RIO VISTA AIRPORT

Airport Land Use Compatibility Plan

Prepared for
Solano County Airport Land Use Commission

March 2018

ESA

RIO VISTA AIRPORT

Airport Land Use Compatibility Plan

Prepared for
Solano County Airport Land Use Commission

March 2018

2600 Capitol Avenue
Suite 200
Sacramento, CA 95816
916.564.4500
www.esassoc.com

ESA

Bend	Oakland	San Francisco
Camarillo	Orlando	Santa Monica
Delray Beach	Pasadena	Sarasota
Destin	Petaluma	Seattle
Irvine	Portland	Sunrise
Los Angeles	Sacramento	Tampa
Miami	San Diego	

150732

OUR COMMITMENT TO SUSTAINABILITY | ESA helps a variety of public and private sector clients plan and prepare for climate change and emerging regulations that limit GHG emissions. ESA is a registered assessor with the California Climate Action Registry, a Climate Leader, and founding reporter for the Climate Registry. ESA is also a corporate member of the U.S. Green Building Council and the Business Council on Climate Change (BC3). Internally, ESA has adopted a Sustainability Vision and Policy Statement and a plan to reduce waste and energy within our operations. This document was produced using recycled paper.

TABLE OF CONTENTS

Airport Land Use Compatibility Plan for Rio Vista Airport

Page

1. Introduction 1
- 1.1 Overview of the Plan 1
- 1.2 Plan Preparation and Review 3
- 1.3 Other ALUCPs 3
- 1.4 How to Use the Rio Vista ALUCP 3

2. General Applicability 5
- 2.1 Purpose 5
- 2.2 Geographic Scope 5
- 2.3 Changes in Airport Land Use Planning Since 1988 7

3. Summary Guide to Land Use Compatibility 9
- 3.1 Understanding Land Use Compatibility 9

4. Detailed Guide to Land Use Compatibility 13
- 4.1 Safety Zones Established 13
- 4.2 Safety Zone 1 13
- 4.3 Safety Zone 2 19
- 4.4 Safety Zone 3 21
- 4.5 Safety Zone 4 23
- 4.6 Safety Zone 5 24
- 4.7 Safety Zone 6 26

5. Development Standards and Policies 29
- 5.1 General Land Use Policies 29
- 5.2 Noise Compatibility Policies 30
- 5.3 Safety Compatibility Policies 33
- 5.4 Airspace Protection Policies 34
- 5.5 Overflight Notification Policies 36
- 5.6 Renewable Energy Policies 38
- 5.7 Height Policies 38
- 5.8 Wildlife Hazards 39

6. ALUC Review Procedures for the Rio Vista ALUCP 43
- 6.1 General Applicability 43
- 6.2 Review of Land Use Actions 48

Page

Appendices

A Rio Vista Draft ALUCP White Paper
B Sample Implementation Documents
C Noise Modeling Assumptions
D Methods for Determining Concentrations of People
E State Laws Related to Airport Land Use Planning
F Title 14, Code of Federal Regulations, Part 77
G Federal Aviation Administration Advisory Circular 150/5200-33B
H Wildlife Hazard Memo to Solano County
I Glossary of Terms
J Airport Layout Plan
K Displacement Analysis
L Errata to the Rio Vista Airport Land Use Compatibility Plan

List of Figures

Figure 1 Regional Location 2
Figure 2 Airport Influence Area 6
Figure 3 Rio Vista Municipal Airport and Travis Air Force Base Airport Influence Areas 8
Figure 4 Rio Vista Municipal Airport Safety Zones 14
Figure 5 2035 CNEL Contours 16
Figure 6 14 CFR Part 77 Imaginary Surfaces - Rio Vista Municipal Airport 17
Figure 7 Overflight Zone 37
Figure 8 Rio Vista Municipal Airport Wildlife Hazard Analysis Boundaries 41

List of Tables

Table 1 Land Use Compatibility Criteria 11
Table 2 Noise Compatibility Criteria 32
Table 3 Species Groups Known to be Attracted to Land Use Types in Solano County 42

RIO VISTA AIRPORT
Airport Land Use Compatibility Plan

1. Introduction

1.1 Overview of the Plan

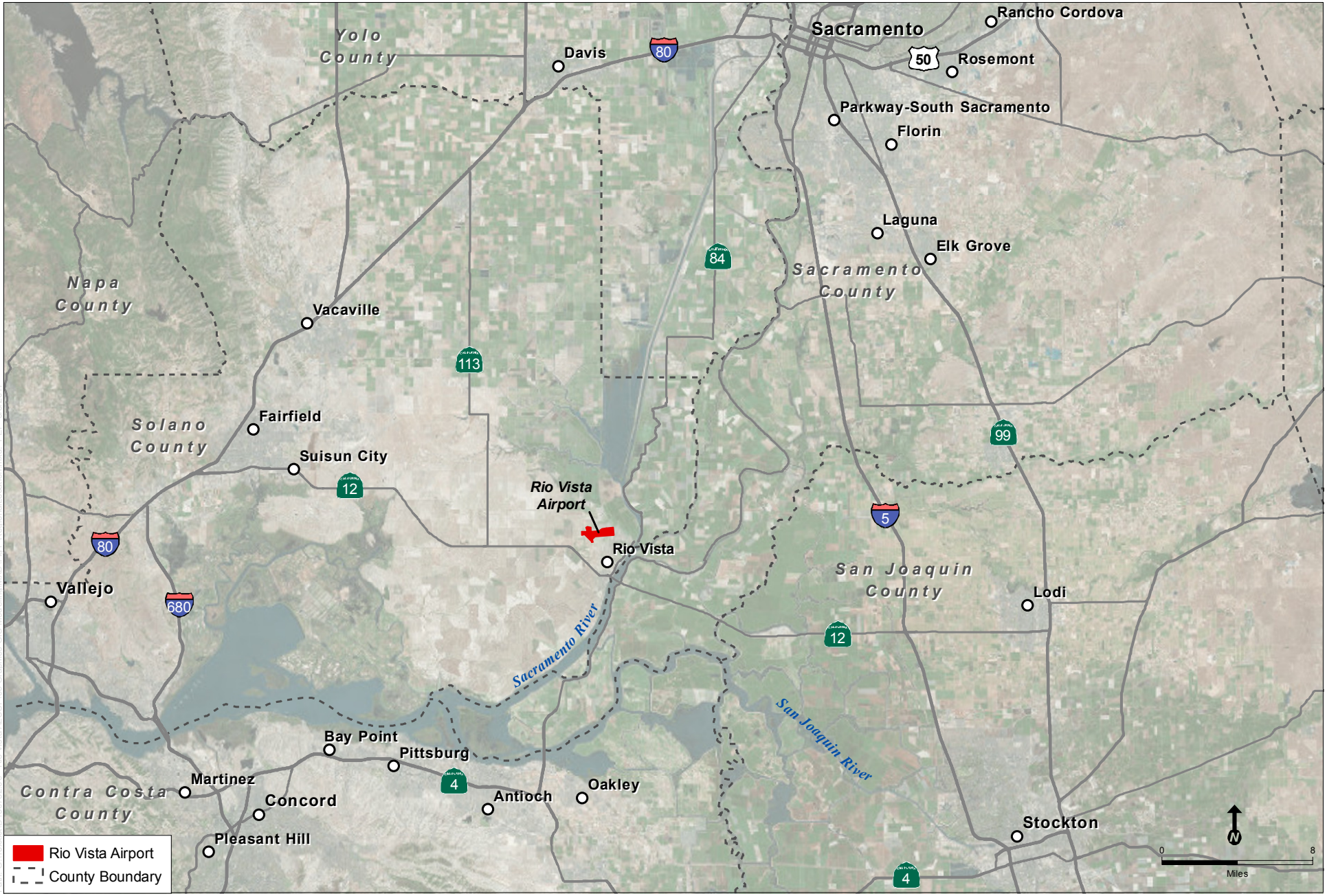
This *Rio Vista Airport Land Use Compatibility Plan* updates land use compatibility policies applicable to future development in the vicinity of Rio Vista Airport (Airport). The policies herein are designed to ensure that future land uses in the surrounding area will remain compatible with the realistically foreseeable, forecasted aircraft activity at the Airport. As adopted by the Solano County Airport Land Use Commission (ALUC or Commission), these policies provide the foundation through which the ALUC can execute its duties to review land use development in accordance with California's State Aeronautics Act (Pub. Util. Code, § 21670 et seq.).

The compatibility criteria defined by these policies are also intended to be reflected within general plans and other policy instruments adopted by Solano County and the City of Rio Vista. These jurisdictions are responsible for overseeing land use in the areas around Rio Vista Airport.

The Legislature also intended that "special districts, school districts, and community college districts are included among the local agencies that are subject to airport land use laws and other requirements of ... article" 3.5 of the State Aeronautics Act (Pub. Util. Code, § 21670(f)).

Figure 1 depicts the location of Rio Vista Airport and the surrounding area. Rio Vista Airport is located in the city of Rio Vista in the Sacramento-San Joaquin River Delta region, approximately 27 miles southwest of the city of Sacramento and 46 miles northeast of the city of San Francisco. The Airport is approximately two miles west of the Sacramento River and approximately 16 miles west of the Interstate 5 (I-5) highway.

This document contains policies directly associated with assessment of land use compatibility (Chapters 3, 4, and 5). The Rio Vista ALUCP incorporates and updates the review procedures from the Solano County Airport Land Use Compatibility Review Procedures and supersedes that document. Chapter 6 of the Rio Vista ALUCP establishes the review procedures to be followed by the Commission and affected local land use jurisdictions with respect to the Airport.



SOURCE: ESA, 2017; ESRI Mapping Services

Rio Vista Municipal Airport ALUCP.150732

Figure 1

Regional Location

ESA

1.2 Plan Preparation and Review

Once adopted by the Solano County ALUC, this document replaces the previous ALUCP titled *Airport/Land Use Compatibility Plan – Rio Vista Municipal Airport [and] New Rio Vista Airport*, adopted by the ALUC in May 1988. The previous Airport/Land Use Compatibility Plan accounts for two Rio Vista Airports: the original Rio Vista Airport, and the then "New" Rio Vista Airport which opened on May 2, 1994, replacing the original Airport. For additional details on the factors that necessitated this ALUCP update, see Appendix A.[1]

The Rio Vista ALUCP has taken these factors into account in the preparation of this document. Other sources have also had a role in the preparation of this document. In particular, Solano County and Rio Vista Airport personnel have played a critical role in providing data on existing aircraft operations at the Airport.

1.3 Other ALUCPs

This ALUCP addresses land use compatibility issues involving the Rio Vista Airport. The Solano County ALUC has also adopted separate ALUCPs for Nut Tree Airport and Travis Air Force Base (AFB), both important aviation facilities within the county. The Airport Influence Area (AIA) for Travis AFB encompasses the entirety of Solano County; therefore, the Rio Vista AIA is located within the AIA of Travis AFB. Specifically, the AIA for Rio Vista Airport is located entirely within Compatibility Zone D of the Travis AFB AIA. In cases where the AIAs of two airports overlap both compatibility plans apply. This document indicates where compatibility issues and standards presented in the Travis AFB Land Use Compatibility Plan (LUCP) may apply and where additional review of that document is needed (see **Table 1** in Chapter 3, Chapter 4, and Section 5.6). Descriptions of provisions of the Travis AFB LUCP are described in this Rio Vista ALUCP for the convenience of the reader and are not separately adopted by this Rio Vista ALUCP.

1.4 How to Use the Rio Vista ALUCP

There are six chapters in this ALUCP update that guide the reader on the land use compatibility requirements for areas around the Airport, as well as the review procedures and implementation strategies to be implemented by the ALUC and local land use agencies. **Chapter 2**, **General Applicability**, provides a context for this update to the ALUCP, explaining recent changes in airport compatibility law in California and general background information about Solano County and the Airport. **Chapter 3**, **Summary Guide to Land Use Compatibility**, summarizes land use compatibility criteria and policies. **Chapter 4**, **Detailed Guide to Land Use Compatibility**, presents the land use compatibility policies for the six safety zones for Rio Vista Airport. **Chapter 5**, **Development Standards**, provides detailed policies pertaining to general, noise, safety, airspace protection, and overflight standards, as well as policies involving renewable energy facilities, meteorological towers, objects greater than 100 feet in height, and wildlife hazards. **Chapter 6**, **ALUC Review Procedures for the Rio Vista ALUCP**, describes the procedures, roles, and responsibilities for the Solano County ALUC.

[1] Some technical information included in Appendix A may be outdated and has been updated in the ALUCP.

This page intentionally left blank

2. General Applicability

2.1 Purpose

This document sets forth the criteria, maps, and other policies to be used by the Solano County ALUC and affected local land use jurisdictions as follows:

Solano County Airport Land Use Commission — The ALUC shall apply these policies when reviewing certain proposals for general plans, specific plans, zoning ordinances, and certain land use development proposals in the vicinity of the Airport for compatibility with aircraft operations at the Airport. The authority for conducting such reviews is established by the California State Aeronautics Act (Pub. Util. Code, § 21670 et seq.).

Affected Land Use Jurisdictions — The County of Solano and City of Rio Vista, both located within the Rio Vista AIA, and the County of Sacramento and City of Isleton,[2] which are partially located within the AIA inside the Wildlife Hazard Analysis (WHA) five-mile boundary, as defined herein, shall utilize these policies as the basis for:

- Modifying their respective general plans, zoning ordinances, and other local land use policies to assure that future land use development will be compatible with aircraft operations.
- Making planning decisions regarding specific development proposals involving the lands impacted by aircraft activity.

2.2 Geographic Scope

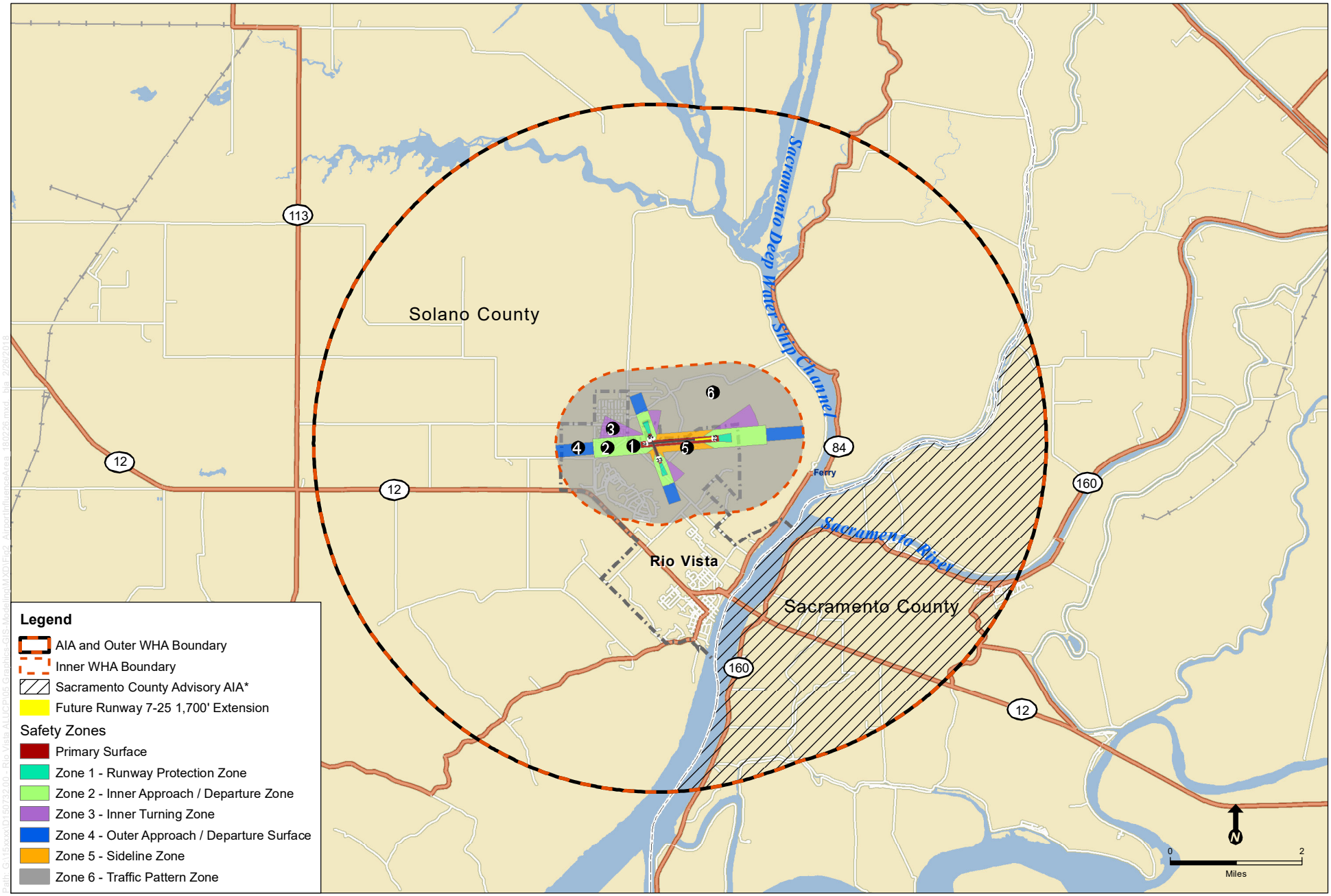
Nature of Compatibility Concerns — This Rio Vista ALUCP applies to:

- All lands on which the uses could be negatively affected by noise or safety impacts associated with present or future aircraft operations at Rio Vista Airport.
- All lands on which the uses could negatively impact flight operations and flight support activities at the Airport.
- Lands on which the uses could negatively affect the operation of aircraft at the Airport.

Boundaries of Airport Influence Area — The Rio Vista AIA is depicted on **Figure 2**.

- The AIA is comprised of portions of Solano County and the city of Rio Vista that surround the Airport, and encompasses Safety Zones 1 through 6, the Airport's 2035 noise contours, the Airport's Title 14 Code of Federal Regulations (CFR) Part 77 surfaces, the Airport's overflight notification area, and the Inner and Outer WHA areas. Figure 2 depicts the safety zones and the AIA for the Airport; additionally, a description of each of the safety zones is located in Section 4.1.
- Within the AIA, all proposed development that includes structures that are 200 feet above ground level (AGL) or greater in height shall be reviewed by the ALUC and shall be consistent with **Table 1 – Land Use Compatibility Criteria** in Chapter 3.

[2] Because Sacramento County is outside the jurisdiction of the Solano County ALUC, the plan is only advisory as applied to the portions of the County of Sacramento and City of Isleton located within the AIA.



SOURCE: California Airport Land Use Planning Handbook, October 2011; ESA, 2016; ESRI Mapping Services

*NOTE: Crosshatched areas are in Sacramento County, outside the jurisdiction of the Solano County Airport Land Use Commission. The Rio Vista ALUCP is advisory only in these areas

Rio Vista Municipal Airport ALUCP.150732

Figure 2

Rio Vista Municipal Airport Influence Area

ESA

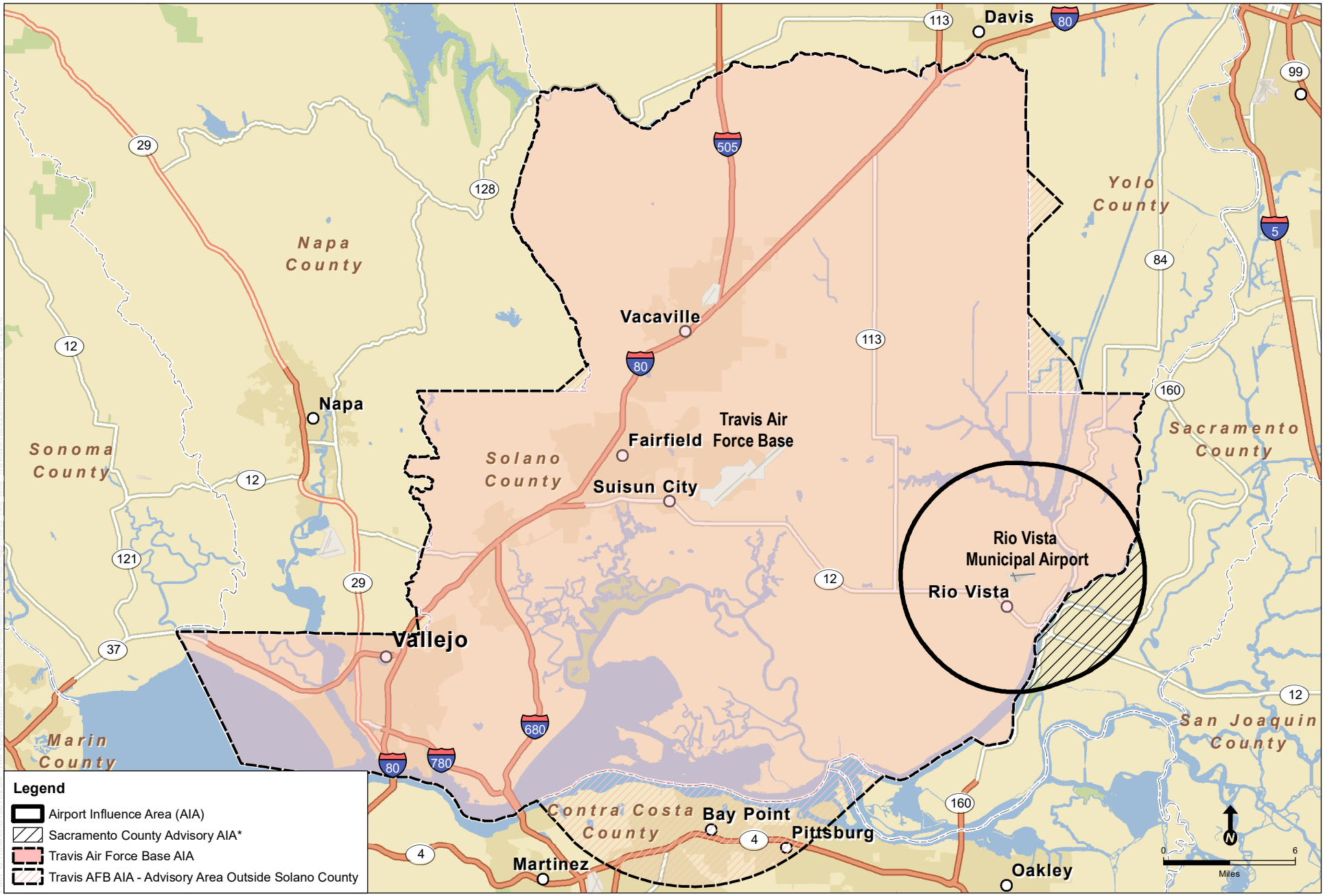
- The entire Rio Vista AIA is located within Compatibility Zone D in the AIA for Travis AFB. Please see the Travis AFB LUCP for additional compatibility standards. Both AIAs are depicted on **Figure 3**.
- Establishment of an AIA is discussed in section 21675 of the Public Utilities Code.

2.3 Changes in Airport Land Use Planning Since 1988

Since the adoption of the 1988 Rio Vista ALUCP, the standards and requirements for airport land use compatibility planning have been consolidated and become more streamlined. The California Airport Land Use Planning Handbook (Handbook) produced by the California Department of Transportation (Caltrans) Division of Aeronautics was first released in 1983 and was subsequently updated in 1993, 2002, and 2011. The 2011 Handbook was reduced from nine to six chapters. Chapter 4 in the 2011 Handbook consolidates information provided in Chapters 3, 7, and 9 in the 2002 edition. This consolidation better focuses discussion on how to develop and implement airport land use compatibility policies that better connect with the goals of the noise, overflight, safety, and airspace protection policies for each unique airport setting. While similar to the original 1983 edition, the 2011 Handbook has evolved into a more simplified and streamlined document.

This update to the Rio Vista ALUCP is primarily needed for the following two reasons:

- To update the current ALUCP, as appropriate, pursuant to the standards set forth in Caltrans' 2011 *California Airport Land Use Planning Handbook.*
- To improve the Rio Vista ALUCP by updating and incorporating the countywide policies contained in the *Solano County Airport Land Use Compatibility Review Procedures* and superseding that document.



SOURCE: California Airport Land Use Planning Handbook, October 2011; ESA, 2016; ESRI Mapping Services

*NOTE: Crosshatched areas are in Contra Costa, Napa, Sacramento, and Yolo Counties, outside the jurisdiction of the Solano County Airport Land Use Commission. The TRavis AFB and Rio Vista ALUCPs are advisory only in these areas

Rio Vista Municipal Airport ALUCP.150732

Figure 3

Rio Vista Municipal Airport and
Travis Air Force Base Airport Influence Areas

ESA

3. Summary Guide to Land Use Compatibility

3.1 Understanding Land Use Compatibility

This chapter provides a summary guide to land use compatibility at the Airport. **Table 1** provides compatibility criteria for seven compatibility areas, including the six safety zones for Rio Vista Airport and the areas between the Inner and Outer WHA boundaries. Maximum residential densities, non-residential intensities, prohibited land uses, and additional development conditions for each of the six safety zones at Rio Vista Airport are shown in **Table 1**. In addition, **Table 1** provides criteria for discretionary projects located in areas between the Inner and Outer WHA boundaries. These requirements are discussed in further detail in Section 5.8.

As discussed earlier, the AIA for Rio Vista Airport is located within the AIA for Travis AFB. Accordingly, the policies included in the Travis AFB LUCP are applicable to areas around Rio Vista Airport. Where noted in this ALUCP, the reader should refer to the Travis AFB LUCP.

A more detailed discussion of the compatibility criteria applicable to the six safety zones is provided in Chapter 4, *Detailed Land Use Compatibility Criteria*.

This page intentionally left blank

TABLE 1
LAND USE COMPATIBILITY CRITERIA

Compatibility Area	Locations	Maximum Densities/Intensities[1]			Additional Criteria	
		Residential Density Allowed	Other Uses (people/ac)[2]		Prohibited Uses[4]	Other Development Conditions[5]
			Maximum Nonresidential Intensity (people per acre)[3]	Maximum Single Acre Intensity – Clustered Development (people per acre)		
Safety Zone 1	Runway Protection Zone	0	0	0	• Assemblages of people • Objects penetrating the Title 14 Code of Federal Regulation (CFR) Part 77 imaginary surfaces • Structures and residential land uses • Hazards to flight[6]	• Avigation easement dedication. • Within the Inner WHA Boundary, reviewing agencies shall prepare a WHA for projects that have the potential to attract wildlife that could cause bird strikes. Based on the findings of the WHA, all reasonably feasible mitigation measures must be incorporated into the planned land use (see Policy WH-1). • Refer to the Compatibility Zone D standards found in the Travis AFB LUCP.
Safety Zone 2	Inner Approach/ Departure Zone	1 du per 10 ac	40	80	• Children's schools,[7] day care centers[8] • Theaters, meeting halls, and other assembly uses • Office buildings > three stories in height • Labor-intensive industrial uses • Stadiums, group recreational uses • Hospitals, nursing homes • Highly noise-sensitive uses (e.g. outdoor theaters) • Aboveground bulk storage of hazardous materials • Hazards to flight[6]	• Locate structures at a maximum distance from extended runway centerline. • Maximum interior noise level of CNEL 45 dB in buildings with noise-sensitive uses (see Policy NP-4). • ALUC review required for objects ≥ 35 feet AGL.[9] • Avigation easement dedication. • See Policy RE-1 pertaining to all proposed wind turbines. • All new or expanded commercial-scale solar facilities must conduct an SGHAT glint and glare study for ALUC review (see Policy RE-2). • Within the Inner WHA Boundary, reviewing agencies shall prepare a WHA for projects that have the potential to attract wildlife that could cause bird strikes. Based on the findings of the WHA, all reasonably feasible mitigation measures must be incorporated into the planned land use (see Policy WH-1). • Refer to the Compatibility Zone D standards found in the Travis AFB LUCP.
Safety Zone 3	Inner Turning Zone	1 du per 2 ac	70	210	• Children's schools,[7] day care centers[8] • Stadiums, group recreational uses • Hospitals, nursing homes • Major shopping centers, theaters, meeting halls, and other assembly uses • Highly noise-sensitive uses (e.g. outdoor theaters) • Hazards to flight[6]	• Maximum interior noise level of CNEL 45 dB in buildings with noise-sensitive uses (see Policy NP-4). • ALUC review required for objects ≥ 50 feet AGL. • Avigation easement dedication. • See Policy RE-1 pertaining to all proposed wind turbines. • All new or expanded commercial-scale solar facilities must conduct an SGHAT glint and glare study for ALUC review (see Policy RE-2). • Within the Inner WHA Boundary, reviewing agencies shall prepare a WHA for projects that have the potential to attract wildlife that could cause bird strikes. Based on the findings of the WHA, all reasonably feasible mitigation measures must be incorporated into the planned land use (see Policy WH-1). • Refer to the Compatibility Zone D standards found in the Travis AFB LUCP.
Safety Zone 4	Outer Approach/Departure Surface	1 du per 2 ac	100	300	• Children's schools,[7] day care centers[8] • Stadiums, group recreational uses • Hospitals, nursing homes • Highly noise-sensitive uses (e.g. outdoor theaters) • Hazards to flight[6]	• Maximum interior noise level of CNEL 45 dB in buildings with noise-sensitive uses (see Policy NP-4) • ALUC review required for objects ≥ 100 feet AGL (see Policy H-2). • See Policy RE-1 pertaining to all proposed wind turbines. • All new or expanded commercial-scale solar facilities must conduct an SGHAT glint and glare study for ALUC review (see Policy RE-2). • All new or expanded meteorological towers > 100 feet AGL, whether temporary or permanent, require ALUC review (see Policy H-1). • Within the Inner WHA Boundary, reviewing agencies shall prepare a WHA for projects that have the potential to attract wildlife that could cause bird strikes. Based on the findings of the WHA, all reasonably feasible mitigation measures must be incorporated into the planned land use (see Policy WH-1). • Refer to the Compatibility Zone D standards found in the Travis AFB LUCP.

TABLE 1 (CONTINUED)
LAND USE COMPATIBILITY CRITERIA

Compatibility Area	Locations	Maximum Densities/Intensities[1]			Additional Criteria	
		Residential Density Allowed	Other Uses (people/ac)[2]			
			Maximum Nonresidential Intensity (people per acre)[3]	Maximum Single Acre Intensity – Clustered Development (people per acre)	Prohibited Uses[4]	Other Development Conditions[5]
Safety Zone 5	Sideline Zone	1 du per 1 ac	70	210	• Highly noise-sensitive uses (e.g. outdoor theaters) • Hazards to flight[6] • Children's schools, large daycare centers • Stadiums, group recreational uses • Hospitals, nursing homes	• Maximum interior noise level of CNEL 45 dB in buildings with noise-sensitive uses (see Policy NP-4) • ALUC review required for objects ≥ 200 feet AGL (see Policy H-2). • See Policy RE-1 pertaining to all proposed wind turbines. • All new or expanded commercial-scale solar facilities must conduct an SGHAT glint and glare study for ALUC review (see Policy RE-2). • All new or expanded meteorological towers ≥ 200 feet AGL, whether temporary or permanent, require ALUC review (see Policy H-1). • Within the Inner WHA Boundary, reviewing agencies shall prepare a WHA for projects that have the potential to attract wildlife that could cause bird strikes. Based on the findings of the WHA, all reasonably feasible mitigation measures must be incorporated into the planned land use (see Policy WH-1). • Refer to the Compatibility Zone D standards found in the Travis AFB LUCP.
Safety Zone 6	Traffic Pattern Zone	No Limit – consider noise and overflight standards	200[12]	800	• Hazards to flight[6,10]	• Maximum interior noise level of CNEL 45 dB in buildings with noise-sensitive uses (see Policy NP-4) • ALUC review required for objects ≥ 200 feet AGL (see Policy H-2). • See Policy RE-1 pertaining to all proposed wind turbines. • All new or expanded commercial-scale solar facilities must conduct an SGHAT glint and glare study for ALUC review (see Policy RE-2). • All new or expanded meteorological towers ≥ 200 feet AGL, whether temporary or permanent, require ALUC review (see Policy H-1). • Within the Inner WHA Boundary, reviewing agencies shall prepare a WHA for projects that have the potential to attract wildlife that could cause bird strikes. Based on the findings of the WHA, all reasonably feasible mitigation measures must be incorporated into the planned land use (see Policy WH-1). • Refer to the Compatibility Zone D standards found in the Travis AFB LUCP.
7	Area Between Inner and Outer WHA Boundary				• Wildlife hazard attractants[10]	• For areas outside of the Inner WHA Boundary but within the Outer WHA Boundary, any new or expanded land use that has the potential to attract the movement of wildlife that could cause bird strikes are required to prepare a WHA (see Policy WH-2). • All discretionary projects located within the Inner WHA Boundary and Outer WHA Boundary are required to consider the potential for the project to attract hazardous wildlife, wildlife movement, or bird strike hazards as part of environmental review process required by the California Environmental Quality Act (CEQA) (see Policy WH-3). • ALUC review required for objects ≥ 200 feet AGL (see Policy H-2). • See Policy RE-1 pertaining to all proposed wind turbines. • All new or expanded commercial-scale solar facilities must conduct an SGHAT glint and glare study for ALUC review (see Policy RE-2). • All new or expanded meteorological towers ≥ 200 feet AGL, whether temporary or permanent, require ALUC review (see Policy H-1).

NOTES:
1 Densities and Intensities are to be calculated in terms of gross acreage. Gross acreage includes the property at issue plus a share of adjacent roads and any adjacent, permanently dedicated, open lands.
2 Usage calculations shall include all people (e.g., employees, customers/visitors, etc.) who may be on the property at any single point in time, whether indoors or outside.
3 The total number of people permitted on a project site at any time, except for rare special events, must not exceed the indicated usage intensity times the gross acreage of the site. Rare special events are ones (such as an air show at an airport) for which a facility is not designed and normally not used and for which extra safety precautions are taken as appropriate.
4 The uses listed here are ones that are explicitly prohibited regardless of whether they meet the intensity criteria, unless such prohibition is precluded by applicable state statues. In addition to these explicitly prohibited uses, other uses will normally not be permitted in the respective safety zones because they do not meet the usage intensity criteria.
5 All height requirements shall be assessed in feet AGL.
6 Hazards to flight include physical (e.g., tall objects such as meteorological towers), visual, and electronic means, as well as wildlife hazard attractants that may interfere with the safety of aircraft operations as determined by the ALUC. Also, see the supporting airspace protection policies for details (Section 5.4).
7 For the purposes of these criteria, children's schools include all grades through grade 12.
8 Family day care homes (as defined by state law) are permitted in any location where residential development is permitted. Noncommercial day care centers ancillary to a place of business are permitted in Safety Zone 4 provided that the overall use of the property meets the indicated intensity criteria.
9 Objects up to 35 feet AGL in height are permitted; however, the Federal Aviation Administration may require marking and lighting of certain objects. See supporting compatibility policies on airspace protection (Section 3.4) for details.
10 Any new consistency determinations for general plan amendments or zoning changes in the Inner WHA Perimeter will be required to analyze the potential for wildlife attractants of this nature and must incorporate reasonably feasible mitigation measures.

4. Detailed Guide to Land Use Compatibility

4.1 Safety Zones Established

The following sections provide a summary of each safety zone for Rio Vista Airport. In total, the Airport features six safety zones, numbered 1 through 6. Compatibility criteria (e.g. density and intensity requirements) relevant to each safety zone are described in detail in each section. These details are also summarized in **Table 1** in Chapter 3. Chapter 5 provides additional specific general, noise, safety, aircraft protection, and overflight policies and development standards that apply to each safety zone.

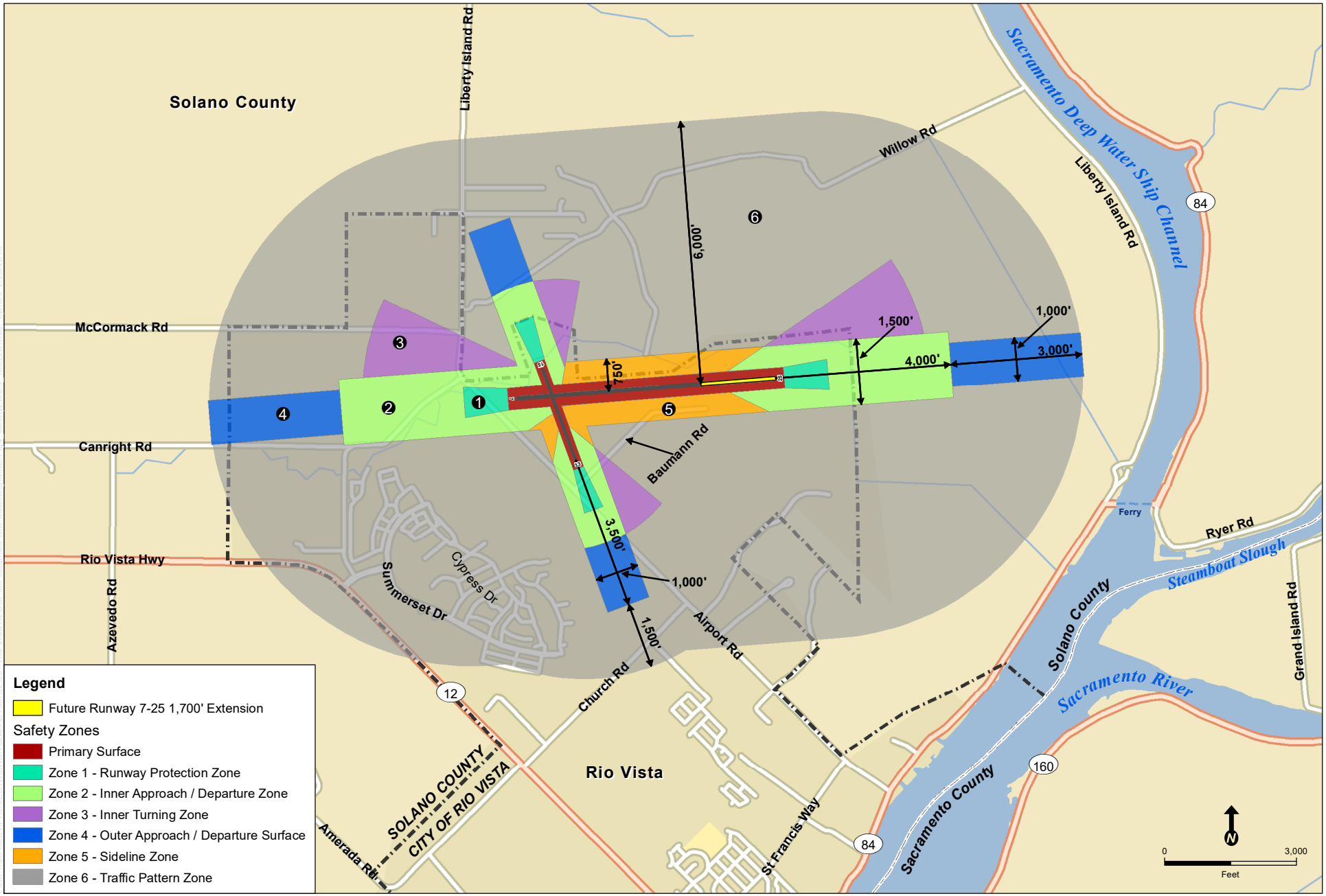
Within each section below, a series of criteria is provided that reflect the specific requirements and regulations for each safety zone. **General Standards** describe the specific requirements for densities and intensities for each zone. **Noise Criteria** provide the development limitations within each zone based on the noise contours from the Airport. **Safety Criteria** explain the particular land uses that are not permitted or may require ALUC review. **Airspace Protection Criteria** discuss specific requirements for development based on 14 CFR Part 77 imaginary surfaces at the Airport. Finally, **Avigation Easement Dedication** describes the avigation easement requirements for parcels located within Safety Zones 1, 2, 3.

4.2 Safety Zone 1

Safety Zone 1 (see **Figure 4**) consists of the two Rio Vista runways, together with immediately adjoining areas within the runway protection zones (RPZs). The dimensions of the RPZs are set in accordance with FAA criteria.

		Maximum Densities/Intensities		
			Other Uses (people/ac)	
Safety Zone	**Locations**	**Residential Density Allowed**	**Maximum Nonresidential Intensity (people per acre)**	**Maximum Single Acre Intensity – Clustered Development (people per acre)**
1	Runway Protection Zone	0 du/ac	0	0

Additional Criteria	
Prohibited Uses	**Other Development Conditions**
• Assemblages of people • Objects exceeding 14 CFR Part 77 height limits • Structures and residential land uses • Hazards to flight	• Avigation easement dedication • Within the Inner WHA Boundary, reviewing agencies shall prepare a WHA for projects that have the potential to attract wildlife that could cause bird strikes. Based on the findings of the WHA, all reasonably feasible mitigation measures must be incorporated into the planned land use (see Policy WH-1). • Refer to the Compatibility Zone D standards found in the Travis AFB LUCP.



SOURCE: California Airport Land Use Planning Handbook, October 2011; ESA, 2016; ESRI Mapping Services

Rio Vista Municipal Airport ALUCP.150732

Figure 4

Rio Vista Municipal Airport Safety Zones

ESA

4.2.1. General Standards — The general standards applicable to the review of proposed land use actions in the vicinity of Rio Vista Airport are set forth in **Table 1**. No new residential development is permitted. In terms of non-residential use, no assemblages of people is allowed.

4.2.2. Noise Criteria — To the greatest extent feasible, it is the objective of the ALUC to minimize new residential development within areas significantly impacted by noise from aircraft operations. Residential and nonresidential development shall not be permitted in this zone. The 2035 noise contours are shown on **Figure 5**.

4.2.3. Safety Criteria — All assemblages of people, along with structures and residential land uses, shall be prohibited within Safety Zone 1. In addition, no storage of any fuel or other hazardous materials shall be permitted. For a discussion of other additional safety risks that require special review and assessment, which include but are not limited to wind turbine facilities and solar facilities (see Section 5.6), meteorological towers (see Section 5.7), and wildlife hazards (see Section 5.8).

Safety Zone 1 is located in Compatibility Zone D of the Travis AFB LUCP. Refer to the Compatibility Zone D standards found in the Travis AFB LUCP for additional safety standards (see Policy SP-4).

4.2.4. Airspace Protection Criteria —The 14 CFR Part 77 surfaces that form the basis for this review are depicted in **Figure 6**. No hazards to flight, including physical (e.g., tall objects), visual, and electronic forms of interference with the safety of aircraft operations, and land uses that may attract birds to increase in the area shall be permitted. As a condition for development approval, the owner of any property proposed for development within Safety Zone 1 shall be required to dedicate an avigation easement to the County of Solano or the City of Rio Vista. FAA notification is required for all new buildings. For a description of the 14 CFR Part 77 surfaces, see Policy AP-2.

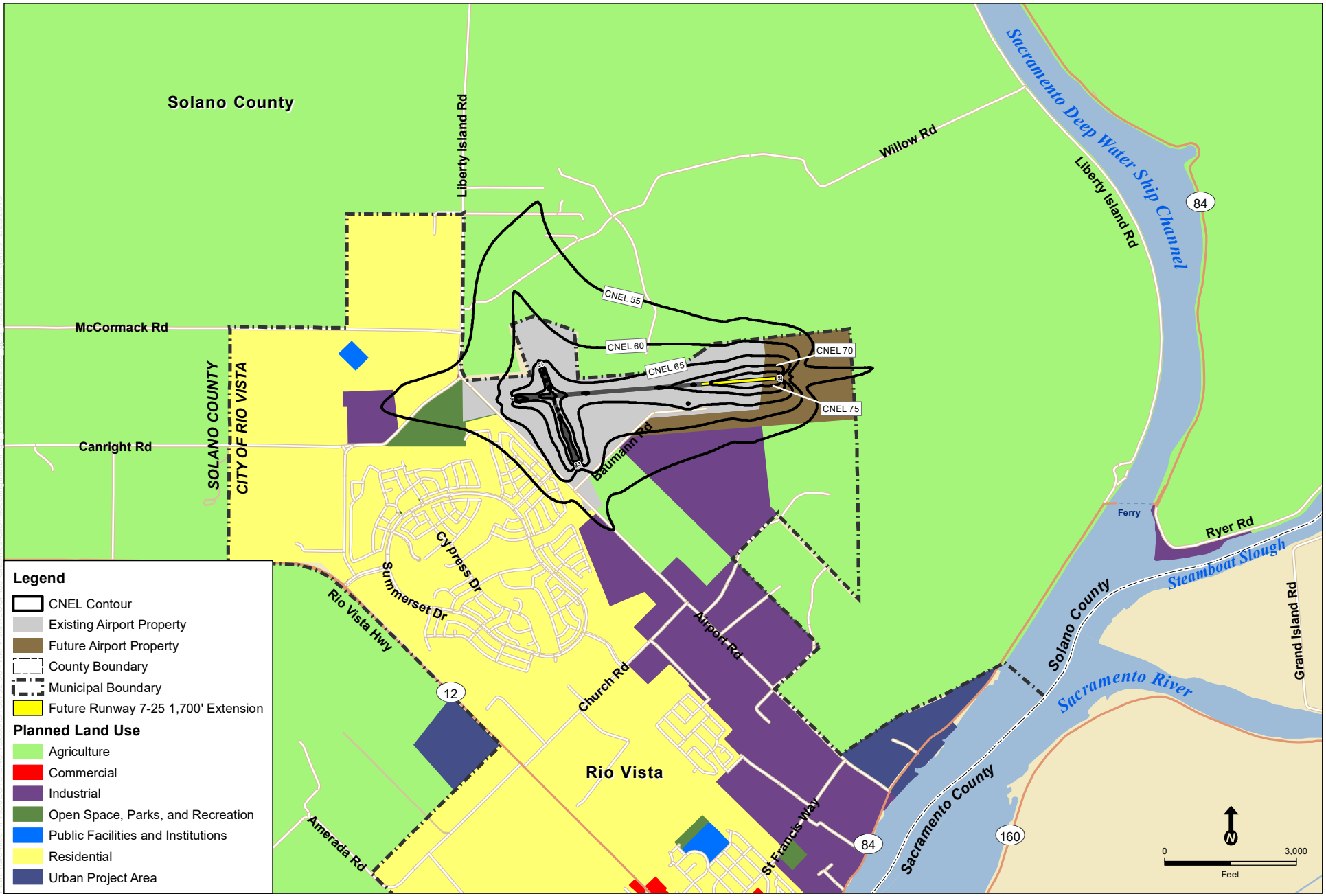
4.2.5. Avigation Easement Dedication — As a condition for development approval, the owner of any property proposed for development within Safety Zone 1 shall be required to dedicate an avigation easement to the County of Solano or the City of Rio Vista. The avigation easement (see Appendix B of this document for an example) shall, to the maximum extent permitted by law:

(a) Provide the right of flight in the airspace above the property;

(b) Allow the generation of noise and other impacts associated with aircraft overflight, including but not limited to noise, vibrations, turbulence, odors, vapors, fumes, fuel particle emissions, exhaust, smoke, and dust;

(c) Restrict the height of structures, trees, and other objects;

(d) Permit access to the property for the removal or aeronautical marking and lighting of objects exceeding the established height limit; and



NOTE: CNEL = Community Noise Equivalent Level.

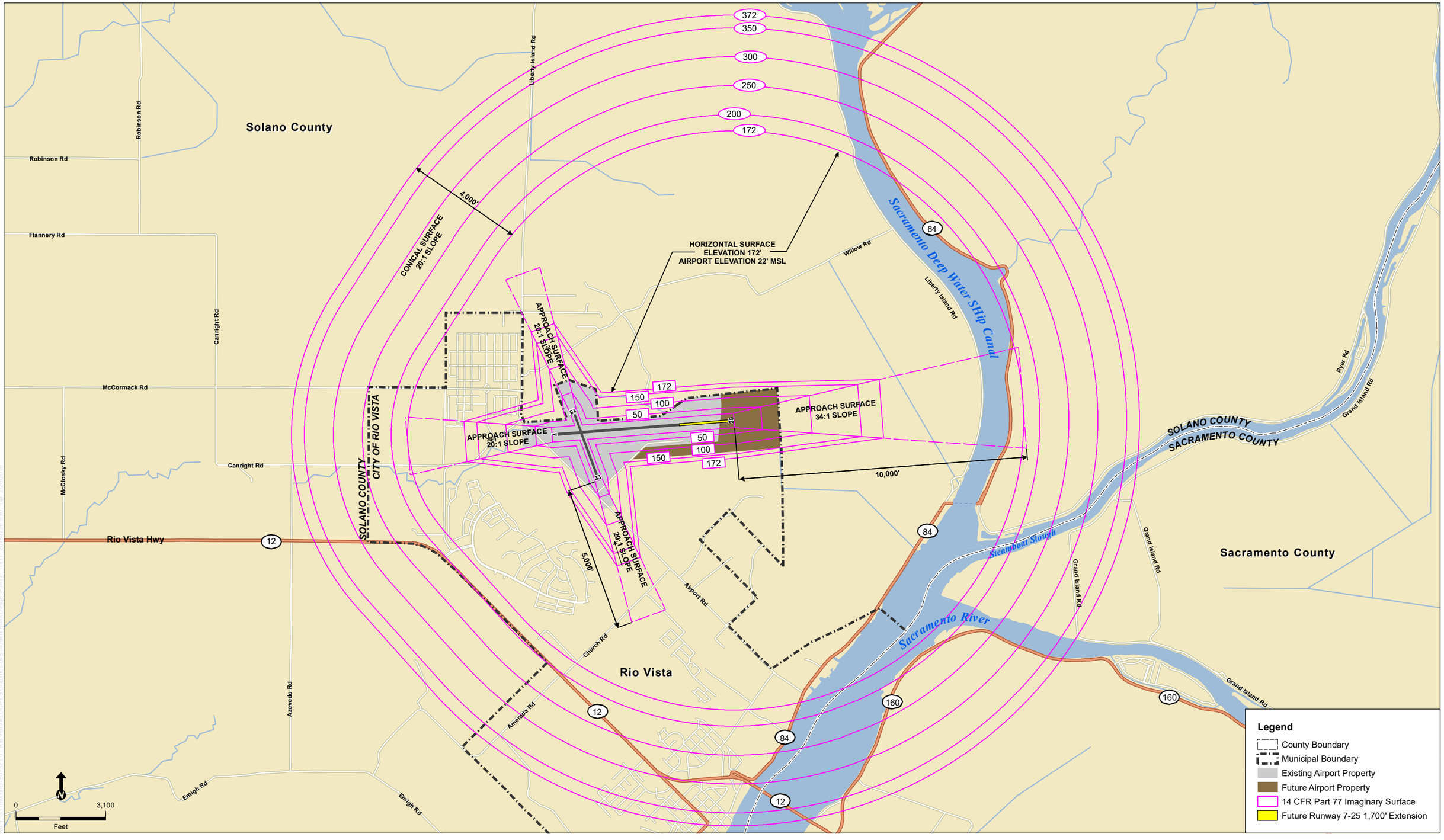
SOURCE: AEDT 2c SP3; ESA, 2016; Solano County GIS Department, 2016; ESRI Mapping Services

Rio Vista Municipal Airport ALUCP.150732

Figure 5

2035 CNEL Contours

ESA



SOURCE: Reinard W. Brandley, 2016; Adapted by ESA, 2016; ESRI Mapping Services
NOTE: All elevations depicted are mean sea level (MSL).

Rio Vista Municipal Airport ALUCP.150732

Figure 6

14 CFR Part 77 Imaginary Surfaces - Rio Vista Municipal Airport

ESA

This page intentionally left blank

(e) Prohibit from being created on the property electrical and electronic interference, glint, glare, and other conditions that would impair the vision of pilots, high-velocity exhaust plumes, and other interference with radio, radar, microwave, or means of aircraft communication, and uses or features that make it difficult for pilots to distinguish between airfield navigation lights and visual aids and other lights, and other potential hazards to flight.

4.3 Safety Zone 2

Safety Zone 2 (see Figure 4) comprises the inner approach and departure areas immediately beyond and surrounding Safety Zone 1. Typically, residential uses are restricted, apart from infill within already developed areas. Non-residential uses that include agriculture, non-group recreational uses (that result in minimal concentrations of people), storage of low-hazard materials, low-intensity light industrial land uses, and auto, aircraft, and marine repair services are all normally allowed within this zone.

Safety Zone	Locations	Maximum Densities/Intensities		
			Other Uses (people/ac)	
		Residential Density Allowed	Maximum Nonresidential Intensity (people per acre)	Maximum Single Acre Intensity – Clustered Development (people per acre)
2	Inner Approach/Departure Zone	1 du per 10 ac	40	80

Additional Criteria	
Prohibited Uses	**Other Development Conditions**
• Children's schools, day care centers • Theaters, meeting halls, and other assembly uses • Office buildings > three stories in height • Labor-intensive industrial uses • Stadiums, group recreational uses • Hospitals, nursing homes • Highly noise-sensitive uses (e.g. outdoor theaters) • Aboveground bulk storage of hazardous materials • Hazards to flight	• Locate structures maximum distance from extended runway centerline. • Maximum interior noise level of CNEL 45 dB in buildings with noise-sensitive uses (see Policy NP-4). • ALUC review required for objects ≥ 35 feet AGL. • Avigation easement dedication. • See Policy RE-1 pertaining to all proposed wind turbines. • All new or expanded commercial-scale solar facilities must conduct an SGHAT glint and glare study for ALUC review (see Policy RE-2). • Within the Inner WHA Boundary, reviewing agencies shall prepare a WHA for projects that have the potential to attract wildlife that could cause bird strikes. Based on the findings of the WHA, all reasonably feasible mitigation measures must be incorporated into the planned land use (see Policy WH-1). • Refer to the Compatibility Zone D standards found in the Travis AFB LUCP.

4.3.1. General Standards — The general standards applicable to the review of proposed land use actions in the vicinity of Rio Vista Airport are set forth in **Table 1**.

Residential development at a density no greater than one dwelling unit per ten acres is permitted. Permitted non-residential uses allow for an intensity of 40 people per acre. Also, 80 people per acre shall be the maximum limit for a single acre on parcels where development is clustered.

4.3.2. Noise Criteria — To the greatest extent feasible, it is the objective of the ALUC to minimize new residential development within areas significantly impacted by noise from aircraft operations at Rio Vista Airport. Residential development shall only be permitted in this zone as infill to already existing development and a maximum, aircraft-related, interior noise level of CNEL 45 dB can be achieved. Nonresidential development shall be highly limited within the general standards. See Policy NP-4 for additional details on acceptable interior noise levels.

4.3.3. Safety Criteria — Land uses of particular safety concern are ones in which the occupants have reduced effective mobility or are unable to respond to emergency situations. Children's schools (all grades through grade 12), day care centers, theatres, meeting halls, other assembly uses, office buildings that are greater than three stories in height, labor-intensive industrial uses, stadiums, group recreational uses, hospitals (medical facilities that include provision for overnight stays by patients), nursing homes, highly noise-sensitive uses (e.g., outdoor theatres), and other uses in which the majority of occupants are children, elderly, and/or disabled shall be prohibited within Safety Zone 2. In addition, no storage of any fuel or other hazardous materials shall be permitted. For a discussion of other additional safety risks that require special review and assessment, which include but are not limited to wind turbine facilities and solar facilities (see Section 5.6), meteorological towers (see Section 5.7), and wildlife hazards (see Section 5.8).

Safety Zone 2 is located in Compatibility Zone D of the Travis AFB LUCP. Refer to the Compatibility Zone D standards found in the Travis AFB LUCP for additional safety standards.

4.3.4. Airspace Protection Criteria — Proposed buildings that are 35 feet or higher AGL require ALUC review. No hazards to flight, including physical (e.g., tall objects), visual, and electronic forms of interference with the safety of aircraft operations, and land uses that may attract birds to increase in the area shall be permitted. As a condition for development approval, the owner of any property proposed for development within Safety Zone 2 shall be required to dedicate an avigation easement to the County of Solano or the City of Rio Vista. FAA notification is required for all new buildings. For a description of the 14 CFR Part 77 surfaces, see Policy AP-2.

4.3.5. Avigation Easement Dedication — As a condition for development approval, the owner of any property proposed for development within Safety Zone 2 shall be required to dedicate an avigation easement to the County of Solano or the City of Rio Vista. The avigation easement (see Appendix B of this document for an example) shall, to the maximum extent permitted by law:

(a) Provide the right of flight in the airspace above the property;

(b) Allow the generation of noise and other impacts associated with aircraft overflight, including but not limited to noise, vibrations, turbulence, odors, vapors, fumes, fuel particle emissions, exhaust, smoke, and dust;

(c) Restrict the height of structures, trees, and other objects;

(d) Permit access to the property for the removal or aeronautical marking and lighting of objects exceeding the established height limit; and

(e) Prohibit from being created on the property electrical and electronic interference, glint, glare, and other conditions that would impair the vision of pilots, high-velocity exhaust plumes, and other interference with radio, radar, microwave, or means of aircraft communication, and uses or features that make it difficult for pilots to distinguish between airfield navigation lights and visual aids and other lights, and other potential hazards to flight from being created on the property.

4.4 Safety Zone 3

Safety Zone 3 (see Figure 4) contains the areas where aircraft turn as they approach or depart the runway. Uses allowed in this safety zone include greenhouses, low-hazard materials storage, mini-storage, warehouses, light industrial uses, and vehicle repair services, as well as uses allowed in Safety Zone 2. Very low residential densities and low-intensity offices and commercial uses are permitted within this zone, while uses with higher concentrations of people and children are prohibited.

Safety Zone	Locations	Maximum Densities/Intensities		
			Other Uses (people/ac)	
		Residential Density Allowed	Maximum Nonresidential Intensity (people per acre)	Maximum Single Acre Intensity– Clustered Development (people per acre)
3	Extended Approach/ Departure Zone	1 du per 2 ac	70	210

Additional Criteria	
Prohibited Uses	**Other Development Conditions**
• Children's schools, day care centers • Stadiums, group recreational uses • Hospitals, nursing homes • Major shopping centers, theaters, meeting halls, and other assembly uses • Highly noise-sensitive uses (e.g. outdoor theaters) • Hazards to flight	• Maximum interior noise level of CNEL 45 dB in buildings with noise-sensitive uses (see Policy NP-4). • Avigation easement dedication. • ALUC review required for objects ≥ 50 feet AGL. • See Policy RE-1 pertaining to all proposed wind turbines. • All new or expanded commercial-scale solar facilities must conduct an SGHAT glint and glare study for ALUC review (see Policy RE-2). • Within the Inner WHA Boundary, reviewing agencies shall prepare a WHA for projects that have the potential to attract wildlife that could cause bird strikes. Based on the findings of the WHA, all reasonably feasible mitigation measures must be incorporated into the planned land use (see Policy WH-1). • Refer to the Compatibility Zone D standards found in the Travis AFB LUCP.

4.4.1. General Standards — The general standards applicable to the review of proposed land use actions in the vicinity of Rio Vista Airport are set forth in **Table 1**.

Within Safety Zone 3, Residential development at a density no greater than one dwelling unit per two acres is permitted. Permitted non-residential uses allow for an intensity of 70 people per acre. For parcels where development is clustered, an intensity of 210 people per acre shall be the limit. See Policy LU-2 for specific calculations and requirements for nonresidential development.

4.4.2. Noise Criteria — To the greatest extent feasible, it is the objective of the ALUC to minimize new residential development within areas impacted by noise from aircraft operations at Rio Vista Airport. Residential development shall only be permitted in this zone if a maximum, aircraft-related, interior noise level of CNEL 45 dB can be achieved. Nonresidential development shall be highly limited within the general standards. See Policy NP-4 for additional details on acceptable interior noise levels.

4.4.3. Safety Criteria — Land uses of particular safety concern are ones in which the occupants have reduced effective mobility or are unable to respond to emergency situations. Children's schools (all grades through grade 12), day care centers, stadiums, group recreational uses, hospitals (medical facilities that include provision for overnight stays by patients), nursing homes, highly noise-sensitive uses (e.g., outdoor theatres), major shopping centers, theaters, meeting halls, and other assembly uses and other uses in which the majority of occupants are children, elderly, and/or disabled shall be prohibited within Safety Zone 3.

Further discussion of other additional safety risks that require special review and assessment are provided in Chapter 5, including but not limited to wind turbine facilities and solar facilities (see Section 5.6), meteorological towers (see Section 5.7), and wildlife hazards (see Section 5.8).

Safety Zone 3 is located in Compatibility Zone D of the Travis AFB LUCP. Refer to the Compatibility Zone D standards found in the Travis AFB LUCP for additional safety standards.

4.4.4. Airspace Protection Criteria — Proposed buildings that are 50 feet AGL or higher require ALUC review. No hazards to flight, including physical (e.g., tall objects), visual, and electronic forms of interference with the safety of aircraft operations, and land uses that may attract birds to increase in the area shall be permitted. As a condition for development approval, the owner of any property proposed for development within Safety Zone 3 shall be required to dedicate an avigation easement to the County of Solano or the City of Rio Vista. For a description of the 14 CFR Part 77 surfaces, see Policy AP-2.

4.4.5. Avigation Easement Dedication — As a condition for development approval, the owner of any property proposed for development within Safety Zone 3 shall be required to dedicate an avigation easement to the County of Solano or the City of Rio Vista. The avigation easement (see Appendix B of this document for an example) shall, to the maximum extent permitted by law:

(a) Provide the right of flight in the airspace above the property;

(b) Allow the generation of noise and other impacts associated with aircraft overflight, including but not limited to noise, vibrations, turbulence, odors, vapors, fumes, fuel particle emissions, exhaust, smoke, and dust;

(c) Restrict the height of structures, trees, and other objects;

(d) Permit access to the property for the removal or aeronautical marking and lighting of objects exceeding the established height limit; and

(e) Prohibit from being created on the property electrical and electronic interference, glint, glare, and other conditions that would impair the vision of pilots, high-velocity exhaust plumes, and other interference with radio, radar, microwave, or means of aircraft communication, and uses or features that make it difficult for pilots to distinguish between airfield navigation lights and visual aids and other lights, and other potential hazards to flight from being created on the property.

4.5 Safety Zone 4

Safety Zone 4 (see Figure 2) covers the outer approach and departure surfaces for the Airport and extends beyond Safety Zone 2. Normally, restaurants, retail, and industrial uses are allowed in this zone, as well as uses that are allowed in Safety Zone 3. Higher intensity retail uses and offices are to be avoided in this zone, while buildings and uses that result in larger assemblages of people and children are prohibited.

		Maximum Densities/Intensities		
			Other Uses (people/ac)	
Safety Zone	**Locations**	**Residential Density Allowed**	**Maximum Nonresidential Intensity (people per acre)**	**Maximum Single Acre Intensity – Clustered Development (people per acre)**
4	Outer Approach / Departure Surface	1 per 2 ac	100	300

Additional Criteria	
Prohibited Uses	**Other Development Conditions**
• Children's schools, day care centers • Stadiums, group recreational uses • Hospitals, nursing homes • Highly noise-sensitive uses (e.g. outdoor theaters) • Hazards to flight	• Maximum interior noise level of CNEL 45 dB in buildings with noise-sensitive uses (see Policy NP-4). • ALUC review required for objects ≥ 100 feet AGL. • See Policy RE-1 pertaining to all proposed wind turbines. • All new or expanded commercial-scale solar facilities must conduct an SGHAT glint and glare study for ALUC review (see Policy RE-2). • Within the Inner WHA Boundary, reviewing agencies shall prepare a WHA for projects that have the potential to attract wildlife that could cause bird strikes. Based on the findings of the WHA, all reasonably feasible mitigation measures must be incorporated into the planned land use (see Policy WH-1). • All new or expanded meteorological towers ≥ 100 feet AGL, whether temporary or permanent, require ALUC review. • Refer to the Compatibility Zone D standards found in the Travis AFB LUCP.

4.5.1. General Standards — The general standards applicable to the review of proposed land use actions in the vicinity of Rio Vista Airport are set forth in **Table 1**.

Within Safety Zone 4, residential development at a density no greater than one dwelling unit per two acres is permitted. Permitted non-residential uses allow for an intensity of 100 people per acre. For parcels where development is clustered, an intensity of 300 people per acre shall be the limit. See Policy LU-2 for specific calculations and requirements for nonresidential development.

4.5.2. Noise Criteria — To the greatest extent feasible, it is the objective of the ALUC to minimize new residential development within areas impacted by noise from aircraft operations at Rio Vista Airport. Residential development shall only be permitted in this zone if a maximum, aircraft-related, interior noise level of CNEL 45 dB can be achieved. Nonresidential development shall be highly limited within the general standards. See Policy NP-4 for additional details on acceptable interior noise levels. The noise impact area is defined as being all locations within the outer boundary of Safety Zone 4 as shown on Figure 2.

4.5.3. Safety Criteria — Land uses of particular safety concern are ones in which the occupants have reduced effective mobility or are unable to respond to emergency situations. Children's schools (all grades through grade 12), day care centers, stadiums, group recreational uses, hospitals (medical facilities that include provision for overnight stays by patients), nursing homes, highly noise-sensitive uses (e.g., outdoor theatres), and other uses in which the majority of occupants are children, elderly, and/or disabled shall be prohibited within Safety Zone 4. Noncommercial day care centers ancillary to a place of business are permitted in Safety Zone 4 provided that the overall use of the property meets the intensity criteria indicated in **Table 1**. Medical clinics are permitted in Safety Zone 4 provided that these facilities meet the maximum intensity standards listed in **Table 1**.

Further discussion of other additional safety risks that require special review and assessment are provided in Chapter 5, including but not limited to wind turbine facilities and solar facilities (see Section 5.6), meteorological towers (see Section 5.7), and wildlife hazards (see Section 5.8).

Safety Zone 4 is located in Compatibility Zone D of the Travis AFB LUCP. Refer to the Compatibility Zone D standards found in the Travis AFB LUCP for additional safety standards.

4.5.4. Airspace Protection Criteria — Proposed buildings that are 100 feet AGL or higher require ALUC review. No hazards to flight, including physical (e.g., tall objects), visual, operational, and electronic forms of interference with the safety of aircraft operations, and land uses that increase the presence of hazardous wildlife within the WHA boundaries shall be permitted. For a description of the 14 CFR Part 77 surfaces, see Policy AP-2.

4.6 Safety Zone 5

Safety Zone 5 (see Figure 2) is the sideline zone that runs outside and parallel to Runways 15-33 and 7-25. Normally, all uses permitted in Zone 4 and common aviation-related activities are allowed, provided they satisfy FAA height and airspace protection criteria. Uses limited in Safety Zone 3 are also limited in Zone 5. All residential uses are to be prohibited unless they are airport-related; and higher-intensity non-residential uses that result in higher assemblages of people, including children, are prohibited.

Safety Zone	Locations	Maximum Densities/Intensities		
			Other Uses (people/ac)	
		Residential Density Allowed	Maximum Nonresidential Intensity (people per acre)	Maximum Single Acre Intensity – Clustered Development (people per acre)
5	Sideline Zone	1 du per 1 ac	70	210

Additional Criteria	
Prohibited Uses	**Other Development Conditions**
• Highly noise-sensitive uses (e.g. outdoor theaters) • Hazards to flight	• ALUC review required for objects ≥ 200 feet AGL. • See Policy RE-1 pertaining to all proposed wind turbines. • All new or expanded commercial-scale solar facilities must conduct an SGHAT glint and glare study for ALUC review (see Policy RE-2). • Within the Inner WHA Boundary, reviewing agencies shall prepare a WHA for projects that have the potential to attract wildlife that could cause bird strikes. Based on the findings of the WHA, all reasonably feasible mitigation measures must be incorporated into the planned land use (see Policy WH-1). • All new or expanded meteorological towers ≥ 200 feet AGL, whether temporary or permanent, require ALUC review. • Refer to the Compatibility Zone D standards found in the Travis AFB LUCP.

4.6.1 General Standards — The general standards applicable to the review of proposed land use actions in the vicinity of Rio Vista Airport are set forth in **Table 1**. Within Safety Zone 5, Residential development at a density no greater than one dwelling unit per acre is permitted. Permitted non-residential uses allow for an intensity of 70 people per acre. For parcels where development is clustered, an intensity of 210 people per acre shall be the limit. See Policy LU-2 for specific calculations and requirements for nonresidential development.

4.6.2. Noise Criteria — As a condition for approval of development within Safety Zone 5, a notice regarding aircraft operational impacts on the property shall be attached to the property deed. An example of a deed notice is contained in Appendix B of this document. Residential development shall only be permitted in this zone if a maximum, aircraft-related, interior noise level of CNEL 45 dB can be achieved. Nonresidential development shall be highly limited within the general standards. See Policy NP-4 for additional details on acceptable interior noise levels.

4.6.3. Safety Criteria — Apart from the prohibition of highly noise-sensitive uses (e.g., outdoor theaters), there are no particular safety requirements for Safety Zone 5.

Further discussion of other additional safety risks that require special review and assessment are provided in Chapter 5, including but not limited to wind turbine facilities and solar facilities (see Section 5.6), meteorological towers (see Section 5.7), and wildlife hazards (see Section 5.8).

Safety Zone 5 is located in Compatibility Zone D of the Travis AFB LUCP. Refer to the Compatibility Zone D standards found in the Travis AFB LUCP for additional safety standards.

4.6.4. Airspace Protection Criteria — Proposed buildings that are 200 feet AGL or higher require ALUC review. No hazards to flight, including physical (e.g., tall objects), visual, and electronic forms of interference with the safety of aircraft operations, and land uses that may attract birds to increase in the area shall be permitted. For a description of the 14 CFR Part 77 surfaces, see Policy AP-2.

4.7 Safety Zone 6

Safety Zone 6 (see Figure 2) comprises the traffic pattern zone and Inner WHA Boundary for the Airport. This larger zone covers regular traffic patterns and entry routes to and exit routes from the Airport. The 55 dB CNEL contour is located within Safety Zone 6. While residential uses in this zone are only restricted in relation to noise and overflight impacts, no other prohibitions exist within this zone. However, outdoor stadiums and similar uses that would result in very high intensities of people should be avoided.

		Maximum Densities/Intensities		
			Other Uses (people/ac)	
Safety Zone	**Locations**	**Residential Density Allowed**	**Maximum Nonresidential Intensity (people per acre)**	**Maximum Single Acre Intensity – Clustered Development (people per acre)**
6	Traffic Pattern Zone	No limit	200	800

Additional Criteria	
Prohibited Uses	**Other Development Conditions**
• None	• ALUC review required for objects ≥ 200 feet AGL • See Policy RE-1 pertaining to all proposed wind turbines. • All new or expanded commercial-scale solar facilities must conduct an SGHAT glint and glare study for ALUC review (see Policy RE-2). • All new or expanded meteorological towers ≥ 200 feet AGL, whether temporary or permanent, require ALUC review. • Within the Inner WHA Boundary, reviewing agencies shall prepare a WHA for projects that have the potential to attract wildlife that could cause bird strikes. Based on the findings of the WHA, all reasonably feasible mitigation measures must be incorporated into the planned land use. • Refer to the Compatibility Zone D standards found in the Travis AFB LUCP.

4.7.1 General Standards — The general standards applicable to the review of proposed land use actions in the vicinity of Rio Vista Airport are set forth in **Table 1**. Within Safety Zone 6, there are no limits for residential density. Permitted non-residential uses allow for an intensity of 200 people per acre, but discourage large stadiums and similar uses. For parcels where development is clustered, an intensity of

800 people per acre shall be the limit. See Policy LU-2 for specific calculations and requirements for nonresidential development.

4.7.2. Noise Criteria — As a condition for approval of development within Safety Zone 6, a notice regarding aircraft operational impacts on the property shall be attached to the property deed. An example of a deed notice is contained in Appendix B of this document. See Policy NP-4 for additional details on acceptable interior noise levels.

4.7.3. Safety Criteria — There are no particular safety requirements for Safety Zone 6.

Further discussion of other additional safety risks that require special review and assessment are provided in Chapter 5, including but not limited to wind turbine facilities and solar facilities (see Section 5.6), meteorological towers (see Section 5.7), and wildlife hazards (see Section 5.8).

Safety Zone 6 is located in Compatibility Zone D of the Travis AFB LUCP. Refer to the Compatibility Zone D standards found in the Travis AFB LUCP for additional safety standards.

4.7.4. Airspace Protection Criteria — Proposed buildings that are 200 feet AGL or higher require ALUC review. No hazards to flight, including physical (e.g., tall objects), visual, and electronic forms of interference with the safety of aircraft operations, and land uses that may attract birds to increase in the area shall be permitted. For a description of the 14 CFR Part 77 surfaces, see Policy AP-2.

This page intentionally left blank

5. Development Standards and Policies

5.1 General Land Use Policies

Function of Supporting Criteria — The Land Use Compatibility Criteria table (see **Table 1**) represents a compilation of noise, safety, and airspace protection compatibility criteria. For the purposes of reviewing proposed amendments to county or city land use plans and zoning ordinances, as well as in the review of most individual development proposals, the criteria in the table are anticipated to suffice. However, certain complex land use actions may require more intensive review. The ALUC may refer to the supporting criteria, as listed in Sections 5.2 through 5.8, to clarify or supplement its review of such actions.

LU-1 Nonresidential Development

The compatibility of nonresidential development shall be assessed primarily with respect to its usage intensity (the number of people per acre) and the noise-sensitivity of the use. Additional criteria listed in **Table 1** and Chapter 4 shall also apply.

1. The total number of people permitted on a project site at any time, except for rare special events, must not exceed the indicated usage intensity times the gross acreage of the site.

    a. Gross acreage includes the property at issue plus a share of adjacent roads and any adjacent, permanently dedicated, open lands.

    b. Usage intensity calculations shall include all people (e.g., employees, customers/visitors, etc.) who may be on the property at any single point in time, whether indoors or outside.

    c. Rare special events are ones (such as an air show at an airport) for which a facility is not designed and normally not used and for which extra safety precautions will be taken to protect the event attendees from an aircraft accident.

2. No single acre of a project site shall exceed the number of people per acre indicated in Chapter 4 and listed in **Table 1**.

3. The noise exposure limitations cited in Policy NP-3 and listed in **Table 2** shall be the basis for assessing the acceptability of proposed nonresidential land uses relative to noise impacts. **Table 2** presents noise compatibility criteria for the Rio Vista ALUCP. The ability of buildings to satisfy the interior noise level criteria noted in Policy NP-4 shall also be considered.

4. All height requirements for this ALUCP shall be assessed in feet AGL.

LU-2 Prohibited Uses

Regardless of usage intensity, certain types of uses are deemed unacceptable within portions of the Rio Vista AIA. See Chapter 4 and **Table 1** for a listing of prohibited uses in the safety zones. In addition to these explicitly prohibited uses, other uses will normally not be permitted in the respective safety zones because they do not meet the usage intensity criteria.

LU-3 Other Development Conditions

All types of proposed development shall be required to meet the additional conditions listed in **Table 1** and Chapter 4 for the respective safety zone where the development is to be located.

LU-4 Existing Development and Projects with a Development Agreement Prior to ALUCP Adoption

Projects with an existing Development Agreement in place prior to the adoption of this ALUCP would not be subject to the new regulations put forth in this ALUCP to the extent the projects constitute existing development beyond the ALUC's jurisdiction, as provided in the State Aeronautics Act.

Consistent with the purposes of the State Aeronautics Act and "the intent of the Legislature to discourage incompatible land uses near existing airports" (Pub. Util. Code, § 21674.7(b)), it is the intent of the Commission not to adopt a definition of existing development that would limit the Commission's jurisdiction in any manner beyond the limitations established by the State Aeronautics Act itself. For example, and without limitation, concerning any project or physical improvement, when a development agreement is entered into or construction is commenced without the use having been duly found consistent with the applicable airport land use compatibility criteria and requirements, or without the agreement or improvement having been duly adopted, permitted, and entitled in conformance with all applicable plans, regulations, conditions, and legal requirements, such use is not existing development. Similarly, where a development agreement has been duly adopted for a project, if that development agreement is of a general nature (e.g., certain initial or "master" development agreements) that agreement would not by itself be a basis for deeming the associated use existing development. This paragraph is declarative of existing Commission policy.

5.2 Noise Compatibility Policies

Figure 5 depicts the noise contours established for the purpose of evaluating the compatibility of land use development in the vicinity of Rio Vista Airport. The potential future noise levels depicted are based upon the forecast aircraft activity scenario described in Appendix C. **Table 2** identifies land uses that are compatible within the 55, 60, 65, and 70 dB CNEL contours.

The objective of the airport noise compatibility policies described in this section is to protect the public health, safety, and welfare by minimizing the exposure of residents and occupants of future noise-sensitive development to excessive noise associated with the Airport. In furtherance of this objective, the following noise compatibility policies (NP) shall apply to the ALUCP.

NP-1 Noise Impact Area

Assessment of whether proposed land use development near Rio Vista Airport is compatible with the noise impacts of aircraft activity at the Airport shall be made with respect to potential future noise levels as depicted on Figure 5. The threshold for evaluation is the 2035 CNEL 55 dB contour. This contour defines the noise impact area of the Airport and all land uses located outside this contour are consistent with the noise compatibility policies of this ALUCP.

NP-2 Noise Exposure in Residential Areas

To the greatest extent feasible, it is the objective of the ALUC to minimize new residential development within areas significantly impacted by noise from aircraft operations at Rio Vista Airport. For this purpose, the noise impact area is defined as being all locations within the CNEL 55 dB contour as shown on Figure 5.

New residential development is deemed normally unacceptable in areas exposed to noise levels between CNEL 55-64 dB. Residential land uses in these areas must be sound-insulated to achieve an indoor noise level of CNEL 45 dB or lower. Above CNEL 65 dB, new residential uses are prohibited.

NP-3 Noise Exposure for Nonresidential Land Uses

The acceptability of nonresidential development in noise-impacted areas is dependent upon the noise sensitivity of the specific use and the extent to which the usage can be shielded from aircraft noise. Examples of acceptable noise levels for nonresidential land uses are presented in **Table 2**. The extent of outdoor activity associated with a particular land use is an important factor to be considered in evaluating its compatibility with airport noise, particularly for those uses listed as "marginally acceptable."

NP-4 Interior Noise Levels

Within the identified noise contours, land uses for which interior activities may be easily disrupted by noise shall be required to comply with the following interior noise level criteria (Interior CNEL calculations should assume that windows are closed):

1. The maximum, aircraft-related, interior noise level that shall be considered acceptable for land uses near airports is 45 dB CNEL in:

    - Living and sleeping areas of single- or multi-family residences;
    - Hotels and motels;
    - Hospitals and nursing homes;
    - Churches, meeting halls, office buildings, and mortuaries; and
    - Schools, libraries, and museums.

2. When reviewed as part of a general plan, specific plan, or zoning ordinance amendment or as a major land use action, evidence that proposed structures will be designed to comply with the above criteria shall be submitted to the ALUC under the following circumstances:

    a. Any single- or multi-family residence situated within the 55 dB CNEL forecast contour shown in Figure 5. [Wood frame buildings typically have an NLR of approximately 20 dB with windows closed.]

    b. Any hotel or motel, hospital or nursing home, church, meeting hall, office building, mortuary, school, library, museum, or other noise-sensitive nonresidential use situated within the 65 dB CNEL forecast contour.

TABLE 2
NOISE COMPATIBILITY CRITERIA

Land Use Category	Location[1] CNEL (dB) 55-60	60-65	65-70	>70
Residential				
Single-family Residential	-	-	--	--
Multi-family Residential	-	-	--	--
Public				
schools, libraries, hospitals, nursing homes, museums	o	-	--	--
churches, auditoriums, concert halls, meeting halls	+	o	-	--
transportation, parking, cemeteries	++	++	+	o
Commercial and Industrial				
offices, retail trade, hotels and motels	+	o	o	-
service commercial, wholesale trade, warehousing, light industrial, mortuaries	++	+	o	o
general manufacturing, utilities, extractive industry	++	++	+	+
Agricultural and Recreational				
Cropland	++	++	++	+
livestock breeding	o	o	o	-
parks, playgrounds, zoos	++	+	o	-
golf courses, riding stables, water recreation	++	+	o	o
outdoor spectator sports	++	+	o	-
amphitheaters	o	-	--	--

	Land Use Acceptability	Interpretation/Comments
++	Clearly Acceptable	The activities associated with the specified land use can be carried out with essentially no interference from the noise exposure.
+	Normally Acceptable	Noise is a factor to be considered in that slight interference with outdoor activities may occur. Conventional construction methods will eliminate most noise intrusions upon indoor activities.
o	Marginally Acceptable	The indicated noise exposure will cause moderate interference with outdoor activities and with indoor activities when windows are open. The land use is acceptable on the condition that outdoor activities are minimal and construction features which provide sufficient noise attenuation are used (e.g., installation of air conditioning so that windows can be kept closed). Under other circumstances, the land use should be discouraged.
-	Normally Unacceptable	Noise will create substantial interference with both outdoor and indoor activities. Noise intrusion upon indoor activities can be mitigated by requiring special noise insulation construction. Land uses that have conventionally constructed structures and/or involve outdoor activities that would be disrupted by noise should generally be avoided.
--	Clearly Unacceptable	Unacceptable noise intrusion upon land use activities will occur. Adequate structural noise insulation is not practical under most circumstances. The indicated land use should be avoided unless strong overriding factors prevail and it should be prohibited if outdoor activities are involved.

NOTE:
[1] See Figure 5 for locations.

5.3 Safety Compatibility Policies

The safety zones for Rio Vista Airport are presented in Figure 4. The density and intensity limitations for the various safety zones are presented in **Table 1**. The objective of the land use safety compatibility criteria for Rio Vista Airport is to minimize the risks to people and property on the ground in the event of an off-airport aircraft accident or emergency landing. The most stringent land use controls shall be applied to the areas with greatest potential risk. In furtherance of this objective, the following safety compatibility policies (SP) shall apply to the ALUCP.

SP-1 Evaluating Safety Compatibility for New Development

The safety compatibility of proposed uses within the AIA for Rio Vista Airport shall be evaluated in accordance with the policies set forth in this section and the safety zones depicted on Figure 4, the compatibility criteria presented in **Table 1**, and the detailed compatibility criteria presented in Chapter 4 of this ALUCP.

SP-2 Land Uses of Particular Concern

Land uses of particular safety concern are ones in which the occupants have reduced effective mobility or are unable to respond to emergency situations. The safety zones depicted on Figure 4, the compatibility criteria presented in **Table 1**, and the detailed compatibility criteria presented in Chapter 4 of this ALUCP shall apply to land uses of particular concern in the AIA. Family day care homes shall be permitted in any location where residential development is permitted.

SP-3 Travis AFB LUCP Compatibility Zone D

All safety zones at Rio Vista Airport are located within Compatibility Zone D of the Travis AFB LUCP. See the Travis AFB LUCP for additional safety standards that also apply to land uses in the Rio Vista AIA.

SP-4 Risks to People on the Ground

The principal means of reducing risks to people on the ground is to restrict land uses so as to limit the number of people who might gather in areas most susceptible to aircraft accidents. (Methods for determining the concentration of people for various land uses are provided in Appendix D of this document.) Intensity limits as presented in **Table 1** and detailed in Chapter 4 of this ALUCP shall apply.

SP-5 Criteria for Clustering of Development

The ALUC generally supports clustering as a means for both enhancing safety compatibility in the vicinity of airports and accomplishing other development objectives. Clustering occurs when development on a site or within an overall safety zone is concentrated in only a portion of the area and the remaining area is held to a low-intensity usage such as agriculture, landscaping, or automobile parking. Refer to Section 6.2.4 for policies regarding infill development.

1. With respect to the vicinity of the Airport, clustering is applicable only to nonresidential development. As indicated in **Table 1**, usage intensity of new nonresidential development shall be limited for both indoor and outdoor occupancies. Please see Chapter 4 for detailed clustering requirements for each of the safety zones, which are incorporated into this Policy SP-3 by reference.

2. In addition to the detailed clustering requirements for each zone:

    a. For the purposes of this policy, the areas to be evaluated within the safety zones shall be rectangles, not irregular shapes.

    b. In no case shall a proposed development be designed to accommodate more than the total number of people per acre that would be safe, as indicated in **Table 1**. A project site may include multiple parcels.

5.4 Airspace Protection Policies

The 14 CFR Part 77 imaginary surfaces for Rio Vista Airport are presented in Figure 6. Tall structures, trees, and other objects, particularly when located near airports or on high terrain, may constitute hazards to aircraft in flight. Federal regulations establish the criteria for evaluating potential obstructions. These regulations also require that the FAA be notified of proposals for creation of certain such objects. The FAA conducts "aeronautical studies" of these objects and determines whether they would be hazards, but it does not have the authority to prevent their creation. The objective of the ALUC's airspace protection policies, together with regulations established by local land use jurisdictions and the state government, is to ensure that hazards to the navigable airspace do not occur. In furtherance of this objective, the following airspace protection policies (AP) shall apply to the ALUCP.

AP-1 Airport Land Use Commission Review of Height of Proposed Objects

Based upon FAA criteria, proposed objects that would exceed the heights indicated in Chapters 3 and 4 for the respective safety zones potentially represent airspace obstruction issues. Development proposals that include any such objects shall be reviewed by the ALUC. Objects of lesser height normally would not have a potential for being airspace obstructions and therefore do not require ALUC review with respect to airspace protection criteria (noise and safety concerns may still be present) except as otherwise stated in this ALUCP. Caution should be exercised, however, with regard to any object more than 50 feet AGL proposed to be located on a site that is substantially higher than the surrounding terrain. Please see Chapter 4 for detailed height review requirements for each of the safety zones.

AP-2 Height Restriction Criteria

The general criteria to be used in assessing whether objects may represent airspace obstructions are established by 14 CFR Part 77. In general, the height of objects in the vicinity of the Airport shall be limited so as not to exceed the imaginary airspace surfaces defined for the airport in accordance with 14 CFR Part 77 criteria.

1. A simplified diagram of the 14 CFR Part 77 Subpart C surfaces for Rio Vista Airport is depicted in Figure 6.

2. In certain circumstances, objects may need to be restricted to heights less than the limits indicated by Figure 6.

    a. In locations along portions of instrument approach procedure routes, restrictions of object heights to less than those indicated by 14 CFR Part 77 may be necessary so as not to impair the utilization of these procedures. The applicable criteria are set forth in FAA

Order 8260.3D, *United States Standard for Terminal Instrument Procedures* (TERPS). Review of objects relative to these criteria normally is conducted by the FAA as part of aeronautical studies. Independent ALUC review is not necessary; rather, the ALUC's function is to ensure compliance with the FAA recommendations.

b. In other parts of the airport vicinity — especially where common visual flight routes cross areas of moderately high terrain — tall objects could pose airspace hazards even if they do not exceed 14 CFR Part 77 limits. Based upon the airport land use commissioners' knowledge of such locations, the ALUC may find lower height limits to be appropriate or may require objects to be obstruction marked and lighted. Input from Rio Vista Airport personnel should be sought with regard to any such cases that may be brought to the ALUC's attention.

3. Objects may be permitted to exceed 14 CFR Part 77 criteria under the following conditions.

   a. In locations where the ground level exceeds or lies within 35 feet of a 14 CFR Part 77 horizontal or conical surface, objects up to 35 feet AGL in height are not prohibited by these policies if they are not a hazard to air navigation. Taller objects may also be acceptable if they would be situated within 100 feet of other objects or high terrain having equal or higher elevation.

   b. The ALUC may, but is not required to, grant exceptions to other proposed objects if the FAA has completed an aeronautical study of the proposal and concluded that the object would not be a hazard to air navigation. Other factors, including the commissioners' knowledge of local airspace and input from Rio Vista Airport personnel, shall also be taken into account in the ALUC's decision to grant such exceptions.

4. All height requirements shall be measured in AGL in all locations.

AP-3 Obstruction Marking and Lighting

In general, the need for marking and lighting of obstructions is determined by the FAA as part of aeronautical studies conducted in accordance with 14 CFR Part 77. Under most circumstances, when reviewing proposed structures that exceed the height criteria indicated in Policy AP-2, the ALUC expects to abide by the FAA's conclusions regarding marking and lighting requirements. However, situations may arise in which the ALUC, because of its particular knowledge of local airports and airspace, may reach a different determination than that of the FAA. In such instances, the ALUC may determine either that a proposed structure is unacceptable or that it is acceptable only if marked and lighted. Any marking and lighting that the ALUC may require shall be consistent with FAA standards as to color and other features.

AP-4 Federal Aviation Administration Notification

Proponents of a project that may exceed the elevation of a 14 CFR Part 77 surface must notify the FAA as required by 14 CFR Part 77, Subpart B, and by sections 21658 and 21659 of the State Aeronautics Act. Notification to the FAA under 14 CFR Part 77, Subpart B, is required even for certain proposed construction that does not exceed the height limits allowed by Subpart C of the regulations. Refer to Appendix E of this document for a copy of these sections of the state codes and to Appendix F for the specific FAA notification requirements. A copy of the form to be submitted to the FAA, FAA Form 7460, *Notice of Proposed Construction or Alteration*, is also included in Appendix F.

1. Local jurisdictions shall inform project proponents of the requirements for notifying the FAA.

2. The requirement for notifying the FAA shall not necessarily trigger an airport compatibility review of an individual project by the ALUC unless required in accordance with the Policies of this ALUCP including but not limited to Policy AP-1.

3. FAA review is required for any proposed structure more than 200 feet AGL of its site. All such proposals also shall be submitted to the ALUC for review regardless of where in the county the object would be located.

4. Any project submitted to the ALUC for consistency determination for reason of height issues shall include a copy of the 14 CFR Part 77 notification to the FAA and the results of the FAA's analysis. The FAA's determination may represent one aspect of a project's compatibility factors. Therefore, a no-hazard determination by FAA does not guarantee ALUC approval of a proposed project.

5.5 Overflight Notification Policies

The overflight zone for Rio Vista Airport is presented in **Figure 7**. The objective of the land use overflight compatibility criteria for Rio Vista Airport is to minimize annoyance related to aircraft overflight to people on the ground. In furtherance of this objective, the following overflight compatibility policies (OP) shall apply to the ALUCP.

OP-1 Airport Land Use Commission Review of Overflight

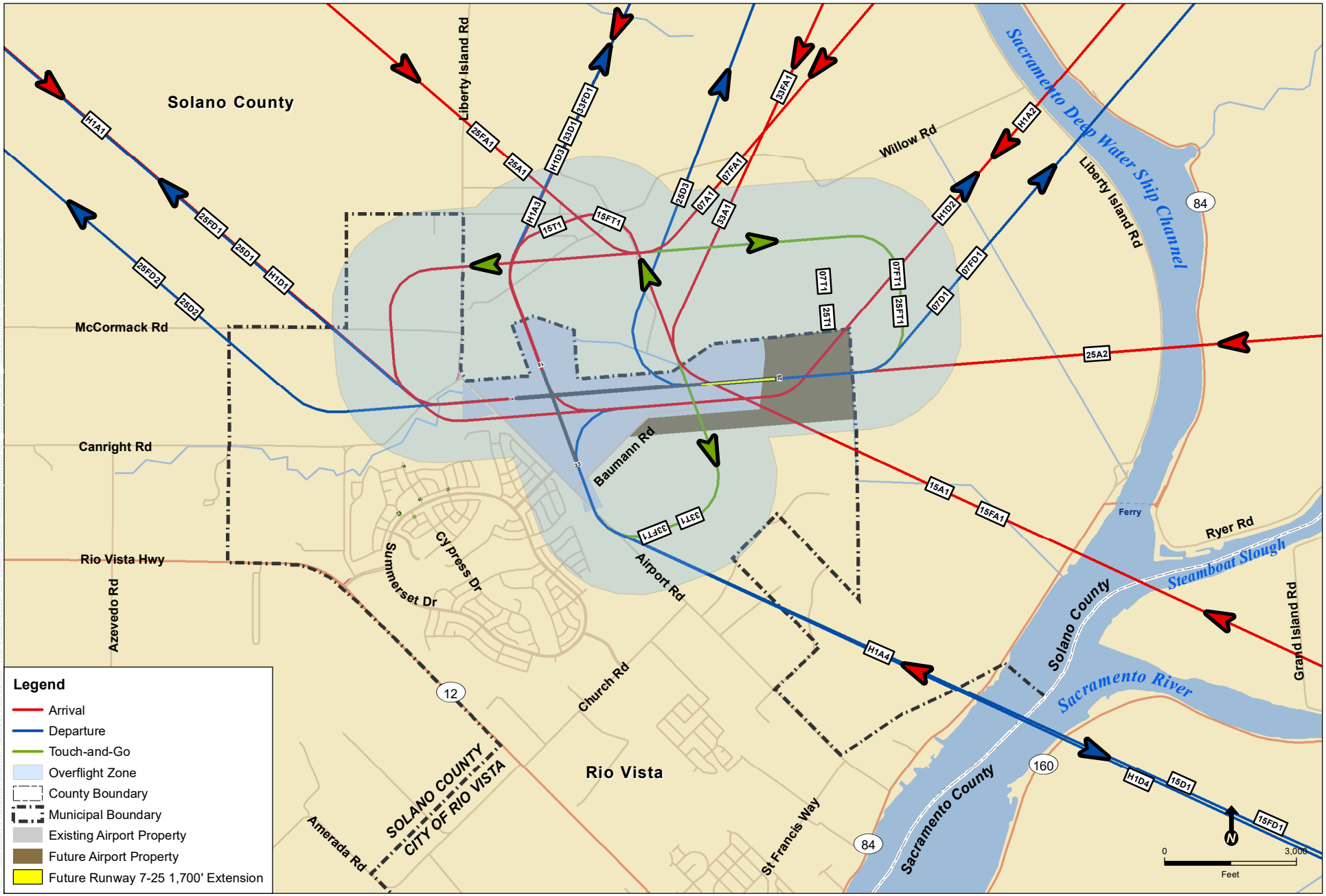
Based on aircraft noise exposure in the vicinity of Rio Vista Airport, existing and future populations living near or within specific overflight zones will need to be informed of the aircraft noise levels and potential nuisance of overflight. Acceptability of a particular noise level, with respect to a specific land use type, will be a function of the noise level and land use.

1. The overflight zone is based upon the aircraft activity scenario presented in the forecast noise contours (see Appendix C).

2. Concurrent with the noise standards, the ALUC should periodically review the forecast noise exposure level contours and update them if appropriate. Reviews should occur at least every five years and should take place sooner if the forecast number of the aircraft operations or the aircraft fleet mix change in a manner not reflected in this ALUCP.

OP-2 Disclosure

Realtors shall provide disclosure notices to all new home buyers for the properties located within the overflight zone.



SOURCE: ESA, 2017; ESRI Mapping Services

Rio Vista Municipal Airport ALUCP.150732

Figure 7

Overflight Zone

ESA

5.6 Renewable Energy Policies

With the increase in both energy demand and renewable energy technology, renewable energy facilities have developed across several areas of Solano County. The ALUC shall apply the following renewable energy (RE) policies to account for wind turbine and solar facilities.

RE-1 Wind Turbine Facilities

As pertains to wind turbine facilities, the Rio Vista ALUCP defers to the policies included in the Travis AFB LUCP. Please see Section 5.6.1 of the Travis AFB LUCP.

RE-2 Solar Facilities

Solar facilities can create reflective glint and glare hazards to aircraft pilots and air traffic controllers. The FAA advises the use of, and Rio Vista Airport employs, the Sandia National Laboratories-developed Solar Glare Hazard Analysis Tool (SGHAT) that allows a user to analyze proposed photovoltaics array systems and recommends mitigation methods if needed. This method provides high-accuracy predictions of potential impacts on airport sensitive receptors and allows for evaluation of design alternatives to avoid glare impacts.

1. No commercial-scale solar facility shall have a potential for glint or glare at Rio Vista Airport. No commercial-scale solar facility shall have a potential for glare or more than a low potential for after-image along the final approach path for any existing landing threshold or future landing threshold (including any planned interim phases of the landing thresholds) as shown on the Airport Layout Plan (see Appendix J) for Rio Vista Airport. All new or expansion of existing commercial-scale solar facilities shall be reviewed by the ALUC and shall be required to conduct a glint and glare study based on the Sandia National Laboratories-developed SGHAT model, in order to demonstrate no glint or glare risk. These ALUCP policies concerning solar facilities are minimum requirements. The FAA may issue further policies or guidance in the future which may also be applicable to solar facilities within the AIA or to environmental review of those facilities. (See FAA, Interim Policy, FAA Review of Solar Energy Systems Projects on Federally Obligated Airports, 78 Fed. Reg. 63277 (Oct. 23, 2013), stating that the FAA plans to publish an update to its *Technical Guidance for Evaluating Selected Solar Technologies on Airports*.)

5.7 Height Policies

The ALUC shall apply the following Height (H) policies to meteorological towers, other types of towers, and tall objects within the AIA.

H-1 Meteorological Towers

Meteorological towers can pose a safety hazard for low-flying aircraft, affecting pilots and aircraft operations.

1. All proposed new or expanded meteorological towers 100 feet AGL in height or greater in Safety Zone 4, or 200 feet AGL or greater in Safety Zones 5 and 6, whether temporary or permanent, shall require ALUC review.

2. All meteorological towers, whether temporary or permanent, regardless of height, shall be subject to the height requirements stated elsewhere in this ALUCP.

3. All meteorological towers, regardless of height and whether temporary or permanent, shall be marked and lighted for safety in adherence with the FAA's marking and lighting requirements contained in FAA Advisory Circular AC-70/7460-1K, *Obstruction Marking and Lighting*. The requirements of Public Utilities Code section 21417, requiring marking of meteorological towers of certain heights in certain locations, may supersede Policy H-1, to the extent section 21417 requires marking. If section 21417 ceases to be in effect, its requirements would not supersede this paragraph. The requirements of this Policy and section 21417 are a minimum, and it is encouraged that meteorological towers be marked and lighted to any greater extent as may be prudent as industry practice improves.

H-2 Objects Greater Than 100 feet AGL

In addition to meteorological towers, other types of towers and tall objects can pose a safety hazard for low-flying aircraft, affecting pilots and aircraft operations.

1. All proposed new or expanded objects 100 feet in height AGL or greater in Safety Zone 4, or 200 feet AGL or greater in Safety Zones 5 and 6 and Zone 7, whether temporary or permanent, shall require ALUC review and shall be subject to the height requirements stated elsewhere in this ALUCP. This includes wind turbine facilities (which are also subject to the policies of the Travis AFB LUCP). Proponents of proposed wind turbines in the Rio Vista AIA should first ascertain whether they meet the requirements of the Travis AFB LUCP and if so, further determine whether they meet the height restrictions included in this ALUCP and the requirements of 14 CFR Part 77.

2. All proposed new or expanded objects 100 feet in height AGL or greater in Safety Zone 4, or 200 feet AGL or greater in Safety Zones 5 and 6 and Zone 7, whether temporary or permanent, shall be marked and lighted for safety. Unless otherwise specified by the ALUC, each new or expanded structure under this Policy must, at a minimum, conform to the FAA's marking and lighting specifications set forth in the FAA's final determination of "no hazard" and the associated FAA study for that particular structure. For purposes of this Policy, any specifications, standards, and general requirements set forth by the FAA in the structure's determination of "no hazard" and the associated FAA study are mandatory, and project applicants shall be bound to implement those specifications through appropriate project approvals and entitlements. Additionally, each structure under this Policy must be marked and lighted in accordance with any marking and lighting requirements prescribed by the ALUC. The requirements of this paragraph 5.7.2(b) apply to meteorological towers and to other objects greater than 100 feet AGL in height.

3. To the extent that the FAA does not provide marking and lighting specifications for a proposed object taller than 100 feet AGL, due to the height or type of the object or for any other reason, the requirements and specifications for marking and lighting the particular proposed object for safety shall be determined after consideration of any FAA requirements for the same or similar type of object.

5.8 Wildlife Hazards

Figure 8 depicts two wildlife hazard zones, the Inner WHA Boundary and the Outer WHA Boundary, which contain specific development requirements. The Inner WHA Boundary is coterminous with the Traffic Pattern Boundary as represented by Safety Zone 6. The Outer WHA Boundary is located five miles from the farthest edge of the Airport's Air Operations Area (AOA), which the FAA recommends for any hazardous wildlife attractant if the attractant could cause hazardous wildlife movement into or across the approach or departure airspace. FAA Advisory Circular 150/5200-33B provides guidance for minimizing the risks that certain wildlife

species pose to aircraft. The Inner WHA Boundary is based on the fact that Rio Vista Airport serves piston-powered aircraft. Together, these perimeters encompass all safety zones and present additional conditions on certain types of land uses that are known to attract wildlife that are hazardous to aircraft operations. See FAA Circular 150/5200-33B in Appendix G for specific land use details and restrictions, including a description of conflicting land uses. The ALUC shall apply the following Wildlife Hazard (WH) policies within the AIA. The following policies do not apply to existing land uses.[3]

Land uses identified in **Table 3** are known to attract certain species groups in Solano County, as described in more detail in Appendix H.

WH-1 Known Wildlife Hazards in Solano County - Inner WHA Boundary:

Within the Inner WHA Boundary as shown on Figure 8, new or expanded land uses involving discretionary review that has the potential to attract wildlife and cause bird strikes are required to prepare a wildlife hazard analysis (WHA). Reviewing agencies shall prepare a WHA for projects that have the potential to attract wildlife that could cause bird strikes. Expansion of existing wildlife attractants includes newly created areas and increases in enhanced or restored areas. The WHA must demonstrate wildlife attractants that may pose hazards to aircraft in flight will be minimized.

WH-2 Known Wildlife Hazards in Solano County - Outer WHA Boundary:

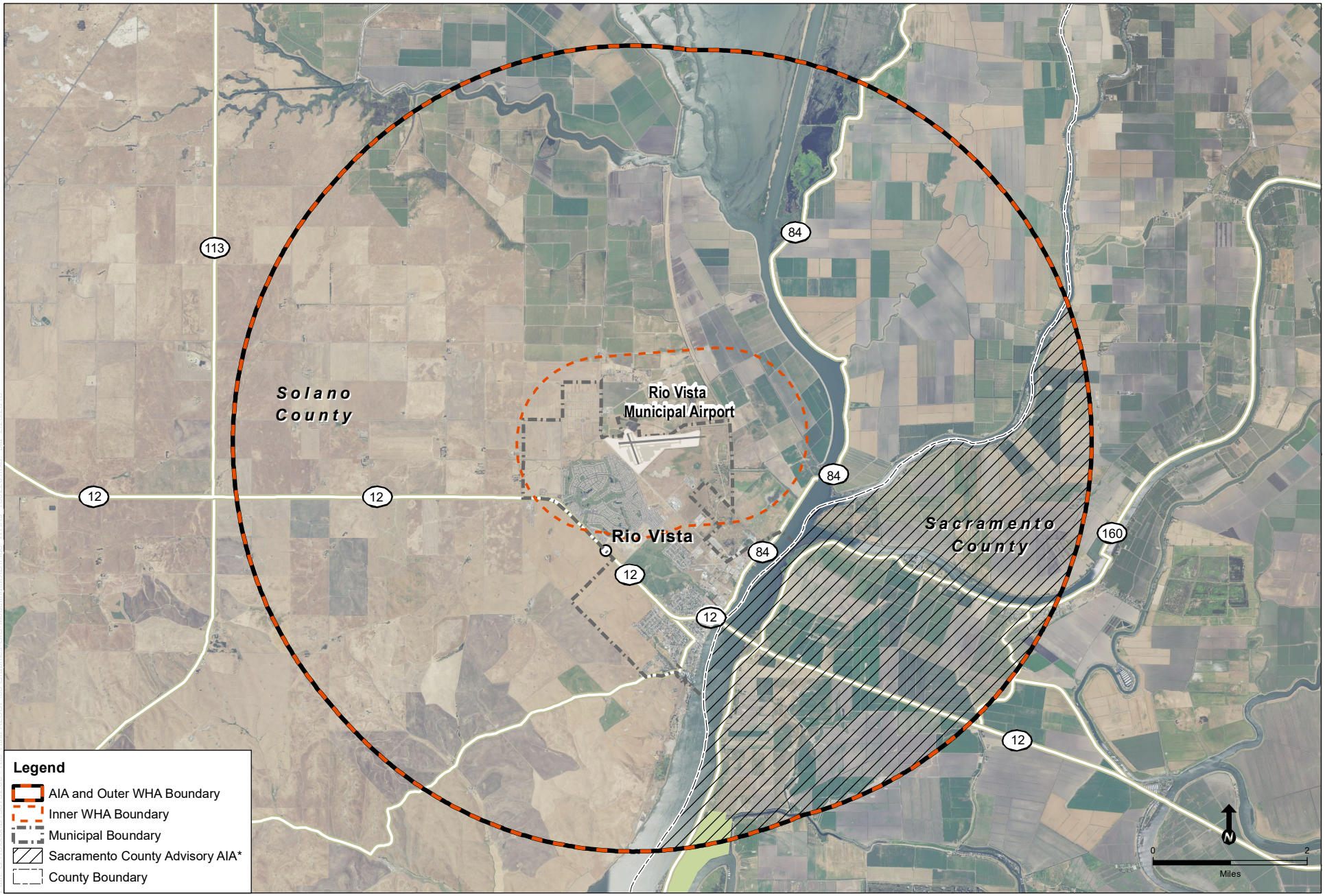
Outside the Inner WHA Boundary but within the Outer WHA Boundary, as shown on Figure 8, any new or expanded land use involving discretionary review that has the potential to attract the movement of wildlife and cause bird strikes are required to prepare a WHA. Expansion of existing wildlife attractants includes newly created areas and increases in enhanced or restored areas. All reasonably feasible mitigation measures must be incorporated into the planned land use. The WHA must demonstrate wildlife movement that may pose hazards to aircraft in flight will be minimized.

WH-3 Environmental Review Compliance:

1. All discretionary projects located within the Inner WHA Boundary or Outer WHA Boundary are required to consider the potential for the project to attract hazardous wildlife, wildlife movement, or bird strike hazards as part of the environmental review process required by the California Environmental Quality Act (CEQA).

2. Because biological and hazard impacts are required to be examined in the context of CEQA compliance, it is anticipated that most projects will develop the information necessary to prepare a WHA and demonstrate compliance with this Policy WH-3 as part of the CEQA process, and that separate documentation will not be needed. Proposed projects within the Inner WHA Boundary that have the potential to cause a significant adverse impact under Policy WH-1, with or without mitigation, shall be reviewed by the ALUC (including but not limited to projects requiring an environmental impact report, mitigated negative declaration, or equivalent document).

[3] Land uses in existence that do not meet the wildlife hazard policies of this ALUCP, upon adoption, are not required to eliminate existing wildlife hazards. Thus, existing activities and uses would be allowed to remain, and only new or expanded land uses are required to meet the aforementioned standards. It should be noted that these regulations are not intended to prohibit existing agricultural activities.



SOURCE: California Airport Land Use Planning Handbook, October 2011; ESA, 2016; ESRI Mapping Services

*NOTE: Crosshatched areas are in Sacramento County, outside the jurisdiction of the Solano County Airport Land Use Commission. The Rio Vista ALUCP is advisory only in these areas

Rio Vista Municipal Airport ALUCP.150732

Figure 3

Rio Vista Municipal Airport
Wildlife Hazard Analysis Boundaries

ESA

TABLE 3
SPECIES GROUPS KNOWN TO BE ATTRACTED TO LAND USE TYPES IN SOLANO COUNTY

Land Use Type/Habitat Feature	Species Group(s) Known to be Attracted to Land Use Type/Habitat Feature
Public Parks	Swallows, sparrows, blackbirds/starlings, crows/ravens, doves, pigeons, geese and ducks
Golf Courses	Geese and ducks, blackbirds/starlings, sparrows, swallows
Water Treatment Plants	Geese and ducks, cormorants/pelicans, herons, shorebirds
Landfills	Gulls, blackbirds/starlings, vultures
Agricultural Lands	Hawks, vultures, blackbirds/starlings, crows/ravens
Rivers and Creeks	Egrets, songbirds, geese and ducks, mammals such as raccoons and otters
Estuarine/Wetland Habitat	Shore birds, blackbirds, geese and ducks, egrets, cormorants, pelicans
Open Space	Hawks, swallows, sparrows, kestrels, coyote, owls, turkey/pheasants, osprey, eagles, vultures

NOTE:
Table 3 is not comprehensive; it provides general groups of wildlife that may use each land use type/habitat feature.

SOURCE: ESA, 2015.

6. ALUC Review Procedures for the Rio Vista ALUCP

6.1 General Applicability

6.1.1. Purpose and Precedence.

(a) Purpose — These Solano County Airport Land Use Commission Review Procedures serve two functions:

(1) To articulate the criteria, in accordance with the California State Aeronautics Act, which the County of Solano and affected cities in the county:

(i) Shall use as the basis for referring specified land use development proposals to the Solano County ALUC for review.

(ii) Shall apply when modifying their respective general plans and zoning ordinances to be consistent with the ALUC's ALUCP for Rio Vista Airport.

(iii) Shall consider when making other planning decisions regarding the proposed development of lands impacted by airport operations.

(2) To define the process by which the ALUC:

(i) Shall review proposed land use development in Solano County and affected cities within the county for compatibility with airport activity.

(ii) Shall review certain types of airport and military airfield development proposals which are also subject to ALUC review.

(b) Precedence — This Review Procedures chapter comprises one portion of the ALUCP for Rio Vista Airport in Solano County.

(1) The procedural policies set forth herein apply to Rio Vista Airport.

(2) The earlier chapters of this document establish the policies — in the form of criteria and maps — by which the compatibility of land use development around Rio Vista Airport is to be evaluated.

6.1.2. Geographic Scope — These Solano County Airport Land Use Compatibility Review Procedures apply to:

(a) Airport Influence Area

(1) All lands on which the uses could be negatively affected by present or future aircraft operations at Rio Vista Airport, as well as lands on which the uses could negatively affect Rio Vista Airport.

(2) The specific limits of the influence area for Rio Vista Airport are depicted on the maps contained within this ALUCP.

(3) ALUC jurisdiction extends no further than the Solano County line. The ALUC's role is only advisory to areas that fall within the AIA for Rio Vista Airport outside Solano County (See Policy 6.1.4(d)).

(b) *Countywide Impacts on Flight Safety* — Other lands, regardless of their location in the county, on which certain land use characteristics could adversely affect the safety of flight in the county. The specific uses of concern are identified in Policy 6.1.4 (c)(3).

6.1.3. Types of Airport and Military Airfield Impacts

(a) Principal Compatibility Concerns include:

(1) Exposure of land uses and people to aircraft noise;

(2) Land use safety — the risks, both to people on the ground and the occupants of aircraft, associated with aircraft accidents near airports and military airfields;

(3) Protection of airport and military airspace from hazards to flight;

(4) General concerns, especially annoyance, related to aircraft overflights; and

(5) Protecting the operations of military installations.

6.1.4. Types of Actions Reviewed

(a) Actions Which Always Require Airport Land Use Commission Review — As required by state law, the following types of actions shall be referred to the ALUC for determination of consistency with the ALUCP prior to their approval by the local jurisdiction:

(1) The adoption or approval of any amendment to a general or specific plan affecting the property within an AIA (Pub. Util. Code, § 21676(b)).

(2) The adoption or approval of a zoning ordinance, building regulation, or other land use ordinances and regulations that affects property within the AIA.

(3) Adoption or modification of the master plan for an existing public-use airport or military airfield (Pub. Util. Code, § 21676(c)).

(4) Any proposal for expansion of an existing airport, heliport, or military airfield if such expansion will require an amended airport permit from the state of California (Pub. Util. Code, § 21664.5).

(5) Any proposal for a new airport, heliport, or military airfield, whether for public use or private use (Pub. Util. Code, § 21661.5), if the facility requires an Airport Permit or Heliport Permit issued by the California Department of Transportation.

(b) Other Land Use Actions Subject to Airport Land Use Commission Review — In addition to the above types of land use actions for which ALUC review is

mandatory, other types of land use actions are subject to review under the following circumstances:

(1) Until such time as (1) the ALUC finds that a local agency's general plan or specific plan is consistent with an ALUCP as presently adopted or as amended in the future or (2) the local agency has overruled the ALUC's determination of inconsistency, state law requires the local agency to refer all actions, regulations, and permits involving land within the Rio Vista AIA to the ALUC for review (Pub. Util. Code, § 21676.5(a)).

(2) After a local agency has revised its general plan or specific plan for consistency with the ALUCP (see Policy 6.2.4 (b)) or has overruled the ALUC, the ALUC no longer has authority under state law to require that all actions, regulations, and permits be referred for review. However, the ALUC and the local agency can agree that the ALUC should continue to review individual projects in an advisory capacity.

    (i) The ALUC requests local agencies to continue to submit major land use actions as listed in Policy 6.1.4 (c). ALUC review of these types of projects can serve to enhance their compatibility with airport activity.

        (a) For the Rio Vista AIA, ALUC review is requested for actions that concern locations within Safety Zone 1, 2, 3, 4, 5, and 6, as well as objects 200 feet AGL or greater in height in the rest of the AIA. All proposed or new or expansion of existing commercial-scale solar facilities and all proposed projects within the Inner or Outer WHA Boundary that have the potential to cause a significant adverse impact under Policies WH-1 or WH-2, with or without mitigation, shall also be reviewed by the ALUC (including but not limited to projects requiring an environmental impact report, mitigated negative declaration, or equivalent document).

    (ii) Review of these actions is requested only if a review of the major land use action has not previously been conducted as part of a general plan, specific plan, or zoning ordinance action or if sufficient project-level detail to enable a full assessment of compatibility was not available at the time of a previous review.

    (iii) Because the ALUC is acting in an advisory capacity when reviewing projects under these circumstances, local jurisdictions are not required to adhere to the overruling process if they elect to approve a project without incorporating design changes or conditions suggested by the ALUC.

(3) Proposed redevelopment of a property for which the existing use is consistent with the local general plan and/or specific plan, but nonconforming with the compatibility criteria set forth in the applicable ALUCP, shall be subject to ALUC review. This policy is intended to address circumstances which arise when a general or specific plan land use designation does not conform to ALUC compatibility criteria, but is deemed consistent with the ALUCP because the designation reflects an existing land use. Proposed redevelopment of such lands voids the consistency status and is to be treated

as new development subject to ALUC review even if the proposed use is consistent with the local general plan or specific plan. (Also see Policies 6.2.4 (b), 6.2.4 (c)(2), and 6.2.4 (c)(3))

(c) Major Land Use Actions — The scope or character of certain proposed major land use actions, as listed below, is such that their compatibility with airport activity is a potential concern. Even though these actions may be basically consistent with the local general plan or specific plan, sufficient detail may not be known to enable a full airfield compatibility evaluation at the time that the general plan or specific plan is reviewed. To enable better assessment of compliance with the compatibility criteria set forth in the ALUCPs, ALUC review of these actions may be warranted. The circumstances under which ALUC review of these actions is to be conducted are indicated in Policy 6.2.3 below.

(1) Actions affecting land uses within the AIA.

(i) Any proposed expansion of the sphere of influence of a city or special district.

(ii) Proposed pre-zoning associated with future annexation of land to a city.

(iii) Proposed land acquisition by a government entity for any facility accommodating a congregation of people (for example, a school or hospital).

(iv) Any off-airport, non-aviation use of land within a runway protection zone at Rio Vista Airport.

(v) Any object having a height which requires review by the FAA in accordance with 14 CFR Part 77.

(vi) Any project having the potential to attract hazardous wildlife to the vicinity of Rio Vista Airport.

(vii) Any project having the potential to create electrical, operational, or visual hazards to aircraft in flight, including:

(a) Electrical interference with radio communications or navigational signals;

(b) Lighting that could be mistaken for airport lighting;

(c) Glint or glare in the eyes of pilots of aircraft using the airport;

(d) High-velocity exhaust plumes;

(e) Impaired visibility near the airport, and

(f) Operational interference with Rio Vista Airport’s radar facilities including but not limited to interference caused by wind turbines.

(viii) Any proposed commercial and non-commercial wind turbine projects greater than 100 feet in height AGL.

(ix) Any proposed new commercial-scale solar facilities.

(x) Any proposed new or expanded meteorological towers greater than 100 feet in height AGL in Safety Zone 4, or greater than 200 feet in height AGL in Safety Zones 5 and 6, whether temporary or permanent.

(xi) Any proposed projects within the Inner or Outer WHA Boundaries, concerning wildlife hazards, that have the potential to cause a significant adverse impact under Policies WH-1 or WH-2, with or without mitigation.

(xii) All proposed new or expanded objects greater than 100 feet in height AGL in Safety Zone 4, or greater than 200 feet in height AGL in Safety Zones 5 and 6, whether temporary or permanent.

(2) Proposed non-aviation development of military airfield property (excluding federally owned property) if such development has not previously been included in an airport master plan or community general plan reviewed by the ALUC. (See Appendix I, Glossary, for a definition of aviation-related use.)

(3) Regardless of location within the AIA, any proposal for construction or alteration of a structure (including but not limited to antennas) taller than 200 feet AGL at the site. (Such structures also require notification to the FAA in accordance with 14 CFR Part 77, Paragraph 77.13(a)(1).)

(4) Any other proposed land use action, as determined by the local planning agency, involving a question of compatibility with military airfield activities.

(d) Intercounty Coordination — Where the Rio Vista AIA crosses the Solano County line, affected jurisdictions outside of the county are asked to coordinate with the Solano County ALUC on airport land use compatibility issues.

(1) The ALUC requests the opportunity to comment upon any major land use actions, as defined above, proposed to be situated within the portions of Rio Vista AIA that extend into adjacent counties.

(2) Any county adjacent to Solano County or any city or other agency within such counties which may be considering proposed establishment or expansion of an airport within three miles, or a heliport within one mile, of the Solano County boundary should inform the Solano County ALUC of such proposal.

(3) Solano County ALUC review of such actions is advisory only. The ALUC has no jurisdiction over development outside Solano County boundaries.

6.2 Review of Land Use Actions

6.2.1. General

(a) *Timing of Project Submittal* — Proposed actions listed in Policy 6.1.4 should be referred to the ALUC at the earliest reasonable point in time so that the ALUC's review can be duly considered by the local jurisdiction prior to formalizing its actions. The timing may vary depending upon the nature of the specific project. However, all projects must be submitted to the ALUC for review prior to final approval by the local government entity.

6.2.2. Review Process for Community Land Use Plans and Ordinances

(a) Initial Airport Land Use Commission Review of General Plan Consistency — In conjunction with adoption or amendment of the Rio Vista ALUCP, the ALUC shall review the general plans and specific plans of affected local jurisdictions to determine their consistency with the ALUC's policies.

(1) Within 180 days of the ALUC's adoption or amendment of an ALUCP, each local agency must amend its general plan and any applicable specific plan to be consistent with the ALUC's plan or, alternatively, adopt findings and overrule the ALUC in accordance with section 21676(b) of the Public Utilities Code (Govt. Code, § 65302.3).

(2) Prior to taking action on a proposed amendment, the local agency must submit a draft of the proposal to the ALUC for review and approval.

(3) In conjunction with its submittal of a general plan or specific plan amendment to the ALUC, a local agency may request that the ALUC modify the areas defined as "infill" in accordance with Policy 6.2.4 (c). The ALUC will include a determination on the infill as part of its action on the consistency of the general plan and specific plans.

(b) Subsequent Reviews of Land Use Development Proposals — As indicated in Policies 6.1.4 (a)(1) and 6.1.4 (a)(2), prior to taking action to adopt a new or amended (or amendment to) a general plan or specific plan or the addition or approval of a zoning ordinance or building regulation affecting an AIA as defined herein, local agencies must submit the proposed plan, ordinance, or regulation to the ALUC for review. Subsequent land use development that is consistent with applicable, previously reviewed, local plans, ordinances, and regulations is subject to ALUC review only under the conditions indicated in Policies 6.1.4 (b) and 6.2.3 (d).

(c) Project Submittal Information — Proposed community land use plans and ordinances submitted to the ALUC for review shall include:

(1) A properly completed ALUC Application Form, available from the County Department of Resource Management.

(d) Airport Land Use Commission Action Choices — When reviewing a general plan, specific plan, zoning ordinance, or building regulation for consistency with the Rio Vista ALUCP, the ALUC has three choices of action:

(1) Find the plan, ordinance, or regulation consistent with the Rio Vista ALUCP. To make such a finding with regard to a general plan, the conditions identified in Policy 6.2.4 (b) must be met.

(2) Find the plan, ordinance, or regulation consistent with the Rio Vista ALUCP, subject to conditions and/or modifications that the ALUC may require. Any such conditions should be limited in scope and described in a manner that allows compliance to be clearly assessed.

(3) Find the plan, ordinance, or regulation inconsistent with the Rio Vista ALUCP. In making a finding of inconsistency, the ALUC shall note the specific conflicts or shortcomings upon which its determination is based.

(e) Response Time

The ALUC must respond to a local agency's request for a consistency determination on a general plan, specific plan, zoning ordinance, or building regulation within 60 days from the date of referral (Pub. Util. Code, § 21676(d)).

(1) If the ALUC fails to make a determination within that period, the proposed action shall be deemed consistent with the Rio Vista ALUCP.

(2) Regardless of ALUC action or failure to act, the proposed action must comply with other applicable local, state, and federal laws and regulations.

(3) The referring agency shall be notified of the ALUC's action in writing.

6.2.3. Review Process for Major Land Use Actions

(a) Project Submittal Information — A proposed major land use action submitted to the ALUC for review shall include:

(1) The following information:

(i) Property location data (assessor's parcel number, street address, subdivision lot number).

(ii) An accurately scaled map showing the relationship of the project site to the airport boundary and runways.

(iii) A description of existing and proposed land uses.

(iv) The type of land use action being sought from the local jurisdiction (e.g., zoning change).

(v) For residential uses, an indication of the potential or proposed number of dwelling units per acre (including any secondary units on a parcel); or, for nonresidential uses, the number of people potentially occupying the total site or portions thereof at any one time.

(vi) A detailed site plan showing ground elevations, the location of structures, open spaces, and water bodies, and the heights of structures and trees.

(vii) Identification of any characteristics that could create electrical interference, confusing lights, glare, smoke, high-velocity exhaust plumes, or other electrical or visual hazards to aircraft flight.

(viii) Any environmental document (initial study, draft environmental impact report, etc.) that may have been prepared for the project.

(ix) Any staff reports regarding the project that may have been presented to local agency decision makers.

(x) Other relevant information that the ALUC or its staff determine to be necessary to enable a comprehensive review of the proposal, either through publication of generally applicable application instructions or on a case-by-case basis considering the circumstances of a particular proposal. An ALUC Application Form is available from the County Department of Resource Management.

(2) Any applicable review fees as established by the Solano County ALUC.

(b) Airport Land Use Commission Action Choices — When reviewing a major land use project proposal, the ALUC has three choices of action:

(1) Find the project consistent with the Rio Vista ALUCP.

(2) Find the project consistent with the Rio Vista ALUCP, subject to compliance with such conditions as the ALUC may require. Any such conditions should be limited in scope and be described in a manner that allows compliance to be clearly assessed (e.g., the height of a structure).

(3) Find the project inconsistent with the Rio Vista ALUCP. In making a finding of inconsistency, the ALUC shall note the specific conflicts upon which its determination is based.

(c) Response Time — State law does not set a time limit for airport land use commissions to review land use actions other than amendment of a general plan or specific plan or the addition or approval of a zoning ordinance or building regulation. Nevertheless, the policy of the Solano County ALUC is that:

(1) When a major land use action is submitted for review on a mandatory basis as required by Policy 6.1.4 (b)(1):

(i) Reviews of projects forwarded to the ALUC for a consistency determination shall be completed within 60 days of the date of project referral.

(ii) The date of referral is deemed to be the date on which all applicable project submittal information as listed in Policy 6.2.3(a) is received by the ALUC Secretary.

(iii) If the ALUC fail to make a determination within the above time periods, the proposed action shall be deemed consistent with the Rio Vista ALUCP.

(2) When a major land use action is submitted on an optional basis in accordance with Policy 6.1.4(b)(2), review by the ALUC should be completed in a timely manner enabling the comments to be considered by decision-making bodies of the submitting agency.

(3) Regardless of action or failure to act on the part of the ALUC, the proposed action still must comply with other applicable local, state, and federal laws and regulations.

(4) The referring agency shall be notified of the ALUC's action in writing.

(d) Subsequent Review — Once a project has been found consistent with the relevant ALUCP or plans, it need not be referred for review at subsequent stages of the planning process (e.g., for a use permit after a zoning change has been reviewed) unless:

(1) Insufficient information was available at the time of the ALUC's original review of the project to assess whether the proposal would be fully in compliance with compatibility criteria (e.g., the site layout and structure height might not be known at the time a general plan change or zoning amendment is requested).

(2) The design of the project subsequently changes in a manner that reopens previously considered compatibility issues and could raise questions as to the validity of the earlier finding of compatibility. Changes warranting a new review include, but are not limited to, the following:

(i) An increase in the number of dwelling units, intensity of use (more people on the site), or other usage characteristics to levels exceeding the criteria set forth in the Rio Vista ALUCP;

(ii) A proposed increase in the height of structures or other design features such that the height limits established by the Rio Vista ALUCP would be exceeded (or exceeded by a greater amount);

(iii) Major site design changes (such as incorporation of clustering or modifications to the configuration of open land areas proposed for the site) if site design was an issue in the initial project review; and/or

(iv) Any significant change to a proposed project for which a special exception was granted in accordance with Policy 6.2.4(c)(6).

(3) The local jurisdiction concludes that further review is warranted.

6.2.4. Review Criteria for Land Use Actions

(a) Compatibility Criteria — The compatibility criteria applicable to the review of proposed land use actions at Rio Vista Airport are set forth in this document.

Additional factors pertaining to the review of general plans as described in Policy 6.2.4(b), as well as the special conditions cited in Policy 6.2.4(c), shall also be taken into account.

(b) General Plan Consistency with the Rio Vista Airport Land Use Compatibility Plan — In order for a general plan to be considered consistent with the Rio Vista ALUCP, both of the following must be accomplished:

(1) *Elimination of Direct Conflicts.* No direct conflicts can exist between the two plans.

(i) Direct conflicts primarily involve general plan land use designations that do not meet the density or intensity criteria specified in the Rio Vista ALUCP although conflicts with regard to other policies also may exist.

(ii) Note, however, that a general plan cannot be found inconsistent with the Rio Vista ALUCP because of land use designations that reflect actual existing land uses already currently devoted to incompatible uses even if those designations conflict with the ALUC's compatibility criteria. Because ALUCs have no authority over existing land uses to the extent already currently devoted to incompatible uses, general plan land use designations that merely reflect the existing uses for such parcels at the time this ALUCP is adopted are, in effect, excluded from requirements for general plan consistency with the ALUC plan. This exception is applicable only if the general plan includes policies setting limitations on expansion and reconstruction of nonconforming uses consistent with Policies 6.2.4(c)(2) and 6.2.4(c)(3).

(2) *Assurance of Compliance with Compatibility Criteria.* Provisions must be made for evaluation of proposed land use development situated within the AIA relative to the compatibility criteria set forth in the Rio Vista ALUCP.

(i) Even if the land use designations in a general plan have been deemed consistent with the Rio Vista ALUCP, evaluation of the proposed development relative to the land use designations alone is usually insufficient. General plans typically do not contain the detailed airport land use compatibility criteria necessary for a complete compatibility evaluation of proposed development.

(ii) Local jurisdictions must choose among the following options, or a combination thereof, for satisfying this evaluation requirement:

(a) Sufficient detail can be included in the general plan and/or referenced implementing ordinances and regulations to enable the local jurisdiction to assess whether a proposed development fully meets the compatibility criteria specified in the Rio Vista ALUCP (this requires both that the compatibility criteria be identified and that project review procedures be described);

(b) The Rio Vista ALUCP can be adopted by reference (additionally, the project review procedure must be described in a separate document presented to and approved by the ALUC); and/or

(c) The general plan can indicate that all major land use actions, as listed in Policy 6.1.4(c) or otherwise agreed to by the ALUC, shall be referred to the ALUC for review in accordance with the policies of Policy 6.2.3.

(iii) The status of ALUC review of major land use actions depends upon which of the options in Sub-Policy (ii) above the local agency selects for making its general plan consistent with the Rio Vista ALUCP. This status, in turn, affects whether a local agency would be required to utilize the overruling process in the event of a disagreement with the ALUC's action.

(a) If either of the first two options under Sub-policy (ii) above is selected, then referral of major land use actions to the ALUC is voluntary. In this case, the ALUC's review is advisory and the local agency would not need to utilize the overruling process if it elects to approve a project without incorporating the ALUC's comments.

(b) If the third option is chosen, submittal of major land use actions for ALUC review is mandatory and overruling procedures would apply.

(c) Special Conditions

(1) Infill — Where development not in conformance with the criteria set forth in Rio Vista ALUCP already exists, additional infill development of similar land uses may be allowed to occur even if such land uses are to be prohibited elsewhere in the zone. This Policy 6.2.4 (c)(1) does not apply to, and does not allow additional infill development for, wind turbines, meteorological towers, power or communications towers, antennas, or similar objects.

(i) A parcel can be considered for infill development if it meets all of the following criteria plus the applicable provisions of either Sub-policy (b) or (c) below:

(a) The parcel size is no larger than 10.0 acres.

(b) At least 65% of the site's perimeter is bounded by adjacent (including across roads) existing uses similar to, or more intensive than, those proposed.

(c) The proposed project would not extend the perimeter of the area defined by the surrounding, already developed, incompatible uses.

(d) Further increases in the residential density, nonresidential usage intensity, and/or other incompatible design or usage characteristics

(e.g., through use permits, density transfers, addition of second units on the same parcel, height variances, or other strategy) are prohibited.

(e) The area to be developed cannot previously have been set aside as open land in accordance with policies contained in the Rio Vista ALUCP unless replacement open land is provided within the same safety zone.

(ii) For residential development, the development density (dwelling units per gross acre) shall not exceed the lesser of:

(a) The average density represented by all existing lots that lie fully or partially within a distance of 300 feet from the boundary of the parcel to be divided; or

(b) Double the density permitted in accordance with the criteria for that location as indicated in the Rio Vista ALUCP.

(iii) For nonresidential development, the usage intensity (the number of people per gross acre) of the proposed use shall not exceed the lesser of:

(a) The average intensity of all existing uses that lie fully or partially within a distance of 300 feet from the boundary of the proposed development; or

(b) Double the intensity permitted in accordance with the criteria for that location as indicated in the Rio Vista ALUCP.

(iv) Infill development on some parcels should not enable additional parcels to then meet the qualifications for infill. The ALUC's intent is that parcels eligible for infill be determined just once. Thus, in order for the ALUC to consider proposed development under these infill criteria, the entity having land use authority (Solano County or affected cities) must first identify the qualifying locations in its general plan or other adopted planning document approved by the ALUC. This action may take place in conjunction with the process of amending a general plan for consistency with the ALUC plan or may be submitted by the local agency for consideration by the ALUC at the time of adoption of the Rio Vista ALUCP. In either case, the burden for demonstrating that a proposed development qualifies as infill rests with the project proponent and/or affected land use jurisdiction.

(2) Nonconforming Uses — Uses not in conformance with the Rio Vista ALUCP may only be expanded as follows:

(i) A nonconforming residential use may be expanded in building size provided that the expansion does not result in more dwelling units than currently exist on the parcel (a bedroom could be added, for example,

but a separate dwelling unit could not be built). No ALUC review of such improvements is required.

(ii) A nonconforming nonresidential development may be expanded provided that no such use shall be expanded in height, size, dimension, or area or increased in intensity (the number of people per acre) above the levels existing at the time of adoption of the Rio Vista ALUCP. No ALUC review of such changes is required.

(iii) ALUC review is required for any proposed expansion of a nonconforming use. Factors to be considered in such reviews include whether the development qualifies as infill (Policy 6.2.4 (c)(1)) or warrants approval because of other special conditions (Policy 6.2.4 (c)(6)).

(3) Reconstruction — An existing nonconforming development that has been fully or partially destroyed as the result of a calamity may be rebuilt only under the following conditions:

(i) Nonconforming residential uses may be rebuilt provided that the expansion does not result in more dwelling units than existed on the parcel at the time of the damage.

(ii) A nonconforming nonresidential development may be rebuilt, even if completely destroyed, provided that the reconstruction does not increase the height, size, dimension or area of the previous structure or result in an increased intensity of use (i.e., more people per acre).

(iii) Reconstruction under Paragraphs (i) or (ii) above must begin within 12 months and be completed within 24 months of the date that the damage occurred. Upon request, the ALUC may grant an extension to these time limits.

(iv) Nonconforming uses situated within a runway protection zone or clear zone should not be rebuilt regardless of whether they meet the above conditions.

(v) Nothing in the above policies is intended to preclude work required for normal maintenance and repair.

(4) Development by Right — Nothing in these policies prohibits construction or alteration of a single-family home on a legal lot of record if such use is permitted by local land use regulations. Construction of other types of uses also may proceed if local government approvals qualify the development as effectively existing (see Appendix I for definition).

(5) Parcels Lying within Two or More Safety Zones — For the purposes of evaluating consistency with the compatibility criteria set forth herein, any parcel that is split by safety zone boundaries shall be considered as multiple parcels divided at the safety zone boundary line. However, the density or intensity of development allowed within the more restricted portion of the

parcel can (and is encouraged to) be applied to the less restricted portion. This application of the more restrictive criteria is permitted even if the resulting density or intensity in the less restricted area would then exceed the limits which would otherwise apply within that safety zone.

(6) Other Special Conditions — The compatibility criteria set forth in the Rio Vista ALUCP are intended to be applicable to all locations within the AIA. However, it is recognized that there may be specific situations where a normally incompatible use can be considered compatible because of terrain, specific location, or other extraordinary factors or circumstances related to the site.

(i) After due consideration of all the factors involved in such situations, the ALUC may find a normally incompatible use to be acceptable.

(ii) In reaching such a decision, the ALUC shall make specific findings as to why the exception is being made and that the land use will neither create a safety hazard to people on the ground or aircraft in flight nor result in excessive noise exposure for the proposed use nor impact airport operations. Findings also shall be made as to the nature of the extraordinary circumstances that warrant the policy exception.

(iii) The burden for demonstrating that special conditions apply to a particular development proposal rests with the project proponent and/or the referring agency, not with the ALUC.

(iv) The granting of a special conditions exception shall be considered site specific and shall not be generalized to include other sites nor serve as a precedent for consideration of other sites.