SUMMARY

S.1 INTRODUCTION

This document is the Final Environmental Impact Statement (Final EIS), prepared in support of the federal actions related to a proposed runway and parallel taxiway extension at Gnoss Field Airport (DVO or Airport), a general aviation airport located adjacent to the City of Novato in unincorporated Marin County, California. The Final EIS has been prepared pursuant to the National Environmental Policy Act of 1969 (NEPA) and its implementing regulations found at Title 40, Code of Federal Regulations (CFR) §§ 1500-1508. Marin County has prepared an Environmental Impact Report (EIR), to meet the California Environmental Quality Act of 1970 requirements to analyze and disclose the potential environmental impacts resulting from the proposed runway extension. The FAA and Marin County circulated the Draft EIS and Draft EIR together so the public could comment on both documents at the same time. The FAA Final EIS is Volume 1. Marin County has completed and certified the Final EIR, which was circulated with the Draft EIS as Volume 2. The Technical Appendices, Public Comments, and FAA Responses to Comments are in Volume 3.

A summary of the potential impacts of all alternatives assessed in this EIS is presented in Table ES-1 (located at the end of this section). The information contained in this EIS will be taken into consideration by the FAA in determining the agency’s decision regarding the Proposed Project.

This EIS includes Chapters One through Seven and Appendices A through Q.

Chapter One – Background – describes the history of the project and summarizes planning and environmental studies conducted by the Airport Sponsor and the FAA.

Chapter Two – Purpose and Need – describes the problem to be addressed, how the alternatives would resolve the problem, the underlying purpose and need for the action, the desires or preferences of the Airport Sponsor, and the parameters used to define a reasonable range of alternatives.

Chapter Three – Alternatives – describes the range of alternatives reviewed to address the previously identified purpose and need, the process used to screen and evaluate reasonable alternatives, and the alternatives carried forward for detailed environmental evaluation.

Chapter Four – Affected Environment – describes the existing conditions within the Study Area.

Chapter Five – Environmental Consequences – describes the analytical processes used and the potential environmental impacts that would result from implementation of the proposed project and alternatives to the proposed project evaluated in detail.
Chapter Six – Cumulative Impacts – describes the potential combined impacts of the proposed alternatives at DVO when added to the impacts of past, present, and reasonably foreseeable future projects in the vicinity of DVO.

Chapter Seven – List of Preparers, List of Agencies, and Persons to Whom Copies are Sent – lists the people who contributed to the preparation of this EIS and the agency and public distribution list.

The following appendices contain detailed information used in the development of the EIS for the subject area noted in the Appendix title:

- Appendix A – Agency Scoping and Coordination
- Appendix B – Public Involvement
- Appendix C – Aviation Activity Forecast
- Appendix D – Runway Length Analysis
- Appendix E – Noise Methodology
- Appendix F – Air Quality
- Appendix G – Water Quality
- Appendix H – Cultural Resources
- Appendix I – Biological Resources
- Appendix J – Wetlands
- Appendix K – Energy Supply, Natural Resources, and Sustainable Design
- Appendix L – Hazardous Materials
- Appendix M – Geology, Soils, and Seismicity Resources
- Appendix N – Mineral Resources
- Appendix O – Land Use Assurance Letter
- Appendix P – Comments Received on Draft EIS/EIR
- Appendix Q – FAA Response to Comments
S.2 BACKGROUND

S.2.1 SPONSOR’S GOALS AND OBJECTIVES

As the Airport sponsor, Marin County has identified the following goals and objectives for the Airport and this project:

1. To make improvements at DVO that are consistent with the 2007 Marin Countywide Plan, the 1997 Update of the Airport Master Plan, and the 1991 Airport Land Use Plan.

2. To make improvements at DVO that are consistent with FAA Advisory Circular 150/5300-13A Airport Design, airpot design standards for a B-I (small) Design Group Airport intended to serve aircraft with a wing span of less than 49 feet, maximum certificated takeoff weight of 12,500 pounds or less, and an approach speed of 91 to 121 knots.

3. To extend the length of the existing runway at DVO to allow the existing aircraft, as represented by the critical aircraft, to operate efficiently during all weather conditions.

S.2.2 PURPOSE AND NEED

S.2.2.1 Sponsor’s Purpose and Need

The Sponsor's purpose and need is to fully accommodate existing aviation activity, as represented by the critical aircraft that regularly uses the Airport under hot weather and other adverse weather conditions. DVO is designated as an Airport Reference Code B-I airport to accommodate aircraft with a wingspan of 49 feet or less, and an approach speed of 91 to 121 knots. (See Appendix D, Runway Length Analysis, for details). Prior planning studies and evaluations of the Airport's ability to accommodate existing aircraft include the 1989 Airport Master Plan, the 1997 Update of the Airport Master Plan, and the 2002 Preliminary Design Report for the proposed runway extension.

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1 This EIS was initially prepared using the earlier version of this Advisory Circular. FAA revised the Advisory Circular effective on September 28, 2012. The particular design standards related to the proposed project reviewed in this EIS did not change in the updated version of the Advisory Circular.

2 The critical aircraft for DVO is Cessna Citation 525 (Cessna 525) business jet. See Chapter Two, Purpose and Need, and Appendix D, Attachment 1, Basis for Determination of the Critical Aircraft for DVO, for details regarding this determination.

3 For the purpose of this EIS, hot weather is defined as the mean daily maximum temperature of the hottest month at the Airport (FAA A/C 150/5325-4B paragraph 506) and adverse weather conditions include wet runways, icy runways, and crosswinds.

4 Marin County, Airport Master Plan Marin County Airport Gnoss Field, 1989.

S.2.2.2 FAA Purpose and Need

The FAA’s statutory mission is to ensure the safe and efficient use of navigable airspace in the U.S. as set forth under 49 United States Code (USC) § 47101 (a)(1). The FAA must ensure that the proposed action does not derogate the safety of aircraft and airport operations at DVO. Moreover, it is the policy of the FAA under 49 USC § 47101(a)(6) that airport development projects provide for the protection and enhancement of natural resources and the quality of the environment of the United States.

S.2.3 SPONSOR’S PROPOSED PROJECT

As the owner and operator of the Airport, Marin County, California is the Sponsor of the proposed project. The Sponsor’s Proposed Project is designed to address the needs of the Airport and includes the following elements:

- Extend Runway 13/31 to the northeast by 1,100 feet increasing the total runway length from 3,300 feet to a total length of 4,400 feet while maintaining the 75-foot width of the runway;
- Extend the parallel taxiway to the full length of the runway;
- Extend the existing Runway Safety Area (RSA) along the sides of Runway 13/31 to maintain the existing RSA width of 120 feet centered on the runway centerline;
- Extend RSA to 240 feet long beyond each end of Runway 13/31 to meet current FAA B-I airport design standards;
- Corresponding realignment of drainage channels to drain the extended runway and taxiway;
- Corresponding levee extension to protect the extended runway and taxiway from flooding;
- Install and/or relocate the navigational aids that pilots use to land at the Airport to reflect the extended runway; and
- Acquire 0.1 acre of undeveloped land south of the Airport from the adjoining private landowner to provide a 240 foot long RSA on the south end of Runway 13/31.

Marin County intends to keep the Airport open for business during construction of the proposed runway extension and the other supporting elements listed above.

S.2.4 FEDERAL ACTIONS

Several Federal actions are directly or indirectly proposed to occur. Implementation of the Sponsor’s Proposed Project or other build alternatives would require several Federal actions and approvals. These include:

- Unconditional approval of the Airport Layout Plan (ALP) to depict the land acquisition, proposed runway extensions and parallel taxiway extension pursuant to 49 United States Code (USC) §§ 40103(b) and 47107(a)(16);
• Air traffic control and airspace management procedures designed to affect the safe and efficient movement of air traffic to and from the proposed runway development. Such actions would include, but are not limited to, the establishment or modification of flight procedures and the installation and/or relocation of Navigational Aids (NAVAIDs) associated with the proposed runway and taxiway extension.

• Determination of eligibility for federal assistance for the proposed projects under the Federal grant-in-aid program authorized by the Airport and Airway Improvement Act of 1982, as amended (49 USC § 47101 et seq.);

• Determinations under 49 USC §§ 47106 and 47107 relating to the eligibility of the Proposed Action for federal funding under the Airport Improvement Program (AIP) to assist with construction of potentially eligible development items shown on the ALP;

• Determination of the effects of the proposed extension of the runway and parallel taxiway and the corresponding increase in size of the associated runway safety area upon the safe and efficient use of navigable airspace pursuant to Title 14 CFR Part 77, Objects Affecting Navigable Airspace. The FAA must determine if the proposed improvements, as proposed by Marin County are consistent with the existing airspace utilization and procedures;

• Determination under 49 USC § 44502(b) that the airport development is reasonably necessary for use in air commerce or in the interests of national defense;

• Approval of further processing of an application for federal assistance for near-term eligible projects using federal funds from the Airport Improvement Program, as shown on the ALP; and

• Approval of a Construction Safety and Phasing Plan to maintain aviation and airfield safety during construction pursuant to FAA Advisory Circular 150/5370-2F Operational Safety on Airports During Construction.

The proposed improvements under consideration in this EIS, and described as Alternatives B and D in Chapter Three, Alternatives are designed to allow the Airport to accommodate existing aviation traffic and passenger demand.

S.2.5 ALTERNATIVES

The analysis of EIS alternatives was an independent examination by the FAA using a two-step screening process. The first step in the screening process was to identify if an alternative could meet the purpose for the Sponsor's Proposed Project as described in detail in Chapter Two, Purpose and Need. Alternatives that did not meet the purpose for the project were excluded from further review. The second step was to further evaluate the remaining alternatives for additional considerations, including significant environmental, operational, cost considerations and reasonable, possible, and prudent alternative considerations. The EIS
considered both on and off-airport alternatives to the Sponsor’s Proposed Project. Off-airport alternatives were considered in Section 3.3 of the EIS, but none were found that met the purpose and need for the proposed project.

On-airport alternatives to the Sponsor’s Proposed Project were evaluated in Section 3.4. The No Action Alternative was included in the evaluation of potential environmental consequences in this EIS, as required by 40 CFR § 1502.14(d). With a No Action Alternative, the airfield layout would remain as it is today, without an extension to the existing runway and no parallel taxiway extension and levee relocations. Although not always reasonable, feasible, prudent, or practicable, the No Action Alternative is a potential alternative under NEPA and provides a basis of comparison for the assessment of future conditions and environmental impacts. Alternatives that meet the purpose and need and were determined to be reasonable, possible, and prudent were also carried forward for further evaluation in the EIS. The following alternatives were carried forward for further evaluation in the EIS:

- Alternative A: No Action – This alternative includes no changes to the Airport. See Exhibit S-1, Alternative A: No Action.
- Alternative B: Sponsor’s Proposed Project, Extend runway to the northwest by 1,100 feet. See Exhibit S-2, Alternative B: Sponsor’s Proposed Project - Extend Runway to the Northwest by 1,100 Feet.
- Alternative D: Extend runway to the southeast by 240 feet and to the northwest by 860 feet. See Exhibit S-3, Alternative D: Extend Runway to the Southeast by 240 Feet and to the Northwest by 860 Feet.

An additional on-site alternative, Alternative C: Extend Runway to the southeast by 1,100 feet, was considered. Alternative C would result in greater impacts to wetlands and waterways than Alternative B or Alternative D, and would require filling a portion of Black John Slough. As the same project purpose can be accomplished by implementation of Alternative B or Alternative D, and the Clean Water Act, Section 404, (b)(1) guidelines only allow the U.S. Army Corps of Engineers to issue a Clean Water Act, Section 404 permit for the least environmentally damaging practicable alternative, it is not likely that the USACOE would issue Marin County a Clean Water Act, Section 404 permit to construct Alternative C, when Alternatives B and D have been identified as practicable. Therefore, Alternative C was not carried forward for detailed analysis.
Alternative B: Sponsor’s Proposed Project
Extend Runway to the Northwest by 1,100 feet

- 1,100-Foot Runway Extension
- Taxiway Extension
- Extend Levee and Drainage Ditch
- Construct 240-Foot x 120-Foot Safety Area
- Acquire 0.1 Acres of Land
- Black John Slough
- Binford Rd
- NWP Railroad
- Airport Rd
- Gnoss Field Airport

Legend
- Proposed Runway Extension
- Proposed Taxiway and Safety Areas
- Proposed Land Acquisition (0.1 Acres)
- Proposed Drainage Ditch
- Proposed Levee
- Existing Runway
- Existing Buildings
- Airport Property Boundary
Alternative D: Extend Runway to the Southeast by 240 Feet and to the Northwest by 860 Feet

- Extend Levee and Drainage Ditch
- Extend Taxiway
- 240-Foot Runway Extension
- Acquire 3.7 Acres of Land
- Construct 240-Foot x 120-Foot Safety Area
- Construct 860-Foot Runway Extension
- Extend Taxiways
- Relocate Roadway
- Construct 240-Foot x 120-Foot Safety Area

Legend:
- Proposed Runway Extension
- Proposed Taxiway and Safety Areas
- Proposed Land Acquisition (3.7 Acres)
- Proposed Roadway Relocation
- Proposed Levee
- Proposed Drainage Ditch
- Existing Runway
- Existing Buildings
- Airport Property Boundary

Gnoss Field Airport
Environmental Impact Statement
Final Report
12/15/13 Prepared by Landrum & Brown
10/5/13 Gnoss Field EIS/GCEIS1
12/5/13 Prepared by Landrum & Brown
1-1 Alternative D map
Exhibit: S-3
S.3 ENVIRONMENTAL CONSEQUENCES

The impacts resulting from implementation of the Sponsor's Proposed Project (Alternative B), Alternative D, and the No Action Alternative are disclosed in Chapter Five, Environmental Consequences, of this EIS. The impacts of each alternative are disclosed for project year 2018. The FAA uses 2018 as a basis for analysis because it is the projected implementation year of the proposed runway extension. In addition, specific Airport activity levels and their associated air quality and noise impacts are evaluated for a condition five years beyond the opening year (2023).

The environmental consequences section forms the scientific and analytical basis for comparing the impacts of the development alternatives. It includes considerations of direct and indirect effects and their significance and possible conflicts between the alternatives and the objectives of Federal, regional, state, and local land use plans, policies and controls for the area concerned.

Based on the guidance provided by FAA Order 5050.4B, National Environmental Policy Act Implementing Instructions for Airport Actions and FAA Order 1050.1E, Change 1, Environmental Impacts: Policy and Procedures, the environmental impacts of the alternatives have been evaluated within 18 general impact categories and cumulative impacts. A summary of the potential impacts resulting from implementation of the alternatives is also presented in Table S-1 located at the end of this section.

S.4 MITIGATION

This EIS identified potential impacts associated with implementation of each of the development alternatives. The EIS includes mitigation possibilities (those actions considered to avoid, minimize, rectify, reduce, or eliminate potential impacts resulting from implementation of any of the runway extension alternatives) for environmental resources where potential impacts were identified. Mitigation and other conditions established in this EIS, or during its review, are subsequently committed to by the FAA in its Record of Decision. These mitigation measures would be implemented by the Airport Sponsor. The FAA would ensure implementation of such mitigation measures through the use of special conditions on grants, Grant-in-aid Agreements, contract specifications, other review or implementation procedures and other appropriate follow-up actions in accordance with Title 40 CFR § 1505.3. A summary of the mitigation possibilities associated with potential impacts is presented in Table S-1 located at the end of this section.
S.5 IDENTIFICATION OF FAA’S PREFERRED ALTERNATIVE

Council on Environmental Quality (CEQ) guidance [40 CFR § 1502.14(e)] requires all Federal agencies to identify a preferred alternative. According to FAA Order 5050.4B Paragraph 1007e.(7), the approving FAA official selects the preferred alternative after reviewing each alternative’s ability to fulfill the agency’s mission while considering their economic and environmental impacts, and technical factors. As discussed in Chapter Two, Purpose and Need, the two development alternatives evaluated in detail in the EIS would meet the project purpose and need.

FAA’s Preferred Alternative: In selecting its Preferred Alternative, the FAA carefully considered each of the alternatives. See Section S.2.4, Alternatives and Chapter Three, Alternatives, to review the full description of each of the alternatives.

- Alternative A (No Action) does not meet the identified purpose and need.
- Alternative B (Sponsor’s Proposed Project) meets the identified purpose and need for the project. In addition, Alternative B has the least environmental impacts of the development alternatives.
- Alternative D meets the identified purpose and need for the project. However, there are increased environmental impacts and costs associated with the project as compared to Alternative B (Sponsor’s Proposed Project).

Alternative B, extend Runway 13/31 to the north by 1,100 feet, is the FAA’s Preferred Alternative. Extending Runway 13/31 to the north by 1,100 feet would meet the Sponsor’s purpose and need for the proposed project to accommodate existing aviation activity, as represented by the critical aircraft that regularly uses the Airport under hot weather and other adverse weather conditions, without derogating the safety of aircraft and Airport operations and with fewer adverse environmental impacts than Alternative D.
<table>
<thead>
<tr>
<th>IMPACT CATEGORY</th>
<th>ALTERNATIVE A – NO ACTION</th>
<th>ALTERNATIVE B</th>
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<th>POTENTIAL MITIGATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Noise</td>
<td></td>
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</tr>
<tr>
<td>Residential Housing Units or Noise-Sensitive Facilities with 65+ CNEL</td>
<td>None</td>
<td>Not Significant</td>
<td>Not Significant</td>
<td>Not Applicable (N/A)</td>
</tr>
<tr>
<td>Noise Impacts</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Socioeconomic Impacts</td>
<td>Would not have a significant impact on socioeconomic resources</td>
<td>Acquisition of 0.1 acres of undeveloped land; Loss of $10.43 in annual tax revenue is Not Significant. Would not have a significant impact on socioeconomic resources.</td>
<td>Acquisition of 3.7 acres of undeveloped land; Loss of $551.10 in annual tax revenue is Not Significant. Would not have a significant impact on socioeconomic resources.</td>
<td>N/A</td>
</tr>
<tr>
<td>Environmental Justice</td>
<td>No impact</td>
<td>With implementation of the compensatory mitigation measures identified in this EIS Alternative B would not disproportionately impact any low income or minority populations.</td>
<td>With implementation of the compensatory mitigation measures identified in this EIS Alternative D would not disproportionately impact any low income or minority populations.</td>
<td>N/A</td>
</tr>
<tr>
<td>Children’s Health and Safety</td>
<td>No impact</td>
<td>Would not result in the release of, nor exposure to, significant levels of harmful agents in the water, air, or soil that would affect children’s health or safety.</td>
<td>Would not result in the release of, nor exposure to, significant levels of harmful agents in the water, air, or soil that would affect children’s health or safety.</td>
<td>N/A</td>
</tr>
<tr>
<td>IMPACT CATEGORY</td>
<td>ALTERNATIVE A – NO ACTION</td>
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<td>ALTERNATIVE D</td>
<td>POTENTIAL MITIGATION</td>
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<td>------------------------------------</td>
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</tr>
<tr>
<td>Secondary (Induced) Impacts</td>
<td>Would not result in significant shifts in patterns of population movement or growth inside or outside of the GSA.</td>
<td>Would not result in significant shifts in patterns of population movement or growth inside or outside of the GSA.</td>
<td>Would not result in significant shifts in patterns of population movement or growth inside or outside of the GSA.</td>
<td>N/A</td>
</tr>
<tr>
<td>Impacts to population</td>
<td>Would not result in significant impacts to public service demands.</td>
<td>Would not result in significant impacts to public service demands.</td>
<td>Would not result in significant impacts to public service demands.</td>
<td>N/A</td>
</tr>
<tr>
<td>Public Service demands</td>
<td>Would not result in significant impacts to public service demands.</td>
<td>Additional temporary economic activity during construction. Not anticipated to induce additional growth in the region.</td>
<td>Additional temporary economic activity during construction. Not anticipated to induce additional growth in the region.</td>
<td>N/A</td>
</tr>
<tr>
<td>Business and economic activity</td>
<td>Would not result in significant impacts to business and economic activity.</td>
<td></td>
<td></td>
<td>N/A</td>
</tr>
<tr>
<td>Air Quality</td>
<td>No impact</td>
<td>Not Significant. Impacts Would Not Exceed Federal Standards</td>
<td>Not Significant. Impacts Would Not Exceed Federal Standards</td>
<td>N/A</td>
</tr>
<tr>
<td>Water Quality</td>
<td>DVO will continue to operate under its SWPPP and continue to implement BMPs to minimize the potential for pollutants to be discharged to the water bodies adjacent to the Airport. As such, implementation of Alternative A would not result in a significant impact on water quality.</td>
<td>Based on the current BMPs, SWPPP, and permits that are in place, it is not anticipated that Alternative B would exceed water quality standards, create water quality problems that cannot be avoided or mitigated, or result in difficulties in obtaining permits. Therefore, no significant impacts are anticipated with implementation of Alternative B.</td>
<td>Based on the current BMPs, SWPPP, and permits that are in place, it is not anticipated that Alternative D would exceed water quality standards, create water quality problems that cannot be avoided or mitigated, or result in difficulties in obtaining permits. Therefore, no significant impacts are anticipated with implementation of Alternative D.</td>
<td>N/A</td>
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Table S-1, Continued
ENVIRONMENTAL IMPACT SUMMARY MATRIX
Gnoss Field Airport

<table>
<thead>
<tr>
<th>IMPACT CATEGORY</th>
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</tr>
</thead>
</table>
| DOT Section 4(f)
  (Recodified as 303c)
Resources and Land and
Water Conservation Act,
Section 6(f) Resources | No impact | Implementation of Alternative B would not result in the physical taking, constructive use, or conversion of any Section 4(f) resource to other purposes, impair the use of any Section 4(f) property, or subject any Section 4(f) property to incompatible noise levels. Therefore, the effect of implementation of Alternative B on Section 4(f) resources would not be significant. | Implementation of Alternative D would not result in the physical taking, constructive use, or conversion of any Section 4(f) resource to other purposes, impair the use of any Section 4(f) property, or subject any Section 4(f) property to incompatible noise levels. Therefore, the effect of implementation of Alternative D on Section 4(f) resources would not be significant. | N/A |
| Historical, Architectural,
Archaeological, & Cultural
Resources | No direct impact | No direct impact | No direct impact | Even though no mitigation is required, the FAA will require Marin County to have an archeological monitor on-site during initial site excavation to evaluate any unanticipated discovery of unknown cultural resources. |
| Direct Effects
(Physical Impacts) | No indirect impact | No indirect impact | No indirect impact | N/A |
| Indirect Effects
(Noise Impacts) | FAA finds implementation of the No Action Alternative would not affect any properties listed or eligible for listing on the National Register of Historic Places. | FAA finds the proposed undertaking would not affect any properties listed or eligible for listing on the National Register of Historic Places. | FAA finds the proposed undertaking would not affect any properties listed or eligible for listing on the National Register of Historic Places. | N/A |
| Summary | | | | N/A |
Table S-1, Continued
ENVIRONMENTAL IMPACT SUMMARY MATRIX
Gnoss Field Airport

<table>
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<th>POTENTIAL MITIGATION</th>
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<tbody>
<tr>
<td>Fish, Wildlife, &amp; Plants</td>
<td>No impact</td>
<td>Removal of approximately 24.47 acres of plant and wildlife habitat suitable for the endangered salt marsh harvest mouse and the endangered California clapper rail including permanent loss of 6.88 acres of high brackish marsh/annual grassland habitat, permanent loss of 1.54 acres of open water ditch/channel habitat, and temporary loss of 16.05 acres of high brackish marsh/annual grassland habitat. The losses of aquatic habitat under Alternative B are considered significant, and will be mitigated as described in detail in Sections 5.9, Fish, Wildlife, and Plants; and 5.10, Wetlands. Impact is considered significant, but mitigatable to a not significant level.</td>
<td>Removal of approximately 28.29 acres of plant and wildlife habitat suitable for the endangered salt marsh harvest mouse and the endangered California clapper rail including permanent loss of 8.24 acres of high brackish marsh/annual grassland habitat, permanent loss of 1.62 acres of open water ditch/channel habitat, and temporary loss of 18.43 acres of high brackish marsh/annual grassland habitat. The losses of aquatic habitat under Alternative D are considered significant, and will be mitigated as described in detail in Sections 5.9, Fish, Wildlife, and Plants; and 5.10, Wetlands. Impact is considered significant, but mitigatable to a not significant level.</td>
<td>Marin County, as the Airport sponsor, would be responsible for developing a mitigation plan acceptable to the USFWS. During ESA Section 7 consultation, the USFWS found the conceptual mitigation options presented were suitable and developed restoration/compensation ratios for the habitat impacts. Based on the ratios, Alternative B would require between 42.9 to 57.3 acres of off-site restoration/compensation and 16.05 acres of on-site restoration. Alternative D would require between 49.9 to 66.5 acres of off-site restoration/compensation and 18.43 acres of on-site restoration.</td>
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**Table S-1, Continued**  
ENVIRONMENTAL IMPACT SUMMARY MATRIX  
Gnoss Field Airport

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<tbody>
<tr>
<td>Wetlands</td>
<td>No impact</td>
<td>Would impact 11.83 acres of wetlands regulated under Section 404 of the CWA, of which 2.66 acres are also regulated under the RHA. Implementation of Alternative B would result in significant impacts to wetlands and aquatic resources unless compensatory mitigation is provided. As described in Section 5.10.6 several options for compensatory mitigation for wetland and aquatic habitat losses associated with the implementation of Alternative B are available. A detailed compensatory mitigation plan would be required to obtain the necessary authorizations to construct Alternative B. With implementation of a mitigation plan to compensate for the losses of wetland and aquatic habitat resulting from the construction of Alternative B, the environmental impact of Alternative B would not be significant.</td>
<td>Would impact 12.73 acres of wetlands regulated under Section 404 of the CWA, of which 2.56 acres are also regulated under the RHA. Implementation of Alternative D would result in significant impacts to wetlands and aquatic resources unless compensatory mitigation is provided. As described in Section 5.10.6 several options for compensatory mitigation for wetland and aquatic habitat losses associated with the implementation of Alternative D are available. A detailed compensatory mitigation plan would be required to obtain the necessary authorizations to construct Alternative D. With implementation of a mitigation plan to compensate for the losses of wetland and aquatic habitat resulting from the construction of Alternative D, the environmental impact of Alternative D would not be significant.</td>
<td>Coordination with the USACOE and local wetland banks is on-going. Marin County, as the Airport sponsor, would be responsible for developing a mitigation plan acceptable to the USACOE. Final mitigation ratios for restoration/compensation will be identified after coordination with USACOE is complete. However, based on Marin County policies and the likelihood that Marin County will choose to coordinate the wetland mitigation requirements identified in the CWA Section 404 permit with the habitat compensation requirements of the USFWS Biological Opinion, wetland mitigation estimates can be made. Alternative B could require an estimated 35.49 acres of restoration/compensation. Alternative D could require 38.19 acres of restoration/compensation.</td>
</tr>
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Landrum & Brown  
June 2014  
Summary  
Page S-19
### Table S-1, Continued

#### ENVIRONMENTAL IMPACT SUMMARY MATRIX

**Gnoss Field Airport**

<table>
<thead>
<tr>
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<th>POTENTIAL MITIGATION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Floodplains</strong></td>
<td>No impact</td>
<td>Would enclose approximately 13 additional acres of the approximately 3,875 acre 100-year floodplain behind the Airport levee. Implementation of Alternative B would not result in a significant encroachment on the existing 100-year floodplain.</td>
<td>Would enclose approximately 15 additional acres of the approximately 3,875 acre 100-year floodplain behind the Airport levee. Implementation of Alternative D would not result in a significant encroachment on the existing 100-year floodplain.</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Coastal Resources</strong></td>
<td>No impact</td>
<td>No permit for this project is required from the Bay Conservation and Development Commission because DVO is located outside of the coastal zone. Construction of Alternative B would not impact the coastal zone. Therefore, construction of Alternative B on Airport property would not have a significant impact on coastal resources.</td>
<td>No permit for this project is required from the Bay Conservation and Development Commission because DVO is located outside of the coastal zone. Construction of Alternative D would not impact the coastal zone. Therefore, construction of Alternative D on Airport property would not have a significant impact on coastal resources.</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Wild &amp; Scenic Rivers</strong></td>
<td>No impact</td>
<td>No impact</td>
<td>No impact</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Farmlands</strong></td>
<td>No impact</td>
<td>No impact</td>
<td>No impact</td>
<td>N/A</td>
</tr>
</tbody>
</table>
Table S-1, Continued
ENVIRONMENTAL IMPACT SUMMARY MATRIX
Gnoss Field Airport

<table>
<thead>
<tr>
<th>IMPACT CATEGORY</th>
<th>ALTERNATIVE A – NO ACTION</th>
<th>ALTERNATIVE B</th>
<th>ALTERNATIVE D</th>
<th>POTENTIAL MITIGATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy Supply &amp; Natural Resources</td>
<td></td>
<td>Alternative B would not result in a substantial increase in demand for energy, natural resources, fuel, or rare consumable natural resources, and would allow the critical aircraft operating at DVO to increase its efficiency and sustainability by being able to take off at maximum gross take-off weight under all weather conditions. Therefore, Alternative B would not have a significant impact on Energy Supply, Natural Resources, or be inconsistent with Sustainable Design.</td>
<td>Alternative D will not result in a substantial increase in demand for energy, natural resources, fuel, or rare consumable natural resources, and would allow the critical aircraft operating at DVO to increase its efficiency and sustainability by being able to take off at maximum gross take-off weight under all weather conditions. Therefore, Alternative D would not have a significant impact on Energy Supply, Natural Resources, or be inconsistent with Sustainable Design.</td>
<td>N/A</td>
</tr>
<tr>
<td>Natural Resources</td>
<td>No impact</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Energy</td>
<td>No impact</td>
<td>Alternative B would not result in significant visual or aesthetic impacts.</td>
<td>Alternative D would not result in significant visual or aesthetic impacts.</td>
<td>N/A</td>
</tr>
<tr>
<td>Light Emissions &amp; Visual Impact</td>
<td>No impact</td>
<td>Not Significant</td>
<td>Not Significant</td>
<td></td>
</tr>
<tr>
<td>Hazardous Materials</td>
<td>No impact</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construction Impacts</td>
<td>No impact</td>
<td>Construction impacts associated with the implementation of Alternative B would not be significant.</td>
<td>Construction impacts associated with the implementation of Alternative D would not be significant.</td>
<td>N/A</td>
</tr>
<tr>
<td>Cumulative Impacts</td>
<td>No impact</td>
<td>Not Significant</td>
<td>Not Significant</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Source: Landrum & Brown, 2011
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After careful and thorough consideration of the facts contained herein, and following consideration of the views of those Federal agencies having jurisdiction by law or special expertise on environmental impacts described, the undersigned finds that the proposed Federal action is consistent with existing national environmental policies and objectives as set forth in section 101(a) of the National Environmental Policy Act of 1969.

Approved

Mark A. McClardy
Manager, Airports Division
Western Pacific Region, AWP 600

DATE

JUNE 11, 2014

Disapproved

Mark A. McClardy
Manager, Airports Division
Western Pacific Region, AWP 600

DATE

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