

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
WESTERN-PACIFIC REGION

RECORD OF DECISION

Proposed Extension of Runway 13/31

Gross Field Airport
Novato, Marin County, California



For further information

Douglas R. Pomeroy
U.S. Department of Transportation
Federal Aviation Administration
San Francisco Airports District Office
1000 Marina Boulevard, Suite 220
Brisbane, CA 94005-1835
650-827-7612

JULY 10, 2020

GENERAL INFORMATION ABOUT THIS DOCUMENT

WHAT'S IN THIS DOCUMENT? This Record of Decision (ROD) provides the final environmental determination and approval by the Federal Aviation Administration (FAA), as lead federal agency to implement the federal actions needed for the proposed extension of the existing 3,300-foot Runway 13/31 at Gnosss Field Airport (DVO), Marin County, California. This ROD was prepared pursuant to Title 40, Code of Federal Regulations (C.F.R.) § 1502.2. This ROD discusses all alternatives considered by FAA in reaching its decision, summarizes the analysis used to evaluate the alternatives, and briefly summarizes the potential environmental consequences of the Proposed Action, No Action and other reasonable alternatives described in the Final Environmental Impact Statement (EIS) published on July 3, 2014 and in the Final Supplement to the Final EIS (SEIS), published on March 6, 2020. This ROD identifies the FAA's preferred alternative, Alternative E, for implementation, which is also the environmentally preferred alternative. In identifying the environmentally preferred alternative, the FAA has adopted all practicable means to avoid or minimize the adverse environmental impacts of Alternative E. This ROD identifies applicable and required mitigation.

BACKGROUND. On December 9, 2011, the FAA published a Draft Environmental Impact Statement (EIS). The U.S. Environmental Protection Agency (EPA) published a Notice of Availability (NOA), of the Draft EIS in the *Federal Register* on the same date. The Draft EIS was prepared in accordance with the requirements of the National Environmental Policy Act (NEPA) of 1969. The FAA received comments on the Draft EIS between December 9, 2011, and February 9, 2012, and held a public hearing to received comments on the Draft EIS on January 10, 2012. The FAA prepared a Final EIS and the EPA published an NOA for the Final EIS on July 3, 2014. During the preparation of the responses to comments on the 2014 Final EIS, the FAA concluded the aviation activity of the critical aircraft at DVO may have changed. The FAA conducted additional evaluations that identified changed conditions, and prepared a Draft Supplement to the Final EIS (SEIS) to consider potential environmental impacts. The public review period of the Draft SEIS began on July 19, 2019 with publication of the NOA in the *Federal Register* and ended on September 6, 2019. A Public Hearing on the Draft SEIS was held on August 22, 2019. During public review of the Draft SEIS, the United States Army Corps of Engineers (USCOE) became a NEPA cooperating agency for the SEIS. The Final SEIS, including responses to comments on the Draft SEIS, was distributed to the public and a NOA of the Final SEIS was published in the *Federal Register* on March 6, 2020. Comments on the Final SEIS are addressed in this ROD. The Final SEIS document is available online at <http://gnosssfieldeis-eir.com/background/index.htm>

WHAT SHOULD YOU DO? Read the Record of Decision to understand the actions that FAA intends to take relative to the proposed project.

WHAT HAPPENS AFTER THIS? Marin County, the owner and operator of DVO, may proceed with the actions necessary to implement Alternative E, the alternative selected by the FAA.

TABLE OF CONTENTS

I.	INTRODUCTION	1
II.	BACKGROUND	4
III.	PROPOSED FEDERAL ACTIONS AND APPROVALS	4
IV.	PURPOSE AND NEED	5
V.	ALTERNATIVES CONSIDERED	6
VI.	AGENCY PREFERRED ALTERNATIVE AND ENVIRONMENTALLY PREFERRED ALTERNATIVE	111
VII.	PUBLIC AND AGENCY INVOLVEMENT	111
VIII.	GOVERNMENT TO GOVERNMENT CONSULTATION	133
IX.	AGENCY COORDINATION AND CONSULTATION	14
X.	ENVIRONMENTAL CONSEQUENCES.....	15
XI.	AGENCY FINDINGS AND DETERMINATIONS	44
XII.	DECISION	51
APPENDIX A RESPONSES TO COMMENTS RECEIVED ON FINAL SEIS		53

LIST OF FIGURES

FIGURE 1 – FAA’s Preferred Alternative	2
--	---

LIST OF TABLES

TABLE 1 – MULTI-STEP SCREENING PROCESS FOR THE PROPOSED GNOSS FIELD RUNWAY 13/31 EXTENSION PROJECT	9
---	---

I. INTRODUCTION

This Record of Decision (ROD) reflects the final environmental determination and approval of the Federal Aviation Administration (FAA) regarding the proposed extension of the existing 3,300-foot Runway 13/31 at Gness Field Airport (DVO or Airport), Novato, Marin County, California, owned and operated by Marin County, California. Marin County is the Sponsor for DVO. The environmental determination and approval are based upon a thorough and careful environmental decision making process, including review of the analysis of impacts described in the 2014 Final Environmental Impact Statement, and the Final Supplement to the 2014 Final EIS published March 6, 2020 (85 FR 13159).

This ROD is based on both the 2014 Final EIS, published on July 3, 2014 (79 FR 38024), and the Final Supplement to the 2014 Final EIS (SEIS), both prepared by the FAA as the lead federal agency. The USCOE became a cooperating agency pursuant to the requirements of NEPA, as amended (42 United States Code [U.S.C.] § 4321, *et seq.*) for the SEIS.

The 2014 Final EIS and the 2020 Final SEIS were prepared pursuant to the implementing regulations of the Council on Environmental Quality (CEQ) Regulations for Implementing the Procedural Provisions of NEPA (Title 40, Code of Federal Regulations [C.F.R.] parts 1500-1508); FAA Orders 1050.1F, *Environmental Impacts: Policies and Procedures* and 5050.4B, *National Environmental Policy Act (NEPA) Implementing Instructions for Airport Actions*. This ROD reflects the decisions and approvals of the FAA pursuant to 40 C.F.R. § 1506.4.

The FAA has selected the Alternative E – Extend Runway 13/31 300 feet, which is also the environmentally preferred alternative, for implementation at DVO. The federal actions identified in Section III of this ROD are necessary to implement the FAA's Preferred Alternative. The Sponsor's Proposed Project is described in detail in Section 2.2 of the Final SEIS. FAA's Preferred Alternative is described in Section 2.3 and depicted in Exhibit 2-2 of the Final SEIS and in Figure 1 of this ROD.

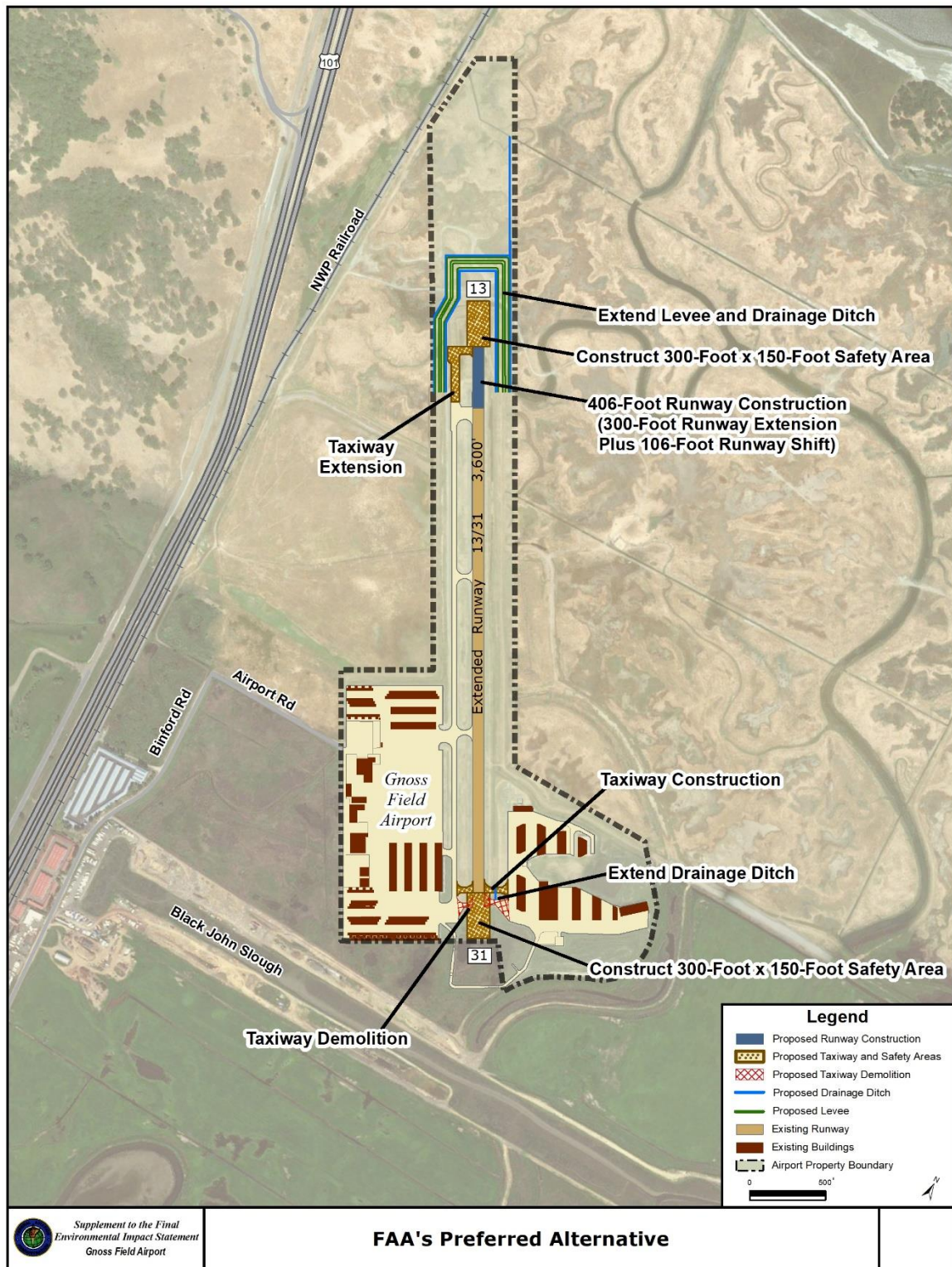


Figure 1 FAA's Preferred Alternative

The FAA's Preferred Alternative includes the following Project components:

- Extend Runway 13/31 300 feet to the northwest from 3,300 feet to a total length of 3,600 feet while maintaining the 75-foot width of the runway;
- Shift Runway 13/31 threshold 106 feet to the northwest to allow construction of FAA 300-foot B-II standard Runway Safety Area (RSA) beyond each runway end while staying within existing DVO property.
- Relocate existing taxiways accessing south end of Runway 13/31 to new runway end;
- 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 provide B-II standard RSA width of 150 feet centered on the runway centerline;
- Corresponding realignment of drainage channels to drain the extended runway and taxiway;
- Corresponding levee extension to protect the extended runway and taxiway from flooding.
- Relocate the Navigational Aids (NAVAIDs), such as the Precision Approach Path Indicator (PAPI) that pilots use to land at the Airport to reflect the extended runway.

The primary difference between FAA's Preferred alternative and the Sponsor's Proposed Project, as described in the Final SEIS, is the length of extension needed to accommodate the critical aircraft at DVO. The Sponsor's proposal was to extend the runway 1,100 feet. FAA's Preferred Alternative is to extend the runway 300 feet. As described in the Final SEIS Section 2.1.3 *Insufficient Runway Length* and Appendix D-1, *Runway Length Analysis*, a 300-foot runway extension to the existing 3,300-foot runway at DVO is necessary to fully accommodate the current critical aircraft at DVO during hot weather conditions.

Section IV of this ROD describes the Purpose and Need. Section V describes the multi-step screening process to identify a range of reasonable alternatives that were capable of achieving the Purpose and Need. As described in Section VI, the FAA has selected the FAA's Preferred Alternative for implementation. Section X summarizes the potential environmental impacts of the alternatives. Section XI includes a summary of mitigation. Section XII includes the Agency Findings and Determinations and Section XIII includes the Decision and Orders.

II. BACKGROUND

DVO is a general aviation airport owned and operated by Marin County, California. Marin County is the Sponsor for DVO. DVO is located in the unincorporated area of Marin County approximately three miles north of the City of Novato on a 120-acre site situated between Highway 101 and the Petaluma River (see Final SEIS Exhibit 4-1, *Airport Regional Location*). DVO is the only public use, general aviation airport in Marin County, California, and one of several reliever airports in the San Francisco Bay area for San Francisco International Airport and Oakland International Airport.

DVO serves as an essential regional transportation resource by providing general aviation facilities in the northern portion of the San Francisco Bay area. The Marin County Department of Public Works is responsible for the daily management of the Airport. The Airport has one runway oriented southeast/northwest (designated Runway 13/31) that measures 3,300 feet long by 75 feet wide.

As described Section 1.2 of the Final SEIS, in 1968, a 3,300-foot by 60-foot, asphalt-paved runway and a facilities complex were built at the south end of the field at DVO. The 1989 *Marin County Airport (Gnoss Field) Airport Master Plan and Update Chapter 6.0 – Airport Development Program Update 1997 – Marin County Airport Master Plans* adopted by the Marin County Board of Supervisors both address the further development of DVO. Due to concerns with the periodic presence of crosswind conditions both the widening of Runway 13/31 and development of a crosswind runway were considered for DVO in the planning documents.

DVO is currently designed to accommodate aircraft with a wingspan of 49 feet or less, and an approach speed of 91 to 121 knots (FAA Airport Reference Code B-I). The approach end of Runway 13 is equipped with precision approach guidance through a published Global Positioning System (GPS) approach procedure. Both runway ends are equipped with a Precision Approach Path Indicator (PAPI). The aircraft parking apron includes approximately 92 tie-downs, 147 T-hangars, and 37 conventional hangars, for a total parking capacity of about 276 aircraft.

III. PROPOSED FEDERAL ACTIONS AND APPROVALS

Federal Actions by the FAA

1. Unconditional approvalⁱ of the ALP to depict the proposed runway shift/extension and parallel taxiway extension pursuant to 49 U.S.C. §§ 40103(b) and 47107(a)(16);
2. Development of 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

ⁱ Paragraph 202(c)(2) of FAA Order 5050.4B defines unconditional ALP approval where the proposed ALP depicts features that are safe and efficient for airport operations and use and that the features are ripe for Federal decision and that the Office of Airports (ARP) has completed the environmental review process this Order requires for the near-term and immediate-term development that is ripe for decision, and the approving FAA official has authorized the airport sponsor or project proponent to begin building the facilities or equipment depicted on the unconditionally approved ALP.

actions would include, but are not limited to, the establishment or modification of flight procedures; and

3. A determination that the environmental analysis prerequisites associated with any future Airport Improvement Program (AIP) funding applications have been fulfilled pursuant to 49 U.S.C. § 47101 *et seq.*
4. In addition to FAA Federal actions, construction of any runway extension would require a Clean Water Act (CWA), Section 404, permit authorization from the USCOE to fill waters within CWA jurisdiction. The USCOE determination regarding whether to issue a CWA, Section 404, permit is a USCOE Federal actionⁱⁱ.

IV. PURPOSE AND NEED

The purpose and need for the FAA's Preferred Alternative is documented in detail in Section 2.1 of the Final SEIS. The next paragraphs of this Section describe the purpose and need of the FAA and Marin County.

FAA Purpose and Need

The purpose of the FAA's Preferred Alternative is to fulfill FAA's statutory mission to ensure the safe and efficient use of navigable airspaceⁱⁱⁱ in the United States as set forth under the Federal Aviation Act of 1958, as amended, [49 U.S.C. § 47101 (a)(1)]. The FAA must ensure that the FAA's Preferred Alternative does not derogate the safety of aircraft and airport operations at DVO. Moreover, it is the policy of the FAA under 49 U.S.C. § 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. The FAA's need for the FAA Preferred Alternative is to ensure that only proposed alterations that do not adversely affect the safety, utility, or efficiency of the airport are approved.

Marin County, California (County) Purpose and Need

The County's purpose and need is to allow existing aircraft, as represented by the family grouping of critical aircraft at DVO, to operate without operational weight restrictions under hot weather conditions. The County has conducted various planning studies with the goal of accommodating existing aircraft operators and improving overall airfield safety. The Project, which is the subject of this EIS, was developed by the County to meet this goal.

ⁱⁱ The USCOE would issue a decision on a CWA, Section 404, permit after review of a CWA, Section 404, permit application, which is typically submitted during the engineering design of a project.

ⁱⁱⁱ 49 USC § 40102 (32) defines *navigable airspace* as airspace above the minimum altitudes of flight prescribed by regulations under this subpart and subpart III of this part, including airspace needed to ensure safety in the takeoff and landing of aircraft. For the purposes of this ROD, navigable airspace includes the airspace at and around Gnoss Field Airport.

V. ALTERNATIVES CONSIDERED

Evaluation and Screening of Alternatives

The FAA completed a thorough and objective review of a range of reasonable alternatives in accordance with CEQ regulations (40 C.F.R. § 1502.14). The FAA established a two-step screening process to identify a range of reasonable runway extension alternatives that were capable of achieving the Purpose and Need for the FAA's Preferred Alternative. Section 3.2 of the Final SEIS identifies the two step screening process used for the Proposed Project:

- **Step 1:** 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* as to allow existing aircraft, as represented by the family grouping of critical aircraft at DVO, to operate without operational weight restrictions under hot weather conditions. Alternatives that did not meet the purpose for the project were excluded from further review.
- **Step 2:** The second step was to further evaluate the remaining alternatives for additional considerations; These considerations were:

Environmental: Alternatives with substantially higher adverse impacts beyond those of the Sponsor's Proposed Project were not evaluated in detail. The Final SEIS also recognized the Clean Water Act (CWA) Section 404(b)(1) guidelines, which provides that the USCOE would only permit the *least environmentally damaging practicable alternative*.

Operational: Alternatives that clearly reduced the safe and efficient use of navigable airspace in the U.S. or would derogate the safety of aircraft and airport operations at DVO as compared to existing conditions were not retained for detailed consideration.

Cost Considerations: Alternatives with costs substantially greater than the Sponsor's Proposed Project were considered impracticable, and

Reasonable, Possible and Prudent alternative considerations: Reasonable alternatives are those that are feasible and prudent from a technical and economic standpoint and using common sense.

Section 3.3 of the Final SEIS states that off-site alternatives were considered in the June 2014 Final EIS. No off-site alternatives were identified that met the purpose and need of this project and the alternatives screening criteria. Therefore, no off-site alternatives were evaluated in detail in the June 2014 Final EIS and none will be evaluated in the Final SEIS. Four runway development alternatives were identified for evaluation along with the No Action Alternative. These runway development alternatives include the alternatives previously identified in the June 2014 Final EIS. These alternatives also include an additional alternative (Alternative E) identified subsequent to the determinations described in Chapter 2, *Purpose and Need*, that the current critical aircraft at DVO, and associated runway length necessary to meet the purpose and need for the project, were no longer the same as what was identified in the June 2014 Final EIS.

During the preparation of the Draft EIS, FAA developed a forecast of aviation demand at DVO. This forecast was prepared in 2009. That forecast was included in the Draft EIS in Appendix C. Appendix D-

1 of the Final SEIS identifies that the runway length analysis was conducted in accordance with FAA Advisory Circular 150/5000-17, *Critical Aircraft and Regular Use Determination* states:

“The critical aircraft is the most demanding aircraft type, or grouping of aircraft with similar characteristics, that make regular use of the airport. Regular use is 500 annual operations, including both itinerant and local operations but excluding touch-and-go operations. An operation is either a takeoff or landing.”

The runway length analysis conducted as part of the 2009 Forecast determined that the Cessna 525 business jet was the most demanding aircraft that had more than 500 annual operations at DVO. The 2014 Final EIS identified the critical aircraft for DVO as the Cessna 525 business jet, and concluded that a 1,100-foot extension to the existing 3,300-foot Runway 13/31 was necessary to fully accommodate that aircraft during hot weather conditions. Following publication of the 2014 Final EIS on July 3, 2014 (79 FR 38024), the FAA concluded that existing aviation activity at DVO might have changed from those described in the 2014 Final EIS.^{iv}

The 2009 Forecast did not account for the decrease in aviation activity during the economic downturn, also known as the “Great Recession.” The economic downturn directly impacted the General Aviation (GA) industry resulting in decreases in GA operations at airports nationwide including at DVO. Those changes in aviation activity in turn resulted in a change in the critical aircraft at DVO. This change required the FAA to revisit its Purpose and Need for the Proposed Action, and the Sponsor’s Proposed Project.

In 2016, FAA prepared a Purpose and Need Working Paper and prepared a new aviation forecast for public review and comment. FAA received comments from airport users on the 2016 Working Paper that suggested there were more aircraft operations than FAA had observed initially and were not captured in the 2016 Working Paper. FAA followed up on those comments and reviewed fuel sales logs, conducted pilot interviews and reviewed available radar data. This information was used to confirm existing aviation activity at DVO. FAA developed a representation of the existing operational fleet mix for DVO for the Working Paper utilizing the radar data, the airport’s operations count, the operations forecast, and the based aircraft forecast. Based on the Working Paper and updated forecasts, FAA confirmed that the Cessna 525 was no longer reasonably foreseen to have more than 500 operations annually at DVO, and therefore, no longer to be used as the critical aircraft at DVO. Thus, FAA updated the forecast again in 2018 to ensure it had the best available data for the Supplement to the Final EIS.

FAA used the updated forecast presented in Appendix C-1 in the Final SEIS. The 2018 updated forecast replaced the 2009 Forecast used in the 2014 Final EIS. The Final SEIS, Chapter 1, and Appendix C-1 *Aviation Activity Forecast*, discloses that the critical aircraft for DVO changed during preparation of the EIS. FAA then determined that an additional Runway Length Analysis was required to verify the current aviation activity level and critical aircraft for DVO. This analysis is included in Appendix D-1 of the Final SEIS. Following this analysis, FAA determined that the critical aircraft at DVO changed to the aircraft

^{iv} FAA San Francisco Airports District Office January 9, 2015 letter to Mr. Craig Tackabery, Marin County Department of Public Works.

*Gross Field Airport, Novato, Marin County, California
Record of Decision, Proposed Extension of Runway 13/31
July 10, 2020*

family grouping of B-II turboprop aircraft and provided a runway length determination at DVO for the new critical aircraft. Table 1 identifies the various alternatives that were evaluated in both the 2014 Final EIS and the Final SEIS.

As described in the Final SEIS Section 2.1.3 *Insufficient Runway Length* and Appendix D-1, *Runway Length Analysis*, a 300-foot runway extension to the existing 3,300-foot runway at DVO is necessary to fully accommodate the current critical aircraft at DVO during hot weather conditions.

FAA Advisory Circular 150/5325-4B *Runway Length Requirements for Airport Design* identifies that the appropriate design objective for an airport's main primary runway is to provide sufficient runway length for all airplanes that will regularly use the runway (i.e. the critical aircraft) without causing operational weight restrictions. FAA Advisory Circular 150/5325-4B defines hot weather operational weight restrictions as when the critical aircraft cannot take off from an airport with a full payload of passengers, cargo, and fuel when the mean (average) daily maximum temperature of the hottest month (82 degrees Fahrenheit at DVO) occurs.

The necessary runway length to accommodate the critical aircraft at DVO changed during the preparation of the EIS because the critical aircraft changed to a less demanding aircraft with a shorter runway length requirement. The change in the DVO critical aircraft from the Cessna 525 business jet to the family grouping of B-II turboprop aircraft occurred because there were fewer than 500 annual operations of the Cessna 525 business jet at DVO.

**Table 1 - MULTI-STEP SCREENING PROCESS FOR THE
PROPOSED GNOSS FIELD RUNWAY 13/31 EXTENSION PROJECT**

Alt.	Description	Step One – Does the alternative meet the Sponsor's Purpose to allow existing aircraft, as represented by the family grouping of critical aircraft at DVO, to operate without operational weight restrictions under hot weather conditions	Step Two – further evaluate the remaining alternatives for additional considerations of Environmental; Operational; Cost considerations; Reasonable, Possible and Prudent alternative considerations	Retain for detailed EIS impact evaluation?
A	No Action	No	Results in no physical environmental impacts (wetlands or cultural resources). Would continue the use of non-standard Runway Safety Areas and would not address the need for more runway length to accommodate current aircraft operators. No direct costs. Indirect costs would occur as a result of not meeting FAA standards and not providing the runway length to accommodate the current aircraft. Indirect costs include the loss of revenue to the Airport due to the fact that some pilots would choose not to use DVO, therefore depriving the County of revenues associated with the sale of fuel to these aircraft.	Yes*
B	Extend Runway to the Northwest by 1,100 Feet (Sponsor's Proposed Project)	Yes	Requires relocation of levee and drainage ditch around the northern portion of runway resulting in the permanent removal of wetland habitat. Requires temporary and permanent removal of endangered species habitat. Requires monitoring of potential cultural resource impacts. Would result in aircraft shifting where the climb to altitude would occur when departing to the south. Requires construction in the 100-year floodplain. Addresses both the non-standard Runway Safety Area and the need for additional runway length. The runway would be closer to the landfill northeast of the Airport, which is a potential bird-attractant. This alternative could be inconsistent with FAA bird-aircraft strike hazard guidance. Would require relocation of the PAPI/VASI navigational aids that pilots use for approach to landing at the Airport to reflect the extended runway. Acquisition costs for the County to gain exclusive use of 0.1 acres of land to the south of the Airport that would be required for the associated RSA extension.	Yes
C	Extend Runway to the Southeast by 1,100 Feet	Yes	Requires the extension of the levee and drainage ditch to the south of the existing runway resulting in more extensive permanent removal of wetland habitat than Alternative B, Alternative D, or Alternative E, including a portion of Black John Slough. Requires more extensive temporary and permanent removal of endangered species habitat than Alternative B, Alternative D, or Alternative E. Although there is no known cultural resources impact from this Alternative, there are potential cultural resource impacts and monitoring would be required. Because the landing threshold for Runway 13 would be closer to the residential areas to the south of the Airport, aircraft approaching to land at DVO from the south, would be at a lower altitude on approach than is experienced with the existing runway when passing near the residential areas to the south of the Airport; this could potentially increase aircraft noise levels in those communities. Would require construction in the 100-year floodplain. Would be the most expensive alternative to build.	No
D	Extend Runway to the Southeast by 240 Feet and to the Northwest by 860 Feet	Yes	Requires relocation of levee and drainage ditch around north and south portions of the runway resulting in permanent removal of wetland habitat similar, but slightly larger, than Alternative B and substantially larger than Alternative E. Would require the temporary and permanent removal of endangered species habitat similar to, but slightly higher than, Alternative B, and substantially larger than Alternative E. Although there is no known cultural resources impact from this Alternative, there are potential cultural resource impacts and monitoring would be required. Would result in aircraft shifting where the climb to altitude would occur when departing to the south. Aircraft would be at a higher altitude than is currently experienced with the existing runway before passing near the residential areas to the south of the Airport, but not as high as Alternative B, which would potentially decrease aircraft departure noise levels in those communities. Would require construction in the 100-year floodplain.	Yes
E	Extend Runway to the Northwest by 300 Feet	Yes	Requires relocation of levee and drainage ditch around the northern portion of the runway, resulting in the permanent removal of wetland habitat. However, the amount of wetland habitat removed is substantially less than that for other alternatives. Although there is no known cultural resources impact from this Alternative, there are potential cultural resource impacts and monitoring would be required. Would result in aircraft shifting where the climb to altitude would occur when departing to the south. Aircraft would be at a higher altitude than is currently experienced with the existing runway before passing near the residential areas to the south of the Airport, which would potentially decrease aircraft departure noise levels in those communities. Would require construction in the 100-year floodplain. Addresses both the non-standard Runway Safety Area and the need for additional runway length. The runway would be extended closer to the landfill northeast of the Airport, which is a potential bird-attractant. This alternative could be inconsistent with FAA bird-aircraft strike hazard guidance. Would require relocation of the PAPI/VASI navigational aids that pilots use for approach to landing at the Airport to reflect the extended runway.	Yes

(*) The No Action Alternative does not meet the Purpose and Need for the project. 40 CFR § 1502.14(d) guidelines require a No Action Alternative be included in the evaluation of environmental consequences, therefore this alternative was carried forward for detailed analysis.

Comparison of Sponsor's Proposed Project to FAA's Preferred Alternative.

The Sponsor's Proposed Project: Extend Runway to the northwest by 1,100 feet (Proposed Project – Alternative B in the Final SEIS) and the FAA's Preferred Alternative (Alternative E in the Final SEIS) have different runway lengths because they are based on *different* critical aircraft. The Sponsor's Proposed Project includes a 1,100-foot runway extension, and is consistent with the runway length analysis identified in the June 2014 Final EIS for the Cessna 525 business jet. The Sponsor's Proposed Project includes the following elements.

- Extend Runway 13/31 1,100 feet to the northwest 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;
- Relocate the Navigational Aids (NAVAIDs), such as the Precision Approach Path Indicator (PAPI), that pilots use to land at the Airport to reflect the extended runway; and
- Acquire 0.1 acre of land south of the Airport to provide for a 240-foot long RSA on the south end of Runway 13/31.

Alternative E, the FAA Preferred Alternative, Extend Runway 13/31 to the northwest by 300 feet and shift the runway northwest by 106 feet was evaluated in the screening process in the Final SEIS. Alternative E was not included in the 2014 Final EIS because the change in critical aircraft was not identified until after the 2014 Final EIS was issued. Alternative E was evaluated in detail in the Final SEIS as the alternative meets the purpose and need of the project for the current critical aircraft and was not eliminated from detailed consideration by environmental, operational, cost, or reasonable, possible, or prudent considerations. Alternative E, the FAA Preferred Alternative includes:

- Extend Runway 13/31 300 feet to the northwest from 3,300 feet to a total length of 3,600 feet while maintaining the 75-foot width of the runway;
- Shift Runway 13/31 threshold 106 feet to the northwest to allow construction of FAA 300-foot B-II standard Runway Safety Area (RSA) beyond each runway end while staying within existing DVO property.
- Relocate existing taxiways accessing south end of Runway 13/31 to new runway end;
- 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 provide B-II standard RSA width of 150 feet centered on the runway centerline;

- Corresponding realignment of drainage channels to drain the extended runway and taxiway;
- Corresponding levee extension to protect the extended runway and taxiway from flooding; and
- Relocate the Navigational Aids (NAVAIDs), such as the Precision Approach Path Indicator (PAPI), that pilots use to land at the Airport to reflect the extended runway; and

VI. AGENCY PREFERRED ALTERNATIVE AND ENVIRONMENTALLY PREFERRED ALTERNATIVE

The CEQ regulations (40 C.F.R. § 1502.14(e)) require that a lead agency identify its preferred alternative in the Final EIS and identify the environmentally preferred alternative (40 C.F.R. § 1505.2(b)) in the ROD. The FAA's Preferred Alternative is the alternative "the agency believes would fulfill its statutory mission and responsibilities, giving consideration to economic, environmental, technical and other factors." The environmentally preferred alternative is the alternative that best promotes the national environmental policies incorporated into Section 101 of NEPA. In general, this would be the alternative that results in the least impact to the environment while still meeting the purpose and need, and that best protects natural and cultural resources.

The Approving Official for this ROD has selected the Preferred Alternative based on a review of "each alternative's ability to fulfill the agency's mission while considering their economic and environmental impacts, and technical factors." The FAA identified Alternative E – Extend the Runway 300 feet north as the preferred alternative for implementation. Alternative E would meet the Sponsor's purpose and need for the proposed project to allow existing aircraft, as represented by the family grouping of critical aircraft at DVO, to operate without operational weight restrictions under hot weather conditions, without derogating the safety of aircraft and airport operations, and with fewer adverse environmental impacts than Alternatives B and D. As a **smaller** project than the Sponsor's Proposed Project, Alternative E would be anticipated to have lower construction costs.

Of all alternatives considered, the No Action Alternative has the fewest environmental impacts and is considered the Environmentally Preferred Alternative. However, the No Action Alternative does not meet the project purpose and need. Of the project alternatives that do meet the project purpose and need, Alternative E, extend Runway 13/31 to the northwest by 300 feet, would be the Environmentally Preferred Alternative because it has fewer environmental impacts than Alternative B, which extends Runway 13/31 to the northwest by 1,100 feet; and Alternative D, which extends Runway 13/31 southeast by 240 feet and northwest by 860 feet. Alternative E has the fewest environmentally impacts and is the most practicable alternative that meets the purpose and need of the proposed project.

VII. PUBLIC AND AGENCY INVOLVEMENT

Scoping for the development of the EIS began with the publication of the Notice of Intent to prepare the EIS in the *Federal Register* on July 11, 2008 (73 FR 40010). A notice of the scoping meeting was published in the *Marin Independent Journal* newspaper, 30 days in advance of the scheduled meeting. A public scoping meeting was held on August 14, 2008 at the Marin Humane Society Auditorium in Novato, California. The public scoping comment period ended on August 29, 2008.

The Notice of Availability of the Draft EIS was published in the *Federal Register* and the *Marin Independent Journal* on December 9, 2011 (76 FR 76972) and a corrected notice was issued by US EPA on December 16, 2011 (76 FR 78252). The Draft EIS was available on a project website, at local libraries, the Marin County Department of Public Works, and at the FAA's San Francisco Airports District Office in Millbrae, California, and the FAA's Western Pacific Region Office in Hawthorne, California. A public hearing was held on January 10, 2012, at the Marin County Board of Supervisors Chambers, San Rafael, California to accept public comment. During the public comment period on the Draft EIS, a total of 169 separate comment letters and oral comments were received. Comments were received from federal, state, and local agencies, organizations, and individuals.

Most comments on the Draft EIS were related to the Aviation Forecast, the Runway Length Analysis, the Aircraft Operations and Noise Levels, and Induced Off-Airport Growth. The Final EIS provided detailed responses to comments on these four general topics as well as specific responses to comments to each comment on the Draft EIS in Appendix Q *Responses to Comments*.

The Notice of Availability of the Final EIS was published in the *Federal Register* on July 3, 2014 (79 FR 38024). The Notice of Availability of the Final EIS was also published in the *Marin Independent Journal*. The Final EIS was available on a project website, at local libraries, and at the FAA's San Francisco Airports District Office in Brisbane, California, and the FAA's Western Pacific Region Office in Hawthorne, California. During the 30-day period after publication of the Final EIS, the FAA received comment letters from the United States Environmental Protection Agency (US EPA) Region IX and a private individual. During the preparation of the response to comments on the 2014 Final EIS, the FAA informally reviewed aviation operations activity from the FAA Traffic Flow Management System Counts (TMFSC) database associated with aviation activity at DVO. After that evaluation, the FAA concluded that existing conditions regarding the aviation activity at DVO may have changed from those described in the June 2014 Final EIS. Therefore, a formal analysis was required to verify the current aviation activity level and critical aircraft for DVO.

That formal analysis was contained in an April 2016 Purpose and Need Working Paper, which was circulated for public review and comment between May 2, 2016 and June 17, 2016, and a public meeting to accept comments on the document was held on June 2, 2016. The April 2016 Purpose and Need Working Paper identified that the critical aircraft classification and associated runway length requirement at DVO had changed from what was described in the 2014 Final EIS. This new information needed to be added in a supplement to the 2014 Final EIS, and therefore, the FAA did not issue a Record of Decision (ROD) on the 2014 Final EIS.

As a result of comments on the April 2016 Purpose and Need Working Paper, the FAA collected additional information on aviation activity at DVO. This additional aviation activity information was provided in the February 2018 Updated Purpose and Need Working Paper. The February 2018 Updated Purpose and Need Working Paper was circulated for agency and public review between February 20, 2018 and April 6, 2018, and a public meeting was held to accept comments on the document on March 20, 2018. The analysis in the February 2018 Updated Purpose and Need Working Paper was then incorporated in the Draft Supplement to the 2014 Final EIS (SEIS).

The Notice of Availability of the Draft SEIS was published in the *Federal Register* and in the *Marin Independent Journal* newspaper on July 19, 2019 (84 FR 34889). The Draft SEIS was available on a project website, at local libraries, the Marin County Department of Public Works, and at the FAA's San Francisco Airports District Office in Brisbane, California, and the FAA's Western Pacific Region Office in El Segundo, California. A public hearing was held on August 22, 2019, at the Marin County Humane Society Auditorium, Novato, California, to accept public comments. The FAA received a total of 16 comments written comments on the Draft SEIS. The comments on the Draft SEIS are included in Appendix P-1. The FAA prepared responses to the comments received on the Draft SEIS, which are included in Appendix Q-1 of the Final SEIS.

The Notice of Availability of the Final SEIS was published in the *Federal Register* (85 FR 13159) and the *Marin Independent Journal* on March 6, 2020. The Final SEIS was available on the project website, at local libraries, and at the FAA's San Francisco Airports District Office in Brisbane, California, and the FAA's Western Pacific Region Office in El Segundo, California.

On March 16, 2020, public health departments for Marin County and other counties in the San Francisco Bay area issued a shelter-in-place order in an effort to minimize the adverse effects of the Corona Virus Disease (COVID-19) public health emergency. As a result local libraries, Marin County offices, the FAA's San Francisco Airports District Office, and many other public facilities were closed to the public, and the public was also confined to their homes except for essential outings. During this period, the Final SEIS has remained publicly available on the internet on the EIS project website. As the United States Postal Service has remained in operation, it has remained possible for the FAA to receive any written comments submitted on the Final SEIS.

The FAA received written comments on the Final SEIS from the Stewarts Point Rancheria Kashia Band of Pomo Indians and the Federal Emergency Management Agency (FEMA), Region IX. The Stewarts Point Rancheria Kashia Band of Pomo Indians March 25, 2020 e-mail stated that DVO was outside of their ancestral tribal area and that they had no further comments on the project. FEMA submitted a February 27, 2020, letter describing the requirements of E.O. 11988 *Floodplain Management*, E.O. 11990 *Protection of Wetlands*, and the National Flood Insurance Program. This letter provided the same information that FEMA submitted in its July 15, 2019 letter during the public comment period for the Draft Supplement to the Final SEIS. The Final SEIS included responses to the FEMA comments on the Draft SEIS, and are also included in Appendix A to this ROD.

EIS was also available for review online at the following website: http://www.gnossfieldeis-eir.com/reports_documents/

VIII. GOVERNMENT TO GOVERNMENT CONSULTATION

The FAA initiated Government-to-Government consultation with various potentially affected Native American Tribes, as described in EO 13175, *Consultation and Coordination with Indian Tribal Governments*, and FAA's Order 1210.20 *American Indian and Alaska Native Tribal Consultation Policy and Procedures*, to ensure that Federally Recognized Tribes were given the opportunity to provide

meaningful and timely input regarding proposed FAA actions that uniquely or significantly affect Tribes. Non-federally recognized tribes who could potentially be affected by the FAA actions were also contacted. The process was initiated by the FAA in December 2008 by notifying Federally Recognized Tribes, in writing, including the Cloverdale Rancheria of Pomo Indians, the Dry Creek Rancheria of Pomo Indians, the Federated Indians of Graton Rancheria, and the Lytton Rancheria Band of Pomo Indians. In addition, representatives of other tribes which are not federally recognized including the Coast Miwok Pomo, the Mishewal-Wappo Tribe of Alexander Valley, the Stewarts Point Rancheria Kashia Tribe of Pomo Indians, and the Ya-Ka-Ama. Copies of letters sent to the tribal officials are available in Appendix H of the 2014 Final EIS. The Federated Indians of Graton Rancheria responded and expressed their interest in receiving information about the mitigation measures associated with archaeological resources which could potentially occur on the project site. After consultation between the Federated Indians of Graton Rancheria, the FAA provided a June 23, 2011, letter to the tribe indicating the FAA will require that an archaeological monitor during the initial excavation of the project site a mitigation measure as discussed in more detail in Section 5.8 of the Final SEIS, Appendix H of the 2014 Final EIS, and this ROD. No tribal group submitted any comments objecting to the environmental analysis in the Final SEIS

IX. AGENCY COORDINATION AND CONSULTATION

Throughout the EIS process, the FAA coordinated with federal, state, and local agencies including California State Historic Preservation Officer (SHPO), United States Fish and Wildlife Service (USFWS), Army Corps of Engineers (USCOE), and the County of Marin.

As discussed in Section 5.8 of the Final SEIS and this ROD, the FAA completed a National Historic Preservation Act, Section 106, consultation with the California State Historic Preservation Officer (SHPO) to evaluate the potential impacts of Alternative B to historic properties on or eligible for the National Register of Historic Places. The FAA and the California SHPO agreed on a Direct Area of Potential Effects (APE) where physical impacts of Alternative B, would occur, and an Indirect APE where indirect effects of implementation of Alternative B would have the potential to increase noise or changes in the visual environment near DVO.

As there are no historic properties located within the Direct APE, where physical ground disturbing activities would occur, the construction activity associated with implementation of Alternative B, D, or E would not directly impact any historic properties. The Indirect APE includes the Olompali Burdell Ranch Complex, located in Olompali State Historic Park, which is eligible for listing on the NRHP. As the Indirect APE would not be exposed to noise levels at or above 65 CNEL, or significant changes in the existing visual environment, no adverse effect on any historic property would occur. As Alternative E is a smaller development project located entirely within the Direct APE for Alternative B, for which National Historic Preservation Act, Section 106, consultation is complete, no additional interagency coordination with the California SHPO is required.

As discussed in Section 5.9 of the Final SEIS and this ROD, the FAA completed an Endangered Species Act, Section 7, consultation with the USFWS to evaluate the potential impacts of Alternative B to federally threatened and endangered species. The USFWS issued a Biological Opinion regarding

Alternative B on April 3, 2013. The Biological Opinion identifies a maximum incidental take of 25.24 acres of federally endangered salt marsh harvest mouse (SMHM) and federally endangered California clapper rail^v (CCR) habitat. The Biological Opinion includes habitat compensation ratios for the amount of additional habitat that must be provided to compensate for the habitat that will be eliminated due to project construction. The Biological Opinion requires that the County of Marin, prior to initiating construction or otherwise taking actions associated with the runway extension that result in adverse effects to the SMHM or CCR, must develop and submit to the USFWS for their review and approval, a revegetation and habitat compensation plan based on the habitat compensation ratios provided in the Biological Opinion and described Section 5.9 of the Final SEIS and this ROD. As discussed in this ROD, as implementation of Alternative E would result in less incidental take than implementation of Alternative B, and would not result in additional or unanticipated impacts to endangered species, no additional FAA inter-agency consultation with the USFWS in accordance with the Endangered Species Act, Section 7, is required.

As discussed in Section 5.10 of the Final SEIS and this ROD, the FAA and the County of Marin coordinated with the USCOE in preparation of this Final SEIS, and the USCOE has become a cooperating NEPA agency for environmental evaluation of the project. The USCOE provided a Clean Water Act (CWA) and Rivers and Harbors Act (RHA) jurisdictional determination in August 2009 for DVO. The FAA will require the County of Marin implement the mitigation requirements identified in the Final SEIS Section 5.10 and this ROD, and obtain a USCOE CWA Section 404 permit, prior to implementing Alternative E, to ensure that these protective measures are implemented. The FAA will continue to coordinate with the USCOE to confirm that Marin County is fulfilling the mitigation requirements identified in the Final SEIS and this ROD, and the requirements of any subsequent USCOE permit issued for the DVO runway extension project.

X. ENVIRONMENTAL CONSEQUENCES

The EIS was prepared to disclose the analysis and the potential environmental effects of the Sponsor's Proposed Project, the No Action Alternative and the other reasonable alternatives in accordance with the requirements of NEPA, the CEQ Regulations for Implementing the Procedural Provisions of NEPA (40 C.F.R. Parts 1500-1508); FAA Orders 1050.1F, *Environmental Impacts: Policies and Procedures* and 5050.4B, *National Environmental Policy Act (NEPA) Implementing Instructions for Airport Actions*; and USCOEs procedures for environmental impact analysis outlined for the USCOE Regulatory Program at 33 CFR §§ 320 – 332.

This Section includes a brief summary of the potential impacts resulting from implementation of the FAA's Preferred Alternative and the Sponsor's Proposed Project. More detailed discussions of the potential impacts for each environmental impact category are contained in the 2014 Final EIS and in Chapter 5 of the Final SEIS.

^v In 2014, the American Ornithologists' Union (now the American Ornithological Society) changed the common name of the California clapper rail to Ridgeway's rail. The name California clapper rail was retained for use in the Draft and Final SEIS to maintain consistency with the earlier Draft EIS and Final EIS.

The Final SEIS examined the following environmental impact categories: Noise; Compatible Land Use; Socioeconomic Impacts, Environmental Justice and Children's Health and Safety Risks; Secondary (Induced) Impacts; Air Quality; Water Quality; Department of Transportation Act Section 4(f) and Land and Water Conservation Fund Act, Section 6(f) Resources; Historic, Architectural, Archaeological and Cultural Resources; Biological Resources; Wetlands and Streams; Floodplains; Coastal Resources; Wild and Scenic Rivers; Farmlands; Energy Supply, Natural Resources, and Sustainable Design; Visual Resources; Hazardous Materials, Pollution Prevention and Solid Waste; Construction Impacts; and Cumulative Impacts. The Final SEIS evaluated each of the environmental impact categories for all the alternatives evaluated in detail.

Section 4.0.1 of the Final SEIS defined a Detailed Study Area (DSA), and a General Study Area (GSA). The DSA is defined as the area where potential direct (ground disturbing) environmental impacts may result from implementation of the Proposed Project. The GSA is defined as the area where potential indirect environmental impacts (such as noise impacts) may result from implementation of the Proposed Project.

NOISE

Section 5.1 of the Final SEIS evaluates the potential for noise impacts to occur as a result of implementing Alternatives A, B, D, and E. The FAA uses the 65 decibel (dB) Community Noise Equivalent Level (CNEL) as its threshold of significant impacts on noise-sensitive land uses. An increase in the noise level of 1.5 dB CNEL or more that results in a noise-sensitive land use being subject to a noise level of 65 dB CNEL or greater is the threshold of significance the FAA uses for determining significant noise impacts.

The number of aircraft operations at DVO is forecasted to reach 87,690 in the year 2035. FAA guidance does not require a detailed noise analysis for a proposed action involving B-II aircraft operating at an airport that is not forecasted to exceed 90,000 annual propeller operations or 700 jet operations during the environmental analysis period covered by the Final SEIS because operations below such levels would not be expected to exceed established FAA thresholds for determining a significant environmental impact from increased aircraft noise. However, potential aircraft noise increase was identified as an environmental issue of concern during public scoping for the proposed runway extension. Therefore, a detailed noise analysis was included in the Final SEIS.

As discussed in Section 5.1 of the Final SEIS, no residential or other noise-sensitive land uses would be exposed to noise levels of CNEL 65 dB or greater by implementing Alternatives A, B, D, or E. Therefore, no significant noise impacts would result from the implementation of Alternatives A, B, D, or E.

COMPATIBLE LAND USE.

Section 4.2.2 of the Final SEIS describes local land planning goals for the land in the vicinity of DVO. The *Marin Countywide Plan – Novato Planning Area*, states that for the land use of the North Novato Planning Area that publicly owned lands shall be designated open space, exclusive of DVO, which shall

retain its Industrial Land Use designation with a Public Facilities combining designation, consistent with the approved and planned development under the DVO *Airport Land Use Master Plan*.

Section 5.2 of the Final SEIS evaluates whether Alternatives A, B, D, and E will remain compatible with existing land uses. The area surrounding DVO is predominantly agricultural, vacant, and open space to the east and south, including the Burdell Unit of the California Department of Fish and Wildlife (formerly California Department of Fish and Game) Petaluma Marsh Wildlife Area, with light industrial/office areas to the north and west. Marin County has aviation easements on some properties adjacent to the north and south of the Airport to prevent the construction of structures that would inhibit the takeoff and landing of aircraft at the Airport.

No changes in land use are expected to occur as a result of implementation of Alternative A or Alternative E, which would occur completely on existing airport property. Therefore, existing land use would remain compatible with implementation of Alternative A or Alternative E.

Implementation of Alternative B would require a property line adjustment to acquire approximately 0.1 acre of land to the south of Runway 31 for the extended RSA and implementation of Alternative D would require acquisition of approximately 3.7 acres of land to the south of Runway 31 for the 240-foot southern extension of Runway 13/31 and extended RSA. This land is vacant, and Marin County holds an aviation easement on the property. Thus, the height of any structures are already restricted to those that would be compatible with air navigation. Therefore, implementation of Alternative B or D would be compatible with existing land use south of the current DVO property.

An existing easement on the northern part of Airport property provides the California Department of Fish and Wildlife access to its properties east of DVO. With implementation of Alternative B, D, or E, this easement would be relocated and the California Department of Fish and Wildlife access to its properties east of DVO would be retained. As a result, implementation of the Proposed Project would be consistent with future plans for the land and would not cause any land use incompatibilities or inconsistencies with local land use plans. As discussed in Section 5.1 of the Final SEIS, implementation of Alternative E would not result in significant noise impacts that would be incompatible with existing land use. Section 5.2.2 of the Final SEIS notes Marin County provided the FAA with the required Land Use Assurance Letter, dated October 21, 2011 (Appendix O of the 2014 Final EIS).

SOCIOECONOMIC IMPACTS, ENVIRONMENTAL JUSTICE AND CHILDREN'S ENVIRONMENTAL HEALTH AND SAFETY RISK.

Alternative A, the No-Action Alternative, has no potential to produce socioeconomic impacts. Section 5.3 of the Final SEIS states Alternative B would require acquisition of approximately 0.1 acre of land to the south of Runway 31 for the RSA. This property is part of a 37-acre parcel that is located immediately off the southern end of the runway. Acquisition of the 0.1 acre area would reduce Marin County property tax revenue by approximately \$10.43 per year. Similarly, Section 5.3 of the Final SEIS states Alternative D would require acquisition of 3.7 acres of land south of Runway 31 for the 240-foot southern extension of Runway 13/13 and the RSA. Acquisition of the 3.7-acre area would reduce Marin County property tax revenue by about \$551.10 annually. These losses of tax revenue with

implementation of Alternative B or Alternative D would not be substantial, and would not represent a significant socioeconomic impact to the local tax base of Marin County.

Marin County intends to keep the Airport open for business during construction of the proposed runway extension. As a result, no loss of revenue for the airport-related businesses is anticipated with implementation of Alternative B, D, or E. Temporary growth in economic activity is likely to occur from the creation of construction jobs during construction under Alternative B, D, or E. Implementation of Alternative B, D, or E would not require relocation of residences or businesses or disruption of local traffic patterns. Therefore, implementation of the Proposed Project would not have a significant impact on socioeconomics.

In accordance with Executive Order (EO) 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations*, Section 4.3 of the Final SEIS evaluated whether the General Study Area (GSA) for the project alternatives included any census tracts with readily identifiable minority or low-income populations. The census track evaluation shows that there are no readily identifiable minority or low-income populations within the GSA. Therefore, Alternatives A, B, D, or E, have no potential to have disproportionate impacts on any minority or low-income population.

Section 5.3.4 of the Final SEIS evaluates environmental health risks or safety risks associated with implementation of Alternatives A, B, D, or E that may disproportionately affect children. Alternative A, the No-Action Alternative, has no potential to cause environmental health risks or safety risks that may disproportionately affect children.

Section 5.5 of the Final SEIS states, Alternatives B, D, or E would not create air quality conditions that would worsen breathing conditions for children. Based on the analyses detailed in Section 5.6, *Water Quality*, none of the alternatives would result in the release of harmful agents into surface or groundwater resources above levels permitted by the State of California and Federal regulations. Therefore, based on the analyses conducted in the Final SEIS, the Alternative E would not result in the release of, or exposure to, significant levels of harmful agents in the water, air, or soil that would affect children's health or safety.

SECONDARY (INDUCED) IMPACTS.

Under Alternative A, the No Action Alternative, no Secondary (Induced) Impacts would occur because no construction activity would occur. Section 5.4 of the Final SEIS evaluated Secondary (Induced) Impacts resulting from implementation of Alternatives B, D, or E. As discussed in Section 5.4 of the Final SEIS, Alternatives B, D, and E would not result in increased aviation activity that would exceed the forecasted levels, produce significant impacts on public services, or induce additional growth in the region. As disclosed in Section 5.1 *Noise* and Section 5.5 *Air Quality*, future growth in aviation activity would not result in significant impacts under year 2024 operating levels for Alternatives B, D, or E. Therefore, even if construction of the runway extension resulted in increased aviation activity and changes in fleet that exceeded the level forecasted for DVO, it would not result in a significant impact associated with induced airport activity.

AIR QUALITY.

The potential for Alternatives A, B, D, or E to have an environmental impact on air quality is discussed in Section 5.5 of the Final SEIS. For the National Ambient Air Quality Standards, Marin County is included in the San Francisco Bay Intrastate Air Quality Control Region (SFBIAQCR).

The USEPA has designated the SFBIAQCR, as a marginal nonattainment area for the NAAQS 8-hour 2015 Ozone (O₃) standard. O₃ is not directly emitted from a source but is formed through photochemical reactions involving emissions of the precursor pollutants nitrogen oxides (NO_x) and Volatile Organic Compounds (VOC) in the presence of abundant sunlight and heat. Therefore, emissions of O₃ on a project level in the Final SEIS were evaluated based on the rate of emissions of the O₃ precursor pollutants, NO_x, and VOC.

The USEPA previously designated the SFBIAQCR in non-attainment for the NAAQS 2006 24-hour standard for emissions of fine particulate matter (PM_{2.5}). The USEPA has since designated the SFBIAQCR in attainment for the NAAQS 24-hour 2012 PM_{2.5} standard. The SFBIAQCR was also previously designated as nonattainment for NAAQS carbon monoxide (CO) standard. However, in April 1998 the SFBIAQCR was redesignated to attainment for CO and now operates under a maintenance plan in order to prevent CO emissions from reaching an unhealthy level.

As summarized in Table 5.5-10 of the Final SEIS, emissions of the six air pollutants for which NAAQS are established, and including air emissions of VOCs that are precursors to the formation of O₃, were compared between Alternatives A, B, D, and E. The net air emissions of the various alternatives were compared to Alternative A - No Action alternative. This comparison also included air emissions from construction activities and subsequent airport operations. As discussed in Section 5.5.5.2 of the Final SEIS, implementation Alternatives A, B, D, and E would not exceed relevant General Conformity *de minimis* levels for any criteria air pollutant. Thus, a General Conformity Determination was not required. Alternatives A, B, D, and E would comply with the Final Bay Area 2017 Clean Air Plan, the State Implementation Plan applicable to the area including DVO. Therefore, the FAA has determined implementation of any of the alternatives would not result in a new violation of the NAAQS nor delay timely attainment of the NAAQS.

WATER QUALITY.

Section 5.6 of the Final SEIS evaluates the potential for water quality impacts to surface waters or groundwater to occur as a result of implementing Alternatives A, B, D, or E. Alternative A, the No Action Alternative, has no potential to cause Water Quality impacts.

DVO operates under a Clean Water Act (CWA), National Pollutant Discharge Elimination System (NPDES), Industrial Stormwater General Permit for Air Transportation Industrial Activities issued by the San Francisco Bay Regional Water Quality Control Board. Rainfall that flows to the shoulders of the runway and taxiway continues flowing into the vegetated perimeter channel. Stormwater runoff between the taxiway and runway flows together in the center drainage inlets and then flows east through culverts under the runway into the perimeter drainage channel. Stormwater discharges during

and after project construction would transport pollutants from impervious surfaces into Black John Slough and the Petaluma River. Pollutant thresholds are not defined by the Industrial Stormwater General Permit, but the permit requires the implementation of Best Management Practices (BMPs).

In accordance with NPDES regulations, to minimize the potential effects of construction runoff on receiving water quality, any construction activity affecting one acre or more must obtain coverage under the General Construction Activity Stormwater Permit (Construction General Permit, 99-08-DWQ). Additionally, permit applicants are required to develop and implement a Stormwater Pollution Prevention Plan (SWPPP) that specifies erosion and sediment control BMPs to reduce or eliminate construction-related impacts on receiving water quality. Permit applicants are also required to perform regular inspections of all BMPs.

Implementation of Alternatives B, D, and E would disturb more than one acre of land. Thus, the County of Marin will be required to obtain a General Construction Activity Stormwater Permit and prepare and implement a SWPPP and BMPs to implement any runway extension alternative. The General Construction Activity Stormwater Permit would require the SWPPP and BMPs minimize the potential effects of construction runoff on water quality. Current BMPs employed at DVO to reduce concentrations of pollutants of concern to minimize or eliminate stormwater quality impacts to Black John Slough and the Petaluma River include:

- Existing Airport levee system and vegetated drainage ditch.
- Designated aircraft wash area on the southeastern asphalt apron that drains all wash waters into a subsurface stormwater filtration system. This system is comprised of a sediment filter and an oil separator and then an evaporation basin. Wash waters normally do not enter the perimeter drainage.
- Established Spill Prevention, Control, and Countermeasure (SPCC) plans:
 - Spill response items include oil booms, absorbent pads, absorbent materials, brooms, shovels, and waste containers.
 - Perimeter drainage channel can be closed with sluice gates at the twin culverts on the east side of the Airport in case of required spill response activities and subsequent water quality protection.
- Airport activities such as herbicide application along runway and taxiway aprons, and along perimeter drainage channels use chemicals that have the potential to pollute stormwaters. In order to reduce or eliminate the potential for contact with stormwaters, spraying activities are scheduled for non-rain days with low to non-existent winds. Herbicides are only applied in accordance with herbicide labeling directions and Environmental Protection Agency label requirements. In addition, chemical spray solutions are mixed away from storm drainages.
- The Airport tests the outflow of runoff monthly and reports the results annually to the Regional Water Quality Control Board.

Construction BMPs include:

- Use of temporary mulching, seeding or other stabilization measures to protect uncovered soils; storing materials and equipment to ensure that spills or leaks cannot enter the storm drain system or surface water; developing and implementing a spill prevention and cleanup plan; and
- Installation of traps, filters, or other devices at drop inlets to prevent contaminants from entering storm drains; and using barriers, such as straw wattles or silt fencing to minimize the amount of uncontrolled runoff that could enter storm drain inlets or surface water.

Based on the current BMPs, SWPPP, and permits that are in place, implementation of Alternatives B, D, or E would not result in exceedances of water quality standards, create water quality problems that cannot be avoided or mitigated, or result in difficulties in obtaining permits.

DEPARTMENT OF TRANSPORTATION ACT, SECTION 4(F) AND LAND AND WATER CONSERVATION FUND ACT, SECTION 6(F) RESOURCES.

Section 5.7 of the Final SEIS discloses the potential impacts to Department of Transportation (DOT) Act Section 4(f) and Land and Water Conservation Fund (LWCF) Act Section 6(f) resources as a result of implementing Alternatives A, B, D, or E. DOT Act Section 4(f) and LWCF Section 6 (f) resources include public parks, recreation areas, open space areas, wildlife areas and historic resources. Alternative A, the No Action Alternative, has no impacts to Section 4(f) or Section 6(f) resources.

Nine properties were identified in the General Study Area that are considered DOT Act Section 4 (f) resources. Four of the properties are developed recreation areas including the Bahia Mini Parks – recreation areas with picnic areas and playground equipment for local residents, Black Point Boat Launch – a public boat launch onto the Petaluma River, Hamman Field – a public baseball field, and Slade Park – another recreation area for local residents with picnic areas and playground equipment. Another four of the properties are open space and natural habitat preservers including the Burdell Unit of the Petaluma Marsh Wildlife Area – a wildlife habitat area, and Deer Island, Mount Burdell, and Rush Creek, which are all open space preserves. The remaining Section 4(f) property, Rancho Olompali State Historic Park, includes developed picnic areas, hiking and horseback riding trails, as well as the Olompali Burdell Ranch Complex, which is eligible for the National Register of Historic Places. None of the Section 4(f) properties identified above contain uses that would require an ambient noise threshold below CNEL 70 dB for land use compatibility.

Section 5.7 of the Final SEIS, states implementation of Alternative B, D, or E would require relocation of a road used by the California Department of Fish and Wildlife (CDFW) to access portions of the Burdell Unit of the Petaluma Marsh Wildlife Area, a Section 4(f) resource. Currently, an unpaved road outside the Airport perimeter fence enters Airport property north of the existing runway and levee system and runs in a west to east direction before exiting Airport property on the east side of the Airport. This road is located behind a locked gate and provides the CDFW motor vehicle access to the Burdell Unit of the CDFW Petaluma Marsh Wildlife area. Under Alternative B, D, or E, construction of the runway extension would sever that unpaved road across Airport property. To provide an

alternative access for the CDFW under this alternative, as the unpaved road nears Airport property on the west side of the Airport, it would rise to the top of the levee and turn north. The unpaved road would then follow the levee north of the runway before turning south to reconnect at its current location on the east side of the Airport.

Both of these connection sites would require construction and grading to reconnect the access road. Under Alternative B, D, or E, approximately 0.23 acre would be disturbed in order to reconnect the road to the existing road. These relatively small areas of disturbance are immediately adjacent to Airport property. Marin County would work with the CDFW to grade and re-vegetate the disturbed areas to bring them as close to the original conditions as possible. Due to the relatively small size of disturbance and the commitment to work with the CDFW to return the sites back to their natural conditions, this is not considered a physical taking of Section 4(f) property under Section 4(f) evaluation criteria. Implementation of the Preferred Alternative would not result in a substantial impairment of the Burdell Unit.

A portion of the Burdell Unit of Petaluma Marsh Wildlife Area is exposed to noise levels above CNEL 70 dB from DVO under existing conditions, and would continue to be exposed to noise levels above CNEL 70 dB under Alternative A, the No-Action alternative. Under Alternative A, the CNEL 70 dB contour will include approximately 19.4 acres of the Burdell Unit, which is approximately 3.0 percent of the Burdell Unit. Under Alternative B, the CNEL 70 dB contour would include approximately 23.5 acres of the Burdell Unit, which represents roughly 3.6 percent of the Burdell Unit. Under Alternative D, the CNEL 70 dB contour would include approximately 20.9 acres of the Burdell Unit, which represents approximately 3.2 percent of the Burdell Unit. Under Alternative E, the CNEL 70 dB contour would include approximately 22.6 acres of the Burdell Unit, which represents approximately 3.5 percent of the Burdell Unit. No other Section 4(f) properties would be exposed to noise levels above CNEL 65 dB as a result of implementing Alternative B, D, or E. The small additional portion of the Burdell Unit of the Petaluma Marsh Wildlife Area that would be within the CNEL 70 dB contour under Alternative B, D, or E is located immediately adjacent to the Airport. The increased area exposed to CNEL 70 dB noise levels would not substantially impair the use the Burdell Unit of the Petaluma Marsh Wildlife Area, or result in a constructive use of the property.

In summary, implementation of Alternatives B, D, or E would not result in the 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. Section 5.7.4 of the Final SEIS states implementation of Alternatives B, D or E would result in only a *de minimis* impact on Section 4(f) resources and not result in a significant impact on Section 4(f) resources.

HISTORIC, ARCHITECTURAL, ARCHAEOLOGICAL AND CULTURAL RESOURCES.

Section 5.8 of the Final SEIS evaluates the effect of Alternatives A, B, D, and E on historic, architectural, archaeological and cultural resources. Alternative A, the No Action Alternative, has no potential to cause environmental impacts to historic, architectural, archaeological and cultural resources.

Section 5.8.2 of the Final SEIS identified a Direct Area of Potential Effects (APE), where physical impacts of the project could occur, and an Indirect APE where indirect effects such as increased noise or changes in the visual environment could occur. FAA determined there are no historic properties located within the Direct APE that are listed or eligible for listing on the National Register of Historic Places (NRHP). The Indirect APE includes the Olompali Burdell Ranch Complex, located in Olompali State Historic Park, which is eligible for listing on the NRHP.

Since FAA determined there are no historic properties located within the Direct APE, construction activity associated with implementation of Alternative B, D, or E would not affect any historic properties. Also, none of the historic properties within the Indirect APE would be exposed to noise levels at or above CNEL 65 dB. Therefore, FAA has determined implementation of Alternatives B, D, or E would not affect any historic properties.

The California State Historic Preservation Officer (SHPO) concurred with FAA's determination of eligibility and findings of effect on historic Properties for Alternative B, the preferred alternative at that time. The California SHPO confirmed by telephone call with the FAA on September 26, 2011 that the NHPA Section 106 consultation process was complete (see FAA letter of October 6, 2011 in 2014 Final EIS Appendix H, *Cultural Resources*). Since the construction activity area associated with Alternative E is entirely located with the construction area of Alternative B, no further consultations with the California SHPO are necessary for implementation of Alternative E.

The 2014 Final EIS, Appendix H identified that undiscovered archaeological or other historic sites could be discovered during construction of the proposed runway extension. As a condition of approval of this ROD, for this project, the FAA will require Marin County have an archaeological site monitor present during the initial site excavation associated with constructing Alternative B, D, or E. Marin County would be required to stop work and evaluate any archaeological or other historic property is discovered during the excavation or subsequent construction of Alternative B, D, or E.

In the event that unanticipated archaeological artifacts are encountered during implementation of Alternative B, D, or E, construction in the area shall halt until a qualified archaeologist evaluates the nature and significance of the find. If the artifacts are determined significant by a qualified archaeologist, the project shall be modified to allow the artifacts or features to remain in place, or the qualified archaeologist shall undertake the recovery of the deposit or feature. The archaeologist shall prepare a summary outlining the methods followed and summarizing the results of the mitigation program. The report shall outline the methods followed, list and describe the resources recovered, map their exact locations and depths, and include other pertinent information. Marin County shall submit the report to the Northwest Information Center and the California SHPO. If the suspected artifacts prove to be non-significant or non-cultural in origin, work would recommence immediately.

In the event that human skeletal remains are discovered at the site during construction, work shall be discontinued in the area of the discovery and the County Coroner shall be contacted. If skeletal remains are found to be prehistoric Native American remains, the Coroner shall call the California Native American Heritage Commission (NHAHC) within 24 hours. The NHAHC would identify the person(s) it believes to be the "Most Likely Descendant" of the deceased Native American. The Most Likely

Descendant would be responsible for recommending the disposition and treatment of the remains. The Most Likely Descendant may make recommendations to the landowner or the person responsible for the excavation/grading work for means of treating or disposing of the human remains and any associated grave goods as provided in California Public Resources Code Section 5097.98.

BIOLOGICAL RESOURCES.

Section 5.9 of the Final SEIS describes the potential impacts of implementing Alternative A, B, D, and E on biological resources. Alternative A, the No Action Alternative, has no potential to cause environmental impacts to biological resources.

Implementation of Alternative B, D, or E would adversely affect the federally endangered salt marsh harvest mouse (SMHM) and federally endangered California clapper rail (CCR). The SMHM and CCR are also designated as fully protected species by the State of California. Section 5.9 of the Final SEIS discusses that the Proposed Project is not likely to adversely affect the threatened California red-legged frog due to the lack of freshwater habitat for that species on DVO. Final SEIS Section 4.9.3.3 discusses that because DVO is enclosed by levees, no fish species are present at DVO and none would be affected by implementation of the Proposed Project.

Section 5.9 of the Final SEIS, Tables 5.9-2, 5.9-3, and 5.9-4, disclose the total temporary and permanent impacts to SMHM and CCR habitat for Alternatives B, D, and E respectively. Implementation of Alternative B would result in impacts to 25.24 acres of SMHM/CCR habitat including 6.88 acres of permanent impacts to High Brackish Marsh/Annual Grassland Habitat, 16.05 acres of temporary impacts to High Brackish Marsh/Annual Grassland Habitat, and 2.31 acres of permanent impacts to Open Water-Ditch/Channel habitat. Implementation of Alternative D would result in impacts to 28.98 acres of SMHM/CCR habitat including 8.24 acres of permanent impacts to High Brackish Marsh/Annual Grassland Habitat, 18.43 acres of temporary impacts to High Brackish Marsh/Annual Grassland Habitat, and 2.31 acres of permanent impacts to Open Water Ditch/Channel habitat. Implementation of Alternative E would result in impacts to 20.7 acres of SMHM/CCR habitat including 5.60 acres of permanent impacts to High Brackish Marsh/Annual Grassland Habitat, 12.74 acres of temporary impacts to High Brackish Marsh/Annual Grassland Habitat, and 2.36 acres of impacts to Open Water-Ditch/Channel habitat.

In response to comments on the Draft SEIS, the Final SEIS, discloses the impacts to SHMH/CCR habitat of Alternative B and Alternative D, if those alternatives were implemented with 300-foot long standard Runway Safety Areas (RSAs) for FAA Airport Reference Code (ARC) B-II aircraft rather than the 240-foot long standard RSAs for ARC B-I aircraft. As disclosed in Final SEIS, Appendix Q-1, Table 6, if Alternative B was implemented with the construction of FAA B-II standard RSAs, it would result in impacts to 25.58 acres of SMHM/CCR habitat, including 7.76 acres of permanent impacts to High Brackish Marsh/Annual Grassland Habitat, 15.37 acres of temporary impacts to High Brackish Marsh/Annual Grassland Habitat, and 2.45 acre impacts to of Open Water-Ditch/Channel Habitat. As disclosed in Final SEIS, Appendix Q-1, Table 8, if Alternative D was implemented with the construction of FAA B-II standard RSAs, it would result in impacts to 29.14 acres of SMHM/CCR habitat, including 9.08 acres of permanent impacts to

High Brackish Marsh/Annual Grassland Habitat, 15.37 acres of temporary impacts to High Brackish Marsh/Annual Grassland Habitat, and 2.45 acres of impact to Open Water-Ditch/Channel Habitat.

The FAA conducted a formal Endangered Species Act, Section 7 consultation with the U.S. Fish and Wildlife Service (USFWS) regarding potential impacts to the federally listed SMHM and CCR resulting from Alternative B, which was Marin County's and the FAA's preferred alternative when the Draft EIS for the extension of Runway 13/31 at DVO was published in December 2011. The 2014 Final EIS, Appendix I, contains the results of the formal Section 7 consultation with the USFWS and the April 3, 2013 USFWS Biological Opinion concerning Alternative B.

The USFWS Biological Opinion concluded that implementation of Alternative B, including the incidental take of 25.24 acres of SMHM/CCR habitat would not jeopardize the continued existence of endangered species provided that specific conservation measures identified in the Biological Opinion were implemented. The USFWS Biological Opinion, identifies USFWS-approved conservation measures that the County of Marin proposes to implement during the construction of the proposed extension of Runway 13/31 to avoid and minimize the effects of the proposed extension on the SMHM and CCR. These conservation measures would be required for implementation of Alternative B, D, or E, and are summarized below:

- Conservation Measure 1: Construction Stormwater Pollution Prevention Plan. As described in detail in the USFWS Biological Opinion, a Stormwater Pollution Prevention Plan will be prepared for the proposed project that includes addressing the following objectives (and would also meet the requirements of the Stormwater Pollution Prevention Plan identified under Section F: *Water Quality* of this ROD:
 - Identify pollutant sources including sources of sediment, that may affect the quality of stormwater discharges from the construction of the project;
 - To identify BMPs to reduce or eliminate pollutants in stormwater discharges and authorized non-stormwater discharges from the site during construction;
 - To outline and provide guidance for BMPs and stormwater monitoring;
 - To identify project discharge points and receiving waters;
 - To address post-construction BMP implementation and monitoring; and
 - To address sediment/siltation/turbidity and non-visually detectable pollutant monitoring and outline a sampling and analysis plan.
- Conservation Measure 2: Hand Removal of Vegetation and Installation of Temporary Exclusion Fencing:
 - To minimize effects on the SMHM, install a USFWS-approved SMHM exclusion fencing;
 - Conduct land clearing activities, including grubbing and vegetation with hand tools or small construction equipment (*i.e.*, Bobcat or similar);
 - Provide USFWS-approved biological monitor during initial ground disturbance and vegetation removal to monitor for SMHM;

- Conservation Measure 3: Provide Environmental Awareness Training;
 - A USFWS-approved biologist will train the construction crew and County of Marin and/or construction contractor staff in appropriate monitoring techniques for SHMH and CCR protection.
 - A USFWS-approved biologist will be available on an on-call basis for the duration of the project.
- Conservation Measure 4: Halting Work if Federally-Listed Species Observed;
 - If a SMHM or CCR is observed on the project site, work will stop and the USFWS-approved biologist will be notified;
- Conservation Measure 5: Off-site Tidal Marsh Restoration;
 - The County of Marin, prior to initiating construction or otherwise taking actions associated with the runway extension that result in adverse effects to the SMHM or CCR, is required to develop and submit to the USFWS for their review and approval, a revegetation and habitat compensation plan based on the following habitat compensation ratios described in Table 1 of the USFWS Biological Opinion:
 - Short-term Temporary Habitat Impacts (<1 year) will be replaced on-site with an On-site Habitat Acreage Replacement Ratio (Replaced:Impacted) of 1:1; plus an Off-site Habitat Acreage Replacement Ratio (Replaced:Impacted) of 1.1:1, for a Total Habitat Replacement Ratio of 2.1:1.
 - Long-term Temporary Habitat Impacts (1-2) years will be replaced on-site with an On-site Habitat Acreage Replacement Ratio (Replaced:Impacted) of 1:1; plus an Off-site Habitat Acreage Replacement Ratio (Replaced:Impacted) of 2:1, for a Total Habitat Replacement Ratio of 3:1.
 - Permanent Impacts (Impacts > 2 years) will be replaced at an Off-site Habitat Acreage Replacement Ratio (Replaced:Impacted) of 3:1, for a Total Habitat Replacement Ratio of 3:1.

The Final SEIS identified the amount of on-site restoration and off-site restoration required for Alternatives B, D, and E in Tables 5.9-2, 5.9-3, and 5.9-4 respectively. The amount of off-site habitat compensation required is provided as a range because the final determination of relative amounts of short-term temporary habitat impacts, long-term temporary habitat impacts, and permanent habitat impacts will not be known until a detailed revegetation and habitat compensation plan is developed.

As described in Table 5-9.2, Alternative B would require on-site restoration of 16.05 acres of High Brackish Marsh/Annual Grassland habitat on-site, off-site restoration/compensation of 38.3 – 52.7 acres of High Brackish Marsh/Annual Grassland; 0.77 acres of On-site Restoration of Open Water Ditch/Channel; and 4.6 acres of Off-site restoration/compensation of Open Water-Ditch/Channel habitat.

As described in Table 5-9.3, Alternative D would require on-site restoration of 18.43 acres of High Brackish Marsh/Annual Grassland habitat on-site, off-site restoration/compensation of 45 – 61.6 acres of High Brackish Marsh/Annual Grassland; 0.69 acres of on-site restoration of Open Water Ditch/Channel; and 4.9 acres of off-site restoration/compensation of Open Water-Ditch/Channel habitat.

As described in Table 5-9.4, Alternative E would require the least habitat restoration and compensation including on-site restoration of 12.74 acres of High Brackish Marsh/Annual Grassland habitat on-site, off-site restoration/compensation of 30.8 – 42.28 acres of High Brackish Marsh/Annual Grassland; 0.47 acres of on-site Restoration of Open Water Ditch/Channel; and 4.72 acres of off-site restoration/compensation of Open Water-Ditch/Channel habitat.

Section 5.9.5 of the Final SEIS, and the USFWS Biological Opinion page 6 provides for increasing or decreasing habitat compensation mitigation ratios for compensation of losses of SMHM and CCR habitat as follows:

- “These compensation ratios may be adjusted by the USFWS based on the quality of the habitat being removed and the quality of the habitat to be created or enhanced to replace it. If after review of a habitat compensation plan, the USFWS determines that adequate high quality habitat acceptable to the USFWS can be provided at a lower compensation ratio, the FAA proposes to utilize a lower habitat compensation ratio if such a ratio is acceptable to the USFWS. The USFWS would likely increase these compensation ratios if the proposed off-site restoration area was outside of the San Pablo Bay Recovery Unit identified in the *Draft Recovery Plan for Tidal Marsh Ecosystems of Northern and Central California*, which extends from Gallanis Creek in Marin County (at the southwestern end of the recovery unit) around San Pablo Bay north and east to Mare Island in Solano County.”

As habitat compensation for both the CCR and SMHM requires off-site habitat compensation, and these species prefer tidal salt marsh, Marin County may coordinate endangered species habitat compensation requirements identified in the USFWS Biological Opinion with the wetland mitigation requirements that will be finalized in the CWA, Section 404 permit for the runway extension project. Such an approach is specifically allowed under the USCOE compensatory mitigation regulations at Title 33 CFR § 332. In general, replacing the high brackish marsh and annual grassland to be temporarily or permanently removed as a result of the DVO runway extension project at a compensatory mitigation site considered suitable for restoration to tidal salt marsh in the USFWS *Recovery Plan for Tidal Marsh Ecosystems of Northern and Central California* (USFWS *Recovery Plan*) (USFWS 2013) would result in the establishment or enhancement of tidal salt marsh habitat that would provide greater wetland functions, and improved habitat for the CCR and SMHM, as compared to the wetlands and other habitat being removed by Alternative B, D or E. As discussed in more detail in the *Wetlands and Streams* section of this ROD, the habitat compensation requirements identified in the USFWS Biological Opinion issued April 3, 2013 are sufficient to also address the impacts to wetlands and aquatic resources resulting from implementation of Alternative B, D, or E.

The USFWS Biological Opinion concluded that implementation of Alternative B is not likely to jeopardize the continued existence of the SMHM or CCR. The USFWS based its determination on the following:

- Successful implementation of the BMPs and conservation measures described in the biological opinion will minimize the adverse effects on individual SMHM and CCRs;
- The marginal quality of the habitat that will be disturbed;
- No suitable CCR breeding habitat will be disturbed; and
- The restoration off-site of suitable tidal marsh habitat for these species within the same USFWS Endangered Species Recovery Plan recovery unit.

As Alternative E has less impact on SMHM and CCR habitat than Alternative B, it is also not likely to jeopardize the continued existence of the SHMH or CCR.

Since Alternative E would impact less SMHM and CCR habitat than Alternative B, it would not be necessary to reinitiate ESA, Section 7 consultation to implement Alternative E. As Alternative D has more impact on SMHM and CCR habitat than Alternative B, and exceeds the 25.24 acreage limit of incidental take of SHMH/CCR habitat authorized in the USFWS Biological Opinion for implementation of Alternative B, Alternative D would require re-initiation of ESA, Section 7, consultation.

The USFWS Biological Opinion determined the following reasonable and prudent measures are necessary and appropriate to minimize the effects of the Proposed Project on the SMHM and CCR.

1. FAA through the applicant will implement the Conservation Measures in Biological Opinion (and described above in this ROD).
2. FAA through the applicant will minimize the effects of the Proposed Project on the SMHM, CCR and their habitats.

The USFWS Biological Opinion included the following terms and conditions to implement the reasonable and prudent measures:

1. Measure Number One (1):
 - a. FAA shall ensure that the SMHM exclusion fencing is made of a heavy plastic sheeting material that does not allow SMHM to pass through or climb, and the bottom shall be buried to a depth of at least 4 inches so that the listed mouse cannot crawl under the fence. Fence height shall be at least 12 inches higher than the highest adjacent vegetation with a maximum height of 4 feet. All supports for the exclusion fencing shall be placed on the inside of the work area. FAA shall ensure that the exclusion fencing is inspected and secured before the start of each work day and that no salt marsh harvest mice are able to enter the work area.
 - b. FAA shall ensure that a compensation plan is finalized and approved by the Service prior to the initiation of construction of the proposed project. FAA shall ensure that the funding for the compensation plan is provided prior to the initiation of construction of

the proposed project and that any required tidal marsh restoration is initiated within 1 year of the initiation of construction of the proposed project.

2. Measure Number Two (2):

- a. FAA shall ensure that in order to avoid the potential for disturbing any SMHM nests and injuring or killing any young salt marsh harvest mice before they have weaned that the contractor uses only non-motorized hand tools to remove salt marsh vegetation during the mouse's breeding season (March 1 through November 30) under the supervision of a USFWS-approved biological monitor. If a SMHM nest is observed, all work shall cease within 100 feet of the nest until the USFWS-approved biological monitor has determined that the young SMHM have been weaned and left the nest. Vegetation removal occurring outside of the SMHM's breeding season (December 1 - February 28) may utilize mechanized or motorized equipment. The USFWS-approved biological monitor shall supervise the vegetation removal, walk ahead of the vegetation removal equipment, and flush any SMHM out of the way
- b. FAA shall ensure that all salt marsh and upland refugia habitat temporarily disturbed during construction of the proposed project is replanted or reseeded with appropriate local native plant species. The applicant shall install native salt marsh plant species including salt grass, dwarf spikerush, alkali heath, gumplant, and pickleweed as appropriate for the location of the disturbed areas and per a USFWS-approved revegetation and monitoring plan with success criteria. The revegetation monitoring plan shall be submitted to and approved by the USFWS prior to the initiation of construction of the proposed project. The revegetation and monitoring plan shall include photographs and annual reporting documenting the site conditions pre- and post-project. Any areas temporarily disturbed that do not meet the success criteria in the revegetation and monitoring plan within 2 years will be considered a permanent effect and shall be compensated off-site at USFWS-approved location at a 3:1 ratio.
- c. FAA shall ensure that in addition to compensating for the temporary disturbance and permanent loss of high brackish marsh and annual grassland habitat for the salt marsh harvest mouse and California clapper rail, that Marin County also compensates at a 3:1 ratio for the permanent loss of 1.54 acres of open water ditch/channel foraging habitat for the CCR.
- d. FAA shall ensure that the applicant develops and implements a USFWS-approved invasive plant species control plan. The invasive plant species control shall include measures to minimize the introduction and spread of perennial pepperweed and other invasive plant species.
- e. FAA shall ensure that the applicant implements the following BMPs:
 - (1) All food and food-related trash items shall be enclosed in sealed trash containers and removed completely from the site at the end of the day.
 - (2) Construction and project personnel shall not bring any pets anywhere in the proposed project work area.

- (3) All equipment shall be maintained in order to prevent leaks of automotive fluids such as gasoline, oils, or solvents. A Spill Response Plan shall be prepared. Hazardous materials such as fuels, oils, solvents, etc. shall be stored in sealable containers and designated locations at least 100 feet from wetlands and aquatic habitats.
- (4) Servicing of vehicles and construction equipment including fueling, cleaning, and maintenance shall occur at least 100 feet from any aquatic habitat, unless the activities are separated by a topographic or drainage barrier. Staging areas may occur closer to the proposed project activities as required.
- (5) If nighttime work is required, FAA shall ensure that the lighting is directed away from the marsh and shielded to prevent spillover into the marsh.

As Implementation of the mitigation measures identified in the USFWS Biological Opinion is also a condition of approval of this ROD. FAA will ensure through a special condition in an AIP grant assurance or similar requirements to ensure that these mitigation measures are implemented. With implementation of these mitigation measures, the impact of Alternative B, D, or E on the SMHM and CCR would not be significant.

Since Alternative E has less impact on SMHM and CCR habitat than Alternative B, reinitiation of ESA Section 7, consultation would not be necessary to implement Alternative E. As Alternative D has more impact on SMHM and CCR habitat than Alternative B, and exceeds the 25.24-acre limit for incidental take of SMHM/CCR habitat authorized in the USFWS Biological Opinion for implementation of Alternative B, implementation of Alternative D would require reinitiation of ESA, Section 7 consultation.

Section 5.9.4 of the Final SEIS states that implementation of the Proposed Project may require the relocation of burrowing owls. A pre-construction clearance survey of burrowing owls would be conducted no more than 30 days prior to the onset of construction. If active owl burrows are located during the pre-construction survey, a 250-foot buffer zone would be established around each burrow with an active nest until the young have fledged and are able to exit the burrow. In the case of occupied burrows without active nesting, active burrows after the young have fledged, or if development commences after the breeding season (typically February 1 to August 31), passive relocation of the birds would be performed. Passive relocation involves installing a one-way door at the burrow entrance, which encourages the owls to move from the occupied burrow.

The FAA will require Marin County to implement these measures identified in the Final SEIS through a special condition in an AIP grant assurance or similar requirement to ensure that these protective measures are implemented. With implementation of these protective measures, the impact of Alternative B, D, or E on the burrowing owl would not be significant.

Section 5.9.6 of the Final SEIS discusses whether implementation of the Proposed Project would result in an increase in wildlife-aircraft strikes between aircraft using DVO and hazardous wildlife potentially attracted to the nearby Redwood Landfill and Recycling Center (RLI). Marin County has implemented a Wildlife Hazard Management Plan (WHMP) for DVO to discourage wildlife hazardous to air navigation

from using DVO or properties near the airport. Marin County will continue to implement the WHMP under Alternative A, the No Action alternative, or Alternative B, D, or E. The FAA Advisory Circular 150/5200-33, *Hazardous Wildlife Attractants on or Near Public Use Airports*, has advisory guidelines that relate to the proximity of landfills near airports. Landfills have the potential to attract wildlife (birds) that may be hazardous to air navigation.

FAA Advisory Circular 150/5200-33B *Hazardous Wildlife Attractants on or Near Airports*, recommends a 5,000 foot separation distance between air operations areas and hazardous wildlife attractants for airports serving piston-powered aircraft, a 10,000 foot separation distance between air operations areas and hazardous wildlife attractants for airports serving turbine-powered (jet) aircraft, and a 5-mile distance between air operations areas and hazardous wildlife attractants which could cause hazardous wildlife to move into or across the approach, departure, or circling airspace for aircraft using a particular airport. DVO serves both piston-powered and turbine-powered aircraft, so a 10,000 foot separation standard between hazardous wildlife attractants and air operations areas would be consistent with the FAA guidance in FAA AC 150/5200-33B. The southern edge of the RLI is currently located approximately 3,460 feet northwest of Runway 13/31 at DVO.

The current operating elevation at the RLI landfill is approximately 86-88 feet, with permitted maximum land fill height of 160 feet. Critical to the nature of the Redwood Landfill facility, with respect to aviation related activity at DVO, is the landfill's 'working face'. The working face at RLI at any given time is typically smaller than 1 acre, or less than 0.5 percent of the total area of the waste disposal/landfill. The working face delineates the exposed area of the landfill which is known to be an attractant to scavenging birds, particularly gulls. To discourage gull populations, RLI currently has the following operational controls available as part of its wildlife hazard management plan.

- Minimize the area of the working face and push distance when possible;
- Use pyrotechnic devices to discourage scavenging gulls during refuse placement and compaction;
- Place daily cover consisting of a 6-inch thickness of compacted soil or approved alternative;
- Employ an outside contractor in the winter months who uses falcons to deter gulls from the landfill; and
- A propane gas-fired cannon may be used in conjunction with the pyrotechnic devices. The cannon emits a loud blast that discourages gulls from approaching the active face of the landfill.

Currently, aircraft fly over all portions of the RLI when arriving to and departing from DVO. There have been no reported bird strikes related to activity at the RLI. RLI's adaptive bird management plan is required by the Local Enforcement Agency (LEA) through its permitting approval authority over the RLI. The LEA has the authority under the provisions of RLI's operation permit to direct the landfill operator to undertake additional management measures if the existing measures at the landfill prove insufficient in preventing the area from becoming an attractant to birds.

The LEA previously authorized the continued operation of RLI near DVO, but in so doing, identified mitigation measures that RLI is required to implement to minimize the attractiveness of the area to wildlife, especially birds. This was required so as to avoid creation of a wildlife aircraft strike hazard at RLI and to prevent RLI from becoming an incompatible land use with DVO. The LEA permit issued to RLI requires these mitigation measures including ongoing management efforts to minimize bird attractants. If deemed ineffective over time, the mitigation measures will change per the LEA permit requirements. With implementation of the DVO WMHP, and the current measures in place at RLI to minimize wildlife/aircraft strike hazards, it is not anticipated that there would be an increase in bird strikes due to the implementation of the Alternatives B, D, or E. Therefore, the potential for implementation of Alternatives B, D, or E to result in an increase in wildlife-aircraft strikes between aircraft using DVO and hazardous wildlife potentially attracted to the RLI facility is not significant.

WETLANDS AND STREAMS.

Section 5.10 of the Final SEIS describes the potential impacts of implementing Alternatives A, B, D, or E on wetlands and streams. Alternative A, the No Action Alternative, has no potential to cause environmental impacts to wetlands and streams.

Implementation of Alternatives B, D, or E would adversely affect the maintenance of wetlands by impacting the ability of the area to support wildlife habitat, specifically habitat for the federally endangered SMHM and CCR, as described in Section 5.9 of the Final SEIS and in this ROD. FAA Order 1050.1F defines an environmental impact to wetlands that adversely affects the maintenance of natural systems supporting wildlife habitat as a significant environmental impact.

Section 5.10 of the Final SEIS, Table 5.10-2, discloses the environmental impacts to wetlands and other aquatic habitats for Alternatives B, D, and E. Implementation of Alternative B would result in the filling of 11.83 acres of wetlands and other waters, including 0.15 acre of depressional seasonal wetland, 10.29 acres of high brackish marsh, 0.59 acre of perennial drainage, 0.80 net acre of ditch/canal (1.57 acres removed and 0.77 acre created). Implementation of Alternative D would result in the filling of 12.73 acres of wetlands and other waters, including 0.15 acre of depressional seasonal wetland, 11.11 acres of high brackish marsh, 0.59 acre of perennial drainage, 0.88 net acre of ditch/canal (1.57 acres removed and 0.69 acre created). Implementation of Alternative E would result in the filling of 7.27 acres of wetlands and other waters, including 0.17 acre of depressional seasonal wetland, 5.49 acres of high brackish marsh, 0.59 acre of perennial drainage, and 1.02 net acre of ditch/canal (1.60 acres removed and 0.58 acre created).

The FAA's determinations of environmental impacts to wetlands and other waters are based on the CWA and Rivers and Harbors Act (RHA) USCOE jurisdictional determination issued in August 2009. Jurisdictional wetlands located within the DSA are shown in Chapter Four, *Affected Environment* on Exhibit 4-10, *Jurisdictional Wetlands and Waters of the U.S.* After the USCOE issued its August 2009 CWA jurisdictional determination, Marin County experienced a drought event that spanned 2012 through 2016, which may have resulted in a degradation of the wetlands present on the DVO. However, the FAA in the Final SEIS conservatively uses the Wetland Delineation approved by the USCOE in August 2009 to estimate potential impacts to wetlands in order to maintain consistency with the

Final EIS and to account for the maximum potential impacts to wetlands that may result from implementation of Alternative B, D, or E. Marin County will reconfirm with the USCOE the CWA jurisdictional determination during project design and CWA permit processing.

Construction of Alternatives B, D, or E would require that Marin County obtain a USCOE CWA Section 404 permit to authorize the filling of wetlands and other waters to construct the project. To obtain a CWA Section 404 permit, Marin County would submit a permit application to the USCOE to place fill in waters within CWA jurisdiction. As the amount of fill within CWA jurisdiction to implement Alternatives B, D, or E exceeds 0.5 acre, the project would need to be authorized by an USCOE Individual (Standard) Permit. The USCOE would follow its regulatory program regulations at 33 CFR §§ 320 – 332 during the processing of the CWA permit for this project including:

- Issuing a Public Notice Soliciting Public and Agency Comments on the proposed project;
- Completing an evaluation as to whether the proposed project complies with the CWA Section 404 (b) (1) Guidelines 40 CFR Part 230 *Guidelines for the Specification of Disposal Sites for Dredged or Fill Material*, including whether the proposed avoidance, minimization, and compensatory mitigation measures for the proposed project are sufficient;
- Completing a public interest review of the proposed project;
- Completing additional NEPA evaluation of the proposed project if necessary;
- Completing compliance with any required special-purpose environmental laws for the proposed project;
- Establish the party responsible for providing compensatory mitigation for environmental impacts to aquatic resources;
- Establishing mitigation ratios for compensatory mitigation for environmental impacts to aquatic resources;
- Evaluating the proposed compensatory mitigation site location, site location protection instrument, mitigation work plan, mitigation objectives, mitigation maintenance plan, ecological performance standards, monitoring requirements long-term management plan, and adaptive management plan;
- Establishing any required financial assurances required for the compensatory mitigation site; and
- Issuing a CWA permit decision for the proposed project, including identifying any special conditions for avoidance, minimization, and compensatory mitigation for impacts to wetlands and aquatic resources if the USCOE issues a permit.

The USCOE is a cooperating NEPA agency for this Final SEIS. The USCOE could choose to accept the FAA's CWA Section 404 (b) (1) Guidelines 40 CFR Part 230 analysis, and the FAA's demonstrated compliance with other special purpose environmental laws including the Endangered Species Act (ESA), Section 7, for endangered species, and the National Historic Preservation Act (NHPA), Section 106, for historic properties during the USCOE's permit evaluation process. Alternatively, the USCOE could also

choose to supplement the Final SEIS with more detailed or specific project or compensatory mitigation information that was not available as of the writing of the Final SEIS.

An evaluation of Alternatives in relation to the CWA Section 404 (b) (1) Guidelines 40 CFR Part 230 *Guidelines for the Specification of Disposal Sites for Dredged or Fill Material* is included in Section 5.10.5 of the Final SEIS and summarized here. Alternative A – No Action, avoids all impacts to wetlands and aquatic resources but does not meet the Purpose and Need for the proposed runway extension. Alternative C – Extend Runway to the Southeast by 1,100 feet, was not evaluated in detail in this Final SEIS as it would require filling of Black John Slough, and therefore clearly has a greater impact on wetland and aquatic resources than Alternatives B, D, or E.

Alternative B – Extend Runway to the Northwest by 1,100 feet, and Alternative D – Extend Runway to the Southeast by 240 feet and to the Northwest by 860 feet, provide an 1,100 foot runway extension that was required to meet the project purpose for the previous critical aircraft for this project – the Cessna 525 business jet – but is 800 feet longer than necessary to meet the project purpose for the current critical aircraft – the family grouping of B-II turboprop aircraft. Alternative E – Extend Runway to the Northwest by 300 feet was developed to meet the project purpose for the current critical aircraft – the family grouping of B-II turboprop aircraft. Alternative E has similar, but reduced, impacts on wetlands and aquatic resources as compared to Alternatives B and D. Alternative E requires filling only 5.49 acres of high brackish marsh wetland as compared to 10.29 acres and 11.11 acres of high brackish marsh wetland under Alternatives B and D, respectively. As described in Section 5.9, Alternative E also has a lesser impact on endangered species than Alternatives B and D. As Alternative E has less impact on endangered species and wetlands than Alternatives B and D, Alternative E is identified as the least environmentally damaging practicable alternative that meets the overall purpose of the proposed project, and is therefore the alternative whose implementation is consistent with the CWA Section 404 (b) (1) Guidelines.

Implementation of Alternative E would meet the requirements of EO 11990 *Protection of Wetlands* and US DOT Order 5660.1A *Preservation of the Nation's Wetlands*, because there is no less environmentally damaging practicable alternative to constructing the Proposed Project than Alternative E. Alternative E minimizes harm to wetland areas and aquatic resources as compared to Alternatives B and D. Alternatives to implement the Proposed Project that proposed constructing a shorter runway extension of less than 300 feet do not meet the project purpose and are not practicable under EO 11990 or US DOT Order 5660.1A. Alternatives such as Alternatives B or D would meet the project purpose but have greater impacts on wetlands than Alternative E. Implementing Alternatives B or D, when Alternative E is available and practicable, would be inconsistent with EO 11990 and US DOT Order 5660.1A.

Section 5.10.6 of the Final SEIS describes several options for compensatory mitigation for wetland and aquatic habitat losses associated with the implementation of the Propose Project. The CWA, NEPA, EO 11990, and US DOT Order 5660.1A, all require consideration of mitigation measures for adverse environmental impacts. In addition, the USCOE regulations at 33 CFR Part 332 provide detailed requirements regarding the approval of compensatory mitigation for impacts to aquatic resources within CWA jurisdiction. The USCOE regulations at 33 CFR §§ 332.3 (b) also identify the order of

preference for different types of compensatory mitigation for aquatic impacts to waters within CWA jurisdiction from most preferable to least preferable as:

- Mitigation bank credits
- In-lieu fee program credits
- Permittee-responsible mitigation under a watershed approach
- Permittee-responsible mitigation through on-site and in-kind mitigation
- Permittee-responsible mitigation through off-site and/or out-of-kind mitigation

The USCOE CWA and RHA regulatory program compensatory mitigation regulations at 33 CFR § 332.3 (b)(1) state that compensatory mitigation projects should not be located where they will increase the risks to aviation by attracting wildlife to areas where aircraft-wildlife strikes may occur (e.g., near airports). As on-site and in-kind wetland mitigation for this project could potentially attract wildlife and increase the risk of aircraft-wildlife strikes, on-site, in-kind aquatic resource mitigation at DVO would be inconsistent with USCOE compensatory mitigation regulations and FAA Advisory Circular 150/5200-33B *Hazardous Wildlife Attractants on or Near Airports*.

USCOE mitigation regulations at 33 CFR 332.3 (f) also require that compensatory mitigation must be, to the extent practicable, sufficient to replace lost aquatic resource functions, and that a minimum one-to-one acreage or linear foot mitigation compensation ratio be used unless another functional or condition assessment method or other suitable metric is available to evaluate the loss of aquatic resource function. Based on USCOE regulations and the FAA NEPA requirements, a minimum of a one-to-one acreage replacement for aquatic resources eliminated by Alternative B, D, or E would be necessary to reduce aquatic resource impacts to a not significant level. However, as described in the following paragraphs, compensatory mitigation for impacts to aquatic resources resulting from implementation of Alternative B, D, or E are anticipated to exceed a one-to-one replacement ratio.

The Marin Countywide Plan, Natural Systems and Agriculture Element, Biological Resources Section, Wetland Conservation Biological Goal Bio-3, Policy Bio-3.2 (Marin Countywide Plan page 2-25) identifies County policies of requiring a 2:1 ratio (replaced:impacted) for on-site compensatory wetland mitigation and a 3:1 ratio (replaced:impacted) for off-site compensatory wetland mitigation. As discussed in Section 5.9.5 and Appendix I, *Biological Resources*, Table I-1 of the Final SEIS, the USFWS Biological Opinion for this project requires endangered species habitat compensation for impacts of the proposed project that exceed the minimum one-to-one compensatory mitigation ratio identified in the USCOE CWA mitigation regulations.

As habitat compensation for both the CCR and SMHM requires off-site habitat compensation, and these species prefer tidal salt marsh, it is likely 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. Such an approach is specifically allowed under the USCOE compensatory mitigation regulations at 33 CFR Part 332. In general, replacing the high brackish marsh and annual grassland to be temporarily or permanently removed as a result of the DVO runway extension project at a compensatory mitigation site considered suitable for restoration to tidal salt

marsh in the 2013 USFWS *Recovery Plan for Tidal Marsh Ecosystems of Northern and Central California* (USFWS *Recovery Plan*) would result in the establishment or enhancement of tidal salt marsh habitat that would provide greater wetland functions, and improved habitat for the CCR and SMHM, as compared to the wetlands, perennial drainages, and ditches/canals being removed.

The habitat acreages necessary to compensate for wetland and aquatic resource impacts under Alternatives B, D, and E based on the 3:1 (replaced: impacted) off-site habitat compensation ratio identified in the Marin Countywide Plan, Natural Systems Goal Bio-3, Policy Bio-3.2, are shown in Table 5.10-3, Table 5.10-4 and Table 5.10-5, respectively, of the Final SEIS. Under Alternative B, 35.49 acres of compensatory mitigation acreage would be needed to compensate at a 3:1 ratio for the removal of 11.83 acres of wetland and aquatic habitat. Under Alternative D, 38.19 acres of compensatory mitigation acreage would be needed to compensate at a 3:1 ratio for the removal of 12.73 acres of wetland and aquatic habitat. Under Alternative E, 21.87 acres of compensatory mitigation acreage would be needed to compensate at a 3:1 ratio for the removal of 7.27 acres of wetland and aquatic habitat. These acreage values are different than the endangered species habitat impact acreages provided in Final SEIS Section 5.9 because Section 5.9 includes habitat impacts and habitat compensation for both upland and wetland endangered species habitat impacts, while Final SEIS Section 5.10 is specific to wetland and aquatic resources impacts.

In order to rely on mitigation to reduce environmental impacts to a not significant level, the FAA must determine that the proposed mitigation is technically possible to implement. The USFWS *Recovery Plan* identifies numerous examples of successful tidal marsh restoration and creation projects in the San Francisco Bay area, and specifically within the USFWS San Pablo Bay Recovery Unit, which includes DVO within its boundaries. The USFWS *Recovery Plan* identifies habitat restoration and creation as its primary strategies for recovery of listed species in tidal marsh ecosystems of Northern and Central California and considers such restoration “...highly feasible in the San Francisco Bay Estuary.” The FAA considers this sufficient evidence that it is feasible to provide compensatory mitigation for the impacts to wetland and aquatic resources associated with Alternative B, D, or E.

In order for the FAA to determine that compensatory mitigation will reduce environmental impacts to a not significant level, the FAA must also be able to reasonably conclude that the proposed mitigation will actually be implemented. The USCOE has a compliance and enforcement program to ensure that USCOE permit recipients comply with USCOE permit and CWA requirements. The USCOE compensatory mitigation regulations at 33 CFR Part 332 require that permit applicants submit ecological performance standards, mitigation monitoring standards, mitigation site management plans, and sometimes financial assurances to obtain a USCOE permit. USCOE permit holders with compensatory mitigation plans that do not meet ecological performance standards can be required to undertake corrective actions to ensure their compensatory mitigation addresses the environmental impacts to wetlands and aquatic resources identified in the USCOE permit. In addition, the FAA can also add special conditions that require implementation of compensatory mitigation for impacts to wetland and aquatic resources to any approval of Federal funding assistance to construct the proposed runway extension.

The FAA will require Marin County implement the mitigation requirements identified in the Final SEIS and the USCOE CWA Section 404 permit for Alternative E through a special condition in Airport Improvement Program grant assurances or similar requirements to ensure that these protective measures are implemented. With implementation of these mitigation measures, the Proposed Project's impact on wetland and aquatic resources would not be significant.

The Final SEIS has established that Alternative E is the least environmentally damaging practicable alternative and will have the least environmental impact on wetlands. Also, the FAA will require wetland mitigation that represents all practicable measures to minimize harm to wetlands. Therefore, implementation of Alternative E, with all of the protective mitigation measures identified in this ROD, meets the requirements of E.O. 11990 and DOT Order 5660.1A. Implementation of Alternative E will meet the purpose and need while minimizing harm to wetlands, through implementation of the mitigation measures for wetland impacts described in this ROD.

FLOODPLAINS.

Section 5.11 of the Final SEIS notes all of DVO is within the 100-year Floodplain on the Flood Insurance Rate Map prepared by the Federal Emergency Management Agency (FEMA), dated March 16, 2016. A regional system of manmade ditches and levees constructed along the Petaluma River provides flood protection for DVO and surrounding areas. In addition, DVO has its own levees on its property to provide further protection for the runway, taxiway, aircraft parking areas, and the administrative offices. However, the FEMA Flood Insurance Rate Map shows all DVO property to be located within the 100-year floodplain because the DVO levees, and the nearby regional system of levees located outside the airport boundary, do not meet the physical criteria identified in the National Flood Insurance Program requirements as described in Title 44 CFR § 65.10 to provide 100-year flood protection. Therefore, for the purposes of the Final SEIS, all of DVO is considered to be located within the 100-year floodplain. Under Alternative A, No Action, DVO would remain in the 100-year floodplain and no development would occur. DVO would also remain in the 100-year floodplain with after implementation of Alternative B, Alternative D, or Alternative E.

Implementation of Alternative B, D, or E would enclose additional area within the DVO Airport levee system. Implementation of Alternatives B, D, and E would result in approximately a 13-acre, 15-acre, or 6-acre encroachment into the 100-year floodplain, respectively. Implementation of Alternative B, D, or E would result in a less than one percent encroachment on the approximately 3,875-acre, 100-year floodplain in the vicinity of DVO. Although the development of Alternative B, D, or E represents a floodplain encroachment, the developed area would remain within the 100-year floodplain as the DVO Airport levees do not meet FEMA 100-year flood protection standards.

As discussed in Section 5.11.3 of the Final SEIS, the floodplain encroachment under Alternative B, D, or E, would not result in floodplain conditions that have a high probability to result in a loss of human life, would not result in substantial, encroachment-associated costs or damage, and would not cause adverse impacts on natural and beneficial floodplain values. Therefore, the floodplain encroachment under Alternative B, D, or E is not considered a significant floodplain encroachment in accordance with Executive Order 11988 *Floodplain Management* and DOT Order 5650.2 *Floodplain Management and*

Protection. However, Alternative E represents the project alternative that meets the project purpose while minimizing short and long-term impacts to the 100-year floodplain as required by EO 11998 and DOT Order 5650.2.

COASTAL RESOURCES.

Section 5.12 of the Final SEIS evaluates the environmental impact of the Proposed Project on coastal resources. Alternative A, the No Action Alternative, has no potential to cause environmental impacts to coastal resources. The Bay Conservation and Development Commission (BCDC) letter of July 28, 2010 stated that the Sponsor's Proposed Project, Alternative B, was outside of the coastal zone and BCDC jurisdiction. Alternatives D and E are also outside of the coastal zone and BCDC jurisdiction. Therefore, no permit is required from the BCDC to construct Alternative B, D, or E on DVO property.

As discussed in Section 5.9 and 5.10 of the Final SEIS, and in this ROD, compensatory mitigation planning for impacts to endangered species and wetlands will be required to implement Alternative B, D, or E. While the general compensatory mitigation requirements for endangered species and wetlands have been established in the Final SEIS, the exact location of the compensatory mitigation sites will not be finalized until endangered species and wetland mitigation plans are completed and approved by regulatory agencies. Once these specific compensatory mitigation plans are established, an additional review of those plan in relation to coastal resources may be required.

WILD AND SCENIC RIVERS.

Section 5.13 of the Final SEIS states that implementation of Alternative A, B, D, or E, would not impact any Wild and Scenic River as the nearest federally designated Wild and Scenic River, the Lower American River, is located in Sacramento, California, approximately 50 miles northeast of DVO.

FARMLANDS.

Section 5.14 of the Final SEIS found that no soils associated with prime or unique farmlands, or farmlands of statewide or local importance are present at DVO. Therefore, no prime or unique farmlands, or farmlands of statewide or local importance are present at DVO and none will be impacted by implementation of Alternative A, B, D, or E.

ENERGY SUPPLY, NATURAL RESOURCES, AND SUSTAINABLE DESIGN.

As discussed in Section 5.15 of the Final SEIS, Alternative A, the No Action Alternative, has no potential to cause new environmental impacts to energy supply, natural resources, or be inconsistent with sustainable design. Implementation of Alternatives B, D, or E would not result in a substantial increase in demand for energy, natural resources, fuel, or rare consumable natural resources. Therefore, implementation of Alternatives B, D, and E would not have a significant impact on Energy Supply or Natural Resources, or be inconsistent with Sustainable Design. As Alternative E is a smaller development project than Alternative B or D, its implementation would require less energy and use fewer natural resources than Alternatives B or D.

LIGHT EMISSIONS AND VISUAL IMPACTS.

Section 5.16 of the Final SEIS evaluates the potential environmental effects of the Proposed Project in regard to light emissions and visual impacts. Alternative A, the No Action Alternative, has no potential to cause new light emissions or impact visual resources.

DVO has Medium Intensity Runway edge lights that are used to outline the edges of the runway during periods of darkness or restricted visibility conditions. DVO has a Precision Approach Path Indicator (PAPI) lighting system to provide visual descent guidance information to pilots during the aircraft landing approach. Runway 31 has a two-light PAPI located on the left side of the runway as the pilot approaches the DVO from the south. This PAPI is located 1.1 miles north of the nearest residential area in the City of Novato, and its location would not change as a result of implementation of the Alternative B.

Implementing Alternative D, the Runway 31 PAPI would be relocated to 1.04 miles north of the nearest residential area. Due to the elevation of the terrain south of the Airport, it is likely that the angle of the PAPI would increase to 4.25 or 4.5 degrees to provide the necessary guidance to pilots approaching from the south of the Airport. If Alternative D were selected, the proposed adjustment to the angle of the PAPI would have to be evaluated for safety and efficiency by FAA's Air Traffic Organization before it could be implemented. Increasing the PAPI GPA beyond 4.2 degrees will result in the elimination of Category B minima from the currently published procedure and any future procedure requests. The PAPI lighting system may still be visible to residential areas, but implementation of Alternative D would not create a significantly different PAPI lighting situation south of DVO than exists today. Implementation of Alternative E would result in the Runway 31 PAPI moving 406 feet northwest of its existing location, and being less visible from the closest residential area south of DVO than under Alternative B or Alternative D.

Runway 13 has a two-light PAPI located on the right side of the runway as a pilot approaches from the north. The nearest residential area to the Runway 13 PAPI is in the City of Petaluma, approximately 5.5 miles north of DVO. With implementation of Alternative B, the Runway 13 PAPI would be moved approximately 0.2 miles northward to reduce the distance between that PAPI and the residences in the City of Petaluma to approximately 5.3 miles from DVO. With implementation of Alternative D, the Runway 13 PAPI would be moved approximately 0.1 mile northward to reduce the distance between that PAPI and the residences in the City of Petaluma to approximately 5.4 miles from DVO. With implementation of Alternative E, the Runway 13 PAPI would be moved approximately 0.1 mile northward to reduce the distance between that PAPI and the residences in the City of Petaluma to approximately 5.4 miles from DVO.

Implementation of Alternatives B, D, or E would also require additional runway and taxiway lighting to provide lighting for the runway and taxiway extensions. These lights delineate the edges of the runway and taxiway pavement. However, these lights would likely be visible from the residential areas to the south that have a view of the Airport. However, other lighting exists along the taxiways and ramps for low visibility purposes and to assist aircraft movement on the airfield, such as hold position lights, stop bar lights, and runway and taxiway signage. Each of these additional light systems are located within

the Airport complex. Given the intensity of the Airport lighting and its distance from the residential areas to the south and north of DVO, implementation of additional lighting by implementation of Alternative B, D, or E would not be anticipated to annoy people in the residential area or interfere with their normal activities. In addition, as implementation of Alternative B, D, or E would result in the extension of Runway 13/31 at just a few feet in elevation above the surrounding land, the runway extension would blend into the surrounding visual features of the area. Given these conditions, implementation of Alternative B, D, or E would not result in significant impacts due to additional light emissions from airfield lighting or result in blocking current views or creating disruptive additional features that would result in a significant adverse impact on visual resources.

HAZARDOUS MATERIALS, POLLUTION PREVENTION AND SOLID WASTE.

Section 5.17 of the Final SEIS evaluates the potential for environmental impacts associated with hazardous materials, pollution prevention and solid waste to occur as a result of implementing Alternatives A, B, D, or E. Alternative A, the No Action Alternative, has no potential to cause impacts associated with hazardous materials, pollution prevention, or solid waste.

The Final SEIS states no evidence of hazardous materials, solid wastes, discolored soil or water, stressed vegetation, above or underground storage tanks, pits, ponds, or lagoons were observed. However, as discussed in Section 4.8.3 of the Final SEIS, fill aggregate rock material has been imported to DVO over the years to raise the project site elevation in preparation for construction of the runway and other facilities at DVO. Some of this material has been found to test positive for asbestos. In October 2017, during the rehabilitation of Runway 13/31, the construction contractor's routine testing identified Naturally Occurring Asbestos (NOA) in the onsite aggregate rock base material that was exposed during the construction work associated with the rehabilitation of the Runway 13/31. The NOA was detected in the imported aggregate rock base material, not in the soils that occur naturally on the project site.

Implementation of Alternatives B, D, or E would require additional fill be transported to DVO to construct the runway extension. While California regulations now preclude the quarrying of rocks with NOA for construction fill, existing fill material on the site may contain NOA. Implementation of Alternatives B, D, or E will require that existing aggregate material at both ends of Runway 13/31 be exposed while the runway extension is being constructed. This could potentially expose NOA in the existing aggregate rock at the DVO during construction.

Any work that disturbs NOA may potentially create a human health hazard by exposing unprotected workers and the public to health hazards from production of airborne dusts with NOA in amounts that could exceed State of California requirements. As implementation of Alternatives B, D, or E would require excavation work at both ends of Runway 13/31 that could expose NOA in existing aggregate fill, protective measures are necessary to protect construction workers and the public.

Implementation of the following mitigation measures, which were previously used to protect construction workers and the public from NOA during the Runway 13/31 reconstruction project, will provide mitigation to protect construction workers and the public from inhaling NOA dust. With

implementation of the mitigation measures described below, implementation of Alternatives B, D, or E would not result in a significant impact on human health or the environment from exposure to NOA.

The mitigation measures that were previously approved during the rehabilitation of Runway 13/31 will be implemented and are as follows:

- California Occupational Safety and Health Administration (Cal/OSHA) will be notified by the construction contractor a minimum of 24-hours prior to commencement of the grading, rock moving, or other disturbance of NOA activities.
- Caution signs meeting the specification of OSHA Construction Safety Order, Section 1529 (a)(7)(B) 1, shall be posted at any location where airborne asbestos concentrations may be present.
- Exterior air intakes at the airport's offices will be turned off for the duration of the NOA processing, as approved by County's Mechanical Engineering staff.
- Wind socks will be mounted at each downwind location where air monitoring will be performed to provide a visual indicator for the heavy equipment operators of the prevailing wind directions. Contractor will provide all necessary notifications to the Marin County airport management and FAA prior to installation of the wind socks.
- A weather station at the airport will be used to monitor prevailing wind direction and speed. The airport manager or project superintendent will notify the heavy equipment operators when wind speeds exceed 25 miles per hour consistently over a 5-minute period and work will cease. Work will not resume until wind speeds are consistently under 25 miles per hour, continuously.
- Equipment operators will position themselves to take advantage of the prevailing winds, whenever possible, so as not to be positioned downwind of the dust generation work. Supervisors will be in radio contact with the operators and will radio the various workers to adjust their positioning where activities are within the potential dust plume.
- The use of rock crushing, screening and sorting equipment shall be prohibited for processing materials with more than 0.25% asbestos, as confirmed by California Air Resources Board Test Method 435 Determination of Asbestos Content in Serpentine Aggregate.
- Water truck operators will apply water in advance of all work that will disturb any Asbestos Containing Materials (ACM). Sufficient water shall be applied as part of the planned engineering controls, based on site observations and testing in compliance with the Asbestos Airborne Toxic Control Measure Plan (ATCM). The ATCM shall comply with Section 93105, Title 17, and CCR. The ATCM shall be filed by the contractor with the Bay Area Air Quality Management District (BAAQMD) in a timely manner.
- If required, high-efficiency particulate air (HEPA)-filtered vacuums, stored near and/ other safety equipment within the regulated area will be used for emergency cleanups and local decontamination.

- DOP testing of HEPA-filtered vacuums will be performed at the start of the NOA handling operations to assure proper operation and efficiency.
- No use of compressed air for cleaning will occur. Only wet cleaning and HEPA- filtered vacuuming will be done.
- A decontamination facility and wash station will be constructed in the area where ACM is being handled.
- Any construction vehicles leaving the work area shall be cleaned or decontaminated in compliance with the BAAQMD and ATCM requirement. The exact method of compliance is at the discretion of the contractor, but shall be listed in their work plan. A Regulated Area shall be established at the perimeter of the ACM work zone that will keep all other workers outside of the area of expected exposure. The Regulated Area will be marked with signage, barricades, warning tape to comply with 8 California Code of Regulations Section 1529 (b).

As discussed in Section 5.17.1.2 of the Final SEIS, underground storage tanks (USTs) for diesel, aviation fuel, and jet fuel, located east of the airport manager's office were removed in 1991. In 1999, during excavation to replace a section of storm drain sewer line, groundwater with a sheen and solvent like petroleum odors were encountered. The area was remediated of contamination. That area is outside of the construction area for Alternatives B, D, and E. As no oil sheen or petroleum odors have been observed in the drainage ditches that enclose Runway 13/31, this indicates that any potential residual petroleum contamination is contained in soil or groundwater near the former USTs, and unlikely to be encountered as part of the construction associated with implementation of Alternatives B, D, or E.

However, as an environmental mitigation measure to protect on-site personnel involved in subsurface construction activities, those workers will be trained in appropriate procedures to recognize soil and groundwater contaminated with petroleum hydrocarbons. If any such pollution is encountered, a work plan will be developed for approval of the San Francisco Regional Water Quality Control Board to properly to avoid threats to human health or the environment. Proper management may include sampling, risk assessment, additional cleanup work, mitigation measures, or some combination of these tasks.

Marin County would continue its current pollution prevention control through waste minimization under Alternatives A, B, D, or E. Since pollution prevention programs will not change under Alternatives A, B, D, or E, implementation of any of these alternatives would not have a significant impact on pollution prevention programs.

As discussed in Section 5.17.3 of the Final SEIS, based on the aviation forecast for DVO, increased aviation activity would occur whether or not an extension to Runway 13/31 is constructed. The projected two percent increase in aviation operations would be expected to generate a slight increase in solid waste due to the increased use of DVO under Alternatives A, B, D or E. Much of this waste, such as cardboard, plastic wrapping, and plywood, may be reusable or recyclable, which would further reduce the amount of solid waste being deposited in the RLI. Given that the RLI landfill is permitted to nearly double its capacity, and currently receives approximately 750,000 tons of solid waste each year,

the additional solid waste generated at DVO would be easily accommodated and not represent a significant impact to solid waste under Alternatives A, B, D, or E.

CONSTRUCTION IMPACTS.

Section 5.18 of the Final SEIS provided a description of the general types and nature of construction environmental impacts and the avoidance and minimization measures proposed to minimize potential adverse effects under the No Action Alternative and Alternatives B, D, and E proposed for DVO. Section 5.18 reiterates discussions under the individual environmental resource categories in the Final SEIS. Construction of new Airport facilities can cause temporary impacts relative to air and water quality; soil erosion; ambient noise levels; hazardous materials and solid waste; biological resources; surface transportation patterns; and socioeconomic conditions. However, the long-term impacts of project implementation are typically greater than the temporary impact of construction. No additional significant environmental impacts that were specific to construction environmental impacts were identified.

CUMULATIVE IMPACTS.

Chapter 6 of the Final SEIS describes the past, present, and reasonably foreseeable future actions relevant to cumulative impacts. Cumulative impacts are defined by the CEQ in 40 C.F.R. § 1058.7 as: *"The impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such actions."* The evaluation of cumulative impacts in the Final SEIS considered the past, present, and reasonably foreseeable future projects or actions undertaken by individuals and municipalities in the vicinity of DVO.

Section 6.3 of the Final SEIS identifies the past actions as those that were completed before or during 2018. Present actions are defined as those completed between 2019 and 2023. Reasonably foreseeable future actions are defined as those planned to be completed between 2024 and 2029, which is within the planning horizon of the Final SEIS. There are several multiphase projects that completed construction phases in 2018, but also have ongoing or anticipated future work between 2024 and 2029.

The project includes amendments to existing Air Traffic Control (ATC) procedures at DVO. The procedures amended are designed for arriving and departing aircraft operating under Instrument Flight Rules (IFR) at DVO. Since the ATC procedure amendments are not finalized at this time, a federal environmental review will be conducted on the final procedure designs prior to implementation.

Section 6.6 of the Final SEIS presents the conclusions of the cumulative impacts and states: The level of cumulative impacts anticipated to occur is not significant due to the types of projects proposed, the extent of the built environment in which they would occur, and the existing requirements to provide mitigation for Alternatives B, D, E and the past present, and reasonably foreseeable projects that may be occur when either Alternatives B, D, or E is implemented. Therefore, implementation of either Alternatives B, D, or E would not result in significant cumulative environmental impacts.

Irreversible and Irretrievable Commitment of Resources. Section 5.19 of the Final SEIS discusses the potential irreversible and irretrievable commitments of resources that would occur as a result of implementing Alternatives B, D, or E. Alternative A, the No Action alternative, would not result in an irreversible or irretrievable commitment of resources.

Implementation of Alternatives B, D, or E, would result in an extension of Runway 13/31 and the parallel taxiway. Therefore, under Alternative B, D, or E, there would be a minor, but irretrievable, increase in demand for Aviation Gasoline (AvGas), and Jet-A fuel, because aircraft would burn slightly more fuel due to the minimal increase in taxi distance to the end of the runway. Implementation of Alternative B, D, or E would require an irretrievable commitment of construction labor. The construction of, and travel to and from, the proposed project site would require the irretrievable consumption of petroleum products and petroleum-based electrical generation provided by the local power company. Implementation of Alternatives B, D, or E would require the use of Portland Cement Concrete and/or asphaltic concrete, and crushed rock and sand (aggregates). The use of these construction materials would be an irreversible commitment of resources.

As discussed in the Final SEIS, Section 5.9 and Section 5.10, and this ROD, endangered species habitat and wetland habitat will be irreversibly removed from DVO by implementation of Alternatives B, D, or E. The acreages of endangered species habitat and wetland habitats irretrievably lost is discussed in the Final SEIS and this ROD. Alternative E, as a shorter runway extension alternative, has a lesser acreage of irreversible and losses of endangered species and wetland habitat as compared to Alternatives B and D. However, mitigation measures would be implemented for Alternatives B, D, or E so that on a regional basis endangered species habitat and wetland habitat is created and/or enhanced to compensate for the irreversible losses of endangered species and wetland habitat on DVO.

XI. AGENCY FINDINGS AND DETERMINATIONS

The following text identifies the various specific federal agency findings and determinations that support the Federal Actions for the proposed runway extension project at DVO.

Federal Aviation Administration Determination under Provisions of the Airport and Airway Improvement Act (49 U.S. C. §§47107 and 47107).

There are numerous findings and determinations prescribed by law that must be made by the FAA as preconditions to agency approvals of airport layout plan changes and airport project funding applications. Any grant-in-aid application and approval would also reflect appropriate statutory and regulatory assurances and other terms and conditions for FAA's actions. This ROD provides the basis to proceed with making those findings and determinations in conjunction with its consideration of appropriate applications and availability of funding.

The following determinations are prescribed by the statutory provisions set forth in the Airport and Airway Improvement Act of 1982, as codified in 49 U.S.C. §§ 47106 and 47107.

- **The project is reasonably consistent with existing plans of public agencies for development of the area (49 U.S.C. § 47106(a) and Executive Order 12372):** The determination prescribed by this statutory provision is a precondition to agency approval by the FAA of airport project grant funding applications. To make this determination, the FAA considered local land use and development plans and requested confirmation from local authorities concerning consistency determinations. The FAA reviewed and considered the plans, goals, and policies of local governments and provided opportunities for local governments and the public to comment on the scope and findings of the Final SEIS. Marin County's long range county plan, known as the *Marin Countywide Plan*, and the *City of Novato General Plan*, each describe planning goals for the areas near and adjacent to DVO. Marin County designates DVO as an Industrial land use designation with a Public Facilities combining designation, consistent with the approved and planned development under the *DVO Airport Land Use Master Plan*. The *Marin Countywide Plan* states that commercial uses on lands surrounding DVO shall be limited to those that are Airport related or compatible with the Airport. The *City of Novato General Plan* designates the land use in the DVO area as Community Facilities and identifies the City's planning goal for the area as to promote development and conservation in that land use pattern. The FAA has received a land use assurance letter from Marin County that the County would continue to ensure appropriate land use regulations are adopted and enforced to ensure land uses are compatible with airport operations. Marin County provided the FAA a Land Use Assurance Letter, which was included in Appendix O of the 2014 Final EIS.
- **Fair consideration has been given to the interests of communities in or near the Project location (49 U.S.C. § 47106(b)(2)):** The determination prescribed by this statutory provision is a precondition to agency approval of airport development project funding applications. Sections VII, VIII, and IX of this ROD respectively, summarize FAA public involvement activities, tribal consultations, and interagency consultations. More information on FAA's public involvement activities are provided in Appendices B, P, and Q of the 2014 Final EIS and Appendices B-1, P-1, and Q-1 of the Final SEIS. Documentation of completion of National Historic Preservation Act, Section 106, consultation and information regarding Government-to-Government consultation with Federally Recognized tribes is provided in Appendix H of the 2014 Final EIS. Documentation of completion of the Endangered Species Act, Section 7 consultation is provided in Appendix I of the 2014 EIS.

The FAA has determined that, throughout the environmental process from its earliest planning stages through the publication of the Final SEIS and through public comment on the Final SEIS, fair consideration was given to the interests of communities in or near the proposed DVO runway extension.

- **Certification from the Airport Sponsor that it has provided an opportunity for a public hearing (49 U.S.C. §47106(c)(1)(A)(i)):** The determination prescribed by this statutory provision is a precondition to agency approval for grant funding applications for airport development projects involving location of a new airport or new runway or a major runway extension. As summarized in Section VII of this ROD, a public hearing was held on the Draft EIS on January 10, 2012, and an additional public hearing was held on the Draft SEIS on August 22, 2019. Details of the January 10, 2012 public hearing are included in Appendices B, P, and Q of the 2014 Final EIS.

Details of the August 22, 2019 public hearing on the Draft SEIS are included in Appendices B-1, P-1, and Q-1 of the Final SEIS.

- **Appropriate action, including the adoption of zoning laws, has been or will be taken, to the extent reasonable, to restrict the use of land in the vicinity of the airport to purposes compatible with airport operations (49 U.S.C. §47107(a)(10)).** The determination prescribed by this statutory provision is a precondition to agency approval or airport development project grant funding applications. Throughout the EIS process, the FAA coordinated with Marin County with regard to compatible land use. The FAA received the required Land Use Assurance letter that Marin County has provided its assurance that appropriate action and enforcement of zoning laws, has been or will be taken, to the extent reasonable, to restrict use of land adjacent to or in the vicinity of DVO to activities and purposes compatible with normal airport operation, including the landing and takeoff of aircraft. A copy of the Land use Assurance letter is included in Appendix O of the 2014 Final EIS.
- **Determination that the airport development is reasonably necessary for the use in air commerce or in the interests of national defense pursuant to (49 U.S.C. § 44502(b)).** The FAA has determined that implementation of Alternative E would maintain the safety, utility and efficiency of DVO. Implementation of Alternative E, will allow existing aircraft, as represented by the family grouping of critical aircraft at DVO, to operate without operational weight restrictions under hot weather conditions at DVO. Section 2.2.1 of FAA Order 5090.5 *Formulation of the NPIAS and ACIP*, identifies that FAA goals for airport facilities includes supporting construction, modification, or expansion of airport facilities to meet demonstrated aeronautical needs, and bringing airport facilities into conformity with current airport standards. Implementation of Alternative E would extend Runway 13/31 by 300 feet, a sufficient distance to allow the current critical aircraft for DVO, the family grouping of B-II turboprop aircraft, to operate without operational weight restrictions under hot weather conditions. Specifically, implementing Alternative E, would allow the family grouping of B-II turboprop aircraft to operate without operational weight restrictions at DVO when the temperature is at the mean daily maximum temperature of the hottest month. That temperature parameter is identified FAA Advisory Circular 50/5325-4B *Runway Length Requirements for Airport Design*, as the appropriate value for use in calculating the necessary runway length for the critical aircraft at an airport. In addition, implementation of Alternative E will provide a Runway Safety Area meeting FAA dimensional standards in FAA Advisory Circular 150/5300-13A *Airport Design*, for B-II aircraft operating at DVO. Such development is reasonably necessary to support air commerce at DVO.
- **The FAA has given the Project the independent and objective evaluation required by the Council on Environmental Quality (40 C.F.R. § 1506.5):** As documented in the Final SEIS and in this ROD, the FAA has objectively evaluated all reasonable alternatives meeting the Purpose and Need (see 40 C.F.R. §1502.1.4(a)). The process included the FAA's selection of a third-party EIS contractor through a competitive process to assist in conducting the environmental review. The environmental review included identifying the Purpose and Need, identifying reasonable alternatives, fully analyzing and disclosing potential environmental impacts, and developing appropriate mitigation measures. The FAA directed the technical analysis provided in the Draft

and Final EIS, and the Draft SEIS and Final SEIS. The FAA furnished guidance and participated in preparation of the EIS by providing input, advice, and expertise throughout the planning and technical analysis, along with administrative direction and legal review of the project. From its inception, the FAA has taken a strong leadership role in the environmental evaluation of the proposed runway extension and has maintained its objectivity. In addition, the FAA has on file a disclosure statement from the environmental consultant that satisfies the requirement of 40 C.F.R. § 1506.3(c).

Compliance with Laws, Regulations, and Executive Orders

This section addresses compliance with laws, regulations, and E.O.s not specific to FAA regulatory authority.

- **Clean Air Act of 1970, as amended (42 U.S.C. §7401 et seq.):** Implementation of Alternative E would not cause an increase in air emissions above the applicable federal *de minimis* thresholds. In addition, implementation of Alternative E must comply with California Air Resources Board requirements as implemented through the Bay Area Air Quality Management District. Implementation would not create any new violation of the NAAQS, delay the attainment of any NAAQS, nor increase the frequency or severity of any existing violations of the NAAQS. As a result, no adverse impact on local or regional air quality is expected by construction of Alternative E. As discussed in Section 5.5.5.2 of the Final SEIS, implementation of Alternative E would not exceed relevant CAA General Conformity *de minimis* levels for any criteria air pollutant. Alternative E would comply with the Final Bay Area 2017 Clean Air Plan, the State Implementation Plan applicable to the area including DVO. As discussed in Section 5.5.5.3 of the Final SEIS, the evaluation of CAA General Conformity requirements for Alternative E showed that air emissions for Alternative E are below CAA General Conformity *de minimis* levels. No further air quality impact evaluations, including CAA General Conformity Determinations, were required.
- **Endangered Species Act of 1973 (16 U.S.C. § 1531 et seq.):** In accordance with Section 7 of the ESA, the FAA prepared a Biological Assessment and entered into formal consultation with the USFWS to address potential impacts to ESA-listed species and critical habitat. Based on the analysis presented in the Biological Assessment, the FAA determined Alternative B *may affect, is likely to adversely affect*, the SMHM and the CCR. The USFWS concurred with FAA's determination in its Biological Opinion dated April 3, 2013. Since issuance of the Biological Opinion, the critical aircraft at DVO may have changed. The FAA has subsequently concluded that a less intensive development project, Alternative E, is sufficient to meet the purpose and need of the runway extension project at DVO. The Final SEIS identifies the impacts to the SMHM and CCR with implementation of Alternative E. The ESA, Section 7, consultation regulations at 50 CFR § 402.16 (a) to (d) identify four instances when a completed consultation must be reinitiated including:
 - (a) extent of incidental take exceeds incidental take statement; or
 - (b) new information reveals additional impacts to listed species or their habitat; or

- (c) action is modified to cause an effect on listed species or habitat not previously considered, or
- (d) a new species is listed or critical habitat designated that was not previously considered.

As none of the four reasons for reinitiating ESA, Section 7, consultation were present, no additional ESA consultation is required to implement Alternative E. Implementation of Alternative E could result in direct disturbance to SMHM and CCR individuals, and would result in habitat loss and disturbance of suitable habitat. The FAA through issuance of this ROD, is adopting all practicable means to avoid or minimize environmental impacts to the SMHM and CCR. In addition, Marin County, as owner and operator of DVO, will be required submit for USFWS approval, and subsequent Marin County implementation, a SMHM and CCR habitat compensation plan to address all environmental impacts to the SMHM and CCR identified in this Final SEIS associated with implementation of Alternative E. The Biological Opinion requires that the habitat compensation plan must be finalized and approved by the USFWS Service prior to the initiation of construction of the runway extension project.

- **Migratory Bird Treaty Act of 1918 (16 U.S.C. §703-712):** The Final SEIS documents the FAA consideration of the potential for impacts to migratory birds. The habitat compensation measures required for SMHM and CCR to implement Alternative E will also provide habitat for migratory birds. The Final SEIS also identifies in Section 5.9.4 that Marin County will conduct a preconstruction survey for burrowing owls, and establish a 250-foot buffer zone between construction activities and any active burrowing owl burrows during the February 1 to August 31 breeding season until young burrowing owls are able to fly away from the burrow. If construction is commenced outside of the burrowing owl breeding season and active burrowing owl burrows were located, the burrowing owls would be passively relocated using one-way doors at the burrow entrance.
- **Department of Transportation Act, Section 4(f) (49 U.S.C. § 303(c)):** As discussed in Section 5.7 of the Final SEIS and this ROD, implementation of Alternative E would require minor physical changes to the Burdell Unit of the Petaluma Marsh Wildlife Area to relocate an existing California Department of Fish and Wildlife (CDFW) unpaved access road that would be severed by construction of the extension to Runway 13/31. This road is located behind a locked gate and provides the CDFW motor vehicle access to the Burdell Unit. To provide an alternative access for the CDFW under Alternative E, as the unpaved road nears DVO Airport property on the west side of the Airport, it would rise to the top of the levee and turn north. The unpaved road would then follow the levee north of the runway before turning south to reconnect at its current location on the east side of the Airport. Both of these connection sites would require construction and grading to reconnect the access road. Under Alternative E, approximately 0.23 acre would be disturbed in order to reconnect the road to the existing road. Due to the relatively small size of disturbance and the commitment to work with the CDFW to provide alternative access and return the sites back to their natural conditions, this is not considered a physical taking of Section 4(f) property under Section 4(f) evaluation criteria.

A portion of the Burdell Unit of Petaluma Marsh Wildlife Area is exposed to noise levels above CNEL 70 dB from aircraft using DVO under existing conditions, and would continue to be exposed to noise levels above CNEL 70 dB under Alternative A, the No-Action alternative. Under Alternative E, the CNEL 70 dB contour would include approximately 22.6 acres of the Burdell Unit, approximately 3.2 acres more than under Alternative A. This represents approximately 3.5 percent of the Burdell Unit. No other Section 4(f) properties would be exposed to noise levels above CNEL 65 dB as a result of implementing Alternative E. This area is located immediately adjacent to the Airport and the small increased area exposed to CNEL 70 dB noise levels would not substantially impair the use the property or result in a constructive use of the property.

Implementation of Alternative E would not result in the 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, implementation of Alternative E would result in only a *de minimis* impact on Section 4(f) resources and not result in a significant impact on Section 4(f) resources.

- **National Historic Preservation Act of 1966 (16 U.S.C. §470):** Pursuant to Section 106 of the NHPA, the FAA, in consultation with the California SHPO, made the following finding : *No historic properties affected* by implementation of Alternative B in the Direct and Indirect Effects APE. The FAA submitted this finding to the California SHPO by letter of June 23, 2011. The California SHPO did not object to this finding and FAA confirmed with the California SHPO by telephone call of September 26, 2011, and letter of October 6, 2011, that the NHPA, Section 106, consultation process was complete. Because the direct area potential effects associated with implementation of Alternative E is smaller, and wholly contained within the direct Area of Potential Effects for Alternative B, and no new historic properties have been identified, the previous findings of no effect under Section 106 remain valid for the implementation of Alternative E.
- **Executive Order 13045, *Protection of Children from Environmental Health Risks and Safety Risks*:** The FAA has determined there would be no change in risk to the health or safety of children due to the implementation of Alternative E.
- **Executive Order 11990, *Protection of Wetlands*, and Department of Transportation Order 5660.1A, *Preservation of the Nation's Wetlands*:** Implementation of Alternative E would meet the requirements of EO 11990 *Protection of Wetlands* and US DOT Order 5660.1A *Preservation of the Nation's Wetlands*. As described in the Final SEIS, Section 5.10, and this ROD, there is no less environmentally damaging practicable alternative minimizing impacts to wetlands than constructing Alternative E. Alternative E meets the project purpose while minimizing harm to wetland areas and aquatic resources as compared to Alternatives B and D. Alternatives to implement the Proposed Project that proposed constructing a shorter runway extension of less than 300 feet do not meet the project purpose and are not practicable under EO 11990 or US DOT Order 5660.1A. Alternatives such as Alternatives B or D would meet the project purpose but have greater impacts on wetlands than Alternative E, and their implementation in place of Alternative E is therefore inconsistent with EO 11990 and US DOT Order 5660.1A. Public notification of the potential environmental impact

to wetlands associated with the proposed extension to Runway 13/31 were included in the public notifications of the availability of the Draft EIS, Final EIS, Draft SEIS, and Final SEIS. The FAA will require Marin County to implement the mitigation requirements for wetland impacts identified for Alternative E in Section 5.10 of the Final SEIS.

- **Executive Order 11988, Floodplain Management, and Department of Transportation Order 5650.2, Floodplain Management and Protection:** As discussed in Section 5.11 of the Final SEIS and this ROD, all of DVO property and the surrounding area is part of an approximately 3,875 acre area that is within the 100-year floodplain. This area will remain within the 100-year floodplain under Alternative A – the No Action alternative, or runway extension Alternatives B, D, or E. This is because the DVO levees, and the nearby regional system of levees located outside the airport boundary, do not meet the physical criteria identified in the National Flood Insurance Program levee physical requirements in 44 CFR § 65.10 to provide 100-year flood protection.

The purpose of the runway extension project does not include providing 100-year flood protection for DVO and neighboring property owners in either the short or long term. Such an effort would require regional flood protection planning, including the consideration of how an increase in the elevation of mean sea level would affect the evaluation and implementation of regional flood control efforts. Implementing a regional flood control program that includes addressing sea level rise is not required to implement Alternatives B, D, or E, and is beyond the scope of the Final SEIS. Marin County is updating its Countywide Plan to address sea level rise as part of ongoing county planning efforts.

Implementation of Alternatives B, D, or E would enclose additional area within the DVO Airport levee system. Implementation of Alternatives B, D, and E would result in approximately a 13-acre, 15-acre, or 6-acre, respectively, encroachment into the 100-year floodplain. Therefore, Alternative E has fewer floodplain impacts than Alternatives B and D. Alternative E represents the project alternative that meets the project purpose while minimizing short and long-term impacts to the 100-year floodplain as required by EO 11998 and DOT Order 5650.2.

In order to determine whether a floodplain encroachment is considered a significant encroachment in accordance with DOT Order 5650.2, three specific issues are addressed: (1) The action would not have a considerable probability of loss of human life; (2) The action would not have substantial encroachment associated cost or extent; and (3) the action would not cause notable adverse impacts on natural and beneficial floodplain values. The evaluation of these issues in the Final SEIS found:

- **(1) The action would not have a considerable probability of loss of human life.** Implementation of Alternative E would not result in a high probability of loss of human life. Alternative E does not result in the construction of any new buildings or structures designed for human habitation within the 100-year floodplain. Alternative E does not alter the available access to and from the Airport. Alternative E does not change the ability to use the Airport during a flood event. Alternative E would not increase the likelihood of flood-induced spills of hazardous materials.

- **(2) The action would not have substantial encroachment associated cost or extent.** Implementation of Alternative E would occur within a 100-year floodplain, but the existing ditch and levee system would be extended to provide flood protection for the runway, taxiway, aircraft parking areas, and administrative offices. As a result, the Airport would be at no greater risk for flood damage than under Alternative A – the No Action alternative. The development included under Alternative E would occur within a large contiguous floodplain that encompasses the Airport and continues east until reaching the Petaluma River. The size of the contiguous area is approximately 3,875 acres. Alternative E would extend the existing levee and ditch system, runway and taxiway to the northwest, resulting in an additional 4.8 acres of land being protected by the DVO Airport levees to the northwest of the runway. To the south, the levee would stay in its current location. While construction of the runway and taxiway extension would result in an additional 1.5 acres of pavement, there would be 0.3 acres of pavement removal. Therefore, there would be a net encroachment of 1.2 acres into the floodplain. The combination of the two areas would result in a total of six acres of encroachment within the floodplain. Impounding this relatively small area (less than one percent of contiguous area) would not result in new areas being subject to 100-year floods, nor would it result in existing areas subject to 100-year floods becoming more prone to floods.
- **(3) The action would not cause notable adverse impacts on natural and beneficial floodplain values.** Implementation of Alternative E would result in the development of additional land and extension of the ditch and levee system in the floodplain. However, due to the size of the floodplain in and around the Airport, there would be no adverse impacts on the natural and beneficial floodplain values. Based on analysis in this section and in other sections of this SEIS, Alternative E would not result in significant impacts to agricultural activities, aquacultural activities, aquatic or terrestrial organisms, flood control, groundwater recharge, or water quality.

XII. DECISION

Approval by the FAA to implement the FAA's Preferred Alternative signifies that applicable federal requirements relating to airport development and planning have been met and permits Marin County to proceed with the Project. This decision does not constitute a commitment of funds under the Airport Improvement Program (AIP). However, it does fulfill the environmental prerequisites to approve applications for grants and Airport Improvement Program funds for the proposed project in the future.

Decision

I have carefully considered the FAA's goals and objectives in relation to the various aeronautical aspects of the proposed runway extension at Gness Field Airport as discussed in the 2014 Final EIS and Final SEIS. I have considered the purpose and need that this project would serve; the alternative means of

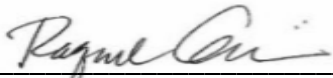
achieving the purpose and need; the environmental impacts of these alternatives; and the mitigation to preserve and enhance the human, cultural, and natural environment.

Under the authority delegated by the Administrator of the Federal Aviation Administration, I find that the Project in the ROD is reasonably supported. I therefore direct that the following Agency Actions and Approvals be taken to carry out this decision, including the following:

Federal Actions by the FAA

1. Unconditional approval of the ALP to depict the proposed runway shift/extension and parallel taxiway extension pursuant to 49 U.S.C. §§ 40103(b) and 47107(a)(16).
2. Development of 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.
3. A determination that the environmental analysis prerequisites associated with any future Airport Improvement Program (AIP) funding applications have been fulfilled pursuant to 49 U.S.C. § 47101 *et seq.*

Approved and Ordered



Raquel Girvin, Regional Administrator,
Western-Pacific Region,
Federal Aviation Administration

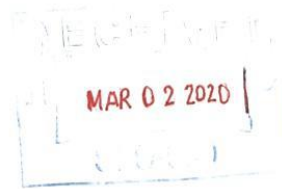
Date: 7/10/2020

RIGHT OF APPEAL

This ROD constitutes a Final Order of the FAA Administrator and is subject to exclusive judicial review under 49 U.S.C. § 46110 by the U.S. Circuit Court of Appeals for the District of Columbia or the U.S. Circuit Court of Appeals for the circuit in which the person contesting the decision resides or has its principal place of business. Any party having substantial interest in this order may apply for review of the decision by filing a petition for review in the appropriate U.S. Court of Appeals no later than 60 days after the order is issued in accordance with the provisions of 49 U.S.C. § 46110.

APPENDIX A
Responses to Comments Received on Final EIS

600	
601	
602	
611	
612	
613	
614	
615	
617	
618	
619	
621	
622	
623	
624	
625	
626	
627	
628	
629	
630	



U.S. Department of Homeland Security
FEMA Region IX
1111 Broadway, Suite 1200
Oakland, CA. 94607-4052



FEMA

February 27, 2020

Doug Pomeroy, FAA
San Francisco Airport District Office
1000 Marina Boulevard, Suite 220
Brisbane, California 94005-1835

Dear Mr. Pomeroy:

This is in response to your request for comments regarding the Final Supplement to Final EIS (SEIS), proposed Extension of Runway 13/31 of Gness Field Airport (DVO) in Novato, Marin County, California.

Executive Order 11988 (Floodplain Management) and Executive Order 11990 (Protection of Wetlands) require all Federal agencies "to avoid to the extent possible the long and short term adverse impacts associated with the occupancy and modification of the floodplains/wetlands and to avoid direct or indirect support of floodplains/wetland development wherever there is a practicable alternative." Federal agencies are responsible for implementing Executive Orders (EO) through their own regulations. The EO states that, at a minimum, Federal agencies must comply with National Flood Insurance Program (NFIP) regulations.

The requirements for environmental considerations are found in Vol. 44 Code of Federal Regulations (44 CFR), Part 9 Floodplain Management and Protection of Wetlands, and part 10 Environmental Considerations. These regulations set forth the policy, procedures, and responsibilities to implement and enforce EO 11988 and 11990. The minimum floodplain management building requirements of the NFIP are described in 44 CFR, Section 60.3.

Please review the current effective Flood Insurance Rate Maps (FIRM) for the County of Marin (Community Number 060173), Maps revised August 15, 2017 and City of Novato (Community Number 0060178), Maps revised March 16, 2016 for land that has been mapped with high, moderate and low flood risks.

www.fema.gov

A summary of the National Flood Insurance Program floodplain management building requirements are as follows:

- All buildings constructed within a riverine floodplain, (i.e., Flood Zones A, AO, AH, AE, and A1 through A30 as delineated on the FIRM), must be elevated so that the lowest floor is at or above the Base Flood Elevation level in accordance with the effective Flood Insurance Rate Map.
- If the area of construction is located within a Regulatory Floodway as delineated on the FIRM, any **development** must not increase base flood elevation levels. **The term development means any man-made change to improved or unimproved real estate, including but not limited to buildings, other structures, mining, dredging, filling, grading, paving, excavation or drilling operations, and storage of equipment or materials.** A hydrologic and hydraulic analysis must be performed *prior* to the start of development, and must demonstrate that the development would not cause any rise in base flood levels. No rise is permitted within regulatory floodways.
- Upon completion of any development that changes existing Special Flood Hazard Areas, the NFIP directs all participating communities to submit the appropriate hydrologic and hydraulic data to FEMA for a FIRM revision. In accordance with 44 CFR, Section 65.3, as soon as practicable, but not later than six months after such data becomes available, a community shall notify FEMA of the changes by submitting technical data for a flood map revision. To obtain copies of FEMA's Flood Map Revision Application Packages, please refer to the FEMA website at <http://www.fema.gov/business/nfip/forms.shtm>.

Please Note:

Many NFIP participating communities have adopted floodplain management building requirements which are more restrictive than the minimum federal standards described in 44 CFR. They do this for many reasons, one of the biggest is to account for risk and uncertainty in order to protect their communities from larger than predicted flood events. FEMA strongly advises you to contact and work with the local community's floodplain manager for more information on local floodplain management building requirements which could be incorporated into your project and provide added levels of protection. The Novato floodplain manager can be reached by contacting Russell Thompson, Public Works Director, at (415) 899-8246. The Marin County floodplain manager can be reached by contacting Berenice Davidson, Principal Civil Engineer, at (415) 473-3770.

Doug Pomeroy, FAA
Page 3
February 27, 2020

If you have any questions or concerns, please do not hesitate to contact Michael Hornick at (510) 627-7260 or Ramona Sudbeck at (510) 627-7169 of my staff who can provide your agency with floodplain management technical expertise and guidance.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Gregor Blackburn', with a long horizontal flourish extending to the right.

Gregor Blackburn, CFM, Branch Chief
Floodplain Management and Insurance Branch

cc:

Russell Thompson, Public Works Director, City of Novato
Berenice Davidson, Principal Civil Engineer, Department of Public Works, Marin County
Ray Lee, WREA, State of California, Department of Water Resources, North Central Region
Office
Michael Hornick, Floodplain Management Specialist, DHS/FEMA Region IX
Ramona Sudbeck, Floodplain Management Specialist, DHS/FEMA Region IX
Alessandro Amaglio, Environmental Officer, DHS/FEMA Region IX

www.fema.gov

From: elaini@stewartspoint.org

To: Pomeroy, Douglas (FAA)

Subject: Proposed Extension of Runway 13/31 at Gness Field Airport, Novato Marin County, CA

Date: Wednesday, March 25, 2020 3:16:32 PM

Doug,

The proposed project in Novato and Marin County is out of the Aboriginal Territory of the Stewarts Point Rancheria Kashia Band of Pomo Indians.

We do not have any concerns or comments at this time.

Thank you,

Elaini Vargas

Tribal Historic Preservation Officer

Kashia Band of Pomo Indians

1420 Guerneville Road, Suite 1

Santa Rosa, CA 95403

Email: elaini@stewartspoint.org

Office: 707-591-0580 Ext 105

Cell: 707-708-1139

COMMENT NUMBER	COMMENTER	COMMENT SUMMARY	RESPONSE
AGENCY			
A01	FEMA	Executive Order 11988 (Floodplain Management) and Executive Order 11990 Protection of Wetlands require all Federal agencies “to avoid to the extent possible the long and short term adverse impacts associated with the occupancy and modification of the floodplains/wetlands and to avoid direct or indirect support of floodplains/wetland development wherever there is a practicable alternative.”	Sections 3.4.3 and 3.4.4 of the Final SEIS and this Record of Decision identify Alternative E as the FAA and USCOE’s Preferred Alternative. This alternative meets the Purpose and Need with the minimum impacts to wetlands and floodplains.
A02	FEMA	The Requirements for environmental considerations are found in Vol. 44 Code of Federal Regulations (44 CFR) Part 9 Floodplain Management and Protection of Wetlands and Part 10 Environmental Considerations. These regulations set forth the policy, procedures, and responsibilities to implement and enforce EO 11988 and 11990. The minimum floodplain management building requirements of the NFIP are described in 44 CFR Section 60.3	Comment noted. Section 4.5.3 of the Final SEIS describes the existing conditions for floodplains. Section 5.11 of the Final SEIS describes the impacts to floodplains for the various runway extension alternatives and the No Action Alternative.
A03	FEMA	Please review the current effective Flood Insurance Rate Maps (FIRM) for the County of Marin (Community Number 060173), Maps revised August 15, 2017 and the City of Novato (Community Number 0060178), Maps revised March 16, 2016 for land that has been mapped with high, moderate and low flood risks.	Section 5.11 of the Final SEIS indicates the current FIRMs were evaluated for the proposed runway extension project. The specific FIRM, identified by the commenter for the City of Novato was specifically referenced in Section 5.11.2 of the Final SEIS to establish the boundary of the 100-year floodplain within the Detailed Study Area.

A04	FEMA	• A summary of the National Flood Insurance Program floodplain management building requirements are as follows: • All buildings constructed within a riverine floodplain (i.e. Flood Zones, A, AO, AH, AE and A1 through A30 as delineated on the FIRM), must be elevated so that the lowest floor is at or above the Base Flood Elevation level in accordance with the effective Flood Insurance Rate Map. • If the area of construction is located within a Regulatory Floodway as delineated on the FIRM, any development must not increase base flood elevation levels. The term development means any man-made change to improved or unimproved real estate, including but not limited to buildings, other structures, mining, dredging, filling, grading, paving, excavation, or drilling operations, and storage of equipment or materials. A hydrologic and hydraulic analysis must be performed prior to the start of development, and must demonstrate that the development would not cause any rise in base flood levels, No rise is permitted within regulatory floodways. Upon completion of any development that changes existing Special Flood Hazard Areas, the NFIP directs all participating communities to submit the appropriate hydrologic and hydraulic data to FEMA for FIRM revision. In accordance with 44 CFR, Section 65.3 as soon as practicable, but not later than six months after such data becomes available, a community shall notify FEMA of the changes by submitting technical data for a flood map revision. To obtain copies of FEMA's Flood Map Revision Application Packages, please refer to the FEMA website at	Under Alternative E, the FAA's Preferred Alternative, no new buildings are proposed to be constructed. DVO is protected by a series of levees and is not located within a regulatory floodway. Additional information regarding the applicability of National Flood Insurance Program requirements identified in the FEMA comment letter on the Draft SEIS was provided in the Final SEIS, Appendix Q-1 <i>FAA Response to Comments Received</i>, responses 8.1 to 8.6. As the FEMA comments on the Final SEIS are the same as the FEMA comments on the Draft SEIS, the FEMA comments have already been appropriately addressed in the Final SEIS. These responses explain that the proposed runway extension project was evaluated using the most current Flood Insurance Rate Map identified by FEMA, that the project is not located in a Regulatory Floodway, that no new buildings are being constructed as part of the proposed project, and that implementation of the proposed project would not require changes to the current Flood Insurance Rate Map. No modifications in the environmental analysis in the Final SEIS is required in response to the FEMA comments.
-----	------	---	--

COMMENT NUMBER	COMMENTER	COMMENT SUMMARY	RESPONSE
		http://www.fema.gov/business/nflip/forms.shtm .	
A05	FEMA	Many NFIP participating communities have adopted floodplain management building requirements which are more restrictive than the minimum federal standards described in 44 CFR. They do this for many reasons, one of the biggest is to account for risk and uncertainty in order to protect their communities from larger than predicted flood events. FEMA strongly advises you to contact and work with the local community's floodplain manager for more information on local floodplain management building requirements which could be incorporated into your project and provide added levels of protection.	Comment noted. Section 5.11.1.1 of the Final SEIS notes The Marin Countywide Plan (MCP" provides guidance and recommendations regarding development within floodplains in order to protect people and property from risks associated with flooding and inundation within the County, notably Policy EH 3.2, Retain Natural Conditions Ensure that flow capacity using biotechnical techniques instead of storm drains, culverts, riprap, and other forms of structural stabilization. Section 5.11.2 of the Final SEIS identifies the local flood control system along the Petaluma River that provides flood protection for the airport.
A06	Stewarts Point Rancheria Kashia Band of Pomo Indians	The proposed project in Novato and Marin County is out of the Aboriginal Territory of the Stewarts Point Rancheria Kashia Band of Pomo Indians. We do not have any concerns or comments at this time	Comment noted.