

Responsibility: Department of Community Services Timeframe: Ongoing

Action CO-A109 Regulate the location and operation of land uses to avoid or mitigate harmful or nuisance levels of air emissions to the following sensitive receptors: residentially designated land uses; hospitals, nursing/convalescent homes, and similar board and care facilities; hotels and lodging; schools and day care centers; and neighborhood parks. Home occupation uses are excluded. New development shall follow the recommendations for siting new sensitive land uses consistent with the CARB's recommendation as shown in the table below. (DEIR MM AIR-3) (Policy CO-6.1, Policy CO-6.2)

Responsibility: Department of Community Services
 Timeframe: Ongoing

TABLE CO-9 Recommendations on Siting New Sensitive Land Uses

Source	Category Advisory Recommendations
Freeways and High-Traffic Roads	Avoid concentrating sensitive land uses within 500 feet of a freeway, urban roads with 100,000 vehicles/day, or rural roads with 50,000 vehicles/day.
Distribution Centers	Avoid concentrating sensitive land uses within 1,000 feet of a distribution center (that accommodates more than 100 trucks per day, more than 40 trucks with operating transport refrigeration units (TRUs) per day, or where TRU unit operations exceed 300 hours per week). Take into account the configuration of existing distribution centers and avoid concentrating residences and other new sensitive land uses near entry and exit points.
Rail Yards	Avoid concentrating sensitive land uses within 1,000 feet of a major service and maintenance rail yard. Within one mile of a rail yard, consider possible siting limitations and mitigation approaches.
Ports	Avoid concentrating sensitive land uses immediately downwind of ports in the most heavily impacted zones. Consult local air districts or the CARB on the status of pending analyses of health risks.
Refineries	Avoid concentrating sensitive land uses immediately downwind of petroleum refineries. Consult with local air districts and other local agencies to determine an appropriate separation.
Chrome Platers	Avoid concentrating sensitive land uses within 1,000 feet of a chrome plater.
Dry Cleaners Using Perchloroethylene	Avoid concentrating sensitive land uses within 300 feet of any dry cleaning operation. For operations with two or more machines, provide 500 feet. For operations with 3 or more machines, consult with the local air district. Do not concentrate sensitive land uses in the same building with perc dry cleaning operations.
Gasoline Dispensing Facilities	Avoid concentrating sensitive land uses within 300 feet of a large gas station (defined as a facility with a throughput of 3.6 million gallons per year or greater). A 50 foot separation is recommended for typical gas dispensing facilities.

Notes:

1. These recommendations are advisory. Land use agencies have to balance other considerations, including housing and transportation needs, economic development priorities, and other quality of life issues.
2. Recommendations are based primarily on data showing that the air pollution exposures addressed here (i.e., localized) can be reduced as much as 80% with the recommended separation.
3. The relative risk for these categories varies greatly. To determine the actual risk near a particular facility, a site-specific analysis would be required. Risk from diesel PM will decrease over time as cleaner technology phases in.
4. These recommendations are designed to fill a gap where information about existing facilities may not be readily available and are not designed to substitute for more specific information if it exists. The recommended distances take into account other factors in addition to available health risk data (see individual category descriptions).
5. Site-specific project design improvements may help reduce air pollution exposures and should also be considered when siting new sensitive land uses.
6. This table does not imply that mixed residential and commercial development in general are incompatible. Rather it focuses on known problems like dry cleaners using perchloroethylene that can be addressed with reasonable preventative actions.
7. A summary of the basis for the distance recommendations can be found in Table 1-2 (see ARB's *Land Use Handbook*).

Source: California Air Resources Board, 2005. *Air Quality and Land Use Handbook: A Community Health Perspective*. April and Tschudin Consulting Group, April 2009.

Action CO-A110 Establish additional air quality monitoring stations in consultation with the YSAQMD, where appropriate. (Policy CO-6.1, Policy CO-6.4)
Responsibility: Department of Community Services Timeframe: Ongoing

Action CO-A111 Prohibit wood-burning fireplaces in new residential developments. (Policy CO-6.1)
Responsibility: Department of Community Services Timeframe: Ongoing

I. Energy Conservation

The following discussion includes goals, policies and actions relating to energy production, usage and conservation within Yolo County. Other policies relating to energy conservation, particularly associated with green building, are also located in the Land Use and Community Character Element of this General Plan.

1. Background Information

Title 24, Part 6 of the California Code of Regulations sets forth the State energy efficiency standards for residential and non-residential buildings. Title 24 requirements address a wide range of design and energy performance features of development, including insulation; the use of energy-efficient heating, ventilation and air conditioning equipment; solar reflective roofing materials; and energy-efficient indoor and outdoor lighting systems.

Energy conservation has numerous benefits besides economic and financial savings for individual consumers. The combustion of fossil fuels to produce heat or electricity, or to power internal combustion engines, has been linked to poor air quality in the Sacramento Valley, global warming and negative impacts on crops. In Yolo County, energy conservation can be achieved via a reduction in electricity usage and private automobile use, encouraging efficient siting and exposure for buildings, and implementing land use and transportation policies that encourage fewer and shorter vehicle trips.

2. Policy Framework


GOAL CO-7	<u>Energy Conservation.</u> Promote energy efficiency and conservation.
------------------	--


Policy CO-7.1 Encourage conservation of natural gas, oil and electricity, and management of peak loads in existing land uses. 🌍


Policy CO-7.2 Support efforts to improve energy efficiency in existing irrigation systems. 🌍


- Policy CO-7.3 Require all projects to incorporate energy-conserving design, construction, and operation techniques and features into all aspects of the project including buildings, roofs, pavement, and landscaping. 🌍
- Policy CO-7.4 Require the use of Energy Star certified appliances, such as water heaters, swimming pool heaters, cooking equipment, refrigerators, furnaces and boiler units, where feasible. 🌍
- Policy CO-7.5 Require all new parking lots to significantly increase shading to relieve the potential for “heat islands.” 🌍
- Policy CO-7.6 Encourage the use of building materials and methods that increase energy efficiency a minimum of 15 percent beyond State Title-24 standards for residential buildings and 20 percent beyond State Title 24 standards for commercial buildings. 🌍
- Policy CO-7.7 Support farmers and landowners in their efforts to maximize the efficiency of agricultural end uses. 🌍
- Policy CO-7.8 Increase energy efficiency and alternative energy utilization in existing buildings where feasible. 🌍
- Policy CO-7.9 Require that new site and structure designs maximize energy efficiency. 🌍
- Policy CO-7.10 Encourage residents to retrofit existing residences to maximize energy efficiency. 🌍
- Policy CO-7.11 Strongly encourage LEED certification or equivalent for all public, private and existing buildings and strongly encourage LEED-Neighborhood Design (ND) certification or equivalent for other applicable projects, particularly within the Specific Plan areas. 🌍
- Policy CO-7.12 Consider lifecycle costs when identifying opportunities for the replacement and retrofit of energy efficient technologies when upgrading or maintaining County facilities. 🌍
- Policy CO-7.13 Support the production of alternative and renewable energy fueling stations in Yolo County. 🌍
- Policy CO-7.14 Consider incentive programs such as reduced fees, and permit expedition for projects that exceed mandatory energy requirements, incorporate alternative energy technologies, or support the County’s energy objectives. 🌍
- Policy CO-7.15 Promote incentives from local, state, and federal agencies for improving energy efficiency and expanding renewable energy installations. 🌍


3. Implementation Program

Action CO-A112 Amend the Zoning Code to streamline permitting for the production of biofuels, biomass, solar, wind and other energy alternatives to reduce dependency on fossil fuels. (Policy CO-7.1) 
Responsibility: Department of Community Services
Timeframe: 2010/2011

Action CO-A113 Require the use of Energy Star certified appliances, such as water heaters, swimming pool heaters, cooking equipment, refrigerators, furnaces and boiler units, in all new subdivisions. (Policy CO-7.1, Policy CO-7.4) 
Responsibility: Department of Community Services
Timeframe: Ongoing

Action CO-A114 Use development agreements to garner commitments from developers of new projects to increase the energy efficiency in existing development. . (Policy CO-7.1, Policy CO-7.8) 
Responsibility: Department of Community Services
Timeframe: Ongoing


Action CO-A115 Amend the Zoning Code to include regulations for all new parking lots to include tree plantings that will result in 50 percent shading of parking lot surface areas within 10 years. (Policy CO-7.1, Policy CO-7.5) 
Responsibility: Department of Community Services
Timeframe: 2010/2011

Action CO-A116 Use Development Agreements and/or adopt an ordinance to require the use of building materials and methods that increase energy efficiency a minimum of 15 percent beyond State Title-24 standards for residential construction and 20 percent beyond Title 24 for commercial construction, where feasible. (Policy CO-7.6) 
Responsibility: Department of Community Services, County Counsel
Timeframe: Ongoing

Action CO-A117 Streamline the permit process to promote energy production from agricultural bio-waste. (Policy CO-7.7)
Responsibility: Department of Community Services
Timeframe: Ongoing

Action CO-A118 Continue to support and participate in local Clean Energy Programs (such as the Valley Clean Energy (VCE)) whereby County-owned and maintained facilities will run on renewable energy sources like wind and solar, and educate and encourage residents and businesses to participate in Clean Energy programs to reduce greenhouse gas emissions and support statewide alternative energy use. (Policy CO-7.15)
Responsibility: County Administrator's Office, Department of Community Services
Timeframe: Ongoing

J. Climate Change

A summary of the issue of climate change is provided in this subsection, however climate change policies also occur in every element of this General Plan and are denoted by the symbol “”.

1. Background Information

A balance of naturally occurring greenhouse gases (GHGs) in the earth's atmosphere is responsible for maintaining a habitable climate. Emissions from human activities, such as electrical production, motor vehicle use, and some forms of agriculture are elevating the concentrations of greenhouse gases in the atmosphere, and have led to increasing instability in the earth's climate. This is known as climate change. Carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O) are the primary GHGs. Other greenhouse gases of concern include hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆). When concentrations of these gases exceed natural concentrations in the atmosphere, the greenhouse effect is enhanced and global warming occurs.

California's major initiatives for reducing climate change or GHG emissions are outlined in Assembly Bill 32 (signed into law 2006), 2005 Executive Order and a 2004 California Air Resources Board (CARB) regulation to reduce passenger car GHG emissions. Among other things, AB 32 establishes a statewide GHG emissions cap for 2020, based on 1990 emissions. The Executive Order and the CARB regulations also aim at reducing GHG emissions 80 percent below 1990 levels by 2050. Senate Bill (SB) 32 requires that statewide GHGs are reduced to at least 40% below the statewide GHG emissions limit (e.g., 1990 levels) by 2030. The CARB is tasked with implementation of these directives.

How California communities are designed and built has large consequences on the State's GHG emission levels, and as a result, has an impact on global climate change. The majority of the State's ~~greenhouse-gas~~ (GHG) emissions are the result of infrastructure and development decisions: how we build our buildings, where we put them, and the quality and types of infrastructure that are required to serve them. This General Plan addresses those issues for unincorporated Yolo County. Additional

information regarding GHG and climate change linkages, the State's regulatory framework, a summary of the County's climate adaptation planning efforts, and risks associated with climate change is provided in the Safety and Environmental Justice White Paper prepared to support a focused update to the General Plan in 2022.

This General Plan establishes the land use pattern that will accommodate the residents, businesses, and attendant infrastructure planned through 2030 in Yolo County. Decisions about the location of commercial, residential and civic buildings, roads and transit systems, water supply, building design, natural resources, open space, agriculture, and energy infrastructure determine the level of GHG emissions in the County. Thus, through the implementation of this General Plan it is possible to reduce in local GHG emissions. Local decisions regarding agricultural land preservation, transportation, air quality, water supply, economic development, environmental protection, and affordable housing need to be coordinated and balanced to achieve the County's multiple policy objectives and still minimize GHG emissions.

Motor vehicle use creates a significant proportion of GHG emissions. There are three interrelated components that can contribute to transportation sector emission reductions: 1) vehicle technology, 2) fuels, and 3) vehicle use. Local government has the ability to affect only one area – vehicle use. Vehicle use is affected by providing transportation alternatives and by managing the demand for transportation.

Transportation demand management (TDM) and alternative mobility options, including walking, biking, and transit, require coordinated land use decisions and measures that maximize the efficient use of existing transportation systems and provide for the increased availability and use of efficient transit, as well as walking and biking infrastructure to increase mobility, improve health, and provide other economic and environmental benefits. The effectiveness of efforts to provide transportation alternatives to the automobile and to implement TDM policies and strategies can be measured in terms of reductions in vehicle miles traveled (VMT) or expected growth in VMT. VMT reductions (and speed stability) correlate directly with reductions in GHG emissions.

Land use patterns also have a direct relationship to GHG emissions. Studies have shown that the following land use characteristics lead to significantly higher average vehicle ownership, daily VMT per capita, annual traffic fatality rate, and maximum ozone level days.

- Population dispersed in low-density residential development.
- A lack of mixed uses (homes, shops, and workplaces).
- A lack of distinct, thriving activity centers, such as strong downtowns or town centers.
- A network of roads marked by very large block size and poor access from one place to another.

Research of the many factors that can be used to analyze the relationship between development and transportation implies that density may have the most significant relationship to travel and transportation outcomes. Controlling for other factors, the difference between the length and amount of trips, low density U.S. metropolitan areas have over 40 percent more daily VMT per capita than high density areas. In general, a doubling of neighborhood density can be expected to result in approximately a 5 percent reduction in both the number of vehicle trips and their length.

Overall VMT and vehicle trips per household decline as accessibility, density, and land-use mixing increase, which have historically been tenets of land use planning in Yolo County, as in this General Plan.

Yolo County has undertaken several actions to date to reduce greenhouse gases as related to County operations and programs:

- **Climate Change Working Group.** Yolo County has created a climate change team through the County Administrator's Office and has organized a climate change working group that includes the cities and various districts, to coordinate countywide climate change efforts.
- **Cool Counties.** The County has committed to the Cool Counties Climate Stabilization Declaration, a pledge to reduce greenhouse gas emissions from County operations by 80 percent by 2050.
- **California Climate Action Registry.** The County has prepared a baseline audit energy usage associated with County operations. This baseline will be used to measure energy usage over time. Through the registry the County will use a common GHG emission reporting system and will receive credit for reductions in emissions.
- **UC Davis Partnership.** The County has engaged civil and environmental engineering students to assist in studying its carbon generation from county operations, and develop policies and strategies to reduce emissions.
- **Increasing Energy Efficiency.** The County has taken steps to increase the energy efficiency of county operations including replacement of incandescent lights with compact fluorescent bulbs, retrofit of infrastructure in County buildings, installation of computerized climate control in all major county buildings, installation of cogeneration capacity at the Monroe Detention Facility, development of a building closure program to retire less energy-efficient buildings, and a countywide appliance replacement program for Energy Star appliances. The County has a goal of ten percent annual reduction in energy usage through 2013.
- **Full-Scale Landfill Bioreactor.** The County recovers methane gas, a potent greenhouse gas, from the Central Landfill to generate electricity.
- **LEED.** The County has adopted Leadership in Energy and Environmental Design (LEED) standards for new county buildings.

- **Recycling.** All County buildings recycle paper, cardboard, cans, bottles, fluorescent tubes, oil, computers, rigid plastics, agricultural plastics, PVC pipe, toner cartridges, cell phones, batteries, and electronic waste. The County has a goal of 50 percent recycling of all sorted material at the landfill. The County also has a Construction and Demolition Recycling Ordinance that requires diversion and recycling of construction and demolition debris.
- **Agricultural Marketing.** The Agriculture Commissioner has initiated an agricultural marketing program to reduce “food miles,” and therefore result in reductions in carbon dioxide emissions.
- **Transportation and Fleet Vehicles.** The County has installed charging stations for electric vehicles and uses electric vehicles for commuting between local facilities.
- **Personnel Training.** County staff attends classes on the California Environmental Quality Act (CEQA) and on climate change issues.
- **Tree Planting.** The County operates a small nursery that provides tree planting for County facilities.
- **Research.** The County is involved in a variety of research projects related to energy conservation and control of GHG emissions.

The County also requires energy efficient project design and landscaping design as a part of the development review process. Additionally, the Cache Creek Area Plan establishes monetary and regulatory incentives to encourage recycling of aggregate products.

2. Policy Framework

GOAL CO-8	<u>Climate Change.</u> Reduce greenhouse gas emissions and plan for adaptation to the future consequences of global climate change.
------------------	--

- Policy CO-8.1 Assess current greenhouse gas emission levels and adopt strategies based on scientific analysis to reduce global climate change impacts. 🌍
- Policy CO-8.2 Use the development review process to achieve measurable reductions in greenhouse gas emissions through requiring new development to be consistent with the energy objectives and targets identified by the adopted Climate Action Plan. 🌍
- Policy CO-8.3 Implement those strategies as described in the adopted Climate Action Plan to adapt to climate change based on sound scientific understanding of the potential impacts. 🌍

- Policy CO-8.4 Undertake an integrated and comprehensive approach to planning for climate change by collaborating with international, national, State, regional, and local organizations and entities. 🌐
- Policy CO-8.5 Integrate climate change planning and program implementation into County decision making. 🌐
- Policy CO-8.6 Increase public awareness about climate change and encourage county residents and businesses to become involved in activities and lifestyle changes that will aid in reduction of greenhouse gas emissions. 🌐
- Policy CO-8.7 Work with local, regional, State, and Federal jurisdictions, as well as private and non-profit organizations, to develop a regional greenhouse gas emissions inventory and emissions reduction plan. 🌐

3. Implementation Program

Action CO-A119 Update the Yolo County Climate Action Plan to achieve the greenhouse gas reduction targets for 2030, and 2050. Updates to the CAP should align the County's GHG reduction targets with the statewide GHG reduction targets of Assembly Bill 32, SB 375, and Executive Orders S-03-05 and B-30-15.
Responsibility: County Administrator's Office
Timeframe: 2024/2025

Action CO-A120 Pursuant to the adopted Climate Action Plan (CAP), the County shall take all feasible measures to reduce its total carbon dioxide equivalent (CO₂e) emissions within the unincorporated area (excluding those of other jurisdictions, e.g., UC-Davis, Yocha Dehe Wintun Nation, DQ University, school districts, special districts, reclamation districts, etc.) as follows: from 648,252 metric tons (MT) of CO₂e in 2008 to 613,651 MT of CO₂e by 2020. In addition, the County shall strive to further reduce total CO₂e emissions within the unincorporated area to 447,965 MT by 2030.

- 27% below 1990 levels by 2030 (447,965 MT CO₂e/year)
- 53% below 1990 levels by 2040 (288,416 MT CO₂e/year)
- 80% below 1990 levels by 2050 (122,730 MT CO₂e/year)


Action CO-A121 These reductions shall be achieved through the measures and actions provided for in the adopted CAP, including those measures that address the need to adapt to climate change. (Policy CO-8.1) 🌐
Responsibility: County Administrator's Office
Timeframe: 2009/2011

Action CO-A¹²² Pursuant to and based on the CAP, the following thresholds shall be used for determining the significance of GHG emissions and climate change impacts associated with future projects:

- 1) Impacts associated with GHG emissions from projects that are consistent with the General Plan and otherwise exempt from CEQA are determined to be less than significant and further CEQA analysis for this area of impact is not required.
- 2) Impacts associated with GHG emissions from projects that are consistent with the General Plan, fall within the assumptions of the General Plan EIR, consistent with the CAP, and not exempt from CEQA are determined to be less than significant or mitigated to a less-than-significant level, and further CEQA analysis for this area of impact is generally not required.

To be determined consistent with the CAP, a project must demonstrate that it is included in the growth projections upon which the CAP modeling is based, and that it incorporates applicable strategies and measures from the CAP as binding and enforceable components of the project.

- 3) Impacts associated with GHG emissions from projects that are not consistent with the General Plan, do not fall within the assumptions of the General Plan EIR, and/or are not consistent with the CAP, and are subject to CEQA review are rebuttably presumed to be significant and further CEQA analysis is required. The applicant must demonstrate to the County's satisfaction how the project will achieve its fair share of the established targets including:
 - Use of alternative design components and/or operational protocols to achieve the required GHG reductions;
 - Use of real, additional, permanent, verifiable and enforceable offsets to achieve required GHG reductions. To the greatest feasible extent, offsets shall be: locally based, project relevant, and consistent with other long term goals of the County;

The project must also be able to demonstrate that it would not substantially interfere with implementation of CAP strategies, measures, or actions. (Policy CO-8.5). 

Responsibility: Department of Community Services; Parks and Resources Department

Timeframe: Ongoing

Action CO-A123 Monitor the development of GHG quantification protocol and guidance for local governments to refine the Climate Action Plan and ensure compliance with appropriate state and federal requirements. (Policy CO-8.1) 🌍

Responsibility: Department of Community Services
Timeframe: Ongoing

Action CO-A124 Require the implementation of cost-effective and innovative GHG emission reduction technologies in building components and design. (Policy CO-8.5) 🌍

Responsibility: Department of Community Services, General Services Department
Timeframe: Ongoing

Action CO-A125 Adopt practices that encourage forestation as a means of storing carbon dioxide, including increasing the urban tree canopy, expanding riparian corridors, establishing hedge rows, and enlarging the acreage of permanent crops such as vineyards and orchards. (Policy CO-8.1) 🌍

Responsibility: Department of Community Services Parks and Resources Department
Timeframe: 2012/2013

Action CO-A126 Consider the provision of local housing for County employees to reduce commute travel time. (Policy CO-8.2) 🌍

Responsibility: Department of Community Services
Timeframe: Ongoing

Action CO-A127 Require each county department to analyze how the predicted effects of climate change will affect its responsibilities and resources. Develop strategies and actions to address outcomes. (Policy CO-8.5) 🌍

Responsibility: County Administrator's Office
Timeframe: 2011/2012

Action CO-A128 Encourage Incorporation of the County's Greenhouse Gas Emissions Reduction Plan/Climate Action Plan into a regional climate action plan. The regional plan should strive to achieve its fair-share contribution towards a minimum 80 percent reduction below 1990 levels in regional greenhouse gas emissions by 2050. (Policy CO-8.7) 🌍

Responsibility: County Administrator's Office
Timeframe: 2011/2012

Action CO-A129 GHG emission reductions shall be monitored and reported to the Board of Supervisors biennially. The GHG emissions inventories shall be updated at least every five years beginning in 2010. (Policy 8.5) 🌍

Responsibility: Department of Community Services
Timeframe: Ongoing

K. Delta Region

The following discussion includes goals, policies and actions relating to the County's interests in the Delta region. Other policies relating to the Delta are also located in each of the other elements of this General Plan.

1. Background Information

In the past two years, the Delta has become an area of intense interest, with numerous planning and legislative efforts looking to redefine the policy and regulatory landscape. This General Plan will incorporate the timely results of these various state processes, where appropriate, once they are adopted. Other processes may be the subject of future Amendments to bring the General Plan into conformance with new laws and/or regulations.

Those areas of the Yolo Bypass, the City of West Sacramento, and the unincorporated area that lie south of Interstate 80 are located within the Primary and Secondary Zones of the Sacramento-San Joaquin Delta (see Figure CO-9, Delta Protection Zones). Land use in these areas must not only be consistent with this General Plan, they must also be consistent with the Land Use and Resource Management Plan (LURMP), as adopted by the Delta Protection Commission (DPC). The DPC is currently in the process of updating the LURMP, to address a wide range of issues, including recent court decisions related to water export, studies that indicate serious problems with the health of the Delta ecosystem, concerns about the ability of levees to withstand significant flood and/or seismic events, and the effects of future global climate change. This review may include areas outside of the Delta as currently defined. The updated Draft LURMP is expected to be released in 2009.

Similarly, in 2006, the Governor issued an Executive Order creating the Delta Vision process. The Delta Vision Blue Ribbon Task Force (DVBRTF) is a group of public officials, experts, and stakeholders, charged with developing recommendations on the overall management and governance of the Delta, including goals related to improving safety, ensuring water supply and water quality, expanding recreation, coordinating emergency response, and protecting infrastructure and public safety. The DVBRTF is currently conducting their strategic planning process, which is expected to be completed by early 2009.

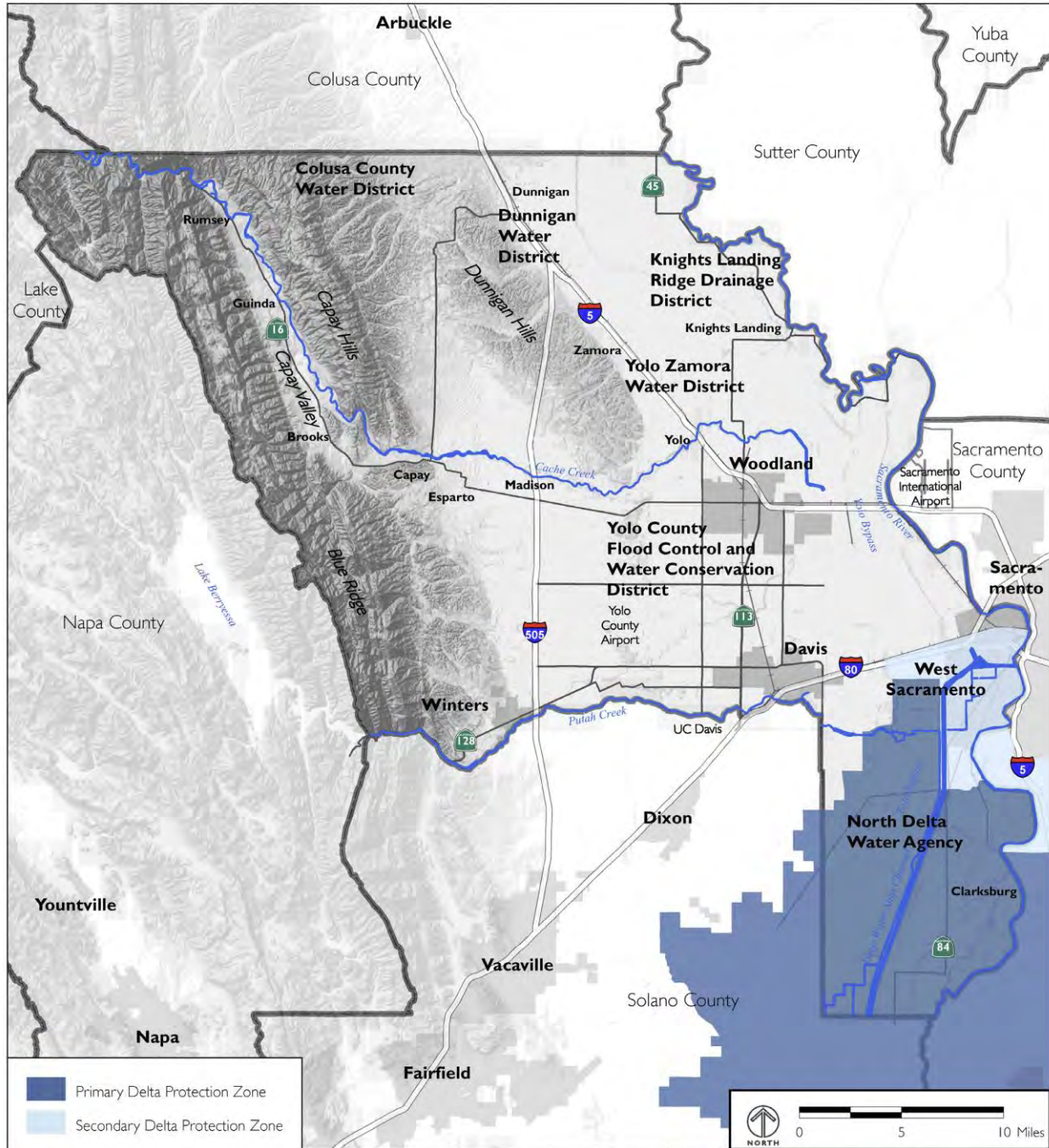
The Bay Delta Conservation Plan (BDCP) is a collaborative effort between Federal and State agencies, water districts, environmental organizations, and the California Farm Bureau to help recover endangered/sensitive species and their habitats in the Delta, while ensuring sufficient and reliable water supplies for Central and Southern California. Primary among their recommendations is the construction of a new facility to con-

vey water from the North Delta to the South Delta. There are two potential alignments for an alternative conveyance: one going through Sacramento County and one through Yolo and Solano Counties. Extensive habitat restoration to mitigate for the plan is also under consideration, including the lower Yolo Bypass and the Clarksburg region. The BDCP is expected to be completed by 2010.

The Central Valley Regional Water Quality Control Board (CVRWQCB) is in the process of developing Total Maximum Daily Loads (TMDLs) for mercury. Both refined and elemental mercury are contaminants in the Delta, the result of natural deposits and the ongoing effects of gold mining in the 18th century. Mercury becomes more concentrated as it is carried up the food chain, adversely affecting development in the young. It is of particular concern to the health of fish species and people who consume large amounts of Delta fish. The TMDLs will strictly regulate the amounts of mercury that can be discharged into the Delta and its tributaries.

The Lower Bypass Planning Forum provides a stakeholder process to assess a broad range of issues concerning the southerly portion of the Yolo Bypass. A State-funded planning process, it includes participation by the DPC, Yolo Basin Foundation, Metropolitan Water District, and Westlands Water District.

FIGURE CO-9. DELTA PROTECTION ZONES



Source: Delta Protection Commission, 2008.

2. Policy Framework

GOAL CO-9	<u>Delta Governance.</u> Participate in State and regional efforts to establish governance, policy, and regulations for the Delta, to ensure the consideration of Yolo County's interests.
------------------	---

- Policy CO-9.1 Advocate for the establishment of funding mechanisms independent of the State budget for payment to the County of in-lieu property taxes and other fees on land acquired in the Delta for habitat restoration and water conveyance.
- Policy CO-9.2 Ensure that the acquisition of new municipal water for the City of Davis, City of Woodland, and UC Davis from the Sacramento River is not precluded.
- Policy CO-9.3 Pursue the establishment of dedicated State and federal funding sources to remediate mercury, in the various sources located in the upper Cache Creek watershed, in the sediments and waterways of both Cache Creek (including the Settling Basin) and the Yolo Bypass, and where it methylizes in the Delta.
- Policy CO-9.4 Ensure that the design and construction of habitat restoration projects within riparian areas do not result in increased levels of mercury bi-methylization within the Yolo Bypass and Delta.
- Policy CO-9.5 Encourage funding to maintain and strengthen flood capacity along the Sacramento River and Yolo Bypass, including support from beneficiaries of the State and Central Valley Water Projects, which have changed flow regimes to the detriment of levee integrity.
- Policy CO-9.6 Support efforts to provide a minimum 100-year flood protection for the community of Clarksburg.
- Policy CO-9.7 Protect water quality in the Sacramento River, its tributaries, and groundwater aquifers from excess salinity due to decreased fresh water inflow from Delta projects.
- Policy CO-9.8 Work to implement high priority projects in Yolo County's Integrated Regional Water Management Plan, especially related to flood management on Cache Creek.
- Policy CO-9.9 Ensure existing and future operations of the Port of Sacramento as an industrial and transport hub for the region, including protection and im-

provement of the levees along the deep-water ship channel, as well as deepening the ship channel.

- Policy CO-9.10 Support improvements necessary to ensure the continued transportation of agricultural products along State Route 84 for the Clarksburg region.
- Policy CO-9.11 Ensure that proposed changes to the operation of the Sacramento Weir fully mitigate any potential adverse impacts to Old River Road (County Road 22).
- Policy CO-9.12 Work to ensure that changes to the operation of the Yolo Bypass, including the Fremont Weir, toe drain, and/or increased frequency of intentional flooding do not adversely affect Yolo County interests. These may include: the economic viability of agriculture within the Bypass, the feasibility of planned development for the Elkhorn Specific Plan, the use of County Road 22 as an alternative route during closures of Interstate 5, and the continued operation of Interstates 5 and 80, and the Union Pacific Railroad across the Bypass.
- Policy CO-9.13 Encourage funding for the construction and operation of the Pacific Flyway Center at a site located next to the Yolo Bypass.
- Policy CO-9.14 Establish Clarksburg as a gateway entry for visitors to the Delta region seeking agricultural tourism, ecotourism, and recreational opportunities.
- Policy CO-9.15 Pursue funding to assist non-governmental organizations acquire agricultural conservation easements within Yolo County, where appropriate.
- Policy CO-9.16 Pursue funding to assist non-governmental organizations acquire habitat conservation easements within Yolo County, where appropriate.
- Policy CO-9.17 Support the establishment of a Delta Conservancy to provide funding and work with federal, State and local governments, local Habitat Conservation Programs, nonprofit organizations, and landowners on improvements to Delta land use management.
- Policy CO-9.18 Work to ensure recognition by the Central Valley Regional Water Quality Control Board (CVRWQCB) of the economic, habitat, water resources, and flood management impacts associated with developing Total Maximum Daily Loads (TMDLs) for mercury within the Delta.
- Policy CO-9.19 Recognize the special character of “heritage” or “legacy” communities in the Delta (such as Clarksburg) and promote their economic vitality.

Policy CO-9.20 Seek to ensure that future changes to the boundaries of the Delta, including the boundaries of the Primary and Secondary Zones, are consistent with the goals and policies of this General Plan.

Policy CO-9.21 Work to ensure that State and federal habitat restoration efforts recognize and support the Yolo Natural Heritage Program.

Policy CO-9.22 Pursue policy and legislative strategies to ensure that the Clarksburg Agricultural District can be fully implemented within the Delta Protection Commission Land Use and Resource Management Plan, Delta Vision, Bay-Delta Conservation Plan, and other regional efforts.

3. Implementation Program

Action CO-A130 Pursue recognition and compensation from the State and other appropriate entities, public or private, for the economic effects of changes to the management and governance of the Delta on Yolo County. (Policy CO-9.1, Policy CO-9.3, Policy CO-9.20, Policy CO-9.21)

Responsibility: County Administrator's Office, Parks and Resources Department

Timeframe: Ongoing

Action CO-A131 Actively participate in State and regional efforts to establish land use policy, regulation, and governance for the Delta to ensure the consideration of Yolo County's interests. (Policy LU-4.2, Policy CO-20, Policy CO-9.21)

Responsibility: Department of Community Services, County Administrator's Office, Parks and Resources Department

Timeframe: Ongoing

8 HEALTH AND SAFETY ELEMENT



Yolo Fire Protection District

Source: April Farnham-Morrison

This element ensures that appropriate consideration of both natural and human-made hazards and risks are factored into land use decision-making. Several of the County's existing communities (such as Clarksburg, Knights Landing, and Madison) face issues regarding flood protection and/or levee stability. Recent legislation on the issue of flood protection, management, and control has changed the regulatory landscape and the goals, policies, and actions of this element address this. General emergency preparedness is also addressed. Appropriate control of noise environment is an important issue for the County, especially given that many normal agricultural practices emit considerable noise at times. The Noise section addresses this issue. Policies addressing the link between community design and individual health are also included, as are policies in support of accessible health care, especially for vulnerable populations.



A. Introduction

1. Context

The Health and Safety Element provides information about the potential risks in Yolo County associated with natural and human-made hazards. It specifically addresses the protection of the community from any unreasonable risks associated with these hazards and also contains information and policies regarding general emergency preparedness. The goals, policies, and actions in the Element seek to reduce death, injuries, and damage to property from natural and human-made hazards and minimize the negative effects of natural disasters such as flooding, fires and seismic events.

2. Contents

The Health and Safety Element is organized into three sections:

- Safety
- Noise
- Health Care

The subsection for each of these topics is formatted as follows: Background Information, Policy Framework, and Implementation Program. Within the Policy Framework and Implementation Program sections, policies and actions related to climate change are denoted with the symbol “🌍”.

3. Background Information

Summary background information for each topic of this element is provided in the relevant subsection below.

B. Regulatory Framework

1. State General Plan Requirements

This Health and Safety Element combines two of the seven required elements of a General Plan: the Noise Element and the Safety Element. It also addresses other topics of importance to Yolo County including emergency preparedness and community health care.

State law (Section 65302g of the Government Code) mandates that the safety element address the following:

- Seismically induced surface rupture.
- Ground shaking.
- Ground failure.
- Tsunami.
- Seiche.
- Dam failure.
- Slope instability.
- Mudslides.



- Landslides.
- Subsidence.
- Liquefaction.
- Other seismic hazards.
- Other geologic hazards.
- Flooding.
- Wildland and urban fires.
- Mapping of known seismic and other geologic hazards.
- Evacuation routes as related to fire and geologic hazards.
- Military installations as related to fire and geologic hazards.
- Peak load water supply requirements as related to fire and geologic hazards (“fire flow”).
- Minimum road widths as related to fire and geologic hazards.
- Clearances around structures as related to fire and geologic hazards.
- Flood hazard zones.
- National Flood Insurance Program maps published by FEMA.
- US Army Corps of Engineers information about flood hazards not addressed.
- Central Valley Flood Protection Board designated floodway maps.
- Dam failure inundation maps.
- DWR Awareness Floodplain Mapping Program maps.
- DWR 200-year floodplain maps.
- Maps of levee protection zones.
- Areas subject to inundation with failure of project or non-project levees or floodwalls not addressed.
- Historic data on flooding including areas subject to flooding, areas vulnerable to flooding after wildfires, and sites that have been repeatedly damaged by flooding not addressed.
- Existing and planned development in flood hazard zones including structures, roads, utilities, and essential public facilities not addressed.
- A listing of local, state, and federal agencies with responsibility for flood protection, including special districts and local offices of emergency services not addressed.
- Climate adaptation and resiliency strategies, including a vulnerability assessment of climate change risks
- Climate adaptation and resilience goals, policies and objectives.
- Feasible implementation measures to carry out the climate adaptation goals, policies, and objectives, including:
 - Feasible methods to avoid or minimize climate change impacts associated with new uses of land.
 - The location, when feasible, of new essential public facilities outside of at-risk areas, including or identifying construction methods or other methods to minimize damage if these facilities are located in at-risk areas.
 - The designation of adequate and feasible infrastructure located in an at-risk area.
 - Guidelines for working cooperatively with relevant local, regional, state, and federal agencies.



- The identification of natural infrastructure that may be used in adaptation projects, where feasible.

State law (Section 65302f of the Government Code) mandates that the Noise element analyze and quantify current and projected noise levels from all of the following:

- Highways, freeways, primary arterials and major local streets.
- Rail lines and ground rapid transit.
- General aviation, heliports, military airports, aircraft overflights, jet engine test stands, and all other ground and maintenance functions related to airport operations.
- Industrial plants and railyards.
- Military installations.
- Other ground stationary sources.

That same section of the Government Code state law also requires the County to recognize the State Noise Element Guidelines, and provide noise contours for all of the noise sources listed above using Community Noise Equivalent Levels (CNEL) or Day/Night Average Sound Level (L_{dn}) measurement levels, and based on monitoring or acceptable modeling. The noise contours are to be used to determine land use so that exposure to excessive noise can be minimized. The noise element must include actions that avoid existing and foreseeable noise problems, and address the State's noise insulation standards.

Yolo County has addressed all of the above items within this element, with the following exceptions:

- Tsunamis – As defined in the General Plan Guidelines, this phenomenon is a large ocean wave generated by an earthquake in or near the ocean. Yolo County has no coastline nor is it proximate to the ocean, and therefore, the General Plan does not address this particular type of event.
- Military Installations – The County essentially has no military installations or facilities. The only military facility in the County, the McClellan/Davis Telecommunication Site, has been declared surplus by the Army and is now closed. Discussion regarding this facility and plans to convert it to a County open space facility are addressed in the Conservation and Open Space Element.
- Peak Load Water Supply – Also known as “fire flow,” this issue is addressed in the Public Facilities and Services Element under Section G, Fire and Emergency Medical Service.
- Minimum Road Widths – This topic is addressed in the Circulation Element.

It should be noted as well that the topic of wildland fire suppression is also discussed in the Public Facilities and Services Element.



2. Other Requirements

Other regulatory requirements specific to the topics addressed in this element are discussed within the applicable subsections.

C. Safety

This section discusses safety in Yolo County as it pertains to naturally occurring hazards as well as hazards relating to human operations. The six topics listed below are included in this section:

1. Geologic and Seismic Hazards (Goal HS-1)
2. Flood Hazards (Goal HS-2)
3. Wildland Fires (Goal HS-3)
4. Hazardous Materials (Goal HS-4)
5. Airport Operations (Goal HS-5)
6. Emergency Preparedness (Goal HS-6)

1. Geologic and Seismic Hazards

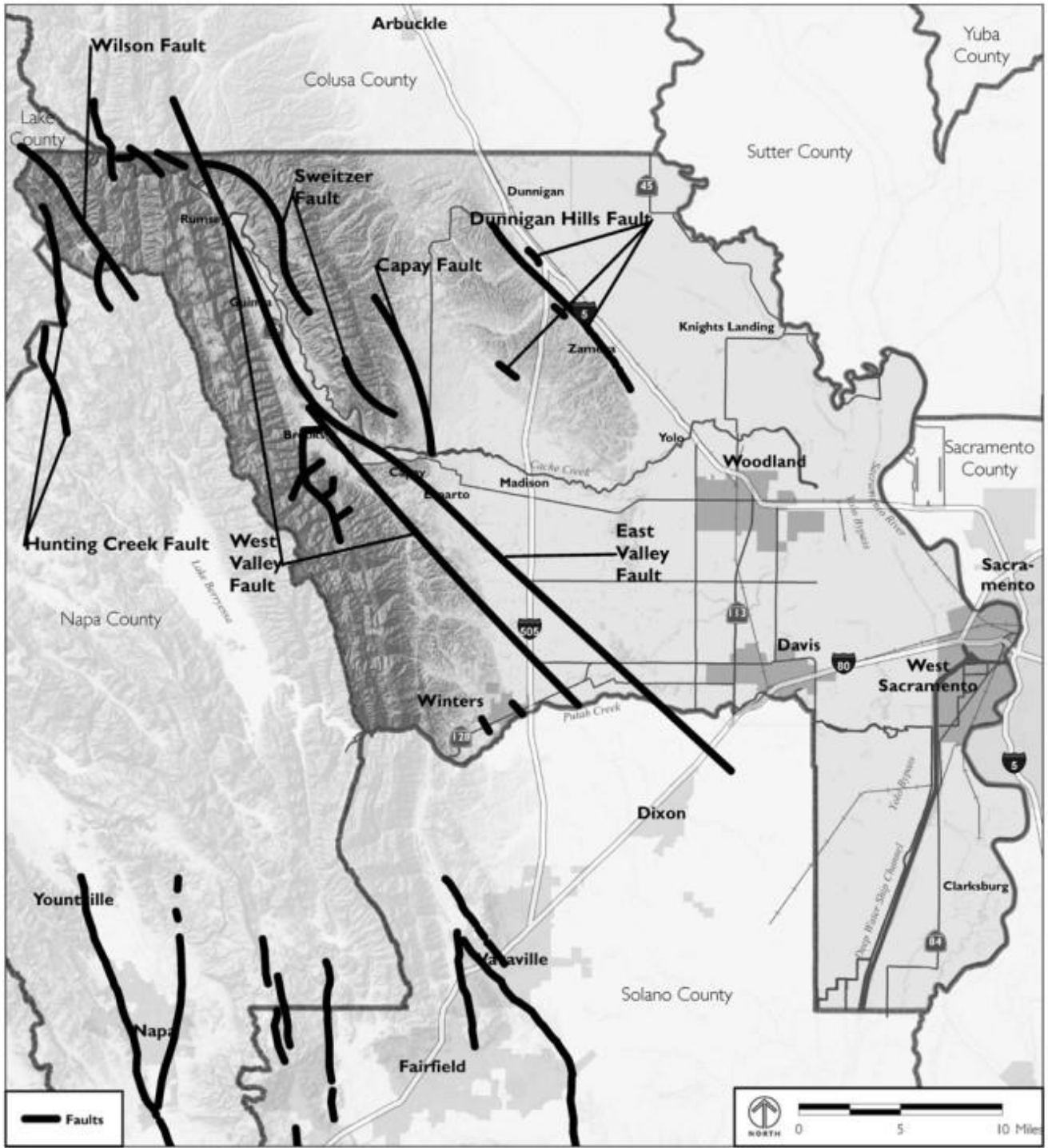
The Geologic and Seismic Hazards section of this element provides goals, policies, and actions that guide Yolo County in ensuring adequate safety from seismic activity and unstable geologic conditions.

a. Background Information

There are two known faults in Yolo County, the Hunting Creek Fault and the Dunnigan Hills Fault, as shown in Figure HS-1. The Dunnigan Hills Fault is not active and the Hunting Creek Fault is located within a sparsely populated area of the county. While Yolo County has a low probability for earthquake hazards compared to the rest of California, it is subject to seismic activity both within and near the County and thus, there is a risk of damage to structures and property as a result.



FIGURE HS-1 FAULTS



Source: USGS, 1996; Yolo County GIS, 2009; Cotton/Bridges/Associates, 2004.



The Hunting Creek Fault is located in the far northwestern portion of the County, which is the only fault in the County subject to surface rupture. As shown in Figure HS-1, only a small portion of the fault lies within Yolo County, and is in an area that is sparsely populated and not planned for any growth or development other than individual farm dwellings that might be built in the future. Development near a fault subject to surface rupture is regulated by the Alquist-Priolo Act. The Act requires a detailed fault-rupture hazard investigation and prohibits development directly over any traces of the active fault line.

The other active or potentially active fault is the Dunnigan Hills Fault, which extends west of Interstate 5 between the town of Dunnigan and northwest of the town of Yolo. This fault has been active in the last 10,000 years, but has not been active in historic times.

In addition to the Hunting Creek and Dunnigan Hills faults, major faults in the Coast Ranges and in the Sierra Nevada foothills are capable of producing groundshaking that could affect Yolo County residents. The April 1892 Vacaville-Winters earthquake that caused severe damage to Winters and lesser damage to Davis, Woodland, and other parts of the County, is believed to have originated from a segment of a complex zone of blind thrust faults that lie to the south in Solano County on the western side of the lower Sacramento Valley.¹

The effects of groundshaking during a maximum intensity earthquake is likely to involve structural damage to stucco, masonry walls and chimneys, which could expose people to falling objects and possible building collapse. The degree of such hazards is controlled by the nature of the underlying soil and rock materials, the magnitude of and distance from the quake, the duration of ground motion and the structural characteristics of the building.

Another risk from seismic activity is liquefaction, which is the rapid transformation of saturated, loose, fine-grained sediment to a fluid-like state because of earthquake ground shaking. Liquefaction can result in substantial loss of life, injury, and damage to property. In addition, liquefaction increases the hazard of fires because of explosions induced when underground gas lines break, and because the breakage of water mains substantially reduces fire suppression capability.

Landslides are another risk associated with seismic activity. Landsliding is the natural process of relatively rapid downslope movement of soil, rock and rock debris as a mass. The rate of landsliding is affected by the type and extent of vegetation, slope angle, degree of water saturation, strength of the rocks, and the mass and thickness of the deposit. Some of the natural causes of this instability are earthquakes, weak materials, stream and coastal erosion, and heavy rainfall. In addition, certain human activities

¹ Yolo County General Plan Update Background Report, January 2005, page 3-5; Yolo County OES.



tend to make the earth materials less stable and increase the chance of ground failure. Activities contributing to instability include extensive irrigation, poor drainage or groundwater withdrawal, removal of stabilizing vegetation and over-steepening of slopes by undercutting them or overloading them with artificial fill. These activities cause slope failure, which normally produce landslides and differential settlement and are augmented during earthquakes by strong ground motion.

In Lake County, northwest of Yolo County, a landslide along the south bank of the North Fork of Cache Creek was discovered in 1998. This landslide is located approximately 1.5 miles downstream of the Indian Valley Dam. The landslide mostly affects Lake County. Also the Capay Valley area is particularly susceptible to landslides, as it is composed of poorly consolidated marine sediments, on either side of a rapidly moving watercourse (Cache Creek) with significant uncontrolled flood volumes. Elsewhere in the County however, landslides are generally not a significant hazard. Figure HS-2 identifies areas with higher potential for landslides, based on soil stability characteristics.

Yolo County faces exposure to mudslides primarily along Cache Creek, in the same areas where landslides are a risk. At the Yolo County/Colusa County boundary, State Route 16 passes through the open preserve area of the Cache Creek Regional Park. For about a mile, the highway is bordered by Cache Creek on the west and canyon walls on the east. The canyon walls are subject to rock and mud slides during heavy winter rains. The rock and mudslides create traffic hazards by occasionally blocking the highway. A road closure gate is along that segment of the highway. This gate prohibits traffic from entering this segment when major rock and mudslides occur.

Areas of Yolo County also experience land subsidence. Subsidence, the decrease of ground elevation, has natural causes and human induced causes. Since the 1950's, the most common cause of subsidence in Yolo County has been groundwater withdrawal, which has resulted in as much as 4 feet of elevation change in some parts of the County. The East Yolo subbasin area has been affected most dramatically, with communities near Zamora, Knights Landing and Woodland having experienced damage and loss of structural integrity to highways, levees, wells and irrigation canals.

Additional information on this topic is provided in the General Plan Background Report (see pages 2-20 and 2-21, Figure Hydro-7, and pages 3-6 and 3-7).

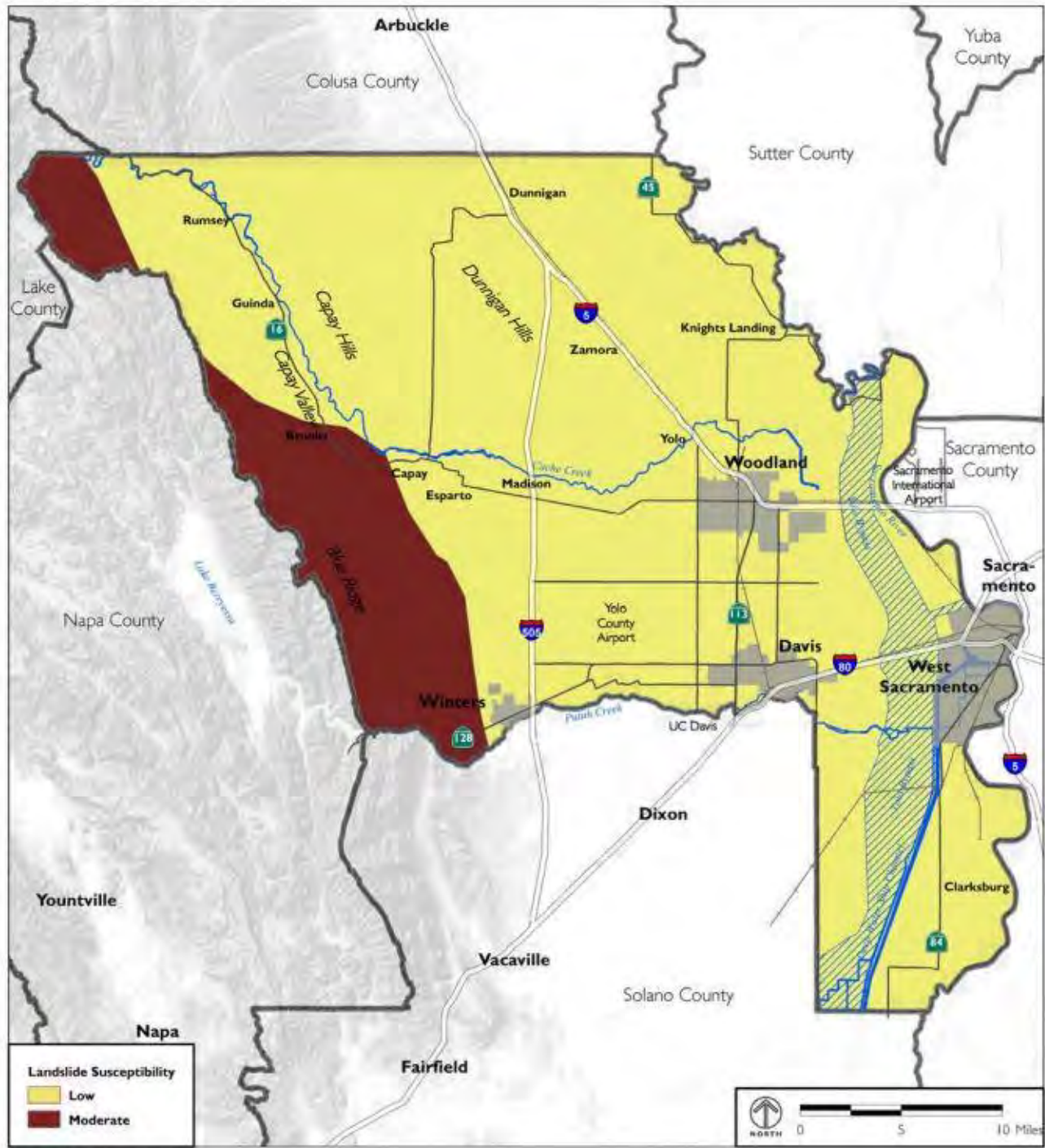
Some soils in Yolo County expand and contract depending on the level of moisture that they contact, impacting their suitability for safe development. These soils vary in distribution and degree of expansiveness. As shown in Figure HS-3, Yolo County soils are characterized by low, moderate, high, and very high expansiveness. Soils with "low" to "moderate" expansiveness have the potential to change up to 6 percent in volume between moist and dry conditions. Soils with "high" and "very high" expansiveness have the potential to change between 6 and 30 percent in volume. Soils rated "high" or "very high" require structural accommodations to ensure soil suitability for



roads, bridges, structures and other types of development. Figure HS-3 identifies expansive soils in the County.



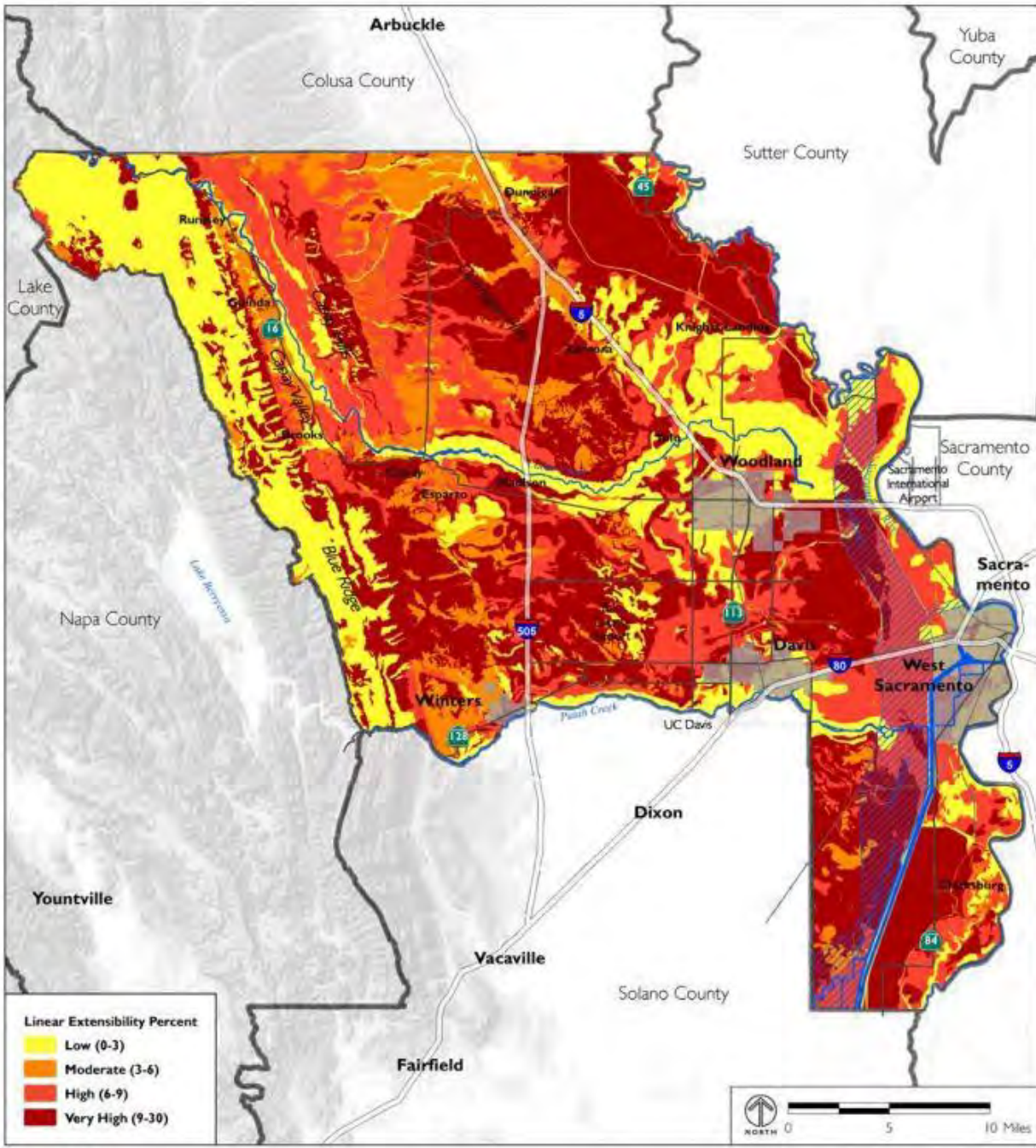
FIGURE HS-2 LANDSLIDE SUSCEPTIBILITY



Source: USGS, 2001.



FIGURE HS-3 EXPANSIVE SOILS





In addition to the natural hazards addressed above, the County faces potential risk from a possible eruptive event at Mount Konockti located in Lake County. Although an eruption is possible, historic events associated with this volcano were non-explosive, and generally involved air fall tuff activity. As with any active geologic system, there is no sound predictive method for assessing risk associated renewed activity in a dormant volcanic system with no recent eruptive history.

b. Policy Framework

GOAL HS-1	<u>Geologic Hazards.</u> Protect the public and reduce damage to property from earthquakes and other geologic hazards.
------------------	---

- Policy HS-1.1 Regulate land development to avoid unreasonable exposure to geologic hazards.
- Policy HS-1.2 All development and construction proposals shall be reviewed by the County to ensure conformance to applicable building standards.
- Policy HS-1.3 Require environmental documents prepared in connection with CEQA to address seismic safety issues and to provide adequate mitigation for existing and potential hazards identified.

c. Implementation Program

- Action HS-A1 Require a geotechnical analysis for construction in areas with potential geological hazards and/or for purposes of environmental analysis. Recommendations of the geotechnical analysis shall be implemented. (Policy HS-1.1, Policy HS-1.2, Policy HS-1.3)
Responsibility: Department of Community Services
Timeframe: Ongoing
- Action HS-A2 Rely upon the most current and comprehensive geological hazard mapping available in the evaluation of potential seismic hazards associated with proposed new development. (Policy HS-1.3)
Responsibility: Department of Community Services
Timeframe: Ongoing
- Action HS-A3 Continue to participate in the Yolo County Subsidence Network and implement its recommendations. (Policy HS-1.2, Policy HS-1.3)
Responsibility: Department of Community Services
Timeframe: Ongoing
- Action HS-A4 Integrate geologic hazard information into the County Geographical Information System. (Policy HS-1.1)



Responsibility: Information Technology Department
Timeframe: 2010/2011



Indian Valley Reservoir

Source: Yolo County Flood Control & Water Conservation District

2. Flood Hazards

The Flood Hazards section of this General Plan provides goals, policies, and actions that guide Yolo County in ensuring adequate safety from flooding for Yolo County communities.

a. Background Information

Yolo County has five primary watersheds with the potential to impact unincorporated communities: Cache Creek Basin; the Sacramento River corridor including the Yolo Bypass (Clarksburg and Knights Landing); Willow Slough (Madison and Esparto),



Colusa Basin Drain (Knights Landing) and Dry Slough (West Plainfield, North Davis Meadows and Binning Farms).

100- and 200-Year Floodplains

The threshold for unacceptable flood risk has traditionally been associated with the “100-year flood”. The Federal Emergency Management Agency (FEMA) creates Flood Insurance Rate Maps (FIRMs) that designate 100-year floodplain zones. A 100-year floodplain zone is the area that has a one in one hundred (1 percent) chance of being flooded in any one year based on historical data. Figure HS-4 identifies the existing 100-year floodplain contours as identified by FEMA for Yolo County. These maps reflect recent climate assumptions, as well as assumptions regarding the likelihood of flooding due to levee failure. State law requires that urban areas, defined as those exceeded a population of 10,000, shall provide 200-year flood protection. The FIRMs do not show the 200-year floodplain; however, maps have been created by the State Department of Water Resources (DWR) showing these areas. Figure HS-5 identifies the existing 200-year floodplain contours as identified by DWR. Because of the generally flat terrain in Yolo County, and the relatively small difference between the volumes of 100- and 200-year flood events, the two floodplains are very similar in extent. Affected communities include Clarksburg, Davis, Esparto, Knights Landing, Madison, West Sacramento, Woodland, and Yolo.

Dam Inundation Zones

In addition to hazards from natural flood events, portions of Yolo County are also located downstream of several dams with large inundation areas, as shown in Figure HS-6. In the unlikely event that any of these dams were to fail, the inundation zones indicate areas that could potentially be flooded. If the dams at Indian Valley Reservoir, Lake Berryessa or along the Sacramento, Feather or American rivers were to fail, the cities of West Sacramento, Winters and Davis would be entirely inundated by floodwaters, as would much of the city of Woodland. The unincorporated communities of Rumsey, Capay, Madison, Knights Landing and Clarksburg and parts of Guinda, Esparto, Monument Hills and Yolo are also located entirely within dam inundation zones.

Levee Flood Protection Zones

Yolo County has approximately 215 miles of project levees, managed by various agencies, including the County, 13 reclamation districts, one levee district, one drainage district, and the California Department of Water Resources. These levees provide flood protection to West Sacramento, Woodland, Knights Landing, Clarksburg, Davis and important agricultural lands. In



FIGURE HS-4 100-YEAR FLOODPLAIN

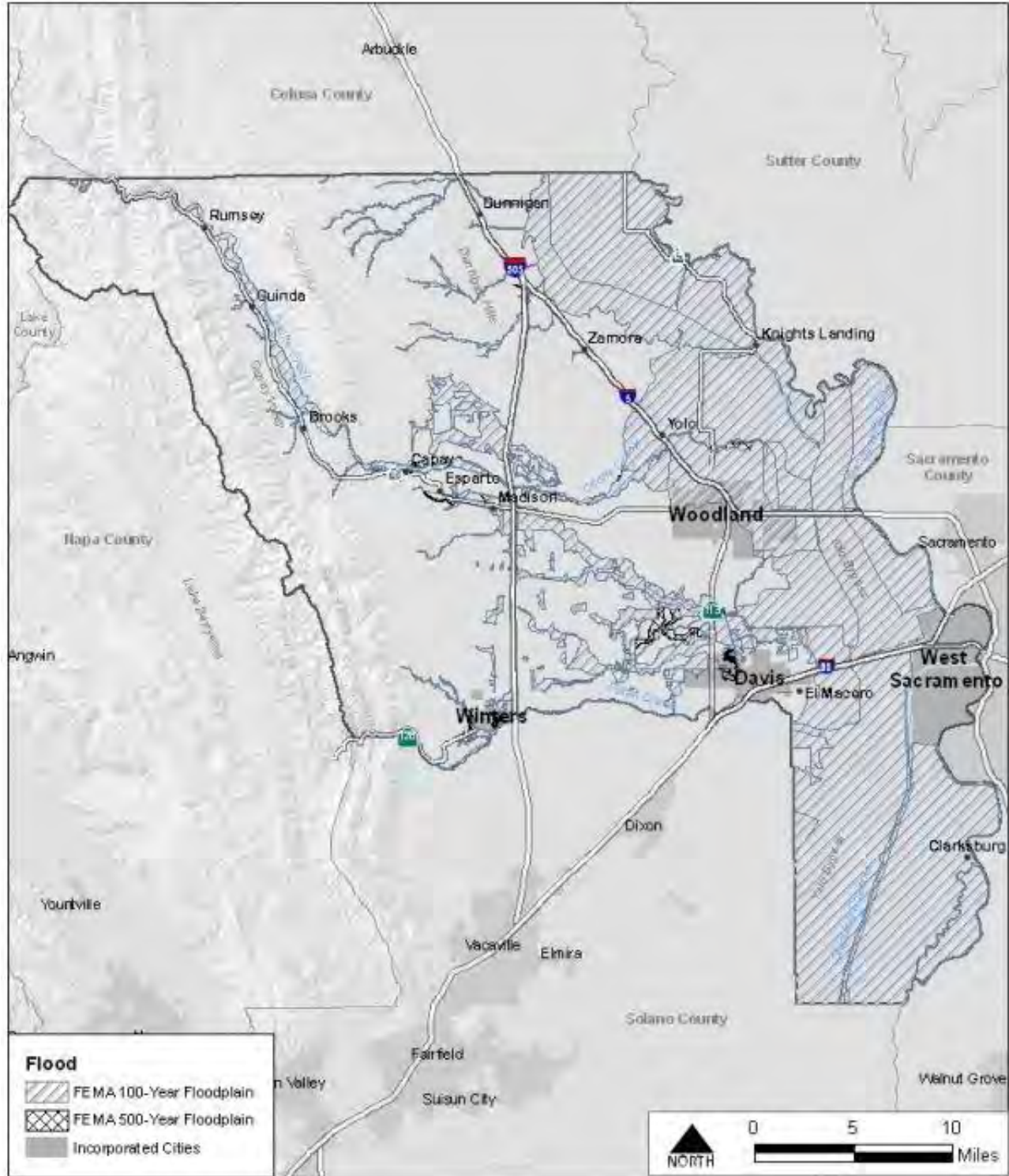




FIGURE HS-5 200-YEAR FLOODPLAIN

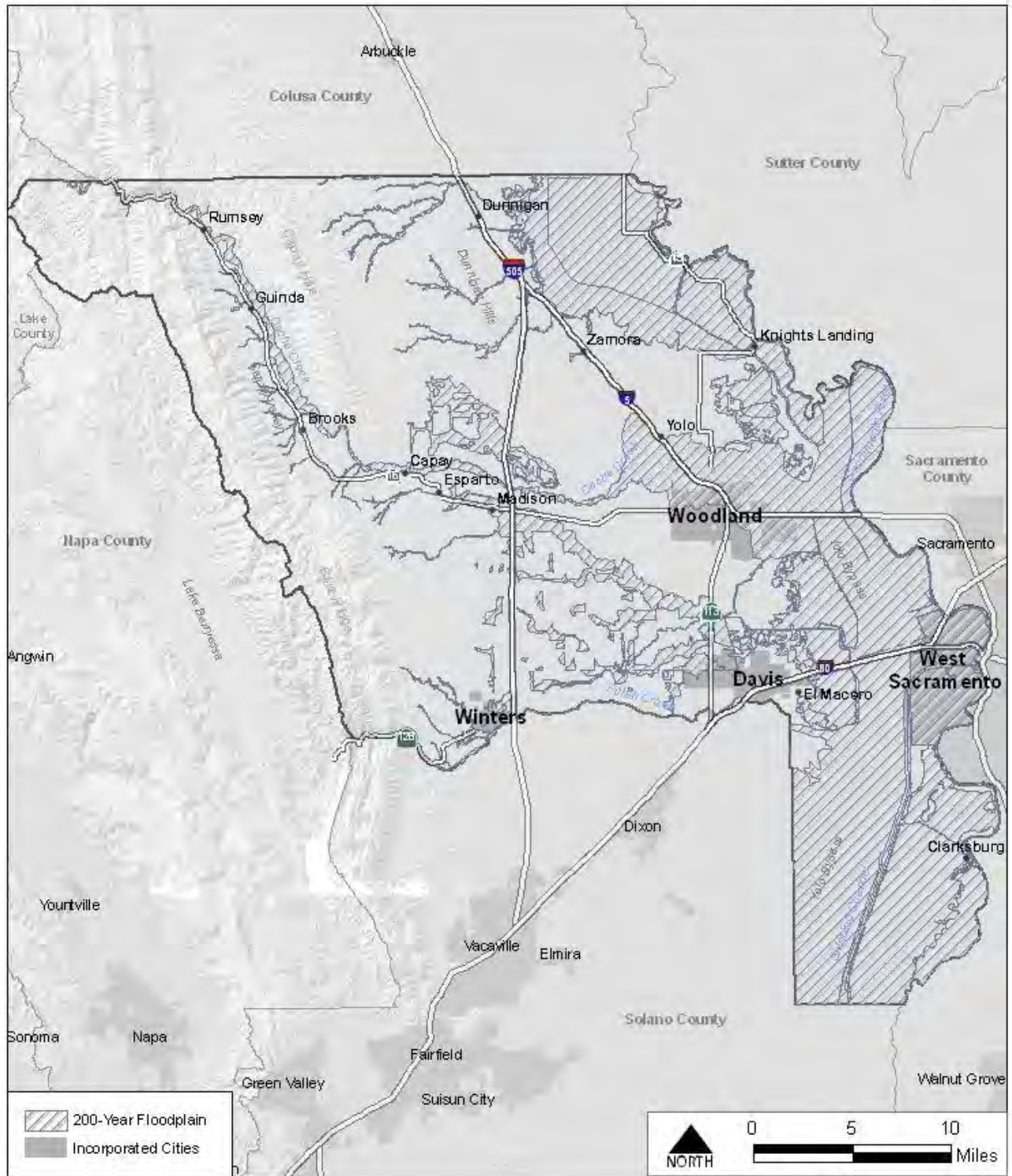
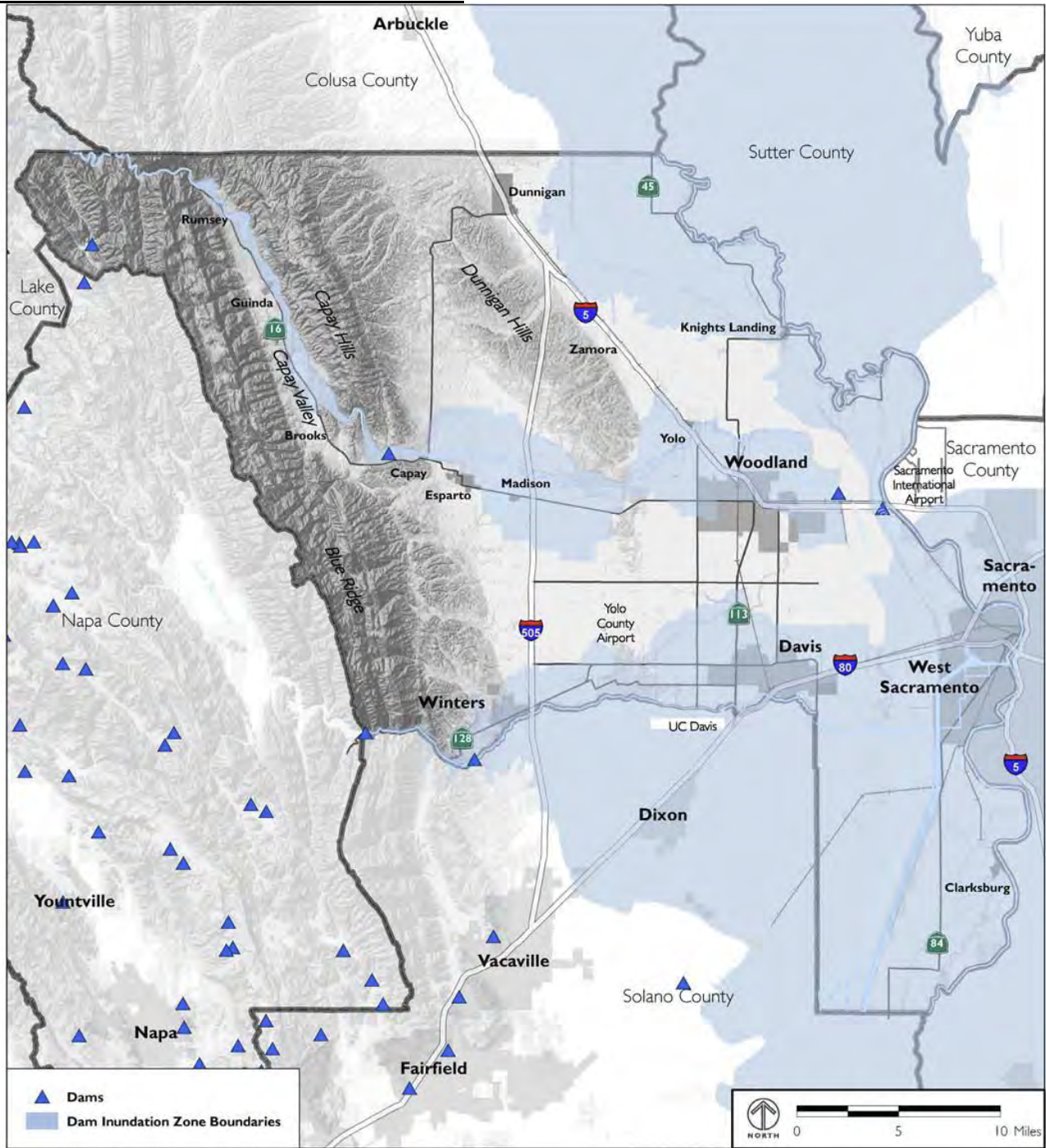




FIGURE HS-6 DAM INUNDATION



Source: California Office of Emergency Services, 2000.



FIGURE HS-7 LEVEE PROTECTION ZONES

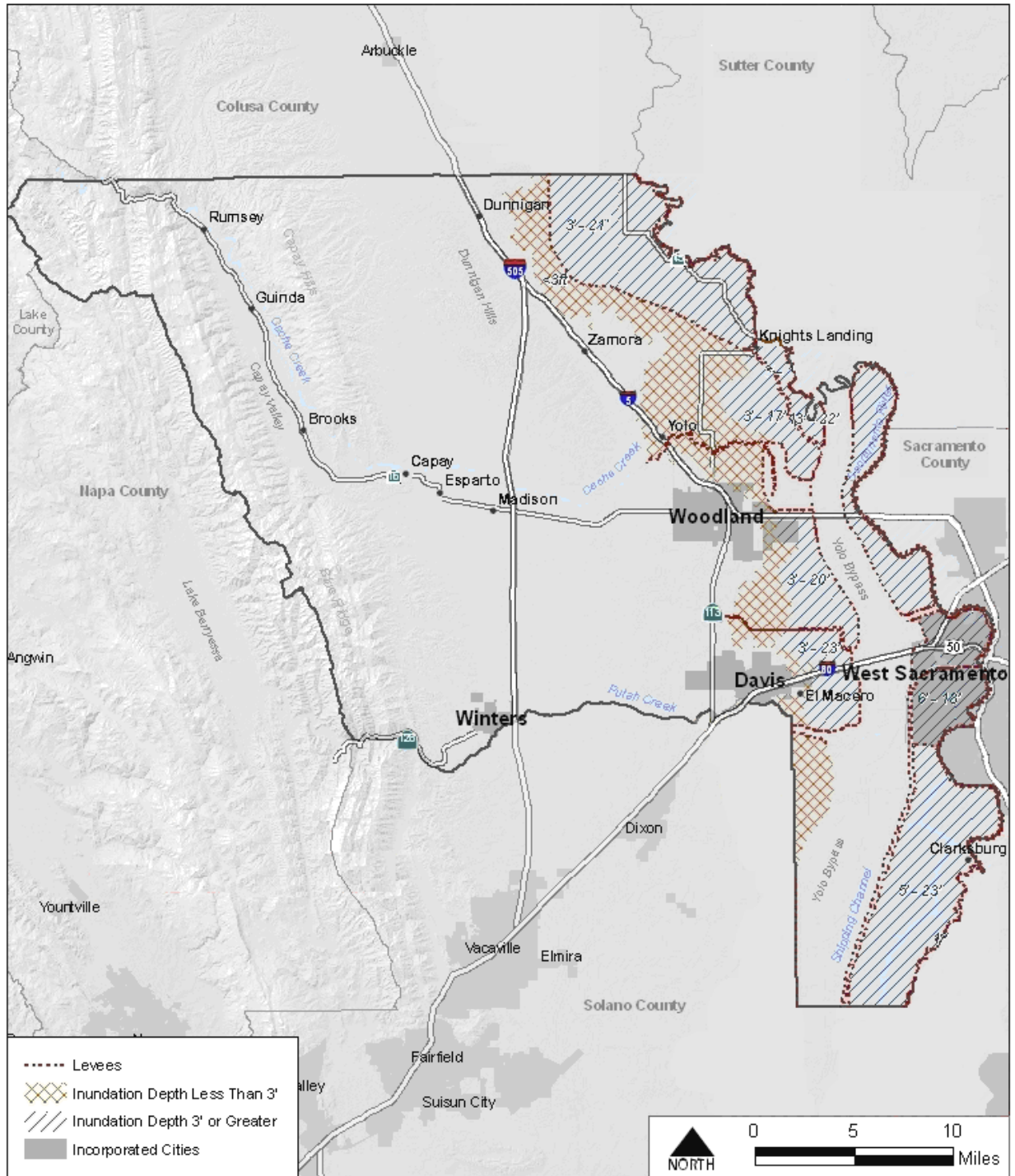




FIGURE HS-8 AWARENESS FLOODPLAINS

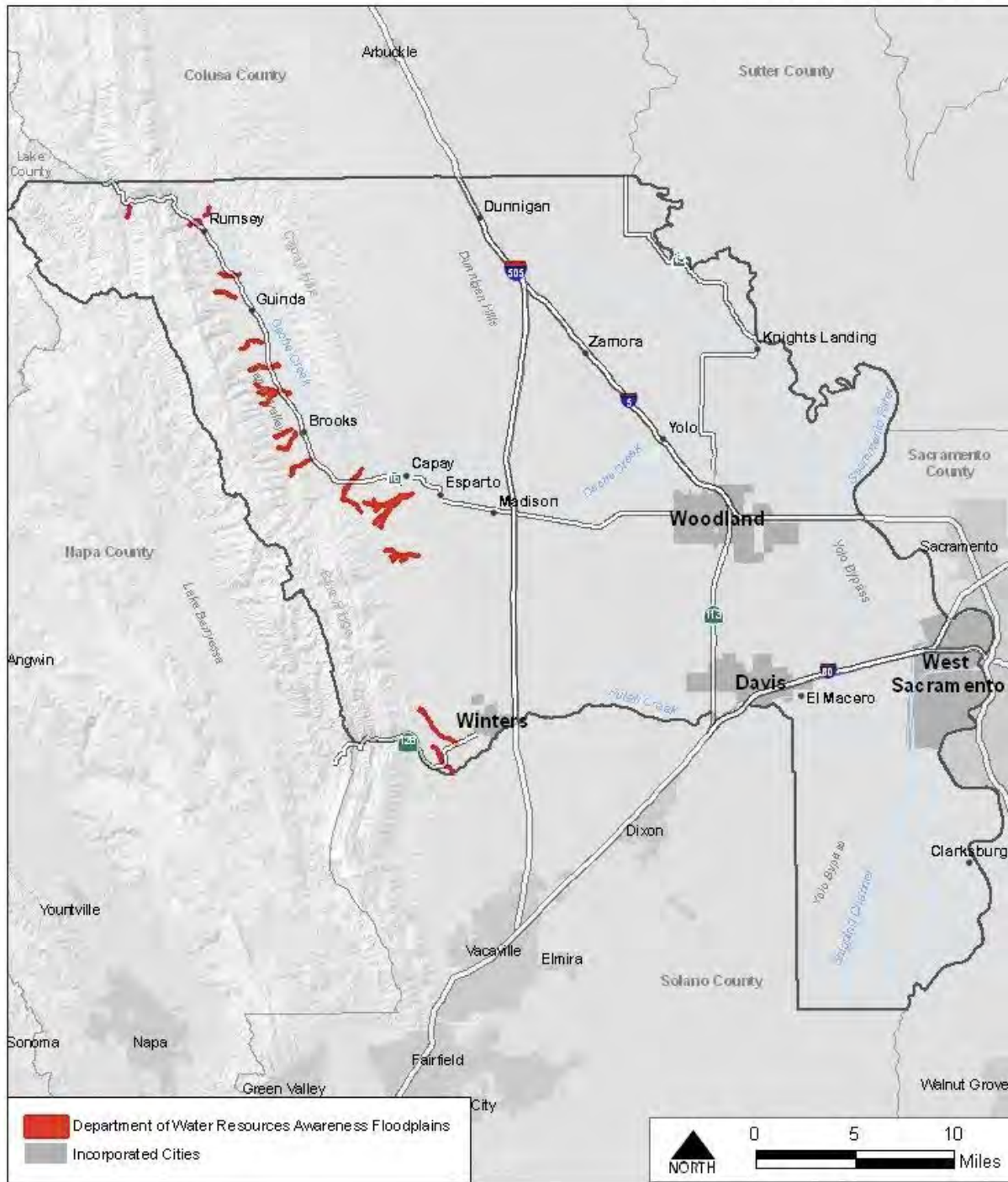




FIGURE HS-9 DESIGNATED FLOODWAYS

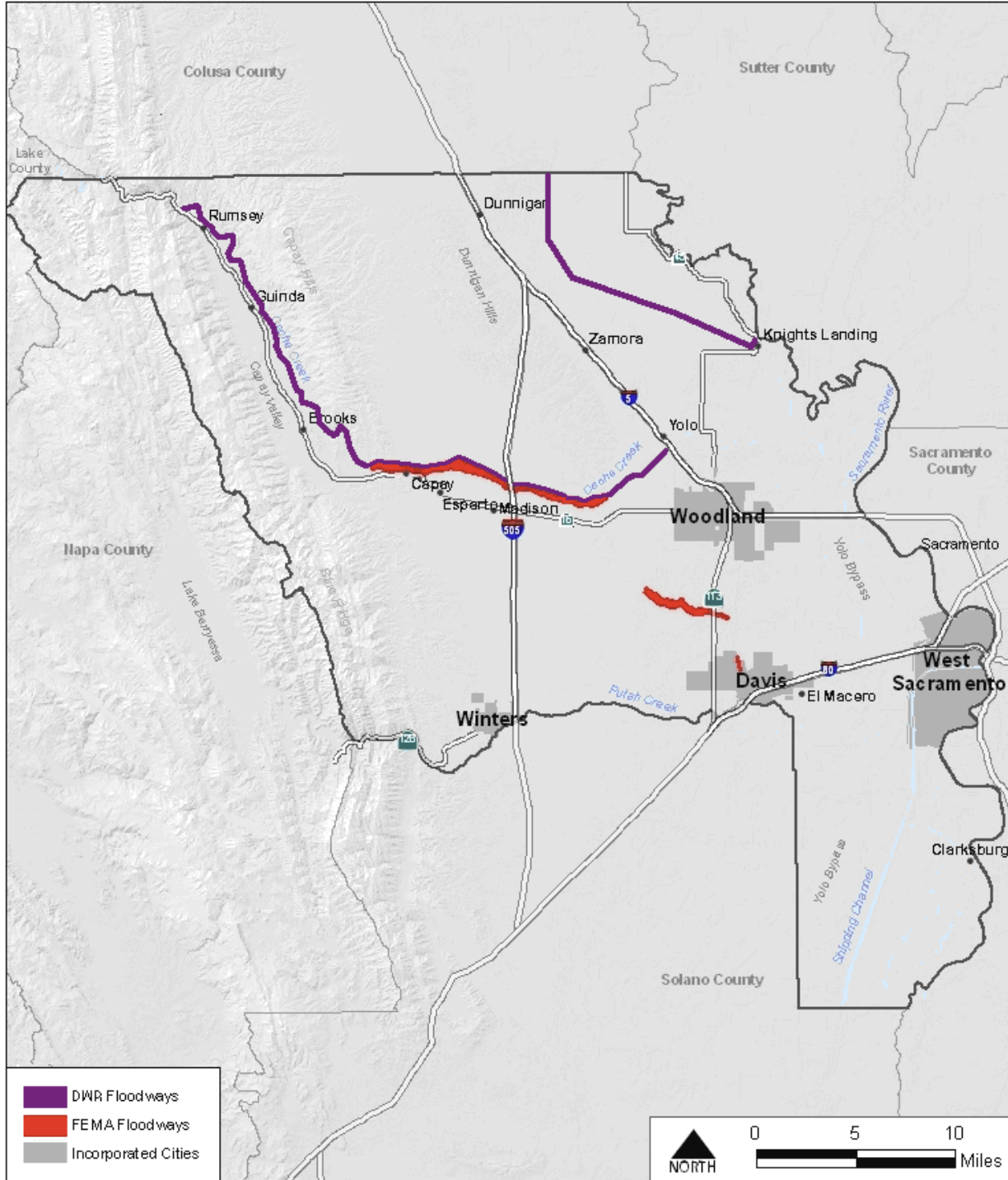




FIGURE HS-10 EXISTING DEVELOPMENT WITHIN THE 100-YEAR FLOODPLAIN

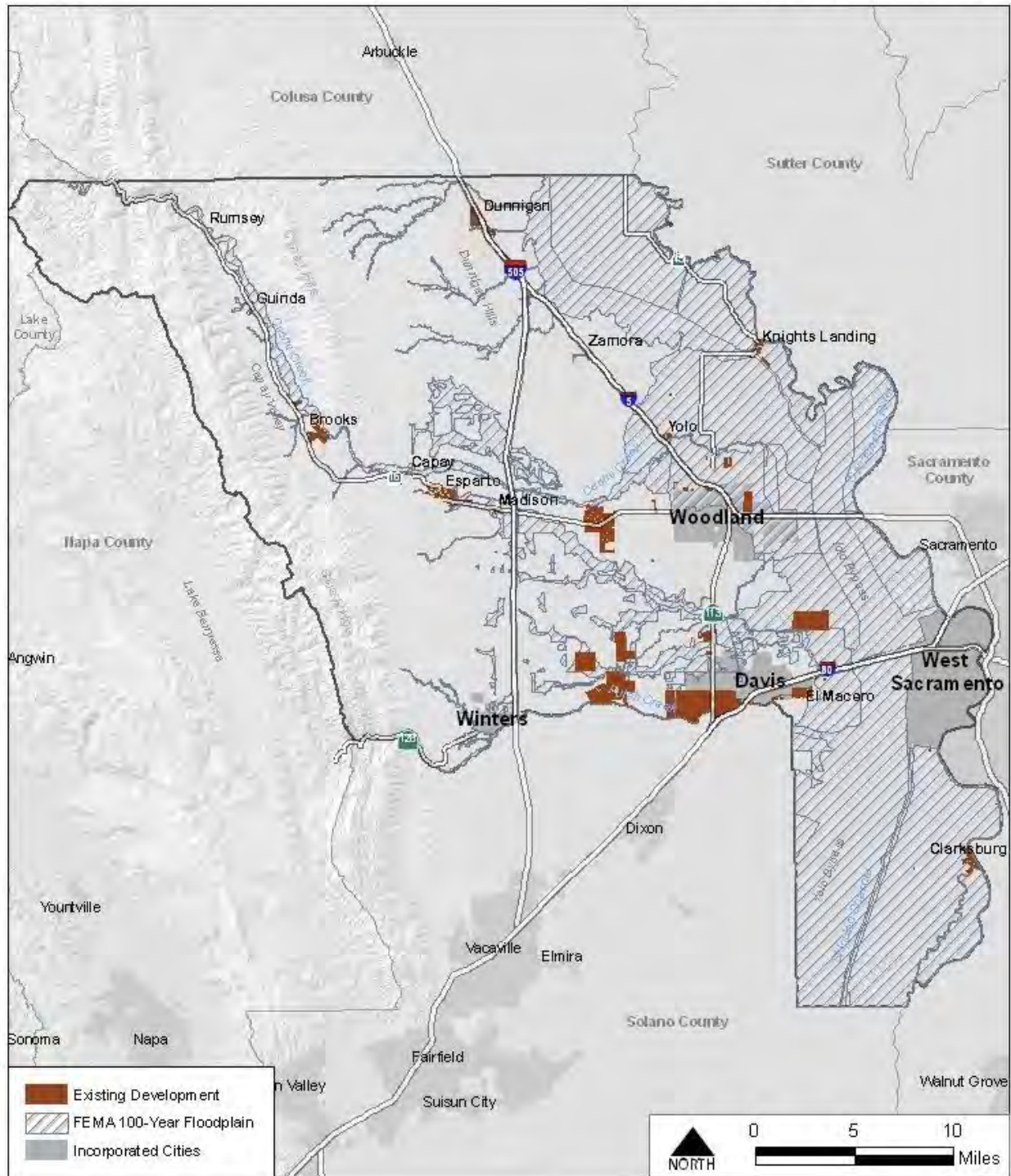
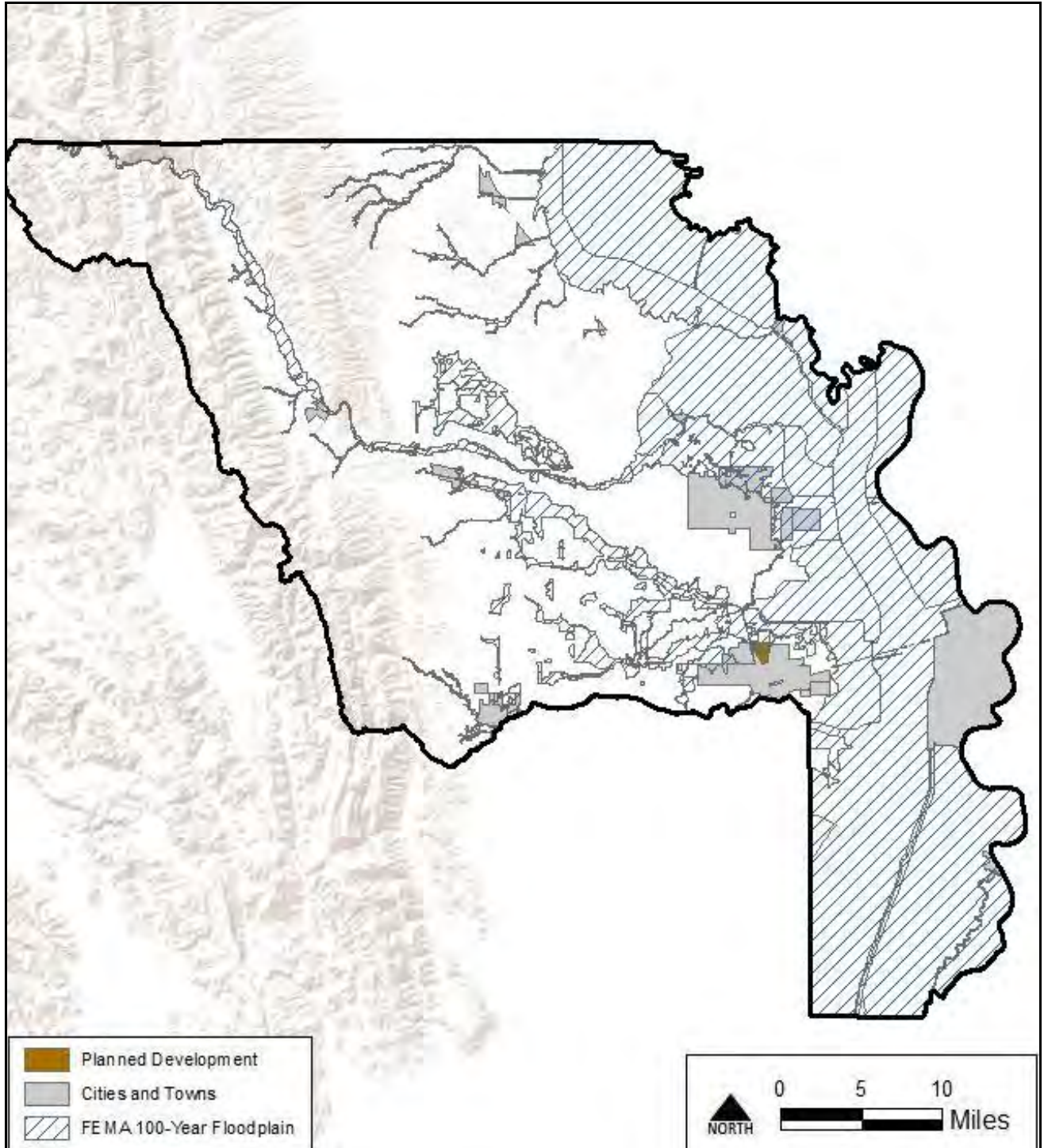




FIGURE HS-11 PLANNED DEVELOPMENT WITHIN THE 100-YEAR FLOODPLAIN





addition, the Yolo Bypass, the Sacramento Weir, and the Fremont Weir help protect Sacramento and other urban communities in the region from flooding by the Sacramento River. Some levees, particularly the project levees that protect parts of the City of Woodland and unincorporated Yolo County, the vicinity of Cache Creek and the town of Yolo, only provide a 10-year level of flood protection rather than the 100-year federal standard. Without work to improve these levees, additional development in Yolo County's floodplain could put more residents at risk of flooding hazards.

The local levees have been assumed to provide adequate protection since their acceptance into the Sacramento River Flood Control Project in 1918. Recently, where insufficient geotechnical information exists to evaluate the integrity of the levees, the State Department of Water Resources has taken the position, in conjunction with FEMA, that levees are not certified. DWR has completed geotechnical evaluations of the urban Sacramento River Flood Control Project levees within the county, and has proposed to do additional evaluations of non-urban levees in the coming years.

Figure HS-7 shows the extent of those areas that are protected by decertified levees and are currently subject to flooding. This map uses the best available information to identify those areas where flooding would be more than three feet deep if a project levee were to fail, assuming maximum capacity flows. Not surprisingly, levee flood protection zones are concentrated in eastern Yolo County, in areas adjoining levees for lower Cache Creek, Putah Creek, the Colusa Basin Drain, the Yolo Bypass, and the Sacramento River. Affected communities include Clarksburg, Davis, Knights Landing, West Sacramento, Woodland, and Yolo.

Responsibility for flood protection is distributed among many agencies at various levels of government. At the federal level the three primary agencies are the Army Corps of Engineers, the FEMA, and the Bureau of Reclamation. At the state level the primary agencies are Department of Water Resources and the Central Valley Flood Protection Board. At the local level in Yolo County and the region these agencies include: the County of Yolo and each of its four cities; the Yolo County Flood Control and Conservation District, 15 local reclamation districts, the Knights Landing Ridge Drainage District, the Madison Esparto Regional County Service Area, the Snowball Levee County Service Area, other CSAs, various Community Service Districts and the Sacramento River West Side Levee District.

Awareness Floodplains

Figure HS-8 shows the extent of awareness floodplains. The Awareness Floodplain Mapping project is an effort by the California Department of Water Resources to identify all flood hazard areas that are not mapped by the Federal Agency Management Agency's (FEMA). These maps are intended to provide communities with additional information regarding potential flood hazards that are not currently identified. The awareness floodplain maps use approximate assessment procedures, relying on aerial photos and general flood models, to identify potential 100-year flood hazard areas. These areas are shown simply as flood prone areas and do not include specific depths and/or other flood hazard data.

Awareness floodplains do not result in any restrictions on building or development. However, if requested by the local jurisdiction, FEMA can incorporate them into National Flood Insurance Program maps where they would become regulatory. Awareness floodplains have been



generally identified along minor drainages within the Capay Valley and Putah Creek, as well as Lamb Valley Slough and upper Willow Slough.

Designated Floodways

Figure HS-9 shows the location of floodways, both designated and regulatory. The Central Valley Flood Protection Board (CVFPB) has the authority to designate floodways in the Central Valley and regulate their uses. The CVFPB defines a Designated Floodway as that portion of the stream channel and adjoining floodplain which is reasonably required to accommodate a design flood event. It can also refer to the floodway between existing levees, as designated by the CVFPB or the State Legislature. The only floodways designated by the CVFPB in Yolo County are: (1) the Colusa Basin Drain; and (2) that portion of Cache Creek located between the Lake County line and the town of Yolo.

For FEMA, a "regulatory floodway" is defined as that portion of the watercourse and adjacent lands that are needed to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height. FEMA requires local cities and counties to regulate development within floodways to prevent any increases in upstream flood elevations. FEMA has designated a portion of Cache Creek as a regulatory floodway, between the towns of Capay and Yolo. A portion of Willow Slough is also considered a regulatory floodway, between County Road 27 and the Southern Pacific Railroad, as is a small portion of Union Pacific Railroad Drain located within the City of Davis.

Existing and New Development within the Floodplain

As a result of rapid population growth and escalating housing costs in the past ten years, there has been increasing pressure in the Sacramento Valley to build homes and other structures in natural floodplains. There has been limited growth within the floodplains of unincorporated Yolo County, however, due to policies that have restricted growth in general within the unincorporated area.

Development within the floodplain can have negative environmental implications that can both lead to increased risk of flooding and expose people and property to flooding risks. Urban development increases the amount of impervious surface and therefore increases surface water runoff and accelerates the timing of peak runoff flows. This results in increased erosion, sedimentation and water quality problems in surface runoff, as well as increased risk of flooding.

Figure HS-10 shows existing development located in the 100-year floodplain. Communities that are currently subject to flooding include the Central Landfill, Clarksburg, east Woodland, Knights Landing, Madison, North Woodland, Spreckles, and Yolo. In addition, portions of the County Airport, Covell, DQ University, Esparto, North David Meadows, Patwin Road, and UC Davis are also located within the floodplain. Historically, nearly all of these communities have been considered outside the floodplain. However, recent changes in FEMA mapping, particularly regarding the protection provided by uncertified levees, has designated large portions of the County in the floodplain that were not previously considered to be at risk from flooding.

Figure HS-11 shows where planned development is located in relation to the 100-year floodplain. The Covell Specific Plan is partially located within the floodplain. As a result, new development located within the floodplain must either elevate improvements and structures or provide a means of community-wide flood protection acceptable to FEMA, such as certified levees, bypasses, or similar measures.



Responsibility for flood protection is distributed among many agencies at various levels of government. At the federal level the three primary agencies are the Army Corps of Engineers, the FEMA, and the Bureau of Reclamation. At the state level the primary agencies are Department of Water Resources and the Central Valley Flood Protection Board. At the local level in Yolo County and the region these agencies include: the County of Yolo and each of its four cities; the Yolo County Flood Control and Conservation District, 15 local reclamation districts, the Knights Landing Ridge Drainage District, the Madison Esparto Regional County Service Area, the Snowball Levee County Service Area, other CSAs, various Community Service Districts and the Sacramento River West Side Levee District.

Yolo County has approximately 215 miles of project levees, managed by various agencies, including the County, 13 reclamation districts, one levee district, one drainage district, and the California Department of Water Resources. These levees provide flood protection to West Sacramento, Woodland, Knights Landing, Clarksburg, Davis and important agricultural lands. In addition, the Yolo Bypass, the Sacramento Weir, and the Fremont Weir help protect Sacramento and other urban communities in the region from flooding by the Sacramento River. Some levees, particularly the project levees that protect parts of the City of Woodland and unincorporated Yolo County, the vicinity of Cache Creek and the town of Yolo, only provide a 10-year level of flood protection rather than the 100-year federal standard. Without work to improve these levees, additional development in Yolo County's floodplain could put more residents at risk of flooding hazards.

The local levees have been assumed to provide adequate protection since their acceptance into the Sacramento River Flood Control Project in 1918. Recently, where insufficient geotechnical information exists to evaluate the integrity of the levees, the State Department of Water Resources has taken the position, in conjunction with FEMA, that levees may not be recertified. DWR has completed geotechnical evaluations of the urban Sacramento River Flood Control Project levees within the county, and proposed to do additional (as yet unknown) evaluations of non-urban levees in the next two years. Preliminary indications are that local levees will not be considered adequate to protect against the 100-year flood.

Legislation

The State Assembly and Senate, in 2006 and 2007, produced legislation governing various aspects of flood planning. The following list includes legislation applicable to Yolo County:

- AB 5 – Flood Management. Renames the Department of Water Resources (DWR) Reclamation Board as the Central Valley Flood Protection Board (CVFPB), and expands its size, duties, and powers. Makes clarifying and technical changes to the State's new flood planning legislation.
- AB 70 – Flood Liability. Requires a city or county to contribute its fair share to property damage caused by a flood, to the extent that the jurisdiction increased the



State’s exposure to liability by approving new development within the boundary of a state flood control project.

- **AB 162** – Requires cities and counties to address flood-related matters in the land use, conservation, safety, and housing elements of their General Plans.
- **AB 930 – Flood Management.** Expands the powers of the Sacramento Area Flood Control Agency to include the acquisition of land easements.
- **SB 5 – Flood Management.** Requires DWR and the CVFPB to prepare and adopt a Central Valley Flood Protection Plan by 2012. Requires cities and counties in the Sacramento–San Joaquin Valley to amend their General Plan and Zoning Ordinances to be consistent with a newly adopted Flood Management Plan within 36 months of flood plan adoption. Establishes other flood protection requirements for local land-use decisions consistent with the Central Valley Flood Protection Plan.

Senate Bill 5 (2007) establishes higher standards of flood protection (generally 200 year protection) for urban and urbanizing areas (defined as areas of at least 10,000 residents, or which will grow to 10,000 or more within the next 10 years). Other areas remain subject to the pre-existing 100-year standard for protection. Yolo County’s unincorporated communities are all well under the 10,000 population threshold at this time and therefore are generally not affected by this new legislation. Future planned growth in Dunnigan will be required to meet the higher 200-year standard; however, it is not currently located within a floodplain.

b. Policy Framework

GOAL HS-2 Flood Hazards. Protect the public and reduce damage to property from flood hazards.

- Policy HS-2.1 Manage the development review process to protect people, structures, and personal property from unreasonable risk from flooding and flood hazards.
- Policy HS-2.2 Ensure and enhance the maintenance and integrity of flood control levees.
- Policy HS-2.3 Actively update and maintain policies and programs to ensure consistency with State and federal requirements.
- Policy HS-2.4 Clearly communicate the risks, requirements, and options available to those who own land and live within the floodplain.
- Policy HS-2.5 Within the Delta Primary Zone, ensure compatibility of permitted land use activities with applicable flood control and protection policies of the Land Use and Resource Management Plan of the Delta Protection Commission.



- Policy HS-2.6 Maintain the structural and operational integrity of essential public facilities during flooding, including climate-related flood events.
- Policy HS-2.7 Manage the floodplain to improve the reliability and quality of water supplies.
- Policy HS-2.8 Consider and allow for the ecological benefits of flooding within historic watercourses while balancing public safety and the protection of property.

c. Implementation Program

- Action HS-A5 Require a minimum of 100-year flood protection for new construction, and strive to achieve 200-year flood protection for existing unincorporated communities. Require a minimum of 200-year flood protection for new construction in urbanizing areas. Where ~~such~~ 100-year flood levels of protection are not provided in nonurbanized areas, require new development to adhere to the requirements of FEMA, State law and the County Flood ~~Damage Prevention~~Protection Ordinance (Chapter 4 of Title 8 of the Yolo County Code). (Policy HS-2.1) 🌐
Responsibility: Department of Community Services
Timeframe: Ongoing
- Action HS-A6 Continue to require habitable or any other structures in the 100-year floodplain to be designed and constructed so that they do not significantly contribute to cumulative flooding that could pose a hazard to surrounding landowners and/or the public. (Policy HS-2.1)
Responsibility: Department of Community Services Timeframe: Ongoing
- Action HS-A7 Yolo County shall not approve any discretionary permit, or ministerial permit, that would result in the construction of a new residence, for a project located within a flood hazard zone, unless the County can make the findings identified in Section 65962a of the Government Code. (Policy HS-2.1)
Responsibility: Department of Community Services
Timeframe: Ongoing
- Action HS-A8 Locate new essential public facilities outside of flood hazard zones, including hospitals and health care facilities, emergency shelters, fire stations, emergency command centers, and emergency communications facilities. Where such location is not feasible,



incorporate methods to minimize potential flood damage to the facility.
(Policy HS-2.6)

Responsibility: Department of Community Services, General Services
Department, Office of Emergency Services

Timeframe: Ongoing

Action HS-A9 Require new developments to detain the stormwater runoff created on-site by a 100-year storm event. (Policy HS-2.1)

Responsibility: Department of Community Services

Timeframe: Ongoing

Action HS-A10 Limit the construction of extensive impermeable surfaces and promote the use of permeable materials for surfaces such as driveways, and parking lots. (Policy HS-2.1)

Responsibility: Department of Community Services

Timeframe: Ongoing

Action HS-A11 Locate new structures outside of the floodplain, where feasible, and implement appropriate methods to minimize potential damage where new construction occurs within flood hazard zones. (Policy HS-2.1)

Responsibility: Department of Community Services Timeframe:
Ongoing

Action HS-A12 Evaluate the feasibility of designating land as open space for future bypass systems to prevent flooding hazards. Work with State and Federal agencies to include such bypasses in the Central Valley Flood Protection Plan, where appropriate. Ensure that responsible agencies fund the purchase of flood easements where bypass systems are designated. (Policy HS-2.1)

Responsibility: Parks and Resources Department

Timeframe: Ongoing

Action HS-A13 Review development proposals to ensure that the need to maintain flood control capacity is balanced with consideration of the environmental health of watercourses that convey floodwaters so as not to cause significant erosion, sedimentation, water quality problems, or loss of habitat. (Policy HS-2.1)

Responsibility: Department of Community Services

Timeframe: Ongoing

Action HS-A14 Require a minimum 50-foot setback for all permanent improvements from the toe of any flood control levee. (Policy HS-2.2)

Responsibility: Department of Community Services

Timeframe: Ongoing



Action HS-A15 Restrict proposed land uses within 500 feet of the toe of any flood control levee, including but not limited to the items listed below, unless site-specific engineering evidence demonstrates an alternative action that would not jeopardize public health or safety:

- Prohibit permanent unlined excavations;
- Large underground spaces (such as basements, cellars, swimming pools, etc) must be engineered to withstand the uplift forces of shallow groundwater;
- Prohibit below-grade septic leach systems;
- Engineered specifications for buried utility conduits and wiring;
- Prohibit new water wells;
- Prohibit new gas or oil wells;
- Engineered specifications for levee penetrations; and
- Require landscape root barriers within 50 feet of the toe. (Policy HS-2.2)

Responsibility: Department of Community Services

Timeframe: Ongoing

Action HS-A16 Support the efforts of levee maintenance districts with efforts to secure State and Federal funding for geotechnical studies of levees and implementation of associated improvements, as well as their ongoing maintenance. (Policy HS-2.2)

Responsibility: County Administrator's Office

Timeframe: Ongoing

Action HS-A17 Encourage flood hazard reduction projects along the Sacramento River to be consistent with the guidelines of the Sacramento River Corridor Floodway Management Plan. (Policy HS-2.2)

Responsibility: Parks and Resources Department

Timeframe: Ongoing

Action HS-A18 Coordinate with local, State and Federal agencies to define existing and potential flood problem areas, including the possible impacts associated with global climate change, and to maintain and improve levees and other flood control features. (Policy HS-2.2) 🌐

Responsibility: Department of Community Services

Timeframe: 2012/2013

Action HS-A19 Develop a detailed maintenance and funding plan for levees under County control, to ensure that levee safety is maintained. (Policy HS-2.2)



Responsibility: Department of Community Services
Timeframe: Ongoing

Action HS-A20 Support and encourage responsible agencies to site new levees or major rehabilitation of levees at a distance from the river and from existing levees, where feasible. These setback levees would provide a degree of redundancy in the system, increase the land available for habitat and flood storage, reduce operation and maintenance costs, and help to ensure the integrity of the structures. (Policy HS-2.2)

Responsibility: Department of Community Services
Timeframe: Ongoing

Action HS-A21 Private development of levees should be limited to those cases where the construction meets national levee standards, the project is in conformance with the State's comprehensive plan for flood damage reduction, and a public agency agrees to provide long-term maintenance of the levee. (Policy HS-2.2)

Responsibility: Department of Community Services
Timeframe: Ongoing

Action HS-A22 Ensure that the upgrade, expansion, or construction of any flood control levee demonstrates that it will not adversely divert flood water or increase flooding. (Policy HS-2.2)

Responsibility: Department of Community Services
Timeframe: Ongoing

Action HS-A23 Work cooperatively with other local agencies and interested parties to develop funding mechanisms to finance the local share of design, construction, and capital costs for repairs and improvements to flood control levees. (Policy HS-2.2)

Responsibility: Parks and Resources Department
Timeframe: Ongoing

Action HS-A24 Improve the county's classification within the Federal Emergency Management Agency Community Rating System. (Policy HS-2.3)

Responsibility: Department of Community Services Timeframe: 2009/2010

Action HS-A25 Pursuant to Sections 65302.9, 65860.1, and 65865.5 of the Government Code, amend the Zoning Ordinance and General Plan, as appropriate, to be consistent with the adopted Central Valley Flood Protection Plan. (Policy HS-2.3) 🌐

Responsibility: Department of Community Services Timeframe: Ongoing



- Action HS-A26 Review on an annual basis those portions of the unincorporated area that are subject to flooding, based on mapping prepared by the Federal Emergency Management Agency and/or the Department of Water Resources, and amend the General Plan as appropriate to reflect any changes. (Policy HS-2.3) 🌐
Responsibility: Department of Community Services
Timeframe: Ongoing
- Action HS-A27 Revise the Health and Safety Element, concurrently with the regular update to the Housing Element, to include new information regarding floodplain mapping and/or regulation. (Policy HS-2.1, Policy HS-2.3) 🌐
Responsibility: Department of Community Services
Timeframe: Ongoing
- Action HS-A28 Take all reasonable and feasible actions to mitigate potential flood damage for new construction on agriculturally designated land in areas protected by the Sacramento River Flood Control Project and related flood protection efforts. (Policy HS-2.1)
Responsibility: Department of Community Services Timeframe: Ongoing
- Action HS-A29 Pursuant to Section 8201 of the State Water Code, develop local plans for flood protection, including analysis of financing options to construct and maintain any needed improvements, to address how 100-year floodplain protection for each community may be provided. Those communities that are economically disadvantaged and at greatest risk shall have priority in developing flood protection plans. The cities shall be consulted in development of the plans, which shall be consistent with the Central Valley Flood Protection Plan. (Policy HS-2.1, Policy HS-2.2) 🌐
Responsibility: Parks and Resources Department, Department of Community Services
Timeframe: 2014/2015
- Action HS-A30 Maintain and update on a regular basis the County Flood Damage Prevention Ordinance, to ensure its conformity with the State Model Flood Ordinance and all Federal Emergency Management Agency requirements. (Policy HS-2.1, Policy HS-2.3) 🌐
Responsibility: Department of Community Services
Timeframe: Ongoing
- Action HS-A31 Inform the public about the specific risks of living in areas at risk of flooding, and provide steps property owners can take to reduce their exposure to flood damages. Encourage all landowners within the 100-



or 200-year floodplain, and/or within areas protected by levees, to purchase and maintain flood insurance. (Policy HS-2.4)
Responsibility: Department of Community Services
Timeframe: Ongoing

Action HS-A32 Require that all residential development projects located within floodplains include a signed waiver regarding the potential flood risk to future buyers. (Policy HS-2.4)
Responsibility: Department of Community Services
Timeframe: Ongoing

Action HS-A33 Develop and implement a public outreach campaign to notify landowners and tenants of their flood status, options for flood insurance, evacuation plans, flood protection programs, locally responsible flood agencies, and other related topics. (Policy HS-2.4)
Responsibility: Parks and Resources Department, Department of Community Services, Office of Emergency Services
Timeframe: 2010/2011

Action HS-A34 Amend the County's Development Agreement enabling ordinance to include the applicable restrictions from Section 65865.5 of the Government Code. (Policy HS-2.3)
Responsibility: Department of Community Services
Timeframe: Ongoing

Action HS-A35 Develop emergency response plans and systems for floodplain evacuation and flood emergency management. Educate the public regarding these plans. (Policy HS-2.4)
Responsibility: Office of Emergency Services
Timeframe: Ongoing

Action HS-A36 Evaluate the creation of a countywide agency to provide flood control and protection. (Policy HS-2.2, Policy HS-2.4, Policy HS-2.6)
Responsibility: County Counsel, County Administrator's Office, Parks and Resources Department
Timeframe: 2009

Action HS-A37 Continue to work with the Flood Control District, the City of Woodland, other appropriate agencies and private landowners to develop strategies and pursue funding for the implementation of projects to improve flood protection for urban and rural residents along lower Cache Creek. (Policy HS-2.2)
Responsibility: County Administrator's Office, Parks and Resources Department, Department of Community Services
Timeframe: Ongoing



3. Wildland Fires

The Wildland Fires section of the Health and Safety Element establishes goals, policies, and actions to ensure safety from wildland fires in and around the County of Yolo.

a. Background Information

Wildland fire danger varies throughout Yolo County. The County is characterized by relatively level valley floor landscapes to the south and east; this lack of topography and complex fuels leads to very little severe fire behavior. In the increasingly hilly landscapes rising to the north and west, the rugged topography creates a landscape where fires can spread rapidly upslope and access for suppression equipment is limited.

The Safety and Environmental Justice White Paper prepared for a focused General Plan Amendment in 2022 addresses the regulatory framework related to wildfire and evacuation planning for General Plans, the County's local wildfire protection and response system, and fire hazard severity zones present in Yolo County.

To quantify the potential risk from wildland fires, the California Department of Forestry and Fire Protection (CalFire) has developed a Fire Hazard Severity Scale that uses three criteria in order to evaluate and designate potential fire hazards in wildland areas. The criteria are fuel loading (vegetation), fire weather (winds, temperatures, humidity levels and fuel moisture contents) and topography (degree of slope). These criteria are used to determine Fire Hazard Severity Zone (FHSZ) ratings. According to CalFire maps for Yolo County, the western portion of the county, west of Esparto and Winters, is designated as a Very High ~~Fire Severity Zone (VHFSZ)~~, as shown in Figure HS-126. The Very High FHSZ in Yolo County is in a State Responsibility Area (SRA), meaning that fire suppression is under the control of CalFire.

Government Code Sections 51175 through 51189 require the State to identify and classify fire hazards and to designate ~~VHFSZ~~Very High FHSZs in Local Responsibility Areas (LRAs), or areas where local agencies are responsible for fire suppression rather than the State. Since the ~~VHFSZ~~Very High FHSZs in Yolo County are in a SRA rather than an LRA, they are not subject to the aforementioned Government Code.

Figure HS-12 identifies the areas in Yolo County that are in the Very High, High, and Moderate FHSZs.

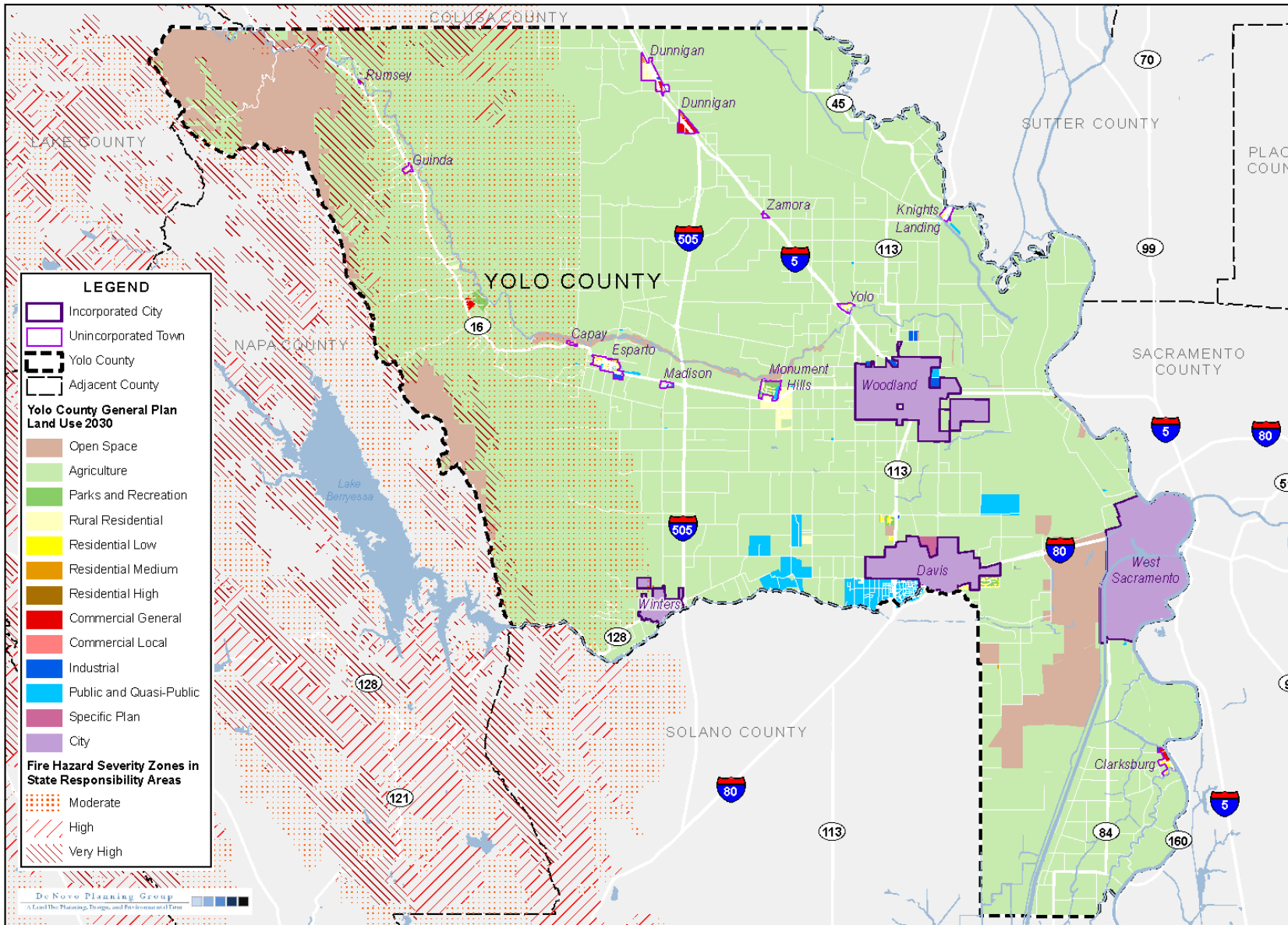
Fire districts in Yolo County are shown in Figure HS-13.

The County and its municipalities do fight a large number of vegetation fires, particularly during the summer. These fires tend to occur along major highways and railroads, and usually do not damage structures. However, fires can be exacerbated by hot north winds during periods of extremely low humidity. In addition, if they are fed by dry grass and vegetation they can easily grow out of control. Wildland fires can damage structures and facilities, and the County must be prepared for protection from dangerous wildland fires, especially where urban and non-urban landscapes meet.



Historical fire data is presented in Figure HS-14, which identifies historical fires greater than 2,000 acres since 2000, and Figure HS-15, which identifies historical fires by burn count.

FIGURE HS-12 FIRE HAZARD SEVERITY ZONES IN STATE RESPONSIBILITY AREAS

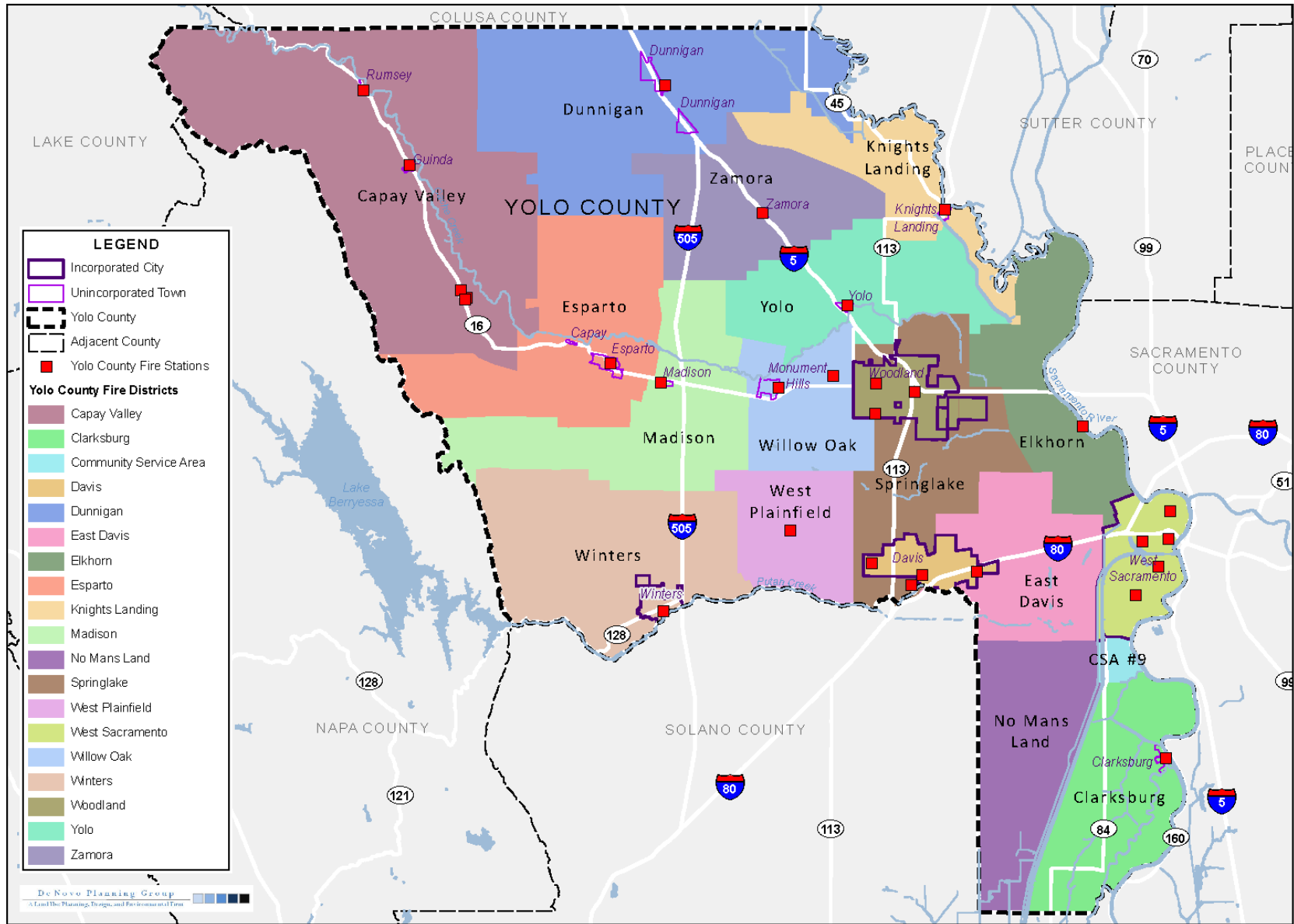


Sources: CalFire/Office of the State Fire Marshal; Yolo County GIS.
Map date: December 10, 2021.





FIGURE HS-13 FIRE DISTRICTS AND STATIONS



Sources: Yolo County GIS.
Map date: December 10, 2021.

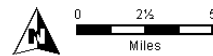
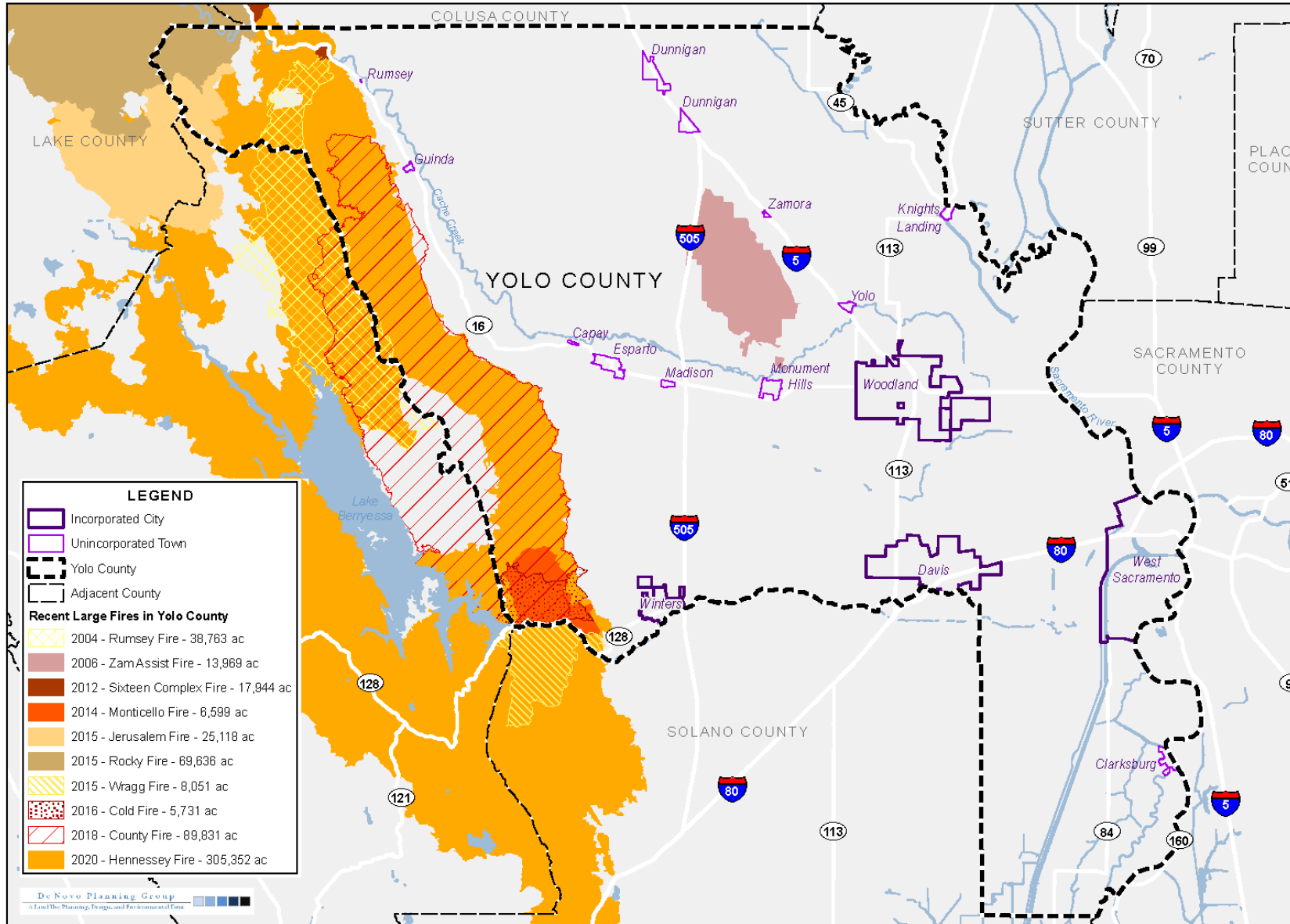




FIGURE HS-14 HISTORICAL FIRES GREATER THAN 2,000 ACRES SINCE 2000

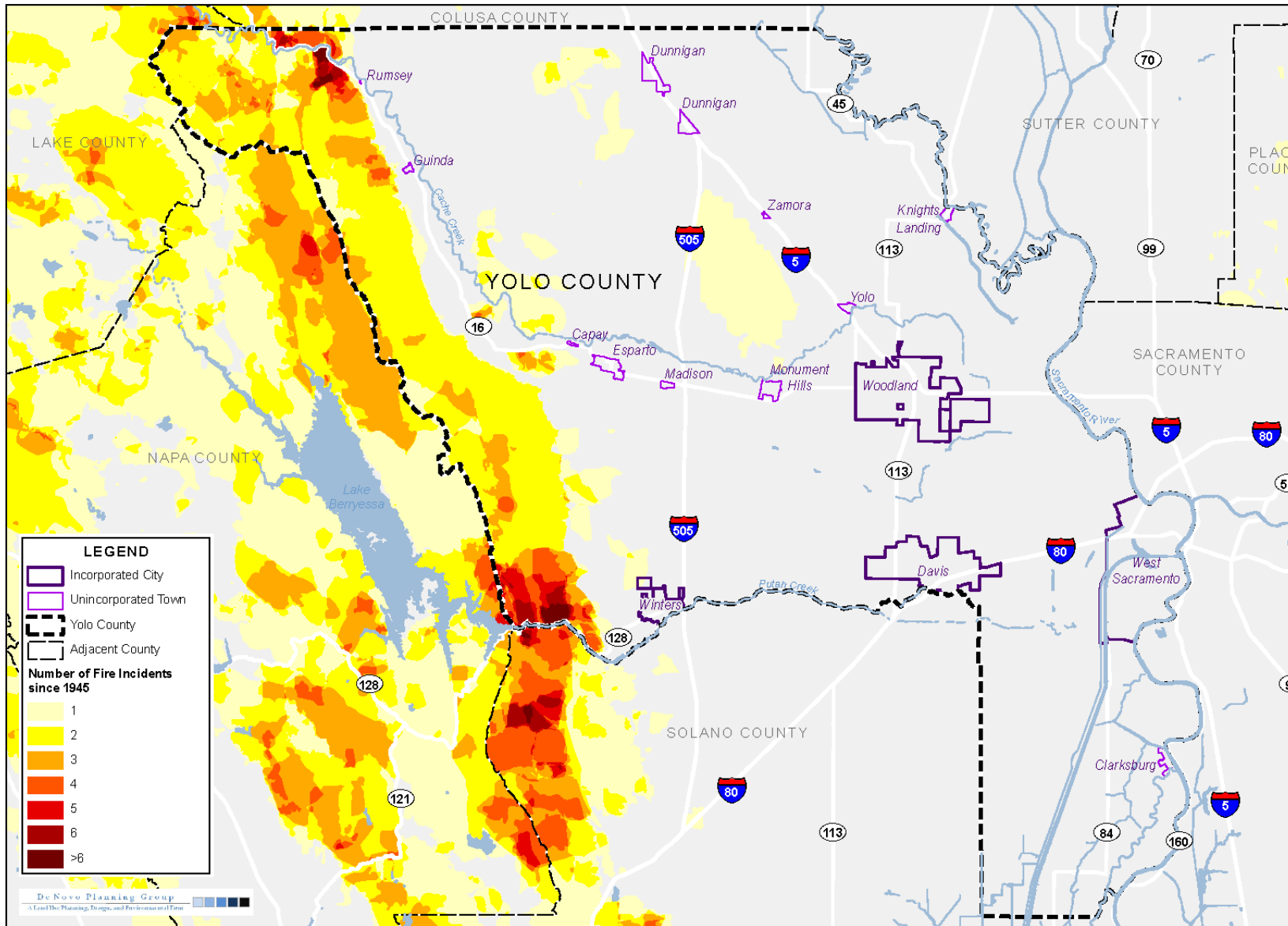


Sources: CalFire; Yolo County GIS.
 Map date: December 10, 2021.





FIGURE HS-15 HISTORICAL FIRES BY BURN COUNT



Sources: CalFire; Yolo County GIS.
Map date: December 10, 2021.





b. Policy Framework

GOAL HS-3 Wildland Fires. Protect the public and reduce damage to property from wildfire hazard.

- Policy HS-3.1 Manage the development review process to protect people, structures, and personal property from unreasonable risk from wildland fires.
- Policy HS-3.2 Encourage well-organized and efficient coordination between fire agencies and the County.
- Policy HS-3.3 Clearly communicate the risks, requirements, and options available to those who own land and live in wildfire hazard areas.
- Policy HS-3.4 Ensure that new essential public facilities are located in areas that minimize exposure to potential natural hazards including wildfire events. Essential public facilities should be planned to accommodate evacuees from hazard events requiring evacuations.

c. Implementation Program

- Action HS-A38 Require new and/or existing development to establish “defensible space” by providing for clearance around structures, using fire-resistant ground cover, building with fire-resistant roofing materials, fuel load reduction, and taking other appropriate measures. 🌐 (Policy HS-3.1)
Responsibility: Department of Community Services
Timeframe: Ongoing
- Action HS-A39 Require the design and construction of new roadways and driveways in fire hazard areas to be of sufficient width, radius and grade to facilitate access by fire-fighting apparatus. (Policy HS-3.1)
Responsibility: Department of Community Services Timeframe: Ongoing
- Action HS-A40 Require land divisions and developments within the very high and high risk Fire Hazard Severity Zones to prepare and implement a wildland fire management and protection plan that demonstrates the following:
- analysis of wildland fire risks;
 - fire response capabilities;
 - wildfire education;
 - guaranteed availability of adequate water;
 - provision of more than one access point for firefighting equipment;



- permanent maintenance of defensible space around all buildings;
 - mitigation measures and design considerations for any non-conforming fuel modification; and
 - use of fire-resistant materials in construction. 🌐 (Policy HS-3.1)
- Responsibility: Department of Community Services Timeframe: Ongoing

Action HS-A41 Cluster residential units located in areas of high fire risk with adequate access to maintained emergency evacuation routes to ensure adequate access for firefighting equipment and escape routes for residents in rural areas. 🌐 (Policy HS-3.1)
Responsibility: Department of Community Services
Timeframe: Ongoing

Action HS-A42 As part of the development review process, consult with the local fire department/district in order to ensure that the project provides adequate emergency access (ingress, egress) and evacuation routes. All development within VHFHSZs shall be evaluated at that time to see if they have at least two emergency evacuation routes.
Responsibility: Department of Community Services
Timeframe: Ongoing

Action HS-A43 Review existing developments within VHFHSZs and identify areas that have limited emergency access and do not contain two evacuation routes. These areas should be prioritized (as feasible) for improvements as part of improvement plans to enhance access in emergency situations.
Responsibility: Department of Community Services
Timeframe: 2023/2024

Action HS-A44 Assist dependent fire districts with development impact fees, legal counsel, grant applications, and fee waivers, where feasible. (Policy HS-3.2)
Responsibility: County Administrator's Office, County Counsel
Timeframe: Ongoing

Action HS-A45 Coordinate with the Clarksburg Fire District to ensure compatibility of permitted land use activities within the Delta Primary Zone with applicable fire safe policies of the Land Use and Resource Management Plan of the Delta Protection Commission. (Policy HS-3.2)
Responsibility: Department of Community Services Timeframe: Ongoing

Action HS-A46 Implement State recommendations for fire prevention in Fire Hazard Severity Zones. (Policy HS-3.1)



Responsibility: Department of Community Services Timeframe:
2009/2010

Action HS-A47 Coordinate with fire districts to ensure fire safe design and construction of new development. (Policy HS-3.2)

Responsibility: Department of Community Services
Timeframe: Ongoing

4. Hazardous Materials

The Hazardous Materials section of the Health and Safety Element establishes goals, policies, and actions to ensure safety from hazardous materials in and around the County of Yolo.

a. Background Information

There are several forms of hazardous materials in Yolo County. Common products such as gasoline, paint solvents, household cleaning products and refrigerants are categorized as hazardous materials and are present throughout Yolo County. Industrial operations, often employing hazardous substances, may leave behind contaminating underground storage tanks and/or residual pollutants that infiltrate the County's natural resources. "Brownfield" sites are those where expansion or redevelopment is complicated by real or perceived contamination from prior or current uses². Superfund sites are significantly contaminated properties as designated by the federal Environmental Protection Agency (EPA) list.

The County regulates the construction, operation, repair and removal of underground storage tanks (USTs) in Yolo County through its Underground Storage Tank program. Leaking USTs in the County are common, and are often associated with airports, farms and abandoned railroad lines. The Environmental Health Division (EHD) maintains a list of leaking USTs.³

There are several brownfield sites identified in the community of Esparto that are polluted with hazardous substances and/or where petroleum leakage has been identified. The County has two \$200,000 grants from the EPA's Brownfields Program to prevent, assess, safely clean up, and sustainably reuse these sites. These funds will also be used to create a brownfield inventory and conduct up to five Phase I and three Phase II environmental site assessments in the Esparto community. The grant funds will also be used to conduct community outreach activities.

There is one Superfund site located in the unincorporated County, which is the landfill at UC Davis. The Frontier Fertilizer Company site is a second listed Superfund site, but is located with the City of Davis.

² Environmental Protection Agency, *Brownfields and Land Revitalization*, <http://www.epa.gov/brownfields/>, accessed on June 30, 2008.

³ Yolo County Department of Environmental Health, *Underground Storage Tank Program*, <http://www.yolocounty.org/Index.aspx?page=109>, accessed June 30, 2008.



The handling, transportation and disposal of hazardous waste is of concern to all communities and residents. Proper regulation of hazardous materials will ensure that detrimental effects of human exposure and environmental contamination are minimized. Hazardous materials and wastes are regulated through various federal, state and local agencies. The EHD is part of the County Health Department and regulates hazardous materials in Yolo County. In case of an emergency, the *Yolo Operational Area Hazardous Materials Emergency Response Plan* provides for an organized and structured response. This plan defines the structure of the emergency response effort made by the county Hazardous Materials Response Team. This team becomes active when deemed necessary by a fire department officer, and combines the forces of the UC Davis, Davis, West Sacramento and Woodland fire departments and the EHD.

The EHD maintains the Hazardous Materials Business Plan and Inventory Program. The program enforces the State “right-to-know” laws passed in 1984, and requires local businesses to provide public access to information about the types and amounts of chemicals being used on their property. Businesses must plan and prepare for a chemical emergency through the preparation of a Hazardous Materials Inventory that is certified annually and a Hazardous Materials Business Emergency Response Plan that is certified annually and inventory of hazardous materials updated annually. EHD also regulates the use, storage, and treatment of hazardous wastes and above-ground storage tanks.

b. Policy Framework

GOAL HS-4	<u>Hazardous Materials.</u> Protect the community and the environment from hazardous materials and waste.
------------------	--

- Policy HS-4.1 Minimize exposure to the harmful effects of hazardous materials and waste.
- Policy HS-4.2 Inspect businesses regularly for compliance with their Hazardous Materials Inventory and Hazardous Materials Business Emergency Response Plan.
- Policy HS-4.3 Encourage the reduction of solid and hazardous wastes generated in the county. 🌍

c. Implementation Program

Action HS-A48 Provide adequate separation between areas where hazardous materials are present and sensitive uses. The following land uses are considered sensitive receptors for the purpose of exposure to hazardous materials: residentially designated land uses; hospitals, nursing/convalescent homes, and similar board and care facilities;



hotels and lodging; schools and day care centers; and neighborhood parks. Home occupation uses are excluded. (Policy HS-4.1)

Responsibility: Department of Community Services
Timeframe: Ongoing

Action HS-A49 New development and redevelopment in areas previously used for agricultural, commercial, or industrial uses shall ensure that soils, groundwater, and buildings affected by hazardous material releases from prior land uses, as well as lead paint and/or asbestos potentially present in building materials, will not have the potential to affect the environment or health and safety of future property owners or users, and any affected areas shall be properly abated. A Phase I Environmental Site Assessment (ESA) to American Society for Testing and Materials (ASTM) standards shall be required where appropriate and a Phase II ESA may be required in certain circumstances based on the recommendations/results of the Phase I. Where the Phase I report has identified agricultural cultivation prior to the 1980s, a shallow soil investigation shall be performed at the property in accordance with DTSC guidance for sampling agricultural properties. (DEIR MM HAZ-1) (Policy HS-4.1)

Responsibility: Department of Community Services
Timeframe: Ongoing

Action HS-A50 Develop a GIS-based map from the information submitted in the filed Hazardous Materials Inventories and Hazardous Materials Business Emergency Response Plans so that emergency responders are aware of potential dangers and can prepare accordingly. (Policy HS-4.2)

Responsibility: Health Department
Timeframe: 2010/2011

Action HS-A51 Promote public education about the safe disposal of used syringes and needles, household hazardous waste, such as motor oil, florescent bulbs, sharps/syringes, and batteries, including the locations of disposal sites. (Policy HS-4.3)

Responsibility: Department of Community Services
Timeframe: Ongoing

Action HS-A52 Cooperate with other agencies in the prevention and control of potential oil spills, including coordination with the State Oil Spill Program (SOSP). The SOSP shall be incorporated into local emergency and safety plans, standards, and ordinances. (Policy HS-4.1)

Responsibility Health Department, Office of Emergency Services
Timeframe: Ongoing



Action HS-A53 Complete the remediation and reclamation of the County's former burn dump sites. (Policy HS-4.1)
Responsibility: Department of Community Services
Timeframe: Ongoing

5. Airport Operations

The Airport Operations section of the Health and Safety Element provides goals, policies, and actions that guide Yolo County in ensuring adequate airport safety.

a. Background Information

Yolo County owns and operates the Yolo County Airport, one of four general aviation airports in the County. Two of the other airports, Watts-Woodland Airport and Borges-Clarksburg Airport, are privately-owned, while the University Airport is owned by UC Davis. The County is also affected by a fifth airport, Sacramento International, which lies just outside the County boundaries.

Yolo County Airport, located four miles west of the City of Davis, is the largest airport in the County based on runway size. Seventy aircraft are based at the field and, on average, 165 aircraft operations occur per day.⁴

The Sacramento International Airport is located immediately outside Yolo County in Sacramento County, and is the largest airport in the vicinity. With more than 150 flights departing daily on 14 commercial airlines, the airport offers international flights. While the airport is not inside Yolo County, noise, safety and land use compatibility concerns do extend into Yolo County and must be addressed in this General Plan.

The Sacramento Area Council of Governments has been designated the Airport Land Use Commission (ALUC) for the counties of Sacramento, Sutter, Yolo, and Yuba. Under the authority of the Airport Land Use Commission Law, Chapter 4, Article 3.5 of the California Public Utilities Code, the ALUC has prepared airport comprehensive land use plans (CLUPs) for four of the airports that affect Yolo County. The University Airport is required to have an Airport Layout Plan (ALP) which has been prepared by UCD.

The purpose of Airport Land Use Commission Law is to protect public health and safety by adopting land use standards that minimize exposure to safety hazards and excessive levels of noise and to prevent the encroachment of incompatible land uses around airports. The law designates airport safety zones around each of the airports and has specific land use compatibility requirements that are consistent with this General Plan as described in the Land Use Element.

⁴ Source: Background Report for the Yolo County General Plan Update, January 2005. Updated data provided by <http://www.airnav.com>, assessed August 15, 2007.



b. Policy Framework

GOAL HS-5 Airport Operations. Protect the community from the risks associated with airport operations and protect airports from the economic impacts of encroachment from incompatible land uses.

Policy HS-5.1 Ensure that land uses within the vicinity of airports are compatible with airport restrictions and operations.

Policy HS-5.2 Ensure that new development near commercial and public use airports is consistent with setbacks, height, and land use restrictions as determined by the Federal Aviation Administration and the Sacramento Area Council of Governments Airport Land Use Commission. Ensure that development proximate to private airstrips addresses compatibility issues. (DEIR MM HAZ-3)

Policy HS-5.3 Respect and conservatively enforce airport safety zones as identified in airports CLUPs.

Policy HS-5.4 Within the Delta Primary Zone, ensure compatibility of permitted land use activities with applicable airport policies of the Land Use and Resource Management Plan of the Delta Protection Commission.

c. Implementation Program

Action HS-A54 Develop appropriate Aviation Disaster Response Plans. (Policy 5.1, Policy HS-5.2, Policy HS-5.3)
Responsibility: Office of Emergency Services
Timeframe: 2010/2011

6. Emergency Preparedness

a. Introduction

The Yolo County Office of Emergency Services (OES) is responsible for coordinating the County government's role in preparation and response to a disaster or large scale emergency within Yolo County. The OES works closely with other emergency management operations in the cities of Davis, West Sacramento, Winters, and Woodland, and with UC Davis, the Rumsey Tribe, various special districts, authorities and joint-power authorities within County boundaries. In the event of an emergency, the OES is charged with responding to the unincorporated areas of Yolo County, providing support to jurisdictions within Yolo County, or both. To assist with such efforts, the Office coordinates local volunteers through the Disaster Service Worker (DSW) Program.

Emergency evacuation is an integral component of the County emergency management system. The OES also conducts ongoing evaluation of potential evacuation routes,



including capacity and condition of roadways and potential barriers to the use of roadways, such as flooding. There are no set evacuation routes; rather, they are established for particular events based on circumstances at the time.

The main focus is on three operational concerns: 1) Local/community evacuation; 2) Area wide evacuation; and 3) Large scale traffic management during regional evacuations. Primary state and local arterial and secondary ground transportation routes have been identified and are included in general preparedness and response planning efforts. The following primary egress points are recognized:

- Interstate 5 – North towards Redding and south into Sacramento
- Interstate 80 – East into Sacramento and west toward Solano County and the San Francisco Bay Area
- Interstate 505 – South to the junction of E/WB Interstate 80
- State Route 16 – West from Woodland into the Capay Valley and then north into Colusa County.
- State Route 45 – North from Knights Landing into Colusa County
- State Route 84 – South from West Sacramento into Solano County with two crossing east into Sacramento County across the Sacramento River
- State Route 113/County Road 102 – North from Woodland into Sutter County and south from Davis
- State Route 128 – West from Winters into Napa County
- County Road 22 – East from Woodland into West Sacramento and then into Sacramento at two locations across the Sacramento River
- County Road 98 – South from Woodland into Solano County

In addition, the County collaborates with neighboring counties and the State to prepare for regional evacuation and movement of people during emergencies. This includes evaluation of en route support to emigrating traffic, designation of major highway traffic capacities, and implementation of traffic control protocols to ensure the rapid, unobstructed, safe, and efficient movement of vehicles engaged in regional evacuations.

Countywide emergency preparedness plans outline procedures that reduce death and injuries or damage to property and minimize the economic and social dislocation resulting from natural and human-made hazards. Emergency preparedness procedures must be FEMA-approved to be eligible for disaster recovery assistance and mitigation funding. In January 2006, Yolo County released a FEMA-approved, multi-jurisdictional local multi-hazard mitigation plan entitled the Yolo Operational Area Multi-Hazard Mitigation Plan (MHMP). The MHMP provides the framework for coordination with agencies and plans required for eligibility of Federal disaster assistance.



The MHMP is a living document that must be officially updated every five years in order for the County and each of its jurisdictions to be eligible for hazard mitigation assistance grant funding from FEMA. A first draft to update the plan was completed by the County and approved by FEMA in 2013. On November 6, 2018, the County approved an update to the Yolo County Operational Area Multi-Jurisdictional Hazard Mitigation Plan, following approval by FEMA in August of 2018.

According to this plan, hazard mitigation is any sustained action taken to eliminate or reduce long-term risk to human life, property, and the environment posed by a hazard. The purpose of the MHMP is to integrate hazard mitigation strategies into the activities and programs of the local jurisdictions and special districts, and to the extent practical, into the activities of private sector organizations.

The Federal Disaster Mitigation Act of 2000 (DMA 2000), Section 322 (a-d) requires that local governments, as a condition of receiving federal disaster mitigation funds, have a mitigation plan that describes the process for identifying hazards, risks and vulnerabilities, identify and prioritize mitigation actions, encourage the development of local mitigation and provide technical support for those efforts. Section 65302.6 of the California Government Code specifies the required elements of such a plan. The adopted MHMP provides the framework for coordination with agencies and plans required to meet eligibility for Federal disaster assistance, and satisfies the State requirements for content.

b. Regulatory Framework

GOAL HS-6	<u>Emergency Preparedness.</u> Provide timely and effective emergency response to reduce the potential loss of life and property.
------------------	--

- Policy HS-6.1 Respond to catastrophic emergencies by:
- Continuing and restoring critical services.
 - Maintaining order.
 - Supporting evacuations.
 - Distributing emergency supplies.
 - Ensuring search/rescue operations and medical care.
 - Saving lives and protecting property.
 - Repairing and restoring essential public infrastructure.
 - Mobilize the necessary resources to carry out emergency response efforts.
 - Coordinating operations with other jurisdictions.



- Disseminating emergency public information.
- Establishing emergency operation centers and maintaining communications.
- Notifying vulnerable populations (e.g., seniors, schoolchildren, disabled, non-English speaking households, etc.)

Policy HS-6.2 Provide continuous advance planning to anticipate potential threats and improve emergency response effectiveness.

Policy HS-6.3 Ensure the compatibility of permitted land use activities within the Delta Primary Zone with applicable emergency preparedness policies of the Land Use and Resource Management Plan of the Delta Protection Commission.

Policy HS-6.4 Encourage adequate infrastructure and resources to provide for local food security in emergencies and to restore food system integrity and operation after an emergency.

Policy HS-6.5 Work with the Yolo Emergency Communications Agency to seek funding for emergency communications, evacuation planning and recovery planning.

c. Implementation Program

Action HS-A55 Develop a disaster response program to enhance the short-term and long-range recovery of affected areas, assist in the return to normal life for local residents, and expedite the reconstruction of homes, businesses, and public facilities. (Policy HS-6.1, Policy HS-6.2)
Responsibility: Office of Emergency Services
Timeframe: 2009/2010

Action HS-A56 Prepare and update emergency access/evacuation routes, including the removal of potential traffic impediments. (Policy HS-6.1, Policy HS-6.2)
Responsibility: Office of Emergency Services
Timeframe: 2009/2010

Action HS-A57 Implement the programs and procedures in the Yolo Operational Area Multi-Hazard Mitigation Plan. (Policy HS-6.1)
Responsibility: Office of Emergency Services
Timeframe: Ongoing

Action HS-A58 Conduct ongoing public outreach efforts regarding procedures and plans to be followed in the event of an emergency. (Policy HS-6.2)
Responsibility: Office of Emergency Services



Timeframe: Ongoing

Action HS-A59 Develop multiple stress scenarios on a regular basis where key evacuation routes are blocked and/or alternative communication methods are inoperable, and refine emergency response plans accordingly. (Policy HS-6.2)
Responsibility: Office of Emergency Services
Timeframe: Ongoing

Action HS-A60 Create an inventory of significant urban, rural, and natural hazards and provide standards for avoidance and/or mitigation of such hazards in an emergency. (Policy HS-6.2)
Responsibility: Office of Emergency Services
Timeframe: 2010/2011

Action HS-A61 Study the implications of climate change for future emergencies, including the increased risk and severity of fires; increased frequency and intensity of drought; expanded and deeper areas of flooding; and associated changes in disease vectors. 🌍 (Policy HS-6.2)
Responsibility: Office of Emergency Services
Timeframe: Ongoing

Action HS-A62 Ensure well-organized and efficient coordination between government, health, and community emergency response agencies. (Policy HS-6.2)
Responsibility: Office of Emergency Services
Timeframe: Ongoing

7. Climate Adaptation and Resiliency

a. Introduction

This section establishes goals, policies, and actions to address risks associated with climate change. The Safety and Environmental Justice White Paper prepared for the focused General Plan Amendment in 2022 to address climate adaptation provides background information related to climate change, including climate change risks and vulnerabilities anticipated for Yolo County. These climate change risks and vulnerabilities include increasing temperature and associated heat-related illness, reduced air quality, uncertain precipitation levels, an increase in extreme weather events, including flooding, reduced certainty regarding water supply, an increase in wildfires, and the potential for increased vector-borne diseases.

Methods to reducing the contribution of land use and development to greenhouse gas emissions discussed in the Conservation and Open Space Element.



b. Regulatory Framework

GOAL HS-7	<u>Climate Adaptation. Minimize risks to people, property, the economy, and the environment through climate adaptation strategies that enhance and promote community resilience.</u>
------------------	---

Policy HS-7.1 Address climate change scenarios, anticipated risks, and adaptive responses in all long-term planning activities, including hazard mitigation planning and infrastructure planning, and in development decisions to protect people, structures, and personal property from unreasonable exposure to projected climate change risks.

Policy HS-7.2 Ensure that climate impacts and climate adaptation measures aimed at reducing climate risks do not lead to disproportionately adverse effects on vulnerable populations.

Policy HS-7.3 Participate in local and regional climate adaptation planning efforts.

Policy HS-7.4 Ensure access to essential public facilities and essential public infrastructure, including evacuation routes, during disasters associated with climate change.

Policy HS-7.5 Support and prioritize adaptation through green infrastructure and natural measures (e.g., wetland/marsh/habitat restoration, greenspaces, fire resistant landscaping etc.) that build capacity to adapt to increased flooding and wildfire hazards and provide for carbon sequestration, where feasible.

Policy HS-7.6 Collaborate with utility providers to ensure that infrastructure and resource management plans account for anticipated effects of climate change, such as increased heat days, changes to flood hazard areas/inundation depths, and changes to precipitation and water supply.

c. Implementation Program

Action HS-A63 When updating master plans for infrastructure, including water supply, flood control and drainage, and critical facilities, review relevant climate change scenarios and ensure that the plans consider the potential effects of climate change and include measures that provide for resilience to climate impacts. Climate change resiliency shall include consideration of ensuring new and existing essential public facilities and essential public infrastructure, including evacuation routes, are located outside of areas anticipated to be vulnerable to risks associated with climate change, to the extent feasible, or are designed to withstand risks associated with climate change.
Responsibility: Department of Community Services



Timeframe: Ongoing

Action HS-A64 Upon the next revision to the Yolo Operational Area Multi-Hazard Mitigation Plan; identify and designate public buildings, specific private buildings, or institutions with air conditioning as public cooling shelters. Extend hours at air-conditioned sites during periods of extreme heat or power outage and ensure sites are also supported by backup battery storage or generators.

Responsibility: Office of Emergency Services

Timeframe: Ongoing

Action HS-A65 Update emergency response plans and training programs to address climate-related risks and strategies identified in the Hazard Mitigation Plan to ensure residents, infrastructure, and facilities are protected during emergencies and extreme weather events, and other climate related impacts.

Responsibility: Office of Emergency Services

Timeframe: Ongoing

Action HS-A66 Extend hours at air-conditioned spaces during periods of extreme heat or power outage and as feasible ensure sites are also supported by backup battery storage or generators.

Responsibility: County Administrator's Office

Timeframe: Ongoing

D. Noise

To control noise and to protect sensitive uses from excessive noise is a concern throughout Yolo County. Although the county's rural setting and predominantly agricultural character generally afford a quieter environment, there are a number of significant sources of environmental noise, including noise associated with various modes of transportation, and industrial and agricultural operations.

1. Background Information

This section describes some of the key concepts and terms utilized in noise analysis.

a. Understanding Noise

Noise can be defined as a sound or series of sounds that are intrusive, irritating, objectionable and/or disruptive to daily life. Noise varies widely in its scope, source, and volume. For instance, noise ranges from individual occurrences, such as a lawn mower, to the intermittent disturbances of train whistles, to the fairly constant noise generated by traffic on freeways. Noise is primarily a concern when generated in the vicinity of noise-sensitive uses such as residential subdivisions, schools and daycare centers, places of worship and hospitals.



The objectionable nature of sound could be caused by its pitch or its loudness. Pitch is the height or depth of a tone or sound, depending on the relative frequency of the vibrations by which it is produced. Higher pitched signals sound louder to humans than sounds with a lower pitch. Loudness depends on the intensity of sound waves and how your ear receives them.

In addition to the concepts of pitch and loudness, there are several noise measurement scales which are used to describe noise in a particular location. These are listed in Table HS-1. The most basic unit of measurement is the decibel (dB), which is a unit of measurement which indicates the relative amplitude of a sound. The zero on the decibel scale is based on the lowest sound level that the healthy, unimpaired human ear can detect. Sound levels in decibels are calculated on a logarithmic basis. An increase of 10 decibels represents a 10-fold increase in acoustic energy, while 20 decibels is 100 times more intense, 30 decibels is 1,000 times more intense, etc. There is a relationship between the subjective noisiness or loudness of a sound and its intensity. Each 10 decibel increase in sound level is perceived as approximately a doubling of loudness over a fairly wide range of intensities. Generally, the human ear cannot perceive a difference between two noises that are less than three decibels different from one another.

There are several methods of characterizing sound. In California, the *A-weighted sound level* or *dBA* is commonly used. Representative outdoor and indoor noise levels in units of dBA are shown in Table HS-2. Most commonly, environmental sounds are described in terms of an average level that has the same acoustical energy over an average period of one hour. This energy-equivalent sound/noise descriptor is called the Equivalent Continuous Noise Level, and is abbreviated L_{eq} .

Since the sensitivity to noise increases during the evening and at night—because excessive noise interferes with the ability to sleep—24-hour descriptors have been developed that incorporate artificial noise penalties added to quiet-time noise events. The *Community Noise Equivalent Level (CNEL)* is a measure of the cumulative noise exposure in a community, with a 5 dB penalty added to evening (7:00 pm to 10:00 pm) and a 10 dB addition to nocturnal (10:00 pm to 7:00 am) noise levels. The *Day/Night Average Sound Level (L_{dn})*, is essentially the same as CNEL, with the exception that the evening time period is grouped into the daytime period.

b. Sound Propagation

When sound propagates over a distance, it changes in level and frequency content. The manner in which noise reduces with distance depends on the following factors:

- **Geometric Spreading.** Geometric spreading is the effect of noise attenuation (reduction) based on whether a noise comes from a single localized source (a point source), or occurs over a distance, such as in the case of highway noise.



TABLE HS-1 DEFINITIONS OF ACOUSTICAL TERMS

Term	Definitions
Decibel, dB	A unit describing the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure, which is 20 micropascals (20 micronewtons per square meter).
Frequency, Hz	The number of complete pressure fluctuations per second above and below atmospheric pressure.
A-Weighted Sound Level, dBA	Sound pressure level in decibels as measured on a sound level meter using the A-weighting filter network, which de-emphasizes very low and very high frequency components of the sound in a manner similar to the frequency response of the human ear and correlates well with subjective reactions to noise. All sound levels in this report are A-weighted, unless reported otherwise.
L ₀₁ , L ₁₀ , L ₅₀ , L ₉₀	The A-weighted noise levels that are exceeded 1%, 10%, 50%, and 90% (respectively) of the time during the measurement period.
Equivalent Noise Level, L _{eq}	The average A-weighted noise level during the measurement period.
Community Noise Equivalent Level, CNEL	The Average A-weighted noise level during a 24-hour day, obtained after adding 5 decibels to measurements taken in the evening (7 to 10 pm) and 10 decibels to measurements taken between 10 pm and 7 am.
Day/Night Noise Level, L _{dn}	The average A-weighted noise level during a 24-hour day, obtained after addition of 10 decibels to levels measured in the night between 10:00 pm and 7:00 am.
L _{max} , L _{min}	The maximum and minimum A-weighted noise level during the measurement period.
Ambient Noise Level	The composite of noise from all sources near and far. The normal or existing level of environmental noise at a given location.
Intrusive	That noise which intrudes over and above the existing ambient noise at a given location. The relative intrusiveness of a sound depends upon its amplitude, duration, frequency, and time of occurrence and tonal or informational content as well as the prevailing ambient noise level.

Source: 2003 General Plan Guidelines, Governor's Office of Planning and Research.



TABLE HS-2 TYPICAL SOUND LEVELS MEASURED IN THE ENVIRONMENT

Noise Generators (At a Given Distance from Noise Source)	A-Weighted Sound Level in Decibel	Noise Environments	Subjective Impression
Near jet engine	140		
	130		Pain threshold
	120	Rock music concert	
Auto horn (10 feet)	100		Very loud
	90	Noisy urban street	
School cafeteria	80		Moderately loud
Freeway traffic	60		
	50	Department store	
	30	Quiet bedroom	Quiet
Whisper	20		
Rustle of leaves in wind	10		
	0		Threshold of hearing

Source: U.S. Department of Housing and Urban Development, Noise Guidebook, Washington D.C., page 1.

- **Ground Absorption.** Ground absorption occurs when the noise path is close to the ground, as it is in the case of highway noise, and the nature of the ground surface has a significant effect on the amount of noise reflected. In particular, hard surfaces and smooth water bodies reflect more noise than soft surfaces such as dirt, grass, or low vegetation.
- **Atmospheric Effects.** Atmospheric conditions can have a significant effect on noise propagation. Wind has been shown to be the most important meteorological factor within approximately 500 feet of the source, whereas vertical changes in air-temperature are more important for greater distances. Other factors, such as humidity and turbulence, also have significant effects.
- **Shielding.** Large objects or barriers in the path between a noise source and a receiver can substantially lower noise levels at the receiver. Natural features, such as hills or other terrain features, and man-made features, such as walls or berms, contribute to shielding. Although the amount of reduction varies depending on the size of the object and the frequency content of the noise source, a barrier that breaks the line of sight between a source and a receiver will typically result in a



decrease of at least 5 dBs, and a taller barrier may provide as much as a 20 dB decrease in noise.

c. State Regulations

California's noise insulation standards became effective in 1974. In 1988, the Building Standards Commission approved revisions to these standards (Title 24, Part 2, California Code of Regulations). The ruling states, "Interior noise levels attributable to exterior sources shall not exceed 45 dBA in any habitable room. The noise metric shall be measured in either CNEL or L_{dn} , consistent with the noise element of the local General Plan." Additionally, the commission specifies that residential buildings or structures proposed to be located within exterior L_{dn} contours of 60 dBA or greater, generated by an existing or planned freeway, expressway, parkway, major street, thoroughfare, rail line, rapid transit line or industrial noise source, shall require an acoustical analysis showing that the building has been designed to limit intruding noise to an interior L_{dn} of 45 dBA.

The State Office of Noise Control has developed guidelines showing the compatibility of a range of noise levels for various land use categories. The noise standards are intended to provide guidelines for the development of noise elements. These basic guidelines may be tailored to reflect the existing noise and land use characteristics of a particular community.

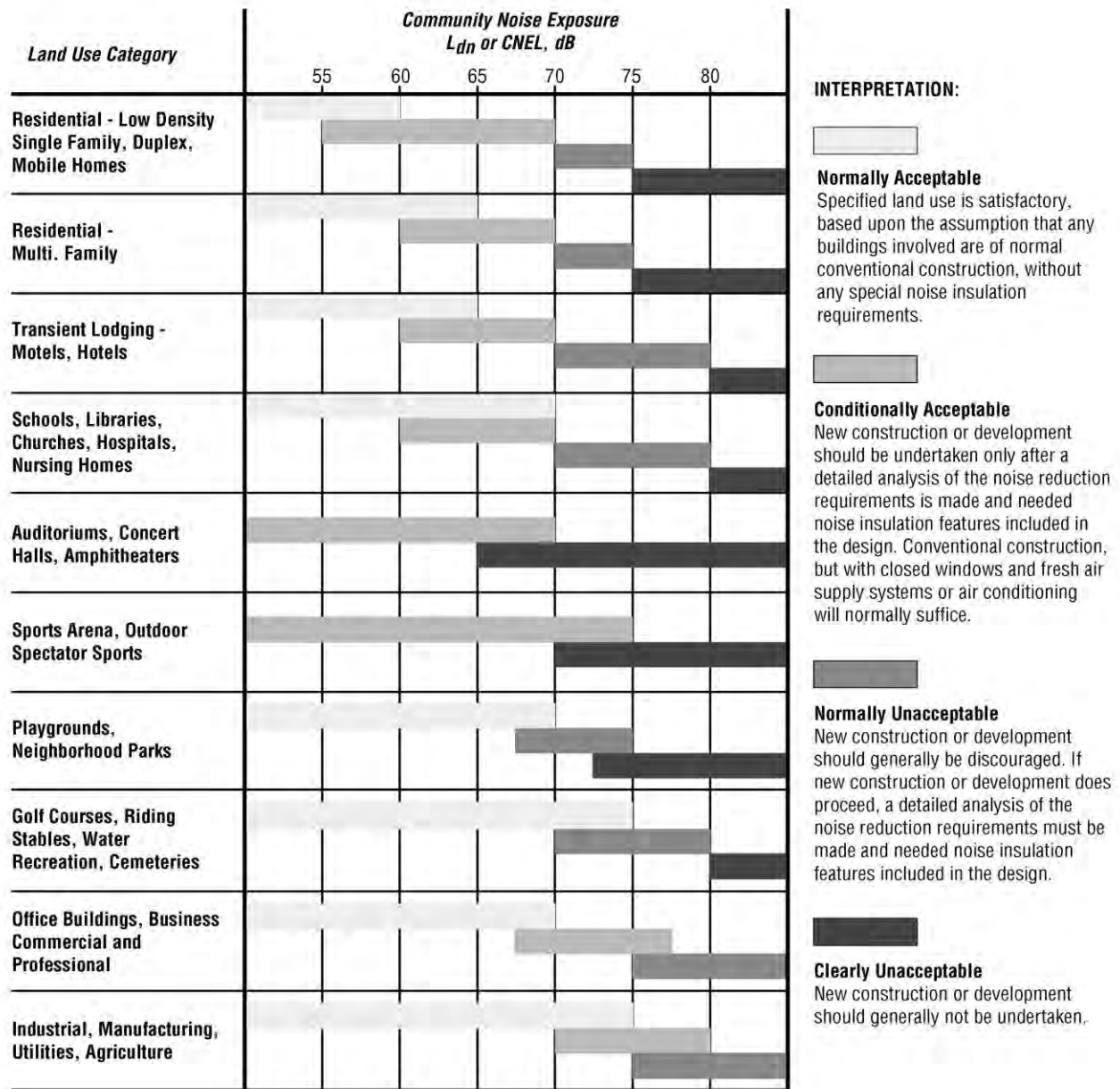
d. Exterior Noise Standards

The Noise Compatibility Guidelines in Figure HS-16 describes the exterior noise standards (excluding airport noise sources which are addressed later in this element) recommended by the State for new development projects according to land use. The guidelines define noise in terms of L_{dn} expressed in decibel units, with outdoor L_{dn} described by four primary categories: normally acceptable, conditionally acceptable, normally unacceptable, and clearly unacceptable. Where the chart shows overlapping L_{dn} ranges for two or more compatibility categories, local conditions should be considered in evaluating land use compatibility at specific locations.

The noise compatibility matrix is to be used as a guideline to achieve long-term noise compatibility for land uses in the unincorporated county. These guidelines assist in determining the compatibility of various land uses within a certain noise environment, and for the location of development and transportation system projects that may impact existing uses.



FIGURE HS-16 NOISE COMPATIBILITY GUIDELINES



Source: 2003 General Plan Guidelines, Governor's Office of Planning and Research.



The standards identified are consistent with the State Office of Noise Control Guidelines and California State Noise Insulation Standards.⁵

e. Interior Noise Standards

California's noise insulation standards were officially adopted by the California Commission of Housing and Community Development in 1974 and became effective in August 1974. They apply to the construction of new hotels, motels, apartment houses, and dwellings other than detached single-family, and are intended to limit the extent of noise transmitted into habitable space. In November 1988, the Building Standards Commission approved revisions to these standards (Title 24, Part 2, California Code of Regulations). The ruling states, "Interior noise levels attributable to exterior sources shall not exceed 45 dB in any habitable room. The noise metric shall be measured in either CNEL or L_{dn}, consistent with the noise element of the local General Plan."

Additionally, the commission specifies that residential buildings or structures (other than detached single-family dwellings) to be located within exterior L_{dn} contours of 60 dBA or greater of an existing or adopted freeway, expressway, parkway, major street, thoroughfare, rail line, rapid transit line or industrial noise source shall require an acoustical analysis showing that the building has been designed to limit intruding noise to an interior L_{dn} of 45 dB.

2. Existing Noise Environment

Before developing an effective noise program, it is important to understand the nature and extent of local noise problems, including the locations of major noise sources, sensitive uses which might be affected by noise, and current levels of noise exposure. This information can be used by the County to develop measures to avoid or mitigate noise exposure to the extent feasible.

Existing noise conditions in Yolo County were assessed as part of the General Plan update, in order to document existing noise sources, and, to the extent possible, quantify noise from these sources. The dominant sources of noise in Yolo County are mobile, related to automobile and truck traffic, aircraft and train transportation. Stationary sources in the county include farming activities, mining activities, commercial and industrial facilities, and construction sites.

3. Mobile Noise Sources

Mobile noise sources generally include those associated with various modes of transportation, including roadway traffic, trains, and aircraft operations.

⁵ These standards are found in the California Code of Regulations, Title 24 (known as the Building Standards Administrative Code), Part 2 (known as the California Building Code), Appendix Chapters 12 and 12A.



a. Roadway Traffic

The County has eight highways and a number of arterials and major streets. As required by State law, existing noise levels on these roadways have been assessed using traffic noise modeling based on existing traffic volumes and the FHWA Highway Traffic Noise Prediction Model (FHWA RD-77-108), the standard model recommended by the FHWA and Caltrans for traffic noise prediction.

Table HS-3 provides a summary of traffic noise modeling results for the freeways and highways in the County, based on existing traffic conditions, which consider allowed vehicle speeds, and average daily traffic volumes. As shown in the table, noise volumes are highest along the most heavily traveled roadways, particularly the State and Interstate highways.

- **Interstate 80.** Interstate 80, which traverses a portion of the county from Davis to the Sacramento County line, is the major source of roadway noise in Yolo County. Noise levels along Interstate 80 range from 73 to 75 dBA L_{dn} at 100 feet from the road centerline.
- **Interstate 5.** Interstate 5 travels through eastern Yolo County. Noise levels along Interstate 5 at 100 feet from the road centerline of Interstate 5 range from 65 to 70 dBA L_{dn} , with the highest noise levels along roadway segments closest to the Sacramento County line.
- **Interstate 505.** Interstate 505 is also a major source of roadway noise. Noise levels at 100 feet from the roadway centerline range between 61 and 64 dBA L_{dn} . The segment near Winters experiences the highest volumes of traffic and levels of roadway noise along Interstate 505.
- **Highway 113.** Highway 113 provides a key north-south connection from Davis to Woodland, and north to Knights Landing. Along its most heavily traveled southern portions, noise levels at 100 feet from the roadway centerline are 54 to 70 dBA L_{dn} , with the noisiest segments found close to the Solano County line.
- **Highway 16.** Highway 16 provides the major connection from Interstate 5 through Woodland, and northwest through the Capay Valley. Noise levels at 100 feet from the roadway centerline range from 63 to 65 dBA L_{dn} . The highest noise levels along the roadway are generally found on segments west of Interstate 505.
- **Highway 128.** Highway 128 connects from the Napa County line west through Winters to Interstate 505. Noise levels at 100 feet from the roadway centerline vary from 62 to 63 dBA L_{dn} , with highest volumes found to the immediate east of the Interstate 505 interchange.
- **Highway 84.** Highway 84 connects West Sacramento to the Clarksburg Area. The more southerly portions of the highway see much lower traffic volumes than in West Sacramento and noise levels are correspondingly lower, at an estimated 57 dBA L_{dn} at 100 feet from the roadway centerline.
- **Highway 45.** Highway 45 branches off from Highway 113 in Knights Landing and parallels Highway 5 in northern Yolo County. The southern section of this highway between Country Road 108 and Country Road 98A experiences traffic noise levels at 100 feet from the centerline of up to 54 dBA L_{dn} .



Table HS-3 Existing Highway Traffic Noise Levels

Roadway Segment	ADT ^a	Center-line to 70 L _{dn} ^b (feet)	Center-line to 65 L _{dn} (feet)	Center-line to 60 L _{dn} (feet)	L _{dn} (dBA) 100 feet from Centerline
Interstate 80					
State Route 50 to County Road 32A	55,400	189	402	864	75.2
Mace Boulevard to Solano County Line	44,200	164	347	743	74.2
Interstate 5					
Sacramento County Line to County Road 102	21,100	101	212	455	71.2
State Route 113 to County Road 13	12,200	72	148	316	68.8
County Road 13 to Interstate 505	7,700	< 50 ^c	110	233	66.8
Interstate 505 to Colusa County Line	10,400	66	134	284	68.1
Interstate 505					
State Route 128 to State Route 16	4,900	< 50	83	173	64.8
State Route 16 to County Road 14	3,000	< 50	62	126	62.7
State Route 113					
Solano County Line to Covell Blvd	22,700	105	223	477	71.5
Covell Boulevard to Gibson Road	15,300	83	172	367	69.8
Interstate 5 to County Road 17	3,200	< 50	65	131	63.0
County Road 17 to County Road 13	900	< 50	< 50	< 50	56.2
County Road 13 to Sutter County Line	1,500	< 50	< 50	59	58.5
State Route 16					
County Road 98 to County Road 94B	10,000	< 50	97	208	66.7
County Road 94B to Interstate 505	9,700	< 50	95	204	66.6
Interstate 505 to County Road 87	8,400	< 50	86	185	65.9
County Road 87 to County Road 78	6,700	< 50	74	160	65.0
State Route 128					
Interstate 505 to Winters	9,300	< 50	66	142	64.2
Winters to County Road 86	7,000	< 50	76	164	65.1
State Route 84					
Clarksburg Road to West Sacramento	1,600	< 50	< 50	62	58.7
West Sacramento to State Route 50	18,900	69	148	318	69.5
State Route 50 to Interstate 80	14,700	58	125	269	68.4
State Route 45					
State Route 113 to Country Road 98A	700	< 50	< 50	< 50	55.1

^a Average Daily Traffic.

^b The 24 hour A-weighted average sound level from midnight to midnight, obtained after the addition of 10 decibels to sound levels occurring in the night between 10:00 p.m. and 7:00 a.m.

^c Traffic noise levels within 50 feet of roadway centerline requires site specific analysis.

Source: LSA Associates, Inc., 2009.

In addition to these routes, a number of County roads are heavily traveled and generate relatively high noise levels along some or all of their length. Table HS-4 provides a summary of traffic noise modeling results for the County roads, based on existing traffic conditions, which consider allowed vehicle speeds, and average daily traffic volumes. As shown in the table, County roads with noise levels greater than 60 L_{dn} include County Road 98, which parallels Highway 113 to the west, between Davis and



Table HS-4 Existing County Roadway Traffic Noise Levels

Roadway Segment	ADT ^a	Center-line to 70 L _{dr} (feet)	Center-line to 65 L _{dr} (feet)	Center-line to 60 L _{dr} (feet)	L _{dn} (dBA) 100 feet from Centerline
County Road 85 - State Route 16 to County Road 14	400	< 50	< 50	< 50	48.6
County Road 85 - County Road 14 to County Road 8	100	< 50	< 50	< 50	42.6
County Road 87 - State Route 16 to County Road 19	200	< 50	< 50	< 50	45.6
County Road 89 - County Road 29A to County Road 27	1,100	< 50	< 50	< 50	53.0
County Road 89 - County Road 27 to County Road 24A	1,300	< 50	< 50	< 50	53.8
County Road 89 - County Road 24A to State Route 16	1,000	< 50	< 50	< 50	52.6
County Road 94B - State Route 16 to County Road 19	600	< 50	< 50	< 50	50.4
County Road 98 - Solano County to County Road 31	2,400	< 50	< 50	58	56.4
County Road 98 - County Road 31 to County Road 29	3,300	< 50	< 50	71	57.8
County Road 98 - County Road 29 to County Road 27	4,000	< 50	< 50	81	58.6
County Road 98 - County Road 27 to County Road 24	5,200	< 50	< 50	97	59.8
County Road 98 - County Road 24 to State Route 16	7,800	< 50	59	126	61.5
County Road 98 - Main Street to Interstate 5	4,600	< 50	< 50	89	59.2
County Road 99 - County Road 31 to County Road 27	1,800	< 50	< 50	< 50	55.2
County Road 99 - County Road 27 to Gibson Road	3,100	< 50	< 50	68	57.5
County Road 101A - West Covell Blvd to County Road 29	2,400	< 50	< 50	58	56.4
County Road 102 - East Covell lvd to County Road 29	6,500	< 50	52	112	60.7
County Road 102 - County Road 29 to County Road 27	5,600	< 50	< 50	101	60.1
County Road 102 - County Road 27 to Gibson Road	4,900	< 50	< 50	93	59.5
County Road 102 - Gibson Road to Interstate 5	11,900	< 50	78	167	63.4
County Road 102 - Interstate 5 to County Road 17	4,900	< 50	< 50	93	59.5
County Road 102 - County Road 17 to County Road 113	6,100	< 50	< 50	107	60.5
County Road 105 - County Road 32A to County Road 28H	600	< 50	< 50	< 50	50.4
Old River Road - County Road 127 to County Road 118	3,900	< 50	< 50	80	58.5
Russell Boulevard - Interstate 505 to County Road 31	4,400	< 50	< 50	86	59.0
County Road 31 - County Road 93A to County Road 95	3,900	< 50	< 50	80	58.5
County Road 31 - County Road 95 to County Road 98	4,900	< 50	< 50	93	59.5
County Road 29A - Interstate 505 to County Road 95	300	< 50	< 50	< 50	47.4
County Road 29 - County Road 95 to County Road 98	600	< 50	< 50	< 50	50.4
County Road 29 - State Route 113 to County Road 102	4,000	< 50	< 50	81	58.6
County Road 28H - County Road 102 to County Road 105	700	< 50	< 50	< 50	51.1
County Road 27 - Interstate 505 to County Road 95	900	< 50	< 50	< 50	52.2
County Road 27 - County Road 95 to County Road 98	1,100	< 50	< 50	< 50	53.0
County Road 27 - County Road 98 to State Route 113	1,700	< 50	< 50	< 50	54.9
County Road 24 - County Road 90 to County Road 95	800	< 50	< 50	< 50	51.6
County Road 24 - County Road 95 to County Road 98	2,100	< 50	< 50	53	55.8
County Road 23 - County Road 85B to County Road 89	1,100	< 50	< 50	< 50	53.0
County Road 19 - County Road 87 to Interstate 505	700	< 50	< 50	< 50	51.1
County Road 19 - Interstate 505 to County Road 94B	600	< 50	< 50	< 50	50.4
County Road 16A - Interstate 5 to State Route 113	300	< 50	< 50	< 50	47.4
County Road 17 - State Route 113 to County Road 102	1,100	< 50	< 50	< 50	53.0
County Road 14 - County Road 85 to Interstate 505	400	< 50	< 50	< 50	48.6
County Road 14 - Interstate 505 to Interstate 5	900	< 50	< 50	< 50	52.2
County Road 13 - Interstate 5 to State Route 113	1,100	< 50	< 50	< 50	53.0
County Road 12A - County Road 85 to Interstate 505	100	< 50	< 50	< 50	42.6
County Road 12A - Interstate 505 to County Road 99W	100	< 50	< 50	< 50	42.6

^a Average Daily Traffic.

^b Traffic noise levels within 50 feet of roadway centerline requires site specific analysis.

Source: LSA Associates, Inc., 2009.



Woodland, and County Road 102, which parallels Highway 113 to the east, connecting Davis and Knights Landing. Based on existing traffic volumes, all other roadway segments within Yolo County that are shown in the Circulation Element of this General Plan have existing traffic noise levels well below 60 dBA L_{dn} at 100 feet from the roadway centerline.

b. Aircraft

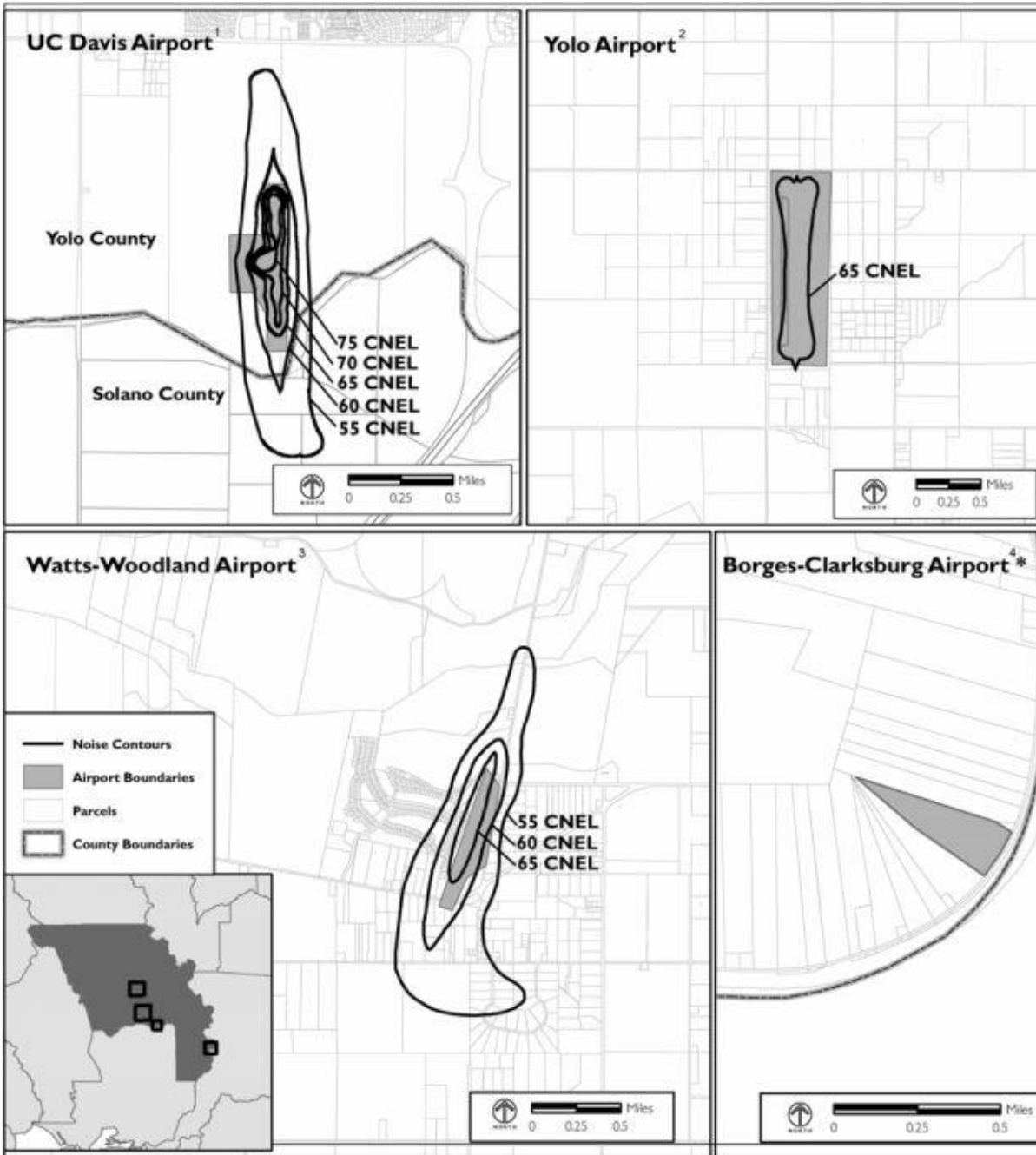
Aircraft operations in the vicinity of airports can be a significant source of noise. There are four airports located within the county, as shown in Figures HS-[178](#) and HS-[189](#). In addition, Sacramento International Airport is situated outside of Yolo County, but generates noise that affects county lands.

- Yolo County Airport is owned by Yolo County and serves Davis, Woodland, Winters and the wider county area. The facility is located about 6 miles from Davis, Woodland and Winters. Noise contours for the Yolo County Airport are depicted in Figure HS-[178](#).
- Watts-Woodland Airport is a privately owned aviation facility located west of Woodland. Noise contours for the Watts-Woodland Airport are depicted in Figure HS-[178](#).
- University Airport is owned by the University of California and serves Davis and Yolo County. The facility is located about two miles south of the City of Davis. Noise contours for the University Airport are depicted in Figure HS-[178](#).
- Borges-Clarksburg Airport is a privately owned airport just north of Clarksburg. According to airport staff, airplane activity is variable, but typically very minimal, averaging one aircraft operation a day. This airport has no affect on County property, as the 65 CNEL line lies within the privately owned property. A map of the Borges-Clarksburg Airport property is shown in Figure HS-[178](#).
- Sacramento International Airport is a large, commercial airport located just west of the Yolo County line, providing hundreds of daily domestic and international departures. Although located in Sacramento County, noise from the operation of this airport does affect Yolo County. The approximate area of affect is illustrated in Figure HS-[189](#).

As indicated earlier in this element, the Sacramento Area Council of Governments has been designated the Airport Land Use Commission (ALUC) for the counties of Sacramento, Sutter, Yolo, and Yuba. SACOG has prepared a Comprehensive Land Use Plan (CLUP) for the Sacramento International Airport, Yolo County Airport, Watts-Woodland Airport, and Borges-Clarksburg Airport. The University Airport is required to have an Airport Layout Plan (ALP), which has been prepared by UCD. The purpose of these plans is to protect public health and safety by adopting land use standards that minimize exposure to safety hazards and excessive levels of noise, and to prevent the encroachment of incompatible land uses around airports per the Airport Land Use Commission Law.



FIGURE HS-17 LOCAL AIRPORT CURRENT NOISE CONTOURS



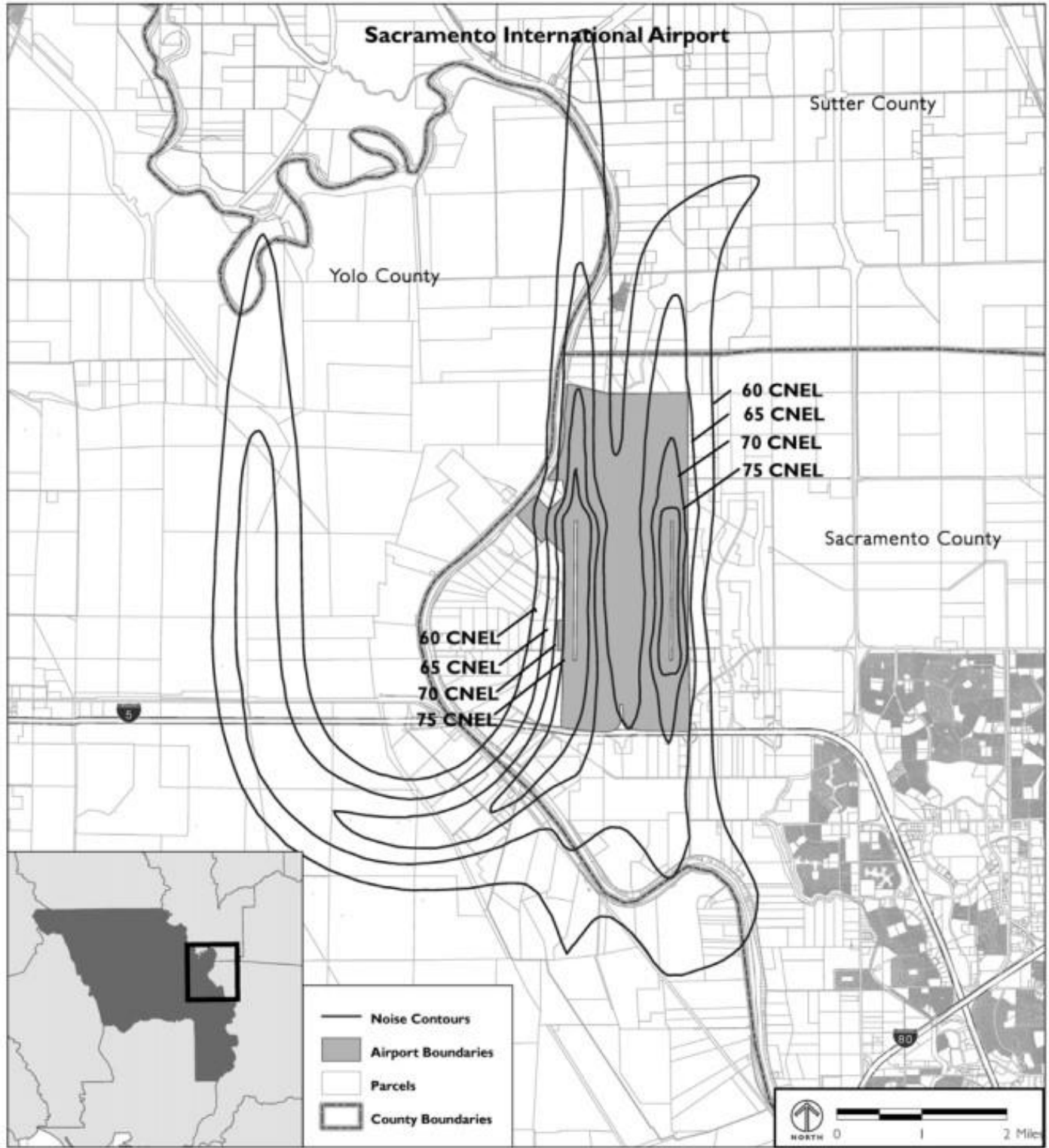
* No noise contours currently exist for the Borges-Clarksburg Airport

Sources:

- 1 UC Davis Long Range Development Plan 2003-2015 Final EIR, October 2003
- 2 Yolo County Airport Comprehensive Land Use Plan, November 1998
- 3 Watts-Woodland Airport Comprehensive Land Use Plan, September 2003
- 4 Borges-Clarksburg Airport Comprehensive Land Use Plan, April 1994



FIGURE HS-18 SACRAMENTO INTERNATIONAL AIRPORT CURRENT NOISE CONTOURS



Source: Sacramento Airport Comprehensive Land Use Plan, September 2003



c. Trains

Yolo County has three active rail lines, one of which, the Union Pacific Railroad line, carries both freight and passenger trains. The train noise contours were calculated following Federal Transportation Administration guidelines: *Transit Noise and Vibration Impact Assessment*, 2006 and are summarized in Table HS-5.

Table HS-5 Train Noise Contours

Railroad Line	Centerline to 65 dBA L _{dn} (feet)	Noise Level (dBA L _{dn}) 100 feet from center of rail line
Union Pacific	930	89
California Northern	11	45
Sacramento River Train	10	44

Source: LSA Associates, Inc., 2009.

- Union Pacific Railroad (UPRR).** The UPRR maintains a rail line that runs through Yolo County from West Sacramento to Davis. The rail line carries both freight trains and Amtrak passenger trains. According to Union Pacific personnel, 35 daily freight train passages typically occur on the line. Freight train lengths vary widely, from as few as four to as many as 120 rail cars and from two to eight locomotives, operating at an average speed of 70 miles per hour.

Amtrak passenger rail service also uses the UPRR rail line. An average of 21 daily eastbound trains and 21 daily westbound trains utilize the line. Each train typically uses four rail cars and one locomotive per train, traveling an average speed of 79 miles per hour.

Assuming the worst case of 35 daily freight trains, each with eight locomotives and 120 cars traveling at 70 miles per hour, and assuming the worst case of 42 daily passenger trains, each with one locomotive and four cars traveling at 79 miles per hour, the estimated combined railroad noise levels at 100 feet from the railroad centerline is approximately 89 dBA L_{dn}. The estimated distance to the 65 L_{dn} contour is 930 feet for this worst case condition for freight and passenger train operations on this rail line.

- California Northern Railroad Company.** The California Northern rail line is a freight line that runs through Davis and Woodland, and along Interstate 5 past Dunnigan. The freight line schedule varies depending on seasonal demands. The rail line carries an average of two trains daily, using between one and 50 rail cars and one or two locomotives, traveling at an average speed of 15 mile per hour. The estimated railroad noise level at 100 feet from the railroad centerline is approximately 45 dBA L_{dn}. The estimated distance to the 65L_{dn} contour is 11 feet from the rail line.
- Sacramento River Train.** The Sacramento River Train is operated by the Sierra Northern Railroad Company that runs freight and an entertainment passenger train from Woodland to West Sacramento. According to Sierra Northern Railroad personnel, typically one round trip runs per day. The trains typically have between two and 25 rail cars with one or two locomotives, traveling at an average speed



estimated at 15 miles per hour.⁶ Assuming the worst case of two daily train bypasses, each with 25 cars and two locomotive traveling at 15 miles per hour, the estimated railroad noise levels at 100 feet from the railroad centerline is approximately 44 dBA L_{dn} . The estimated distance to the 65 L_{dn} contour is 10 feet from the rail line.

4. Stationary Noise Sources

Stationary noise sources generally include those associated with stationary (non-mobile) operations such as farming, mining, industry and food processing, and construction.

a. Farming Activities

The primary sources of noise related to farming activity in Yolo County are nighttime diesel pump operations, nighttime harvesting, crop-dusting aircraft, and bird deflection devices. Typical noise levels from tractors as measured at a distance of 50 feet range from about 78 dBA to 106 dBA L_{max} , with an average of about 84 dBA L_{max} . These noise levels are considered to be reasonably representative of noise levels from other wheeled and tracked farm equipment.⁷

b. Mining Activities

Mining activities in Yolo County mostly comprise sand and gravel extraction operations, and are limited to locations along the Cache Creek corridor that are generally isolated from residential subdivisions and other sensitive land uses.

Primary noise sources associated with mining activities include heavy equipment operations for material extraction, processing activities and material trucking. Table HS-6 provides a summary of typical noise level produced by common mining operations, although the actual noise generated from mining activities will vary based on the type and intensity of the operations.

The Off Channel Mining Plan (OCMP) establishes the following noise standards:

- 80 dBA- L_{eq} at property boundaries (6:00 a.m. to 6:00 p.m.)
- 60 dBA- L_{eq} at off-site residences or noise-sensitive uses (6:00 a.m. to 6:00 p.m.)
- 65 dBA- L_{eq} at property boundaries (6:00 p.m. to 6:00 a.m.)

Five mining locations in the County were monitored for noise. The locations and the results are shown in Tables HS-7 and HS-8. All five locations were monitored during their daytime operations, primarily within or near to the property boundaries. Each operation was found to be within the 80 dBA- L_{eq} standard set out by the OCMP.

⁶ David Magaw, President, Sierra Northern Railway. Personal Communication with Jones and Stokes, October 12, 2004.

⁷ Bolt, Beranek & Newman, 1987. *Noise Control for Buildings and Manufacturing Plants*.



TABLE HS-6 NOISE PRODUCED BY TYPICAL MINING OPERATIONS AT 500 FEET

Activity	Range of Maximum Sound Levels (dBA at 50 feet)	Suggested Maximum Sound Levels for Analysis (dBA at 50 feet)	L50
Loading and Batching	80 to 85	83	58
Rock Plant Operations	87 to 103	98	67
Excavator/Haul Truck	83 to 94	88	50
Scrapers	83 to 91	87	60

Source: Bolt, Beranek & Newman, 1987. *Noise Control for Buildings and Manufacturing Plants*.

c. Other Commercial/Industrial Facilities and Plants

Food processing, winery, olive oil processing, and other commercial/industrial facilities are also a source of noise in the County. Mechanical equipment and trucking are the primary sources of noise associated with these facilities. Associated trucking trips on County roads are accounted for in the traffic noise analysis.

Seven facilities of this type were monitored for noise during their daytime operations. The locations and the results are shown in Tables HS-7 and HS-8.

d. Construction

Two types of short-term noise are emitted during construction. First, construction crew commutes and the transport of construction equipment and materials to construction sites would incrementally increase noise levels on access roads leading to the sites. Although there would be a relatively high single event noise exposure potential causing intermittent noise nuisance (passing trucks at 50 feet would generate up to a maximum of 86 dBA L_{max}), the effect on longer term (hourly or daily) ambient noise levels would be minimal. Second, noise would be generated during excavation, grading, and erection of buildings. Construction typically occurs in discrete steps, each of which has a distinctive mix of equipment and, consequently, distinctive noise characteristics. These various sequential phases would change the character of the noise generated on each site and, therefore, the noise levels surrounding these sites as construction progresses. Despite the variety in the type and size of construction equipment, similarities in the dominant noise sources and patterns of operation allow construction related noise ranges to be categorized by work phase. Table HS-9 lists typical construction equipment noise levels recommended for noise impact assessments, based on a distance of 50 feet between the equipment and a noise receptor.



TABLE HS-7 **SHORT-TERM AMBIENT NOISE MONITORING LOCATIONS AND PRIMARY NOISE SOURCES**

Site Number	Facility	Monitoring Location	Primary Noise Sources
1	RH Phillips - (winery) 26800-44 County Road 12A	18 ft east of parking lot entrance, 22 ft west of steam boilers	Compressor, steam boilers
2	Granite - Esparto (sand and gravel mine), 15560 County Road 87	142 ft southeast of rock plant	Rock plant operations, bull dozer
3	Teichert - Esparto (sand and gravel mine), 27940-44 County Road 19A	39 ft south of end of parking lot, 54 ft northeast of machinery	Gravel equipment/ machinery
4	Cemex - Madison (sand and gravel mine), 30288 State Route 16	36 ft southwest of asphalt loading ramp, 98 ft south of asphalt plant	Asphalt plant (rock plant not in operation)
5	Syar - Madison (sand and gravel mine) – 16560 County Road 89	65 ft southeast of sand plan, 92 ft south of gravel plant	Sand plant, soft gravel plant, occasional trucks/loaders/scrapers
6	Mariani – Winters (ag-ricultural processing), 30455 County Road 31	82 ft southwest of transporting tunnel, 96 ft southeast of warehouse & cylinder processors	Processing at warehouse & materials moving through tunnels
7	Teichert - Woodland (sand and gravel mine), 35460-68 County Road 20	62 ft southwest of rock plant, 122 ft south of sand plant	Rock & sand plant operations
8	Pirmi - Woodland (rice mill), 854 Kentucky Avenue	27 ft south of Tank 51, 42 ft east of Tank 8, 82 ft southeast of Pit 4	Operations in Pit 4, processing
9	Syar - Woodland (batch plant), 39820 Kentucky Avenue	96 ft west of fuel tanks, 46 ft northwest of batch plant	Batch plant operations, on-site trucks
10	Medland Field Airport - Davis (crop duster private airport), 41155-71 County Road 27	48 ft north of driveway, 4 ft east of end of runway	Maintenance operations in hangar, on-site trucks
11	County Landfill - Davis (solid waste disposal), 44082-90 County Road 28H	144 ft north of landfill	Equipment operating in landfill, trucks
12	Clark Pacific ^a - Woodland (concrete plant), 40600 County Road 18C	100 ft from batch plant	Batch plant operation, concrete transfer trucks, vibrators, forklifts, grinders

^a This noise monitoring data taken from *Initial Study/Mitigated Negative Declaration Zone File #2007-078, Clark Precast, LLC's "Sugarland" Project*. February 22, 2008.
 Source: LSA Associates, Inc., 2008.



TABLE HS-8 SHORT-TERM AMBIENT NOISE MONITORING RESULTS^a

Site Number	Date	Start Time	dBA L _{eq}	dBA L _{max}	dBA L _{min}
1	8/19/08	9:00 a.m.	66.3	82.7	62.4
2	8/19/08	9:55 a.m.	59.5	76.5	53.0
3	8/19/08	10:55 a.m.	71.2	77.1	68.3
4	8/19/08	12:05 p.m.	78.3	89.9	67.0
5	8/19/08	12:55 p.m.	74.0	85.7	54.0
6	8/19/08	1:45 p.m.	75.5	87.2	55.5
7	8/20/08	10:20 a.m.	76.6	79.3	73.7
8	8/20/08	11:05 a.m.	82.0	86.7	74.4
9	8/20/08	11:40 a.m.	64.5	82.4	61.2
10	8/20/08	12:55 p.m.	56.2	72.8	36.2
11	8/20/08	1:28 p.m.	75.2	91.2	64.1
12	11/15/07	24 hr	75 L _{dn} ^b	ND ^c	ND ^c

^a This noise monitoring data taken from *Initial Study/Mitigated Negative Declaration Zone File #2007-078, Clark Precast, LLC's "Sugarland" Project*. February 22, 2008.

^b L_{dn} is the 24-hour A-weighted average sound level, obtained after the addition of 10 decibels to sound levels occurring in the night between 10:00 p.m. and 7:00 a.m.

^c ND = No Data available.

Source: LSA Associates, Inc., 2008.



TABLE HS-9 TYPICAL CONSTRUCTION EQUIPMENT MAXIMUM NOISE LEVELS

Type of Equipment	Range of Maximum Sound Levels (dBA at 50 feet)	Suggested Maximum Sound Levels for Analysis (dBA at 50 feet)
Pile Drivers	81 to 96	93
Rock Drills	83 to 99	96
Jackhammers	75 to 85	82
Pneumatic Tools	78 to 88	85
Pumps	68 to 80	77
Scrapers	83 to 91	87
Haul Trucks	83 to 94	88
Electric Saws	66 to 72	70
Portable Generators	71 to 87	80
Rollers	75 to 82	80
Dozers	85 to 90	88
Tractors	77 to 82	80
Front-End Loaders	86 to 90	88
Hydraulic Backhoe	81 to 90	86
Hydraulic Excavators	81 to 90	86
Graders	79 to 89	85
Air Compressors	76 to 89	85
Trucks	81 to 87	85

Source: Bolt, Beranek & Newman, 1987. *Noise Control for Buildings and Manufacturing Plants.*

5. Future Noise Environment

a. Mobile Noise Sources

i. Roadway Traffic

The FHWA highway traffic noise prediction model (FHWA RD-77-108) was used to evaluate future traffic-related noise conditions on highways and major roadways throughout the County. The resultant noise levels were weighed and summed over a 24-hour period in order to determine the L_{dn} values. The future average daily traffic (ADT) volumes for roadway segments in the project vicinity were used in the traffic noise impact analysis with the modeled receiver located 100 feet from the roadway centerline. The projected noise levels for highway traffic in the horizon year of 2030 are summarized in Table HS-10 and for major roadways are summarized in Table HS-11.



Table HS-10 FUTURE HIGHWAY TRAFFIC NOISE LEVELS*

Roadway Segment	ADT	Center-line to 70 L _{dn} (feet)	Center-line to 65 L _{dn} (feet)	Center-line to 60 L _{dn} (feet)	L _{dn} (dBA) 100 feet from Centerline	Increase in L _{dn} (dBA) over Cumulative No Project
Interstate 80						
State Route 50 to County Road 32A	127,000	325	698	1,501	78.8	0.1
Mace Boulevard to Solano County Line	102,300	282	604	1,299	77.8	0.0
Interstate 5						
Sacramento County Line to County Road 102	85,100	249	535	1,150	77.2	0.9
State Route 113 to County Road 13	59,600	197	422	907	75.7	1.1
County Road 13 to Interstate 505	45,600	165	353	759	74.5	2.4
Interstate 505 to Colusa County Line	71,500	222	476	1,024	76.5	3.2
Interstate 505						
State Route 128 to State Route 16	28,000	121	256	549	72.4	1.7
State Route 16 to County Road 14	26,400	116	246	528	72.2	4.0
State Route 113						
Solano County Line to Covell Boulevard	51,700	179	384	825	75.1	0.3
Covell Boulevard to Gibson Road	49,800	175	374	805	74.9	0.5
Interstate 5 to County Road 17	15,800	84	175	375	69.9	1.0
County Road 17 to County Road 13	5,200	< 50	63	135	63.9	0.6
County Road 13 to Sutter County Line	9,400	< 50	93	200	66.4	1.2
State Route 16						
County Road 98 to County Road 94B	16,400	63	135	290	68.8	0.6
County Road 94B to Interstate 505	13,900	56	121	259	68.1	1.0
Interstate 505 to County Road 87	23,000	78	168	363	70.3	0.5
County Road 87 to County Road 78	20,000	71	154	330	69.7	0.2
State Route 128						
Interstate 505 to Winters	12,500	< 50	80	173	65.5	-0.4
Winters to County Road 86	9,300	< 50	92	198	66.4	-0.3
State Route 84						
Clarksburg Road to West Sacramento	4,500	< 50	57	122	63.2	0.2
West Sacramento to State Route 50	35,400	104	225	484	72.2	0.0
State Route 50 to Interstate 80	28,400	90	194	417	71.2	0.1
State Route 45						
State Route 113 to Country Road 98A	1,300	< 50	< 50	54	57.8	0.0

*Cumulative (2030) Highway Traffic Noise Levels With Build-Out of Draft General Plan
 Source: LSA Associates, Inc., March 2009.



Table HS-11 FUTURE COUNTY ROADWAY TRAFFIC NOISE LEVELS*

Roadway Segment	ADT	Center-line to 70 L _{dr} (feet)	Center-line to 65 L _{dr} (feet)	Center-line to 60 L _{dn} (feet)	L _{dn} (dBA) 100 feet from Centerline	Increase in L _{dn} (dBA) over Cumulative No Project
County Road 85 - State Route 16 to County Road 14	2,000	< 50	< 50	5	55.6	5.2
County Road 85 - County Road 14 to County Road 8	1,000	< 50	< 50	< 50	52.6	1.5
County Road 87 - State Route 16 to County Road 19	600	< 50	< 50	< 50	50.4	0.0
County Road 89 - County Road 29A to County Road 27	10,300	< 50	7	152	62.7	2.8
County Road 89 - County Road 27 to County Road 24A	14,300	< 50	88	189	64.2	4.3
County Road 89 - County Road 24A to State Route 16	16,300	< 50	96	206	64.7	8.9
County Road 94B - State Route 16 to County Road 19	1,200	< 50	< 50	< 50	53.4	1.8
County Road 98 - Solano County to County Road 31	4,700	< 50	< 50	90	59.3	-0.2
County Road 98 - County Road 31 to County Road 29	7,000	< 50	55	118	61.1	0.2
County Road 98 - County Road 29 to County Road 27	8,000	< 50	60	128	61.6	0.4
County Road 98 - County Road 27 to County Road 24	7,900	< 50	55	127	61.6	0.6
County Road 98 - County Road 24 to State Route 16	9,200	< 50	66	141	62.3	0.4
County Road 98 - Main Street to Interstate 5	9,300	< 50	66	142	62.3	1.8
County Road 99 - County Road 31 to County Road 27	2,100	< 50	< 50	5	55.8	0.2
County Road 99 - County Road 27 to Gibson Road	2,700	< 50	< 50	6	56.9	0.0
County Road 101A - West Covell Blvd to County Road 29	7,200	< 50	56	120	61.2	0.3
County Road 102 - East Covell Blvd to County Road 29	11,400	< 50	76	163	63.2	0.1
County Road 102 - County Road 29 to County Road 27	14,900	< 50	90	194	64.3	0.3
County Road 102 - County Road 27 to Gibson Road	18,000	< 50	102	220	65.2	0.1
County Road 102 - Gibson Road to Interstate 5	28,900	65	140	302	67.2	-0.1
County Road 102 - Interstate 5 to County Road 17	17,600	< 50	101	217	65.1	0.8
County Road 102 - County Road 17 to County Road 113	12,900	< 50	82	177	63.7	0.3
County Road 105 - County Road 32A to County Road 28H	4,900	< 50	< 50	9	59.5	2.1
Old River Road - County Road 127 to County Road 118	15,200	< 50	92	197	64.4	2.0
Russell Boulevard - Interstate 505 to County Road 31	6,700	< 50	53	114	60.9	-0.2
County Road 31 - County Road 93A to County Road 95	7,300	< 50	56	121	61.2	0.1
County Road 31 - County Road 95 to County Road 98	8,200	< 50	67	131	61.8	0.3
County Road 29A - Interstate 505 to County Road 95	700	< 50	< 50	< 50	51.1	0.0
County Road 29 - County Road 95 to County Road 98	2,600	< 50	< 50	6	56.8	2.1
County Road 29 - State Route 113 to County Road 102	5,700	< 50	< 50	103	60.2	1.0
County Road 28H - County Road 102 to County Road 105	4,900	< 50	< 50	9	59.5	2.1
County Road 27 - Interstate 505 to County Road 95	3,900	< 50	< 50	80	58.5	0.6
County Road 27 - County Road 95 to County Road 98	3,500	< 50	< 50	74	58.1	-0.3
County Road 27 - County Road 98 to State Route 113	7,300	< 50	56	121	61.2	0.4
County Road 24 - County Road 90 to County Road 95	6,700	< 50	53	114	60.9	6.8
County Road 24 - County Road 95 to County Road 98	7,500	< 50	57	123	61.4	2.1
County Road 23 - County Road 85B to County Road 89	4,400	< 50	< 50	86	59.0	1.1
County Road 19 - County Road 87 to Interstate 505	4,400	< 50	< 50	86	59.0	3.2
County Road 19 - Interstate 505 to County Road 94B	2,500	< 50	< 50	59	56.6	0.8
County Road 16A - Interstate 5 to State Route 113	2,200	< 50	< 50	53	56.0	3.0
County Road 17 - State Route 113 to County Road 102	1,200	< 50	< 50	< 50	53.4	0.0
County Road 14 - County Road 85 to Interstate 505	2,300	< 50	< 50	56	56.2	3.6
County Road 14 - Interstate 505 to Interstate 5	1,700	< 50	< 50	< 50	54.9	2.3
County Road 13 - Interstate 5 to State Route 113	2,400	< 50	< 50	58	56.4	-1.0
County Road 12A - County Road 85 to Interstate 505	200	< 50	< 50	< 50	45.6	0.0
County Road 12A - Interstate 505 to County Road 99W	200	< 50	< 50	< 50	45.6	0.0

*Cumulative (2030) County Roadway Traffic Noise Levels With Build-Out of Draft General Plan
Source: LSA Associates, Inc., March 2009.



- **Interstate 80.** Interstate 80, which traverses a portion of the county from Davis to the Sacramento County line, is projected to continue as the major source of roadway noise in Yolo County. Noise levels along Interstate 80 range from 74 to 75 dBA L_{dn} at 100 feet from the road centerline.
- **Interstate 5.** Interstate 5 travels through eastern Yolo County. Noise levels along Interstate 5 at 100 feet from the road centerline of Interstate 5 will range from 71 to 73 dBA L_{dn} , with the highest noise levels along roadway segments closest to the Sacramento County line.
- **Interstate 505.** Interstate 505 will continue to be a major source of roadway noise. Noise levels at 100 feet from the roadway centerline will range between 68 and 69 dBA L_{dn} . The segment near Winters experiences the highest volumes of traffic and levels of roadway noise along Interstate 505.
- **Highway 113.** Highway 113 provides a key north-south connection from Davis to Woodland, and north to Knights Landing. Its heavily traveled southern portions are expected to continue to be the greatest source of noise, with noise levels at 100 feet from the roadway centerline are 61 to 71 dBA L_{dn} . The noisiest segments will found close to the Solano County line.
- **Highway 16.** Highway 16 provides the major connection from Interstate 5 through Woodland, and northwest through the Capay Valley. Noise levels at 100 feet from the roadway centerline will range from 66 to 70 dBA L_{dn} . The highest noise levels will continue to be generally found on segments west of Interstate 505.
- **Highway 128.** Highway 128 connects from the Napa County line west through Winters to Interstate 505. Noise levels at 100 feet from the roadway centerline vary from 62 to 63 dBA L_{dn} , with highest volumes found to the immediate east of the Interstate 505 interchange.
- **Highway 84.** Highway 84 connects West Sacramento to the Clarksburg Area. The more southerly portions of the highway will continue to see much lower traffic volumes than in West Sacramento with correspondingly lower noise levels, at an estimated 60 dBA L_{dn} at 100 feet from the roadway centerline.
- **Highway 45.** Highway 45 branches off from Highway 113 in Knights Landing and parallels Highway 5 in northern Yolo County. The southern section of this highway between Country Road 108 and Country Road 98A will continue to experience low traffic noise levels at 100 feet from the centerline of up to 60 dBA L_{dn} .

In addition to these routes, a number of County roads will continue to be heavily traveled and generate relatively high noise levels along some or all of their length. Table HS-11 provides a summary of traffic noise modeling results for the County roads, based on projected traffic conditions, which consider allowed vehicle speeds, and average daily traffic volumes. As shown in the table, County roads with noise levels greater than 60 L_{dn} are expected to include County Roads 98, 101A, 102, 105, 31, 27, 19, and 13, in addition to Old River Road and Russell Boulevard. However, all of these



roadways are expected to be below 65 L_{dn}. Based on projected traffic volumes, all other roadway segments within Yolo County that are shown in the Circulation Element of this General Plan are expected to have existing traffic noise levels below 60 dBA L_{dn} at 100 feet from the roadway centerline.

ii. Aircraft

The Sacramento International Airport is expected to grow its services through 2020, the Airport's current planning horizon. The Airport plans to physically expand into neighboring properties, increase flight frequency for both passenger and cargo aircraft, and provide additional airport related infrastructure. As shown in Figure HS-19, the CNEL 65 dB contour is projected to cover 3,382 acres in 2020, all of which lies within Sacramento County.

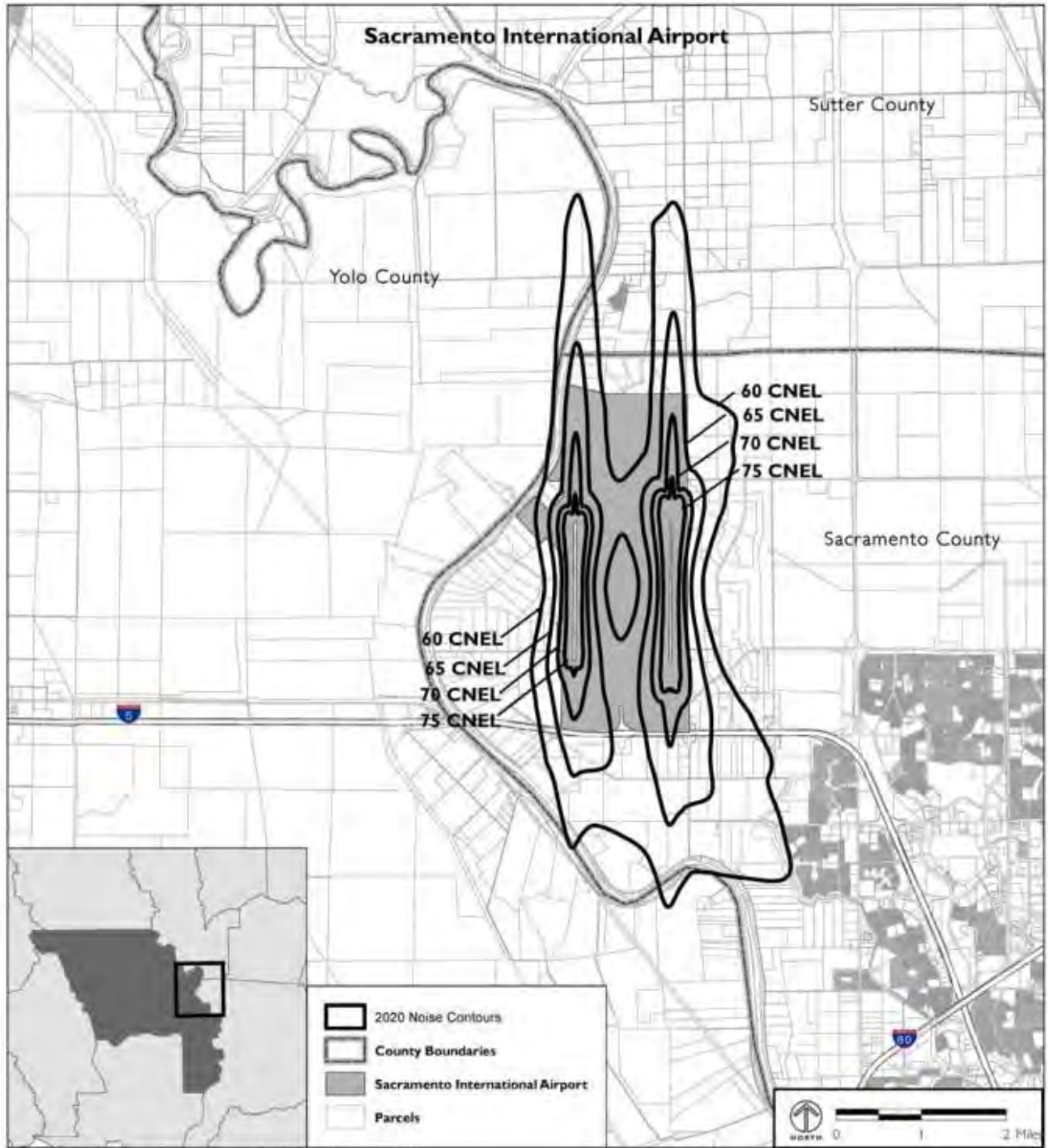
The Yolo County Airport is in its third and final stage of development, including expansion and improvements to the airport facility. The final phase of the project includes the development of a parallel connecting taxiway and holding apron, expected to be complete in 2015. It is expected that 145 airplanes will utilize the airport annually, operating some 101,000 incoming and outgoing flights each year. There are no incompatible uses located or planned within the CNEL 65 dB noise contours.⁸

As identified in the comprehensive land use plans for the Borges-Clarksburg Airport and the Watts-Woodland Airport, neither facility expects to add any substantial new facilities or increase airport traffic by a significant level. In addition, the University Airport has no planned expansions or increases of level of service.

⁸ Sacramento Area Council of Governments, Yolo County Airport Comprehensive Land Use Plan, October 1999, page 18.



FIGURE HS-19 SACRAMENTO INTERNATIONAL AIRPORT FUTURE NOISE CONTOURS





iii. Trains

There are no known plans for train traffic in Yolo County to increase during the time of this General Plan. However, in the event that train traffic does increase, noise associated with trains is unlikely to exceed that described in Section 3.c. of this element. The calculated existing conditions railroad noise levels evaluated a conservative scenario that assumed a “worst case” railroad operations scenario. The analysis assumed that the maximum estimated number of locomotives, rail cars, and train-passings per day for each of the railroad operators. Future railroad noise levels are not expected to increase over these calculated conservative existing conditions train-related noise levels.

b. Stationary Noise Sources

i. Mining Activities

The sand and gravel mining activities described in Section 8.b. of this element are expected to continue through 2027 under the existing off-channel mining permits approved for a 30-year period in 1997. Therefore, mining-related noise levels are not expected to increase over the levels discussed in Section 4.b. of this element. Prior to the completion of the 30-year period, the County is likely to consider the extension of off-channel mining into new aggregate reserves along Cache Creek. If the permits are extended, they will be subject to the goals, policies and actions of this element and to the noise regulations of the Off-Channel Mining Plan (OCMP).

ii. Farming Activities

Farming activities on agricultural land in Yolo County are strongly promoted in the General Plan and therefore expected to expand. Table LU-7 in the Land Use and Community Character Element estimates an increase of about 820 acres of stationery agricultural industrial and commercial uses e.g. grain operations, feed stores, wineries, etc) over the 320 acres of existing such uses operating within the County’s current base of about 600,000 acres of agriculturally designated land. There may also be resulting increases in intensity of agricultural activity and/or changes in crops or operations that may occur. This is not accounted for in Table LU-7. The sum total of this expected increase in all types of agricultural activity would have to result in an approximate doubling of existing noise sources for there to be a perceptible resulting increase in ambient noise levels above existing conditions. For example, twice the number of pieces of farming equipment operating at the same time on agricultural land would be necessary to produce a perceivable increase in ambient noise levels. This level of activity increase is not anticipated to occur.

c. Other

i. Commercial/Industrial Facilities and Plants

Commercial and industrial facilities, particularly related to processing of agricultural products, are expected to expand during the lifetime of this General Plan. They are likely to exceed the levels described in Section 4.c. of this element, but are unlikely to double on any particular site, making it unlikely that the expansion would result in a



perceivable increase in ambient noise levels. Expansion will be subject to the policies and actions in this element, which are designed to reduce conflicts between commercial and industrial uses and sensitive receptors.

ii. Construction

The amount of construction that will take place in Yolo County under this General Plan is likely to exceed the current amount of construction. However, the same types of construction noise described in Section 4.d. of this element is expected to occur with the construction that takes place in the future. New commercial, industrial and residential construction will be focused in Dunnigan, Esparto, Knights Landing, Madison, Elkhorn and around highway interchanges, with more limited development in Monument Hills, Yolo and Zamora. In each of these locations, construction noise will be within the limits described in Section 4.d. of this element and subject to the policies of this element.

6. Policy Framework

GOAL HS-7	<u>Noise Compatibility.</u> Protect people from the harmful effects of excessive noise.
------------------	--

Policy HS-7.1 Ensure that existing and planned land uses are compatible with the current and projected noise environment. However, urban development generally experiences greater ambient (background) noise than rural areas. Increased density, as supported by the County in this General Plan, generally results in even greater ambient noise levels. It is the County's intent to meet specified indoor noise thresholds, and to create peaceful backyard living spaces where possible, but particular ambient outdoor thresholds may not always be achievable. Where residential growth is allowed pursuant to this general plan, these greater noise levels are acknowledged and accepted, notwithstanding the guidelines in Figure HS-16.

Policy HS-7.2 Ensure the compatibility of permitted land use activities within the Primary Delta Zone with applicable noise policies of the Land Use and Resource Management Plan of the Delta Protection Commission.

Policy HS-7.3 Protect important agricultural, commercial, industrial, and transportation uses from encroachment by land uses sensitive to noise and air quality impacts.

Policy HS-7.4 For proposed new discretionary development, where it is not possible to reduce noise levels in outdoor activity areas to 60 dB CNEL or less using practical application of the best-available noise reduction measures, greater exterior noise levels may be allowed, provided that all available reasonable and feasible exterior noise level reduction measures have been implemented.



- Policy HS-7.5 Minimize the impact of noise from transportation sources including roads, rail lines, and airports on nearby sensitive land uses.
- Policy HS-7.6 Support improvements to at-grade crossings to eliminate the need for train whistle blasts in, near, or through communities.
- Policy HS-7.7 Encourage railroad companies to adopt operational strategies that reduce the potential for noise and interrupted traffic flow.
- Policy HS-7.8 Encourage local businesses to reduce vehicle and equipment noise through fleet and equipment modernization or retrofits, use of alternative fuel vehicles and installation of mufflers or other noise reducing equipment.

7. Implementation Program

Action HS-A61 Adopt a comprehensive Noise Ordinance that includes the following components:

- Standards for acceptable exterior and interior noise levels, their applicability and any specific exceptions to those standards.
- Guidelines and technical requirements for noise measurements and acoustical studies to determine conformance with provisions of the ordinance.
- Standards for construction equipment and noise-emitting construction activities.
- Regulations for the noise generated by events, including truck loading and unloading, operation of construction equipment, and amplified music.
- Standards to implement “quiet” pile driving technology (such as pre-drilling of piles, the use of auger cast piles, or similar technology) where feasible in consideration of geotechnical and structural requirements and conditions. (DEIR MM NOI-4) (Policy HS-7.1, Policy HS-7.4, Policy HS-7.5)

Responsibility: Department of Community Services

Timeframe: 2010/2011

Action HS-A62 Regulate the location and operation of land uses to avoid or mitigate harmful or nuisance levels of noise to the following sensitive receptors: residentially designated land uses; hospitals, nursing/convalescent homes, and similar board and care facilities; hotels and lodging; schools and day care centers; and neighborhood parks. Home occupation uses are excluded. (Policy HS-7.1, Policy HS-7.4)



Responsibility: Department of Community Services

Timeframe: Ongoing

Action HS-A63 Review proposed development projects for compatibility with surrounding and planned uses in accordance with the Noise Compatibility Guidelines and the County's Right to Farm Ordinance; however these guidelines shall not be applied to outdoor activity areas nor shall they be used to prohibit or preclude otherwise allowed density and intensity of development. (Policy HS-7, Policy HS-7.4)

Responsibility: Department of Community Services

Timeframe: Ongoing

Action HS-A64 Require the preparation of a noise analysis/acoustical study, including recommendations for attenuation, for all proposed projects which may result in potentially significant noise impacts to nearby sensitive land uses. (Policy HS-7.1, Policy HS-7.4)

Responsibility: Department of Community Services

Timeframe: Ongoing

Action HS-A65 Require a noise analysis/acoustical study, with recommendations for attenuation, for all proposed development within noise-impacted areas that may reasonably be expected to be exposed to levels that exceed the appropriate Noise Compatibility Guidelines standards. (Policy HS-7.1, Policy HS-7.4)

Responsibility: Department of Community Services

Timeframe: Ongoing

Action HS-A66 Require architectural design and site planning techniques to meet interior noise attenuation requirements in a manner that does not discourage allowed density or intensity, architectural quality, or pedestrian connectivity, such as:

- Locating noise-sensitive interior spaces, such as living rooms and bedrooms, furthest from noise sources.
- Orienting buildings to shield noise sensitive outdoor spaces from a noise source.
- Using noise insulating windows and building materials.
- Providing open space, berms or walls, or landscaped areas between occupied dwellings and noise generators.
- Locating dwellings as far as possible from noise generators.
- Requiring effective sound barriers for new residential developments adjacent to existing freeways and highways.



- Avoid sound wall to the greatest possible extent. Where used, sound walls shall be screened with vegetation, berms and similar methods of mitigation, and shall be screened with a landscape buffer. (Policy HS-7.1, Policy HS-7.4)

Responsibility: Department of Community Services

Timeframe: Ongoing

Action HS-A67 Limit land uses, consistent with adopted Comprehensive Land Use Plans (CLUP), within identified airport safety zones. (Policy HS-7.1)

Responsibility: Department of Community Services

Timeframe: Ongoing

Action HS-A68 Refer proposed development projects within areas requiring airport land use compatibility review to the Airport Land Use Commission. (Policy HS-7.1)

Responsibility: Department of Community Services

Timeframe: Ongoing

Action HS-A69 Designate appropriate zoning that avoids placing significant new noise sensitive land uses in proximity of existing or planned commercial and industrial uses. (Policy HS-7.1)

Responsibility: Department of Community Services

Timeframe: Ongoing

Action HS-A70 Minimize noise conflicts between current and proposed transportation networks by encouraging compatible land uses around critical segments with higher noise potential. (Policy HS-7.1)

Responsibility: Department of Community Services

Timeframe: Ongoing

Action HS-A71 Designate and maintain established truck routes where noise conflicts with land uses are least likely to occur. (Policy HS-7.1, Policy HS-7.5)

Responsibility: Department of Community Services

Timeframe: Ongoing

Action HS-A72 Identify locations and work with the California Department of Transportation to mitigate freeway noise that adversely affects unincorporated residential land uses. (Policy HS-7.5)

Responsibility: Department of Community Services

Timeframe: Ongoing

Action HS-A73 Minimize potential noise conflicts by establishing compatible land uses and larger setbacks adjoining truck routes and other critical transportation corridors that tend to generate greater levels of noise. (Policy HS-7.1, Policy HS-7.5)



Responsibility: Department of Community Services Timeframe:
Ongoing

Action HS-A74 Where feasible, utilize alternative road surfacing materials that minimize vehicle noise. (Policy HS-7.1, Policy HS-7.5)
Responsibility: Department of Community Services
Timeframe: Ongoing



Herbert Bauer Building

Source: Yolo County

E. Health Care

1. Background Information

The Yolo County Health Department provides detection and prevention of communicable diseases, public health laboratory services, emergency preparedness, health education, immunizations, and registration of births and deaths; it also supports and monitors special programs for families with children, senior citizens and other populations with special health needs and provides medical care to the medically indigent residents of Yolo County. In addition, the Yolo County Department of Alcohol, Drug and Mental Health Services provides such services through outpatient clinics and Regional Resource Centers in Woodland, West Sacramento, and Davis, school-based sites, and through a network of community agencies and independent providers.



The County has two main hospitals and multiple smaller medical clinics. The locations of medical facilities in Yolo County are shown in Figure PF-5. The two hospitals in Yolo County are:

- Woodland Memorial Hospital, run by Catholic Healthcare West
- Sutter Davis Hospital

These two hospitals are non-profit, provide emergency services and feature state-of-the-art medical technology.

Non-profit medical clinics in Yolo County include CommuniCare Health Centers, Esparto Family Practice, Winters Healthcare and the Cowell Student Health Center. CommuniCare Health Centers, Winters Healthcare and Esparto Family Practice offer affordable and culturally appropriate health care services for Yolo County residents who are low-income and uninsured or underinsured. Each city in Yolo County has one of these clinics. The CommuniCare Health Care Center in Knights Landing is closing due to state funding cuts. The Cowell Student Health Center, on the UC Davis Campus, provides basic services to University students. Multiple private clinics and health care providers, most associated with Woodland Healthcare, Sutter Davis Hospital, Kaiser or UC Davis Medical Center, offer outpatient care in each of the cities in Yolo County. Most of their subspecialty care is referred to higher level facilities in Sacramento.

Yolo County's residents are generally healthy, with lower incidence of disease and other health indicators in Yolo County in comparison with the State at large.⁹ However, this is variable by city, with Davis, which is a university city, having a much healthier and better insured population. A list of prominent health issues in Yolo County include:

- Mental health care access for children
- Dental care for low-income children
- Access to medical specialists for under or uninsured residents
- Drug and alcohol use
- Obesity
- Lack of transportation from rural areas
- Lack of affordable housing
- Lack of affordable childcare
- Lack of transportation as a health access issue
- Lack of organized after-school activities for teens
- Lack of affordable health care for farm families, agricultural workers, and undocumented workers.

This General Plan addresses transportation (in the Circulation Element), housing (in the Housing Element), childcare (in the Public Facilities and Services Element), and general community health and fitness (in this element and in the Land Use and Community Character Element).

⁹ California Department of Public Health, *2007 County Health Status Profiles*, Yolo County Data Sheet.



2. Policy Framework

GOAL HS-8	<u>Health Care.</u> Create a community environment that supports individual and social health.
------------------	---

- Policy HS-8.1 Require community design that provides opportunities for safe, healthy, and easily accessible community interaction.
- Policy HS-8.2 Support efforts to provide basic health care and mental health services in each community.
- Policy HS-8.3 Strive to ensure that reasonable access to adequate primary, preventative and specialty health, dental and mental care is available throughout Yolo County.
- Policy HS-8.4 Accommodate the health needs of special populations, including the elderly and disabled.
- Policy HS-8.5 Encourage supportive housing, residential board and care, group homes, and hospice care in all communities.
- Policy HS-8.6 Maintain a range of social services for families and individuals.
- Policy HS-8.7 Protect vulnerable populations including youth, the elderly, and disabled.
- Policy HS-8.8 Design communities to promote an active healthy lifestyle, personal fitness, and access to healthy foods.
- Policy HS-8.9 Encourage builders to incorporate universal building design techniques that enable seniors and persons with disabilities to remain in their homes.
- Policy HS-8.10 Support State and Federal efforts to provide health care for all populations.
- Policy HS-8.11 Ensure that the County is prepared for health emergencies or disasters which affect the health of the community.

3. Implementation Program

- Action HS-A75 Promote and support cross-cultural education and awareness of the importance of a regular healthcare provider and preventive health care. (Policy HS-8.2, Policy HS-8.7)



Responsibility: Health Department
Timeframe: Ongoing

Action HS-A76 Work with non-profit and other service providers to expand priority services identified in the upcoming Maternal, Child and Adolescent Health (MCAH) 5-Year Action Plan and other health-oriented community assessments. (Policy HS-8.2, Policy HS-8.3, Policy HS-8.7)

Responsibility: Health Department, Department of Alcohol, Drug and Mental Health Services Department
Timeframe: Ongoing

Action HS-A77 Coordinate with hospitals and local physicians to expand the availability of health care services within the County's unincorporated communities and services to all residents throughout the County, especially the medically indigent. (Policy HS-8.2, Policy HS-8.3) 🌐

Responsibility: Health Department
Timeframe: Ongoing

Action HS-A78 Allow for services and housing for special populations to be linked to ensure convenient access. (Policy HS-8.4) 🌐

Responsibility: Department of Employment and Social Services, Department of Alcohol, Drug and Mental Health Services Department, Health Department
Timeframe: Ongoing

Action HS-A79 Provide opportunities to expand in-home care, assisted living opportunities, and services for low-income seniors and disabled households. (Policy HS-8.4)

Responsibility: Department of Employment and Social Services
Timeframe: Ongoing

Action HS-A80 Expand support services for aging members of the population to meet the needs of the county's growing older population. (Policy HS-8.4)

Responsibility: Department of Employment and Social Services
Timeframe: Ongoing

Action HS-A81 Accommodate pedestrian, bicycle, and transit needs in public rights-of-way and streetscape design. (Policy HS-8.1, Policy HS-8.8) 🌐

Responsibility: Department of Community Services
Timeframe: Ongoing

Action HS-A82 Adopt infrastructure standards for residential neighborhoods and downtown commercial areas that are designed to decrease traffic



speeds and increase pedestrian and bicycle safety. (Policy HS-8.1, Policy HS-8.8) 🌐
Responsibility: Department of Community Services
Timeframe: Ongoing

Action HS-A83 Require that new development incorporates a diversity of housing types that address residents with different incomes, family sizes, ages, and accessibility needs. (Policy HS-8.9)
Responsibility: Department of Community Services
Timeframe: Ongoing

Action HS-A84 Emphasize pedestrian oriented neighborhoods with connected sidewalks and trails that provide convenient access to goods, services, and community resources. (Policy HS-8.1, Policy HS-8.8) 🌐
Responsibility: Department of Community Services
Timeframe: Ongoing

Action HS-A85 Promote community design that creates a compatible and integrated balance of residential density, green space, and job centers. (Policy HS-8.1) 🌐
Responsibility: Department of Community Services
Timeframe: Ongoing

Action HS-A86 Consider the health consequences of proposed project design, as a part of the development review process. (Policy HS-8.1, Policy HS-8.8) 🌐
Responsibility: Department of Community Services, Health Department
Timeframe: Ongoing

Action HS-A87 Ensure that zoning requirements accommodate and encourage opportunities for services to be established in each community to serve vulnerable populations. (Policy HS-8.4) 🌐
Responsibility: Department of Community Services
Timeframe: Ongoing

Action HS-A88 Work with local organizations to promote health education and recreational activities for youth. (Policy HS-8.2 through HS-8.4, Policy HS-8.6, Policy HS-8.7)
Responsibility: Health Department
Timeframe: Ongoing

Action HS-A89 Ensure that zoning requirements promote access to healthy foods by including neighborhood locations for markets, restaurants and other food sources. (Policy HS-8.1, Policy HS-8.8)



Responsibility: Department of Community Services, Health Department

Timeframe: 2009/2011 Action HS-A90 Encourage patterns of development that provide ready access to healthy foods through farmer's markets, community gardens, edible landscaping, etc. (Policy HS-8.1, Policy HS-8.8)

Responsibility: Department of Community Services, Health Department

Timeframe: Ongoing

Action HS-A91 Ensure training in public health competencies for all appropriate County staff to serve as public health disaster workers. (Policy HS-8.11)

Responsibility: Health Department

Timeframe: Ongoing

Action HS-A92 Ensure well-organized and efficient emergency coordination between health organizations, government, and community emergency response agencies. (Policy HS-8.11)

Responsibility: Health Department

Timeframe: Ongoing

Action HS-A93 Prepare for and coordinate expanding public health and medical services capacity in times of emergency and surge demands. (Policy HS-8.11)

Responsibility: Health Department

Timeframe: Ongoing

Action HS-A94 Encourage schools, hospitals, colleges, government agencies, businesses and private food outlets such as grocery stores and restaurants, to provide health care information, education, and services to the community. (Policy HS-8.2)

Responsibility: Health Department

Timeframe: Ongoing