

## **5.2 COMPATIBLE LAND USE**

This section provides an evaluation of the compatibility of land uses in the vicinity of the Gness Field Airport (DVO or Airport) for the Sponsor's Proposed Project and its alternatives. The impacts of each alternative on surrounding land uses and the consistency of the alternatives with the comprehensive plans of the surrounding communities are assessed in accordance with Federal Aviation Administration (FAA) Order 1050.1E, Change 1, *Environmental Impacts: Policies and Procedures* and FAA Order 5050.4B, *National Environmental Policy Act (NEPA) Implementing Instructions for Airport Actions*. The existing land use patterns within the General Study Area (GSA) are described in Chapter Four, *Affected Environment*. **Exhibit 5.2-1, Generalized Land Use**, graphically depicts the general land use pattern within the GSA.

### **5.2.1 REGULATORY SETTING**

The FAA has identified guidelines relating the compatibility of land use types to airport sound levels measured using the Day-Night Average Sound Level (DNL) described in Appendix E, *Noise Methodology*. These guidelines are defined in 14 Code of Federal Regulations (CFR) Part 150 (Table 1 of Appendix A, *Agency Scoping and Coordination*), *Land Use Compatibility with Yearly Day-Night Average Sound Levels*. These guidelines, shown in **Table 5.2-1**, delineate the compatibility parameters for residential, public (schools, churches, nursing homes, hospitals), commercial, manufacturing and production, and recreational land uses.

The State of California has adopted similar land use compatibility guidelines to airport sound levels; however, these guidelines use the Community Noise Equivalent Level (CNEL) described in Appendix E. While DNL is the primary metric the FAA uses to determine noise impacts, the FAA recognizes CNEL as an alternative metric to assess noise effects in the State of California.<sup>1</sup> Therefore, the CNEL metric is substituted for DNL in Table 5.2-1.

### **5.2.2 FUTURE CONDITIONS: 2018**

The following section discusses the land use impacts of the Sponsor's Proposed Project and its alternatives in 2018.

#### **Alternative A: No-Action**

Alternative A (No Action), includes no change to the present airfield layout at DVO. No changes to land uses at DVO would occur as a result of Alternative A in 2018. As shown in Exhibit 5.1-1, *2018 Alternative A (No Action) Community Noise Equivalent Level* in Section 5.1, *Noise*, no residential or noise-sensitive land uses would be exposed to noise levels of 65 CNEL or higher under the 2018 Alternative A.

---

<sup>1</sup> FAA Order 1050.1E, Change 1, *Environmental Impacts: Policies and Procedures*, dated March 20, 2006; Appendix A, Paragraph 14a.

**Alternative B:  
Extend Runway 13/31 to the Northwest by 1,100 Feet (Sponsor's Proposed Project)**

This section provides a summary of the potential land use impacts as a result of Alternative B (Sponsor's Proposed Project) for the year 2018.

**Noise Impacts:** As shown in Exhibit 5.1-2, *Noise Contour Comparison: 2018 Alternative B vs. 2018 Alternative A*, no residential or noise-sensitive land uses would be exposed to noise levels of 65 CNEL or higher under the 2018 Alternative B noise contour.

**Consistency with Local Land Use Plan:** No changes in land use are expected to occur as a result of Alternative B and no residential or noise-sensitive land uses would be exposed to noise levels of 65 CNEL or higher under the 2018 Alternative B. Alternative B would require a lot-line adjustment to gain control of 0.1 acres of land to the south of Runway 31 for the extended Runway Safety Area (RSA). This land is currently vacant, cannot be built on, and due to an existing easement that Marin County holds on the property, the height of any structures can be restricted so that it would not become a hazard to navigation.<sup>2</sup> For the area being discussed, the maximum vertical height would be less than two feet, making it impossible to construct buildings. An existing easement on the northern part of Airport property provides the California Department of Fish and Game access to the properties east of the Airport.<sup>3</sup> Under this Alternative, the easement would be relocated and access to the properties east of the Airport would continue. As a result, Alternative B would not be inconsistent with future plans for the land and would not cause any land use incompatibilities or inconsistencies with local land use plans.

**Alternative D:  
Extend Runway 13/31 to the Northwest by 860 Feet and to the Southeast by 240 Feet**

This section provides a summary of the potential land use impacts due to Alternative D for the year 2018.

**Noise Impacts:** As shown in Exhibit 5.1-3, *Noise Contour Comparison: 2018 Alternative D vs. 2018 Alternative A*, no residential or noise-sensitive land uses would be exposed to noise levels of 65 CNEL or higher under the 2018 Alternative D noise contour.

**Consistency with Local Land Use Plan:** No changes in land use are expected to occur as a result of Alternative D and no residential or noise-sensitive land uses would be exposed to noise levels of 65 CNEL or higher under the 2018 Alternative D. Alternative D would require acquisition of 3.7 acres of land to the

---

<sup>2</sup> Avigation Easement between Rancho Del Pantano, Inc. and Marin County, April 10, 1967.

<sup>3</sup> Purchase Agreement between Mount Burdell Enterprises and Ranch Burdell Partners and Marin County, December 16, 1997.

south of Runway 31 for the extended RSA. This land is currently vacant, cannot be built on, and due to an existing easement that Marin County holds on the property, the height of any structures can be restricted so that it would not become a hazard to navigation.<sup>4</sup> For the area being discussed, the maximum vertical height would be less than ten feet, making it virtually impossible to construct buildings with any useful purpose. An existing easement on the northern part of Airport property provides the California Department of Fish and Game access to the properties east of the Airport.<sup>5</sup> Under this Alternative, the easement would be relocated and access to the properties east of the Airport would continue. As a result, Alternative D would not be inconsistent with future plans for the land and would not cause any land use incompatibilities or inconsistencies with local land use plans.

**Table 5.2-1  
LAND USE COMPATIBILITY GUIDELINES – 14 CFR PART 150  
Gross Field Airport**

<u>LAND USE</u>	<b>COMMUNITY NOISE EQUIVALENT LEVEL (CNEL) IN DECIBELS*</b>					
	<b>BELOW 65</b>	<b>65-70</b>	<b>70-75</b>	<b>75-80</b>	<b>80-85</b>	<b>OVER 85</b>
<u>RESIDENTIAL</u>						
Residential, other than mobile homes & transient lodgings	Y	N <sup>1</sup>	N <sup>1</sup>	N	N	N
Mobile home parks	Y	N	N	N	N	N
Transient lodgings	Y	N <sup>1</sup>	N <sup>1</sup>	N <sup>1</sup>	N	N
<u>PUBLIC USE</u>						
Schools, hospitals, nursing homes	Y	25	30	N	N	N
Churches, auditoriums, and concert halls	Y	25	30	N	N	N
Governmental services	Y	Y	25	30	N	N
Transportation	Y	Y	Y <sup>2</sup>	Y <sup>3</sup>	Y <sup>4</sup>	N <sup>4</sup>
Parking	Y	Y	Y <sup>2</sup>	Y <sup>3</sup>	Y <sup>4</sup>	N
<u>COMMERCIAL USE</u>						
Offices, business and professional	Y	Y	25	30	N	N
Wholesale and retail -- building materials, hardware, and farm equipment	Y	Y	Y <sup>2</sup>	Y <sup>3</sup>	Y <sup>4</sup>	N
Retail trade, general	Y	Y	25	30	N	N
Utilities	Y	Y	Y <sup>2</sup>	Y <sup>3</sup>	Y <sup>4</sup>	N
Communication	Y	Y	25	30	N	N
<u>MANUFACTURING AND PRODUCTION</u>						
Manufacturing, general	Y	Y	Y <sup>2</sup>	Y <sup>3</sup>	Y <sup>4</sup>	N
Photographic and optical	Y	Y	25	30	N	N
Agriculture (except livestock) and forestry	Y	Y <sup>6</sup>	Y <sup>7</sup>	Y <sup>8</sup>	Y <sup>8</sup>	Y <sup>8</sup>
Livestock farming and breeding	Y	Y <sup>6</sup>	Y <sup>7</sup>	N	N	N
Mining and fishing, resource production and extraction	Y	Y	Y	Y	Y	Y
<u>RECREATIONAL</u>						
Outdoor sports arenas and spectator sports	Y	Y	Y <sup>5</sup>	N <sup>5</sup>	N	N
Outdoor music shells, amphitheaters	Y	N	N	N	N	N
Nature exhibits and zoos	Y	Y	N	N	N	N
Amusements, parks, resorts, and camps	Y	Y	Y	N	N	N
Golf courses, riding stables, and water recreation	Y	Y	25	30	N	N

<sup>4</sup> Avigation Easement between Rancho Del Pantano, Inc. and Marin County, April 10, 1967.

<sup>5</sup> Purchase Agreement between Mount Burdell Enterprises and Ranch Burdell Partners and Marin County, December 16, 1997.

**Table 5.2-1, Continued  
LAND USE COMPATIBILITY GUIDELINES - FAR PART 150  
Gross Field Airport**

\* Note: The FAA uses the DNL metric for determining noise impacts to the above listed land use types; however, the FAA also recognizes use of the Community Noise Equivalent Level (CNEL) which is required to be used to identify noise impacts in the State of California.

The designations contained in this table do not constitute a Federal determination that any use of land covered by the program is acceptable under Federal, State, or local law. The responsibility for determining the acceptable and permissible land uses and the relationship between specific properties and specific noise contours rests with the local authorities. FAA determinations under Part 150 are not intended to substitute federally determined land uses for those determined to be appropriate by local authorities in response to locally determined needs and values in achieving noise compatible land uses.

**Key to Table A-1**

Y (Yes) Land use and related structures compatible without restrictions.

N (No) Land use and related structures are not compatible and should be prohibited.

NLR Noise Level Reduction (outdoor to indoor) to be achieved through incorporation of noise attenuation into the design and construction of the structure

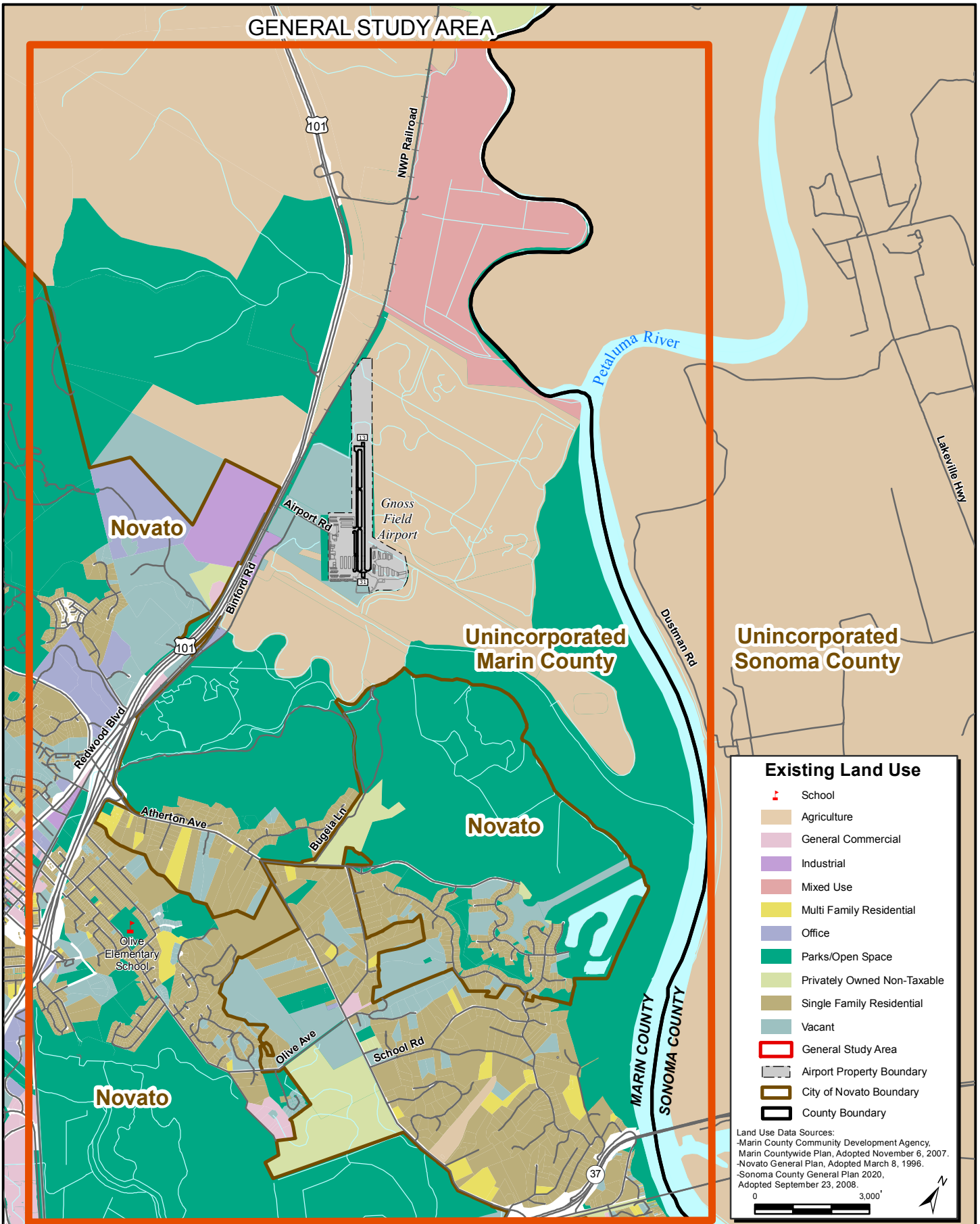
25, 30, 35 Land use and related structures generally compatible; measures to achieve a NLR of 25, 30, or 35 dB must be incorporated into design and construction of structure.

**Notes for Table A-1**

1. Where the community determines that residential or school uses must be allowed, measures to achieve outdoor-to-indoor Noise Level Reduction (NLR) of at least 25 dB and 30 dB should be incorporated into building codes and be considered in individual approvals. Normal residential construction can be expected to provide a NLR of 20 dB, thus, the reduction requirements are often stated as five, 10, or 15 dB over standard construction and normally assume mechanical ventilation and closed windows year round. However, the use of NLR criteria will not eliminate outdoor noise problems.
2. Measures to achieve NLR of 25 dB must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise-sensitive areas, or where the normal noise level is low.
3. Measures to achieve NLR of 30 dB must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise-sensitive areas, or where the normal noise level is low.
4. Measures to achieve NLR of 35 dB must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise-sensitive areas, or where the normal noise level is low.
5. Land use compatible provided special sound reinforcement systems are installed.
6. Residential buildings require a NLR of 25 dB.
7. Residential buildings require a NLR of 30 dB.
8. Residential buildings not permitted.

Source: FAR Part 150 Airport Noise Compatibility Planning, Appendix A, Table 1.

GENERAL STUDY AREA



**Existing Land Use**

- School
- Agriculture
- General Commercial
- Industrial
- Mixed Use
- Multi Family Residential
- Office
- Parks/Open Space
- Privately Owned Non-Taxable
- Single Family Residential
- Vacant
- General Study Area
- Airport Property Boundary
- City of Novato Boundary
- County Boundary

Land Use Data Sources:  
 -Marin County Community Development Agency, Marin Countywide Plan, Adopted November 6, 2007.  
 -Novato General Plan, Adopted March 8, 1996.  
 -Sonoma County General Plan 2020, Adopted September 23, 2008.

0 3,000'

