4

Byron Airport Policies

BYRON AIRPORT COMPATIBILITY POLICIES

6. Byron Airport Policies

6.1. General

6.1.1. Airport Influence Area

(a) The Byron Airport influence area is defined by the outer edge of the airport’s Federal Aviation Regulations (FAR) Part 77 conical surface as depicted on the Byron Airport Airspace Protection Surfaces drawing (Figure 4A) and also shown on the Byron Airport Compatibility Map (Figure 4B). This area extends 14,000 feet from the ends of the primary surfaces for Runway 12-30.

(b) The airport influence area encompasses locations commonly overflown by aircraft as they approach and depart the airport or fly within the traffic pattern. Aircraft may overfly these locations at or below the established traffic pattern altitude (1,000 feet above the airport elevation).

6.1.2. Primary Land Use Compatibility Criteria — The primary criteria for assessing whether a land use plan, ordinance, or development proposal is to be judged compatible with Byron Airport activity are set forth in the remainder of this section.

(a) These criteria are to be used in conjunction with the Byron Airport Compatibility Map (Figure 4B).

(b) The Byron Airport Compatibility Map represents a combination of the four airport land use compatibility concerns — noise, safety, airspace protection, and overflight — addressed by this Compatibility Plan. Specific factors used in defining the compatibility zone boundaries are described in Appendix D.
6.1.3. Countywide Compatibility Criteria — In addition to the compatibility criteria specifically for Byron Airport as set forth in this chapter, the countywide policies listed in Chapter 2 shall also be applied to the review of land use development proposals in the airport vicinity. In particular, reference is made to the following:
(a) Policies pertaining to the review of general plans (Countywide Policy 2.4.3);
(b) Consideration for special conditions (Countywide Policy 2.4.4); and
(c) Supplemental compatibility criteria (Countywide Policies, Section 4).

6.2. Compatibility Zone ‘A’ Criteria

6.2.1. Residential Development
(a) No new dwellings are permitted.

6.2.2. Nonresidential Development
(a) No new structures are permitted other than aeronautical facilities the location of which is set by FAA Criteria.
(b) Outdoor activities shall be limited to a maximum of 10 people per gross acre.

6.2.3. Uses Specifically Prohibited — The following uses are specifically prohibited:
(a) Storage of fuel and other hazardous materials.

6.2.4. Height Limitations — Unless a specific exemption is granted (see Countywide Policy 4.3.2.), the height of objects within Compatibility Zone A shall be limited in accordance with the Byron Airport Airspace Protection Surfaces drawing (Figure 4A). In most of Zone A, the allowable height is less than 35 feet and, in some locations, is zero. Implementation of these limitations on property not controlled by the airport may necessitate airport acquisition of fee title or easements on the affected property.

6.2.5. Other Development Conditions — Proposed development within Compatibility Zone A shall meet the following additional conditions:
(a) Any future nonaviation development or use of property within Compatibility Zone A shall meet the criteria for open land as described in Byron Airport Policy 6.9.4.
(b) Dedication of an avigation easement to Contra Costa County shall be required as a condition for approval of any development in this zone. See Countywide Policy 4.3.3.
6.3. Compatibility Zone ‘B1’ Criteria

6.3.1. Residential Development

(a) New residential development, including any lot split for the purposes of residential development, is prohibited except that a single dwelling may be built on an existing lot of record.

(b) Buildings on existing lots of record shall be located as far as practical from the extended runway centerline and shall be limited to a maximum of two stories in height.

6.3.2. Nonresidential Development

(a) Except as indicated in Byron Airport Policy 6.9.1, nonresidential uses within Compatibility Zone B1 shall be limited to:

1. An average intensity of no more than 25 people per gross acre on the site at any time.
2. A maximum intensity on any single acre (measured as a square) of no more than 50 people at any time.
3. In no case shall a proposed development be designed to accommodate more than the average number of people per acre indicated in Paragraph (1) above times the gross acreage of the project site. A project site may include multiple parcels.

(b) Multi-story retail uses, fast-food establishments, large shopping centers (500,000 or more square feet), theaters, motels, and similar uses typically do not comply with the above intensity criteria, but are acceptable if the usage is limited through building design, use permit, and/or other mechanisms.

(c) Buildings shall be located as far as practical from the extended runway centerline and shall be limited to a maximum of two stories in height.

6.3.3. Uses Specifically Prohibited — The following uses are prohibited regardless of their usage intensity:

(a) Children’s schools and day care centers.

(b) Hospitals and nursing homes.

(c) Aboveground bulk storage of hazardous materials with the exception of:

1. On-airport storage of aviation fuel and other aviation-related flammable materials.
2. Up to 2,000 gallons of nonaviation flammable materials.
(d) Highly noise-sensitive uses (for example, outdoor theaters).

6.3.4. Height Limitations — Unless a specific exemption is granted (see Countywide Policy 4.3.2.), the height of objects within Compatibility Zone B1 shall be limited in accordance with the Byron Airport Airspace Protection Surfaces drawing (Figure 4A).
(a) Generally, there is no concern with regard to any object up to 35 feet tall.
(b) ALUC review is required for any proposed object taller than 35 feet.

6.3.5. Other Development Conditions — Proposed development within Compatibility Zone B1 shall meet the following additional conditions:
(a) Open land characteristics as described in Byron Airport Policy 6.9.4 shall be provided on at least 30% of the land within Compatibility Zone B1.
(b) Dedication of an avigation easement to Contra Costa County shall be required as a condition for approval of any development in this zone. See Countywide Policy 4.3.3.

6.4. Compatibility Zone ‘B2’ Criteria

6.4.1. Residential Development
(a) Residential development shall be limited to an average density of no more than 0.1 dwelling units per gross acre (that is, the average lot size shall be at least 10 acres).
(b) Individual lots may vary in size. However, the minimum size for any new residential lot shall be at least 5.0 acres.

6.4.2. Nonresidential Development
(a) Except as indicated in Byron Airport Policy 6.9.1, nonresidential uses within Compatibility Zone B2 shall be limited to:
   (1) An average intensity of no more than 50 people per gross acre on the site at any time.
   (2) A maximum intensity on any single acre (measured as a square) of no more than 100 people at any time.
   (3) In no case shall a proposed development be designed to accommodate more than the average number of people per acre indicated in Paragraph (1) above times the gross acreage of the project site. A project site may include multiple parcels.
(b) Fast-food establishments, large shopping centers (500,000 or more square feet), theaters, motels, and similar uses typically do not comply with these intensity
criteria, but are acceptable if the usage is limited through building design, use permit, and/or other mechanisms.

6.4.3. Uses Specifically Prohibited — The following uses are prohibited regardless of their usage intensity:

(a) Children’s schools and day care centers.

(b) Hospitals and nursing homes.

(c) Aboveground bulk storage of hazardous materials with the exception of:

(1) On-airport storage of aviation fuel and other aviation-related flammable materials.

(2) Up to 2,000 gallons of nonaviation flammable materials.

(d) Highly noise-sensitive uses (for example, outdoor theaters).

6.4.4. Height Limitations — Unless a specific exemption is granted (see Countywide Policy 4.3.2.), the height of objects within Compatibility Zone B2 shall be limited in accordance with the Byron Airport Airspace Protection Surfaces drawing (Figure 4A).

(a) Generally, there is no concern with regard to any object up to 70 feet tall unless it is located on high ground or it is a solitary object (e.g., an antenna) more than 35 feet taller than other nearby objects.

(b) ALUC review is required for any proposed object taller than 70 feet.

6.4.5. Other Development Conditions — Proposed development within Compatibility Zone B2 shall meet the following additional conditions:

(a) Open land characteristics as described in Byron Airport Policy 6.9.4 shall be provided on at least 20% of the land within Compatibility Zone B2.

(b) A deed notice shall be required as a condition for approval of any development in this zone. See Countywide Policy 4.4.3.(b).

6.5. Compatibility Zone ‘C1’ Criteria

6.5.1. Residential Development

(a) Residential development shall be limited to an average density of no more than 0.2 dwelling units per gross acre (that is, the average lot size shall be at least 5.0 acres).

(b) Individual lots may vary in size. However, the minimum size for any new residential lot shall be at least 2.5 acres.
6.5.2. Nonresidential Development

(a) Except as indicated in Byron Airport Policy 6.9.1, nonresidential uses within Compatibility Zone C1 shall be limited to:
   (1) An average intensity of no more than 100 people per gross acre on the site at any time.
   (2) A maximum intensity on any single acre (measured as a square) of no more than 300 people at any time.
   (3) In no case shall a proposed development be designed to accommodate more than the average number of people per acre indicated in Paragraph (1) above times the gross acreage of the project site. A project site may include multiple parcels.

(b) Large shopping centers (500,000 or more square feet), theaters, stadiums, multi-story motels or hotels with conference centers, and similar uses typically do not comply with these intensity criteria, but are acceptable if the usage is limited through building design, use permit, and/or other mechanisms.

6.5.3. Uses Specifically Prohibited — The following uses are prohibited regardless of their usage intensity:
   (a) Children’s schools.
   (b) Hospitals and nursing homes.

6.5.4. Height Limitations — Unless a specific exemption is granted (see Countywide Policy 4.3.2.), the height of objects within Compatibility Zone C1 shall be limited in accordance with the Byron Airport Airspace Protection Surfaces drawing (Figure 4A).
   (a) Generally, there is no concern with regard to any object up to 100 feet tall unless it is located on high ground or it is a solitary object (e.g., an antenna) more than 35 feet taller than other nearby objects.
   (b) ALUC review is required for any proposed object taller than 100 feet.

6.5.5. Other Development Conditions — Proposed development within Compatibility Zone C1 shall meet the following additional conditions:
   (a) Open land characteristics as described in Byron Airport Policy 6.9.4 shall be provided on at least 10% of the land within Compatibility Zone C1.
   (b) A deed notice shall be required as a condition for approval of any new residential development in this zone. See Countywide Policy 4.4.3.(b).
6.6. Compatibility Zone ‘C2’ Criteria

6.6.1. Residential Development

(a) Residential development shall either:

(1) Be limited to an average density of no more than 0.2 dwelling units per gross acre (that is, the average lot size shall be at least 5.0 acres); or

(2) Have an average density of at least 5.0 dwelling units per gross acre (that is, the average lot size shall be no more than 0.2 acres; approximately 8,700 feet)

(b) Individual lots may vary in size. However, wherever Option (1) is selected, the minimum size for any new residential lot shall be at least 2.5 acres.

6.6.2. Nonresidential Development — See criteria for Compatibility Zone C1.

6.6.3. Uses Specifically Prohibited — See criteria for Compatibility Zone C1.

6.6.4. Height Limitations — See criteria for Compatibility Zone C1.

6.6.5. Other Development Conditions — See criteria for Compatibility Zone C1.

6.7. Compatibility Zone ‘D’ Criteria

6.7.1. Residential Development — Residential development is not restricted.

6.7.2. Nonresidential Development — Allowable intensities for nonresidential activities are not limited.

6.7.3. Uses Specifically Prohibited — No uses are specifically prohibited.

6.7.4. Height Limitations — See criteria for Compatibility Zone C1.

6.7.5. Other Development Conditions — None.

6.8. Height Exception Overlay Zone

6.8.1. Height Limitations — Unless a specific exemption is granted (see Countywide Policy 4.3.2), the height of objects within the Height Exception Overlay Zone shall be limited in accordance with the Byron Airport Airspace Protection Surfaces drawing (Figure 4A).
Byron Airport Policies / Chapter 4

4–8

Contra Costa County Airport Land Use Compatibility Plan (December 2000)

(a) Objects within this zone may exceed the height limits established in accordance with federal airspace protection standards if the height is less than that of nearby objects or terrain.
(b) Generally, there is no concern with regard to any object up to 50 feet tall unless it is located on high ground or it is a solitary object (e.g., an antenna) more than 35 feet taller than other nearby objects.
(c) ALUC review is required for any proposed object taller than 50 feet.

6.8.2. Other Development Conditions

(a) Dedication of an avigation easement to Contra Costa County shall be required as a condition for approval of any development in this zone having a height in excess of 50 feet. See Countywide Policy 4.3.3.
(b) All other criteria of the underlying compatibility zone shall apply.

6.9. Compatibility Criteria — All Zones

6.9.1. Usage Intensity Exceptions — The intensity (people per acre) limits for nonresidential uses cited in the preceding policies may be exceeded under the following circumstances:
(a) The buildings incorporate special risk-reduction design features in accordance with Countywide Policy 4.2.4. In such cases, an intensity bonus of up to 1.5 times the basic intensity criterion may be permitted. Specifically:
   (1) A maximum of 75 people per single acre within Compatibility Zone B1.
   (2) A maximum of 150 people per single acre within Compatibility Zone B2.
   (3) A maximum of 450 people per single acre within Compatibility Zones C1 or C2.
(b) During rare special events. Rare special events are ones (such as an air show at the airport) for which a facility is not designed and normally not used and for which extra safety precautions can be taken as appropriate.

6.9.2. Acceptable Noise Exposures for Residential and Other Land Uses — The acceptable levels of airport-related noise exposure for proposed land use development in the airport environs are taken into account in the compatibility zone criteria listed above.
(a) The noise compatibility criteria specifically applicable to evaluation of future development near Byron Airport are indicated in Table 4A. Table 4A is intended to serve as an additional reference in instances where specific noise
compatibility issues are apparent, but not fully addressed by the preceding compatibility zone criteria.

(b) 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 in Table 4A as “marginally acceptable.”

(c) For the purposes of evaluating the noise compatibility of proposed land uses in the Byron Airport vicinity, the projected cumulative noise contours depicted in Figure 4C shall be used.

6.9.3. Hazards to Flight — No land use which would result in an increased attraction of birds or would create a visual or electronic hazard to flight shall be permitted anywhere within the Byron Airport influence area. (See Countywide Policy 4.3.6.)

6.9.4. Open Land Criteria — In the event that a light aircraft is forced to land away from an airport, the risks to the people on board can best be minimized by providing as much open land area as possible within the airport vicinity. This concept is based upon the fact that many light aircraft accidents and incidents occurring away from an airport runway are controlled emergency landings in which the pilot has reasonable opportunity to select the landing site.

(a) To qualify as open land, an area should be:

1. Free of most structures and other major obstacles such as walls, large trees or poles (greater than 4 inches in diameter, measured 4 feet above the ground), and overhead wires.
2. Have minimum dimensions of approximately 75 feet by 300 feet.

(b) Roads and automobile parking lots are acceptable as open land areas if they meet the above criteria. The arrangement of light fixtures is a paramount design consideration.

(c) Open land requirements for each compatibility zone are intended to be applied with respect to the entire zone. Individual parcels may be too small to accommodate the minimum-size open area requirement. Consequently, the identification of open land areas must initially be accomplished at the general plan or specific plan level or as part of large (10 acres or more) development projects.

(d) Clustering of development (subject to the above-indicated limits on the maximum number of people occupying a single acre) and providing contiguous landscaped and parking areas is encouraged as a means of increasing the size of open land areas.

(e) Building envelopes and the airport compatibility zones should be indicated on all development plans and tentative maps for projects located within the Byron Airport influence area in order to assure that individual development projects
provide the open land areas identified in the applicable general plan, specific plan, or other large-scale plan.
## Noise Compatibility Criteria

### Byron Airport Environ

<table>
<thead>
<tr>
<th>Land Use Category</th>
<th>CNEL (dB)</th>
<th>50–55</th>
<th>55–60</th>
<th>60–65</th>
<th>65–70</th>
<th>70–75</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Residential</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>single-family, mobile homes</td>
<td>++</td>
<td>++</td>
<td>+</td>
<td>0</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>multi-family, apartments, condominiums</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Public</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>schools, libraries, hospitals, nursing homes</td>
<td>+</td>
<td>0</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>churches, auditoriums, concert halls</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>transportation, parking, cemeteries</td>
<td>++</td>
<td>++</td>
<td>++</td>
<td>+</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Commercial and Industrial</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>motels, hotels</td>
<td>++</td>
<td>+</td>
<td>0</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>offices, retail trade</td>
<td>++</td>
<td>+</td>
<td>0</td>
<td>0</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>service commercial, wholesale trade, warehousing, light industrial</td>
<td>++</td>
<td>++</td>
<td>+</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>general manufacturing, utilities, extractive industry</td>
<td>++</td>
<td>++</td>
<td>++</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td><strong>Agricultural and Recreational</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>cropland</td>
<td>++</td>
<td>++</td>
<td>++</td>
<td>++</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>livestock breeding</td>
<td>++</td>
<td>+</td>
<td>0</td>
<td>0</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>parks, playgrounds, zoos</td>
<td>++</td>
<td>+</td>
<td>+</td>
<td>0</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>golf courses, riding stables, water recreation</td>
<td>++</td>
<td>++</td>
<td>+</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>outdoor spectator sports</td>
<td>++</td>
<td>+</td>
<td>+</td>
<td>0</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>amphitheaters</td>
<td>+</td>
<td>0</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>

### Land Use Acceptability Interpretation/Comments

<table>
<thead>
<tr>
<th>Land Use Acceptability</th>
<th>Interpretation/Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>++</td>
<td><strong>Clearly Acceptable</strong> The activities associated with the specified land use can be carried out with essentially no interference from the noise exposure.</td>
</tr>
<tr>
<td>+</td>
<td><strong>Normally Acceptable</strong> 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.</td>
</tr>
<tr>
<td>o</td>
<td><strong>Marginally Acceptable</strong> 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.</td>
</tr>
<tr>
<td>–</td>
<td><strong>Normally Unacceptable</strong> 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 which have conventionally constructed structures and/or involve outdoor activities which would be disrupted by noise should generally be avoided.</td>
</tr>
<tr>
<td>– –</td>
<td><strong>Clearly Unacceptable</strong> Unacceptable noise intrusion upon land use activities will occur. Adequate structural noise insulation is not practical under most circumstances. The indicated land uses should be avoided unless strong overriding factors prevail and should be prohibited if outdoor activities are involved.</td>
</tr>
</tbody>
</table>

Table 4A
Figure 4A

Airspace Protection Surfaces
Byron Airport
Activity Assumptions

• 160,200 Total Annual Aircraft Operations
• 20,000 Helicopter Operations Included
• 200 Historic Military Jet Operations Included
• See Exhibit 6C for Details

Notes:

• Future operations projection represents the activity level associated with planned capacity of 400 based aircraft.
• Runway lengths include planned extensions.

Projected Noise Contours

Byron Airport

Contra Costa County Airport Land Use Compatibility Plan (December 2000)
Activity Assumptions
• 160,200 Total Annual Aircraft Operations
• 20,000 Helicopter Operations Included
• 200 Historic Military Jet Operations Included
• See Exhibit 6C for Details

Notes:
• Future operations projection represents the activity level associated with planned capacity of 400 based aircraft.
• Runway lengths include planned extensions.

Projected Noise Contours
Byron Airport

Figure 4C