COUNTY OF YOLO

Office of the County Administrator

Patrick S. Blacklock
County Administrator

YOLO COUNTY AIRPORT
Aviation Avenue & County Road 95
Davis, CA 95616
Off site office: 625 Court St., Rm. 202
Woodland, CA 95695
PH (530) 666-8114 X FX (530) 668-4029

October 3, 2011

The County welcomes comments from parties interested in Yolo County's proposed obstruction removal project, which is proposed to enhance safety near the Yolo County Airport.

The following Draft Environmental Assessment (EA) was prepared in accordance with the National Environmental Policy Act (NEPA), and Federal Aviation Administration (FAA) guidance for implementing NEPA. FAA is the Federal Lead Agency for the proposed project, and Yolo County is the Project Sponsor.

Public Review Period
The County has circulated the Draft EA for public review during a 33-day period that will extend from Monday, October 3, 2011 at 9 a.m. through Friday, November 4, 2011 at 5 p.m. Written, faxed, or emailed comments may be submitted to the County during this timeframe. All comments must be directed to:

Wes Ervin, Economic Development Manager
625 Court Street, Room 202
Woodland, CA 95695
Fax: (530)668-4029
E-mail: wes.ervin@yolocounty.org

All written, faxed, or emailed comments must be received by 5:00 p.m. on Friday, November 4.

Public Meeting
The County will also receive oral or written comments during its regular meeting of the Yolo County Aviation Advisory Committee on Thursday, November 3, 2011 at 6:00 p.m. The meeting will be held at:

Lillard Hall, West Plainfield Fire Department
24905 County Road 95
Davis, California

The Count appreciates your feedback and looks forward to hearing from you during the public review period for this important project.

Sincerely,

Wes Ervin

Wes Ervin
Economic Development Manager

Draft Environmental Assessment for Off-Site Obstruction Removal

Yolo County Airport
Davis, California

Report prepared by:

Mead & Hunt

www.meadhunt.com

October 2011

This environmental assessment becomes a Federal document when evaluated, signed, and dated by the Responsible FAA Official.

Responsible FAA Official

Date

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Yolo County Airport
ENVIRONMENTAL ASSESSMENT

1. INTRODUCTION

Yolo County Airport (DWA) is a publicly owned airport operated by the Yolo County Department of General Services. DWA occupies 495 acres in an unincorporated area of Yolo County in Northern California, more than 50 miles northeast of the San Francisco Bay. It is located approximately 5 miles west of the center of the City of Davis and approximately 20 miles west of the City of Sacramento as shown in **Figure 1-1**. As presented in **Figure 1-2**, the Airport is bound by County Road (CR) 29 to the north, Aviation Avenue to the south, and CR 95 on the west**.**

DWA is the primary General Aviation (GA) airport for Yolo County. The most recently approved aviation forecasts indicate that the County anticipates moderate growth in GA activity and increased business jet activity based on the presence of Davis Flight Support (DFS). Existing operations include government-related activity and executive business jet activity associated with the nearby state capital.

Yolo County proposes to remove approximately 150 trees that are or will soon become obstructions to aviation. The trees are all located on 14 properties adjacent to DWA. The County prepared this Draft Environmental Assessment (EA) pursuant to the National Environmental Policy Act (NEPA). The purpose of the EA is to identify the potential effects of obstruction removal on the natural and human environment. The obstructions were identified on the Airport's most recent Airport Layout Plan (ALP) update, and removal of the obstructions would bring DWA into compliance with Federal Aviation Regulation (FAR), Part 77, "*Objects Affecting Navigable Airspace*."

1.1 Existing Facility

DWA has one asphalt runway, Runway 16-34, which is 6,000 feet long and 100 feet wide (see **Figure 1-3**). The Runway 16 end is equipped with a Global Positioning System (GPS) instrument approach with visibility minimums as low as 1 statute mile. The runway 34 end is also equipped with a GPS instrument approach and a Very High Frequency Omnidirectional Range (VOR) navigation system instrument approach. Both instrument approaches for the Runway 34 end have visibility minimums of 1 statute mile. The runway is served by Taxiway A, a full-length taxiway that is parallel to the east side of the runway. The only exit taxiway exists at midfield.

Airport Reference Code Criteria		
Approach Category	Approach Speed Range	
B	≥ 91 knots	< 121 knots
C	≥ 121 knots	< 141 knots
Design Group	Wingspan Range	
I		< 49 feet
II	≥ 49 feet	< 79 feet

Aviation support facilities at DWA include aprons, transient parking areas, tie-down positions, hangars, and DFS, a fixed-base operator (FBO). Landside facilities include vehicle access and parking areas.

The existing Airport Reference Code (ARC) at DWA is B-II, and the Airport's existing layout satisfies safety standards for a B-II airport. Although the addition of DFS has increased the amount of aircraft activity by aircraft categorized as larger than B-II, the number of operations by aircraft classified as B-II or larger does not currently exceed 500 per year. An increasing trend in activity by aircraft larger than B-II is expected to continue at DWA.

1.2 Project Background

Yolo County last updated its ALP in 2009, during which time the obstruction chart was revised. The results of surveys performed to revise the obstruction chart indicated the presence of numerous obstructions pursuant to FAR Part 77, "*Objects Affecting Navigable Airspace*."

According to FAR Part 77, an obstruction to air navigation is defined as "an object of greater height than any of the heights or surfaces presented in 13 Code of Federal Regulations (CFR) Part 77." The surveys performed in support of the ALP update identified the presence of tall trees located on nearby, off-site properties and within the transitional surface and threshold siting surface at each end of the runway (see **Figures 1-2** and **1-3**). The County proposes to remove the tall trees and replace them with lower-growing species.

Source: Mead & Hunt, Inc. (April 2009)

Figure 1-1

Location Map

Yolo County Airport Obstruction Removal Project

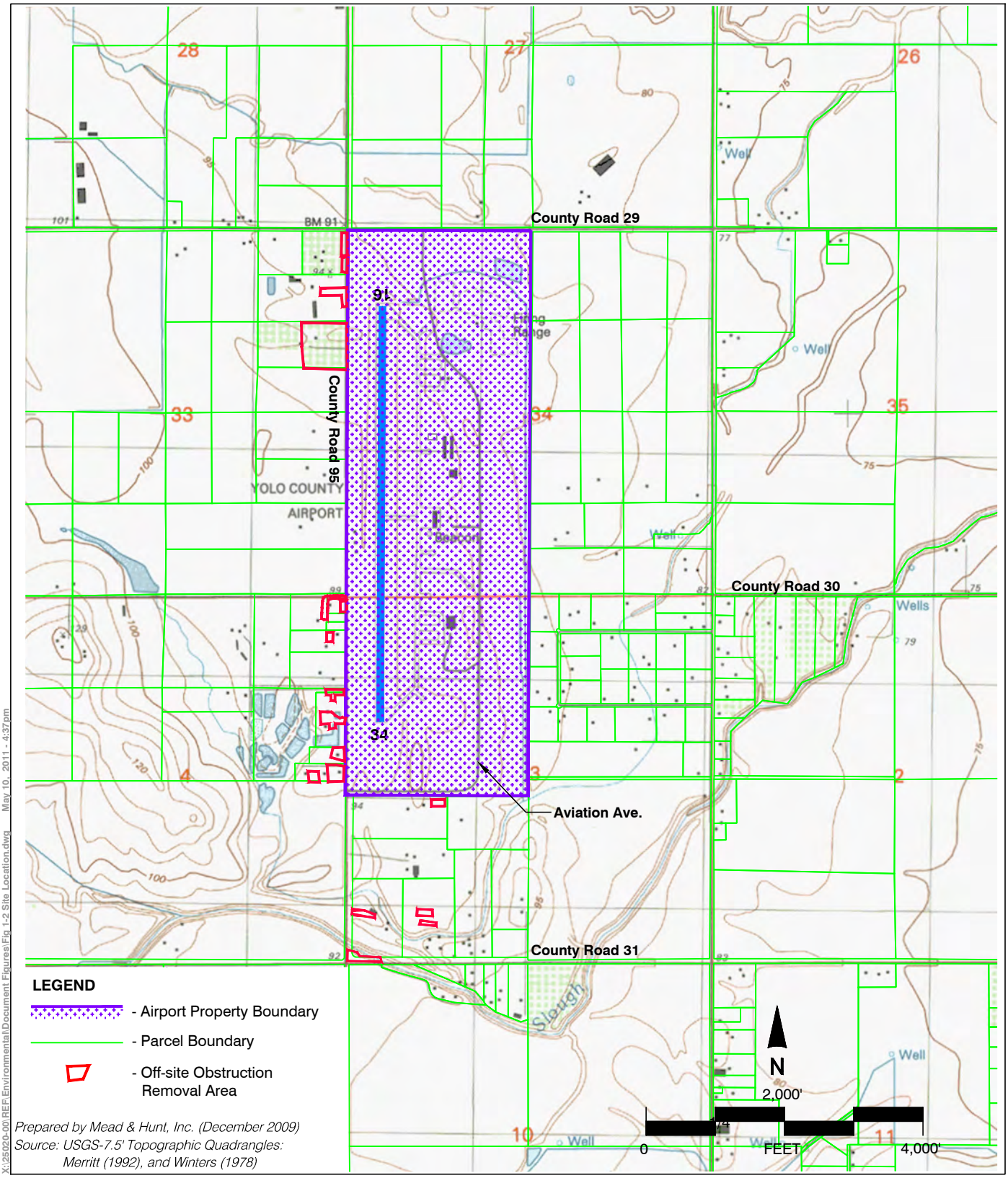
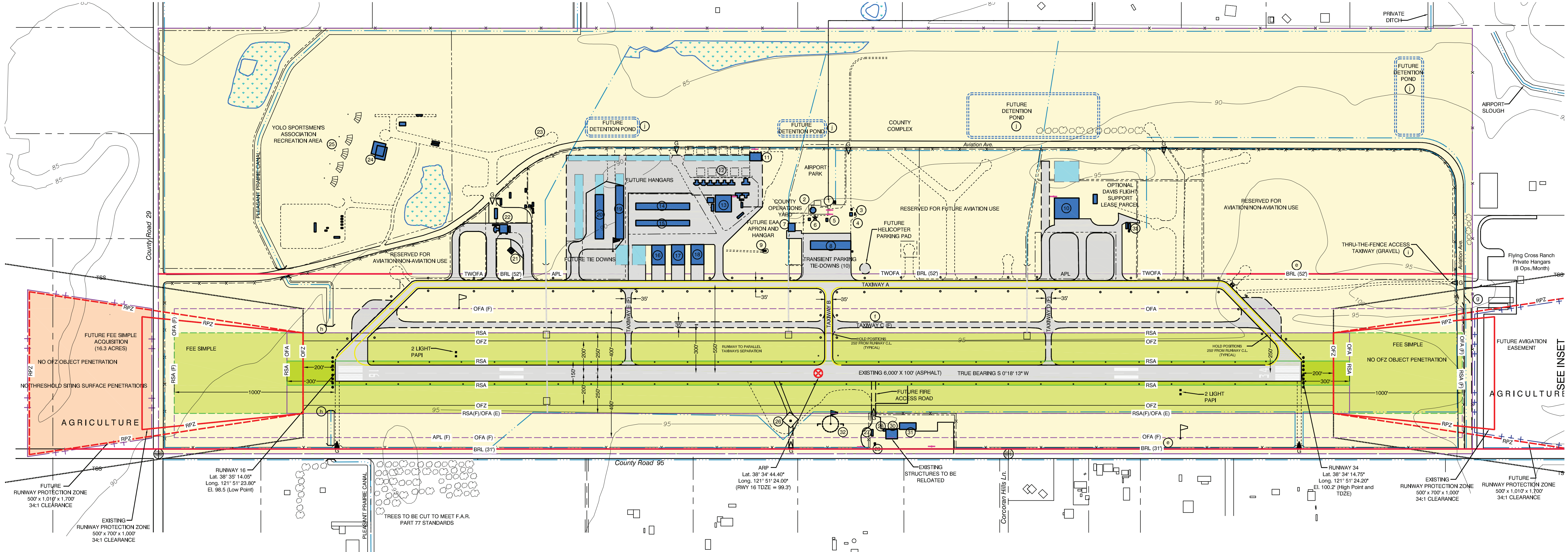
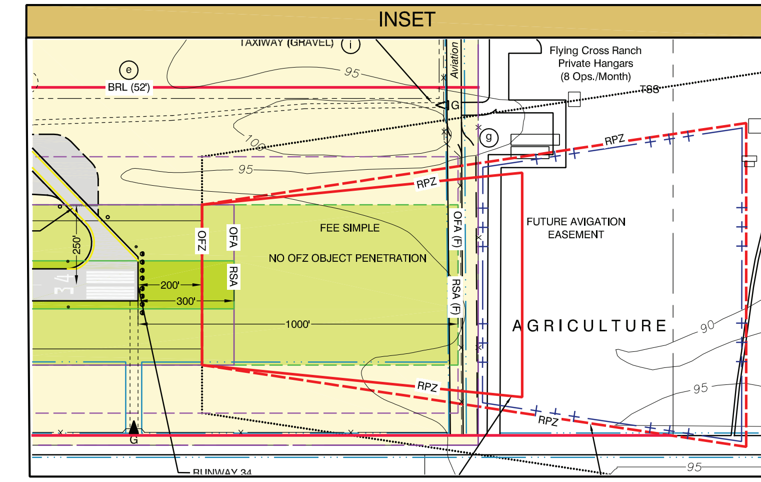


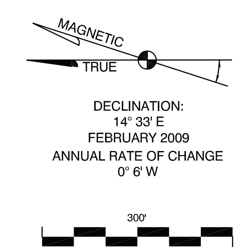
Figure 1-2

Site Location

Yolo County Airport Obstruction Removal Project







DECLINATION:
14° 33' E
FEBRUARY 2009
ANNUAL RATE OF CHANGE
0° 6' W

BUILDING AND FACILITY LEGEND

		ELEVATION (a)
1	Water Pump	N/A
2	Water Tank	111.1'
3	Restrooms	N/A
4	Caretaker Facilities	N/A
5	Electrical Building	N/A
6	Rotating Beacon	124.9'
7	EAA Hangar	106.0'
8	Hangars	111.9'
9	AWOS	124.3'
10	Davis Flight Support FBO	131.9'
11	Private Hangar	107.6'
12	T-Hangars (12)	107.5'
13	Yolo Aviation Private Hangar	117.7'
14	Hangars	108.9'
15	Hangars	109.4'
16	Box Hangar (83' x 123')	123.0'
17	Box Hangar (83' x 123')	122.9'
18	Box Hangar (83' x 123')	123.1'
19	Hangars	131.4'
20	Hangars	110.3'
21	Fuel Tanks	103.1'
22	Pre Star Hangars / Offices	111.0'
23	Balloon Launch Area	N/A
24	Club House	N/A
25	Trap & Skeet Range	N/A
26	Crop Duster Loading Area / Concrete Pad	N/A
27	Fire Station Caretaker Quarters (to be relocated)	105.0' (est.)
28	Lighted 38 Ft. Siren Tower (to be relocated)	135.8'
29	Well and Pump	N/A
30	Fire Station (to be relocated)	113.8'
31	Lillard Hall (to be relocated)	112.9'
32	Wind Cone / Segmented Circle	117.0' (est.)
33	Davis Fuel Farm	105.0'

DRAWING LEGEND

	EXISTING	FUTURE
ACTIVE AIRFIELD PAVEMENT		
OTHER PAVEMENT IN USE		
DIRT OR GRAVEL ROAD		N/A
AIRPORT PROPERTY (d)		
OTHER PROPERTY LINES		N/A
AVIGATION EASEMENT	N/A	
INTERNAL BOUNDARY (lease, R.O.W., etc.)		N/A
RUNWAY SAFETY AREA	RSA	RSA
BUILDING RESTRICTION LINE (e)	BRL	BRL
RUNWAY PROTECTION ZONE	RPZ	RPZ
OBJECT FREE AREA (RUNWAY)	OFA	OFA
OBSTACLE FREE ZONE	OFZ	OFZ
OBJECT FREE AREA (TAXIWAY)	TOFA	TOFA
AIRCRAFT PARKING LIMIT	APL	APL
THRESHOLD SITING SURFACE	TSS	N/A
BUILDING ON AIRPORT		
BUILDING OFF AIRPORT		N/A
BUILDING TO BE REMOVED	N/A	
FENCE	x	
VEHICLE GATE	G	G
WIND CONE		
SEGMENTED CIRCLE		N/A
VISUAL AIDS (PAPI)		N/A
AIRFIELD LIGHTS: SINGLE/GROUP/FLASHING		
ROTATING BEACON		N/A
TOPOGRAPHIC CONTOURS	XX	N/A
VEGETATION / TREES		N/A
UTILITY POLE		N/A
MONUMENT		N/A
AIRPORT REFERENCE POINT		N/A
WATERWAY / CHANNEL / CULVERT		N/A
UNDERGROUND STORM DRAIN / CATCH BASIN		N/A
WETLAND		N/A
DETENTION/WATER QUALITY POND	N/A	
SECTION CORNER	27 34 28 33	N/A

ALP NOTES

(a) Elevation Source: Mead & Hunt, Inc. survey; June, 2008. All data in NAVD88. All vertical data is in feet above mean sea level (MSL).

(b) Coordinate Source: Airport 5010, November 20, 2008. All data is in NAD83.

(c) Climate data provided by the Western Regional Climate Center, www.wrcc.dri.edu.

(d) Airport Property Boundary Source: Yolo County, 2008.

(e) Vertical clearance of 52' is provided at the Building Restriction Line (BRL) east of Taxiway A. BRL west of Runway is located at County Road 95 to restrict development of any potential Part 77 transitional surface obstructions and structures in the ultimate OFA. Existing buildings west of Runway to be relocated.

(f) Proposed Taxiway C is for long term planning purposes only. This proposed project shall not be undertaken without prior NEPA environmental processing and written FAA approval. Precondition will include FAA Forecast approval, FAA approval of the critical aircraft required for change to ARC C-II, and FAA approval of the applied airfield design standards. Future parallel Taxiway C will likely be constructed in two phases: Phase 1 will include the portion south of Taxiway B, and Phase 2 will include the portion north of Taxiway B.

(g) Aviation Avenue to be realigned to meet future RSA and OFA standards.

(h) Culvert may have to be extended to conform to future RSA and OFA standards.

(i) An "Off Airport Runway Access" agreement was approved by Yolo County in February 1993 (#93-29) permitting thru-the-fence access to Flying Cross Ranch. The users are active in airfield operations and the County Board of Supervisors continues to approve this use.

(j) Future detention ponds will be created to alleviate persistent flooding on the airfield. The Yolo County Airport Drainage Plan Update (December 2005) provides further documentation on the justification for multiple Detention Ponds located on Dedicated Airport Property.

SUBMITTED BY:
County of Yolo, California

By ____________ Date

FAA Approval Space

NO.	REVISION	SPONSOR	DATE
1	Woodland Aviation Lease Area		April 2001
2	Yolo aircraft storage, Button Aviation		May 2004
3	Ultimate ARC change from B-II to C-II; Future parallel taxiway	Mead & Hunt	January 2009

YOLO COUNTY AIRPORT
DAVIS/WOODLAND/WINTERS, CALIFORNIA

Figure 1-3 AIRPORT LAYOUT PLAN

MEAD & HUNT
133 Aviation Boulevard, Suite 100
Santa Rosa, California 95403
(707) 526-5010
Fax (707) 526-9721
www.meadhunt.com

W:\Library\Logos\yolo seal.jpg

DESIGN: TT/BM | DRAWN: TE/HH/BM | DATE: August 2009 | SHEET 1 OF 4

The preparation of these documents was financed in part through a planning grant from the Federal Aviation Administration as provided under Section 505 of the Airport and Airway Improvement Act of 1982, as amended. The contents do not necessarily reflect the official views or policy of the FAA. Acceptance of these documents by the FAA does not in any way constitute a commitment on the part of the United States to participate in any development depicted herein nor does it indicate that the proposed development is environmentally acceptable in accordance with appropriate public laws.

2. PROJECT DESCRIPTION, PURPOSE AND NEED

2.1 Project Description

The County proposes to remove approximately 150 trees that either exceed the elevations identified in FAR Part 77 or will soon exceed those elevations. The results of the obstruction survey and airspace analysis identified single trees and groups of trees along CR 95 on parcels adjacent to the airport, south of Aviation Avenue, and south of CR 29 (see **Figure 2-1**). As shown, the trees would be removed from 14 adjacent parcels located east, west, and south of airport property.

The County will remove the trees, grind the stumps, and haul the debris from the project area to a local landfill. The County will perform all tree removals outside of the nesting season to avoid potential effects to breeding birds. The County will assist property owners by providing funding for the planting of new trees. Property owners will be afforded the opportunity to select the replacement trees from a list of lower-growing native species that will not have the growth potential to penetrate FAR Part 77 surfaces.

2.2 Project Purpose

FAA identifies an obstruction as "An object of greater height than any of the heights or surfaces presented in FAR Part 77." The trees identified as obstructions associated with DWA are located adjacent to the sides of the runway and in the approach to Runway 34, and they are tall enough to exceed the heights identified in FAR Part 77**.**

The County identified the obstructions while updating its ALP in 2009. In addition, the California Department of Transportation (Caltrans) Division of Aeronautics noted the presence of the obstructions during a safety inspection performed in late 2008. Caltrans requested that the County take action to remove the obstructions or risk an amendment to its operating permit that would restrict operations to only daylight hours.

2.3 Project Need

A recent airspace study performed by the County identified several obstructions that must be removed, lighted, or marked to alert aviators to their presence. The proposed project would enhance safety for aviators and those living near the airport by removing tall trees that have become obstructions and have the potential to interfere with air traffic.

The proposed project would allow the County to comply with applicable federal regulations pertaining to navigable airspace, and it would allow the County to continue its operations without interruptions or restrictions. Activity at DWA is expected to increase, and limitations on its operation would impede the County's ability to meet the demand for services.

2.4 Document Purpose and Proposed Federal Action

Pursuant to NEPA, the Federal Aviation Administration (FAA) is the Federal Lead Agency for the proposed project, and the County of Yolo, Department of General Services is the Project Sponsor. As a federal agency, FAA must consider the potential effects of a proposed Federal Action on the natural and human environment prior to project approval or funding. The proposed Federal Action is unconditional approval of the proposed project on the ALP and subsequent funding to implement the obstruction removal project. Obstruction removal is required to bring the airport into compliance with FAR Part 77, "Objects Affecting Navigable Airspace."

The EA is being prepared in accordance with NEPA, Council on Environmental Quality (CEQ) regulations, and all applicable FAA Orders and guidance including: Order 5050.4B, *NEPA Implementing Instructions for Airport Actions* (FAA 2006a) and FAA Order 1050.1E, Change 1, *Environmental Impacts: Policies and Procedures* (FAA 2006b).

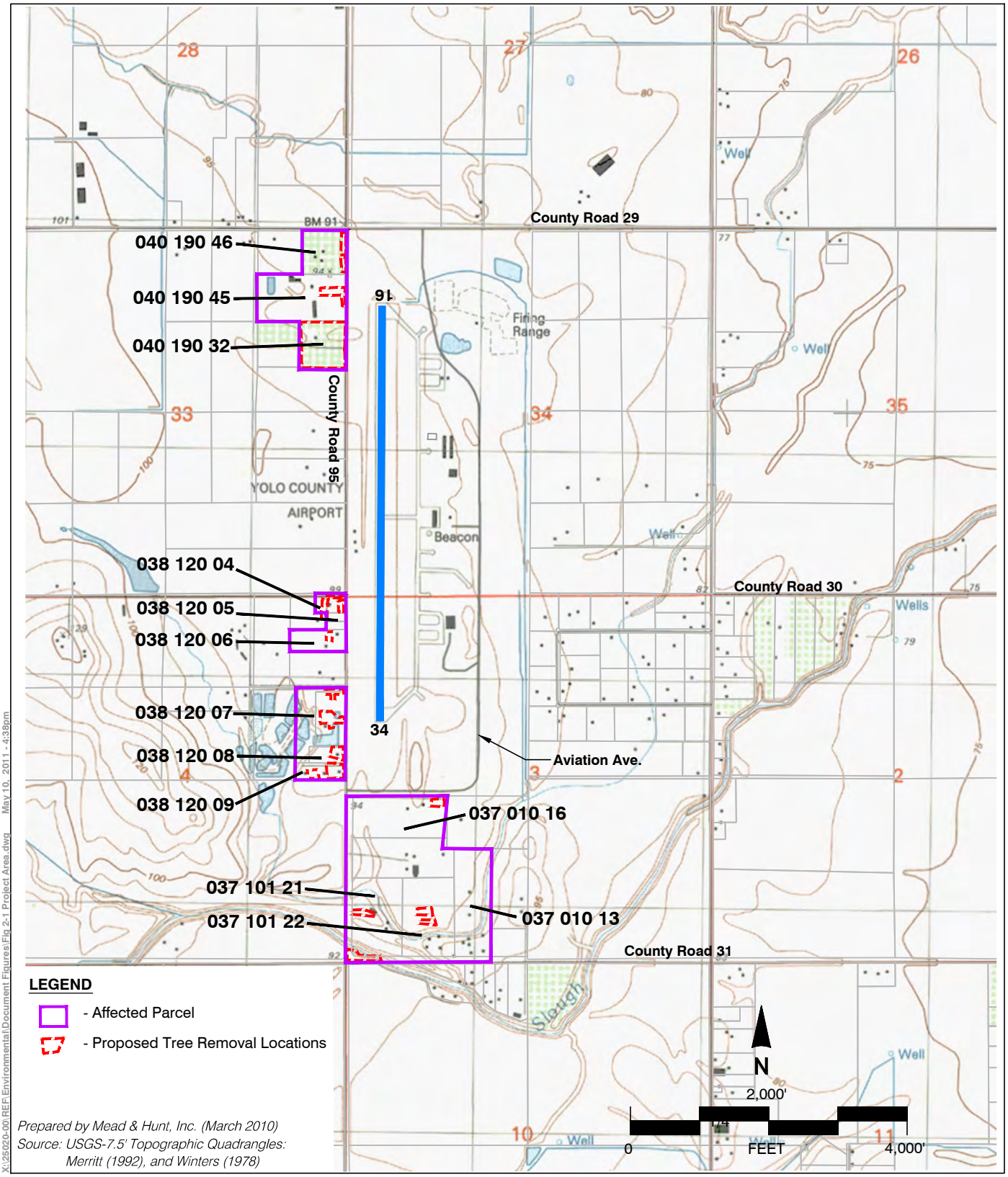


Figure 2-1

Project Area

Yolo County Airport Obstruction Removal Project

3. ALTERNATIVES

As the Federal Lead Agency, FAA must comply with the policies and procedures of NEPA and other related environmental laws, regulations, and orders applicable to its actions. As described in FAA Order 5050.4B, *NEPA Implementing Instructions for Airport Actions*, FAA must identify the potential alternatives that are available to achieve the purpose and need for a proposed project, and present the basis used to make an informed decision regarding the selection of a preferred alternative (FAA 2006a).

Neither NEPA nor FAA regulations require a specific number of alternatives or a specific range of alternatives to be included in an EA. However, an EA must consider the proposed action and the consequences of taking no action. For each alternative considered but eliminated from further study, a project sponsor must briefly explain why the alternative was eliminated from further discussion (FAA 2006a).

Pursuant to FAA regulations set forth in Order 5050.4B, an alternatives discussion must include:

- Alternatives considered, including the Proposed Action and the No Action alternatives;
- A concise statement explaining why any initial alternative was not considered in detail;
- A statement identifying a preferred alternative, if one has been identified;
- Applicable laws, regulations, executive orders and associated permits, licenses, approvals, and reviews required to implement a project alternative; and
- Environmental impacts and conceptual mitigation measures.

3.1 Proposed Alternatives

The purpose of examining alternatives is to ensure that an alternative that may enhance environmental quality or have a less detrimental effect is not prematurely dismissed from consideration. The County identified two alternatives that could be implemented to achieve the proposed project's purpose and need, but dismissed one of the alternatives from detailed evaluation.

The County also evaluated a No Action alternative. Although the No Action alternative would not achieve the proposed purpose and need, NEPA requires project sponsors to consider a No Action alternative, because it serves as a baseline against which the environmental effects of a proposed project can be compared.

Sections 3.1.1 and 3.1.2 present a discussion of the alternatives that were retained for detailed analysis. Section 3.2 describes the alternative that was dismissed from detailed analysis in the EA.

3.1.1 Proposed Action

The County proposes to remove trees that exceed or will soon exceed the heights identified in FAR Part 77. Under this alternative, approximately 150 trees and stumps will be removed, and the debris will be hauled from the project area to the local landfill. The County will perform all tree removals during the autumn to avoid the breeding season for birds. To offset the loss of habitat associated with

tree removal, the County will assist property owners by providing for the planting of new trees at a ratio of 1:1. The replacement trees will be lower-growing native species that do not have the potential to penetrate FAR Part 77 surfaces. The trees provided by or authorized by the County for revegetation would be selected from a list of species that would not provide food or nesting habitat for potentially hazardous wildlife.

The Proposed Action will result in the loss of two trees known to contain a Swainson's hawk nest and trees that could potentially support Swainson's hawk nests in the future. To prevent this habitat loss and prevent long-term impacts to Swainson's hawk nesting habitat in the County, the project will include County funding to plant 15 new native trees for each known nest tree (30 trees total) in a riparian area at the Chickahominy Creek Ranch Conservation Area (CCR), which is located approximately 2 miles west of the project area. The planting of replacement trees at CCR was included as part of the proposed project to ensure "no net loss" of suitable Swainson's hawk nesting habitat in west-central Yolo County.

The Proposed Action will protect navigable airspace and facilitate safe and efficient airport operations because it would remove known obstructions. The Proposed Action would enhance safety to aviators, allow the County to achieve compliance with FAR Part 77, allow the county to comply with its grant assurances, and allow the County to comply with the terms of the request it received from the Caltrans Division of Aeronautics.

The Proposed Action would provide for a permanent, cost-effective solution that fulfills the proposed project's purpose and need.

3.1.2 No Action Alternative

Under the No Action alternative, tall trees known to penetrate navigable airspace would remain in place. The obstructions would not be removed, and conditions at the airport would not comply with FAR Part 77. The County would not comply with the request to remove obstructions made by the Caltrans Division of Aeronautics. Trees would not be planted at CCR to provide suitable nesting for the Swainson's hawk.

3.2 Alternatives Dismissed from Further Evaluation

The County considered trimming or "topping" the trees to comply with FAR Part 77. Although this alternative would fulfill the proposed project's purpose and need, it would do so only temporarily. Annual surveys and ongoing maintenance would be required in perpetuity to provide ongoing compliance with FAR Part 77 and the County's grant assurances.

The County dismissed tree topping early during EA development for three reasons:

- Tree topping would provide only a temporary solution,
- Tree topping can be detrimental to the health of the tree, and
- Ongoing funding and environmental study would be required to support each future tree topping event.

4. AFFECTED RESOURCES AND ENVIRONMENTAL CONSEQUENCES

4.1 Analytical Approach

FAA Order 5050.4B, *NEPA Implementing Instructions for Environmental Actions* (FAA, 2006a), and FAA Order 1050.1E, *Environmental Impacts: Policies and Procedures* (FAA, 2006b), provide FAA guidance for implementing NEPA. FAA Order 1050.1E identifies the potential environmental impact categories that should be considered in an environmental analysis.

Not all projects are the same, and not all environmental resources identified for analysis are affected by every project. As a result, the contents of an EA may vary according to the proposed action. Pursuant to FAA Order 1050.1 E, an EA should:

> *…present detailed analysis, commensurate with the level of impact of the proposed action and alternatives, to determine whether any impacts will be significant. If the proposed action and its alternatives will not cause impacts within specific categories of environmental impacts, a brief statement describing the factual basis for the conclusion that the action is not likely to cause environmental impacts within these impact categories is sufficient.*

Subsequent FAA guidance set forth in January 10, 2011, further enunciates the need to provide concise analysis based on the presence and extent of resources associated with the proposed project and the nature of the project itself. In its memorandum, "Guidance on Preparing Focused, Concise and Timely Environmental Assessments," FAA states that "FAA Order 1050.1E lists all impact categories. However, it is not the intent for all categories to require detailed discussion of analysis. The EA should concentrate on areas where there may be significant environmental impacts, or where there are uncertainties that require evaluation."

4.2 Environmental Resources that are Not Present or Unlikely to be Affected by the Proposed Project

The environmental analyses presented in this chapter address all environmental impact assessment categories set forth by FAA in Order 1050.1E, however, not all resource areas are evaluated to the same level of detail. Section 4.2 summarizes the resources that were either not present in the study area or do not have the potential to be affected by the proposed project or its alternatives. Section 4.3 presents each environmental resource for which a detailed analysis was performed.

4.2.1 Resources that are Absent from the Project Area

FAA guidance identifies 23 environmental resources or issue areas that should be addressed pursuant to NEPA. While evaluating the proposed obstruction removal project, the County identified four resources or environmental impact areas that should be reviewed according to FAA guidance, but were not present in the study area and could not be affected by the proposed project: Coastal barriers, coastal resources, U.S. Department of Transportation Section 4(f) resources, and wild and scenic rivers. **Table 4-1** summarizes these resources.

Table 4-1. Resources That Are Not Present Within the Project Area, Yolo County Airport	
Resource	**Description**
Coastal Barriers/Coastal Zone Management	Barrier islands occur along all coastlines of the United States. Coastal zones are those waters and their bordering areas in states along the coastlines of the oceans, the Gulf of Mexico and shorelines of the Great Lakes. The proposed project area is located in California's Central Valley, approximately 50 miles from the San Francisco Bay. The proposed project site is neither within a designated coastal zone nor within an area governed by a local coastal zone management plan.
Section 4(f) Resources	Section 4(f) of the Department of Transportation Act of 1966 prohibits the taking of publicly owned land of a park, recreational area, or wildlife and waterfowl refuge of national, state, or local significance or land of a historic site of national, state, or local significance unless there is no prudent and feasible alternative that would avoid those resources, and the program or project includes all possible planning to minimize harm resulting from resource use. The proposed project does not include the construction of new facilities that would require the use of any section 4(f) resources. None of the areas in which trees would be removed is located on property associated with a Section 4(f) resource.
Wild and Scenic Rivers	"Wild and scenic rivers" are those rivers having remarkable scenic, recreational, geologic, fish, wildlife, historic, or cultural values. Federal agencies may not assist or, by loan, grant, or license or other authorizations, a water resources action that would have a direct or adverse effect on the values for which the river was designated. The nearest wild and scenic river to the project site is Cache Creek, a portion of which is listed on the National Rivers Inventory (NRI). The portion of Cache Creek that appears on the NRI is more than 20 miles upstream of the project area.

4.2.2 Resources Unlikely to be Affected by the Proposed Project

As stated in FAA guidance, potential environmental effects and resource areas that are not relevant to the proposed action should be briefly noted, and no further analysis is required (FAA 2011). While evaluating the proposed obstruction removal project, the County identified 12 resources or environmental impact areas that were unlikely to be affected by the proposed project and would not require detailed environmental analysis.

Energy Supplies and Natural Resources

Airport development actions have the potential to change energy requirements or use consumable natural resources. Pursuant to FAA Order 5050.4B, a significant impact would occur if the construction, operation, or maintenance of a proposed project would cause a demand for energy or natural resources that would exceed available or future supplies.

The proposed project does not involve the construction or operation of new airport facilities that would result in a permanent increase in the consumption of energy or natural resources. Fuel consumption will be associated with the operation of vehicles and equipment needed to remove trees. During the approximately two-week construction period, a crew of approximately 10 workers will travel to the site each day. The crew will use double-bladed chain saws to remove trees, and approximately 10 trips per day by diesel-powered vehicles will be required to remove debris from the site. Tree removal will require the temporary use of petroleum- and diesel-based fuels, but these resources are readily available.

Under the No Action alternative, no impact to energy or natural resources is anticipated. The impact associated with fuel consumption during implementation of the Proposed Action will be temporary and associated with the use of gasoline and diesel to fuel trucks and equipment. These resources are not limited in supply. The potential impacts associated with the Proposed Action would be temporary, and no impact on energy supplies or the use of natural resources is anticipated.

Environmental Justice

An environmental justice analysis considers whether a proposed Federal Action has the potential to cause disproportionate and adverse effects to a low-income or minority population or pose health and safety risks to children. Potential disproportionate effects include impacts associated with noise exposure, air quality effects, glare, or the division of an established community.

The proposed project would require the removal of approximately 150 trees from fourteen parcels in a rural residential area of Yolo County. The project will not require the relocation of any businesses or residences, and it does not have the potential to divide or create a barrier in an established community. The project will not create any new permanent sources of emissions to affect air quality or affect a known drinking water source to pose safety risks to children.

The proposed project will create noise and air quality effects during the approximately two-week period during which trees are removed, but these effects would be temporary. The proposed project does not include the construction or operation of new facilities that could create air quality, noise, or glare to affect nearby residents.

Under the No Action alternative, no impact would occur. Under the proposed action, only temporary increases in noise and vehicle emissions are anticipated during the brief two-week construction period (see Section 4.3.1). No permanent impacts are associated with the Proposed Action; therefore, the proposed project cannot cause disproportionate or adverse effects on low-income or minority populations.

Induced Socioeconomic Impacts

To fulfill its NEPA requirements, FAA must evaluate a proposed airport project to determine whether it has the potential to cause induced or secondary socioeconomic impacts on surrounding communities. Such impacts would include shifts in the patterns of population movement and growth, an increased demand for public services, changes in business and economic activities, or other factors.

The proposed project involves the removal of trees that are obstructions to aviation on rural-residential properties adjacent to the airport. No new construction or operations are proposed on the property. Therefore, the proposed project does not have the potential to shift patterns of population growth, require additional public service demands, or create negative impacts to business or economic activities. No induced socioeconomic impact is anticipated under either the No Action or Proposed Action alternative.

Important Farmland

Important farmland includes all pasturelands, croplands, and forests (even if zoned for development) considered to be prime, unique, or statewide or locally important lands. If a proposed project would convert important farmland to a non-agricultural use, FAA must coordinate with the local Natural Resource Conservation Service field office to evaluate the potential effect of the proposed project on important farmland.

The proposed project will require tree removal from private, residential properties adjacent to the airport. As documented by the California Department of Conversation, the proposed project will not involve any important farmlands (California Department of Conservation 2011). No farmlands or areas in cultivation are present within project boundaries. Therefore, no impact to cultivated areas is anticipated under either the No Action or Proposed Action alternative.

Hazardous Materials

Federal, state, and local laws regulate hazardous materials use, storage, transport, or disposal. These laws may extend to past and future landowners of properties containing these materials. In addition, disrupting sites containing hazardous materials or contaminants may cause significant impacts to soil, surface water, groundwater, air quality, and the organisms using these resources

The County reviewed the EnviroStor database maintained by the California Department of Toxic Substances Control and the GeoTracker database of the California State Water Resources. The GeoTracker database identified six potential hazardous waste sites within 1,000 feet of the project area (see **Figure 4-1**):

- Two leaking underground storage tank (LUST) cases cleanup sites were identified on Yolo Road. Public records associated with these sites indicated that cleanup was complete and the sites have been closed.
- Two other LUST sites, which are listed as open, were identified on CR 29, on property owned by Teichert & Son, Inc.
- Two sites were identified on DWA in association with its former military use.

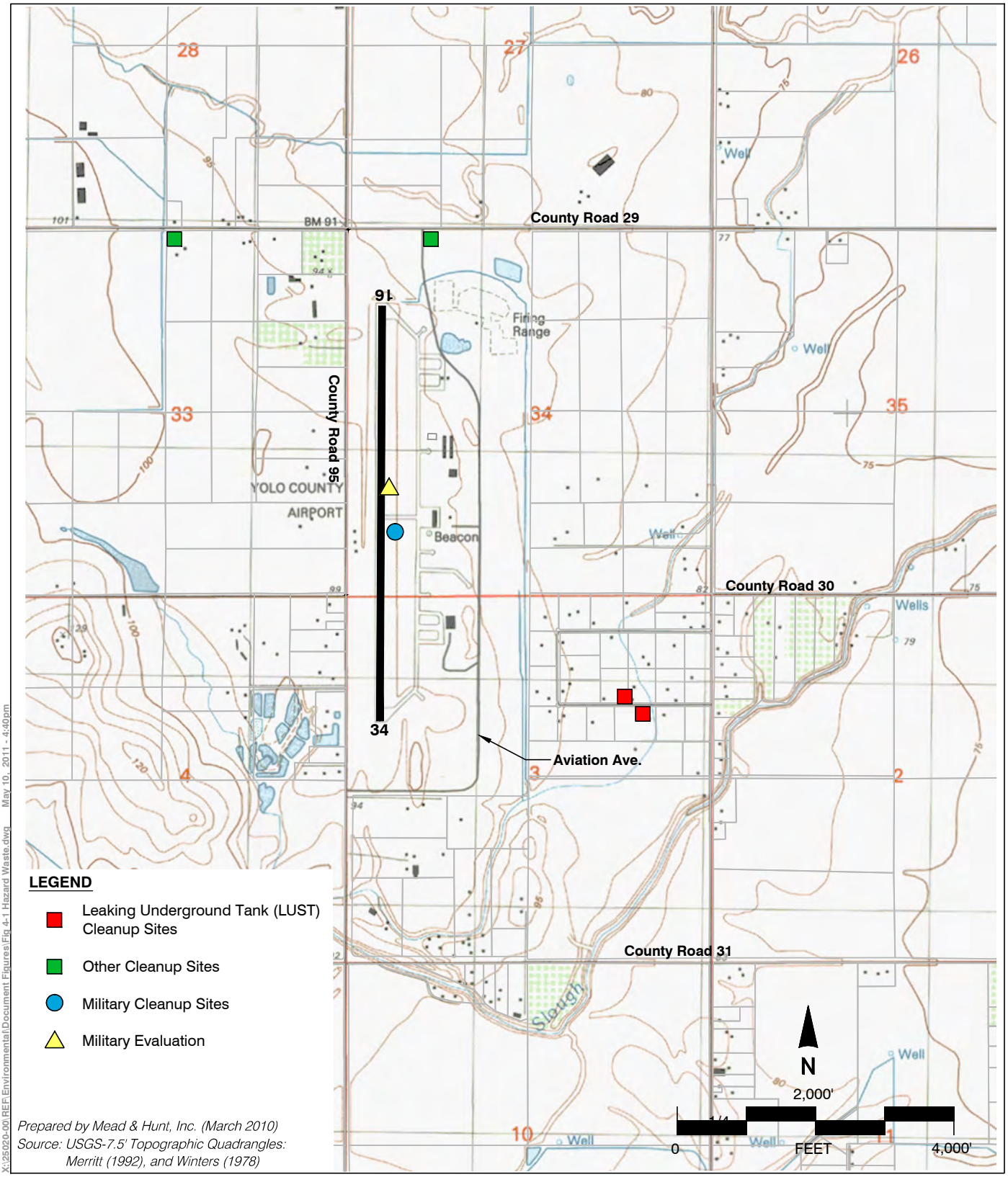


Figure 4-1

Hazard Waste Sites

Yolo County Airport Obstruction Removal Project

The proposed project will include the use of vehicles and equipment that require the use of petroleum-based fuels. Potential temporary impacts associated with the use of petroleum-fueled equipment to cut down trees and remove debris will be reduced through the use of Best Management Practices (BMPs) and best available technologies.

Neither the No Action alternative nor the Proposed Action alternative will require tree removal on property known to contain hazardous materials. Under the Proposed Action, BMPs will be implemented to prevent the accidental release of petroleum based fuels associated with construction equipment; therefore, no impact is anticipated under the Proposed Action alternative.

Light Emissions and Visual Effects

Airport-related lighting facilities and activities have the potential to affect surrounding residents and other nearby light-sensitive areas such as parks or recreational areas. Visual effects broadly consider the extent to which airport development contrasts with the existing environment, architecture, historic or cultural setting, or land use planning.

The proposed project involves the removal of selected trees that were identified as obstructions to navigable airspace. No new construction or operations are proposed that would produce sources of light or glare, and the County will assist property owners by providing for the planting of new trees adjacent to residences. No visual barriers associated with existing aviation facilities will be removed to affect sensitive resources. No impact is anticipated as a result of the No Action or Proposed Action alternative.

Noise

Airport development actions that affect runway configurations, aircraft operations, or fleet mix may increase noise levels. When evaluating a proposed project, FAA's noise analysis focuses primarily on how the proposed project would affect the cumulative noise exposure of individuals to aircraft noise.

The proposed project does not have the potential to alter the fleet mix, volume of aircraft operations, or overall airport capacity. The proposed project will not bring aircraft closer to potential sensitive receptors nor will it result in the loss of a perceived sound barrier between the Airport and off-site areas. A temporary increase in ambient noise levels will occur as trees are cut, stumps are removed, and debris is transported off site, but this impact will be associated project activities and will occur only during daytime hours for an approximately two-week period. No permanent noise impacts are anticipated as a result of either the No Action or Proposed Action alternative.

Social Impacts

FAA must evaluate proposed airport development actions to determine whether they would cause social impacts, such as: the displacement of homes or businesses; changing surface transportation patterns; disrupting orderly, planned development; or creating a notable change in employment or housing needs.

The proposed project does not have the potential to displace or otherwise affect businesses or homes. Construction areas will be restricted during project activities. The proposed project would not create an increased demand for housing. No adverse impacts are anticipated as a result of either the No Action or Proposed Action alternative.

Solid Waste

Solid waste includes garbage, refuse, or sludge from a waste treatment plant, water supply treatment plant, or an air pollution control facility (42 USC Section 6903[27]). Many airport projects include construction, renovation, or demolition that produces debris (e.g., dirt, concrete, asphalt) that must be disposed of properly.

The proposed project involves the removal of approximately 150 mature trees. The stumps will be ground in place. Debris will be taken off site and placed in an appropriate landfill. The nearby Yolo County Central Landfill holds sufficient capacity and can accept branches with leaves and tree rounds up to 12 inches in diameter as green waste, as well as larger wood waste (Yolo County, 2011a). No impact is anticipated as a result of either the No Action or Proposed Action alternative.

Water Quality

Airport-related construction, operations, and maintenance activities may affect water quality in navigable waterways, municipal drinking water supplies, important sole-source aquifers, or protected groundwater supplies.

The proposed project will not include the construction of new facilities or changes to airport operations to affect surface water or groundwater quality. In addition, the proposed project will not require the removal of trees from wetlands, streams, or other riparian areas. All waste will be removed from the project area, so it will not have the potential to block stormwater management facilities, such as drains and swales. No impact on water quality is anticipated as a result of either the No Action or the Proposed Action alternative.

Wetlands

Executive Order 11990, Protection of Wetlands, and DOT Order 5660.1A, Preservation of Wetlands, require federal agencies to avoid and minimize adverse effects to wetlands when there is a practicable alternative.

Based on site visits and data published by the National Wetlands Inventory, wetlands are present in the project area, just west of parcel nos. 038-120-07, 038-120-08, and at the boundary of parcel no. 03-120-09 (see **Figure 4-2).** Several site reconnaissance visits were performed during the period from 2009 to 2010 to identify potential biotic communities and the potential presence of rare, threatened, and endangered species. Based on the results of the biological field studies, no trees will be removed from areas containing wetlands or other waters of the U.S., and project equipment will not traverse wetland areas to gain access to the project area. No impacts to wetland resources are anticipated as a result of either the No Action or the Proposed Action alternative.

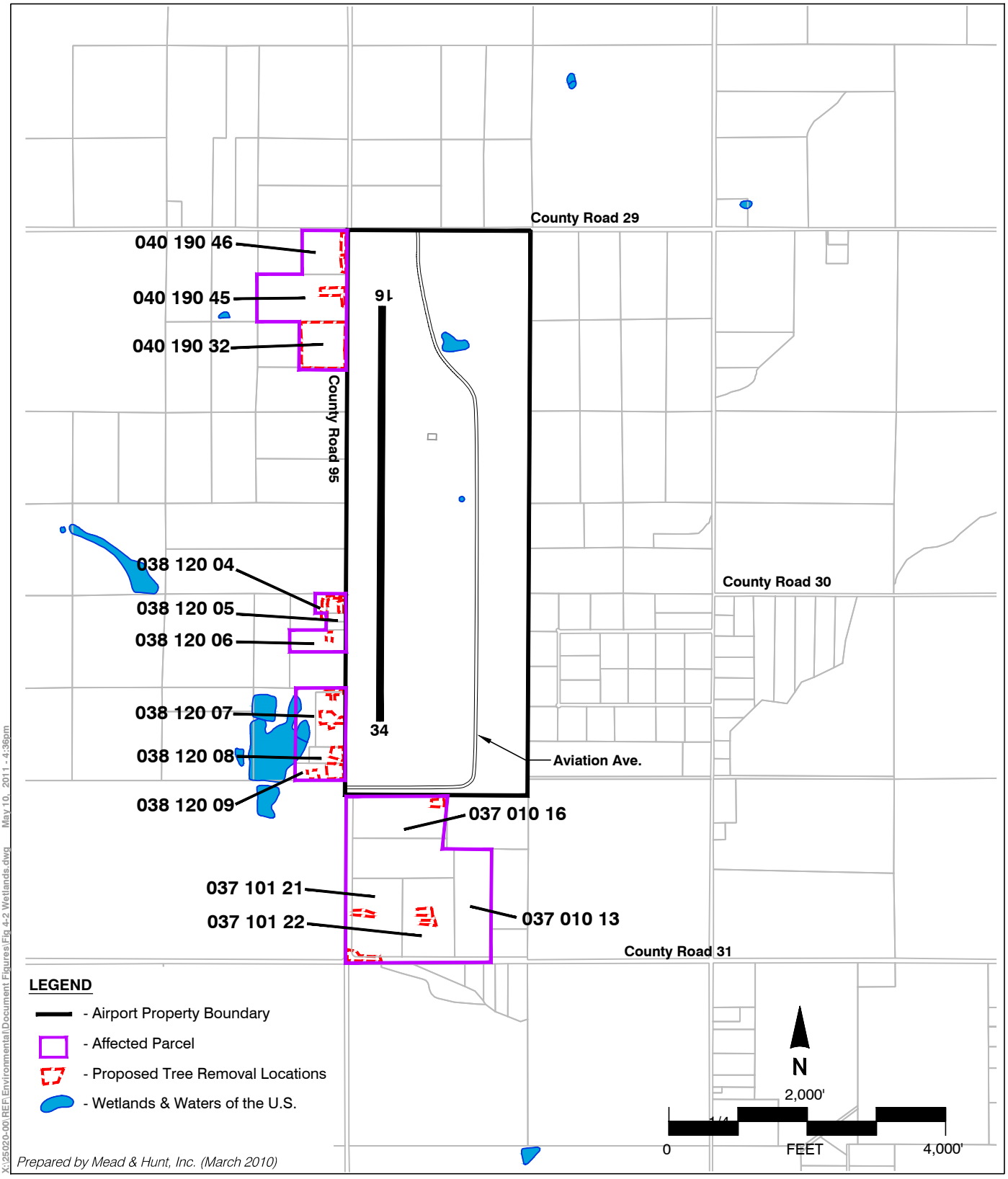


Figure 4-2

Wetlands & Waters of the U.S.

Yolo County Airport Obstruction Removal Project

Construction Impacts

Airport-related construction projects may cause various environmental effects primarily due to dust, equipment emissions, storm water runoff, and noise. In most cases, these effects are subject to federal, state, or local ordinances or regulations.

No construction-related effects would occur as a result of the No Action alternative. As described previously, the Proposed Action alternative has the potential to cause temporary increases in construction-related noise during daytime hours and temporary air quality effects associated with construction (see Section 4.3.1). Temporary air quality effects would be avoided and minimized through the incorporation of BMPs, including dust suppression, in accordance with the County's general specifications for construction projects and guidance set forth by the California Air Resources Board (CARB). No new facilities or additional pavement will be constructed to increase discharge to surface or groundwater resources. No construction-related impacts are anticipated under either the No Action or Proposed Action alternative.

4.3 Environmental Resources Subject to Detailed Analysis

Yolo County identified seven environmental resources/impact areas that were appropriate for more detailed analysis based on their potential to exist in the proposed project area or their potential to be associated with project-related environmental effects. These resources are:

- Air quality
- Compatible land use
- Biotic resources
- Federally listed endangered and threatened species
- Floodplains
- Historic and archaeological resources
- Cumulative impacts

Sections 4.3.1 through 4.3.7 describe these resources, their regulatory context, and their potential to be adversely affected by the Proposed Action and No Action alternatives.

4.3.1 Air Quality

The Federal Clean Air Act of 1970 directs the U.S. Environmental Protection Agency (EPA) to establish ambient air quality standards for six criteria pollutants: ozone (0_3), carbon monoxide (CO), oxides of nitrogen (NO_X), sulfur dioxide (SO_2), lead, and particulate matter with diameters of less than 10 microns (PM_{10}) or 2.5 microns ($PM_{2.5}$).

Affected Environment

DWA is located in the Sacramento Valley Air Basin (SVAB), and air quality is managed by the Yolo-Solano Air Quality Management District (YSAQMD). The U.S. Environmental Protection Agency

(EPA) has designated the basin as nonattainment for ozone and partial nonattainment for 24-hour $PM_{2.5}$ emissions.

- Ozone is formed as a result of a photochemical reaction involving nitrogen oxides (NOx) and volatile organic compounds (VOCs). VOCs, which are commonly referred to as reactive organic gases (ROG), are usually associated with consumer products and organic solvents.

- PM consists of very small liquid and solid particles that can be suspended in air and inhaled. The majority of $PM_{2.5}$ is generated by the combustion of fuels.

Methodology

The proposed project does not have the potential to change the aircraft fleet mix or increase capacity, so an air quality analysis was not necessary to identify potential changes in aircraft emissions. However, temporary air quality impacts will be associated with the petroleum-fueled equipment to cut down trees and remove debris. The County conducted an emissions inventory and air quality analysis to determine whether project emissions would potentially cause significant air quality effects or worsen local air quality (e.g., cause levels of pollution that would exceed the NAAQS).

The proposed project was assumed to require the use of 10 trucks per day to carry workers to and from the site, the use of double-sided chain saws to remove trees, and up to 10 additional vehicle trips per day to remove debris from the site.

To determine the potential emissions associated with vehicle trips to the site and tree removal equipment, the County used the California Air Resources Board's Off-road 2007 Model. The results obtained from the model were compared to the thresholds identified by YSAQMD for construction projects as shown in Table 4-2.

Table 4-2. Emissions Inventory, Yolo County Obstruction Removal Project

Pollutant	YSAQMD Threshold (lbs./day)	Project-related emissions (lbs./day)
ROG	54	4
NO_X	54	16
PM_{10}	80	0.7 all PM (Total for PM_{10} and PM $_{2.5}$)
CO	Violation of a State ambient air quality standard	11

All construction activities and vehicle emissions are regulated by the State of California. As previously noted, YSAQMD is considered a non-attainment area for ozone (8-hour). Ozone is formed in the lower atmosphere through the interaction of oxides of nitrogen (NO_x) and volatile organic compounds (VOCs), or when ROG reacts in the presence of sunlight. As noted in **Table 4-2**, the amount of NO_X and ROG associated with project activities does not approach regulatory thresholds; therefore, the

amount of ozone generated by the proposed project would not exceed regulatory thresholds associated with the formation of ozone to worsen local air quality.

Impact Analysis

No air quality impacts are anticipated under the No Action alternative. Potential air quality impacts associated with the Proposed Action do not exceed regulatory thresholds. Any increases the emissions of ROG, NO_X, and CO, which are precursors of the ozone formation, will be temporary and below regulatory thresholds. The total amount of PM is well below regulatory levels as well. All potential air quality effects will be further reduced through the use of Best Management Practices (BMPs), including dust-suppression, during all project activities. No air quality impacts are anticipated with implementation of the Proposed Action.

4.3.2 Compatible Land Use

As set forth in FAA guidance, the compatibility of existing and planned land uses in the vicinity of an airport is usually associated with the extent of the airport's noise impacts. Activities that may alter aviation-related noise impacts and affect land uses subjected to those impacts typically involve airport development actions to accommodate fleet mix changes or the number of aircraft operations; air traffic changes; or new approaches to the airport made possible by new navigational aids (FAA 2006a; FAA 2007). In addition, if a proposed action would cause noise impacts that affect land uses, such as social or induced socioeconomic effects (e.g., community disruption, relocation impacts, etc.), those effects must be analyzed in the context of the affected resource(s).

Methodology

The County reviewed the proposed project for its potential to affect aviation-related noise exposure and its potential to cause social/socioeconomic effects (see Section 4.2.2). In addition, the County reviewed applicable land use plans, goals, and policies to determine whether the proposed project was consistent with appropriate governing documents. The evaluation of compatible land use associated with the proposed project included an analysis of the following local plans:

- *2030 Countywide General Plan* (Yolo County 2009)
- *Yolo County Airport Compatible Land Use Plan* (SACOG 1999)

For the purposes of this EA, the Proposed Action or No Action alternative would cause a significant impact on compatible land use if it would result in increased noise exposure, community disruptions, the relocation of businesses or residences, create socioeconomic impacts, or affect wetlands, floodplains, or critical habitat. In addition, the proposed project was reviewed to determine whether it would be inconsistent with the airport's grant assurances as well as local land use policies and plans.

Affected Environment

Yolo County General Plan. DWA and the proposed project area are located in an unincorporated area of Yolo County and governed principally by Yolo County's *2030 Countywide General Plan (General Plan)*. The plan includes goals to guide decision-making, policies that will help to support or achieve the County's goals, and actions proposed by the County to implement the goals and policies of the *General Plan*. The Health and Safety Element of the *General Plan* addresses airport facilities. The Conservation Element of the *General Plan* addresses conservation and natural resources. Applicable General Plan policies and goals that would apply to the proposed project are summarized in **Table 4-3**.

Table 4-3. Applicable General Plan Goals and Policies. Yolo County 2030 Countywide General Plan

Health and Safety (HS) Element	Description
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.
Conservation Element (CO)	**Description**
Policy CO-2.23	Support efforts to coordinate the removal of non-native, invasive vegetation within watersheds and replacement with native plants.

Yolo County Airport Comprehensive Land Use Plan. The Sacramento Area Council of Governments (SACOG) serves as the Airport Land Use Commission (ALUC) for the counties of Sacramento, Sutter, Yolo, and Yuba. Under the authority the California Public Utilities Code, the ALUC prepares airport comprehensive land use plans (CLUPs) for four of the airports that affect Yolo County, including DWA (SACOG 1999). The CLUPs provide findings regarding the compatibility of proposed land uses in the airport influence area, and it provides policies pertaining to the development of new facilities in an effort to promote compatible land use. The CLUP associated with the DWA provides the following findings pertaining to obstructions:

- Height guidelines for determining if an object is an obstruction to air navigation are set forth in Federal Aviation Regulation Part 77, Objects Affecting Navigable Airspace. Objects that would be of greater height than the imaginary horizontal and sloping surfaces contained in this regulation are deemed to be an obstruction to air navigation.
- Penetration of these imaginary surfaces by permanent structures would interfere with the operating capability of the airport, would endanger pilots and passengers of aircraft operating at the airport, and would pose a hazard to persons occupying those structures.

Grant Assurance Requirements. As the operator of DWA, the County receives financial assistance from FAA. As an organization that accepts funds, the County must agree to certain obligations known

as grant assurances. The grant assurances require the County to maintain and operate its airport facilities safely, efficiently, and in accordance with specified conditions, including FAR Part 77 regulations. Yolo County must comply with all FAA grant assurances or risk the loss of current or previously granted federal funds.

Impact Analysis

As described in Section 4.2.1, neither the No Action nor the Proposed Action alternative would alter the fleet mix, aircraft operations, or airport capacity. No noise-related impact would occur to affect nearby land uses. Similarly, neither the No Action nor Proposed Action alternative would cause any community disruption, business relocation, socioeconomic impacts, or affect wetlands. As discussed in Sections 4.3.3 through 4.3.5, neither alternative would affect critical habitat for federally listed species or lead to construction within a designated floodplain.

Under the No Action alternative, no obstructions would be removed, and the trees would continue to pose hazards to pilots and passengers of aircraft. Implementation of the No Action alternative would not allow the County to comply with FAR Part 77 to fulfill the proposed project's purpose and need. The No Action alternative would not comply with the *General Plan's* Health and Safety Element goal and policies pertaining to airport operation, nor would it fulfill the goal of removing hazards to aviation as set forth in the CLUP. In addition, it would not fulfill the intent of the airport to comply with its grant assurances as documented in its recent letter to FAA (see **Appendix E**). The No Action alternative would create an adverse impact because it would not comply with the *General Plan's* Health and Safety goal and policy, the CLUP, or comply with the County's grant assurances as required by FAA.

The Proposed Action would comply with the goals and policies of the *General Plan's* Health and Safety Element, as it would improve safety for the community and aviators in accordance with both the *General Plan* and CLUP. The Proposed Action would fulfill the project's purpose and need by removing obstructions to navigable airspace as defined by FAR Part 77, and it would allow the County to comply with its grant assurances. The Proposed Action would also comply with the policies set forth in the Yolo County CLUP pertaining to FAR Part 77.

The Proposed Action alternative also would comply with the policies set forth in the General Plan Conservation Element, because it would remove non-native species (eucalyptus trees) and provide for the replacement of many trees with native species. As noted in the project description, the project would include the planting of 30 trees at CCR, which would create potential nesting habitat for, and prevent adverse effects on, Swainson's hawk habitat.

No impacts associated with compatible land use are anticipated with implementation of the Proposed Action alternative.

4.3.3 Biotic Resources

FAA must evaluate proposed actions that would cause a significant effect to biotic resources. Pursuant to FAA guidance in Order 1050.1E, the term "biotic resources" refers to the plants and animals that occur in a particular area (FAA 2006b). The term also refers to rivers, lakes, wetlands,

forests, upland communities, and other habitat types supporting flora and aquatic and avian fauna. The following discussion of biotic resources addresses only the state-listed rare or unique species or habitats associated with the project area that could be affected by a proposed project. (Refer to Section 4.3.4 for a discussion of Federally listed endangered and threatened species.)

Pursuant to FAA guidance, an evaluation of biotic resources must include an analysis of impacts and their consequences on common and unique biotic resources to determine whether any permanent change will occur to a particular habitat in the project area. If a change will occur, the extent of that change must be identified (FAA 2006b).

Methodology

To identify biotic communities in the project area, the County performed literature surveys and field studies. The field studies included four site reconnaissance visits during the spring and summer of 2009 and follow-up visits in 2010.

Literature surveys and database records were reviewed to identify a list of special-status plant and animal species that have the potential to occur in the study area. Records were reviewed from the following resources:

- United States Fish and Wildlife Services' (USFWS) Endangered Species Program;
- California Natural Diversity Data Base (CNDDB);
- Previous studies performed in the project area, specifically those associated with the distribution, abundance, and habitat associations associated with the Swainson's hawk (*Buteo swainsoni*); and
- Previously published environmental studies.

The County conducted biological field surveys in April, June, and July of 2009, and follow-up site visits in 2010 (see Appendix A). The surveys identified dominant vegetation, common wildlife, and sensitive species. Subsequent survey activities focused on the identification of nesting raptor activity.

For the purposes of this EA, the Proposed Action or the No Action alternative would cause a significant impact on a biological resource if scientific literature from agencies that have expertise on the biotic resource indicates that the proposed project or its alternatives would:

- Affect population dynamics;
- Affect sustainability and reproduction rates;
- Affect natural and artificial mortality; or
- Affect the minimum population size needed to maintain an affected population (FAA 2006b).

Affected Environment

Based on field studies, the vegetation associated with the project area includes non-native grassland, fallow fields, and remnant groves of mostly non-native and ornamental trees. Vegetation on the 14 private properties that comprise the study area includes similar grassland with trees that had been

planted to provide ornamental landscaping, shade, windbreak, or cover. As shown on **Figure 4-3**, eucalyptus is the most abundant tree species, and the study area includes many large, old eucalyptus trees. The largest and densest stands are just northeast of the intersection of CR 95 and CR 31 and on the property located 0.25 mile southwest of the intersection of CR 95 and CR 31.

Most of the trees identified for removal were planted near residences to provide landscaping, shade, windbreak, or cover. Two stands of densely planted eucalyptus stands are present along CR 95, which include a few acacia and tamaracks as well. Eucalyptus is the predominant species associated with the trees selected for removal, and eucalyptus trees entirely comprise ten of the 16 tree stands identified as containing obstructions. Four remaining stands include a mixture of eucalyptus with other species (poplar, cypress, acacia, and tamarack). Two stands identified with obstructions are stands composed of walnuts trees mixed with olives or oaks (see **Figure 4-3**).

In the project vicinity, riparian habitat is present along Dry Slough, which passes beneath CR 95 near its intersection with CR 31. Another riparian habitat is associated with a drainage canal on the airport property near the Yolo Sportsmen's Association area, but it is outside of the project area (Yolo County, 2010). All tree removal will occur outside of stream channels and riparian habitat areas, and equipment will not enter these areas.

State-Listed Species

Based on a review of the Californian Natural Diversity Database (CNDDB) and site observations, 13 special-status species (three plants and ten animals) were identified as potentially occurring in the site vicinity. However, none of the three special-status plant species are expected to occur in the project area due to the lack of suitable native substrates (i.e., clay and/or alkaline soils).

Of the 10 state-listed animal species, one raptor species is historically known from the project area (Burrowing owl), and three raptor species or were observed during field surveys (white-tailed kite, northern harrier, and Swainson's hawk).

- **White-tailed kite.** White-tailed kite is a California fully protected species that nests in densely foliaged trees and large shrubs located near suitable foraging habitat (i.e., grasslands, marshes, agricultural fields). A potential nest was observed in an off-site pine grove, but the grove will not be affected by the proposed project and all project activities will occur outside of nesting season (see **Appendix A).**
- **Northern harrier**. Northern harrier is a California Species of Special Concern that prefers freshwater wetland and salt marsh habitats, although it may also occur in grasslands and agricultural fields (Peeters and Peeters 2005). This species nests on the ground in dense vegetation, typically in marshes or overgrown fields. No suitable nesting habitat was observed in the project area while conducting the surveys.

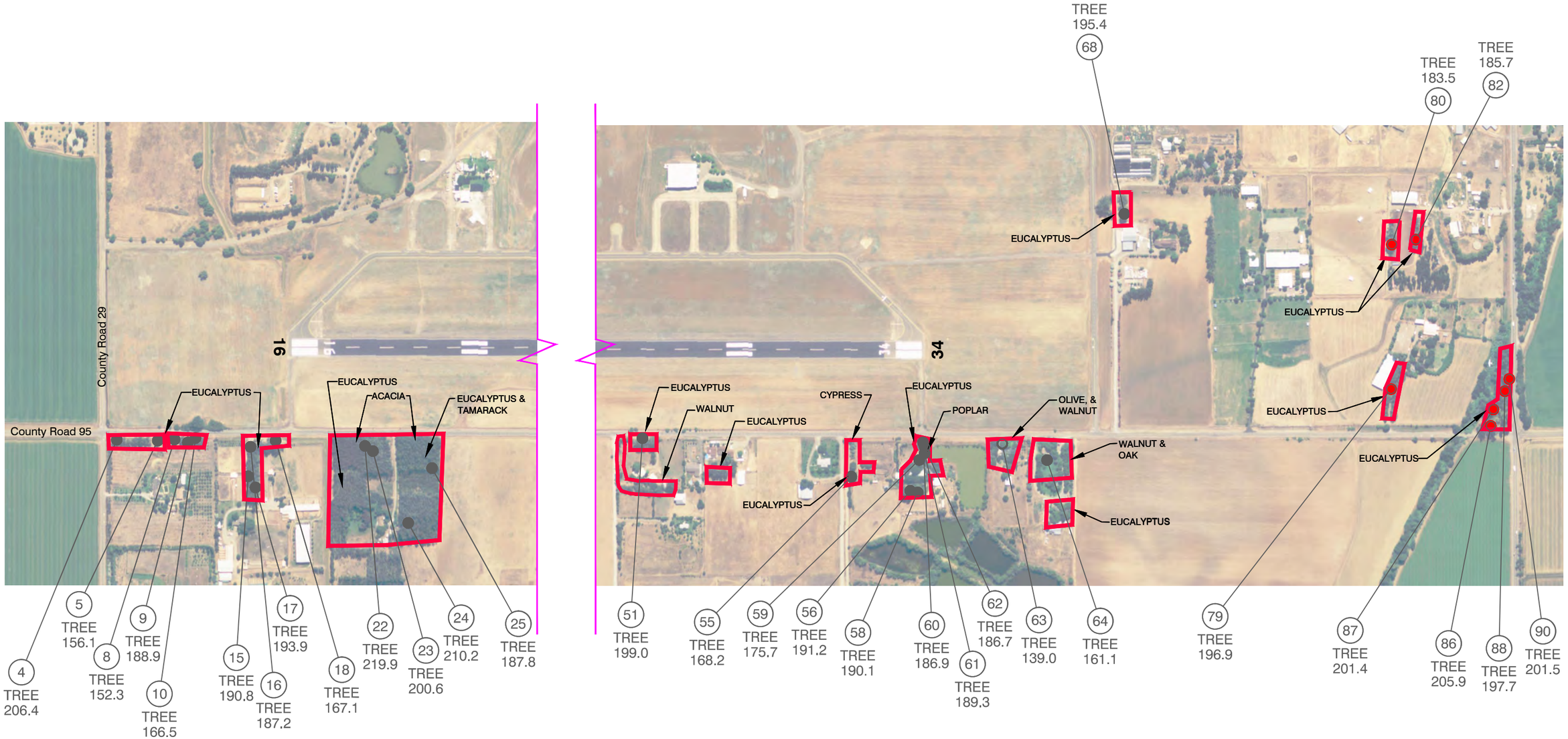
- **Swainson's hawk**. Yolo County supports the largest nesting concentration of Swainson's hawks in California (Estep 2008). Numerous agricultural fields interspersed with residential and riparian trees that characterize the landscape surrounding the project area represent high-quality nesting and foraging habitat for this state-threatened species. Two active nests were identified in the project area: one nest was present immediately northeast of the CR 95/CR 31 intersection (Nest Tree No. 1), and another was present on the southern edge of the large eucalyptus grove on the property at 24330 CR 95 (Westerdahl property), approximately 400 feet west of CR 95 (Nest Tree No. 2). The nest locations are shown on **Figure 4-4**, and further data are provided in **Appendix A**.
- **Burrowing owl**. The CNDDB includes a record of a historic burrowing owl colony adjacent to the Airport along CR 95 and approximately 0.7 mile north of CR 31 (CDFG 2009; CNDDB occurrence no. 28). However, the site was flooded in 1983 and is now considered extirpated. A few California ground squirrel (*Spermophilus beecheyi*) burrows were observed in some of the dirt berms along the west side of CR 95, but no burrowing owls were observed in the project area during field surveys.

Impact Analysis

Based on the result of database inquiries, literature reviews, and an analysis of the collected data, the only sensitive vegetation alliance was associated with the portion of Dry Slough that passes through the southwestern portion of the study area. No tree removal is proposed from the riparian area.

As noted in the project description, the project includes a landowner tree replacement program on those properties affected by tree removal. The newly planted trees will be limited to native species that do not have the potential to exceed FAA height restrictions. To prevent potential impacts to species protected by the Migratory Bird Treaty Act (MBTA), the proposed project will be performed outside of the nesting season for bird species (February 15 to August 15), including the four raptor species identified during field surveys.

Several years will be required for the replacement trees to mature; therefore, the project will result in short-term nesting habitat loss for the two Swainson's hawk pairs identified during field surveys. However, many other suitable nest trees will remain in the vicinity following project completion. Suitable nesting habitat in the vicinity of Nest Tree No. 1 includes trees within riparian trees along Dry Slough and the row of planted walnut trees located on the south side of CR 31. Suitable nesting habitat in the vicinity of Nest Tree No. 2 includes additional eucalyptus trees in the western portion of the property and the row of ornamental trees lining the driveway approximately 700 feet to the south. Although Swainson's hawks are known to exhibit high nest site fidelity between years (Estep 2008), they have also shown some ability to select alternative nest sites in response to nest tree removal, as long as such sites are located nearby (LSA 2009). The availability of suitable nest trees in the vicinity of the two nest trees that will be removed indicates that that the affected Swainson's hawk pairs would be able to find alternative nest sites in the following breeding season. Therefore, the temporary, short-term loss of these nesting trees is considered less than significant.



Wooded areas containing airspace obstructions, as identified by WH Pacific.

Individual trees identified as airspace obstructions by Mead & Hunt

- All elevations are in feet above mean sea level

N

600'

0 FEET 1,200'

Source: Mead & Hunt, Inc. (January 2011)

X:\25020-00\REF\Environmental\Document Figures\Fig 4-3 Tree Species.dwg May 10, 2011 - 4:59pm

Figure 4-3

Tree Species

Yolo County Airport Obstruction Removal Project

X:\25020-00\REF\Environmental\Document Figures\Fig 4-4 Raptor Sites.dwg May 10, 2011 - 4:55pm

Source: LSA, Inc. (2009)

Figure 4-4

Known Swanson's Hawk Nest Sites

Yolo County Airport Obstruction Removal Project

Two protected species were identified in the project area: the white-tailed kite and the Swainson's hawk. No trees proposed for removal contained nests associated with the white-tailed kite.

Under the No Action alternative, no tree removal would occur. No impact to sensitive natural communities is anticipated.

The Proposed Action will result in the loss of two trees that are known to contain a Swainson's hawk nest and trees that could potentially support Swainson's hawk nests in the future. To offset this habitat loss and prevent long-term impacts to Swainson's hawk nesting habitat in the County, the proposed project will include County funding to pay for the planting of 15 new native trees to replace each known nest tree (30 trees total) in a riparian area at the CCR, located approximately 2 miles west of the project area. The planting of replacement trees at CCR and within the project area was included as part of the proposed project to ensure "no net loss" of suitable Swainson's hawk nesting habitat in west-central Yolo County.

According to the Proposed Action, approximately 150 trees will be removed from 14 properties. None of the trees will be removed from riparian habitat or another sensitive natural community as identified by local or regional plans, policies, or regulations, or by state or federal agencies. Trees associated with landscaping or ornamental areas will be replaced by native species, and 30 trees will be planted at CCR to provide potential nesting habitat for the Swainson's hawk, a state-listed species.

No long-term effect to biological resources is anticipated under the Proposed Action alternative.

4.3.4 Federally Listed Endangered and Threatened Species

Section 4.2.3 presents the potential effect of the proposed project on federally listed species or critical habitats under the Endangered Species Act of 1973.

Federal Endangered Species Act

Under the Federal Endangered Species Act (FESA), the Secretary of the Interior and the Secretary of Commerce have joint authority to list a species as threatened or endangered (16 USC 1533[c]). Pursuant to the requirements of FESA, an agency reviewing a proposed project within its jurisdiction must determine whether any listed threatened or endangered species may be present in the project area, and the agency must determine whether the proposed project has the potential to affect such species. In addition, the agency is required to determine whether the project is likely to jeopardize the continued existence of any species proposed to be listed under FESA or result in the destruction or adverse modification of critical habitat proposed to be designated for such species (16 USC 1536[3], [4]).

USFWS also publishes a list of candidate species. Species on this list receive special attention from federal agencies during environmental review, although they are not protected under the FESA. The candidate species are *taxa* for which the USFWS has sufficient biological information to support a proposal to list these species as endangered or threatened.

Migratory Bird Treaty Act

The Federal Migratory Bird Treaty Act (MBTA) prohibits the taking, hunting, killing, selling, and purchasing of migratory birds, parts of migratory birds, or their eggs and nests. As identified in the MBTA, "take" is defined as the "hunt, pursuit, capture, or kill, or attempt to hunt, pursue, capture or kill unless the context otherwise requires."

Methodology

The County's biologists conducted a literature review and database inquiries pertaining to federally listed species and to identify species of flora and fauna that had the potential to occur in the project area. Following a literature review, project biologists conducted several site visits in 2009 and follow-up visits in 2010 to characterize site conditions and identify the presence of listed species.

According to FAA Order 5050.4B, a project would have significant impacts on endangered and threatened species if:

- Listed or proposed to be listed species are present within the area affected by the proposed action, and the proposed action would have an adverse effect on endangered or threatened species or on critical habitat;
- Input from the USFWS or state agency indicates that substantial, project-induced damage to wildlife cannot be mitigated to minimal levels; or
- Analysis indicates that project implementation would result in the loss of a substantial amount of habitat, of habitat that supports rare species, or of small amounts of sensitive habitat with a significant accompanying loss of plant communities and displacement of wildlife when these adverse impacts to wildlife or wildlife habitat cannot be mitigated to the satisfaction of the resource agencies.

Affected Environment

The proposed project area supports wildlife species that have adapted to the agricultural landscapes that characterize much of Yolo County and California's Central Valley. Twenty-eight avian species, including raptors, were observed during the 2009 field study and nesting raptor survey as shown in **Table 4-4**:

Table 4-4. Avian Species Observed in Study Area, Yolo County, Obstruction Removal Project

American crow *(Corvus brachyrhynchos)*	American kestrel *(Falco sparverius)*
Anna's hummingbird *(Calypte anna)*	Barn owl *(Tyto alba)*
Barn swallow *(Hirundo rustica)*	Bullock's oriole *(Icterus bullockii)*
Black phoebe *(Sayornis nigricans)*	Cliff swallow *(Petrochelidon pyrrhonota)*
European starling *(Sturnus vulgaris)*	Great horned owl *(Bubo virginianus)*
Greater yellowlegs *(Tringa melanoleuca)*	House finch *(Carpodacus mexicanus)*
Mallard *(Anas platyrhynchos)*	Northern Flicker *(Colaptes auratus)*

Table 4-4. Avian Species Observed in Study Area Yolo County Obstruction Removal Project	
Northern harrier *(Circus cyaneus)*	Northern mockingbird *(Mimus polyglottos)*
Nuttall's woodpecker *(Picoides nuttallii)*	Pacific-slope flycatcher *(Empidonax difficilis)*
Red-shouldered hawk *(Buteo lineatus)*	Red-winged blackbird *(Agelaius phoeniceus)*
Swainson's hawk *(Buteo sainsoni)*	Turkey vulture *(Cathartes aura)*
Violet-green swallow *(Tachycineta thalassina)*	Western kingbird *(Tyrannus verticalis)*
Western scrub-jay *(Aphelocoma californica)*	White-tailed kite *(Elanus leucurus)*
Wilson's warbler *(Wilsonia pusilla)*	Yellow-rumped warbler *(Dendroica coronate)*

Source: LSA Associates, 2009.

One mammal species, the Western gray squirrel (*Sciurus griseus*), was also observed during field surveys. Several other mammals are expected to occur but were not observed: Virginia opossum *(Didelphis virginiana),* Botta's pocket gopher *(Thomomys bottae),* Norway rat (*Rattus norvegicus),* house mouse (*Mus musculus*), California vole (Microtus californicus), black-tailed jackrabbit (Lepus californicus), coyote *(Canis latrans),* northern raccoon *(Procyon lotor),* striped skunk *(Mephitis mephitis),* and black-tailed deer *(Odicoileus hemionus).* Common amphibian and reptile species expected to occur in the project area include California slender salamander *(Batrachoseps attenuatus),* arboreal salamander *(Aneides lugubris),* western toad *(Bufo boreas),* Sierran treefrog *(Pseudacris regilla),* western fence lizard *(Sceloporus occidentalis),* southern alligator lizard *(Elgaria multicarinata),* racer *(Coluber constrictor),* gopher snake *(Pituophis catenifer),* and common garter snake (*Thamnophis sirtalis*). Refer to **Appendix A** for further information.

Federally Threatened Species

The County reviewed an official USFWS list of Federally Endangered and Threatened Species (including Candidate and Proposed Species) for the Merritt and Winters United States Geological Service (USGS) 7.5-minute quadrangles and Yolo County prior to performing field surveys in 2009. A new species list was obtained in 2010 to identify any potential changes in species status. The list of federally listed species and their potential presence within the project area is summarized in **Table 4-5**. A recent list of federally protected species is presented in **Appendix B**.

Table 4-5. Federally Endangered and Threatened Species, Yolo County Airport Obstruction Removal Project		
Common Name (*Scientific Name*)	**Federal Status**	**Potential for Occurrence/ Observation**
Invertebrates		
Conservancy fairy shrimp *(Branchinecta conservatio)*	Endangered	*None.* Not expected to occur due to absence of vernal pools.
Vernal pool fairy shrimp (*Branchinecta lynchi)*	Threatened	*None.* Not expected to occur due to absence of vernal pools.
Valley elderberry longhorn beetle *(Desmocerus californicus dimorphus)*	Threatened	*None.* Not expected to occur due to absence of elderberry shrubs.

Table 4-5. Federally Endangered and Threatened Species, Yolo County Airport Obstruction Removal Project

Common Name (*Scientific Name*)	Federal Status	Potential for Occurrence/ Observation
Critical habitat, vernal pool tadpole shrimp; Vernal pool tadpole shrimp *(Lepidurus packardi)*	Critical habitat; Endangered	*None.* Not expected to occur due to absence of vernal pools.
Fish		
Green sturgeon *(Acipenser medirostris)*	Threatened	*None.* Not expected to occur due to absence of streams tributary to Sacramento River.
Delta smelt; Critical habitat, delta smelt (*Hypomesus transpacificus)*	Threatened; Critical habitat	*None.* Not expected to occur due to absence of streams tributary to Sacramento River.
Central Valley steelhead Critical habitat, Central Valley Steelhead *(Oncorhynchus mykiss)*	Threatened; Critical habitat	*None.* Not expected to occur due to absence of streams tributary to Sacramento River.
Central Valley spring-run Chinook salmon; Critical habitat, Central Valley spring-run Chinook; Winter-run Chinook salmon, Sacramento River Critical habitat, winter-run Chinook salmon; *(Oncorhynchus tshawytscha)*	Threatened; Critical Habitat; Endangered; Critical habitat	*None.* Not expected to occur, due to absence of streams tributary to Sacramento River.
Amphibians		
California tiger salamander, central population Critical habitat, CA tiger salamander, central population *(Ambystoma californiense)*	Critical Habitat; Threatened	*None.* Presumed to be absent due to the due to lack of seasonal pools, vernal pools, and seasonal wetlands.
California red-legged frog *(Rana draytonii)*	Threatened	*None.* As stated in the 1996 USFWS *Recovery Plan for California Red-legged Frog*, "the California red-legged frog was probably extirpated from the floor of the Central Valley before 1960." Recent occurrences are from the Coast Range foothills to the west, and Yolo County is outside of the distribution for this species.
Reptiles		
Giant garter snake *(Thamnophis gigas)*	Threatened	*None.* Not expected to occur due to lack of records in project area vicinity. No agricultural wetlands or other wetlands, ditches, drainage canals, or surface water features will be affected by the proposed project.
Birds		

Table 4-5. Federally Endangered and Threatened Species, Yolo County Airport Obstruction Removal Project		
Common Name (*Scientific Name*)	**Federal Status**	**Potential for Occurrence/ Observation**
Northern spotted owl *(Strix occidentalis caurina)*	Threatened	*None.* Not expected to occur due to absence of coniferous forest.
Plants		
Palmate-bracted bird's beak *(Cordylanthus palmatus)*	Endangered	*None.* Not expected to occur due to absence of saline-alkali soils.
Colusa grass; Critical habitat, Colusa grass *(Neostapfia colusana)*	Threatened; Critical habitat	*None.* Not expected to occur due to absence of vernal pools.
Critical habitat, Solano grass; Solano grass *(Tuctoria mucronata)*	Critical habitat; Endangered	*None.* Not expected to occur due to absence of vernal pools.

Source: USFWS, 2011

Based on the results of the literature review, database record searches, and field surveys, none of the 12 federally listed animal species or their critical habitats are likely to occur in the proposed project area. None of the listed invertebrate, amphibian, or reptile species is likely to occur based on the absence of vernal pools and wetlands within the study area. None of the identified fish species or their critical habitats are likely to occur based on the absence of streams in the project area that serve as tributaries of the Sacramento River. None of these species was observed during field surveys.

One federally listed bird species was identified on the project list, but it was not observed in the project area. The federally threatened Northern spotted owl is unlikely to occur based on the absence of conifer forest within the proposed project area.

No federally listed plant species were identified as likely to occur in the proposed project area. Neither Colusa grass nor Solano grass are likely to occur in the project area based on the absence of vernal pools. The absence of saline-alkali soils indicates that Palmate-bracted birds' beak is unlikely to occur in the project area. No federally listed plant species was observed during field surveys.

FAA initiated informal consultation with the USFWS Sacramento Field Office. USFWS reviewed the species lists and concurred with FAA's conclusion that that the proposed project would not affect federally listed species in the project area based on the lack of suitable habitat. Correspondence between FAA and USFWS is presented in **Appendix B**.

Impact Analysis

As shown in **Table 4-5**, the Proposed Action is not likely to result in adverse effects to federally listed species based on the absence of these species or their suitable habitats. As noted in the project description, the Proposed Action includes the removal of approximately 150 trees, provisions to assist landowners in tree replacement at a 1:1 ratio, and funding for the planting of 30 trees in the nearby Chickahominy Creek Reserve. To prevent potential impacts to species protected by the MBTA, the proposed project will be performed outside of the nesting season for bird species (February 15 to

August 15). No permanent impacts to federally listed species are anticipated as a result of the Proposed Action.

Under the No Action alternative, no trees will be removed; therefore, no impact is anticipated. Replacement of the eucalyptus trees with native species would not occur.

4.3.5 Floodplains

To meet Executive Order 11988, "Floodplains" and the U.S. Department of Transportation (DOT) Order 5650.2, "Floodplain Management and Protection," all airport development actions must avoid the floodplain, if a practicable alternative exists. The objective of Executive Order 111988 is to preserve and restore the natural and beneficial values floodplains provide. The Order directs federal agencies to take actions to reduce the risk of flood loss, minimize flood impacts on human safety, health, and welfare and restore and preserve floodplain natural and beneficial values.

Methodology

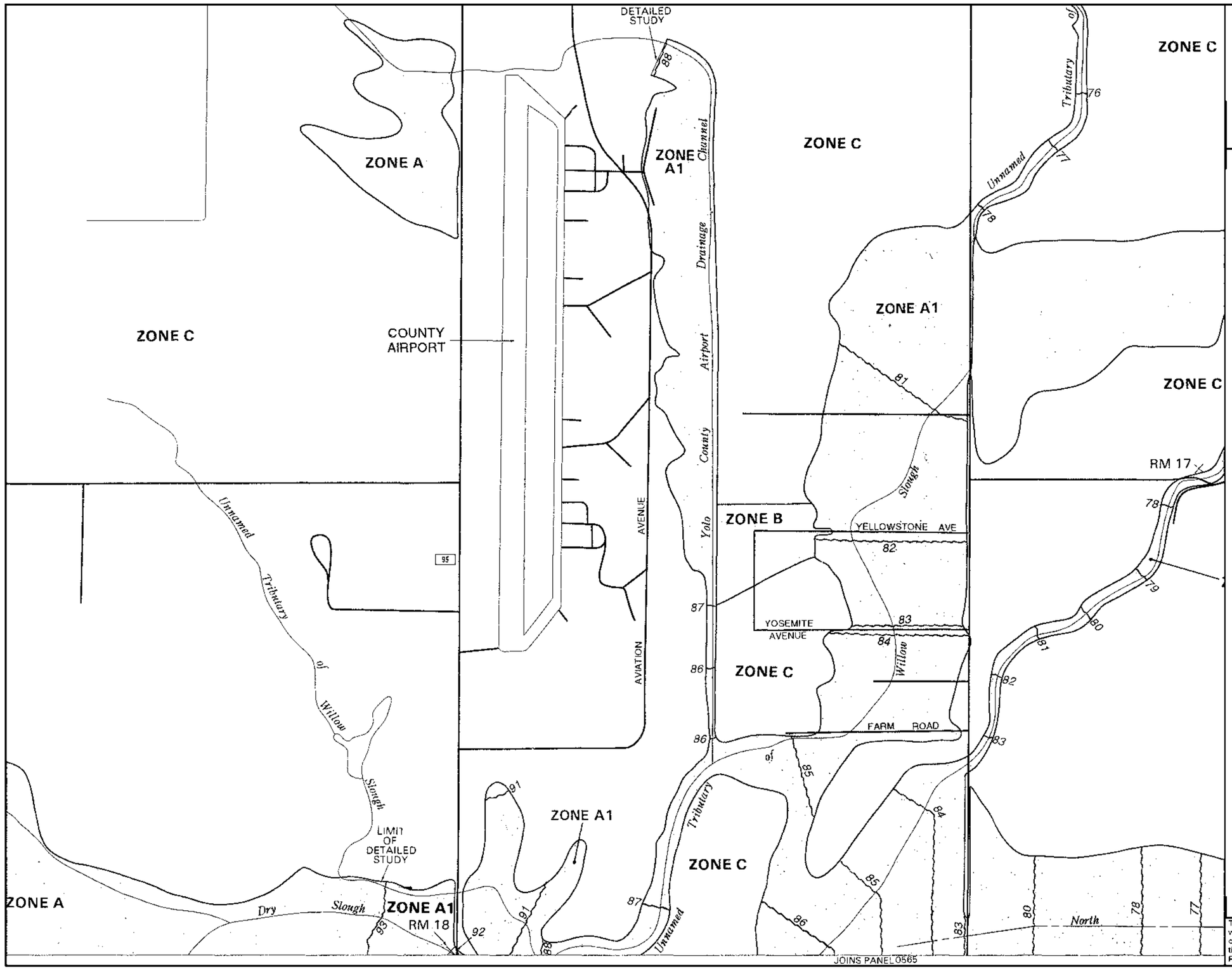
Federal guidance identifies several factors to consider when assessing potential floodplain impacts, including whether a proposed action has the potential to affect a floodplain's natural and beneficial values.

For NEPA purposes, a significant impact would occur if a proposed action would cause a considerable probability of the loss of human life, or if it has the potential to cause damage that would interrupt airport service or use of a proposed runway or other proposed airport facility. The proposed project will not provide for the development of additional facilities within the floodplain to increase the probability of the loss of human life, nor will it pose extensive damage or costs to airport facilities. On the contrary, the obstruction removal will prevent an interruption of airport service or use of Runway 16-34.

A significant impact would also occur if a proposed project would create a notable, adverse effect on a floodplain's natural and beneficial values. FAA guidance identifies a notable adverse effect if it would affect agricultural activities, acquacultural activities, or disrupt the ability of a floodplain to provide needed food, cover, or water requirements needed to sustain organisms.

Affected Environment

Based on Flood Insurance Rate Map No. 0604230555C, a portion of the proposed project area is located within Zone A (FEMA1999). Zone A refers to areas with a 1% annual chance of flooding. As shown on **Figure 4-5**, the portion of the proposed project area that lies within the 100-year floodplain is adjacent to CR 95, southwest of its intersection with CR 29. This floodplain area includes a grove of eucalyptus, many of which are located in the transitional surface. Floodplain areas also occur south of Aviation Avenue that are associated with the unnamed tributary of Union Creek near its confluence with the Yolo County Airport Drainage channel. Although some tree removal is proposed in the floodplain, no tree removal is proposed within riparian areas.



APPROXIMATE SCALE IN FEET

1000 0 1000

NATIONAL FLOOD INSURANCE PROGRAM

FIRM

FLOOD INSURANCE RATE MAP

YOLO COUNTY, CALIFORNIA
UNINCORPORATED AREAS

(SEE MAP INDEX FOR PANELS NOT PRINTED)

COMMUNITY-PANEL NUMBER
060423 0555 C

MAP REVISED:
MARCH 23, 1999

Federal Emergency Management Agency

Figure 4-5: Floodplain Location

Impact Analysis

A portion of the proposed project will require the removal of trees from a designated floodplain near the intersection of CR 95 and CR 29. The floodplain is associated with a low-lying area rather than with a surface water feature or riparian area.

The No Action alternative will not result in any activity in a designated floodplain. No adverse impact to designated floodplains is anticipated.

The Proposed Action alternative will not affect areas in cultivation, nor will it occur near aquacultural activities or affect surface water resources, such as streams, ponds, or wetlands to affect aquatic habitat for aquatic or terrestrial organisms (see also Sections 4.2.2 and 4.2.3). It will not create new facilities to create or retain water, nor will it create new impervious surfaces to increase flood flows or prevent groundwater recharge.

The natural flow of water through vegetation found in floodplains can help to reduce pollutant loads, thereby helping to maintain water quality. The Proposed Action alternative will result in the removal of trees, many of which will be replaced by lower-growing species. Although the trees help to maintain water quality by absorbing surface water and reducing pollutant loads, the proposed project will include the planting of new trees to offset this potential impact. In addition, the proposed project will not result in the creation of impervious surface, which would deter infiltration and increase the amount and rate of runoff. Therefore, the impact to floodplains associated with the Proposed Action alternative is less than significant.

4.3.6 Historical and Archaeological Resources

Cultural resources include historical, architectural, and archaeological resources, such as historic districts, sites, buildings, structures, objects, and landscapes that may be significant in American history, prehistory, architecture, archaeology, engineering, and culture. Cultural resources include existing and potential historic and prehistoric archaeological sites, historic buildings and structures, and Native American Traditional Cultural Properties (TCPs).

The National Historic Preservation Act (NHPA) of 1966, as amended, established the Advisory Council on Historic Preservation (ACHP) and the National Register of Historic Places (NRHP) within the National Park Service (NPS). Section 106 of the NHPA requires federal agencies to consider the effects of their undertakings on properties on or eligible for inclusion in the NRHP. Compliance with Section 106 requires consultation with the ACHP, the State Historic Preservation Officer (SHPO), and the Tribal Historic Preservation Officer (THPO) if there is a potential adverse effect to historic properties on or eligible for listing on the NRHP. Consultation on preservation-related activities also may occur with other federal, state, and local agencies, Tribes, Native Hawaiian organizations, the private sector, and the public. Applicable statues and Executive Orders pertaining to cultural resources include:

- The Historic Sites Act of 1935,
- The Department of Transportation Act of 1966,
- The Archaeological and Historic Preservation Act of 1974 (NHPA),
- The Public Building Cooperative Use Act of 1976,
- The American Indian Religious Freedom Act of 1978,
- The Archaeological Resources Protection Act of 1979,
- The Antiquities Act of 1986,
- The Native American Graves Protection and Repatriation Act (NAGPRA) of 1990,
- Executive Order (EO) 11593, Protection and Enhancement of the Cultural Environment,
- EO 13006, Locating Federal Facilities on Historic Properties in Our Nations Central Cities,
- EO 13007, Indian Sacred Sites, and
- EO 13175, Consultation and Coordination with Indian Tribal Governments.

Methodology

An Area of Potential Effect (APE) for historic properties was identified to include areas that could be directly (physically) or visually affected by the proposed obstruction removal activities. The APE incorporated areas immediately adjacent to tree removal activities, and was identified to correspond with the legal parcel boundaries for each potentially affected parcel. The APE boundaries are shown on **Figure 4-6**.

Historical and cultural resource field surveys were performed to identify resources within the project's APE, such as sites listed on the NRHP or eligible for inclusion on the NRHP. The historic and archaeological survey included:

- A Record Search at the Northwest Information Center at Sonoma State University and the Yolo County Historical Society to identify previously documented historic and archaeological sites;
- Pedestrian field surveys to identify potential archaeological features and features in the built environment on residential/ranch properties within the APE boundaries; and
- Consultation with Native American Heritage Commission (NAHC) and federally recognized tribes in the area to identify potential sacred sites.

A copy of the archaeological investigation and historic resource investigation are presented in Appendices C and D, and copies of agency correspondence are provided in Appendix B.

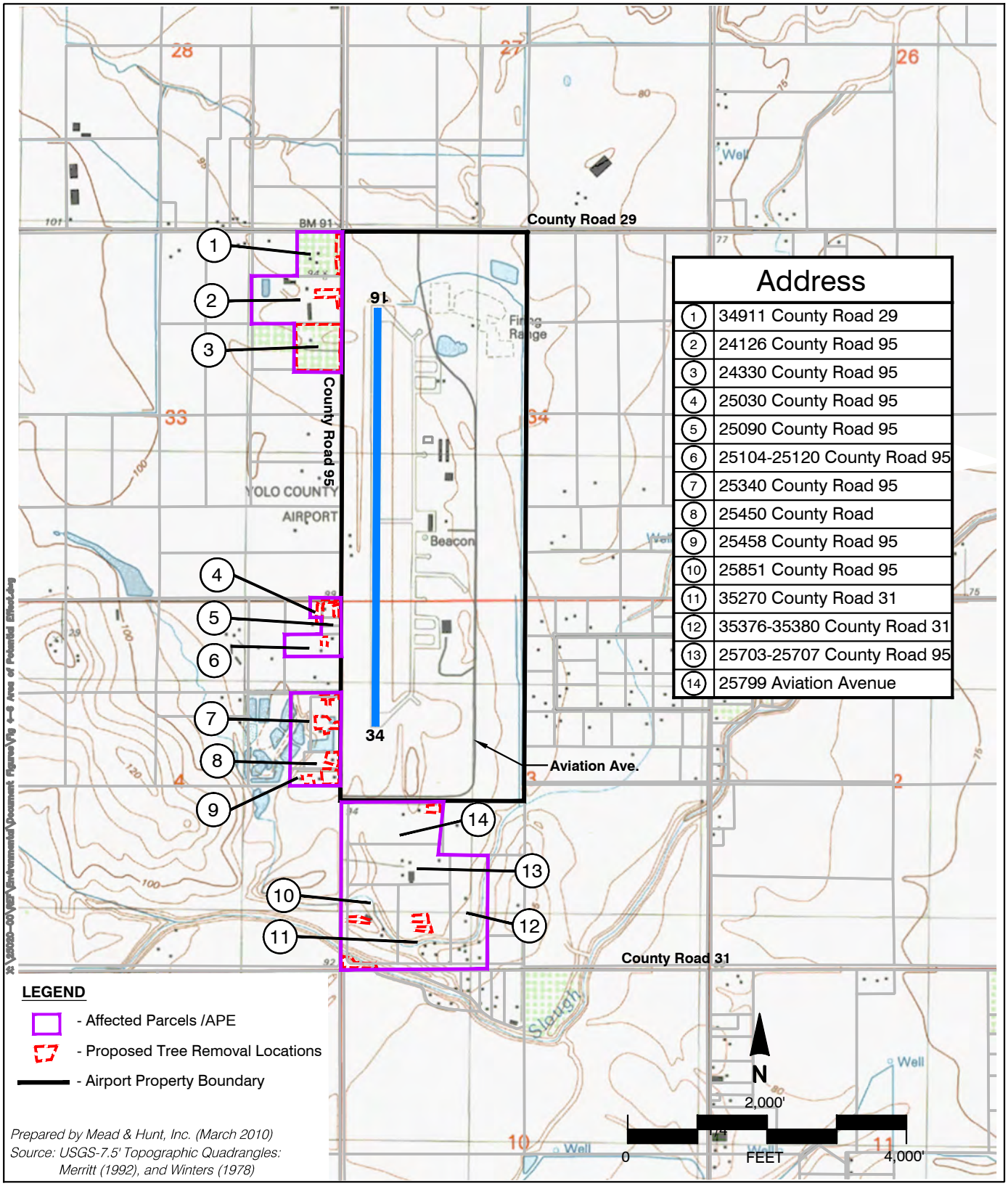


Figure 4-6

Area of Potential Effect

Yolo County Airport Obstruction Removal Project

NHPA established the National Register of Historic Places (NRHP), which is the official list of sites significant in American history. Section 106 of the NHPA requires federal agencies to consider the effect of undertakings on historic properties and to develop and evaluate alternatives to avoid, minimize, or mitigate unavoidable adverse effects on historic properties. Historic properties are those listed on or formally determined eligible for the NHRP.

To be listed on the NRHP, a property must be 50 years old, possess historic significance, and retain physical integrity. A property possesses historic significance if it fulfills one of the following criteria:

- Criterion A: the property is associated with events or activities that have made a significant contribution to the broad patterns of history.
- Criterion B: The property is associated with the lives of persons significant in our past.
- Criterion C: The property is associated with the distinctive characteristics of a type, period, or method of construction, or it represents the work of a master, possesses high artistic values, or represents a significant and distinguished entity whose components may lack individual distinction.
- Criterion D: The property holds the potential to provide important information about prehistory or history.

Affected Environment

Summary Ethnographic and Historic Context

The area surrounding Davis, California, is characterized in ethnographic literature as the seasonal territory inhabited by the Southern Patwin, specifically the Hill Patwin, during the contact period. In the late 18th Century, Spanish Exploration of the Sacramento Valley and settlement of the Bay Area transformed Patwin culture. The 1879 Office Map of Yolo County illustrates that the APE and its surrounding vicinity are situated on a variety of parcels that were all claimed land. Historically, the land surrounding the airport appears to have been devoted to agriculture during the 19th Century.

The land associated with the airport was acquired by the federal government during the 1940s for auxiliary aviation facilities to support operations at McClellan Air Base in nearby Sacramento. An 8,000-foot paved airstrip was constructed at the site in 1942, and B-25 aircraft were based there during World War II. The federal government conveyed the airstrip to Yolo County in 1948, and the airstrip was renamed as Yolo County Airport in 1974.

Many of the large agricultural holdings surrounding the airport were subdivided during the 1960s and 1970s, and many residences were constructed along CR 95. Most parcels are associated with farming and equestrian activities. (More detailed ethnographic and historical context data are provided in **Appendix D**.)

Historic Resources

The results of the literature search did not identify any NRHP-listed or NRHP-eligible within the APE. One resource, the Victorian-era Gotfried-Shmeiser house, was identified within 0.25-mile of the APE and on the south side of CR 31. OHP's Historic Properties Directory (2009) lists the property under the status code of 3S, which indicates that it appears to be eligible for the NRHP (LSA Associates, 2010).

The County conducted a field survey of 14 parcels adjacent to CR 95, CR 29, Aviation Road, and CR 31 to identify and evaluate potential historic-age properties that might be eligible for NRHP. Eleven residential/ranch properties less than 50 years in age were evaluated, and none appeared to possess exceptional significance. Three historic-age properties were identified, but none were determined to be eligible for the NRHP as summarized in **Table 4-6** and the discussion below.

Table 4-6. Historic-Age Properties within the APE, Yolo County Obstruction Removal Project

Type	Address	Parcel No.	Recommendation
Farm House/Ranch Residence	35270 County Road 31	037-101-22	Not Eligible
Residence: Minimalist Traditional House	25458 County Road 95	038-120-09	Not Eligible
Center-aisle Barn	25030 County Road 95	038-120-04	Not Eligible

Source: Mead & Hunt, 2010.

Research and evaluation of the properties did not reveal any association with events that contributed to the settlement or development of Yolo County, local or regional agriculture, or any association with significant individuals important in the settlement and development of Yolo County. As such, these properties do not appear to possess significance under *Criterion A: Settlement or Agriculture* in Yolo County or *Criterion B: Persons* important in the settlement or history of Yolo County. These properties were also evaluated under *Criterion C: Architecture*. None was determined to be eligible. For more information, refer to **Appendix D,** which includes copies of the resource evaluation forms. Each property was also evaluated as a distinguishable entity whose components may lack individual distinction. None appear to form a complex or grouping of buildings and structures that, while individually undistinguished, collectively constitute a distinguishable entity that meets National Register or California Register Criteria for Evaluation.

Cultural and Archaeological Resources

No recorded cultural resources were identified within the APE or within a 0.25-mile radius of the APE during the record search or literature review. The records indicated that a previous survey was conducted in an area adjacent to the southern boundary of the APE, and no archaeological resources were identified.

A pedestrian survey was conducted on February 2010 to identify potential archaeological deposits within the APE. Parcel No. 038-120-009 was not available for investigation because the property owner would not permit access. The project team conducted a survey of using 3- to 5-meter transects,

and ground surface visibility ranged from good to poor. In areas where groundcover would permit, the ground surface was scraped at 5- to 10-meter intervals to expose underlying materials. Rodent borrows and dirt piles were examined for midden soils, artifacts, or other indicators of archaeological deposits.

Some freshwater clam shells were identified at the northern boundary of parcel No. 040-19-045 and northeast of the runway. No other archaeological indicators were identified in association with the shells, and the shells were considered natural occurrences. The southernmost portion of parcel No. 037-01-021 contained pieces of modern lumber, such as discarded fence posts and shipping palettes. Much of the ground within the APE was disturbed by agricultural activities and constructed berms near channelized water outside of the project boundaries.

Native American Consultation

The Native American Heritage Commission (NAHC) was contacted to identify potential Sacred Land Listings. The NAHC indicated that no Sacred Lands were listed in the project area, and it provided a list of Native American tribal representatives to contact regarding the presence of traditional cultural sites within the project area. The FAA conducted Government-to Government consultation with Native American tribal representatives based upon the NAHC consultation to inquire about the presence of traditional cultural properties in the project area (see **Appendix B**). Tribal representatives did not identify any cultural sites. In cases where individuals and groups did not respond to FAA's request for information, FAA concluded that there were no concerns regarding the proposed project.

Geoarchaeological Sensitivity Assessment

The geomorphology and age of a particular land form can indicate sensitivity for buried archaeological deposits. The County conducted a geoarchaeological sensitivity assessment to determine the project area's potential to contain buried archaeological deposits. Based on the data associated with landform age and soil types obtained during the geoarchaeological sensitivity assessment, the APE has a low to moderate sensitivity for containing buried archaeological deposits. The soils are well developed and associated with Tertiary land forms that are too old to contain buried archaeological deposits. The soils associated with Holocene landforms at the perimeter of the APE are well developed, although buried archaeological resources could occur beneath these soils.

Impact Analysis

Neither historic nor archaeolgocial resources were identified with the APE based on the results of research and field surveys. The results of the geoarchaeological investigation indicate that the proposed project area has a low to moderate sensitivity to contain buried archaeological deposits.

Impact CUL-1. Ground-disturbing activities, such as tree removal, have the potential to adversely affect previously unknown archaeological resources or human remains, and the effects of this disturbance could be significant. The implementation of Mitigation Measures CUL-1 and CUL-2 during tree removal activities would reduce the risk of impacts to previously unknown resources.

- **Mitigation Measure CUL-1: Cease work if prehistoric or historical archaeological materials are encountered.** If deposits of prehistoric or historical archaeological materials are encountered during project activities, all work within 25 feet of the discovery shall cease. The Contractor shall alert the Department of General Services immediately, so that a qualified archaeologist can be retained. Project personnel shall not disturb any archaeological or historical materials until they are assessed by a qualified archaeologist and appropriate consultation is conducted with regulatory agencies.

- **Mitigation Measure CUL-2: Cease Work if human remains are discovered during project activities.** If human remains are encountered, all work within 25 feet of the discovery shall cease immediately. The Contractor shall alert the Department of General Services, and the Department shall contact the County Coroner immediately. A qualified archaeologist shall be contacted to determine whether agency consultation is required. If the human remains are of Native American origin, the County Coroner shall notify the Native American Heritage Commission within 24 hours of identification. NAHC will provide recommendations for the proper treatment of the remains and associated grave goods.

FAA consulted with the State Historic Preservation Office under Section 106 of the NHPA regarding the project's Area of Potential Effect (APE) and eligibility of resources within the project area. In a letter to FAA dated February 14, 2011, the SHPO concurred with conclusions presented by the County, and agreed that a finding of No Historic Properties affected is appropriate for the proposed project (see **Appendix B.**)

The No Action alternative would not result in any ground-disturbing activities; therefore, no impacts to historical, cultural, or archaeological resources are anticipated.

No historical or archaeological resources are known to exist within the APE. However, the selective removal of trees could result in disturbances to unknown archaeological resources, buried historical resources, or human remains, which could result in significant impacts to these resources. The implementation of mitigation measures CUL-1 and CUL-2 would reduce the potential impacts associated with the Proposed Action to less than significant. The proposed project would have no effect on any historic properties, architectural, or cultural resources on or eligible for the NRHP.

4.3.7 Cumulative Impacts

According to the Council on Environmental Quality (CEQ), cumulative impacts represent the "…impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonable foreseeable future actions, regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over time."

Pursuant to CEQ NEPA regulations and guidance, federal agencies, such as FAA, must identify and address cumulative actions in their environmental documents (40 CFR Section 1508.25[a][2]). The cumulative impact analysis provides information on impacts resulting from the Proposed Action in

combination with other actions that have occurred or that will occur within a defined time and geographic area.

Methodology

The impact analysis did not identify any potentially significant impacts that would occur as a result of the proposed project following the implementation of BMPs or mitigation measures. Potential incremental effects were identified for the following environmental impact areas:

- Construction Impacts
- Energy Supplies and Natural Resources
- Floodplains
- Cultural Resources
- Federally Listed Endangered and Threatened Species

The potential incremental effects of the Proposed Action on each of these environmental resource areas were reviewed to determine whether the project's effects had the potential to contribute to any cumulative environmental effects. Within each resource area, the project's incremental effects were considered in relation to the environmental effects of other past, current, or future projects with the surrounding area. The area of potential cumulative effect varied with resource, but included the airport. Such other projects included recent projects (i.e., projects that had occurred during the last three years) and reasonably foreseeable projects (i.e., projects that were identified on an approved plan for implementation within the next five years).

Based on a review of the Airport Layout Plan/Capital Improvement Program and a list of current planning projects available from the Yolo County Planning Department, the following projects were identified:

- On-site obstruction removal at Yolo County Airport.
- Airport drainage improvements
- Improvements to previously developed areas of the infield, including aprons and run-up areas and runway maintenance/rehabilitation.

Available County data did not identify any recent or proposed development projects within 0.5 mile of the Airport during the analytical timeframe (Yolo County 2011c).

Affected Resources

Within the resource areas listed above, the following incremental effects were identified:

- *Construction Impacts.* Tree removal and associated vehicle activity will cause temporary, incremental effects to noise, air quality, and water quality. However, these effects will be offset through the implementation of BMPs specified in project engineering plans and specifications and in accordance with County and other regulatory agency requirements. Incremental effects

associated with other proposed projects that would occur in concurrently in the same geographic area would be required to implement BMPs and other regulatory agency requirements to prevent potential cumulative impacts.

- *Energy Supplies and Natural Resources.* The proposed project would result in the short-term, incremental use of consumable resources, such as fuel for construction vehicles and equipment. However, no projects are proposed that would result in prolonged construction periods or the development of new facilities that would create an increased demand for consumable energy after production. New infield improvements have the potential to create the need for lights or water; however, pursuant to FAA guidance, they would be designed using the best available technologies associated with energy efficiency. None of the proposed projects would place a significantly increased demand on available resources.

- *Floodplain Impacts.* All of the proposed projects identified within the cumulative impact area would occur within previously developed areas within or immediately adjacent to the airport boundaries. None of the proposed projects identified in planning documents place facilities within the 100-year floodplain; therefore, no cumulative effects on floodplain capacity or functions are anticipated.

- *Cultural Resources.* All proposed activities would occur in previously disturbed areas of the airport, and no NRHP-eligible resources were identified in association with on-site tree removal activities (Yolo County 2011d).

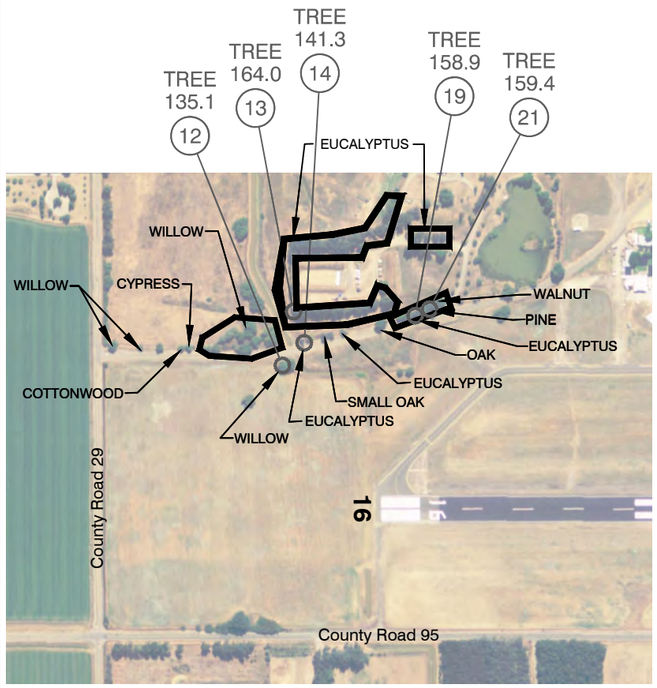
- *Federally Listed Endangered and Threatened Species.* No federally listed threatened or endangered species were identified within the project area. However, the Proposed Action has the potential to remove two trees that are known to contain nests for the Swainson's hawk, a state-listed species. The Proposed Action includes the planting of 30 additional trees at the CCR to provide nesting habitat for the Swainson's hawk, and no long-term impacts to the species are anticipated.

One proposed project that has the potential to contribute cumulative impacts would involve the removal obstructions and on DWA property during the next two years. On-site trees to be removed include one willow tree (Obstruction No. 12), three eucalyptus trees (Obstruction Nos. 13, 14, and 19), and one pine tree (Obstruction No. 21). In addition, the county will remove one stand of approximately ten willow trees, two stands of planted eucalyptus trees, and one walnut tree that are likely to become obstructions in the next five years. The trees and stumps will be removed, and the debris will be hauled from the project area to the local landfill. The County will perform these activities outside of the avian nesting season.

Impact Analysis

Based on a review of project-related incremental impacts in combination with the effects of other known projects identified in the vicinity of the proposed project area, only one other project was identified that has the potential to create cumulative impacts: on-site obstruction removal at DWA (see **Figure 4-7**). The project would include the removal of trees adjacent to northern airport boundary.

The County completed an environmental review for the removal of on-site trees (Yolo County 2011d), which included a nesting raptor survey, to determine whether the trees that were identified for removal provided nests or perching sites for various raptor species, including federal or state-listed species. The survey results did not identify the presence of nests that supported raptors in the proposed project area. A previous report had identified the presence of a nesting tree in the project area that supported the state-threatened Swainson's hawk, but field visit results indicated that the tree was no longer present. As a result, the on-airport tree removal activities would not contribute impacts to listed species. In addition, the proposed project would not affect migratory birds because it would occur outside of the nesting season (February 15 to August 15). Therefore, this analysis concludes that the Proposed Action is not associated with any significant cumulative impacts, and no additional mitigation is required beyond that already incorporated and identified for the incremental impacts.



N

600'

0 FEET 1,200'

N

1,000'

0 FEET 2,000'

Wooded areas containing airspace obstructions, as identified by WH Pacific. Trees to be removed as part of project.

56 TREE 191.2

Individual trees identified as airspace obstructions by Mead & Hunt

- All elevations are in feet above mean sea level

Source: Mead & Hunt, Inc. (Novemberr 2009)

X:\25020-00\REF Environmental\Document Figures\Fig 4-7 On-Site Tree Removal.dwg May 10, 2011 - 4:57pm

Figure 4-7

On-site Tree Removal Project

Yolo County Airport Obstruction Removal Project

5. List of Preparers

5.1 Lead Agency

The FAA is the NEPA lead agency for preparation of this EA.

U.S. Department of Transportation
Federal Aviation Administration
San Francisco Airports District Office
831 Mitten Road
Burlingame, California 94010

5.2 Principal Reviewer

Responsibility for review of this EA rests with the Federal Aviation Administration (FAA). The following paragraph identifies the principal FAA individual associated with this document in accordance with Council on Environmental Quality (CEQ) Regulations Section 1502.7 and Paragraph 87 of FAA Order 5050.4B, *National Environmental Policy Act (NEPA), Implementing Instructions for Airport Actions.*

Barry Franklin: B.S. Civil Engineering. Twenty years of experience. Environmental Protection Specialist, Airports Division, Western-Pacific Region. Responsible for the coordination of federal environmental disclosure documents for the Airports Division, Western-Pacific Region.

5.3 Principal Preparers

Responsibility for preparation of this Environmental Assessment EA rests with the Yolo County Department of General Services. Listed below are the employees of the County responsible for preparation of this EA.

Assistance and data analysis were provided by consultants hired by the County. The consultant for preparation of this document was Mead & Hunt, Inc. (Mead & Hunt). It is recognized that no one individual can be an expert in all of the environmental analysis presented in this EA. Consequently, an interdisciplinary team, consisting of technicians and experts in various topics, was required to prepare and complete this study. All decisions regarding the content, scope and methodology associated with the environmental analysis were made by the County with review and input from the FAA.

5.3.1 Yolo County

The following County Staff member contributed to document preparation:

Wes Ervin: Economic Development Manager, Yolo County. Responsible for County review of the EA.

5.3.2 Mead & Hunt (NEPA Consultant)

Yolo County retained Mead & Hunt, Inc. to prepare this EA. The following staff contributed to the preparation of the EA.

David Dietz: M.S., B.S. Planning, Quality Assurance/Quality Control. Thirty years of experience. Responsible for review of all work products.

Lisa Harmon: B.A. English. Nineteen years of experience. Project Manager. Responsible for oversight and preparation of the EA. FAA coordination and County coordination.

Carol Roland: Ph.D., U.S. History. Responsible for preparation of the historical resources evaluation pursuant to Section 106 of the National Historic Preservation Act. Thirty year's experience in cultural resources management.

Todd Eroh: Graphics and mapping. Twenty-two years of graphics design and experience. Proficient in the use of AutoCAD and ArcView (GIS).

5.3.3 Sub-consultant Assistance

One subconsultant assisted the Mead & Hunt Team with document preparation:

LSA Associates: Responsible for assisting biological studies and cultural resource studies in support of the EA (see **Appendices A** and **C**).

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Appendix A

Nest Survey Report

2009 NESTING RAPTOR SURVEY

YOLO COUNTY AIRPORT TREE REMOVAL PROJECT

DAVIS, YOLO COUNTY, CALIFORNIA

Submitted to:

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LSA Project No. MHN0902

LSA

July 23, 2009

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1.0 INTRODUCTION

1.1 BACKGROUND

The Yolo County Airport (Airport), with the assistance of Mead & Hunt, Inc. (M&H), has identified several trees in the Airport vicinity as airspace obstructions that pose potential hazards to incoming and outgoing aircraft. The California Division of Aeronautics (CDA) is requiring that these obstruction trees either be removed or topped. However, such trees could also provide nest and perching sites for various raptor species, including the State-threatened Swainson's hawk (*Buteo swainsoni*). To determine whether any of the obstruction trees support current or historic raptor nests, LSA Associates, Inc. (LSA) surveyed the trees for raptor nests and raptor nesting behavior during the 2009 breeding season. This report presents the results of that survey, and also summarizes known Swainson's hawk nest occurrences in the Airport vicinity and provides a brief overview of federal and State regulations pertaining to nest protection and Swainson's hawk impacts.

1.2 SETTING

The Yolo County Airport is located six miles northeast of Winters, five miles northwest of Davis, and five miles southwest of Woodland in rural Yolo County, California. The Airport is bounded by County Road (CR) 29 to the north, Aviation Avenue to the east and south, and CR 95 to the west (Figure 1). Surrounding land uses include agricultural fields, rural residences, and family ranching operations (including pastures and feedlots). Vegetation on the Airport consists of non-native grassland or fallow fields, with sparse ornamental trees planted around some of the buildings. Most of, if not all, of the private properties adjacent to the Airport contain trees planted for ornamental landscaping, shade, or windbreak cover, with eucalyptus (*Eucalyptus* sp.) the most commonly occurring species. Several of these trees are quite old and very large. Particularly large and/or dense eucalyptus stands are present just northeast of the intersection of CR 95 and CR 31, and at the Westerdahl property (i.e., 24330 CR 95) on the west side of CR 95 and approximately 0.25 mile south of CR 29. Dry Slough, which runs through the southwest corner of the project area, supports a native riparian plant community consisting of willows (*Salix* sp.), Fremont cottonwood (*Populus fremontii*), and valley oak (*Quercus lobata*). Riparian vegetation consisting of dense willows and a few cottonwoods is also present on the north side of the irrigation canal north of the Yolo Sportsmen's Association (YSA) property northeast of the Airport runway.

LSA

FIGURE 1

Project Area

Yolo County Airport Raptor Survey

0 0.125 0.25

Miles

Project Vicinity

SOURCE: Aerial Imagery from the U.S. Department of Agriculture, NAIP (2005)

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2.0 METHODS

2.1 SWAINSON'S HAWK NEST RECORDS

Prior to initiating surveys, LSA reviewed the California Natural Diversity Database (CNDDB) (CDFG 2009) for records of known Swainson's hawk nests within 0.5 mile of the project area, defined as the Airport itself as well as adjacent properties that contain obstruction trees (see Figure 1). Records were identified by drawing the project area boundary on an aerial photograph using Geographic Information Systems (GIS) software (ESRI ArcGIS 9.3.1) and conducting a query for all Swainson's hawk CNDDB records within 0.5 of the boundary. LSA also reviewed *The Distribution, Abundance, and Habitat Associations of the Swainson's Hawk (Buteo swainsoni) in Yolo County* (Estep 2008), which summarizes a comprehensive Swainson's hawk nest census that was conducted in 2007 for the Yolo County Natural Heritage Program (NHP). This report also contains valuable information on the nesting habits, foraging associations, and abundance of this and other nesting raptor species in Yolo County.

2.2 2009 NEST SURVEY

LSA wildlife biologist Matt Ricketts conducted surveys on April 11, April 24, June 5, and July 7, 2009. Each survey consisted of checking obstruction trees as marked on M&H's *Obstruction Identification* aerial map dated March 2009 (attached as Appendix A) for the presence of stick nests and/or watching for behavioral signs of raptor nesting (e.g., pairs copulating, carrying food, or calling) with binoculars or spotting scope. Any nesting activity observed in early surveys was followed with focused observations on subsequent surveys. With the exception of the July 7 survey, all surveys were conducted from the roadsides of CR 95 or Aviation Avenue, since permission to access private property was not granted until later in the survey period. On July 7, Mr. Ricketts was granted foot access to the properties at 25851 CR 95 (Rocky Road Ranch), 25340/44 CR 95 (Maurer property), and 24330 CR 95 (Westerdahl property) to more closely inspect obstruction trees on and adjacent to these properties. Although obstruction trees were not marked in the field, most were identifiable based on their height above neighboring trees or isolation from other tall trees. In particularly dense eucalyptus groves where identification of individual obstruction trees was difficult (e.g., Tree 24 on Westerdahl property, Trees 86–88 and 90 at southwest corner of Rocky Road Ranch), Mr. Ricketts walked through the grove on foot while inspecting trees for stick nests.

This survey was not intended as a complete nest census of the entire project area as it specifically focused on the obstruction trees identified in the above-mentioned aerial map prepared by M&H. Several raptor species were observed over the four days of surveying, and active nests of these species both within and near the project area were likely undetected. However, LSA is confident that the survey effort was sufficient to detect any raptor nesting activity in the obstruction trees for the 2009 breeding season.

3.0 RESULTS

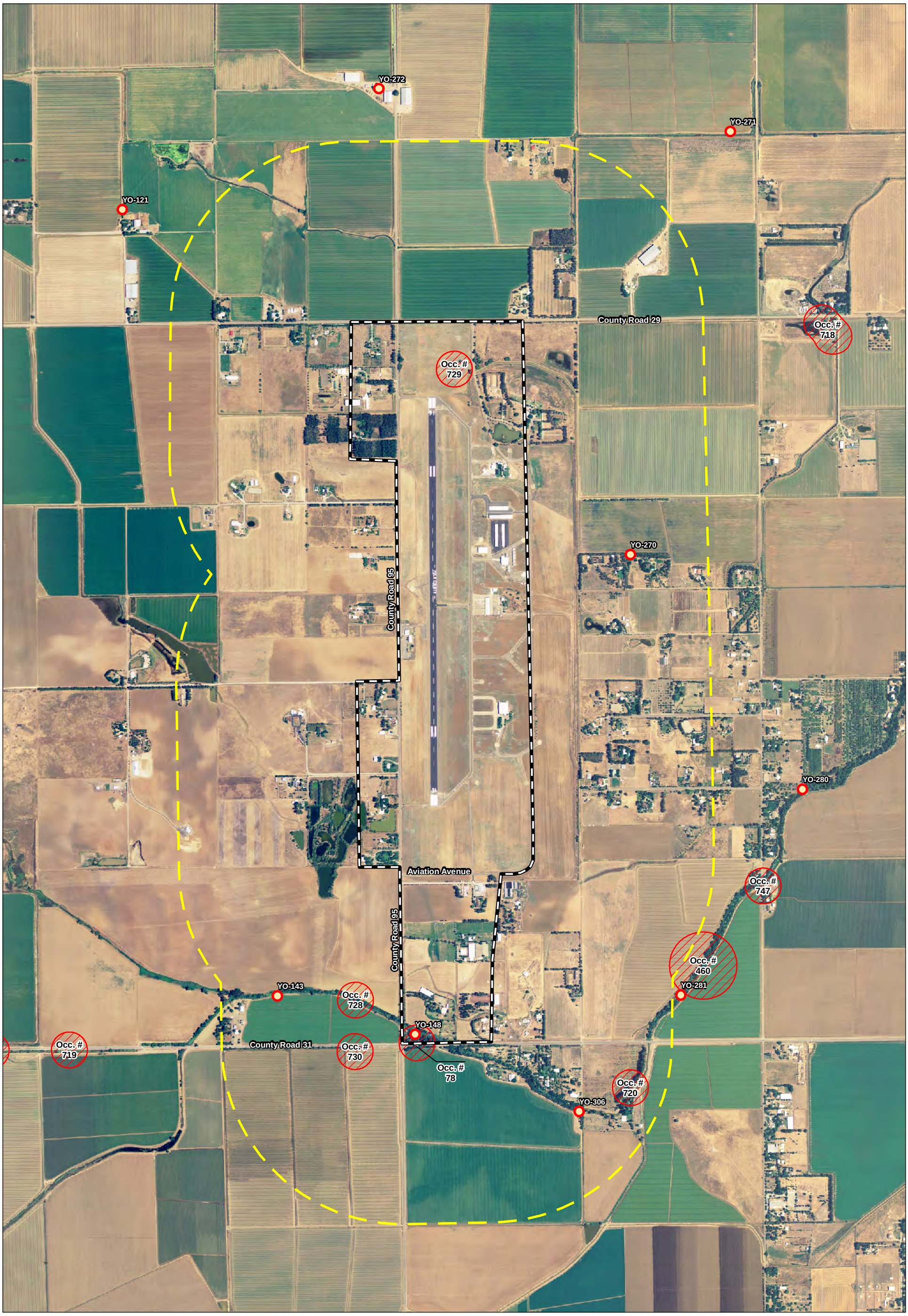
3.1 SWAINSON'S HAWK NEST RECORDS

The CNDDB contains five Swainson's hawk nest records within 0.5 mile of the project area, and Estep (2008) documented four nests on or within 0.5 mile of the project area in 2007 (Figure 2, Table A). Of these historic nests, CNDDB occurrence number 78, which is the same as Estep's (2008) YO-148, is in closest proximity to proposed tree removal activities, since four trees in this area (Trees 86, 87, 88, and 90) have been identified as airspace obstructions (Appendix A). The eucalyptus grove at this location (i.e., northeast of the CR 95/CR 31 intersection; southwest corner of Rocky Road Ranch property) has intermittently supported nesting Swainson's hawks as far back as 1979 (CDFG 2009), and also supported an active nesting pair in 2009 (see discussion of Rocky Road Ranch Nest below). CNDDB occurrence number 729 refers to a nest in a "lone willow in [a] fallow field north of [the] airport runway." No such tree was observed during LSA's site visits, and it is assumed that this tree was removed at some point since 2004, when the nest was last checked (CDFG 2009).

3.2 2009 NEST SURVEY

Seven raptor species were observed during the survey: white-tailed kite (*Elanus leucurus*), northern harrier (*Circus cyaneus*), red-shouldered hawk (*Buteo lineatus*), American kestrel (*Falco sparverius*), barn owl (*Tyto alba*), great horned owl (*Bubo virginianus*), and Swainson's hawk. Swainson's hawk was the only species confirmed as nesting within the project area, although there was some evidence that white-tailed kite, red-shouldered hawk, and American kestrel may have nested, as well. No active nests were found in any of the obstruction trees, assuming that such trees were correctly identified in the field using the M&H aerial map. Old stick nests were found in or immediately adjacent to Trees 15, 58, 61, 69, and 90 (Figure 3, Appendix A). Nine trees south of the Airport runway (i.e., Trees 67–73, 76, and 78 on M&H map) were removed over the two-week period between June 29 and July 10 subsequent to verbal notifications from the Federal Aviation Administration (FAA) and CDA that these trees were out of compliance with obstacle clearance requirements for nighttime aircraft approaches (R. Groom, pers. comm.). The southernmost of these trees (i.e., Tree 78) was approximately 1,600 feet (0.3 mile) north-northeast of the active Swainson's hawk nest near the CR 95/CR 31 intersection (see discussion of Rocky Road Ranch Nest below). LSA had not observed any raptor nesting activity in these trees as of the June 5 survey, by which time most California raptors are well into their nesting cycle. As such, LSA does not believe that these removals adversely affected any nesting raptors. Based on LSA's understanding, the remaining obstruction trees will be removed during non-nesting season (i.e., September through January).

The seven raptor species observed during the survey are discussed in greater detail below. Because of its special regulatory status (State threatened), Swainson's hawk is discussed first.



LSA

N

0 0.125 0.25
Miles

Project Area

1/2 Mile Radius around Project Area

2007 Swainson's Hawk Nests (Approximate) (Estep 2008)

Swainson's Hawk Occurrences (CNDDB - May 2, 2009)

SOURCE: Aerial Imagery from the U.S. Department of Agriculture, NAIP (2005)

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FIGURE 2

Yolo County Airport Raptor Survey

Known Swainson's Hawk Nest Sites in Project Vicinity

Table A: Known Swainson's Hawk Nest Sites Within 0.5 Mile of Yolo County Airport Tree Removal Project Area

Figure 2 ID	Location	Year(s) Active	Notes	Source
YO-143	Cottonwood, Dry Slough at County Road (CR) 95	2007	1 young fledged	Estep 2008
YO-148	Eucalyptus grove, CR 31 at CR 95	2007, 2009 (this study)	1 young fledged in 2007, no fledglings observed in 2009	Estep 2008
YO-270	Cottonwood in tree row, 0.4 mile (mi) east of CR 96, 0.6 mi south of CR 29	2007	Undetermined outcome	Estep 2008
YO-306	Eucalyptus along Dry Slough, 0.2 mi south of CR 31	2007	Undetermined outcome	Estep 2008
Occ. # 78	Eucalyptus grove, CR 31 at CR 95 **(same as YO-148 above)**	1979, 1990, 1991, 2002, 2004	1 young fledged in 1979; active but unknown outcome in 1980, 1981, 1990, 1991, 2002, and 2004. Inactive in 1980, 2001, and 2005.	CDFG 2009 (Comrack, Estep, Resseguie)
Occ. # 720	Tall eucalyptus on west bank of Dry Slough, 0.1 mi south of CR 31, 0.4 mi west of CR 96	1999	No young fledged in 1999; inactive 2000–2001, 2005; adult observed near nest on 7/21/04	CDFG 2009 (L.J. Resseguie)
Occ. # 728	Dry Slough, 0.25 mi northwest of CR 95 and CR 31 intersection	1999, 2000	Nest located in sprawling black walnut; 2 young fledged in 1999, 1 fledged in 2000; inactive in 2001, 2004, and 2005	CDFG 2009 (L.J. Resseguie)
Occ. # 729	0.25 mi southeast of CR 95/CR 29 intersection, at north end of Yolo Co. Airport	1999, 2000	Nest located in lone willow in field north of airport runway; 1 young fledged in 1999, 1 chick observed 6/17/00 but no young fledged; inactive 2001-2002, no sightings in 2004	CDFG 2009 (L.J. Resseguie)
Occ. # 730	South side of CR 31, 0.1 mi west of CR 95	1999	Nest located in fifth walnut west of CR 95; 3 young fledged in 1999; inactive in 2000, 2001 2004, and 2005.	CDFG 2009 (L.J. Resseguie)

LSA

FIGURE 3

PROJECT AREA

SWAINSON'S HAWK NEST

OTHER NESTS

Yolo County Airport Raptor Survey

2009 Nest Observations

N

0 400 800

FEET

SOURCE: Aerial Imagery from the U.S. Department of Agriculture, NAIP (2005)

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3.2.1 Swainson's Hawk

Yolo County supports the largest nesting concentration of nesting Swainson's hawks in California (Estep 2008), and the numerous agricultural fields interspersed with residential and riparian trees that characterize the landscape surrounding the Airport represent high-quality habitat for this species. Several individuals were observed during each visit, most often soaring high over the Airport or adjacent properties. For example, six to eight individuals were seen soaring over the fields north of CR 29 at one time on April 11, calling and occasionally diving at each other. Two active Swainson's hawk nests were found in the project area during the 2009 breeding season: one in the eucalyptus grove northeast of the CR 95/CR 31 intersection ("Rocky Road Ranch Nest") and one on the southern edge of the large eucalyptus grove at the Westerdahl property ("Westerdahl Nest"), approximately 400 feet west of CR 95 (Figure 3; Appendix B). These nests are further described below.

Rocky Road Ranch Nest. As mentioned above, the eucalyptus grove at the southwestern corner of Rocky Road Ranch supported an active Swainson's hawk nest in 2007, and the landowners claim that the nest has been active for the last several years (C. Smith and T. Hoffman, pers. comm.). The CNDDB (CDFG 2009) also cites multiple nesting attempts at this location. LSA first observed breeding activity in the area on April 11, when a light-morph male Swainson's hawk was seen copulating with an intermediate-morph female on a telephone pole on the west side of CR 95 just south of Dry Slough and later on top of a eucalyptus east of CR 95. LSA also observed a large stick nest in a dead eucalyptus in the middle of the grove during this first visit, although it was not clear at that time whether the nest was active or not (see Appendix B for photos of eucalyptus grove and nest). The nest was confirmed active when the female was seen flying directly into the nest at 6:51 am on April 24, with the male flying to perch on the nest rim a few seconds later. Both adults remained in the eucalyptus grove throughout the remainder of the 1.5-hour observation period. Based on this behavior, LSA concluded that the female was laying eggs or making final adjustments to the nest's construction. During the third visit on June 5, the female was not seen but the male was still present in the grove perching on various tall trees and occasionally calling. Although the female was out of sight, it may have been laying low in the nest incubating eggs or brooding recently hatched fledglings. However, during the final visit on July 7, no young or other activity was seen at the nest. The female was perched at a tall snag approximately 100 feet east of the nest tree throughout much of the 1.25-hour observation period (this was the favored perch of the male on June 5, as well), occasionally flying to other trees within the grove. The male was seen flying high over the fields south of CR 31 at 8:22 am, but at no time was it seen associating with the female or flying to the nest. In addition, when the LSA biologist entered the eucalyptus grove on foot to inspect the trees more closely, neither of the adults uttered any alarm calls, nor were any young seen perched at or near the nest. Since young Swainson's hawks would be expected to be active and visible near nest sites at this time of year (SHTAC 2000), LSA concludes that the pair likely attempted to nest this year, but failed to produce young, possibly due to infertile eggs. However, the eucalyptus grove is still considered an active nesting territory[1] during the 2009 breeding season, since a pair was observed copulating in or near the grove in April and perching in the grove during all four LSA site visits. In addition, an old stick nest was found in the eastern portion of the grove approximately 150 feet east of the above-described nest tree during the July 7 site visit. This nest may have been used by Swainson's hawks in the past, but appeared to have not been used in some time (based on the presence of cobwebs).

[1] Estep (2008) defines an active nest territory as "a nesting area that was occupied by a breeding pair of Swainson's hawks throughout all or a significant portion of the breeding season."

Westerdahl Nest. Although Swainson's hawks were heard calling from or flying over the large eucalyptus grove at the Westerdahl property during the April and June site visits, nesting was not confirmed until July 7, when two young were seen perched in the vicinity (i.e., one approximately 80 feet west and one approximately 100 feet east) of a stick nest on the southern edge of the grove approximately 400 feet west of CR 95 (see photos in Appendix B). The two young Swainson's hawks were identified as such based on dark brown streaking on their breast and belly and tawny feathering on the head and upperparts. The branches supporting the nest and ground surface under the nest tree were covered in droppings, indicating recent activity. Based on the M&H airspace obstruction map, the nest tree appears to be located approximately 200 feet west of Tree 25 and 230 feet southeast of Tree 24.

Other Observations. Tree 61 on the Maurer property, a large eucalyptus, contains an old stick nest that the landowner claims has historically been used by Swainson's hawks (F. Maurer, pers. comm.). LSA monitored this tree for approximately 0.5 hour on July 7, but did not observe any evidence of raptors using the nest (i.e., no adults or young perching in tree, no alarm calls). This nest may have indeed been used by Swainson's hawks (or other raptors) in previous years, but appears inactive for 2009.

As mentioned above, individual Swainson's hawks were seen throughout the project area during all four site visits, mostly flying or soaring. In addition to the above-described nest territories, individual Swainson's hawks were also seen perching in the vicinity of the YSA property on April 11 (individual perched in large willow approximately 100 feet north of irrigation canal) and July 7 (individual perched in eucalyptus at northwestern corner of shooting range, possibly Tree 13 on M&H aerial). No nest structures were found in this area during the four site visits, however.

3.2.2 White-tailed Kite

White-tailed kites nest in densely foliaged trees and large shrubs located near suitable foraging habitat (i.e., grasslands, marshes, agricultural fields). This species was observed in the project area on April 24, June 5, and July 7. On April 24, a probable mated pair was seen briefly perching in the trees north of the irrigation canal north of the YSA property, but flew to the southeast out of sight over the YSA property after five minutes. No nest structures or nesting behavior were seen in this area during this or subsequent site visits. On June 5, a single white-tailed kite was seen soaring over the western portion of the large eucalyptus grove on the Westerdahl property. On July 7, a white-tailed kite was heard, then seen, flying from a grove of pine trees east of the Rocky Road Ranch property (i.e., just southwest of Tree 82 on M&H map) to the east. A few minutes later, the kite returned to perch in top of a pine near a stick nest that may have contained eggs or young. The nest was located in top of an adjacent pine and appeared similar in size, structure, and placement to other white-tailed kite nests that have been observed by LSA. Given that no trees will be removed from the pine grove and that the grove was inaccessible by foot, LSA did not conduct detailed observations of the nest and was thus unable to determine whether it is currently active. Nevertheless, the behavior of the observed adult and suitability of the habitat suggest that white-tailed kites may be nesting in this area. A second white-tailed kite was also seen on July 7 briefly perched in a eucalyptus tree row on the Westerdahl property approximately 300 feet northwest of the driveway terminus, before it flew to the west out of sight. This individual was seen clutching prey (probably a vole or mouse) in its talons as it flew to the perch from the southeast, and may have been carrying it to a nest outside the project area. Suitable

nesting habitat for this species is present throughout the project area, but no nest structures were found in any of the obstruction trees.

3.2.3 Northern Harrier

Northern harrier was only observed on two occasions during the survey. On April 11, a male harrier was seen foraging over the field north of the Airport runway, and possibly the same bird was seen in the same area on April 24. This species nests on the ground in dense vegetation, typically in marshes or overgrown fields. No suitable nesting habitat was observed in the project area while conducting the survey, although weedy fields or small wetlands in surrounding areas may contain potential nest sites.

3.2.4 Red-shouldered Hawk

Red-shouldered hawks were observed in the project area on June 5 and July 7. At 10:19 a.m. on June 5, an adult red-shoulder was seen flying into the eucalyptus trees just south of the entrance to Hacienda Halagueña at 24146 CR 95 (i.e., near Tree 18 on M&H map) from the south. Three minutes later, the same bird flew south from the trees lining the Hacienda Halagueña driveway towards the large eucalyptus grove on the neighboring Westerdahl property, and a second red-shoulder was seen flying north into the same trees from which the first bird had just left. Several red-shoulder calls were also heard from the western portion of the Westerdahl eucalyptus grove over the next 10–15 minutes. The observed behavior suggested that the two red-shoulders may have been a mated pair that was nesting in the trees lining the Hacienda Halagueña driveway, but a close inspection of these trees during both the June 5 and July 7 site visits did not reveal any evidence of recent nesting. An old stick nest covered in cobwebs was seen about half-way up a eucalyptus on the north side of the driveway on July 7 (this tree may correspond with Tree 15 on the M&H map), but no whitewash, prey remains, feathers, or other signs of recent activity were seen on the ground surface under the nest, and no young were seen perched in any nearby trees. This tree may have been used in the past by red-shoulders, but it appears that the pair observed in the area this year may have been nesting further to the south or southwest on or adjacent to the Westerdahl property.

Single red-shouldered hawks were also heard and/or seen on the Maurer and YSA properties on July 7. An old stick nest first found in the top of Tree 58 on April 24 has reportedly supported nesting red-shoulders in the past (F. Maurer, pers. comm.), but no activity or young were seen at the nest on July 7. A single red-shoulder was seen perched in a willow 150 feet west-southwest of Tree 58, and may have nested in the abundant riparian vegetation in the western portion of the property. A single red-shoulder was also heard calling from the northwest corner of the U-shaped eucalyptus stand on the YSA property, although LSA was unable to visually locate it. No nest structures were seen in any of the trees along Aviation Ave or the western and northern sides of the U-shaped stand, but it's possible that a nest could have been present elsewhere on the YSA property, which was not thoroughly surveyed on foot due to lack of access. Red-shouldered hawks traditionally nest in riparian woodlands, but in recent years have developed a fondness for eucalyptus in urban and rural settings (Peeters and Peeters 2005; LSA obs.). The numerous eucalyptus trees throughout the project area provide suitable nest sites for this species.

3.2.5 American Kestrel

American kestrel is a small falcon that is one of the most common and widespread raptors in California (Peeters and Peeters 2005). It nests in various types of cavities in snags; holes in cliffs, dirt banks, and buildings; old magpie nests; dead palm fronds; crannies amidst bridge girders; and nest boxes (Peeters and Peeters 2005). This species was observed in the project area on April 11. While scanning Trees 68, 69, and 70 for active nests from the side of Aviation Avenue, LSA observed a pair of kestrels copulating in an ornamental tree west of the northernmost shed on the Flying Road Ranch property. Soon after copulation, the male flew into an opening under the eaves of the west wall of the shed and emerged soon thereafter. Although neither the male nor female was seen carrying nesting material or food, this behavior suggests that the kestrels may have been nesting in the shed. However, focused follow-up observations of this pair were not conducted since the shed would not be impacted by tree removals and most of the time spent in the area was focused on determining whether nearby obstruction trees (Trees 67–73) contained active nests. Nevertheless, these observations indicate that American kestrels likely nest in the project area where suitable cavities are available.

3.2.6 Barn Owl

The barn owl is the most widespread of all owl species (Burton 1984, cited in Marti 1992) and occurs in a variety of both urban and rural habitats. It nests in a wide variety of cavities, including those within trees, cliffs, caves, riverbanks, church steeples, barn lofts, hay stacks, and nest boxes (Marti 1992). A single barn owl was seen flying among various trees in the southwestern portion of the large eucalyptus grove on the Westerdahl property on July 7. Abundant whitewash and feathers on the ground in this portion of the grove indicate that it's heavily used by both barn and great-horned (see below) owls for roosting. In addition, Tree 51 and nearby densely foliaged trees on the Maurer property have been known to support roosting barn owls (F. Maurer, pers. comm.). Although no large cavities of suitable size for barn owl nesting were observed in any of the larger obstruction trees, suitable nest sites are likely present in old barns and abandoned buildings in the Airport vicinity.

3.2.7 Great Horned Owl

Great horned owl is the most widely distributed owl species in North America and occurs in a wide variety of habitats. It does not construct its own nest, but instead occupies old stick nests previously built by other raptor species (Houston et al. 1998). A single great-horned owl was observed in the same general location as the above-described barn owl on July 7. Great-horned owls nest earlier in the season than most other raptor species, often initiating nesting as early as January (Estep 2008). As such, LSA may have missed 2009 nesting attempts by this species within the project area since surveys were not initiated until April. However, the observation of the individual on the Westerdahl property confirms that this species roosts, and likely nests, within the project area. Any tree removals scheduled from December–February should only occur after pre-removal surveys have been conducted to ensure that nesting great-horned owls are not present.

4.0 NEST PROTECTION REGULATIONS

This section summarizes federal and State regulations that pertain to nests of native birds, including raptors. The California Endangered Species Act is also discussed since Swainson's hawk is protected under this Act.

4.1 MIGRATORY BIRD TREATY ACT

The federal Migratory Bird Treaty Act (MBTA) prohibits the taking, hunting, killing, selling, purchasing, etc. of migratory birds, parts of migratory birds, or their eggs and nests. As used in the MBTA, the term "take" is defined as "to pursue, hunt, shoot, capture, collect, kill, or attempt to pursue, hunt, shoot, capture, collect, or kill, unless the context otherwise requires." Most bird species native to North America are covered by this act. Compliance with the MBTA is typically achieved on most projects through the implementation of preconstruction surveys and nest buffers (if necessary) for any activities that remove or disturb any vegetation or structures that could potentially support nesting birds during the breeding season, the definition of which varies among agencies and municipalities.

4.2 CALIFORNIA FISH AND GAME CODE

Section 3503 of the California Fish and Game Code, enforced by the California Department of Fish and Game (CDFG), prohibits the take, possession, or needless destruction of the nest or eggs of any bird. Subsection 3503.5 specifically prohibits the take, possession, or destruction of any birds in the orders Falconiformes (hawks and eagles) or Strigiformes (owls) and their nests. Non-native species, including European starling, house sparrow, and rock pigeon, are not afforded any protection under the MBTA or California Fish and Game Code. As with the MBTA, compliance with this code requirement is typically achieved through the implementation of preconstruction surveys and nest buffers during the breeding season, which the CDFG usually defines as February 1–August 31, based on LSA's experience. If active nests are found during preconstruction surveys, a buffer is typically established around the nest in which no construction or other work can be conducted until a qualified biologist has determined that the nest has failed or that the young have successfully fledged and are capable of flight. The buffer width can vary depending on the sensitivity of the species to disturbance and nature of the proposed activity, but is usually developed in consultation with the CDFG. Based on LSA's experience, buffer sizes of 300 feet for raptors (excepting Swainson's hawks, which require buffers of 0.25 to 0.5 mile) and 50 feet for smaller birds are typically deemed adequate by the CDFG to protect active nests. In addition, CDFG typically requests that Swainson's hawk nests be monitored once a week by qualified biologists during any construction projects with active Swainson's hawk nests in the vicinity.

4.3 CALIFORNIA ENDANGERED SPECIES ACT

The CDFG has jurisdiction over State-listed endangered, threatened, and rare plant and animal species under the California Endangered Species Act (CESA). CESA is similar to the federal Endangered Species Act both in process and substance; it is intended to provide additional protection to threatened and endangered species in California. Species may be listed as threatened or endangered under both acts (in which case the provisions of both State and federal laws apply) or under only one act. Section 2080 of the Fish and Game Code prohibits the "take" of any State-listed threatened or endangered species. "Take" is defined in Section 86 as "hunt, pursue, capture, or kill, or attempt to hunt, pursue, capture, or kill." While not specifically defined in the definition of take, the loss of Swainson's hawk nest trees or other essential habitat can result in territory abandonment and reduced reproductive potential leading to further population declines, and thus can potentially be used in the definition of take (Estep 2008).

Removal of a known Swainson's hawk nest tree typically requires an incidental take permit from the CDFG pursuant to Section 2081 of the Fish and Game Code. Incidental take permits can only be issued if the following specific criteria are met:

1. The authorized take is incidental to an otherwise unlawful activity;
2. The impacts of the authorized take are minimized and fully mitigated;
3. The measures required to minimize and fully mitigate the impacts of the authorized take;
    a. are roughly proportional in extent to the impacts of the authorized take;
    b. maintain the applicant's objectives to the greatest extent possible, and
    c. are capable of successful implementation;
4. Adequate funding is provided to implement the required minimization and mitigation measures and to monitor compliance with and the effectiveness of the measures; and
5. Issuance of the permit will not jeopardize the continued existence of a State-listed species.

Based on LSA's review of the M&H aerial map of airspace obstruction trees (Appendix A), the two Swainson's hawk nest trees found during the 2009 breeding season do not *appear* to correspond with any of the trees marked. However, this needs to be confirmed in the field before a more definitive assertion can be made. The project will involve the removal of two trees (i.e., Trees 24 and 25) within 300 feet of the Westerdahl nest, and four trees (i.e., Trees 86–88, 90) within 300 feet of the Rocky Road Ranch nest. CDFG typically does not require an incidental take permit for projects that remove of a small number of trees adjacent to or near known Swainson's hawk nest trees, but could require a permit if such removals affected numerous Swainson's hawk territories over a large area, or resulted in a known pair abandoning their territory in the following breeding season, which would constitute "take" under CESA as defined above. The likelihood of a given Swainson's hawk pair abandoning their territory due to a few tree removals is somewhat subject to debate, but the abundance and proximity of suitable nest trees in the project area and the retention of most trees within both the Westerdahl and Rocky Road Ranch eucalyptus groves suggest that the two pairs observed in 2009 would not abandon their territories in 2010. Swainson's hawks have shown some adaptability to nest tree removal in other portions of the Central Valley (e.g., along Sacramento River), moving to nearby trees in the following breeding season (J. Estep, pers. comm.).

Another potential issue concerns the long-term effects of removing larger eucalyptus trees in the Airport vicinity (e.g., Trees 51, 56, 58, 59–62, 80, and 82). The permanent removal of such trees may result in increased competition for nest sites between Swainson's hawks and other raptor species known to nest in the area (e.g., red-shouldered hawk, great horned owl), thus affecting future long-term reproductive success. As such, LSA recommends initiating consultation with the CDFG as soon as possible to address potential project impacts to Swainson's hawk.

5.0 REFERENCES

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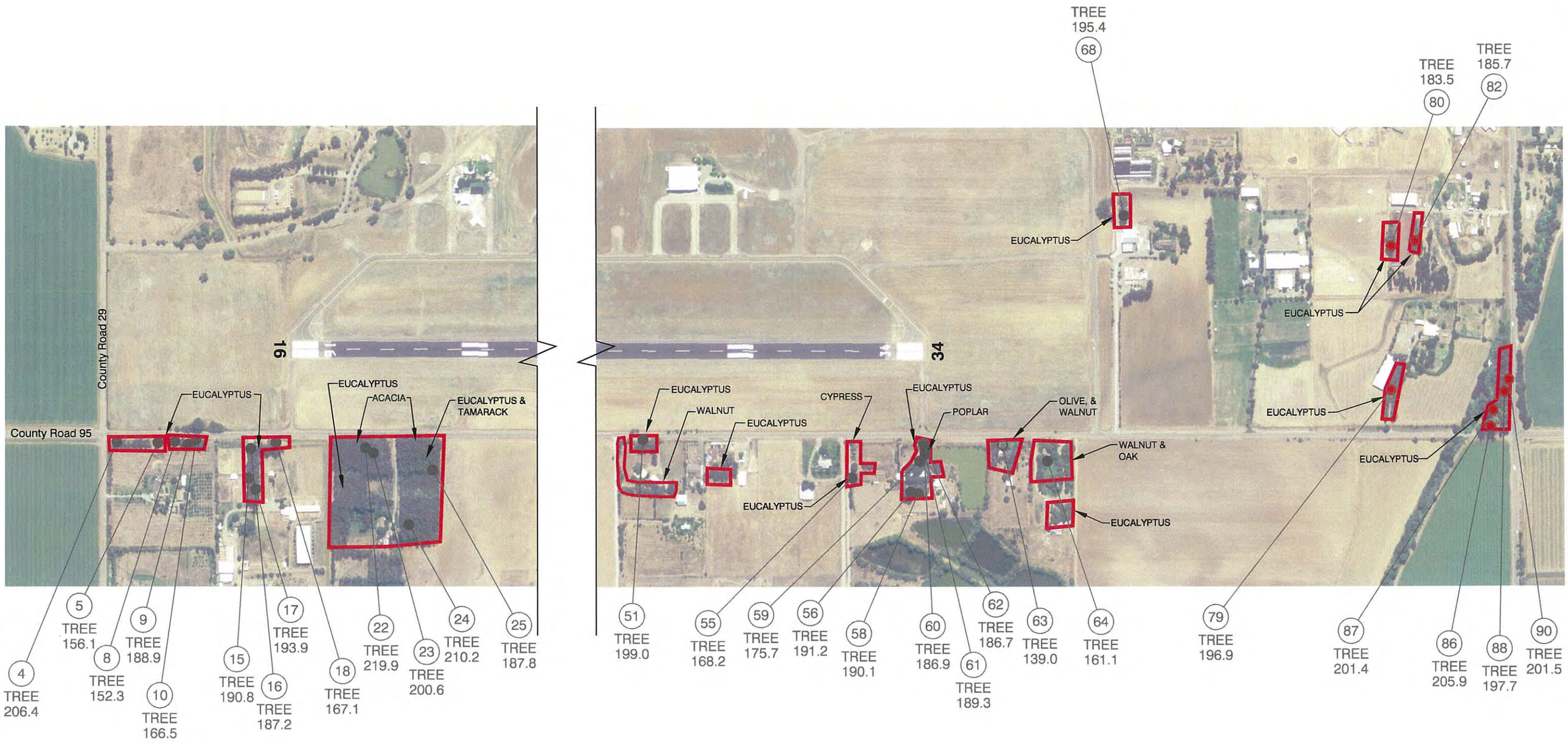
Marti, C. D. 1992. Barn Owl. *In* A. Poole, P. Stettenheim, and F. Gills, editors. The Birds of North America, No. 1. The Academy of Natural Sciences, Philadelphia, Pennsylvania, and The American Ornithologists' Union, Washington, D.C.

Peeters, H., and P. Peeters. 2005. Raptors of California. University of California Press, Berkeley.

Swainson's Hawk Technical Advisory Committee (SHTAC). 2000. Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley. May 31. < http://www.dfg.ca.gov/wildlife/nongame/docs/swain_proto.pdf>

APPENDIX A

MEAD & HUNT OBSTRUCTION IDENTIFICATION MAP



Wooded areas containing airspace obstructions, as identified by WH Pacific.

Individual trees identified as airspace obstructions by Mead & Hunt

- All elevations are in feet above mean sea level

N

600'

0 FEET 1,200'

Source: Mead & Hunt, Inc. (January 2011)

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Figure 3

Off-Site Obstruction Removal

Yolo County Airport

APPENDIX B

NEST PHOTOGRAPHS

Swainson's hawk nesting territory northeast of CR 95/CR 31 intersection, viewed from east side of CR 95 approx. 200 feet north of Dry Slough. Nest visible in center of frame, perched Swainson's hawk visible at top of snag above and right of nest.

Close-up view of above nest

Westerdahl property Swainson's hawk nest viewed from open field to the south

Close-up of Westerdahl nest

Appendix B

Agency Correspondence:

U.S. Fish and Wildlife Service

Native American Tribal Representatives

State Historic Preservation Office

Agency Correspondence:

U.S. Fish and Wildlife Service

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Sacramento Fish and Wildlife Office
2800 Cottage Way, Room W-2605
Sacramento, California 95825-1846

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In reply refer to:
81420-2011-I-0348-1

RECEIVED
APR 11 2011
SFO-600

APR 08 2011

Robin K. Hunt
Federal Aviation Administration
Western-Pacific Region Airports Division
San Francisco Airports District Office
831 Mitten Road, Room 210
Burlingame, California 94010

Subject: Informal Endangered Species Consultation on the Yolo County Airport Proposed Off Airport Tree Removal Project, Yolo County, California

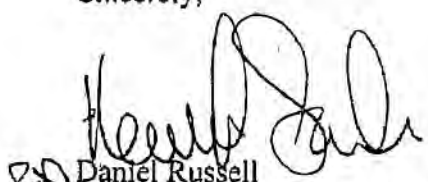
Dear Ms. Hunt:

This letter acknowledges the U.S. Fish and Wildlife Service's (Service) January 26, 2011, receipt of the Federal Aviation Administration's (FAA) letter requesting informal consultation for the Yolo County Airport Proposed Off Airport Tree Removal Project (proposed project) in Yolo County. You propose to remove selected trees within the vicinity of the Yolo County Airport that are in conflict with FAA regulations (14 CFR Part 77). Your request was for concurrence that the proposed project is not likely to adversely affect the following listed species: the endangered vernal pool tadpole shrimp (*Lepidurus packardi*); the threatened vernal pool fairy shrimp (*Branchinecta lynchi);* the threatened valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*); the threatened delta smelt (*Hypomsus transpacificus*); the threatened California tiger salamander (*Ambystoma californiense*); the threatened California red-legged frog (*Rana draytonii*); the threatened giant garter snake (*Thamnophis gigas*); the threatened northern spotted owl (*Strix occidentalis caurina*); the endangered Colusa grass (*Neostapfia colusana*); the endangered Solano grass (*Tuctoria mucronata)*; and, the endangered palmate-bracted bird's beak (*Cordylanthus palmatus*). The proposed project is not located in proposed or designated critical habitat for any listed species; therefore, no critical habitat will be affected. This response is in accordance with section 7 of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*).

The Service used the following in our review of your request: 1) your letter requesting concurrence that the proposed project will not adversely affect listed species; 2) electronic mail and telephone communications between the FAA and the Service regarding the proposed project; and 3) other information available to the Service.

The Service concurs that the proposed project is not likely to adversely affect the species listed above based on a lack of suitable habitat of any of the species in the project area. If you have any questions or concerns about the proposed project, please contact Lisa Ellis or Kellie Berry, Chief, Sacramento Valley Branch at (916) 414-6600.

Sincerely,



RD Daniel Russell
Deputy Assistant Field Supervisor

cc:
Ray Groom, Yolo County, Woodland, California

U.S Department
of Transportation
**Federal Aviation
Administration**

Western-Pacific Region
Airports Division

San Francisco Airports District Office
831 Mitten Road
Burlingame, CA 94010

January 27, 2011

Ms. Susan Moore
Field Supervisor
Sacramento U.S. Fish and Wildlife Service Office
2800 Cottage Way, Suite W-2605
Sacramento, CA 95825

Dear Ms. Moore:

Yolo County Airport, Woodland, California
Proposed Off Airport Tree Removal

The purpose of this letter is to initiate informal Section 7 consultation, under Title 50, Code of Federal Regulations (CFR) Part 402, and the implementing regulations for the Endangered Species Act of 1973, as amended. The Federal Aviation Administration (FAA) is beginning informal Section 7 consultation for proposed removal of selected trees from a number of parcels adjacent to the Yolo County Airport (Airport). The County of Yolo (County) is the owner and operator of the airport.

The County proposes to remove selected trees from several parcels of land adjacent to the Airport that penetrate Title 14 CFR Part 77, 7:1 imaginary transitional surface, and represent an obstruction to aircraft navigation at the Airport (See figures 2 and 3 as attached enclosures 4 and 5).

A safety inspection performed by the California Department of Transportation, Division of Aeronautics, identified several tall trees that could pose hazards to aviators and the traveling public.

The County performed an obstruction survey and the survey results indicated that approximately 150 trees located on fourteen private properties were tall enough to create obstructions to aircraft. The trees, which are associated with rural and residential properties adjacent to Aviation Road, County Road 31, and County Road 95, are located in the airport approach. The impacted transitional and primary surfaces are associated with the south end of the runway. The County must remove the trees because they pose a risk of collisions with aircraft.

The County proposes to remove the trees and stumps and replace them with lower-growing species of trees. Most of the trees identified for removal are individual or small groups of eucalyptus trees. The County considered topping the trees, but determined that it would be ineffective as eucalyptus trees are known to grow quickly and reach tall heights compared to other trees native to the County.

As a result, the County determined that topping would provide only a temporary and inadequate solution for obstruction removal. The County will perform all tree removals during the autumn and winter months to avoid the breeding season for birds.

The County conducted biological surveys on April 11, April 24, June 5, and July 7, 2009. Additional informal site visits were performed during 2010 to identify potential changes to the previously documented surveys, but none were noted.

On April 29, 2010, an official United States Fish and Wildlife Service (USFWS) list of Federal Endangered and Threatened Species (including Candidate and Proposed Species) which is presented as enclosure (1), addresses these species and their likelihood to appear in the proposed project area.

The USFWS Species Review for Yolo County Airport Obstruction Removal Environmental Assessment as shown in enclosure (2), indicates there was none observed nor the potential for occurrence of endangered and threatened species in the proposed project area.

Based on these findings, the FAA has determined that the proposed removal of trees on lands located adjacent to the airport is not likely to adversely affect any listed endangered and threatened species or their designated critical habitat would be impacted due to proposed project.

If you have any questions or need additional information on this submittal, please contact me at 650-876-2778 ext. 600 or robin.k.hunt@faa.gov. You can also contact Barry Franklin at 650-876-2778 ext. 614 or barry.franklin@faa.gov.

Sincerely,

for Robin K. Hunt
Manager, Airports District Office

Enclosure: (1) U. S. Fish and Wildlife Service Sacramento Fish and Wildlife Office Federal Endangered and Threatened Species that Occur in or may be Affected by Projects in Yolo County
(2) U. S. Fish and Wildlife Service Species Review for Yolo County Airport Obstruction Removal Environmental Assessment
(3) Project Location Yolo County Airport Figure 1
(4) Parcels Locations Figure 2
(5) Off-Site Obstruction removal Figure 3

Cc: R. Groom, Director of General Services, Yolo County, w/o encl
L. Harmon, Mead & Hunt Inc., w/o encl

U.S. Fish & Wildlife Service
Sacramento Fish & Wildlife Office
Federal Endangered and Threatened Species that Occur in or may be Affected by Projects in the Counties and/or U.S.G.S. 7 1/2 Minute Quads you requested

Document Number: 100804042015

Database Last Updated: April 29, 2010

Quad Lists

Listed Species

Invertebrates

Branchinecta lynchi

vernal pool fairy shrimp (T)

Desmocerus californicus dimorphus

valley elderberry longhorn beetle (T)

Lepidurus packardi

vernal pool tadpole shrimp (E)

Fish

Hypomesus transpacificus

delta smelt (T)

Oncorhynchus mykiss

Central Valley steelhead (T) (NMFS)

Oncorhynchus tshawytscha

Central Valley spring-run chinook salmon (T) (NMFS)

winter-run chinook salmon, Sacramento River (E) (NMFS)

Amphibians

Ambystoma californiense

California tiger salamander, central population (T)

Rana draytonii

California red-legged frog (T)

Reptiles

Thamnophis gigas

giant garter snake (T)

Quads Containing Listed, Proposed or Candidate Species:

WINTERS (514C)

MERRITT (514D)

County Lists

Yolo County

Listed Species

Invertebrates

Branchinecta conservatio

Conservancy fairy shrimp (E)

Branchinecta lynchi
vernal pool fairy shrimp (T)

Desmocerus californicus dimorphus
valley elderberry longhorn beetle (T)

Lepidurus packardi
Critical habitat, vernal pool tadpole shrimp (X)
vernal pool tadpole shrimp (E)

Fish

Acipenser medirostris
green sturgeon (T) (NMFS)

Hypomesus transpacificus
Critical habitat, delta smelt (X)
delta smelt (T)

Oncorhynchus mykiss
Central Valley steelhead (T) (NMFS)
Critical habitat, Central Valley steelhead (X) (NMFS)

Oncorhynchus tshawytscha
Central Valley spring-run chinook salmon (T) (NMFS)
Critical Habitat, Central Valley spring-run chinook (X) (NMFS)
Critical habitat, winter-run chinook salmon (X) (NMFS)
winter-run chinook salmon, Sacramento River (E) (NMFS)

Amphibians

Ambystoma californiense
California tiger salamander, central population (T)
Critical habitat, CA tiger salamander, central population (X)

Rana draytonii
California red-legged frog (T)

Reptiles

Thamnophis gigas
giant garter snake (T)

Birds

Strix occidentalis caurina
northern spotted owl (T)

Plants

Cordylanthus palmatus
palmate-bracted bird's-beak (E)

Neostapfia colusana
Colusa grass (T)
Critical habitat, Colusa grass (X)

Tuctoria mucronata
Critical habitat, Solano grass (=Crampton's tuctoria) (X)
Solano grass (=Crampton's tuctoria) (E)

Candidate Species

Birds

Coccyzus americanus occidentalis
Western yellow-billed cuckoo (C)

Key:

(E) *Endangered* - Listed as being in danger of extinction.

(T) *Threatened* - Listed as likely to become endangered within the foreseeable future.

(P) *Proposed* - Officially proposed in the Federal Register for listing as endangered or threatened.

(NMFS) Species under the Jurisdiction of the National Oceanic & Atmospheric Administration Fisheries Service. Consult with them directly about these species.

Critical Habitat - Area essential to the conservation of a species.

(PX) *Proposed Critical Habitat* - The species is already listed. Critical habitat is being proposed for it.

(C) *Candidate* - Candidate to become a proposed species.

(V) Vacated by a court order. Not currently in effect. Being reviewed by the Service.

(X) *Critical Habitat* designated for this species

Important Information About Your Species List

How We Make Species Lists

We store information about endangered and threatened species lists by U.S. Geological Survey 7½ minute quads. The United States is divided into these quads, which are about the size of San Francisco.

The animals on your species list are ones that occur within, **or may be affected by** projects within, the quads covered by the list.

- Fish and other aquatic species appear on your list if they are in the same watershed as your quad or if water use in your quad might affect them.
- Amphibians will be on the list for a quad or county if pesticides applied in that area may be carried to their habitat by air currents.
- Birds are shown regardless of whether they are resident or migratory. Relevant birds on the county list should be considered regardless of whether they appear on a quad list.

Plants

Any plants on your list are ones that have actually been observed in the area covered by the list. Plants may exist in an area without ever having been detected there. You can find out what's in the surrounding quads through the California Native Plant Society's online Inventory of Rare and Endangered Plants.

Surveying

Some of the species on your list may not be affected by your project. A trained biologist and/or botanist, familiar with the habitat requirements of the species on your list, should determine whether they or habitats suitable for them may be affected by your project. We recommend that your surveys include any proposed and candidate species on your list. See our Protocol and Recovery Permits pages.

For plant surveys, we recommend using the Guidelines for Conducting and Reporting Botanical Inventories. The results of your surveys should be published in any environmental documents prepared for your project.

Your Responsibilities Under the Endangered Species Act

All animals identified as listed above are fully protected under the Endangered Species Act of 1973, as amended. Section 9 of the Act and its implementing regulations prohibit the take of a federally listed wildlife species. Take is defined by the Act as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect" any such animal.

> Take may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or shelter (50 CFR §17.3).

Take incidental to an otherwise lawful activity may be authorized by one of two procedures:

- If a Federal agency is involved with the permitting, funding, or carrying out of a project that may result in take, then that agency must engage in a formal consultation with the Service.

  During formal consultation, the Federal agency, the applicant and the Service work together to avoid or minimize the impact on listed species and their habitat. Such consultation would result in a biological opinion by the Service addressing the anticipated effect of the project on listed and proposed species. The opinion may authorize a limited level of incidental take.

- If no Federal agency is involved with the project, and federally listed species may be taken as part of the project, then you, the applicant, should apply for an incidental take permit. The Service may issue such a permit if you submit a satisfactory conservation plan for the species that would be affected by your project.

  Should your survey determine that federally listed or proposed species occur in the area and are likely to be affected by the project, we recommend that you work with this office and the California Department of Fish and Game to develop a plan that minimizes the project's direct and indirect impacts to listed species and compensates for project-related loss of habitat. You should include the plan in any environmental documents you file.

Critical Habitat

When a species is listed as endangered or threatened, areas of habitat considered essential to its conservation may be designated as critical habitat. These areas may require special management considerations or protection. They provide needed space for growth and normal behavior; food, water, air, light, other nutritional or physiological requirements; cover or shelter; and sites for breeding, reproduction, rearing of offspring, germination or seed dispersal.

Although critical habitat may be designated on private or State lands, activities on these lands are not restricted unless there is Federal involvement in the activities or direct harm to listed wildlife.

If any species has proposed or designated critical habitat within a quad, there will be a separate line for this on the species list. Boundary descriptions of the critical habitat may be found in the Federal Register. The information is also reprinted in the Code of Federal Regulations (50 CFR 17.95). See our Map Room page.

Candidate Species

We recommend that you address impacts to candidate species. We put plants and animals on our candidate list when we have enough scientific information to eventually propose them for listing as threatened or endangered. By considering these species early in your planning process you may be able to avoid the problems that could develop if one of these candidates was listed before the end of your project.

Species of Concern

The Sacramento Fish & Wildlife Office no longer maintains a list of species of concern. However, various other agencies and organizations maintain lists of at-risk species. These lists provide essential information for land management planning and conservation efforts. More info

Wetlands

If your project will impact wetlands, riparian habitat, or other jurisdictional waters as defined by section 404 of the Clean Water Act and/or section 10 of the Rivers and Harbors Act, you will need to obtain a permit from the U.S. Army Corps of Engineers. Impacts to wetland habitats require site specific mitigation and monitoring. For questions regarding wetlands, please contact Mark Littlefield of this office at (916) 414-6580.

Updates

Our database is constantly updated as species are proposed, listed and delisted. If you address proposed and candidate species in your planning, this should not be a problem. However, we recommend that you get an updated list every 90 days. That would be November 02, 2010.

Attachment 2:
Federal Endangered and Threatened Species List
Yolo County Airport Obstruction Removal

Common Name (*Scientific Name*)	**Federal Status**	**Potential for Occurrence/ Observation**
Quad Lists		
Invertebrates		
Vernal pool fairy shrimp (*Branchinecta lynchi)*	Threatened	*None.* Not expected to occur due to absence of vernal pools.
Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus)*	Threatened	*None.* Not expected to occur due to absence of elderberry shrubs.
Vernal pool tadpole shrimp *(Lepidurus packardi)*	Endangered	*None.* Not expected to occur due to absence of vernal pools.
Fish		
Delta smelt *(Hypomsus transpacificus)*	Threatened	*None.* Not expected to occur, due to absence of streams tributary to Sacramento River.
Central Valley steelhead *(Oncorhynchus mykiss)*	Threatened	*None.* Not expected to occur, due to absence of streams tributary to Sacramento River.
Central Valley spring-run chinook salmon Central Valley winter-run chinook salmon *(Oncorhynchus tshawytscha)*	Threatened Endangered	*None.* Not expected to occur, due to absence of streams tributary to Sacramento River.
Amphibians		
California tiger salamander, central population *(Ambystoma californiense)*	Threatened	*None.* Presumed to be absent due to the due to lack of seasonal pools, vernal pools, and seasonal wetlands.
California red-legged frog *(Rana draytonii)*	Threatened	*None.* As stated in the 1996 USFWS *Recovery Plan for California Red-legged Frog*, "the California red-legged frog was probably extirpated from the floor of the Central Valley before 1960." Recent occurrences extend from the Coast Range foothills to the west, and Yolo County is outside of the distribution area for this species.
Reptiles		
Giant garter snake *(Thamnophis gigas)*	Threatened	*None.* Not expected to occur due to lack of records in project area vicinity. No agricultural wetlands or other wetlands, ditches, drainage canals, or surface water features are present in the proposed project area.
Yolo County Lists		
Conservancy fairy shrimp *(Branchinecta conservatio)*	Endangered	*None.* Not expected to occur due to absence of vernal pools.
Vernal pool fairy shrimp (*Branchinecta lynchi)*	Threatened	*None.* Not expected to occur due to absence of vernal pools.
Valley elderberry longhorn beetle *(Desmocerus californicus dimorphus)*	Threatened	*None.* Not expected to occur due to absence of elderberry shrubs.
Critical habitat, vernal pool tadpole shrimp; Vernal pool tadpole shrimp *(Lepidurus packardi)*	Critical habitat; Endangered	*None.* Not expected to occur due to absence of vernal pools.
Fish		
Green sturgeon *(Acipenser medirostris)*	Threatened	*None.* Not expected to occur due to absence of streams tributary to Sacramento River.

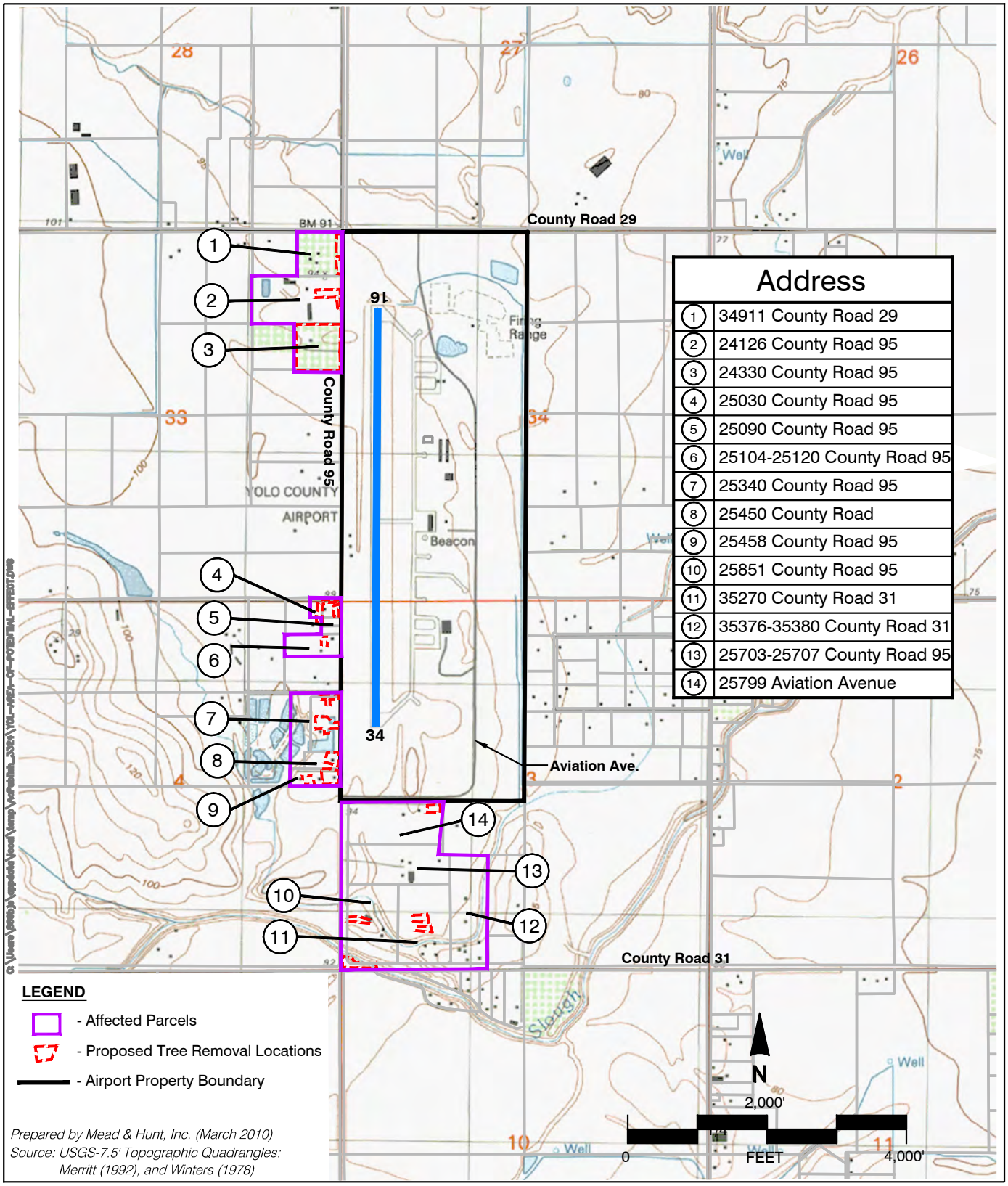
Attachment 2:
Federal Endangered and Threatened Species List
Yolo County Airport Obstruction Removal

Common Name (*Scientific Name*)	**Federal Status**	**Potential for Occurrence/ Observation**
Delta smelt; Critical habitat, delta smelt (*Hypomesus transpacificus)*	Threatened; Critical habitat	*None.* Not expected to occur due to absence of streams tributary to Sacramento River.
Central Valley steelhead *Critical habitat, Central Valley Steelhead* *Oncorhynchus mykiss*	Threatened; Critical habitat	*None.* Not expected to occur due to absence of streams tributary to Sacramento River.
Central Valley spring-run Chinook salmon; Critical habitat, Central Valley spring-run Chinook; Winter-run Chinook salmon, Sacramento River Critical habitat, winter-run Chinook salmon; *(Oncorhynchus tshawytscha)*	Threatened; Critical Habitat; Endangered; Critical habitat	*None.* Not expected to occur, due to absence of streams tributary to Sacramento River.
Amphibians		
California tiger salamander, central population Critical habitat, CA tiger salamander, central population *(Ambystoma californiense)*	Critical Habitat; Threatened	*None.* Presumed to be absent due to the due to lack of seasonal pools, vernal pools, and seasonal wetlands.
California red-legged frog *(Rana draytonii)*	Threatened	*None.* As stated in the 1996 USFWS *Recovery Plan for California Red-legged Frog*, "the California red-legged frog was probably extirpated from the floor of the Central Valley before 1960." Recent occurrences are from the Coast Range foothills to the west, and Yolo County is outside of the distribution for this species.
Reptiles		
Giant garter snake *(Thamnophis gigas)*	Threatened	*None.* None. Not expected to occur due to lack of records in project area vicinity. No agricultural wetlands or other wetlands, ditches, drainage canals, or surface water features will be affected by the proposed project.
Birds		
Northern spotted owl *(Strix occidentalis caurina)*	Threatened	*None.* Not expected to occur due to absence of coniferous forest.
Plants		
Palmate-bracted bird's beak *(Cordylanthus palmatus)*	Endangered	*None.* Not expected to occur due to absence of saline-alkali soils.
Colusa grass; Critical habitat, Colusa grass *(Neostapfia colusana)*	Threatened; Critical habitat	*None.* Not expected to occur due to absence of vernal pools.
Critical habitat, Solano grass; Solano grass *(Tuctoria mucronata)*	Critical habitat; Endangered	*None.* Not expected to occur due to absence of vernal pools.
Birds		
Western yellow-billed cuckoo *(Coccysuz americanus occidentalis)*	Candidate	Low. Not expected to occur due to lack of mature Central Valley riparian forest.

Figure 1

Project Location

Yolo County Airport

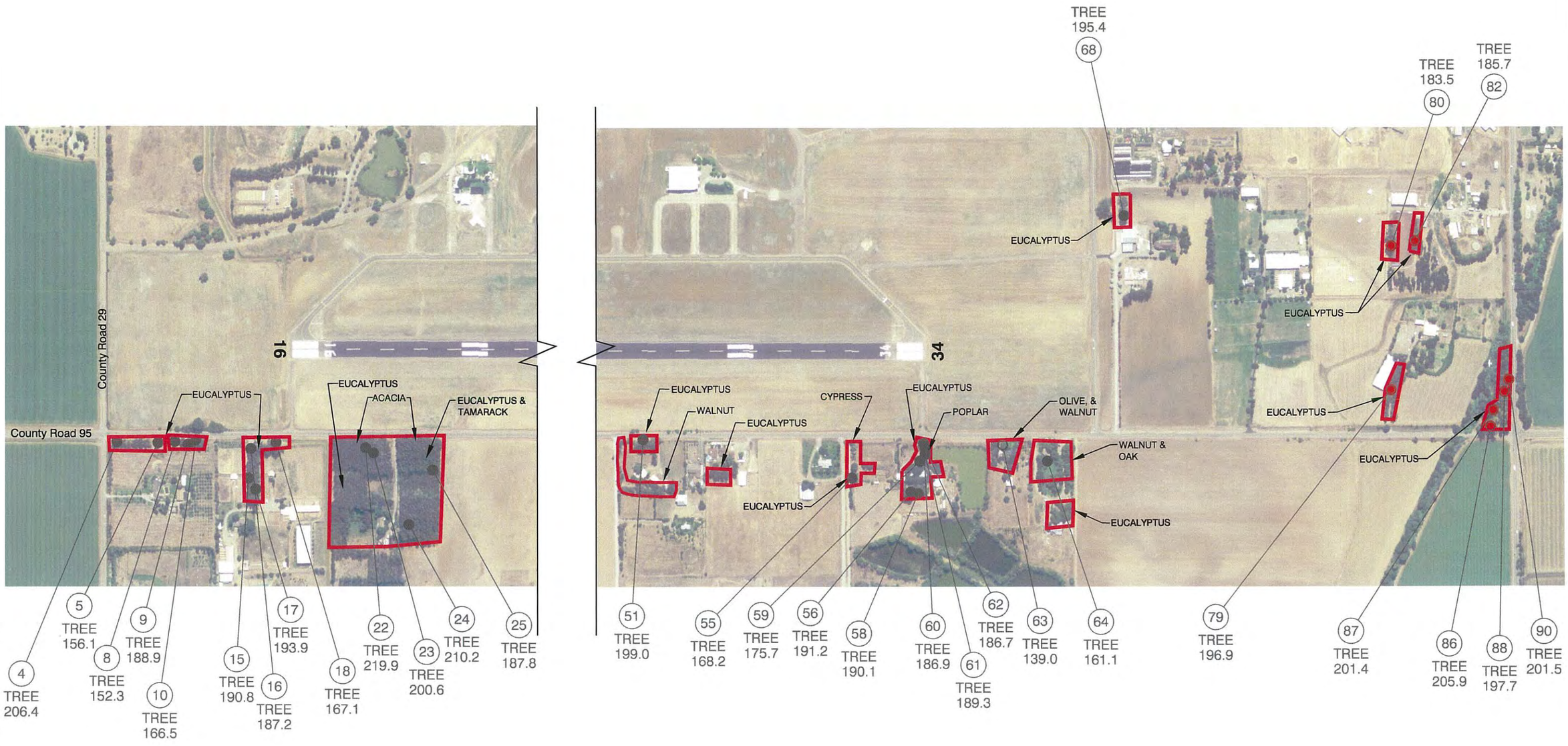


Address	
1	34911 County Road 29
2	24126 County Road 95
3	24330 County Road 95
4	25030 County Road 95
5	25090 County Road 95
6	25104-25120 County Road 95
7	25340 County Road 95
8	25450 County Road
9	25458 County Road 95
10	25851 County Road 95
11	35270 County Road 31
12	35376-35380 County Road 31
13	25703-25707 County Road 95
14	25799 Aviation Avenue

Figure 2

Parcel Locations

Yolo County Obstruction Removal Project



Wooded areas containing airspace obstructions, as identified by WH Pacific.

Individual trees identified as airspace obstructions by Mead & Hunt

- All elevations are in feet above mean sea level

N

600'

0 FEET 1,200'

Source: Mead & Hunt, Inc. (January 2011)

\\san-fp01\entp\25020-00\REF\Environmental\YOL-TREE-SPECIES.dwg Jan 18, 2011 - 11:50am

Figure 3

Off-Site Obstruction Removal

Yolo County Airport

Agency Correspondence:

Native American Tribal Representatives

December 16, 2010

Mr. Barry Franklin
Environmental Protection Specialist
San Francisco Airports District Office
831 Mitten Road, Suite 210
Burlingame CA 94010

RE: Proposed Tree Removal Project, Yolo County Airport, Woodland, California

Dear Mr. Franklin:

Thank you for your notification letter dated, December 6, 2010, regarding cultural information on or near the proposed tree removal project at the Yolo County Airport, Woodland, Yolo County, California. We appreciate your efforts to contact us and wish to respond.

The Cultural Resources Department has reviewed the project and concluded that it is within the aboriginal territories of the Yocha Dehe Wintun Nation. Therefore, we have a cultural interest and authority in the proposed project area.

Based on the information provided, the Tribe is not aware of any known cultural resources on this project site. Should this project be located near a waterway, and involves earthmoving activity, a monitor is recommended

Additionally, as the project progresses, if any new information or cultural items are found, we do have a process to protect such important and sacred artifacts. Upon such a finding, please contact the following individual:

Mr. Reno Keoni Franklin
Director of Cultural Resources
Yocha Dehe Wintun Nation
Office: (530)796-3400, rfranklin@yochadehe-nsn.gov

Thank you for providing us with this notice and opportunity to comment.

Sincerely,

Marshall McKay
Tribal Chairman

MM:pb

cc: Ms. Michelle LaPena, La Pena Law Corporation

U.S Department
of Transportation
**Federal Aviation
Administration**

Western-Pacific Region
Airports Division

P. O. Box 92007
Los Angeles, CA 90009-2007

December 6, 2010

Marshall McKay
Chairperson
Yocha Dehe Wintun Nation
P. O. Box 18
Brooks, CA 95606

Dear Chairperson McKay:

Proposed Tree Removal Project
Yolo County Airport, Woodland, California
Government to Government Consultation

The Federal Aviation Administration (FAA) and the County of Yolo (County) are preparing an Environmental Assessment (EA) to evaluate the potential impacts of removing selected trees from a number of parcels adjacent to the Yolo County Airport (Airport). The trees were identified as obstructions to aircraft navigation because they penetrate several of the imaginary surfaces identified in Title 14 Code of Federal Regulations (CFR) Part 77, Objects Affecting Navigable Airspace, and we have included a drawing of the Area of Potential Effect to show the location of the various parcels around Yolo County Airport for the proposed tree removal project (See enclosure 1). The FAA is the lead federal agency for government to government consultation for the proposed project. The County is the Airport sponsor.

Purpose of Government to Government Consultation

The primary purpose of government to government consultation, as described in Federal Executive Order 13175 "*Consultation and Coordination with Indian Tribal Governments*" and FAA's Order 1210.20 "*American Indian and Alaska Native Tribal Consultation Policy and Procedures*" is to ensure that Federally Recognized Tribes (Tribes) are given the opportunity to provide meaningful and timely input regarding proposed FAA actions that uniquely or significantly affect Tribes.

Consultation Initiation

In order to fulfill our requirement with Title 36, CFR Part 800, we are contacting you as part of the environmental review process. With this letter, the FAA is seeking input on concerns that uniquely or significantly affect your Tribe related to Airport improvements. Early identification of Tribal concerns will allow the FAA to consider ways to avoid and minimize potential impacts to Tribal resources and practices during the environmental review process. We would be pleased to discuss details of the Airport's proposed project with you.

Project Information

The County proposes to remove selected trees from several parcels of land adjacent to the Airport that penetrate Title 14 CFR Part 77, 7:1 imaginary transitional surface, and represent an obstruction to aircraft navigation at the Airport.

A safety inspection performed by the California Department of Transportation, Division of Aeronautics, identified several tall trees that could pose hazards to aviators and the traveling public.

The County performed an obstruction survey, and the survey results indicated that approximately 150 trees located on fourteen private properties were tall enough to create obstructions to aircraft. The trees, which are associated with rural and residential properties adjacent to Aviation Road County Road 31 and County Road 95, are located in the airport approach. The transitional and primary surfaces are associated with the south end of the runway. The County must remove the trees because they pose a risk of collisions with aircraft.

The County proposes to remove the trees and stumps and replace them with lower-growing species of trees. Most of the trees identified for removal are individual or small groups of eucalyptus trees. The County considered topping the trees, but determined that it would be ineffective as eucalyptus trees are known to grow quickly and reach tall heights compared to other trees native to the County. As a result, the County determined that topping would provide only a temporary and inadequate solution for obstruction removal. The County will perform all tree removals during the autumn and winter months to avoid the breeding season for birds.

Confidentiality

We understand that you may have concerns about the confidentiality of information on areas or resources of religious, traditional and cultural importance to the Tribe. We would be happy to discuss these concerns and develop procedures to ensure the confidentiality of such information is maintained.

FAA Contact Information

If you wish to provide comments related to this proposed project, please contact Barry Franklin, Environmental Protection Specialist, of the San Francisco Airports District Office, 831 Mitten Road, Suite 210, Burlingame, California, 94010 or by telephone at (650) 876-2778 extension 614 or barry.franklin@faa.gov. I can be reached directly at (310) 725-3600 or mark.mclardy@faa.gov.

Project Consultation Options Form

Your timely response will greatly assist us in incorporating your concerns into the environmental review process. For that purpose, we respectfully request that you complete the Tribal Consultation Options form, enclosure (2), and forward it to the FAA, using the enclosed stamped, self-addressed envelope within 30-days of your receipt of this correspondence.

Sincerely,

for Deb Roth

Mark A. McClardy
Manager, Airports Division
Western-Pacific Region

Enclosures: (1) Area of Potential Effect Yolo County Obstruction Removal Project
(2) Tribal Consultation Options Form with return envelope

U.S Department
of Transportation
**Federal Aviation
Administration**

Western-Pacific Region
Airports Division

P. O. Box 92007
Los Angeles, CA 90009-2007

December 6, 2010

Elaine Peterson
Chairperson
Cortina Indian Rancheria of
Wintun Indians of California
570 6th Street Ste. F
Williams, CA 95987

Dear Chairperson Peterson:

Proposed Tree Removal Project
Yolo County Airport, Woodland, California
Government to Government Consultation

The Federal Aviation Administration (FAA) and the County of Yolo (County) are preparing an Environmental Assessment (EA) to evaluate the potential impacts of removing selected trees from a number of parcels adjacent to the Yolo County Airport (Airport). The trees were identified as obstructions to aircraft navigation because they penetrate several of the imaginary surfaces identified in Title 14 Code of Federal Regulations (CFR) Part 77, Objects Affecting Navigable Airspace, and we have included a drawing of the Area of Potential Effect to show the location of the various parcels around Yolo County Airport for the proposed tree removal project (See enclosure 1). The FAA is the lead federal agency for government to government consultation for the proposed project. The County is the Airport sponsor.

Purpose of Government to Government Consultation

The primary purpose of government to government consultation, as described in Federal Executive Order 13175 "*Consultation and Coordination with Indian Tribal Governments*" and FAA's Order 1210.20 "*American Indian and Alaska Native Tribal Consultation Policy and Procedures*" is to ensure that Federally Recognized Tribes (Tribes) are given the opportunity to provide meaningful and timely input regarding proposed FAA actions that uniquely or significantly affect Tribes.

Consultation Initiation

In order to fulfill our requirement with Title 36, CFR Part 800, we are contacting you as part of the environmental review process. With this letter, the FAA is seeking input on concerns that uniquely or significantly affect your Tribe related to Airport improvements. Early identification of Tribal concerns will allow the FAA to consider ways to avoid and minimize potential impacts to Tribal resources and practices during the environmental review process. We would be pleased to discuss details of the Airport's proposed project with you.

Project Information

The County proposes to remove selected trees from several parcels of land adjacent to the Airport that penetrate Title 14 CFR Part 77, 7:1 imaginary transitional surface, and represent an obstruction to aircraft navigation at the Airport.

A safety inspection performed by the California Department of Transportation, Division of Aeronautics, identified several tall trees that could pose hazards to aviators and the traveling public.

The County performed an obstruction survey, and the survey results indicated that approximately 150 trees located on fourteen private properties were tall enough to create obstructions to aircraft. The trees, which are associated with rural and residential properties adjacent to Aviation Road County Road 31 and County Road 95, are located in the airport approach. The transitional and primary surfaces are associated with the south end of the runway. The County must remove the trees because they pose a risk of collisions with aircraft.

The County proposes to remove the trees and stumps and replace them with lower-growing species of trees. Most of the trees identified for removal are individual or small groups of eucalyptus trees. The County considered topping the trees, but determined that it would be ineffective as eucalyptus trees are known to grow quickly and reach tall heights compared to other trees native to the County. As a result, the County determined that topping would provide only a temporary and inadequate solution for obstruction removal. The County will perform all tree removals during the autumn and winter months to avoid the breeding season for birds.

Confidentiality

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FAA Contact Information

If you wish to provide comments related to this proposed project, please contact Barry Franklin, Environmental Protection Specialist, of the San Francisco Airports District Office, 831 Mitten Road, Suite 210, Burlingame, California, 94010, or by telephone at (650) 876-2778 extension 614 or barry.franklin@faa.gov. I can be reached directly at (310) 725-3600 or mark.mclardy@faa.gov.

Project Consultation Options Form

Your timely response will greatly assist us in incorporating your concerns into the environmental review process. For that purpose, we respectfully request that you complete the Tribal Consultation Options form, enclosure (2), and forward it to the FAA, using the enclosed stamped, self-addressed envelope within 30-days of your receipt of this correspondence.

Sincerely,

for Mark A. McClardy
Manager, Airports Division
Western-Pacific Region

Enclosures: (1) Area of Potential Effect Yolo County Obstruction Removal Project
(2) Tribal Consultation Options Form with return envelope

U.S Department
of Transportation
**Federal Aviation
Administration**

Western-Pacific Region
Airports Division

San Francisco Airports District Office
831 Mitten Road, Room 210
Burlingame, CA 94010

December 8, 2010

Dave Jones
Wintun Environmental Protection Agency
P. O. Box 1839
Williams, CA 95982

Dear Mr. Jones:

Proposed Tree Removal Project
Yolo County Airport, Woodland, California
Native American Consultation Initiation

The Federal Aviation Administration (FAA) and the County of Yolo (County) are preparing an Environmental Assessment (EA) to evaluate the potential impacts of removing selected trees from a number of parcels adjacent to the Yolo County Airport. The trees were identified as obstructions to aircraft navigation because they penetrate several of the imaginary surfaces identified in Title 14, Code of Federal Regulations (CFR) Part 77, *Objects Affecting Navigable Airspace*, and we have included a drawing of the Area of Potential Effect to show the location of the various parcels around Yolo County Airport for the proposed tree removal project (See enclosure). The FAA is the lead federal agency for Native American consultation for the proposed project. The County is the sponsor for Yolo County Airport. Your name and contact information was provided to us by the California Native American Heritage Commission.

Consultation Initiation

The FAA is seeking input on concerns that uniquely or significantly affect your Tribe related to planned and proposed Airport improvements. Early identification of Tribal concerns will allow the FAA to consider ways to avoid and minimize potential impacts to Tribal resources and practices as the project planning alternatives are developed and refined.

Project Information

The County proposes to remove selected trees from several parcels of land adjacent to the Airport that penetrate Title 14 CFR Part 77, 7:1 imaginary transitional surface, and represent an obstruction to aircraft navigation at the Airport.

A safety inspection performed by the California Department of Transportation, Division of Aeronautics, identified several tall trees that could pose hazards to aviators and the traveling public.

The County performed an obstruction survey, and the survey results indicated that approximately 150 trees located on fourteen private properties were tall enough to create obstructions to aircraft. The trees, which are associated with rural and residential properties adjacent to Aviation Road County Road 31 and County Road 95, are located in the airport approach. The transitional and primary surfaces are associated with the south end of the runway. The County must remove the trees because they pose a risk of collisions with aircraft.

The County proposes to remove the trees and stumps and replace them with lower-growing species of trees. Most of the trees identified for removal are individual or small groups of eucalyptus trees. The County considered topping the trees, but determined that it would be ineffective as eucalyptus trees are known to grow quickly and reach tall heights compared to other trees native to the County. As a result, the County determined that topping would provide only a temporary and inadequate solution for obstruction removal. The County will perform all tree removals during the autumn and winter months to avoid the breeding season for birds.

Confidentiality

We understand that you may have concerns about the confidentiality of information on areas or resources of religious, traditional and cultural importance to the Tribe. We would be happy to discuss these concerns and develop procedures to ensure the confidentiality of such information is maintained.

FAA Contact Information

If you wish to provide comments related to this proposed project, please contact Barry Franklin, Environmental Protection Specialist, of the San Francisco Airports District Office, 831 Mitten Road, Suite 210, Burlingame, California, 94010 or by telephone at (650) 876-2778 extension 614 or barry.franklin@faa.gov. I can be reached directly at (650) 876-2778 extension 600 or robin.k.hunt@faa.gov.

Your timely response will greatly assist us in incorporating your concerns into the environmental review process. For that purpose, we respectfully request that you provide us any comments you may have and forward them to the FAA, using the enclosed stamped, self-addressed envelope within 30-days of your receipt of this correspondence.

Sincerely,

Robin K. Hunt
Manager, Airports District Office

Enclosure - Area of Potential Effect Yolo County Obstruction Removal Project Figure

U.S Department
of Transportation
**Federal Aviation
Administration**

Western-Pacific Region
Airports Division

San Francisco Airports District Office
831 Mitten Road, Room 210
Burlingame, CA 94010

December 8, 2010

Kesner Flores
Wintun/Patwin
P. O. Box 1047
Wheatland, CA 95692

Dear Mr. Flores:

Proposed Tree Removal Project
Yolo County Airport, Woodland, California
Native American Consultation Initiation

The Federal Aviation Administration (FAA) and the County of Yolo (County) are preparing an Environmental Assessment (EA) to evaluate the potential impacts of removing selected trees from a number of parcels adjacent to the Yolo County Airport. The trees were identified as obstructions to aircraft navigation because they penetrate several of the imaginary surfaces identified in Title 14, Code of Federal Regulations (CFR) Part 77, *Objects Affecting Navigable Airspace*, and we have included a drawing of the Area of Potential Effect to show the location of the various parcels around Yolo County Airport for the proposed tree removal project (See enclosure). The FAA is the lead federal agency for Native American consultation for the proposed project. The County is the sponsor for Yolo County Airport. Your name and contact information was provided to us by the California Native American Heritage Commission.

Consultation Initiation

The FAA is seeking input on concerns that uniquely or significantly affect your Tribe related to planned and proposed Airport improvements. Early identification of Tribal concerns will allow the FAA to consider ways to avoid and minimize potential impacts to Tribal resources and practices as the project planning alternatives are developed and refined.

Project Information

The County proposes to remove selected trees from several parcels of land adjacent to the Airport that penetrate Title 14 CFR Part 77, 7:1 imaginary transitional surface, and represent an obstruction to aircraft navigation at the Airport.

A safety inspection performed by the California Department of Transportation, Division of Aeronautics, identified several tall trees that could pose hazards to aviators and the traveling public.

The County performed an obstruction survey, and the survey results indicated that approximately 150 trees located on fourteen private properties were tall enough to create obstructions to aircraft. The trees, which are associated with rural and residential properties adjacent to Aviation Road County Road 31 and County Road 95, are located in the airport approach. The transitional and primary surfaces are associated with the south end of the runway. The County must remove the trees because they pose a risk of collisions with aircraft.

The County proposes to remove the trees and stumps and replace them with lower-growing species of trees. Most of the trees identified for removal are individual or small groups of eucalyptus trees. The County considered topping the trees, but determined that it would be ineffective as eucalyptus trees are known to grow quickly and reach tall heights compared to other trees native to the County. As a result, the County determined that topping would provide only a temporary and inadequate solution for obstruction removal. The County will perform all tree removals during the autumn and winter months to avoid the breeding season for birds.

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We understand that you may have concerns about the confidentiality of information on areas or resources of religious, traditional and cultural importance to the Tribe. We would be happy to discuss these concerns and develop procedures to ensure the confidentiality of such information is maintained.

FAA Contact Information

If you wish to provide comments related to this proposed project, please contact Barry Franklin, Environmental Protection Specialist, of the San Francisco Airports District Office, 831 Mitten Road, Suite 210, Burlingame, California, 94010 or by telephone at (650) 876-2778 extension 614 or barry.franklin@faa.gov. I can be reached directly at (650) 876-2778 extension 600 or robin.k.hunt@faa.gov.

Your timely response will greatly assist us in incorporating your concerns into the environmental review process. For that purpose, we respectfully request that you provide us any comments you may have and forward them to the FAA, using the enclosed stamped, self-addressed envelope within 30-days of your receipt of this correspondence.

Sincerely,

for Robin K. Hunt
Manager, Airports District Office

Enclosure - Area of Potential Effect Yolo County Obstruction Removal Project Figure

Agency Correspondence:

State Historic Preservation Office

STATE OF CALIFORNIA – THE NATURAL RESOURCES AGENCY
EDMUND G. BROWN, JR., Governor
OFFICE OF HISTORIC PRESERVATION
DEPARTMENT OF PARKS AND RECREATION
1725 23rd Street, Suite 100
SACRAMENTO, CA 95816-7100
(916) 445-7000 Fax: (916) 445-7053
calshpo@parks.ca.gov
www.ohp.parks.ca.gov

February 14, 2011

Reply In Reference To: FAA110118A

Robin K. Hunt
Manager, Airports District Office
San Francisco Airports District Office
831 Mitten Road, Room 210
Burlingame, CA 94010

RE: Section 106 Consultation for Proposed Off Airport Tree Removal, Yolo County Airport, City of Woodland, Yolo County, CA

Dear Ms. Hunt:

Thank you for initiating consultation with me. You do so at the request of the Federal Aviation Administration (FAA) in order to comply with Section 106 of the National Historic Preservation Act of 1966 (16 U.S.C. 470f), as amended, and its implementing regulation at 36 CFR Part 800. You are requesting my concurrence with the Area of Potential Effects (APE), eligibility determinations, and a finding of No Historic Properties Affected.

The Yolo County Airport (Airport) proposes to remove approximately 150 trees located on 14 private parcels adjacent to the Airport. Most of the trees identified for removal are individual or small groups of eucalyptus. The trees will be removed or reduced to stumps. In addition to your letter, you have provided the following studies in support of this undertaking:

- *Archaeological Study for the Yolo County Airport Tree Removal Project, Davis, Yolo County, California* (LSA Associates, Inc.: March 2010)
- *Historic Resources Study, Yolo County Airport Tree Removal Project* (Mead & Hunt: December 2010)

Qualified cultural resource specialists conducted records searches and surveys of the project area. Project archaeologists walked three and five meter transects, scraping exposed ground surface every five-to-ten meters to expose potential cultural materials. Rodent burrows and backdirt piles were also examined. No archaeological properties were identified. Historians identified and evaluated three historic-age properties, applying National Register Criterion within the historic context of agriculture and transportation in Yolo County to the following three properties:

- Farm House (constructed in 1920)
- Minimal Traditional House (constructed in 1950)
- Center-aisle Barn (constructed in 1937)

FAA110118A

The consultants are of the opinion that the properties are ineligible for listing on the National Register of Historic Places (NRHP). Research did not reveal any association with events that contributed to settlement or development of Yolo County, local or regional agriculture, or any association with historically significant individuals. Additionally, the buildings are modest, common examples of agricultural architecture and do not possess a level of workmanship or artistic value to merit inclusion on the National Register.

Having reviewed your submittal, I have the following comments:

1) I concur that the above-listed properties are ineligible for listing on the NRHP;

2) I concur that the Area of Potential Effects (APE) has been properly determined and documented pursuant to 36 CFR Parts 800.4 (a)(1) and 800.16 (d);

3) I further concur that the finding of No Historic Properties Affected is appropriate pursuant to 36 CFR Part 800.4(d)(1) and that the documentation supporting this finding has been provided pursuant to 36 CFR Part 800.11(d);

4) Be advised that under certain circumstances, such as an unanticipated discovery or a change in project description, you may have additional future responsibilities for this undertaking under 36 CFR Part 800.

Thank you for considering historic properties during the project planning process. Please contact Tristan Tozer of my staff at (916) 445-7027 or at ttozer@parks.ca.gov.

Sincerely,

Susan K Stratton for

Milford Wayne Donaldson, FAIA
State Historic Preservation Officer

U.S Department
of Transportation
**Federal Aviation
Administration**

Western-Pacific Region
Airports Division

San Francisco Airports District Office
831 Mitten Road
Burlingame, CA 94010

January 18, 2011

Mr. Milford Wayne Donaldson
Office of Historic Preservation
California Department of Parks and Recreation
1725 23rd Street, Suite 100
Sacramento, CA 95816

Dear Mr. Donaldson:

**Section 106 Consultation for the Proposed Off Airport Tree Removal
Yolo County Airport, City of Woodland, Yolo County, California**

The Federal Aviation Administration (FAA) is the lead federal agency responsible for an environmental determination in accordance with the National Environmental Policy Act (NEPA) for the approval of the near-term projects depicted on an Airport Layout Plan (ALP) for the Yolo County Airport (Airport). Approval of the ALP and funding of the proposed improvement constitutes a federal undertaking, requiring compliance with Section 106 of the National Historic Preservation Act of 1966, as amended, and its implementing regulations of 36 Code of Federal Regulation (CFR) Part 800. This letter is submitted to initiate consultation with the State Historic Preservation Office (SHPO) pursuant to 36 CFR Part 800.2(c) (l) (i) and 36 CFR Part 800.3(c) and request your concurrence with the Area of Potential Effect (APE), as depicted in the enclosure (1) Archaeological Study and enclosure (2) Historic Resources Study.

Description of Proposed Undertaking

The Airport proposes to remove selected trees from several parcels of land adjacent to the Airport that penetrate Title 14 CFR Part 77, 7:1 imaginary transitional surface, and represent an obstruction to aircraft navigation at the Airport.

A safety inspection performed by the California Department of Transportation, Division of Aeronautics, identified several tall trees that could pose hazards to aviators and the traveling public.

The Airport performed an obstruction survey, and the survey results indicated that approximately 150 trees located on fourteen private properties were tall enough to create obstructions to aircraft. The trees, which are associated with rural and residential properties adjacent to Aviation Road, County Road 31, and County Road 95, are located in the airport approach. The impacted transitional and primary surfaces are associated with the south end of the runway.

The Airport must remove the trees because they pose a risk of collisions with aircraft. The Airport proposes to remove the trees and stumps and replace them with lower-growing species of trees. Most of the trees identified for removal are individual or small groups of eucalyptus trees. The Airport considered topping the trees, but determined that it would be ineffective as eucalyptus trees are known to grow quickly and reach tall heights compared to other trees native to Yolo County. As a result, the Airport determined that topping would provide only a temporary and inadequate solution for obstruction removal. The Airport will perform all tree removals during the autumn and winter months to avoid the breeding season for birds.

Archaeology and Historic Resources Inventory

The Archeological and Historic Resources Studies were prepared and the APE was identified. The Archaeological Study survey resulted in no archaeological deposits identified within the APE. Much of the APE's ground surface was disturbed, with many locations on or adjacent to human-made berms or proximal to channelized water. Much of the APE was and still is utilized for agricultural purposes, and therefore has been repeatedly disturbed by seasonal plowing. Because no archaeological deposits were identified in the APE based on background research into soil types and landform age, the APE has low-to-moderate sensitivity for buried archaeological deposits. Therefore, the project is not likely to adversely affect archaeological deposits that may qualify as historic properties.

As a result of the Historic Resources Study survey, three properties that are at least 50 years old within the project APE were identified. Based on the results of the field survey, research, and evaluation the three properties are recommended not eligible for listing on the National Register.

Native American Consultation

In December 2010, the FAA sent letters to those on the Native American Heritage Commission (NAHC) list requesting they provide information concerning the proposed project area if any was available. The NAHC list included federally recognized and non-federally recognized tribes, individuals, and groups expressing interest in the area. For those individuals and groups that did not response, the FAA believes there are no concerns regarding the proposed project. However, there was one tribal representative who did respond on December 21, 2010 and provided the following information.

- Mr. Marshall Mckay, Tribal Chairman of the Yocha Dehe Wintun Nation, stated that the Tribe was not aware of any known cultural resources on the proposed project site. However, as the proposed tree removal project proceeds and upon discovery of important or sacred artifacts, they should be contacted.

Summary of Findings and Determination of Effect

Based on the information contained in the Archeological and Historic Resources Studies, the FAA has determined that there are no properties that are listed or eligible for listing on the National Register of Historic Places (NRHP) within the APE. The FAA has also determined that the proposed undertaking will not affect any properties listed or eligible for listing on the NRHP. Appropriate measures will be followed in the event that any buried archaeological resources are encountered during removal of trees. All activities will be temporarily suspended in the immediate vicinity of the find to allow for a qualified archaeologist to evaluate the find and implement appropriate mitigation measures, as needed.

If you have any questions or need additional information on this submittal, please contact me at 650-876-2778 ext. 600 or robin.k.hunt@faa.gov. You can also contact Barry Franklin at 650-876-2778 ext. 614 or barry.franklin@faa.gov.

Sincerely,

for Robin K. Hunt
Manager, Airports District Office

Enclosure (1) Archaeological Study for the Yolo County Airport Tree Removal Project (LSA, March 2010)
(2) Historic Resources Study Yolo County Airport Tree Removal Project (Mead & Hunt, December 2010)

Cc: R. Groom, Director of General Services, Yolo County, w/o encl
L. Harmon, Mead & Hunt Inc., w/o encl

Appendix C

Archaeological Survey

ARCHAEOLOGICAL STUDY FOR THE YOLO COUNTY AIRPORT TREE REMOVAL PROJECT

DAVIS, YOLO COUNTY, CALIFORNIA

LSA

March 2010

Cover Photograph

APN #04019045, view looking east down driveway

ARCHAEOLOGICAL STUDY FOR THE YOLO COUNTY AIRPORT TREE REMOVAL PROJECT

DAVIS, YOLO COUNTY, CALIFORNIA

Submitted to:

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LSA Project No. MHN0902

LSA

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INTRODUCTION

LSA Associates, Inc. (LSA) conducted this archaeological study at the request of Mead & Hunt as part of environmental review of the Yolo County Airport Tree Removal Project (project) in Davis, Yolo County, California (Figure 1). Yolo County (County) is proposing to remove selected groups of trees from non-contiguous areas around the airport because they extend into protected airspace. The project area is nearly equidistant from Davis, Winters, and Woodland, yet it is considered a portion of rural Davis.

The project Area of Potential Effects (APE) comprises those areas that will undergo tree removal, and is coterminous with the APE for direct effects to archaeological deposits. Ground-disturbing project activities would be limited to within the direct APE.

The purpose of this archaeological study is to (1) identify prehistoric or historical archaeological deposits that meet the definition of a historical or archaeological resource under the California Environmental Quality Act (CEQA), or a historic property under Section 106 of the National Historic Preservation Act (Section 106); and (2) characterize the general archaeological and geo-archaeological sensitivity of the subsurface environment in the project's APE. To prepare the study, LSA conducted background research and a pedestrian field survey focused only on archaeological deposits; built environment resources were not addressed. All consultation pursuant to the requirements of Section 106 was conducted by Mead & Hunt and is not documented in this report.

This cultural resources study was carried out by LSA archaeologist Leslie Smirnoff, who meets the *Secretary of the Interior's Professional Qualifications Standards* for archaeology (48 CFR 44716). Ms. Smirnoff has an M.A. in Cultural Resources Management from Sonoma State University and two and a half years of professional experience practicing archaeology in California for private firms and state agencies. Ms. Smirnoff is Registered Professional Archaeologist #56480.

No archaeological deposits were identified in or adjacent to the APE by this study. Further study or investigation for the presence of archaeological deposits is not recommended. Please see the Study Results and Recommendations sections for additional information.

PROJECT DESCRIPTION

The County is proposing to remove selected groups of trees from non-contiguous areas that surround the airport. These groups of trees extend into and obstruct portions of surrounding airspace. The majority of the trees to be removed are located along County Road 95 adjacent to the airport, while other groups are along Aviation Avenue and south of County Road 29. Additionally, some groups are located north of County Road 31. All but a few of the trees are eucalyptus. The proposed plan involves removing trees and the accompanying stumps, which may be pulled or ground out. Shorter tree species will be replanted in most locations.

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FIGURE 1

Archaeological Study

Yolo County Airport Tree Removal Project
Davis, Yolo County, California

Project Location

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AREA OF POTENTIAL EFFECTS

The APE consists of discontiguous polygons adjacent to and within the Yolo County Airport, near the City of Davis in Sections 3, 4, 33 and 34 of Townships 8 and 9 North/Range 1 East, Mount Diablo Base Line and Meridian (Figures 2 and 3). The APE is bounded by County Route 29 on the north and County Route 31 on the south, with County Route 95 extending north-south along the western edge. Currently, the APE consists of private residences, landscaping, and agricultural land.

The majority of the APE is located on an outcrop of the Pliocene (5.3 to 2.6 Ma[1]) Tehama Formation of the Vacaville Assemblage (Graymer et al. 2002:11; Wagner et al. 1991). This outcrop of Tehama Formation is bordered on the north, northwest, and southeast by Holocene (present to 10,000 years B.P.[2]) basin deposits. Basin deposits are fine-grained sediment deposits on valley floors that accumulate due to flooding. These Holocene deposits likely cover the Tehama Formation at an unknown depth (Graymer et al. 2002).

The soils in the APE are of several different, well-developed series: Hillgate, Myers, Brentwood, Corning, and Sehorn (Beaudette and O'Geen 2010).

There are several water sources that are near the APE: Dry Slough and Chickahominy Slough are approximately ¼ mile to the south and Union School Slough is approximately 1/4 mile north of the APE. Putah Creek is approximately 1½ miles to the south. Additionally, two channelized water sources are located in the northern portion of the APE.

The native vegetation of the APE originally consisted of riparian forest. Riparian forest is characterized by the presence of cottonwood (*Populus fremontii*) and woody vines interspersed with islands of tule (Küchler 1977:20). Modern agriculture and residential development has cleared much of the original forest and replaced it with agricultural uses.

LEGISLATIVE AND REGULATORY CONTEXTS

Both federal- and state-level regulations require that agencies identify important or significant cultural resources and take into account a proposed project's impacts or effects onto those resources. Both of these frameworks provide criteria for evaluating such resources in order to determine if an adverse impact or effect will occur.

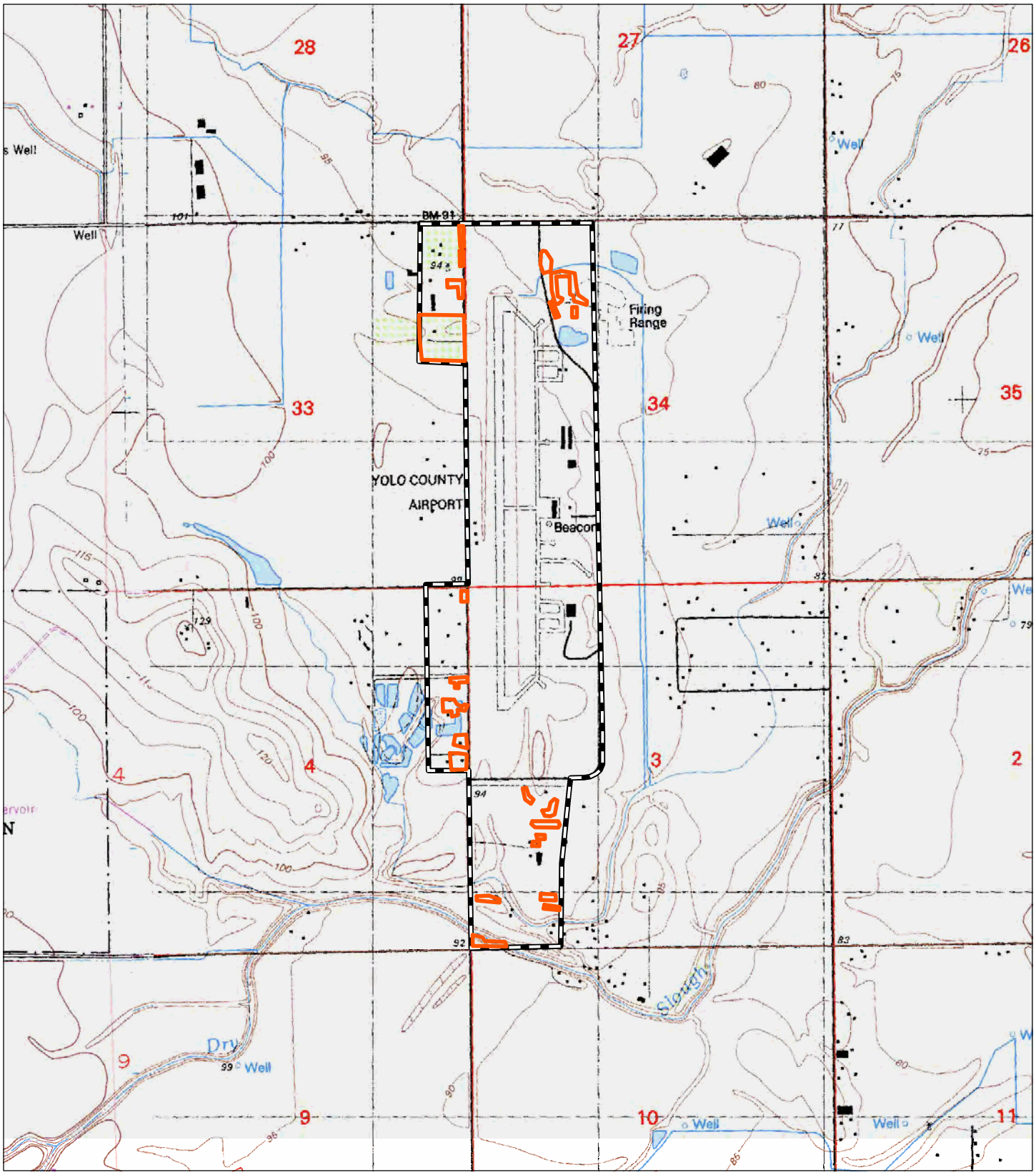
National Historic Preservation Act

National Register Bulletin *How to Apply the National Register Criteria for Evaluation* states:

> Preserving historic properties as important reflections of our American heritage became a national policy through passage of the Antiquities Act of 1906, the Historic Sites Act of 1935, and the National Historic Preservation Act of 1966, as amended….The National Historic Preservation

1 Million years ago.

2 Before present.



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N

0 1,000 2,000
Feet

Project Area

Project Area of Potential Effects

FIGURE 2

Archaeological Study

Yolo County Airport Tree Removal Project
Davis, Yolo County, California

Project Area of Potential Effects

Source: USGS 7.5' *Merritt Calif.*, 1981 and *Winters Calif.*, 1968 Quad Maps
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LSA

Project Area

Project Area of Potential Effects

0 400 800

Feet

FIGURE 3

Archaeological Study

Yolo County Airport Tree Removal Project
Davis, Yolo County, California

Project Area of Potential Effects

SOURCE: Aerial Imagery from the U.S. Department of Agriculture, NAIP (2005)

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> Act of 1966 authorized the Secretary to expand this recognition to properties of local and State significance in American history, architecture, archaeology, engineering, and culture, and are worthy of preservation. The National Register of Historic Places is the official list of the recognized properties, and is maintained and expanded by the National Park Service on behalf of the Secretary of the Interior [National Park Service 1997a:i].

Section 106. If a project is subject to federal jurisdiction and the project is an undertaking as defined by 36 CFR §800.16(y) with the potential to cause effects on historic properties (36 CFR §800.3(a)), Section 106 of the National Historic Preservation Act of 1966, as amended, must be addressed to take into account the effect of the undertaking on any district, site, building, structure, or object included in or eligible for inclusion in the National Register of Historic Places.

National Register of Historic Places[3]

Historic Property. A historic property is any district, site, building, structure, or object listed in or eligible for listing in the National Register at the local, state, or national level (36 CFR §800.16(l)(1); National Park Service 1997b:Appendix VII:3). The criteria for determining a resource's eligibility for National Register listing are defined at 36 CFR §60.4. The evaluation of a resource's eligibility for listing in the National Register takes into account the property's age, period of significance, historic context, significance, and integrity.

Age. Generally, cultural properties must be 50 years of age or more to be eligible for listing in the National Register. National Register Bulletin *How to Apply the National Register Criteria for Evaluation*, states that "properties that have achieved significance within the past 50 years shall not be considered eligible" unless such properties are "of exceptional importance" (National Park Service 1997a:2).

Period of Significance. The period of significance for a property is "the span of time when a property was associated with important events, activities, persons, cultural groups, and land uses or attained important physical qualities or characteristics" (National Park Service 1999:21). The period of significance begins with the earliest important land use or activity that is reflected by historic characteristics tangible today. The period closes with the date when events having historical importance ended (National Park Service 1999:21).

Significance Criteria. Four evaluation criteria are applied to the property in which the property's significance for its association with important events or persons, importance in design or construction, or information potential is assessed (National Park Service 1997a:11). The criteria for determining a resource's significance for National Register listing are defined at 36 CFR §60.4 and are as follows:

> …the quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and

[3] The eligibility requirements of the California Register of Historical Resources and the National Register of Historic Places are nearly identical. A property that is eligible for the National Register is considered eligible for the California Register and, in general, properties that are considered eligible for the California Register will also be eligible for the National Register.

a) That are associated with events that have made a significant contribution to the broad patterns of our history; or

b) That are associated with the lives of persons significant in our past; or

c) That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

d) That have yielded, or may be likely to yield, information important in prehistory or history.

Integrity. In order to be eligible for the National Register, a cultural resource must retain historical integrity, which is the ability of a resource to convey its significance. The evaluation of integrity must be grounded in an understanding of a resource's physical features and its environment, and how these relate to its significance. "The retention of specific aspects of integrity is paramount for a property to convey its significance"(National Park Service 1997a:44). Under Criteria A, B, and C, the National Register places an emphasis on a resource appearing like it did during its period of significance to convey historical significance; under Criterion D, properties convey significance through the information they contain (National Park Service 2000:38).

National Register Bulletin *How to Apply the National Register Criteria for Evaluation* (National Park Service 1997a:2) states that the quality of significance is present in districts, sites, buildings, structures, and objects that possess integrity. There are seven aspects of integrity to consider when evaluating a cultural resource: location, design, setting, materials, workmanship, feeling, and association:

- Location is the place where the historic property was constructed or the place where the historic event occurred. The actual location of a historic property, complemented by its setting, is particularly important in recapturing the sense of historic events and persons.
- Design is the combination of elements that create the form, plan, space, structure, and style of a property. Design includes such elements as organization of space, proportion, scale, technology, ornamentation, and materials.
- Setting is the physical environment of a historic property. Setting refers to the character of the place in which the property played its historical role. Physical features that constitute the setting of a historic property can be either natural or manmade, including topographic features, vegetation, paths or fences, or relationships between buildings and other features or open space.
- Materials are the physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property.
- Workmanship is the physical evidence of the crafts of a particular culture or people during any given period in history or prehistory. It is the evidence of the artisan's labor and skill in constructing or altering a building, structure, object, or site.
- Feeling is a property's expression of the aesthetic or historic sense of a particular period of time. It results from the presence of physical features that, taken together, convey the property's historic character.
- Association is the direct link between an important historic event or person and a historic property.

"To retain historic integrity a property will always possess several, and usually most, of the aspects" (National Park Service 1997a:44).

Eligibility. National Register Bulletin *How to Apply the National Register Criteria for Evaluation* (National Park Service 1997a:3) states that in order for a property to qualify for listing in the National Register, it must meet at least one of the National Register criteria for evaluation by:

- being associated with an important historic context *and*
- retaining historic integrity of those features necessary to convey its significance.

Resources that meet the age guidelines, are significant, and possess integrity will generally be considered eligible for listing in the National Register.

California Environmental Quality Act (CEQA)

CEQA applies to all discretionary projects undertaken or subject to approval by the state's public agencies (California Code of Regulations [CCR] Title 14(3) §15002(i)). CEQA states that it is the policy of the State of California to

> "…take all action necessary to provide the people of this state with… historic environmental qualities…and preserve for future generations examples of the major periods of California history" (Public Resources Code [PRC] §21001(b), (c)). Under the provisions of CEQA, "A project with an effect that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment" (CCR Title 14(3) §15064.5(b)).

CEQA §15064.5(a) defines a 'historical resource' as a resource which meets one or more of the following criteria:

- Listed in, or eligible for listing in, the California Register of Historical Resources;
- Listed in a local register of historical resources (as defined at PRC §5020.1(k));
- Identified as significant in a historical resource survey meeting the requirements of §5024.1(g) of the Public Resources Code; or
- Determined to be a historical resource by a project's lead agency (CCR Title 14(3) §15064.5(a)).

A historical resource consists of

> Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California…Generally, a resource shall be considered by the lead agency to be 'historically significant' if the resource meets the criteria for listing in the California Register of Historical Resources (CCR Title 14(3) §15064.5(a)(3)).

CEQA requires that historical resources and unique archaeological resources be taken into consideration during the CEQA planning process (CCR Title 14(3) §15064.5; PRC §21083.2). If feasible, adverse effects to the significance of historical resources must be avoided, or the effects mitigated (CCR Title 14(3) §15064.5(b)(4)). The significance of a historical resource is impaired when a project demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for the California Register of Historical Resources. If there is a substantial adverse change in the significance of a historical resource, the preparation of an environmental impact report may be required (CCR Title 14(3) §15065(a)).

If the cultural resource in question is an archaeological site, CEQA (CCR Title 14(3) §15064.5(c)(1)) requires that the lead agency first determine if the site is a historical resource as defined in CCR Title 14(3) §15064.5(a). If the site qualifies as a historical resource, potential adverse impacts must be considered in the same manner as a historical resource (California Office of Historic Preservation 2001a:8). If the archaeological site does not qualify as a historical resource but does qualify as a unique archaeological site, then the archaeological site is treated in accordance with PRC §21083.2 (CCR Title 14(3) §15069.5(c)(3)). In practice, most archaeological sites that meet the definition of a unique archaeological resource will also meet the definition of a historical resource (Bass, Herson, and Bogdan 1999:105). CEQA defines a "unique archaeological resource" as an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets one or more of the following criteria:

- Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information; or
- Has a special and particular quality such as being the oldest of its type or the best available example of its type; or
- Is directly associated with a scientifically recognized important prehistoric or historic event or person (PRC §21083.2(g)).

If an impact to a historical or archaeological resource is significant, CEQA requires feasible measures to minimize the impact (CCR Title 14(3) §15126.4 (a)(1)). Mitigation of significant impacts must lessen or eliminate the physical impact that the project will have on the resource. Generally, the use of drawings, photographs, and/or displays does not mitigate the physical impact on the environment caused by demolition or destruction of a historical resource. However, CEQA requires that all feasible mitigation be undertaken even if it does not mitigate impacts to a less than significant level (California Office of Historic Preservation 2001a:9; see also CCR Title 14(3) §15126.4(a)(1)).

California Register of Historical Resources

The California Register of Historical Resources (California Register) is a guide to cultural resources that must be considered when a government agency undertakes a discretionary action subject to CEQA. The California Register helps government agencies identify and evaluate California's historical resources (California Office of Historic Preservation 2001b:1), and indicates which properties are to be protected, to the extent prudent and feasible, from substantial adverse change (PRC §5024.1(a)). Any resource listed in, or eligible for listing in, the California Register is to be considered during the CEQA process (California Office of Historic Preservation 2001a:7).

A cultural resource is evaluated under four California Register criteria to determine its historical significance. A resource must be significant at the local, state, or national level in accordance with one or more of the following criteria:

1) Is associated with events that have made a significant contribution to the broad pattern of California's history and cultural heritage;
2) Is associated with the lives of persons important in our past;
3) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
4) Has yielded, or may be likely to yield, information important in prehistory or history.

Age. In addition to meeting one or more of the above criteria, the California Register requires that sufficient time must have passed to allow a "scholarly perspective on the events or individuals associated with the resource." Fifty years is used as a general estimate of the time needed to understand the historical importance of a resource (California Office of Historic Preservation 2006:3; CCR Title 14(11.5) §4852 (d)(2)). The State of California Office of Historic Preservation recommends documenting, and taking into consideration in the planning process, any cultural resource that is 45 years or older (California Office of Historic Preservation 1995:2).

Period of Significance. The period of significance for a property is "the span of time when a property was associated with important events, activities, persons, cultural groups, and land uses or attained important physical qualities or characteristics" (National Park Service 1999:21). The period of significance begins with the date of the earliest important land use or activity that is reflected by historic characteristics tangible today. The period closes with the date when events having historical importance ended (National Park Service 1999:21). The period of significance for an archeological property is "the time range (which is usually estimated) during which the property was occupied or used and for which the property is likely to yield important information" (National Park Service 2000:34). Archaeological properties may have more than one period of significance.

Integrity. The California Register also requires a resource to possess integrity, which is defined as "the authenticity of a historical resource's physical identity evidenced by the survival of characteristics that existed during the resource's period of significance. Integrity is evaluated with regard to the retention of location, design, setting, materials, workmanship, feeling, and association" (California Office of Historic Preservation 2006:2).

Eligibility. Resources that are significant, meet the age guidelines, and possess integrity will generally be considered eligible for listing in the California Register.

California Public Resources Code §5097.5

California Public Resources Code §5097.5 prohibits excavation or removal of any "…archaeological, paleontological or historical feature, situated on public lands, except with express permission of the public agency having jurisdiction over such lands." Public lands are defined to include lands owned by or under the jurisdiction of the state or any city, county, district, authority or public corporation, or any agency thereof. Section 5097.5 states that any unauthorized disturbance or removal of

archaeological, historical, or paleontological materials or sites located on public lands is a misdemeanor.

California Health and Safety Code §7050.5

Section 7050.5 of the California Health and Safety Code states that in the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the remains are discovered has determined whether or not the remains are subject to the coroner's authority. If the human remains are of Native American origin, the coroner must notify the Native American Heritage Commission within 24 hours of this identification. The Native American Heritage Commission will identify a Native American Most Likely Descendant (MLD) to inspect the site and provide recommendations for the proper treatment of the remains and associated grave goods.

METHODS

Background research was completed to identify cultural resources within and cultural resources studies of the APE. The background research consisted of a records search, a literature/map review, and a geo-archaeological sensitivity assessment of the project site.

Background Research

A records search (File #09-0936) of the project area and a ¼-mile radius was completed at the Northwest Information Center (NWIC) of the California Historical Resources Information System, Sonoma State University, Rohnert Park, on January 29, 2010. The NWIC, an affiliate of the California Office of Historic Preservation, is an official state repository of cultural resources records and reports for Yolo County.

As part of the records search LSA also reviewed the following State of California and City inventories for cultural resources in and adjacent to the project area:

- *California Inventory of Historic Resources* (California Department of Parks and Recreation 1976);
- Five Views: An Ethnic Historic Site Survey for California (California Office of Historic Preservation 1988);
- *California Historical Landmarks* (California Office of Historic Preservation 1996);
- *California Points of Historical Interest* (California Office of Historic Preservation 1992);
- *Directory of Properties in the Historic Property Data File* (California Office of Historic Preservation October 23, 2009). The directory includes the listings of the National Register of Historic Places, National Historic Landmarks, the California Register of Historical Resources, California Historical Landmarks, and California Points of Historical Interest; and
- *Yolo County Historic Resource Survey: Area 6, Rural Davis* (Les 1986).

Results. No recorded cultural resources were identified by the record search or literature review in or adjacent to the APE, and no previous studies of the project area have been done. However, within the ¼-mile radius surrounding the APE, both a survey has been conducted and a resource is indicated on NWIC maps. In an approximately 90 meter x 90 meter area adjacent to the southern portion of the APE, a segment of a larger archaeological survey was executed with negative results (True 1980). Additionally, the maps at the NWIC depict recorded resource, the Victorian-era Gotfried Schmeiser house built by a prominent Davis family, in the southern portion of the ¼-mile radius. This resource is a historic property located on County Road 31 east of County Road 95 and on the south side of the road. It is listed in both the Yolo County Historic Resources Survey (Les 1986) and in the Office of Historic Preservation's Historic Properties Directory (2009). The Office of Historic Preservation's Historic Properties Directory lists the property under the status code of 3S, which means that it appears eligible for the National Register of Historic Places as an individual property through survey evaluation.

LSA's review of historic-era maps identified a building/structure directly adjacent to the southern-most portion of the APE, as shown on the *Woodland, California* 15-minute quadrangle (U.S. Geological Survey 1907). Additionally, a building/structure adjacent to the northern-most portion of the APE is shown on the same *Woodland, California* quadrangle as well as another *Woodland, California* 15-minute quadrangle (U.S. Army Corps of Engineers 1940).

Field Survey

On February 25, 2010, LSA archaeologists Leslie Smirnoff and Thea Fuerstenberg, B.A., conducted a pedestrian survey of the APE to identify archaeological deposits. All but one of the discontiguous polygons that comprise the APE were surveyed. The one excluded area, APN #03812009, was inaccessible due to objections from the property owner. No other issues prevented access to the APE.

The pedestrian survey consisted of LSA staff surveying the APE with transects that ranged in spacing between three and five meters apart. Ground surface visibility ranged from good to poor: approximately 40% of areas were sparsely vegetated, 30% was moderately vegetated or covered with visual obstructions such as tall grasses, and the remaining 30% was covered with a thick layer of duff, tree limbs, fallen bark or pavement. In areas where groundcover would permit (e.g., areas not landscaped or paved), the ground surface was scraped every five-to-ten meters to expose potential archaeological materials. Additionally, rodent-burrows and backdirt piles were examined for midden soils, artifacts and other indicators of archaeological deposits.

CULTURAL SETTING

Prehistoric Context

The Paleoindian/Archaic/Emergent cultural sequence developed by Fredrickson (1974) is commonly used to interpret the prehistoric occupation of Central California. Fredrickson has divided time and cultural characteristics ranging from approximately 10,000 B.C.–A.D. 1800 into three major periods: the Paleoindian Period (10,000–6000 B.C.); the three-staged Archaic Period, consisting of the Lower Archaic (6000–3000 B.C.), Middle Archaic (3000–1000 B.C.), and Upper Archaic (1000 B.C.–A.D. 500); and the Emergent Period (A.D. 500–1800).

This Paleoindian period corresponds to the end of the Ice Age, and there is little concrete information about the environment or culture available for these dates. Due to a lack of millingstone implements that have been located from this period, milling is not believed to have occurred or to have been in an incipient phase. It is hypothesized that hunting and gathering were the means of subsistence in this period (Fredrickson 1984:497). Following the Paleoindian period is the Archaic period. The Lower Archaic period is linked to climate change associated with an antithermal, a period of high temperatures and minimal precipitation. During this period, there was an emphasis on seed collecting and processing. The Middle Archaic period is marked by the presence of acorn processing artifacts: the mortar and the pestle. It is believed that this period saw the end of the antithermal and the beginning of the medithermal, or slight cooling of climate conditions, which is the climate that is experienced today. In this period, hunting increased in importance and the prevalence of marine and littoral faunal remains becomes apparent. Fredrickson postulated that this period and the new technologies evident within it (e.g., the concave base projectile point and the mortar and pestle) are the product of population shifts. Following the Middle Archaic period is the Upper Archaic period, which is marked by a climate that turned colder and wetter yet more stable (Rosenthal et al. 2007:155). This period shows an increase in social complexity, which is demonstrated by way of status distinctions that are evident in burials and seemingly more complex networks of trade (Fredrickson 1974:46–48). The stable climate evident in the Upper Archaic continued into the Emergent period (Rosenthal et al. 2007:157). This period is marked by a spike in population and a growing body of evidence of inter-group exchange, which indicates social, religious and organization patterns were becoming more complex (Moratto 1984:211).

Ethnographic Context

The outskirts of Davis and the surrounding area are characterized in ethnographic literature as the seasonal territory inhabited by the Southern Patwin, specifically the Hill Patwin, during the contact period. The territorial boundaries of the Patwin are described as extending along the Sacramento Valley from the town of Princeton to the San Pablo and Suisun bays. Patwin is not so much the name of a tribe but a name used to refer to themselves meaning “people.” The Patwin share common linguistic ties with their northern neighbors, the Wintuan. Often the Patwin are referred to as Southern Wintuan. The Wintuan language is classified under the umbrella of the Penutian stock, which is associated with other Native American groups as well (Johnson 1978:350).

Patwin territories were comprised of one or more land holding groups that anthropologists refer to as “tribelets.” The tribelet, a nearly universal characteristic throughout native California, consists of a principle village occupied year round, and a series of smaller hamlets and resource gathering and processing locations occupied intermittently or seasonally. Populations of tribelets ranged between 50 and 500 persons and were largely determined by the carrying capacity of a tribelet’s territory (Kroeber 1932:258). A chief governed each village, functioning as a manager of economic and ceremonial activities. Additionally, shaman possessed power through curative and spiritual abilities. Subsistence consisted of hunting, fishing and gathering seeds, acorns and bulbs depending on the season. Mussels were collected along riverbeds as well. Each village had its own specific hunting, fishing and gathering areas with the village chief assigning families to collect in specific locations. In addition to sustenance provided by floral and faunal resources, many had utilitarian function as well. Coiled or twined baskets, often decorated with feathers or shells, and rope were woven from vegetative matter. Cured animal hides served as bedding, robes, skirts, mats and sacks. Tools were often made of bone, wood and stone. The Patwin utilized tule balsa boats propelled by pole to traverse waters. Four types of permanent buildings existed in the village: the dwelling meant for

habitation, the ceremonial dance house, the sweat hut and the menstrual hut. All were elliptical, earth-covered, and semi-subterranean buildings (Johnson 1978:350–360).

By the late eighteenth century, Spanish exploration of the Sacramento Valley and settlement of the Bay Area transformed Patwin culture. Spanish settlers moved into northern California and established the mission system that exposed the Patwin to diseases to which they had no immunity. Mission records indicate that many Patwin entered missions San Francisco and San Jose. Additionally, with the onslaught of settlers in the area during the Mexican and American eras the remaining Patwin were forced from their lands and assimilated into American culture either working as laborers on ranches or being forced onto reservations (Johnson 1978:351).

Historical Context

Spanish Period. There is little record of Yolo County and even less regarding the vicinity of Davis from the Spanish period. The first documented explorers were led by Spanish explorer Gabriel Moraga in 1808 (Les 1986:22). These pioneers and trailblazers were followed by Franciscan missionaries aiming to convert the Patwin and their Native American neighbors into Catholics and loyal subjects of Spain as well as landowners looking for laborers (Kroeber 1925:357).

Mexican period. During the Mexican period, Jedediah Smith is recorded as venturing into the area to survey the region's fur potential (Johnson 1978:351 from Larkey 1969). Many of the visitors to this vicinity were hunters and trappers exploiting the rich resources along Cache Creek during this era (Gregory 1913:6). Yet, productive hunting was not the only benefit of the area that attracted sojourners and settlers. The reoccurring flooding which led to rich soils was recognized as a boon for agricultural activities (Les 1986:41). Located approximately one mile to the south of the APE, the first land grant in Yolo County, Ranch Rio de los Putos, was acquired in 1842 by William Wolfskill. A portion of this land grant was occupied by Wolfskill's brother John and was utilized for agriculture (Hoover et al. 1990:533). Some assert that Wolfskill became "the father of the horticulture industry in northern California" (Hoover et al. 1990:533). Present-day Davis is located in what was the Rancho Laguna de Santos Calle, an unconfirmed Mexican land grant (Les 1986:41).

American Period. In the 1850s, Joseph B. Chiles acquired 4200 acres of the Rancho Laguna de Santos Calle, and eventually divided it between his sons in law, Gabriel Brown and Jerome C. Davis. By 1864, the Davis ranch covered 13,000 acres, producing wheat, peaches and grapes in addition to raising stock. The ranch house was leased in 1867 to William Dresbach who turned it into a hotel. Settlement began to spring up around the hotel and Dresbach named the town Davisville (Hoover et al. 1990:537). In the early 1860s, the California Pacific railroad established a line that ran through Davisville. The railroad purchased some land from the Davis family, recorded a town plat and sold lots to prospective residents and businesspeople (Les 1986:24 and 41). By 1870, rural Davisville had 1000 residents while the town had 400 citizens (Les 1986:41). Additionally, the 1879 Official Map of Yolo County illustrates the APE and the vicinity as situated on a variety or parcels that were all claimed land (De Pue 1879:2). The 1870 U.S. Census of rural Davisville illustrates that the majority of the individuals living in rural Davis were farmers. Out of 10 heads of household on one page of the census, nine individuals list their occupation as farmer. In 1905 the University Farm, from which sprang what is known today as UC Davis, was established and the town of Davisville dropped the ending of its name, becoming Davis, as it is referred to today.

The airport was constructed in 1942 by the U.S. military on land that was acquired through take permit. The existing landing strip was at one time connected via access road to a troop housing area as well as a bomb storage facility (California Military Museum n.d.). After World War II, the airport was ceded to Yolo County (Sacramento Area Council of Governments 1999:4). The rural character that was established in the historic-era continues in and around rural Davis, as much of the property surrounding the airport is zoned agricultural with limits placed on single-family development (Sacramento Area Council of Governments 1999:7).

GEOARCHAEOLOGICAL SENSITIVITY ASSESSMENT

The age of a particular landform can be used to determine the sensitivity for buried archaeological deposits. Certain landforms are too old (>15,000 years B.P.) or too young (<150 years B.P.) to contain buried prehistoric archaeological resources. The degree of surface soil development can be used to assess the relative age of a landform. Weakly-developed soils are generally younger and shallower, with few horizons; well-developed soils are generally older, having taken longer to develop and are deeper with more horizons. Well-developed surface soils are associated with older landforms that may have been at or near the surface and will generally have a lower sensitivity for buried archaeological resources. Conversely, weakly-developed surface soils are associated with younger landforms formed in the recent geologic past and generally have a high sensitivity for buried archaeological resources (Rosenthal and Meyer 2004:49).

Geology

Geologically, the APE is situated in the Sacramento Valley, which is a large, northwest-southeast trending asymmetrical structural trough filled with a thick sequence of marine and nonmarine sediments (Hackel 1966:217). The Sacramento Valley is bounded by the Coast Range to the west, the Cascade Range to the north, the Sierra Nevada to the east, and the Sacramento-San Joaquin Delta to the south.

The majority of the APE is located on located on an outcrop of the Pliocene (5.3 to 2.6 Ma) Tehama Formation of the Vacaville Assemblage (Graymer et al. 2002:11; Wagner et al. 1991). The Tehama Formation is a poorly consolidated, non-marine, white quartz arenite tuffaceous sandstone, siltstone, and pebble to cobble conglomerate (Graymer et al. 2002:11). It contains beds of white ash tuff and pink tuff breccia of the Putah Tuff member (Graymer et al. 2002:11). The Tehama Formation is, in some places, overlain by the Pleistocene (2.6 Ma to 10,000 B.P.) Montezuma Formation. The Tertiary (65 to 2.6 Ma) sedimentary and volcanic deposits of the Vacaville Assemblage, including the Pliocene Tehama Formation, overlie the Mesozoic (251 to 65 Ma) sandstone, siltstone, and shale of Great Valley Sequence at an unknown depth (Graymer et al. 2002).

This outcrop of Tehama Formation is bordered on the north, northwest, and southeast by Holocene (present to 10,000 years B.P.) basin deposits. Basin deposits are fine-grained sediment deposits on valley floors from flooding. The area along Dry Slough, in the southern portion of the APE, is mapped as Holocene alluvium (Graymer et al. 2002). This alluvium can be sand, silt, or gravel and is undissected by later erosion (Graymer et al. 2002:4). These Holocene deposits likely cover the Tehama Formation at an unknown depth (Graymer et al. 2002).

Soils

The soils in the APE are of several different, well-developed series: Hillgate, Myers, Brentwood, Corning, and Sehorn (Beaudette and O'Geen 2010).

Hillgate Series. The majority of the APE (roughly corresponding with the area mapped as Tehama Formation) is mapped as Hillgate loam, moderately deep. Hillgate is also mapped in the extreme northwestern portion of the APE, near County Road 29. The Hillgate series typically consists of very deep, well- to moderately well-drained soils that formed in alluvium from mixed sources (Natural Resources Conservation Service [NRCS] 2010c). They are on nearly level to moderately sloping old terraces. They are well-developed with a typical depth of approximately 73 inches (NRCS 2010c).

Myers Series. Surrounding the Hillgate series is Myers clay. Myers is also mapped in the extreme southern portion of the APE, south of Dry Slough. The Myers series consists of very deep, well-drained soils found in basins (NRCS 2010d). Myers soils are on nearly level alluvial fans. They are well-developed with a typical depth of at least 71 inches (NRCS 2010d).

Brentwood Series. The area immediately adjacent to Dry Slough is mapped as Brentwood silty clay loam. The Brentwood series consists of deep, well- to moderately well-drained soils formed in valley fill from sedimentary rocks (NRCS 2010a). Brentwood soils are on nearly level to gently sloping fans. They are well-developed with a typical depth of approximately 60 inches (NRCS 2010a).

Corning Series. Two patches of Corning gravelly loam are mapped in the APE. One is in the southeastern portion of the APE, near County Road 31 and east of County Road 95. The other patch is in the southwestern portion of the APE, near County Road 31 and west of County Road 95. Gravel pits are also mapped near this southwestern patch. The Corning series consists of very deep, well- or moderately well-drained soils that formed in gravelly alluvium weathered from mixed rock sources (NRCS 2010b). Corning soils are on nearly level to gently rolling old high, old terrace remnants with mounded relief. They are well-developed with a typical depth of approximately 60 inches (NRCS 2010b).

Sehorn Series. Also mapped in the southwestern portion of the APE, near County Road 31 and west of County Road 95, is Sehorn clay, 2- to 15-percent slopes. The Sehorn series consists of moderately deep, well-drained soils found on foothills and formed in residuum weathered from calcareous sandstone and shale (NRCS 2010e). They are well-developed with a typical depth of approximately 32 inches (NRCS 2010e).

Summary

Based on background research, APE has a low-to-moderate sensitivity for buried archaeological deposits based on the soil types and landform age. The soils in the project are well developed and, in the central portion of the APE, are associated with Tertiary landforms that are too old to contain buried archaeological deposits. The soils associated with Holocene landforms on the perimeter of the APE are typically well developed, although buried archaeological resources could be found beneath these soils.

STUDY RESULTS

No archaeological deposits were identified as a result of this study. Background records search database indicated that no recorded cultural resources or previously conducted studies are in or adjacent to the APE. Much of the APE's ground surface was disturbed, with many locations on or adjacent to human-made berms or proximal to channelized water. Adding to this, much of the APE was and is utilized for agricultural purposes, and therefore has been repeatedly disturbed by seasonal plowing.

The pedestrian survey identified freshwater clam shells were identified at the northern boundary of APN #04019045 and along the northern boundary of the rifle range, northeast of the runway in APN #04019006. The clam shells were in berms along an unimproved dirt road paralleling the channelized water course running east to west and flanking the upper portion of the airport property. No other archaeological indicators were identified in association with the clam shells, and they are considered natural occurrences. Additionally, the southern-most portion of the APE (APN #03701021) contained several variously sized piles of modern lumber consisting of discarded fence posts and shipping palettes.

Because no archaeological deposits were identified in the APE, and based on background research into soil types and landform age, the APE has a low-to-moderate sensitivity for buried archaeological deposits. For these reasons, the project is not anticipated to result in either adverse effects to archaeological deposits that may qualify as historic properties under Section 106 or a significant impact to archaeological deposits that qualify as historical resources or archaeological resources under CEQA.

RECOMMENDATIONS

Although the results of this study were negative, there is always the potential to encounter intact subsurface prehistoric and historical archaeological deposits and human remains during project construction. The following procedures should be addressed in project contract documents.

Archaeological Deposits

Project construction contracts should include the following directive. The language should be included in the contract documents prior to permitting project actions that include ground-disturbing activities.

If deposits of prehistoric or historical archaeological materials are encountered during project activities, all work within 25 feet of the discovery should be redirected and a qualified archaeologist contacted to assess the situation, consult with agencies as appropriate, and make recommendations for the treatment of the discovery. Project personnel should not collect or move any archaeological materials. Archaeological materials can include flaked-stone tools (e.g., projectile points, knives, and choppers) or obsidian, chert, basalt, or quartzite tool-making debris; bone tools; culturally darkened soil (i.e., midden soil often containing heat-affected rock, ash and charcoal, shellfish remains, bones and other cultural materials); and stone-milling equipment (e.g., mortars, pestles and handstones). Prehistoric archaeological sites often contain human remains. Historical materials can include wood, stone, concrete, or adobe footings, walls, and other structural remains; debris-filled wells or privies; and deposits of wood, glass, ceramics, metal, and other refuse. Project personnel should not

collect or move any archaeological materials or human remains and associated materials. Fill soils used for construction purposes should not contain archaeological materials.

It is recommended that adverse effects to accidentally discovered archaeological deposits be avoided by project activities. If such deposits cannot be avoided, they should be evaluated for their National Register of Historic Places and/or California Register of Historical Resources eligibility. If a deposit is not eligible (i.e., if it is not a historic property under Section 106 or a historical resource under CEQA), a determination should be made as to whether it qualifies as a "unique archaeological resource" under CEQA. If the deposit is neither an historical nor unique archaeological resource, avoidance is not necessary. If the deposit is eligible for listing in the National Register of Historic Places and/or the California Register of Historical Resources, or is a unique archaeological resource, it will need to be avoided by adverse effects or such effects must be mitigated. Adverse effects will be mitigated through the implementation of a treatment plan developed in consultation with the County. Mitigation may consist of, but is not necessarily limited to, systematic recovery and analysis of archaeological deposits; recording the resource; preparation of a report of findings; and accessioning recovered archaeological materials at an appropriate curation facility.

Human Remains

Although the proposed project is not anticipated to disturb burials, there is always the possibility that human remains will be encountered. Project construction contracts should include the following directive. The language should be included in the contract documents prior to permitting project actions that include ground-disturbing activities.

If human remains are encountered during project activities, work within 25 feet of the discovery shall be redirected and the County Coroner notified immediately. At the same time, an archaeologist shall be contacted to assess the situation and consult with agencies as appropriate. Project personnel shall not collect or move any human remains and associated materials. If the human remains are of Native American origin, the Coroner must notify the Native American Heritage Commission within 24 hours of this identification. The Native American Heritage Commission will identify a Most Likely Descendant to inspect the site and provide recommendations for the proper treatment of the remains and associated grave goods.

Upon completion of the assessment, the archaeologist should prepare a report documenting the methods and results, and provide recommendations for the treatment of the human remains and any associated cultural materials, as appropriate and in coordination with the recommendations of the Most Likely Descendant.

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Appendix D

Historical Resources Study

Historic Resources Study

Yolo County Airport Tree Removal Project

Report Prepared for

Yolo County Department of General Services

Report prepared by

www.meadhunt.com

December 2010

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Executive Summary

The County of Yolo (County) retained Mead & Hunt, Inc. (Mead & Hunt) to provide review under the California Environmental Quality Act (CEQA) and Section 106 of the National Historic Preservation Act (Section 106) and implementing regulations 36 CFR Part 800 for the removal of selected trees in the vicinity of the Yolo County Airport. The selected trees have been identified as penetrating protected airspace. Section 106 review is being completed due to the potential use of Federal Aviation Administration (FAA) funding. Qualified historians from Mead & Hunt delineated the project area and the area of potential effects (APE) for historic property identification under Section 106 (see Appendix A for APE and project area maps).

An archaeological survey, *Archaeological Study for the Yolo County Airport Tree Removal Project,* was completed by LSA Associates, Inc. in March 2010 as part of Section 106 and CEQA compliance.

A request was made to the Northwest Information Center (IC), Sonoma State University, for a record search of previously documented historic resources and archaeological sites. The IC record search (NWIC File #09-0936) returned no listed or formally determined eligible properties on the National Register of Historic Places (National Register) within the APE. No California Register of Historical Resources (California Register) listed properties are within the APE. One historic property, the Gotfried Schmeiser house, was identified in a Yolo County Historic Resources Survey in 1989. The property is located within 0.25-miles of the project area and APE, but is outside the project area and APE boundaries. Physically and visually, the property is separated from the project area/APE by County Road (CR) 31. No previous historical or archaeological surveys have been conducted within the project area/APE.

The Native American Heritage Commission (NAHC) and federally recognized tribes in the area were notified of the proposed project and requested to provide comment or information on historic resources or archaeological sites of importance to Native American tribes. The Yolo County Historical Society was notified of the proposed project and requested to provide information on historical resources or archaeological sites of importance. These efforts did not yield information on historical resources or archaeological sites. Appendix B provides copies of correspondence with these groups.

Mead & Hunt identified and documented three properties that are at least 50 years old within the project area/APE. Department of Parks and Recreation (DPR) forms and maps showing the location of the surveyed properties and the project area are provided in the appendices.

Based on the results of the field survey, research, and evaluation, no properties are recommended eligible for listing in the National Register or the California Register. No further work is recommended.

1. Introduction

Mead & Hunt conducted research and a field survey to identify potential historic resources in the project area/APE at the Yolo County Airport on February 25, 2010. No resources listed in, or eligible for listing in, the California Register or National Register were identified. Section 2 of this report presents details on the California and National Registers, as well as Section 106 of the National Historic Preservation Act.

A. Location of Project

The project is located in the immediate vicinity of the Yolo County Airport in south-central Yolo County, northwest of the city of Davis and southwest of the city of Woodland, California. The project area extends through Sections 33 and 34 T9N R1E and Sections 3 and 4 T8N R1E, MDM (USGS, Merritt Quadrangle 7.5, revised 1992). The project area is bounded by CR 29 on the north, CR 95 on the west, and County Road (CR) 31/County Highway E6 on the south. On the east, the project area is bounded by the quarter section line of the northeast and southeast quarters of Sections 33 and the NE quarter of Section 4. The airport contains approximately 200 acres and includes two runways and a cluster of buildings and structures at the northeast corner of the property. The land surrounding the airport is rural in character, with 20-acre residential/agricultural parcels, some of which have been subdivided into smaller parcels. The airport is within the municipal boundaries of the city of Davis, California. The location of the project is provided in Appendix A.

B. Project Description

The proposed project would remove trees on private property adjacent to the airport on its western and southern boundaries along CR 95 and between Aviation Boulevard and CR 31 (Note: permit is only for off-site tree removal). The trees have been identified as penetrating protected airspace. The majority of the trees are non-native Eucalyptus. Trees that penetrate protected airspace will be removed and stumps will be removed or ground in place. Tree cutting activities will occur in the fall season to avoid bird breeding season. In most locations, the removed trees will be replaced by shorter growing species.

2. Regulatory Environment

A. California State Law

The California Public Resources Code (PCR) defines a historical resource to include, but is not limited to, any object, building, structure, site, area, place, record, or manuscript that is historically or archaeologically significant or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California (PRC § 5010.1[j]). An archaeological resource may be a historical resource for purposes of CEQA. It is the obligation of a lead agency to first determine if an archaeological resource meets the criteria for listing in the California Register. If so, it must be treated as any other historical resource and the provisions of PRC 21083.2 do not apply (CEQA Guidelines § 15064.25 [c][2]).

In California the standard of historical (including archeological) significance is listing in, or eligibility for listing in, the California Register. The California Register is the authoritative guide to be used by state and local agencies to identify the state's historical resources (PRC § 5024.1[a]). It includes properties nominated to and placed on the register by the State Historic Resources Commission and properties listed in or formally determined eligible (under § 106 of the National Historic Preservation Act) for listing in the National Register (PRC § 5024.1[b] and [d][1]). Both individual properties and historic districts may be listed in the California Register (PRC § 5024.1[e][1][2]).

In addition to properties listed or formally determined eligible for listing in the California Register, historical resources or districts designated or listed as a city or county landmark or locally listed pursuant to any city or county ordinance are presumed to be eligible for listing in the California Register unless a preponderance of evidence in the record indicates that it is not historically or culturally significant (PRC § 21084.1). Historical resources identified as significant in historical resource surveys conducted by local governments also may be eligible for listing (PRC § 5024.1[e][3]) if the survey meets one or more of the criteria for eligibility set forth in PRC § 5024.1(g). Further, if a historical resource is not listed in the California Register, is not designated by a local agency, and is not identified as significant in an historical survey, a lead agency may determine that the resource may be a historical resource as defined in the PCR § 5020.1(j) or §5024.1 (CEQA Guidelines, §15064.5[a][4]).

The criteria for listing in the California Register are defined in statute (PRC § 5024.1 [C][1-4]), in the CEQA Guidelines (California Code of Regulations Title 14 Chapter 3 § 15064.5 [3][A-D]) and in the Guidelines for the California Register (CCR Title 14, Ch. 11.5 § 4852[b][1-4]). These criteria are very similar to the federal criteria for listing in the National Register. The criteria include:

1) Associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States.

2) Associated with the lives of persons important to local, California, or national history.

3) Embodies the distinctive characteristic of a type, period, region, or method of construction, or represents the work of a master or possesses high artistic values.

4) Has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

One or more of these criteria may apply to a single property or a district.

In addition to meeting the above criteria, a property or district must possess integrity. Integrity is defined as the authenticity of a historical resource's physical identity evidenced by the survival of characteristics that existed during the resource's period of significance. A property must retain enough of its historic character or appearance to be recognizable as a historical resource and to convey the reasons for its significance (CCR Title 14, Ch 11.5 § 4852[C]).

Under CEQA, cultural resources must be evaluated to determine their eligibility for listing in the California Register. Negative impacts to eligible resources must be mitigated.

B. Federal

The National Historic Preservation Act established the National Register. The National Register is the official list of districts, sites, building, structures, and objects significant in American history, architecture, archaeology, engineering, and culture. A property can be significant in one of more of these categories at the local, state, or national level. To be listed in the National Register, a property's significance must be demonstrated by one or more of the following criteria:

Criterion A – Association with events or activities that have made a significant contribution to the broad patterns of history.

Criterion B – Associated with the lives of persons significant in our past.

Criterion C – Associated with the distinctive characteristics of a type, period, or method of construction, or represents the work of a master, possesses high artistic values, or represents a significant and distinguished entity whose components may lack individual distinction.

Criterion D – Holds the potential to provide important information about prehistory or history.

To be listed in the National Register, properties generally must be at least 50 years old, possess historic significance, and retain physical integrity. Historic properties are those listed on or formally determined eligible for listing on the National Register and are automatically listed in the California Register.

C. Section 106

Section 106 requires that federal agencies take into account the effect of undertakings on historic properties, develop, and evaluate alternatives that would avoid, minimize, or mitigate adverse effects their projects may have on historic properties. Historic properties include those listed in, or formally determined eligible for listing in, the National Register. Section 106 applies to projects on federal lands, projects that require a federal permit, or projects that utilize, in part or in whole, federal funding. The regulations that govern the Section 106 review process require the federal agency to consult with the State Historic Preservation Officer (SHPO).

3. Project Area/Area of Potential Effects

The APE for historical properties was delineated to encompass areas physically affected by the tree removal activities. The APE for potential direct or visual effects was delineated to incorporate areas immediately adjacent to the tree removal activities. APE boundaries correspond to the affected properties' legal parcel boundaries. The APE boundaries also delineate the project area boundaries for purposes of CEQA. The APE map is provided in Appendix A.

4. Survey Methodology and Research Design

The objective of the survey was to identify historic-age properties in the project area/APE that appeared to meet the National Register or California Register criteria for listing. Historic-age properties are defined as those that are at least 50 years in age or properties of more recent construction that possess exceptional significance. For properties that appeared to meet these criteria, Mead & Hunt evaluated the significance and historic integrity to make recommendations for National Register and California Register eligibility.

Mead & Hunt conducted research and a field survey to identify features in the built environment on 14 residential/ranch parcels and one parcel within the boundaries of the Yolo County Airport on February 25, 2010. All of these properties are within the project area/APE. Chad Moffett served as the Principal Investigator and Carol Roland served as project historian. Moffett and Roland exceed the Secretary of the Interior's Professional Qualifications Standards for history and/or architectural history, as outlined in 36 CFR Part 61.

Historic-age properties in the project area/APE include a horse farm and riding school, a ranch remnant (barn), and a residence. Research focused on the development of the rural area surrounding the airport and on the airport land. Research included previous land use, both prior to and following the airport's establishment in Section 34, T8 and 9N R1E in the 1940s, the settlement and agricultural development of central Yolo County, and the history of the airport.

Sources used to develop the historical context and property histories included county histories, historic plat maps and historic U.S. Geological Survey (USGS) topographical maps, tax assessor records, personal communication with property owners, and previous environmental documents. Mead & Hunt conducted research at the California State Library, Sacramento; the Schields Library, University of California, Davis; and the Yolo County Archive, Woodland. The Northwest Information Center, Sonoma State University, conducted a record search for previous studies and previously identified historic resources or properties listed in the National Register or California Register in the airport vicinity. A list of research materials consulted is included in the bibliography of this report.

Historic-age resources in the APE were evaluated using the guidance provided in National Register Bulletin, *How to Apply the National Register Criteria for Evaluation*, and the California State Office of Historic Preservation, *Instructions for Recording Historical Resources*. DPR Forms 523 A and B were prepared for three historic-age properties. DPR 523 forms are presented in Appendix C.

5. Historic Context

The purpose of this historic overview is to provide a context in which to identify important historic themes and to evaluate historic-age properties in the project area/APE. Property-specific information is included on the DPR 523 forms for each property.

A. Yolo County Agriculture

Yolo County is one of the original counties of California, created at the time of statehood. It is located in the Sacramento Valley, a vast floodplain that occupies the northern third of California's 400-mile-long Central Valley.[1] The county is bordered on the east by Sacramento County and the state capital, and is approximately 75 miles from San Francisco. The project area is located north of Putah Creek, the largest waterway in the county. Established in 1851 and 1868 respectively, the cities of Woodland and Davis have remained the major population centers of the county.

Putah Creek was an area of early agricultural settlement with Ranchos Rio de los Putos and Rancho Laguna de Santos Calle established in the 1840s. Following statehood in 1850, the area's proximity to markets in San Francisco and the gold country turned central Yolo County into a major grain-producing region during the California wheat boom of the 1850s and 1860s. Over centuries, the seasonal flooding of Putah Creek and the Sacramento River resulted in rich layers of alluvial soil in central Yolo County, which in combination with the relatively mild climate resulted in high crop yields and the potential to produce more than one crop in a year. At the same time, land speculation, frequent and disastrous flooding, and over production resulted in fortunes that were quickly made and lost. Many pioneer farmers and ranchers lasted only a few decades before being wiped-out by overextended loans, heavy mortgages, and successive winter floods. Among the best known of these unsuccessful early agriculturists were William Dresbach and Jerome Davis, the founders of the town of Davisville (later renamed Davis).[2]

Yolo County farmers who were able to hold on beyond the tumultuous settlement years and expand their land holdings created large agricultural estates encompassing thousands of acres.[3] In the 1880s a major transition from wheat to fruit productions began in Yolo County, with orchards and vineyards replacing grain fields. This was a change that historian David Vaught calls "one of the most dramatic and complete agricultural transformations in American agricultural."[4] Vaught notes that in 1889 California was the nation's second leading wheat producing state, but by 1909 the state had emerged as one of the world's principal producers of deciduous and citrus fruits, grapes, vegetables, and nuts. By the turn of the

[1] Vaught, David, *After the Gold Rush: Tarnished Dreams in the Sacramento Valley*, Baltimore: Johns Hopkins University Press, 2007, 27.

[2] David Vaught's study of Yolo County in the period from 1840-1900 chronicles the agricultural practices and land speculation that characterized the post gold-rush era with particular emphasis on Dresbach and Davis and their shifting fortunes.

[3] Vaught, 184-185.

[4] Vaught, 205.

twentieth century California and Yolo County had become net importers of grain.[5] While orchards and vineyards dominated county agriculture, livestock also held an important place in the rural economy.

The land within the project area/APE follows the general county land use pattern outlined above. Initially the area was occupied by a number of landholders and was divided into small agricultural parcels. In 1879 the eastern half of Section 33 T9N R1E and Section 4, T8N R1E, were divided among five owners whose holdings ranged between 80 and 160 acres, although some held additional land in adjacent sections. By 1908 the land in the project area had became part of the large agricultural holdings of two of the county's prominent landowners, George W. Chapman and G.W. Scott.[6]

Chapman was a Yolo County pioneer. Born in Alabama, like so many other young men of the 1850s he set out for California in 1854, sailing around the horn to San Francisco. Shortly after his arrival, he began purchasing land in the Sacramento Valley, much of it classified as "swampland." By the 1890s he was one of the largest landholders in the county with an estate estimated at 24,000 acres."[7] The 1913 history of Yolo County deemed George, and his son Walter, "one of the most prominent families in Yolo County."[8] By the 1920s Walter Chapman owned all the land in Sections 34 and 33, T8N R1E, and Section 3 and 4, T9N R1E. In fact, by this period the Chapmans had consolidated most of the land in Union Township (current Woodland Township) and owned much of the land in the vicinity of the contemporary airport.[9]

The other principal nineteenth and twentieth-century owner of land in the project area/APE was G.W. Scott. While his landholdings were not as large as Chapman's, he nonetheless had substantial holdings that included 14,000 acres in Yolo County, including the northern halves of Sections 33 and 34. Like Chapman, Scott was a pioneer who traveled overland from New York to California in 1850. Following his death in 1912, his son Clarence took over the family property in Sections 33 and 34, which he subsequently sold to Chapman.[10]

Historically, the land surrounding the airport appears to have been devoted to agriculture. Neither Chapman nor Scott established a residence in the project area. Chapman maintained a family home in Winters, while Scott's residence was in Buckeye. None of the county maps from 1879 through 1900 indicate a road or trail to provide access to the land now within the project area/APE. By 1915 CR 95 had been constructed and the USGS map for that year shows a single residence within the project area/APE.

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[5] Vaught, 205.

[6] Ashley, P.N., *Official Map of County of Yolo County*, 1908.

[7] Vaught, 184.

[8] History Record Company, *History of Yolo County California with Biographical Sketches*, Los Angeles: Historic Records Company, 1913.

[9] Ashley, P.N., *Official Map of County of Yolo*, 1908.

[10] Proctor, A.G., *Official map of Yolo County, 1929*; USGS, *Merritt Quadrangle*, 1915.

By 1937 a barn had been built behind this house. The house was demolished in the 1990s, but the barn remains standing and was documented on a DPR form in Appendix C.[11]

The majority of lots now adjacent to the airport along CR 95, CR 29, and CR 31 are 20-acre parcels dating from the 1960s. In the 1970s some of these lots were split into smaller parcels. In 1977 the County Board of Supervisors adopted a policy that prohibited lot divisions of less than 20 acres in the Airport Planning Area, which includes the land within the project area/APE. In 1980 the Yolo County Community Development Agency also established a 20-acre minimum parcel size for all sites abutting the airport.[12]

B. Transportation

In the 1940s the federal government acquired the land in Section 34, T9N R1E, for auxiliary aviation facilities to service McClellan Air Base, which was established in 1935 in Sacramento. Shortly after the attack at Pearl Harbor in 1942, the federal government initiated construction of an airstrip at this location in Yolo County. By October 1942 the airstrip included an 8,000-foot graded and paved airstrip, which was used for alternative basing of B-25 aircraft during World War II. In 1948 the federal government gave the airstrip to the county, which named it the Yolo County International Airport. In 1974 the name was changed to Yolo County Airport.[13] Under the Yolo County General Plan, the area adjacent to the airport is designated for agricultural use. In the 1960s and 1970s the large agricultural holdings surrounding the airport were subdivided and a number of residences were constructed along CR 95. The majority of these parcels are associated with small farming enterprises and equestrian activities. The airport services private aviation and leases land to a shooting range.

[11] *Metsker's Map of Yolo County, Calif*ornia, 1940

[12] P&D Aviation, *Final Report Yolo County Airport, Woodland, California: Airport Master Plan*, May 1996, 2-3.

[13] P&D Aviation, 2-16.

6. Survey Results and Recommendations

Efforts to identify known historic resources within the project area/APE began with a request to the IC. The IC search (NWIC #09-0936) yielded no known or recorded historic resources or archaeological sites within the project area/APE, and no properties listed or formally determined eligible for listing in the National Register or California Register.

On February 25, 2010, Mead & Hunt conducted a field survey of 14 parcels located on CR 95, CR 29, Aviation Road, and CR 31. Historians from Mead & Hunt identified three historic-age properties in the project area/APE and completed DPR forms for those properties. Property descriptions, history, and the results of National Register and California Register evaluations are provided on DPR 523 forms in Appendix C. Historic-age properties within the APE are shown in Table 1.

Table 1. Historic-Age Properties Within the APE

Resource Name	Address	T-R-S	Quarter Sections	APN	Recommendation
Residence	35270 County Road 31	T8N R1E - 03	SW	037-101-22	Not Eligible
Residence	25458 County Road 95	T8N R1E - 04	NW	038-120-09	Not Eligible
Barn	25030 County Road 95	T8N R1E - 04	NW	038-120-04	Not Eligible

Based on the results of the historical resources survey and research, three properties are recommended as not eligible for listing in the National Register or the California Register. For these properties, research and evaluation of the properties did not reveal any association with events that contributed to the settlement or development of Yolo County, local or regional agriculture, or any association with significant individuals important in the settlement and development of Yolo County. As such, these properties do not appear to possess significance under *Criterion A: Settlement or Agriculture* in Yolo County or *Criterion B: Persons* important in the settlement or history of Yolo County.

These properties were also evaluated under *Criterion C: Architecture*. The ranch (now functioning as an equestrian riding facility) at 35270 CR 31 does not represent significant types, periods, or methods of construction, and does not display high artistic value. It lacks integrity of materials, setting, association, and feeling. The barn (25030 CR 95) is wood-frame, single-wall construction. This method of construction is common to early twentieth century barns in Yolo County and the Sacramento Valley. As an individual property, the barn does not represent a significant type, period, or method of barn construction important in the development of Yolo County farming or ranching. It is not part of an early twentieth century farmstead or ranching complex and does not qualify as a part of a historic farmstead or agricultural district. The residence at 25458 CR 95 is a modest Minimal Traditional residence constructed in 1950. This style of architecture is very common in California and in the immediate Davis area. No detailed field examination of this residence and its outbuildings was possible due to the property owner's refusal of entry and prohibition of any photography. Based on observation from the public right-of-way, the buildings do not appear to represent a significant type, period, or method of construction. Each property was also evaluated as a distinguishable entity whose components may lack individual distinction. None appear to form a complex or grouping of buildings and structures that, while individually

undistinguished, collectively constitute a distinguishable entity that meets National Register or California Register Criteria for Evaluation. There are no historic properties affected for Section 106 and no historic properties affected within the project area for CEQA. No further work is recommended for these properties.

Eleven residential/ranch properties less than 50 years in age were evaluated, and none appeared to possess exceptional significance. No DPR forms were completed for these properties. Non-historic age properties in the project area/APE are shown in Table 2. In addition, airport facilities located in Assessor Parcel 040-190-66 within the airport boundaries were field surveyed to determine if any were 50 years old or older. No historic age properties were identified in this area of the airport property. These properties did not appear to meet National Register Criteria for Evaluation for exceptional significance; therefore, no further work was completed.

Table 2. Non-Historic-Age Properties in the APE

Description	Address	County	Township-Range-Section	APN
Airport	Airport Property	Yolo	T9N R1E-34	040-190-66
Modern Ranch	25799 Aviation Road	Yolo	T8N R1E-03	037-010-16
Modern Residence	34911 County Road 29	Yolo	T9N R1E-33	040-190-46
Modern Ranch	24126 County Road 95	Yolo	T8N R1E-33	040-190-45
Modern Residence	24330 County Road 95	Yolo	T9N R1E-33	040-190-32
Modern Residence	25090 County Road 95	Yolo	T8N R1E-04	038-120-05
Modern Residence	25090 County Road 95	Yolo	T8N R1E-04	038-120-06
Modern Ranch	25340 County Road 95	Yolo	T8N R1E-04	038-120-07
Modern Residence	25450 County Road 95	Yolo	T8N R1E-04	038-120-08
Modern Residence	25703 – 25707 County Road 95	Yolo	T8N R1E-03	037-010-17
Modern Ranch	25851 County Road 95	Yolo	T8N R1E-04	037-101-21
Modern Residence	35376-35380 County Road 31	Yolo	T8N R1E-03	037-010-13

7. Bibliography

Ashley, P.N. Official Map of County of Yolo County. 1908.

DePue and Company. Official Map of Yolo County, California. 1979.

History Record Company. *History of Yolo County California with Biographical Sketches*. Los Angeles: Historic Records Company, 1913.

LSA Associates, Inc. *Archaeological Study for the Yolo County Airport Tree Removal Project. Richmond, California, 2010.*

Larkey, Joann, Walter Shipley et al. *Yolo County: Land Of Changing Patterns: an illustrated history*. Northridge, California: Windsor Publications, 1987.

Metsker's Map of Yolo County, California. 1940.

California Historical Information Systems, Northwest Information Systems, NWIC File No. 09-0603, November 10, 2009.

Proctor, A.G. Official Map of Yolo County. 1929.

P&D Aviation. Final Report Yolo County Airport, Woodland, California: Airport Master Plan. May 1996.

United States Geological Services (U.S.G.S). 7.5-Minute Topographic Quadrangle for Merritt, California. 1992.

Vaught, David. *After the Gold Rush: Tarnished Dreams in the Sacramento Valley*. Baltimore: Johns Hopkins University Press, 2007.

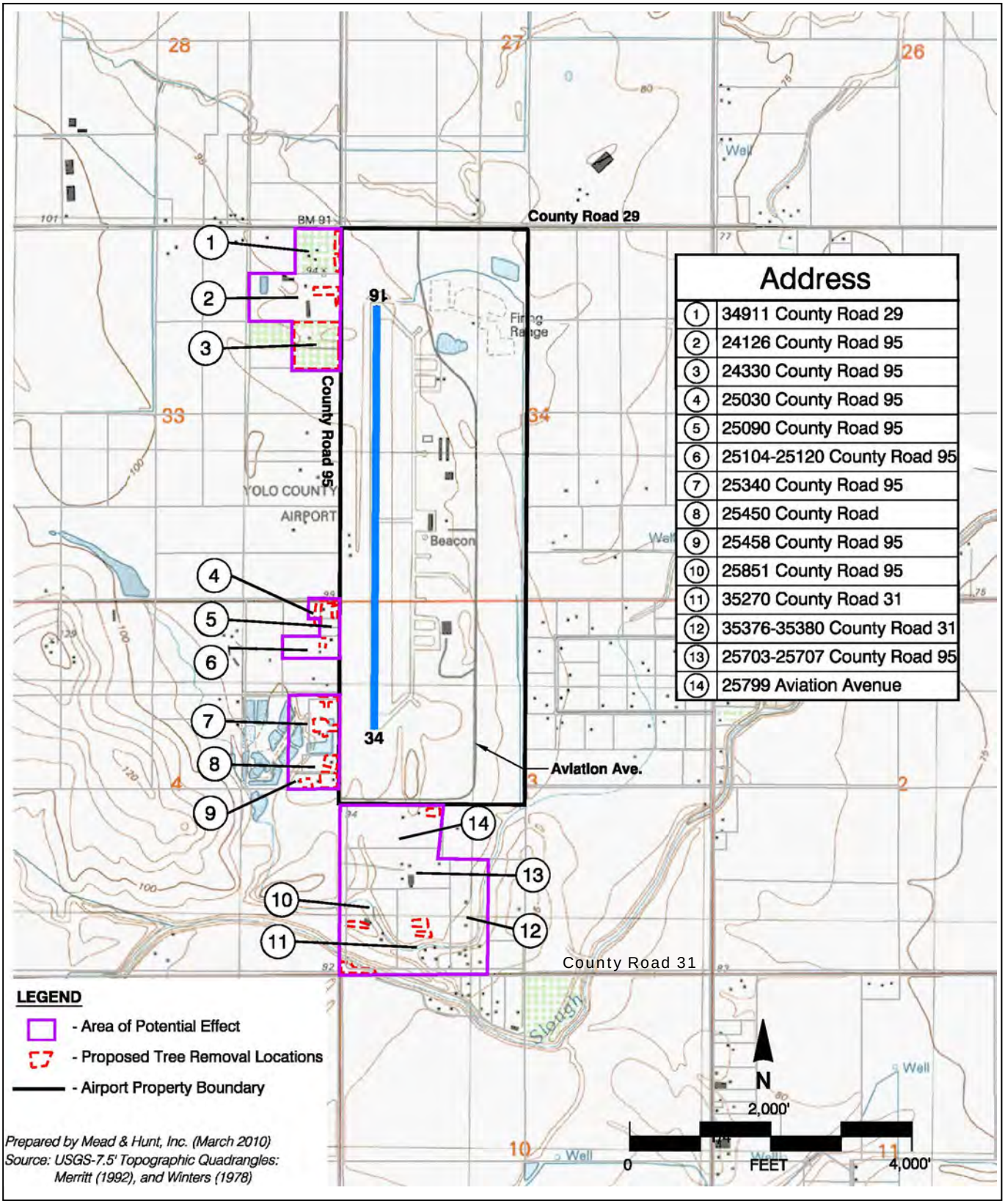
Appendix A. Project Area and Area of Potential Effects Map

Prepared by Mead & Hunt, Inc. (March 2010)

X:\25020-00\09003\TECH\Cadd\YOL-LOCATION-MAP.dwg Apr 01, 2010 - 11:28am

Project Location

Yolo County Airport



Area of Potential Effect
Yolo County Obstruction Removal Project

Appendix B. Local and State Government and Tribal Notification

MEAD & HUNT

Designing the future

February 3, 2010

Native American Heritage Commission
915 Capitol Mall, Room 364
Sacramento, CA 95814

Subject: Yolo County Tree Removal Project, Davis, Yolo County, California

Dear Native American Heritage Commission:

Mead & Hunt, Inc. (Mead & Hunt) has been contracted on behalf of Yolo County to provide historical services for a tree removal project at the Yolo County Airport. Mead & Hunt has been retained to complete both Section 106 review under the National Historic Preservation Act and implementing regulations 36 CFR Part 800 and California Environmental Quality Act (CEQA) review for a tree removal project at the Yolo County Airport. The project requires the approval of the Federal Aviation Administration and Yolo County.

The project area is located northwest of the city of Davis in Sections 33 and 34, Township 9N, Range 1E and Section 3 and 4, Township 8N, Range 1E. A copy of the 7.5' USGS Merritt Quadrangle topographic map is attached with the project location marked with an exhibit that indicates project activities in red.

We are requesting a review of your Sacred Lands file for any cultural resources within the project area. In addition, please provide a list of federally recognized Native American individuals or organizations that may have knowledge of cultural resources in the project area or wish to share information or concerns with regard to this project.

The project consists of the removal of non-native trees in the vicinity of Yolo County Airport. The trees designated for removal have been identified as penetrations of protected airspace. The majority of trees to be removed are located along County Road 95 adjacent to the airport. Other groups of trees are located south of Aviation Avenue and south of County Road 29. The majority of trees to be removed are Eucalyptus. Following removal of the trees, stumps may be pulled from the ground or may be ground in place. Debris will be removed from the area. Cutting will occur during the fall months to avoid bird breeding season.

In November 2009 Mead & Hunt conducted a California Historical Resources Information System search at the Northwest Information Center at Sonoma State University (NWIC File NO. 09-0603). The search results indicate that no recorded cultural resources are in any of the tree removal areas. Local, state, and federal cultural resource inventories include no recorded resources within the project area. The NWIC

base maps show no recorded sites. An archeological and historical resources survey will be conducted in the project area to identify cultural resources.

If you have questions or comments please contact me.

Sincerely,
MEAD & HUNT, Inc.

Carol Roland, Ph.D.
Project Manager

Attachments

MEAD & HUNT

Designing the future

February 3, 2010

Yolo County Historical Society
PO Box 1447
Woodland, CA 95776

Subject: Yolo County Tree Removal Project, Davis, Yolo County, California

To Whom It May Concern:

Mead & Hunt, Inc. (Mead & Hunt) has been contracted on behalf of Yolo County to provide historical services for a tree removal project at the Yolo County Airport. Mead & Hunt has been retained to complete both Section 106 review under the National Historic Preservation Act and implementing regulations 36 CFR Part 800 and California Environmental Quality Act (CEQA) review for a tree removal project at the Yolo County Airport. The project requires the approval of the Federal Aviation Administration and Yolo County.

The project area is located northwest of the city of Davis in Sections 33 and 34, Township 9N, Range 1E and Section 3 and 4, Township 8N, Range 1E. A copy of the 7.5' USGS Merritt Quadrangle topographic map is attached with the project location marked with an exhibit that indicates project activities in red.

We are requesting a review of your records for any cultural resources within the project area or individuals or organizations that may have knowledge of cultural resources in the project area or wish to share information or concerns with regard to this project.

The project consists of the removal of non-native trees in the vicinity of Yolo County Airport. The trees designated for removal have been identified as penetrations of protected airspace. The majority of trees to be removed are located along County Road 95 adjacent to the airport. Other groups of trees are located south of Aviation Avenue and south of County Road 29. The majority of trees to be removed are Eucalyptus. Following removal of the trees, stumps may be pulled from the ground or may be ground in place. Debris will be removed from the area. Cutting will occur during the fall months to avoid bird breeding season.

In November 2009 Mead & Hunt conducted a California Historical Resources Information System search at the Northwest Information Center at Sonoma State University (NWIC File NO. 09-0603). The search results indicate that no recorded cultural resources are in any of the tree removal areas. Local, state, and federal cultural resource inventories include no recorded resources within the project area. The NWIC

base maps show no recorded sites. An archeological and historical resources survey will be conducted in the project area to identify cultural resources.

Please submit any additional information or comments on the project within 30 days of receipt. If you have questions or comments please contact me.

Sincerely,

MEAD & HUNT, Inc

Carol Roland, Ph.D.
Project Manager

Attachments

MEAD & HUNT

Designing the future

March 15, 2010

Mr. Marshall McKay
Tribal Chair
Yocha Dehe Wintun Nation
PO Box 18
Brooks, CA 95605

Subject: Yolo County Tree Removal Project
Davis, Yolo County, California

Dear Mr. McKay:

Mead & Hunt, Inc. (Mead & Hunt) has been contracted on behalf of Yolo County to complete Section 106 under the National Historic Preservation Act and implementing regulations 36 CFR Part 800 for a tree removal project at the Yolo County Airport that requires the approval of the Federal Aviation Administration (FAA) and Yolo County. Mead and Hunt will also prepare a cultural resource technical report for preparation of California Environmental Quality Act (CEQA) documents for the project.

The project area is located northwest of the city of Davis in Sections 33 and 34, Township 9N, Range 1 E and Section 3 and 4, Township 8N, Range 1E (map attached). A copy of the 7.5' U.S. Geological Survey (USGS) Merritt Quadrangle topographic map is attached with the project location marked. Also attached is a map of the project area with project activities marked in red.

The Yocha Dehe Wintun Nation was identified as a potentially interested consulting party from the list of Federally Recognized Tribes listed by the Bureau of Indian Affairs of the Department of the Interior. As partial fulfillment of the FAA's responsibility under Section 106 and Yolo County under CEQA, we are contacting you to describe the proposed project and to request any comments you may have regarding the project's potential to affect sites, recognized by the Yocha Dehe Wintun Nation as culturally or religiously significant. We welcome the comments of Native American individuals or organizations that may have knowledge of cultural resources in the project area or wish to share information or concerns with regard to this project.

The project consists of the removal of non-native trees near Yolo County Airport. The trees designated for removal penetrate protected airspace. The majority of tree removal activities are located along County Road 95 adjacent to the airport. Other groups of trees are located south of Aviation Avenue and south of County Road 29. One stand of trees is located in the northwest portion of the airport property. The majority of trees to be removed are Eucalyptus. Following removal, stumps may be pulled from the

ground or may be ground in place, creating ground disturbance at some tree removal locations. Debris will be removed from the area. Cutting will occur during the fall months to avoid bird breeding season.

In November 2009 Mead & Hunt conducted a California Historical Resources Information System search at the Northwest Information Center at Sonoma State University (NWIC File NO. 09-0603). The search results indicate that there are no recorded cultural resources in any of the tree removal areas. Local, state, and federal cultural resource inventories include no recorded resources within the project area. The NWIC base maps show no recorded sites. In addition, Mead & Hunt has notified the Native American Heritage Commission of the proposed project and requested any information or comment on the project or on resources of Native American interest within the project area. Archeological and historical resources surveys will be conducted in the project area to identify cultural resources.

If your office has any information regarding the presence of traditional or cultural resources that may be adversely affected by the proposed project, please inform us at your earliest convenience.

Sincerely,

MEAD & HUNT, Inc.

Carol Roland, Ph.D.
Project Manager

Attachments

March 24, 2010

Ms. Carol Roland, PH.D.
Project Manager
Mead & Hunt Inc.
180 Promenade Circle, Suite 240
Sacramento CA 95834

RE: Yolo County Tree Removal Project, Davis, Yolo County, California

Dear Ms. Roland:

Thank you for your notification letter dated, March 15, 2010, regarding information on the proposed tree removal project northwest of Davis, Yolo County, California.

Based on the information provided, the Yocha Dehe Wintun Nation, of California, is not aware of any known cultural resources on this site. However, as the project progresses, if cultural resources or Native American human remains are found, we have a process for handling such an occurrence. It is always suggested that a tribal monitor be present for earthmoving activities, particularly where the earth is previously undisturbed.

Please contact the following individual if tribal cultural items or Native American human remains are found:

Ms. Phoebe Bender
Cultural Resource Information Specialist
Yocha Dehe Wintun Nation, of California
Office: (530)796-3400, pbender@yochadehe-nsn.gov

And, copy all communications to:
Ms. Michelle LaPena, LaPena Law Corporation, michelle@lapenalaw.com

Thank you for providing us with this notice and opportunity to comment.

Sincerely,

Marshall McKay
Tribal Chairman

MM:pb

Appendix C. DPR 523 Forms

State of California The Resources Agency Primary #
DEPARTMENT OF PARKS AND RECREATION HRI #

PRIMARY RECORD

Trinomial
NRHP Status Code
Other Listings _____
Review Code _____ Reviewer _____ Date

 ***Resource Name or #:** 35270 CR 31

P1. Other:

***P2. Location:** **Not for Publication** ■ **Unrestricted**

***a. County**: Yolo

*__b.__ **USGS 7.5' Quad:** Merritt **Date**: 1992

c. Address: 35270 County Road 31 **City:** Davis **Zip**: 95616

d. UTM: **Zone:** **mE/** **mN**

e. **Other Locational Data**: APN 37-101-022

***P3a. Description**:

This building is a one-and-one-half story, gable-front home with rectangular plan, small addition off the west elevation, and full-width porch on the south gable end. Fenestration on the building consists of aluminum horizontal sliding windows on the primary building and one-over-one double hung on the addition. The primary building is clad in 4'x8' painted panels with stick battens, and the addition features board and batten siding. The gable end porch is composed of square stock framing with shed roof and a handicap ramp on the west end. The roof features bargeboard on the gable ends and metal sheathing.

***P3b. Resource Attributes:** HP 2

***P4. Resources Present:** ■ **Building Structure Object Site District Element of District Other**

P5b. Description of Photo: Front elevation; view north, 3-10-2010

P5. Photograph or Drawing

***P6. Date Constructed/Age**: c. 1920

Source: USGS Merritt Quad 1915, Yolo County Aerial ABB-110-79-1937. Available at Sheilds Library, Map Collection, University of California, Davis.

■ **Historic Prehistoric Both**

***P7. Owner and Address:**
Matt Haseltine
35270 CR 31
Davis, CA 95616

***P8.Recorded by:**
Carol Roland, Ph.D.
Mead & Hunt, Inc.
180 Promenade Circle
Sacramento, CA 95834

***P9. Date Recorded**: 2-25-2010

P10. Survey Type: ■ Intensive ☐Reconnaissance ☐Other

***P11.ReportCitation**: *Historic Resources Study for Yolo County Airport Tree Removal Project*

Attachments:

None ■Location Map ■Continuation Sheet ■Building, Structure and Object Record District Record Archeological Record Linear Feature Record Milling Station Record Rock Art Record Artifact Record Photograph Record Other (list)

BUILDING, STRUCTURE, AND OBJECT RECORD

***NRHP Status Code**
Page 2 **of** 3 ***Resource Name or #** 35270 County Road 31
B3. Original Use: Residence
B4. Present Use: Residence

***B5. Architectural Style:** Vernacular
***B6. Construction History:** Constructed circa 1920.

***B7. Moved?** X **No** **Yes** **Unknown** **Date:** **Original Location:**
***B8. Related Features:** Large modern pole barn, horse sheds corrals and parking lot.

B9a. Architect: Unknown **b. Builder:** Unknown
***B10. Significance: Theme:** Agriculture Yolo County **Area** Davis, California
Period of Significance 1920 **Property Type:** Single Family Residence A**pplicable Criteria:** A & B

Based on physical examination of the property the residence appears to be an example a common vernacular farm house style. There are numerous examples of similar residences of this period and style in Davis, Yolo and Sacramento counties. The building does not exhibit any unique design features or demonstrate evidence of high artistry.

The buildings are not associated with events of individuals important in the history of Yolo County. It does not appear eligible for listing in the National Register of Historic Places or the California Register of Historical Resources as an example of its architectural type, period, or style. The integrity of the building is impaired by extensive replacement materials and a loss of setting and association. It is not associated with other buildings, structures, or landscape features contemporary with its construction.

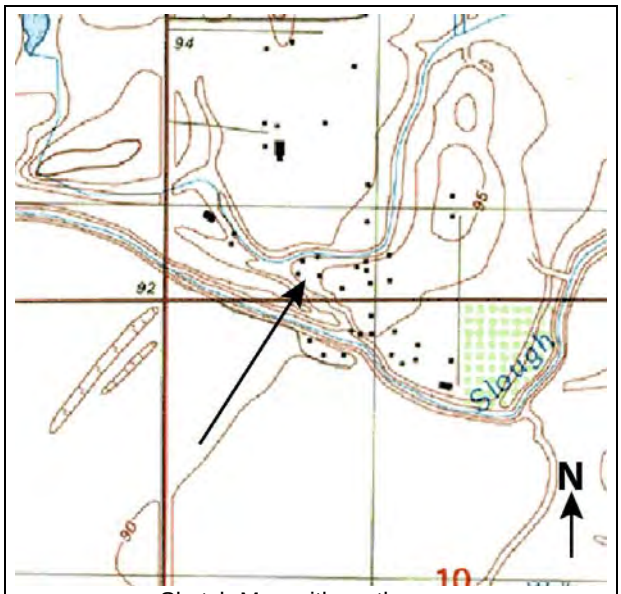
B11. Additional Resource Attributes: None
***B12. References:**

History Record Company. *History of Yolo County California with Biographical Sketches.* Los Angeles: Historic Records Company, 1913.
Larkey, Joann, Walter Shipley et al. Yolo *County: Land Of Changing Patterns: an illustrated history.* Northridge, Calif: Windsor Publications, 1987.
Metsker's Map of Yolo County, California, 1940
Proctor, A.G. *Official Map of Yolo County*, 1929.
P&D Aviation, *Final Report Yolo County Airport, Woodland, California: Airport Master Plan*, May 1996.
Proctor, A.G. *Official Map of Yolo County*, 1929.
Vaught, David. *After the Gold Rush: Tarnished Dreams in the Sacramento Valley*. Baltimore: Johns Hopkins University Press, 2007.

(This space reserved for official comments.)

B13. Remarks: None

***B14. Evaluator:** Carol Roland, Ph.D.
***Date of Evaluation:** 3-8-2010



Sketch Map with north arrow

State of California X The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code
Other Listings
Review Code Reviewer Date

Page 1 **of** 3 ***Resource Name or #:**) 25458 County Road 95

P1. Other Identifier: None

***P2. Location:** **Not for Publication** X **Unrestricted**

***a. County:** Yolo

***b. USGS 7.5' Quad** : Merritt **Date:** Revised 1992 **T** 8N__; **R** 1E; SW ¼ **of** SW 1/4 **of Sec** 4 MDM

c. **Address:** 25458 County Road 95 **City**: Davis **Zip:** 95616

d. **UTM:** Zone __, _____ mE/ _____ mN

e. **Other Locational Data**: APN 38-120-09

***P3a. Description:**

The legal parcel is occupied by a residence, a mobile home and several small modern outbuildings. The residence is a Minimal Traditional style house constructed circa 1950. No other descriptive information is available because property owner refused entry. Residence is only partially visible from the public right-of-way.

***P3b. Resource Attributes:** HP 2

***P4. Resources Present:** X Building X Structure Object Site District Element of District Other

P5b. Description of Photo: None; prohibited by owner

P5a. Photograph or Drawing

No photos allowed by owner

***P6. Date Constructed/Age and Source:** 1950; USGS Merritt Quadrangle 1952.

■ **Historic** **Prehistoric** **Both**

***P7. Owner and Address:**
Unknown
25458 County Road 95
Davis, CA 95616

***P8. Recorded by:**
Carol Roland
Mead & Hunt, Inc.
180 Promenade Circle
Suite 240
Sacramento, CA 95834

***P9. Date Recorded:** 2/25/2010

*** P10. Survey Type:** ■ Intensive ☐Reconnaissance ☐Other

***P11. Report Citation**: *Historic Resource Study Yolo County Airport Tree Removal Project*

***Attachments:**

None ■Location Map ■Continuation Sheet ■Building, Structure and Object Record District Record Archeological Record Linear Feature Record Milling Station Record Rock Art Record Artifact Record Photograph Record Other (list)

BUILDING, STRUCTURE, AND OBJECT RECORD

***NRHPStatusCode**
Page 2 **of** 3 ***ResourceName or #** 254508 County Road 95
B1. Historic Name: None
B2. Common Name: None
B3. Original Use: Residential **B4. Present Use:** Residential

***B5. Architectural Style**: Minimal Traditional
***B6. Construction History**: Built circa 1950.

***B7. Moved?** X No Yes Unknown **Date:** N/A **Original Location**: N/A
***B8. Related Features:**
Mobile home and several small prefabricated sheds.

B9a. Architect: Unknown **b. Builder:** Unknown
***B10. Significance: Theme:** Agricultural Development Yolo County **Area:** Yolo County
Period of Significance: 1950 **Property Type:** Single family residence **Applicable Criteria**: A and C

Although only partially visible from the public right-of-way (owner refused entry), the existing residence appears to be a simple Minimal Traditional style residence. It character defining features include a gable composition roof, aluminum slider windows and stucco cladding. It appears to have no distinguishing features nor to exhibit important design characteristics or high artistry. It is an example of a very common residential building type of which there are numerous examples in the Davis area. It is not associated with an important event or person in Yolo County of City of Davis history. It does not appear eligible for listing in the California Register of Historical Resources or the National Register of Historic Places.

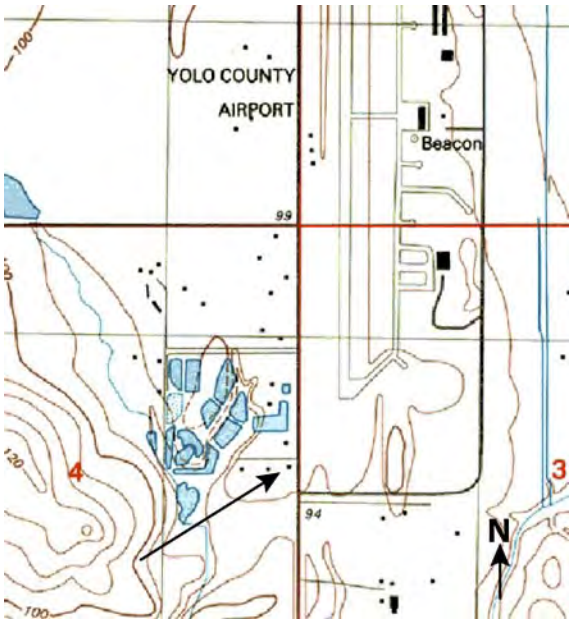
B11. Additional Resource Attributes: None
***B12. References:**
History Record Company. *History of Yolo County California with Biographical Sketches.* Los Angeles: Historic Records Company, 1913.
Larkey, Joann, Walter Shipley et al. Yolo *County: Land Of Changing Patterns: an illustrated history.* Northridge, Calif: Windsor Publications, 1987.
Metsker's Map of Yolo County, California, 1940
Proctor, A.G. *Official Map of Yolo County*, 1929.
P&D Aviation, *Final Report Yolo County Airport, Woodland, California: Airport Master Plan*, May 1996.
Proctor, A.G. *Official Map of Yolo County*, 1929.
Vaught, David. *After the Gold Rush: Tarnished Dreams in the Sacramento Valley*. Baltimore: Johns Hopkins University Press, 2007.

(This space reserved for official comments.)

B13. Remarks: None

***B14. Evaluator:** Carol Roland, Ph.D.

***B 15. Date of Evaluation:** 3-8-2010



State of California The Resources Agency Primary #
DEPARTMENT OF PARKS AND RECREATION HRI #

PRIMARY RECORD

Trinomial
NRHP Status Code
Other Listings _____
Review Code _____ Reviewer _____ Date

 ***Resource Name or #:** 25030 CR 95

P1. Other: None

***P2. Location:** **Not for Publication** ■ **Unrestricted**

***a. County**: Yolo

*__b.__ **USGS 7.5' Quad:** Merritt **Date**: 1992 (Revised)

c. Address: 25030 County Road 95 **City:** Davis **Zip**: 95616

d. UTM: **Zone:** **mE/** **mN**

e. **Other Locational Data**: APN 038-120-04

***P3a. Description**:

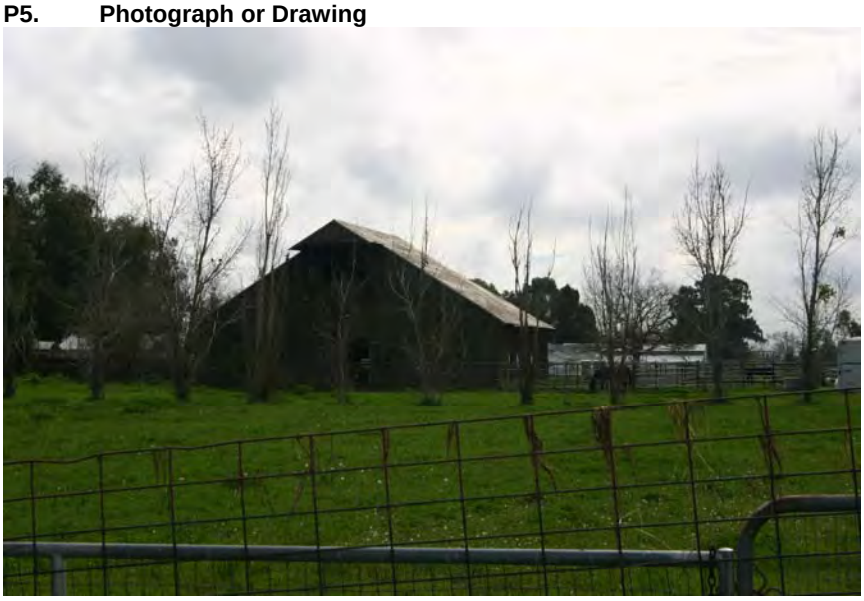
The resource is a two-and-one-half story center-aisle barn with square massing and gable end with protruding hay hood on the north elevation, and Dutch hip roof (hip roof with small gable in the area where the hip roof would normally apex) on the south that extends down to the first story. Access to the hay mow is on the north gable elevation where there are access doors open to the second and upper half story to allow for loading. Below these access panels is a wide double-door centered on the building that provides access to the dividing corridor. The east and west wings are individually accessible via doors on the north, south, and west sides of the building. The barn features single-wall construction with vertical board cladding on the exterior and a metal roof.

***P3b. Resource Attributes:** HP 4

***P4. Resources Present:** ■ **Building Structure Object Site District Element of District Other**

P5b. Description of Photo: Front elevation; view south, 3-8-2010

P5. Photograph or Drawing



***P6. Date Constructed/Age**: c. 1937

Source: USGS Merritt Quad 1915, Yolo County Aerial ABB-110-79-1937. Available at Sheilds Library, Map Collection, University of California, Davis.

■ **Historic Prehistoric Both**

***P7. Owner and Address:**

Steven & Rebecca Sheehan
25030 CR 95,
Davis, CA 95616

***P8. Recorded by:**

Carol Roland
Mead & Hunt, Inc.
180 Promenade Circle
Sacramento, CA 95834

***P9. Date Recorded**: 2-25-2010

***P11.ReportCitation**: *Historic Resources Study for Yolo County Airport Tree Removal Project*

P10. Survey Type: ■ Intensive ☐Reconnaissance ☐Other

Attachments:

None ■Location Map ■Continuation Sheet ■Building, Structure and Object Record District Record Archeological Record Linear Feature Record Milling Station Record Rock Art Record Artifact Record Photograph Record Other (list)

BUILDING, STRUCTURE, AND OBJECT RECORD

***NRHP Status Code**
Page 2 **of** 3 ***Resource Name or #** 25030 CR 95
B1. Historic Name: None
B2. Common Name: None
B3. Original Use: Barn
B4. Present Use: * Barn

B5. Architectural Style: Vernacular center aisle barn

***B6. Construction History:** Building was constructed after 1915 and prior to 1937. It was part of a ranch complex that also included a residence.
***B7. Moved?** X **No** **Yes** **Unknown** **Date:** **Original Location:**
***B8. Related Features:** Fenced pasture

B9a. Architect: Unknown **b. Builder**: Unknown
***B10. Significance: Theme:** Yolo County Agriculture **Area:** Davis, California
Period of Significance Circa 1937 **Property Type:** Ancillary farm building
Applicable Criteria: A and C

The barn is an example of typical wood frame single-wall construction center aisle barn. This is a building type that was common on Yolo County and Sacramento Valley farms and ranches in the late nineteenth and early twentieth centuries. While this type of barn is no longer being built in the area, a number of similar examples of the style, building type, and period are found in the area. The barn does not exhibit an important method of construction or exhibit high artistry.
It is not associated with any important event in the history of the development of Yolo County agriculture, nor is it associated with an individual important in county or regional history. It was originally part of a larger ranch complex but the other ranch buildings and structures have been removed.

The barn does not appear to be eligible for listing in the National Register of Historic Places or the California Register of Historical Resources.

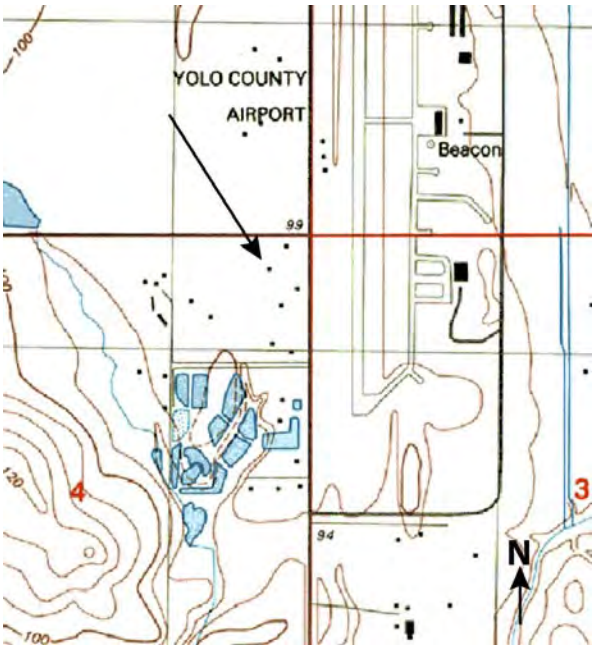
B11. Additional Resource Attributes: None
***B12. References:**

History Record Company. *History of Yolo County California with Biographical Sketches.* Los Angeles: Historic Records Company, 1913.
Larkey, Joann, Walter Shipley et al. Yolo *County: Land Of Changing Patterns: an illustrated history.* Northridge, Calif: Windsor Publications, 1987.
Metsker's Map of Yolo County, California, 1940
Proctor, A.G. *Official Map of Yolo County*, 1929.
P&D Aviation, *Final Report Yolo County Airport, Woodland, California: Airport Master Plan*, May 1996.
Proctor, A.G. *Official Map of Yolo County*, 1929.
Vaught, David. *After the Gold Rush: Tarnished Dreams in the Sacramento Valley*. Baltimore: Johns Hopkins University Press, 2007.

(This space reserved for official comments.)

B.13. **Remarks**: None

***B14.** **Evaluator:** Carol Roland, PH.D.
Date of Evaluation: 3-8-2010



Sketch Map with north arrow

Appendix E

Sponsor's Grant Assurance Letter

COUNTY OF YOLO

Office of the County Administrator

Patrick S. Blacklock
County Administrator

YOLO COUNTY AIRPORT
Aviation Avenue & County Road 95
Davis, CA 95616
Off site office: 625 Court St., Rm. 202
Woodland, CA 95695
PH (530) 666-8114 X FX (530) 668-4029

June 1, 2011

Mr. Barry Franklin
Environmental Protection Specialist
Federal Aviation Administration
Western Pacific Region
San Francisco Airports District Office
831 Mitten Road, Suite 210
Burlingame, CA 94010

Re: Land Use Assurance for Yolo County Airport (DWA)

Dear Mr. Franklin:

Yolo County hereby provides assurance that the appropriate action, including the enforcement of zoning laws, has been or will be taken, to the extent reasonable, to restrict land uses adjacent to or in the immediate vicinity of the Yolo County Airport (DWA) to activities and purposes compatible with normal airport operation, including landing and takeoff of aircraft. This action includes the consideration of both existing and planned land uses.

The designation and administration of land uses in the vicinity of DWA is primarily the responsibility of Yolo County under state and local law. Based on Yolo County's recently approved *2030 Countywide General Plan*, approved land use designations in the immediate vicinity of the airport provide for agricultural use, public/quasi-public use, and residential rural use. In addition, the Sacramento Area Council of Governments (SACOG), which serves as the Airport Land Use Commission (ALUC) for Sacramento, Sutter, Yolo, and Yuba counties, adopted the 1999 *Yolo County Airport Comprehensive Land Use Plan* (CLUP) in 1999. As required by Section 21675 of the California Public Utilities Code, the plan establishes criteria that the ALUC will use to evaluate general and specific plans, zoning ordinances, building regulations, and airport master plans proposed for adoption or amendment in the Airport vicinity.

DWA management will continue to work with SACOG, as well as with our other County departments and nearby jurisdictions, such as the cities of Davis and Woodland, to ensure that land uses in the immediate vicinity of the Airport are compatible with the Airport operations and comply with the land uses designated in the CLUP.

Should the FAA have any questions or comments regarding this land use assurance, please do not hesitate to contact me at (559) 621-4500.

Sincerely,

Terry Vernon, Airport Manager
Yolo County

Appendix F

Public Outreach and Involvement

F. PUBLIC OUTREACH AND INVOLVEMENT

The Draft EA is available for public review and comment for a 33-day period that extends from Monday, October 3, 2011 at 9:00 a.m. through Friday, November 4, 2011 at 5:00 p.m. The public may also offer oral comments during a public hearing that will be held during a regular meeting of the Yolo County Aviation Advisory Committee on Thursday, November 3, 2011 at 6:00 p.m. The committee serves as an advisory capacity to the Board of Supervisors as to matters concerning the Yolo County Airport area of influence as defined in the County Airport Comprehensive Land Use Plan.

To notify the public of the availability of the Draft EA and public hearing, the County prepared a press release and distributed it to several media sources prior to document circulation. The press release was distributed to the following media outlets for publication:

- *The Davis Enterprise,* published in Davis, Yolo County, California
- *The Woodland Daily Democrat*, published in Woodland, Yolo County, California
- *The Winters Express,* published in Winters, Yolo County, California
- Esparto Chamber of Commerce Newsletter

A notification of document availability and the public hearing was also posted on the County's Press Release website (http://www.yolocounty.org/Index.aspx?page=26).

F.1 Public Review and Comment

The Draft EA is available for public review and comment at the following locations throughout the public comment period:

Yolo County Administrator's Office
625 Court Street, Room 202
Woodland, CA 95695
Telephone: 530-666-8150
Hours: Monday through Friday, 8 a.m. to 5 p.m. (Appointments also available)

Yolo County Department of Planning and Public Works
292 West Beamer Street
Woodland, CA 95695
Telephone: 530-666-8775
Counter Hours: Monday through Friday, 9 a.m. to 12 p.m. (Appointments Available)

Davis Branch Library
315 E.14th Street
Davis, CA 95616
Telephone: 530-757-5593
Hours: Monday: 1 p.m. to 9:00 p.m., Tuesday through Thursday – 10 a.m. to 9 p.m., Friday-Saturday – 10 a.m. to 5:30 p.m., and Sunday – 1 p.m. to 5 p.m.

A copy of the document is also available at the Federal Aviation Administration's (FAA's) San Francisco Airports District Office. FAA is the Federal Lead Agency for the proposed project.

U.S. Department of Transportation, Federal Aviation Administration
San Francisco Airports District Office
831 Mitten Road
Burlingame, California 94010
Hours: Monday through Friday, 8 AM to 5 PM

The Draft EA is also available at the Yolo County Airport Website at:
http://www.yolocounty.org/Index.aspx?page=1350

F.2 Comment Submission

Members of the public are invited to comment on the Draft EA. Comments are invited in a variety of formats including in writing, email, or fax to the following address throughout the public comment period:

Mr. Wes Ervin, Economic Development Manager
County Administrator's Office
625 Court Street , Room 202
Woodland, CA 95695
Fax: (530) 668-4029
E-mail: wes.ervin@yolocounty.org

As noted in press releases and distribution letters, all written, faxed, or emailed comments must be received by 5:00 p.m. on Friday, November 4, 2011.

F.3 Agency Review

FAA and Yolo County have consulted with numerous federal, state, and local agencies during the development of the EA, and documentation of this correspondence is included in appendices to this document. Correspondence with or materials provided by these agencies is cited in Chapter 6, References.

F.4 Public Meeting

The County will receive oral or written comments during its regular meeting of the Yolo County Aviation Advisory Committee on November 3, 2011 at 6:00 p.m. The meeting will be held at:

Lillard Hall, West Plainfield Fire Department
Yolo County Airport
24905 County Road 95
Davis, California

The meeting was announced in the initial media releases identifying document availability.