

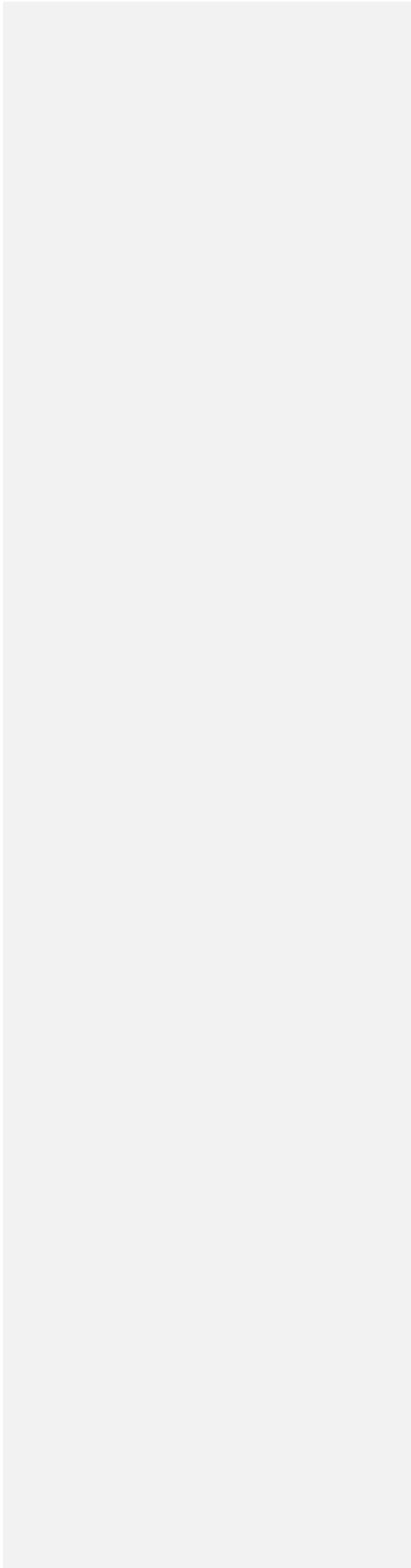
Appendix K
Displacement Analysis

RIO VISTA AIRPORT

Displacement Analysis

Prepared for
Solano County Airport Land Use
Commission

~~February 2018~~ [March 2018](#)



RIO VISTA AIRPORT Displacement Analysis

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Commission

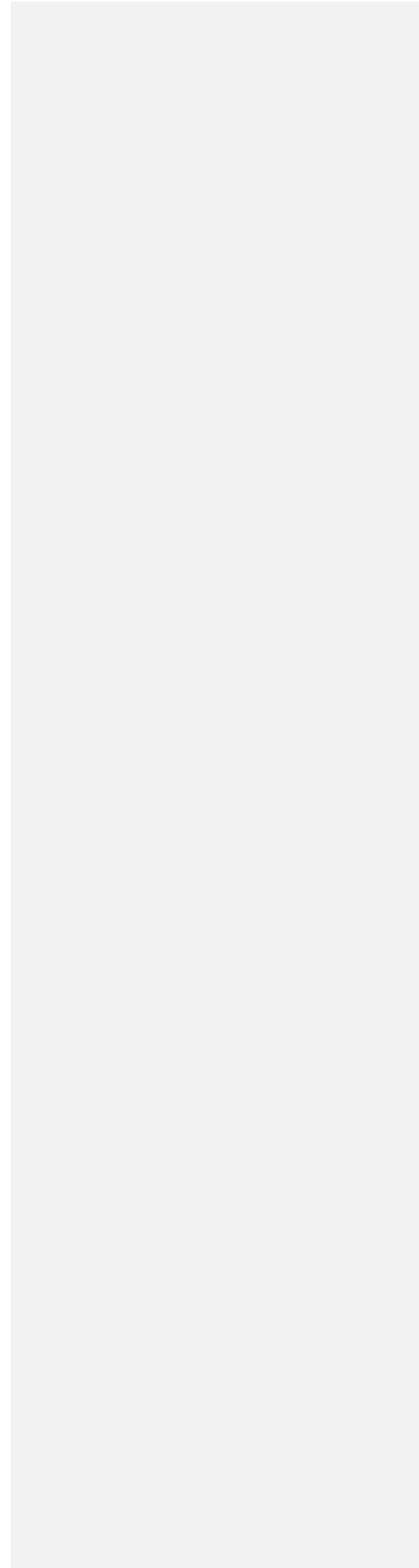
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2600 Capitol Avenue
Suite 200
Sacramento, CA 95816
916.564.4500
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CHAPTER 1

Introduction

1.1 Introduction

Per Government Code section 65302(a)-(c), once an Airport Land Use Commission (ALUC) has adopted an Airport Land Use Compatibility Plan (ALUCP), local agencies are required to make their land use documents consistent with the ALUCP or to take steps to override all or part of the ALUCP. Because the policies and compatibility criteria in the ALUCP may vary from those included in existing land use documents, adoption of an ALUCP may have the effect of displacing potential future development by rendering it incompatible with relevant land use documents where previously it was not. Accordingly, adoption of the ALUCP for the environs of Rio Vista Airport (the Airport) has the potential to displace future land uses within portions of the Airport Influence Area (AIA). The AIA is depicted on **Figure 1**.

Displacement can occur as a result of any changes to land use development that have not yet occurred. As the policies and compatibility criteria in the ALUCP do not apply to existing land use, there is no potential for displacement of already existing development. This also applies to future land use development that although not started or completed has already been approved for development by the responsible local agency.

The updated ALUCP primarily continues policies and regulations included in the 1988 Rio Vista Airport ALUCP. The updated ALUCP, like the 1988 ALUCP, contains policies focused on noise, safety, overflight notification, and airspace protection. These four compatibility factors guide the policy strategies envisioned in the updated ALUCP. There are new or revised policies within these four categories that differ from the policies contained within the 1988 ALUCP.

While changes have been made to the policies relating to noise, overflight notification, and airspace protection, they are not of a nature that would result in displacement of residential or non-residential uses. As pertains to noise, the 2035 CNEL 65+ dB noise contours do not extend beyond the Airport property. While areas designated for residential use west of the Airport are found within the 2035 CNEL 55 - 65 dB noise contours, the policies applicable within these noise contours require that residential land uses in these areas must be sound insulated to achieve an indoor noise level of CNEL 45 dB or lower, which is a feasible and common standard, and therefore the criteria would not displace potential future development within the AIA. Other areas within the CNEL 55 -65 are designated for industrial, open space, and agricultural uses and do not include uses, residential or otherwise, that would conflict with the compatibility criteria

**Figure 1 Rio Vista Municipal Airport and Travis Air Force Base Airport
Influence Areas**

included in Table 2 in the updated ALUCP. The overflight notification and airspace protection policies do not include criteria that would displace potential future development within the AIA.

The updated ALUCP does include changes to safety policies and compatibility criteria that vary from those included in the 1988 ALUCP and subsequently local agency land use plans. In addition, the updated ALUCP includes policies pertaining to wildlife hazard attractants that also may affect future land use development in the AIA. Consequently, this development displacement analysis is primarily concerned with the effects of the safety compatibility factor and wildlife hazard attractant policies included in the updated Rio Vista Airport ALUCP.

1.2 Policy Changes to the ALUCP

As discussed in the previous section, there are a series of policy changes that could potentially result in displacement of residential and non-residential uses in the AIA. First, policy changes pertaining to the revised Safety Zones (Safety Zones 1, 2, 3, 4, and 6) could restrict the future development of residential and non-residential land uses on vacant parcels located therein. The safety zones are depicted on **Figure 2**. The following list describes the more restrictive changes in the ALUCP update:

- Safety Zone 1 restricts maximum non-residential intensity to 0 people per acre. This is more restrictive than the maximum intensity of 10 people per acre provided within Compatibility Zone A in the 1988 ALUCP.
- Safety Zone 2 limits residential density to a maximum of 0.1 dwelling unit per acre (du/ac). This is more restrictive than the maximum residential density of 0.3 du/ac found in Compatibility Zone B in the 1988 ALUCP.
- Safety Zone 3 limits residential density to a maximum of 0.5 du/ac. This is more restrictive than the maximum residential density of 1 du/ac found in Compatibility Zone C in the 1988 ALUCP.
- Safety Zone 4 limits residential density to a maximum of 0.5 du/ac. This is more restrictive than the maximum residential density of 4 du/ac found in Compatibility Zone D in the 1988 ALUCP.
- There were portions of two vacant parcels observed within Safety Zone 5. However, Safety Zone 5 limits residential density to a maximum of 1 du/ac and non-residential intensity to 70 people per acre. This is more restrictive than the residential density limit of 6 du/ac and unlimited intensity in Compatibility Zone E in the 1988 ALUCP. [Notwithstanding this, this land is currently, as well as for land_ designated for agricultural use in the Solano County General Plan, which gives a more restrictive designation for these parcels than the proposed ALUCP.](#)
- Safety Zone 6 has no limits on residential density but limits non-residential intensity to a maximum of 200 people per acre (800 people when development is clustered). This is more restrictive than the generally unlimited intensity allowed in Compatibility Zone F in the 1988 ALUCP. However, the 1988 ALUCP suggested that no more than 100 people per structure

should be allowed within Compatibility Zone F under the aircraft flight tracks, and that large assemblages should not exceed 300 people located in close proximity with one another.

Figure 2 Rio Vista Municipal Airport Safety Zones

The second set of policy changes, involving wildlife hazards, could potentially result in displacement for several vacant parcels containing non-residential land uses. **Figure 3** depicts the two Wildlife Hazard Analysis (WHA) areas in which these policies apply. The Inner WHA Boundary, which extends to the outermost boundary of the safety and overflight notification zones, is intended to minimize bird strike hazard occurrence and builds on the policies designed to avoid bird attractants found in the 1988 ALUCP. The Inner WHA Boundary is based on Federal Aviation Administration (FAA) Advisory Circular (AC) 150/5200-33B. The Outer WHA Boundary extends to a radius of five miles from the Air Operations Area (AOA) and also is based on AC 150/5200-33B. This boundary also comprises the AIA for Rio Vista Airport. FAA AC 150/5200-33B provides guidance for minimizing the risks that certain wildlife species pose to aircraft. Together, these two boundaries impose additional conditions on certain types of land uses that are known to attract wildlife that are hazardous to aircraft operations. The Inner WHA Boundary specifically seeks to minimize any new or expanded land uses that are or include hazardous wildlife attractants, such as public parks, golf courses, water treatment plants, landfills, agricultural lands, wetlands, and open space.

As discussed in Section 5.8 in the ALUCP, any new consistency determinations for general plan amendments or zoning changes in the Inner WHA Boundary will be required to analyze the potential for wildlife attractants and must incorporate reasonably feasible mitigation measures to prevent wildlife hazards. Outside the Inner WHA Boundary and within the Outer WHA Boundary, any land use or expanded land use requiring discretionary review from a local agency that has the potential to attract the movement of hazardous wildlife that could cause bird strikes must demonstrate that hazards to flight will be minimized. Consequently, environmental impacts may arise from the displacement of future land uses from one area to another.

The third grouping of policy changes pertains to the possible limitation of three specific non-residential uses: solar facilities, wind turbine facilities, and other objects greater than 100 feet in height above ground level (AGL) including meteorological towers. While the proposed land use policies have the potential to limit the development of these land uses in certain areas of the city of Rio Vista and Solano County, all three of these land uses may still be developed within the Airport environs as long as they are consistent with ALUCP policies. Additional analysis of the effects of these policy changes is found in Chapter 3.

Potential environmental effects associated with displaced development may include changes in land use patterns and associated shifts in the distribution and concentration of population. By restricting development in parts of the Rio Vista Airport AIA, there is the potential for increased growth pressure in other areas of the AIA. If this “displaced” development was to occur, potential environmental impacts might include localized increases in vehicular traffic volumes and related increases in noise and air emissions.

Figure 3 Rio Vista Municipal Airport Wildlife Hazard Analysis Boundaries

All future development within the AIA, whether it is “displaced” or not, will be subject to the zoning and permitting authority of the City of Rio Vista and Solano County. While a portion of the AIA, notably the Outer WHA Boundary, is located in Sacramento County and the City of Isleton, the Solano County ALUC—and therefore this ALUCP—has jurisdiction only within Solano County. It is likely that future development projects within the updated ALUCP will undergo environmental review at the project level. Environmental impacts arising from future development projects will have to be specifically considered in the appropriate environmental documents prepared for those projects as a condition of permit issuance. The purpose of this development displacement analysis, therefore, is to inform local planning agencies of the potential for displaced development, and associated consequences, to enable them to plan accordingly.

1.3 Development Displacement Analysis for Residential Land Uses

Housing Elements from the City of Rio Vista and Solano County general plans were reviewed and compared to safety maps, policies, and criteria included in the updated ALUCP to determine the potential for the displacement of residential land uses within Safety Zones 2, 3, and 4 of the AIA for Rio Vista Airport. Excluding Airport Road, which traverses Safety Zone 1 off the Runway 7 and Runway 33 ends, all [of Safety Zones 1](#) [isare](#) located entirely on Airport property and are not available for development of residential uses. Similarly, with the exception of a portion of Safety Zone 5 north of Runway 7-25, all Safety Zones 5 are also limited to Airport property. The portion of Safety Zone 5 that extends beyond Airport property; however, is located on an isolated parcel designated for agricultural use with a more restrictive residential density limit under the Solano County General Plan than in the draft ALUCP. Finally, compatibility criteria for Safety Zone 6 does not constrain residential densities, thus there is no potential for displacement of residential uses in Zone 6. Other areas within the AIA yet outside the six safety zones and noise contours are not subject to the noise and safety compatibility criteria included in the updated ALUCP and were also excluded from further analysis.

Parcel data was obtained from the Solano County Assessor and aerial photographs, as well as information provided by the City of Rio Vista and Solano County, were used to determine the development status and development potential for vacant parcels within the safety zones. General plan land use policies applicable to the parcels identified as vacant were then compared to the safety compatibility criteria in the ALUCP to determine the potential for displaced development. The results of the analysis for residential land uses are discussed in Chapter 2 of this technical report.

1.4 Development Displacement Analysis for Non-Residential Land Uses

Similar to the approach employed to analyze potential displacement of residential uses, vacant non-residential parcels in the AIA were identified using the Solano County parcel database and

aerial photographs. The selected parcels were then analyzed for potential development displacement by evaluating City of Rio Vista and Solano County general plan policies compared to the policies in the updated ALUCP. The results of the vacant non-residential parcel evaluation are discussed in Chapter 3 of this technical report.

CHAPTER 2

Residential Displacement Analysis

This chapter presents the results of the development displacement analysis conducted for residential land uses under the updated Rio Vista ALUCP. The displacement analysis documented in this chapter was conducted to determine if there were any residential uses allowed under the current land use plans that would no longer be permitted after implementation of the updated ALUCP for Rio Vista Airport.

As discussed in Section 1.1, the updated ALUCP does not include changes that would result in displacement of residential uses due to the noise, airspace protection, and overflight compatibility policies. However, it was determined that policies associated with the safety zones included in the updated ALUCP would have the potential to displace residential uses. These policies would introduce stricter limits on residential density in Safety Zones 2, 3, and 4 than are in effect under the current ALUCP. To identify potential displacement, separate displacement calculations were performed for areas of the city of Rio Vista and Solano County located within these three safety zones.

The development displacement analysis results indicate that there would be potential displacement of residential land uses as a result of the implementation of the ALUCP. Potential displacement would be limited to a portion of one parcel in the city of Rio Vista. Overall, this parcel is 0.82 acres in size and designated for Neighborhood Residential use. A 0.16 acre portion of the parcel is located in Safety Zone 4 with the remainder located in Safety Zone 6. The safety compatibility criteria for Safety Zone 6 places no limits on residential density; therefore, there is no potential for residential displacement on the portion of the parcel located in Safety Zone 6.

Table 2-1 provides more details on this vacant parcel.

**TABLE 2-1
HOUSING OPPORTUNITY SITES FALLING WITHIN SAFETY ZONE 4**

WHA Boundary	Safety Zone	APN	Jurisdiction	GPLU Designation	Acreage	Maximum Density (du/ac) ¹
Inner	4	0176010130	City of Rio Vista	Neighborhood Residential	0.16	7.5
TOTAL	--	--	--	--	0.16	--

SOURCES:

City of Rio Vista, 2017. City of Rio Vista Municipal Code, Title 17. Available: <http://qcode.us/codes/riovista/> on August 17, 2017.
City of Rio Vista, 2002. Rio Vista General Plan 2001. Adopted July 18, 2002.

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Data regarding residentially zoned parcels were derived from the Rio Vista Zoning Ordinance and General Plan.¹ Vacant parcels were mapped and assessed based on their APN, and, using information contained in the ALUCP, parcels lying within Safety Zones 2, 3 and 4 were identified. Excluding the 0.82 acre parcel partially located within Safety Zone 6 and discussed above, no vacant residential parcels were found within Safety Zones 1, 3, or 6. Portions of two parcels designated for agricultural use that permit residential use, were identified in Safety Zone 5 and one vacant residential parcel was found in Safety Zone 4. Residential density is more restrictive under the Solano County General Plan for lands designated for agricultural use than the ALUCP, so there is no potential for displacement on the parcels in Safety Zone 5. Consequently, only the portion of the single parcel located in Safety Zone 4 was retained for further analysis.

2.1 Potential for Displacement Due to Safety Zone Policies

The safety zone boundaries for Safety Zones 2, 3, and 4 have been slightly altered from the existing 1988 Rio Vista Airport ALUCP, and the maximum densities allowed within these safety zones have been revised to 0.1 du/ac within Safety Zone 2 and 0.5 du/ac within Safety Zones 3 and 4. As indicated in Table 2-1, the Neighborhood Residential land use designation in the Rio Vista General Plan allows for a maximum density of 7.5 du/ac.

As stated above, analysis indicates that potential displacement of development could occur on a single 0.16-acre portion of an 0.82-acre parcel. The 0.16-acre portion of the parcel is located within Safety Zone 4 with the remainder of the parcel in Safety Zone 6. Under the allowable density provided for this land use designation in the Rio Vista General Plan, a total of 6.15 residential dwelling units would be allowed on this parcel, 1.2 residential dwelling units in the portion located within Safety Zone 4. Under the policies in the updated ALUCP, the maximum residential density for the portion of the parcel located within Safety Zone 4 would allow for 0.08 dwelling units. This would constitute a potential displacement of 1.12 dwelling units. This parcel is an isolate that borders the back of two residential parcels, but is not connected to the local street network. Excluding the residential uses that border the parcel to the northeast, it is otherwise surrounded by a larger parcel designated for industrial (warehouse) uses. In addition, there is a substantial amount of vacant land designated for residential uses and more practically situated to the surrounding community available for development within the city of Rio Vista. The housing needs assessment included in the City of Rio Vista's General Plan Housing Element identifies several vacant housing sites within the City. For example, the housing needs assessment identifies an approximately 500-acre parcel located south of Highway 12 and west of Esperson Court that is undeveloped, but can accommodate 1,500 single-family homes. Considering the availability of substantial amounts of vacant land designated for residential uses, the elimination of 1.12 dwelling units from Safety Zone 4 would not constitute displaced development.

¹ City of Rio Vista, 2017. City of Rio Vista Municipal Code, Title 17; available: <http://qcode.us/codes/riovista/>, accessed August 17, 2017.

CHAPTER 3

Non-Residential Displacement Analysis

3.1 Introduction

This chapter presents the results of the development displacement analysis for future/proposed non-residential land uses located within the Inner WHA Boundary and Outer WHA Boundary for Rio Vista Airport. As discussed in Section 1.1, the updated ALUCP does not include changes that would result in displacement of non-residential uses due to the noise, airspace protection, and overflight compatibility policies. The policies associated with the updated safety zones restrict certain non-residential uses based on location relative to each of the safety zones, including objects greater than 100 feet in height AGL including meteorological towers. The policies also include broader restrictions on land uses located within the Inner WHA Boundary and Outer WHA Boundary. These restrictions have the potential to cause displacement of non-residential uses.

The displacement analysis documented in this chapter provides a larger analysis on the vacant and underutilized land parcels within the Inner WHA Boundary. Because these parcels are vacant, there is the potential for future development of non-residential land uses that could attract wildlife leading to aircraft bird strikes. This chapter also focuses on the vacant and underutilized land parcels within the Outer WHA Boundary that have the potential for future development of non-residential land uses that could increase hazardous wildlife movement. Based on these two boundaries, a displacement analysis was conducted to determine if there were any non-residential land uses proposed in current land use plans (or allowed based on zoning classification) that would no longer be permitted after implementation of the updated Rio Vista ALUCP.

The displacement analysis was conducted using information from general plans adopted by Solano County and the City of Rio Vista, along with criteria contained in the updated ALUCP for Rio Vista Airport. The analysis revealed that, because no new prohibitions would occur as a result of these boundaries, there would be no displacement of land uses as a result of the adoption and implementation of the updated Rio Vista ALUCP.

3.2 Non-Residential Issues Not Screened Further

Policies related to the development of solar facilities, wind turbine facilities, and other objects greater than 100 feet in height AGL were updated in the ALUCP. As regards ~~solar facilities and~~ wind turbines, the updated ALUCP defers to the policies included in the Travis AFB ALUCP. These policies have been in effect since adoption of the Travis AFB ALUCP in October 2015.

Accordingly, no displacement of ~~solar facilities or~~ wind turbines would occur as a result of the updated Rio Vista Airport ALUCP.

As regards solar facilities, developers of solar facilities are now required to provide a glint and glare study based on the Solar Glare Hazard Analysis Tool (SGHAT) model to demonstrate that the proposed or expanded facility would not pose a glint or glare risk. As long as proposed facilities do not cause glint or glare and are below the height limits associated with each compatibility zone, these future facilities could be located throughout Rio Vista and Solano County, in surrounding counties, and in other areas of the state or country. The outcome of an unfavorable SGHAT analysis typically results in adjustment to the planned tilt or orientation of a proposed array in order to reduce glint and glare, not relocation of a proposed array to a different site. Therefore, displacement of solar facilities is not anticipated to occur.

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Other structures, including new meteorological towers, are required to undergo ALUC review if they are:

- ≥ 35 feet AGL in Safety Zone 2
- ≥ 50 feet AGL in Safety Zone 3
- ≥ 100 feet AGL in Safety Zone 4
- ≥ 200 feet AGL in Safety Zones 5 and 6

These height limits are consistent with the height limits established in the current ALUCP which are established in accordance with 14 CFR Part 77, as well as the standards established in the Travis AFB ALUCP and would not lead to potential displacement.

3.3 Vacant Parcel Screening Analysis

Vacant parcels within the Inner WHA Boundary and Outer WHA Boundary were identified using a parcel database obtained from the Solano County Assessor/Recorder's office. The database includes detailed information on each parcel, including the jurisdiction in which the parcel is located, parcel size, and existing land use. This information was augmented using geographic information systems (GIS) datasets derived from the City of Rio Vista and Solano County General Plans. These data sets were used to identify the planned land use for each parcel. Parcels without development potential (i.e., already developed or entitled by approved future development) were excluded from the analysis. In addition, parcels with land uses determined to be consistent with the policies in the updated ALUCP were also excluded from further analysis. In total, 12 vacant parcels planned for non-residential uses were identified within the Inner WHA Boundary and 57 vacant parcels planned for non-residential use were identified within the Outer WHA Boundary.

Table 3-1 provides information regarding the 12 vacant non-residential parcels with development potential within the Inner WHA Boundary.

Table 3-2 provides information regarding the 56 vacant non-residential parcels with development potential within the Outer WHA Boundary.

**TABLE 3-1
VACANT AND DEVELOPABLE PARCELS IN THE INNER WHA BOUNDARY AT RIO VISTA AIRPORT**

Perimeter	APN	Jurisdiction	General Plan Land Use Designation	Acreage
Inner WHA Boundary	0177110250	City of Rio Vista	Industrial (General)	4.12
Inner WHA Boundary	0177110240	City of Rio Vista	Industrial (General)	29.56
Inner WHA Boundary	0177110230	City of Rio Vista	Industrial (General)	12.01
Inner WHA Boundary	0176460010	City of Rio Vista	Industrial (Limited)	33.16
Inner WHA Boundary	0176010140	City of Rio Vista	Industrial (Warehouse)	9.25
Inner WHA Boundary	0176460020	City of Rio Vista	Industrial (Limited)	0.67
Inner WHA Boundary	0176321280	City of Rio Vista	Open Space	0.19
Inner WHA Boundary	0177100130	City of Rio Vista	Agricultural/Open Space	23.00
Inner WHA Boundary	0176321270	City of Rio Vista	Open Space	0.16
Inner WHA Boundary	0176010660	City of Rio Vista	Industrial (Warehouse)	51.27
Inner WHA Boundary	0176336090	City of Rio Vista	Industrial (Warehouse)	0.09
Inner WHA Boundary	0176336120	City of Rio Vista	Industrial (Warehouse)	0.11
TOTAL	--	--	--	163.59

SOURCES:

City of Rio Vista, 2017. City of Rio Vista Municipal Code, Title 17; accessed at <http://qcode.us/codes/riovista/> on August 17, 2017.
City of Rio Vista, 2002. Rio Vista General Plan 2001. Adopted July 18, 2002.

**TABLE 3-2
VACANT AND DEVELOPABLE PARCELS IN THE OUTER WHA BOUNDARY AT RIO VISTA AIRPORT**

Perimeter	APN	Jurisdiction	General Plan Land Use Designation	Acreage
Outer WHA Boundary	0178141170	City of Rio Vista	Highway Commercial	0.63
Outer WHA Boundary	0178135050	City of Rio Vista	Downtown	0.17
Outer WHA Boundary	0178220020	City of Rio Vista	Industrial (General)	4.54
Outer WHA Boundary	0178121160	City of Rio Vista	Downtown	0.20
Outer WHA Boundary	0177110250	City of Rio Vista	Industrial (General)	4.12
Outer WHA Boundary	0178121140	City of Rio Vista	Downtown	0.13
Outer WHA Boundary	0178220050	City of Rio Vista	Industrial (General)	5.88
Outer WHA Boundary	0049193090	City of Rio Vista	School	0.13
Outer WHA Boundary	0178134070	City of Rio Vista	Downtown	0.16
Outer WHA Boundary	0177130080	City of Rio Vista	Study Area	3.46
Outer WHA Boundary	0049163020	City of Rio Vista	Downtown	0.12
Outer WHA Boundary	0049163020	City of Rio Vista	Downtown	0.12
Outer WHA Boundary	0049163020	City of Rio Vista	Downtown	0.12
Outer WHA Boundary	0177140050	City of Rio Vista	Study Area	0.31
Outer WHA Boundary	0049156100	City of Rio Vista	Downtown	0.04
Outer WHA Boundary	0177110240	City of Rio Vista	Industrial (General)	29.56

**TABLE 3-2
VACANT AND DEVELOPABLE PARCELS IN THE OUTER WHA BOUNDARY AT RIO VISTA AIRPORT**

Perimeter	APN	Jurisdiction	General Plan Land Use Designation	Acreage
Outer WHA Boundary	0177140070	City of Rio Vista	Study Area	1.63
Outer WHA Boundary	0178151110	City of Rio Vista	Highway Commercial	0.18
Outer WHA Boundary	0178020040	City of Rio Vista	Industrial (General)	5.15
Outer WHA Boundary	0049161120	City of Rio Vista	Downtown	0.08
Outer WHA Boundary	0176434080	City of Rio Vista	School	0.21
Outer WHA Boundary	0178152210	City of Rio Vista	Highway Commercial	0.56
Outer WHA Boundary	0177110210	City of Rio Vista	Industrial (General)	2.96
Outer WHA Boundary	0049175090	City of Rio Vista	Historic Residential	0.21
Outer WHA Boundary	0177140080	City of Rio Vista	Industrial (General)	0.88
Outer WHA Boundary	0049131090	City of Rio Vista	Highway Commercial	3.29
Outer WHA Boundary	0049131050	City of Rio Vista	Highway Commercial	0.84
Outer WHA Boundary	0178020060	City of Rio Vista	Industrial (General)	5.46
Outer WHA Boundary	0049183070	City of Rio Vista	Historic Residential	0.12
Outer WHA Boundary	0049165210	City of Rio Vista	Downtown	0.05
Outer WHA Boundary	0177130070	City of Rio Vista	Study Area	2.14
Outer WHA Boundary	0049161010	City of Rio Vista	Downtown	0.19
Outer WHA Boundary	0177110230	City of Rio Vista	Industrial (General)	12.01
Outer WHA Boundary	0049156020	City of Rio Vista	Downtown	0.27
Outer WHA Boundary	0178210140	City of Rio Vista	Industrial (General)	9.23
Outer WHA Boundary	0178121130	City of Rio Vista	Downtown	4.06
Outer WHA Boundary	0177122060	City of Rio Vista	Study Area	0.26
Outer WHA Boundary	0178123010	City of Rio Vista	Downtown	1.30
Outer WHA Boundary	0049156010	City of Rio Vista	Downtown	0.05
Outer WHA Boundary	0176460010	City of Rio Vista	Industrial (Limited)	33.16
Outer WHA Boundary	0178135030	City of Rio Vista	Downtown	0.11
Outer WHA Boundary	0176010140	City of Rio Vista	Industrial (Warehouse)	9.25
Outer WHA Boundary	0176460020	City of Rio Vista	Industrial (Limited)	0.67
Outer WHA Boundary	0176321280	City of Rio Vista	Open Space	0.19
Outer WHA Boundary	0178020080	City of Rio Vista	Industrial (Limited)	4.99
Outer WHA Boundary	0049132020	City of Rio Vista	Highway Commercial	1.68
Outer WHA Boundary	0177100130	City of Rio Vista	Agricultural/Open Space	23.00
Outer WHA Boundary	0049156110	City of Rio Vista	Downtown	0.16
Outer WHA Boundary	0176321270	City of Rio Vista	Open Space	0.16
Outer WHA Boundary	0178210150	City of Rio Vista	Industrial (General)	1.21
Outer WHA Boundary	0176010660	City of Rio Vista	Industrial (Warehouse)	51.27
Outer WHA Boundary	0176336090	City of Rio Vista	Industrial (Warehouse)	0.09
Outer WHA Boundary	0176336120	City of Rio Vista	Industrial (Warehouse)	0.11
Outer WHA Boundary	0048320040	Solano County	General Industrial	0.91

**TABLE 3-2
VACANT AND DEVELOPABLE PARCELS IN THE OUTER WHA BOUNDARY AT RIO VISTA AIRPORT**

Perimeter	APN	Jurisdiction	General Plan Land Use Designation	Acreage
Outer WHA Boundary	0048320100	Solano County	General Industrial	1.32
Outer WHA Boundary	0048100560	Solano County	Agriculture	37.74
Outer WHA Boundary	0048320090	Solano County	General Industrial	20.72
TOTAL	--	--	--	287.35

SOURCES:

City of Rio Vista. 2017. City of Rio Vista Municipal Code, Title 17; accessed at <http://qcode.us/codes/riovista/> on August 17, 2017.

City of Rio Vista. 2002. Rio Vista General Plan 2001. Adopted July 18, 2002.

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3.3.1 Displacement Analysis – Inner WHA Boundary

As shown in Table 3-1, there are 29 vacant parcels within the Inner WHA Boundary, all located within the city of Rio Vista, that are potentially subject to the wildlife hazard policies in Section 5.8 of the updated ALUCP. These parcels are located in areas designated for agricultural, industrial, or open space uses in the Rio Vista General Plan.

Policy WH-1 requires any new land use within the Inner WHA Boundary that has the potential to attract wildlife and cause bird strikes and is subject to discretionary review to prepare a wildlife hazard analysis. Land uses include expansion of existing uses as well as development of new uses that serve as wildlife hazard attractants. The wildlife hazard analysis must demonstrate that wildlife attractants that may pose hazards to aircraft in flight will be minimized. In addition, Policy WH-3 requires that as part of the California Environmental Quality Act (CEQA) review process for any projects within the Inner WHA Boundary with a potential to create bird strike hazards include mitigation to minimize the potential for impacts. In addition, all projects, with or without mitigation, shall be subject to ALUC review for consistency with the ALUCP.

Compliance with the policies in the ALUCP may not eliminate the potential for displacement; however, it would likely minimize it for the majority of projects. Regardless, without examining land uses associated with specific projects, none of which are known or reasonably foreseeable at this time, it would be unduly speculative to identify potential displacement associated with the WHA policies at this time. Any discretionary projects that become known in the future with the potential to cause significant adverse environmental effects would be reviewed and addressed under CEQA.

3.3.2 Displacement Analysis – Outer WHA Boundary

As presented in Table 3-2, 53 vacant parcels in the city of Rio Vista and four vacant parcels in unincorporated Solano County would be subject to the wildlife hazard policies in Section 5.8 of the updated ALUCP. These parcels are primarily located in areas designated for agricultural, industrial, open space, downtown, or highway commercial uses.

Typically, large tracts of open, undeveloped land can attract potential hazards if they include features such as wetlands or landfills that provide opportunities for wildlife to feed, loaf, and nest (see Appendix H). Accordingly, smaller parcels designated for downtown or highway commercial uses and surrounded by similar development are less likely to attract wildlife hazards. This would generally limit the potential for displacement to larger parcels, away from urban areas, designated for agricultural, industrial, or open space uses.

Policy WH-2 requires any new land use outside the Inner WHA boundary but within the Outer WHA Boundary, that has the potential to attract the movement of wildlife and cause bird strikes, and is subject to discretionary review are required to prepare a wildlife hazard analysis. Land uses include expansion of existing uses as well as development of new uses that has the potential to attract the movement of wildlife and cause bird strikes. The wildlife hazard analysis must demonstrate that wildlife attractants that may pose hazards to aircraft in flight will be minimized and mitigations to support that aim are a required part of the process. Furthermore, Policy WH-3 requires that mitigation measures be implemented as part of the CEQA review process for any projects within the Outer WHA Boundary. Compliance with the policies in the ALUCP may not eliminate the potential for displacement; however, it would likely minimize it for the majority of projects. Regardless, without examining land uses associated with specific projects, none of which are known or reasonably foreseeable at this time, it would be unduly speculative to identify potential displacement associated with the WHA policies at this time. Any discretionary projects that became known in the future with the potential to cause significant adverse environmental effects would be reviewed and addressed under CEQA.