

FINAL ENVIRONMENTAL ASSESSMENT

**GILLESPIE FIELD – RUNWAY OBJECT FREE AREA / RUNWAY SAFETY AREA
(ROFA/RSA) DRAINAGE IMPROVEMENT PROJECT**

**GILLESPIE FIELD AIRPORT
EL CAJON, CALIFORNIA**

Prepared for:

**COUNTY OF SAN DIEGO
PUBLIC WORKS DEPARTMENT
Airports Division**

and

**U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION**

As Lead Federal Agency pursuant to the National Environmental Policy Act of 1969

Prepared by:

**County of San Diego
Department of Public Works, Environmental Services Unit**

July 2019

**This Environmental Assessment becomes a federal document when evaluated, signed and dated
by the responsible FAA Official.**

Responsible FAA Official

Date

GENERAL INFORMATION ABOUT THIS DOCUMENT

WHAT'S IN THIS DOCUMENT? This document contains the Final Environmental Assessment (EA) for the Proposed Runway Object Free Area/Runway Safety Area (ROFA/RSA) Drainage Improvement Project at Gillespie Field Airport (Airport). The Proposed Action analyzed in this environmental documentation includes: improvements to the slope and drainage of an existing airport storm water conveyance system between runways to meet the Federal Aviation Administration's (FAA's) ROFA and RSA grade standards. The project also includes installation of a storm water conveyance connection to an adjacent area of the Airport, and includes installation of separated ingress and egress taxiways between the adjacent 70-acre site and Taxiway Delta. This document discloses the analysis and findings of the potential impacts of the Proposed Action, No Action and other reasonable alternatives.

BACKGROUND. The purpose of the proposed improvements is to bring the Airport's drainages into compliance with FAA design standards as stated in FAA Advisory Circular (AC) 150/5300-13A, *Airport Design*. The Proposed Action would address the drainage conveyance and slope between Runways 9L-27R and 9R-27L and surrounding areas to efficiently move storm water away from aircraft movement surfaces. The Proposed Action includes the installation of underground culvert system to efficiently convey storm water flows into the existing drainage system. The project also includes installation of two new taxiways, Taxiways Sierra and November. These taxiways would be separated ingress and egress connection points between the adjacent 70-acre site and Taxiway Delta.

The Draft EA was released for public and agency review and comment on April 15, 2019 for 30 days. The Notice of Availability of the Draft EA was published in *The San Diego Union-Tribune* newspaper and the County of San Diego's website to inform the general public and other interested parties.

The document presented herein represents the Final EA in fulfillment of the FAA's policies and procedures relative to the National Environmental Policy Act (NEPA) and other related Federal requirements. Copies of the document are available for inspection at the County of San Diego Airports Administration: 1930 Joe Crosson Drive. El Cajon, California 92020, the County of San Diego Department of Public Works Environmental Services Unit: 5510 Overland Avenue, Suite 410. San Diego, California 92123; and the FAA Los Angeles Airports District Office in El Segundo, California.

WHAT SHOULD YOU DO? Read this Final EA to understand the actions that the County of San Diego and FAA intend to take relative to the Proposed Action at the Airport.

WHAT HAPPENS AFTER THIS? Following review of the Final EA, the FAA will either issue a Finding of No Significant Impact (FONSI) or decide to prepare an Environmental Impact Statement(EIS).

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ACRONYMS AND ABBREVIATIONS

µg/m ³	Micrograms per cubic meter
AC	Advisory Circular
Airport	Gillespie Field Airport
Airport Sponsor	County of San Diego, Department of Public Works, Airports Division
ALUCP	Airport Land Use Compatibility Plan
ASTM	American Society for Testing and Materials
Basin Plan	Water Quality Control Plan for San Diego Basin
BMP	Best Management Practice
CAA	Clean Air Act
CalEEMod	California Emissions Estimator Model
CEQ	Council on Environmental Quality
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
CNEL	Community Noise Equivalent Levels
CO	carbon monoxide
CO ₂	carbon dioxide
CWA	Clean Water Act (Federal Water Pollution Control Act)
dB	decibel
dB(A)	A-weighted decibel
DNL	day-night average sound level
EA	Environmental Assessment
EDDA	Environmental Due Diligence Audit
EMFAC	Emission Factors Model
EPA	U.S. Environmental Protection Agency
FAA	Federal Aviation Administration
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
GHG	greenhouse gas
L _{eq}	one-hour equivalent noise level
MBTA	Migratory Bird Treaty Act
MT CO ₂ e	metric tons of carbon dioxide equivalent
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NOx	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NPL	National Priorities List
NWP	Nationwide Permit
PCB	polychlorinated biphenyl
P.L.	Public Law
PM	particulate matter
ppb	parts per billion
ppm	parts per million
RCP	reinforced concrete pipe
RCRA	Resource Conservation and Recovery Act
ROFA	Runway Object Free Area
RSA	Runway Safety Area
RWQCB	Regional Water Quality Control Board
SDAB	San Diego Air Basin
SDCRAA	San Diego County Regional Airport Authority
SHPO	State Historic Preservation Office
SIP	State Implementation Plan
SR-67	State Route 67
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
USACE	United States Army Corps of Engineers

U.S.C.	United States Code
USDOT	United States Department of Transportation
USFWS	United States Fish and Wildlife Service
VOC	volatile organic compound

1.0 PURPOSE AND NEED

1.1 Introduction

This Environmental Assessment (EA) documents the potential environmental effects associated with proposed airside improvements necessary to bring Gillespie Field's Runway Object Free Areas (ROFA) and Runway Safety Areas (RSA) into compliance with the Federal Aviation Administration (FAA) Advisory Circular (AC) 150/5300-13A *Airport Design* standards. The ROFA is an area surrounding a runway that must be kept free of any objects above ground level. It is intended to provide adequate aircraft wing-tip clearance. The RSA is a defined surface surrounding the runway prepared or suitable for reducing the risk of damage to airplanes in the event of an undershoot, overshoot, or excursion from the runway.

Gillespie Field Airport (Airport) is owned and operated by the County of San Diego, Department of Public Works, Airports Division (Airport Sponsor). The Airport consists of 757 acres located within the limits of the City of El Cajon; with the exception of a small portion of property located north of Prospect Avenue and near the northern end of Runway 17/35, which are within the limits of the City of Santee. Airport property also extends into the unincorporated County just east of State Route 67 (SR-67) and Runway 9L/27R. The Airport is designated by the FAA in the National Plan of Integrated Airport Systems as a reliever airport, which is a high-capacity general aviation airport in a major metropolitan area. Regional and Airport Boundary maps are provided in Figures 1 and 2, respectively.

This EA was prepared in accordance with federal laws and regulations, and pursuant to the requirements and standards of Section 102(2)(c) of the National Environmental Policy Act (NEPA) of 1969, Council on Environmental Quality (CEQ) *Regulations for Implementing the National Environmental Policy Act* (Title 40 Code of Federal Regulations [CFR] Parts 1500-1508, 2005), FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures* and FAA Order 5050.4B, *National Environmental Policy Act (NEPA) Implementing Instructions for Airport Actions*.

There is an existing airport storm water conveyance system between the existing runways. The conveyance is a man-made and regularly maintained earthen swale that conveys surface water runoff from runway and taxiway surfaces as well as upstream sources (i.e., roadway flow from Airport Drive), and ponds during high flow storm events.

1.2 Proposed Action

The Proposed Action site is approximately 26 acres in the eastern portion of Gillespie Field airfield between Runways 9L-27R and 9R-27L, and includes a culvert connection to link the detention basin south of Airport Drive to the existing drainage conveyance system.

The Proposed Action consists of installing approximately 2,300 feet of 42-inch reinforced concrete pipe (RCP) in the location of the existing earthen swale used for storm water conveyance. The RCP will connect to existing storm drains to the northwest at the intersection of Runway 9L-27R and Taxiway Bravo and on the southeast end at the intersection of Taxiways Delta and Delta 8 (the infield is north of the intersection of Joe Crosson Drive and Wing Avenue). The RCP would be covered leaving grated openings to capture storm water flows.

The Proposed Action includes the installation of an additional RCP from approximately the center of the previously mentioned RCP to the south 800 feet connecting to an underground detention basin south of Joe Crosson Drive. The installation of this RCP would require trenching approximately 5-12 feet under Runway 9R-27L, Taxiway Delta, and an apron to connect Taxiway Delta to the Cajon Air Center.

The 42-inch RCP that would be installed underground includes grate inlets that daylight along the swale's low-flow to quickly capture storm water flows and prevent backup and ponding on aircraft movement surfaces. Runoff from the airfield generally flows to the northwest, and the captured runoff will continue to disperse off runway surfaces to the adjacent pervious drainage channels to allow for percolation. The project includes two connection points. The newly undergrounded detention system is conveying existing flows. New flows will be conveyed from the proposed two-box culvert system that connects to the detention basin south of Joe Crosson Drive. Water from both connections will flow northwest. Installation of the underground stormwater conveyance would require utility relocation. All areas to be impacted during grading for installation of the culvert will be recontoured compacted, and hydroseeded using a native seed mix for erosion control.

The project also includes installation of two new taxiways, Taxiways Sierra and November. These taxiways would be separated ingress and egress connection points between the adjacent 70-acre site and Taxiway Delta. The proposed taxiways would utilize existing pavement where feasible.

Construction and installation of the conveyance connection is proposed with this project as one action to minimize runway closures and disruption to airport operations by completing earthwork concurrently as one project. Project construction will require periodic temporary closures of Runway 9R-27L and 9L-27R and Taxiway Delta as construction and grading activities will impact the ROFA/RSA and will require trenching along Runway 9R-27L for installation of the culvert underneath the runway. This earthwork could be constructed with a closure and/or require it to be accomplished during night shifts with steel plating over the excavation to reopen each day. A construction staging area (approximately 200' x 100') would be located in the southwest corner of the Proposed Action project limits. This temporary area will be fenced and located outside the active airfield. The estimated total construction is anticipated to be approximately six months.

1.3 Requested Federal Action

The federal actions that are the subject of this EA include the following:

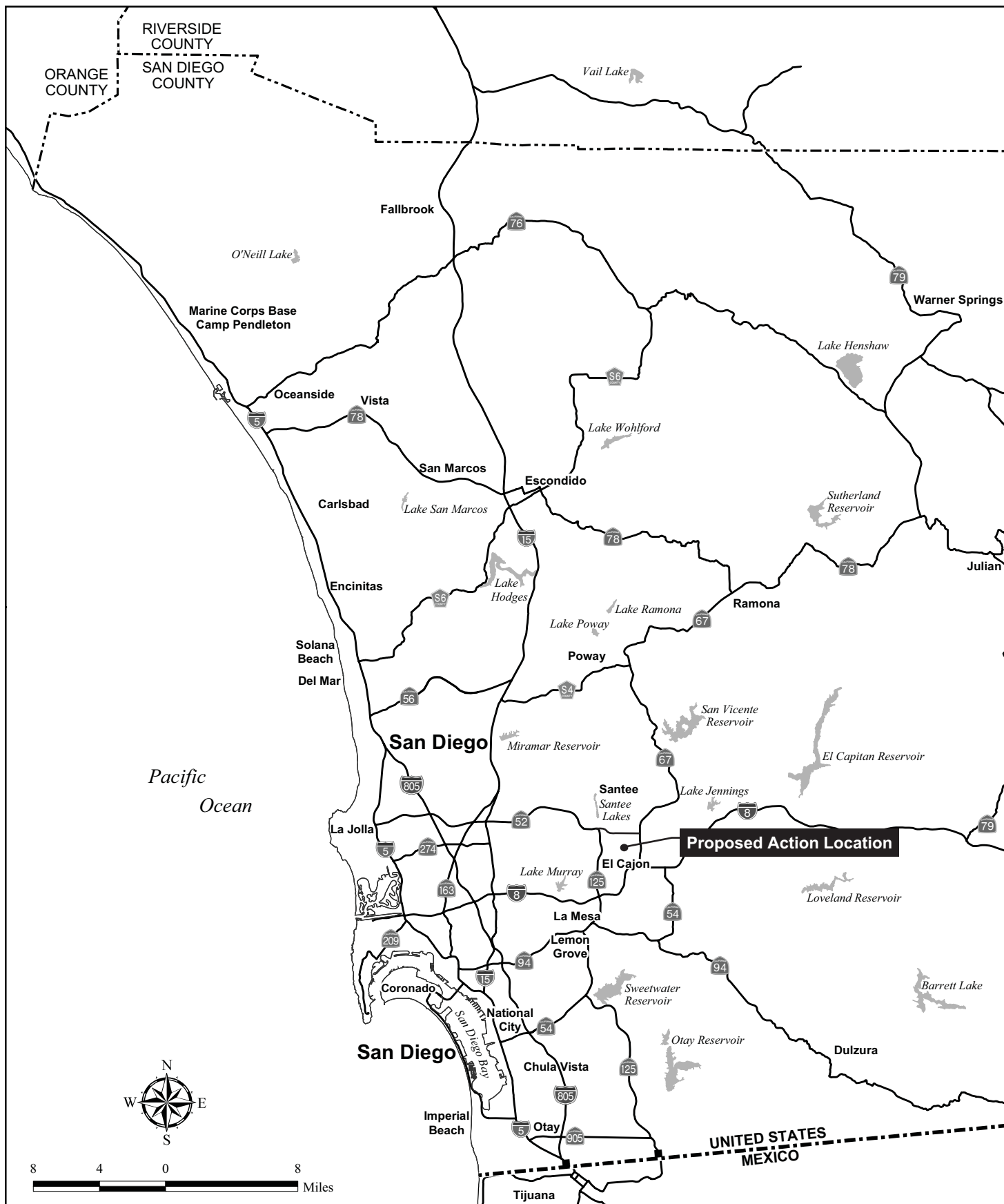
- The unconditional approval of the portion of the Airport Layout Plan that depicts the facility improvements of the Proposed Action pursuant to 49 United States Code (U.S.C.) §§40103(b), 44718 and 47107(a)(16) and 14 CFR Part 77.
- Approval of a Construction Safety and Phasing Plan to maintain aviation and airfield safety during construction pursuant to FAA AC 150/5370-2F, *Operational Safety on Airports During Construction*.
- Determination of eligibility for federal assistance under the federal Grant-in-aid program authorized by the Airport and Airway Improvement Act of 1982, as amended, pursuant to 49 U.S.C. §47101 et seq.

1.4 Purpose and Need

Gillespie Field's ROFA and RSA are not in compliance with the FAA's AC 150/5300-13A, *Airport Design* standard. FAA standards require a maximum cross slope within the RSA of 5 percent, which the site currently exceeds up to 9 percent. Heavy rain events can cause the aircraft movement and ROFA/RSA areas to potentially flood during heavy rain events. This requires coordination between the FAA Air Traffic Control Tower, pilots, and County staff to ensure aircraft can maneuver safely throughout the airfield without resulting in significant delays or disruptions. Meeting the FAA's design standards for cross slopes within the ROFA/RSA would improve the storm water drainage and reduce or eliminate flooding in the aircraft movement and ROFA/RSA areas. The improved drainage through the airfield will efficiently convey flows into the existing stormwater system to exit airport property downstream.

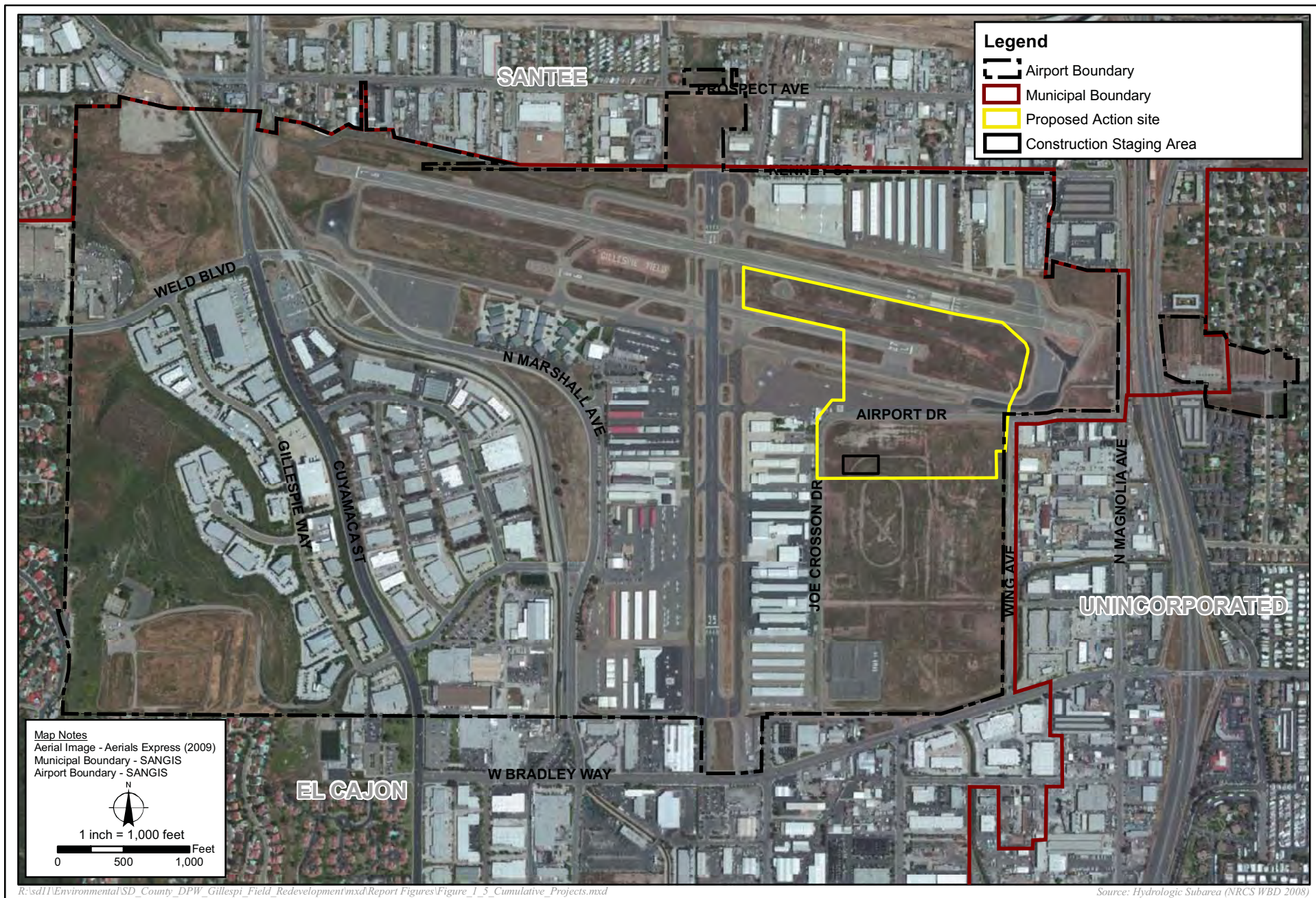
The proposed ingress and egress taxiways between the adjacent 70-acre site and Taxiway Delta are also needed to allow aircraft, which would be based on the 70-acre Cajon Air Center, access to Taxiway Delta and other areas of the airfield.

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Regional Location Map
 GILLESPIE FIELD - ROFA/RSA PROJECT
 ENVIRONMENTAL ASSESSMENT
 Figure 1

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Airport Boundary
 GILLESPIE FIELD - ROFA/RSA PROJECT
 ENVIRONMENTAL ASSESSMENT
 Figure 2

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2.0 ALTERNATIVES

2.1 Introduction

The objective of this alternatives analysis is to identify reasonable alternatives that accommodate the purpose and need as discussed in Chapter 1. Once identified, each alternative is evaluated in terms of its ability to satisfy the objectives of the purpose and need for the project and its potential for an effect on the surrounding environment. The results of this evaluation are to determine which alternatives will be considered reasonable and practicable, thereby warranting further consideration. The alternatives under consideration are more closely evaluated in Chapter 4 of this document.

CEQ regulations (Title 40 CFR Section 1502.14), regarding implementation of NEPA, require that federal agencies perform the following tasks:

- Rigorously explore and objectively evaluate all reasonable alternatives and, for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated;
- Devote substantial treatment to each alternative considered in detail, including the Proposed Action, so that reviewers may evaluate their comparative merits;
- Include reasonable alternatives not within the jurisdiction of the lead agency; and
- Include the alternative of No Action.

As stated in FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures* and FAA Order 5050.4B, *National Environmental Policy Act (NEPA) Implementing Instructions for Airport Actions*, alternatives can be eliminated from further consideration when the alternatives do not fulfill the purpose and need for the action or cannot be reasonably implemented. As discussed above, CEQ Section 1502.14(c) requires the evaluation of the No Action Alternative regardless of whether it meets the stated purpose and need or is reasonable to implement.

2.2 Alternative Screening Process

The purpose of the Proposed Action (see Section 1.2) is (1) to comply with FAA design standards for the ROFA/RSA areas; and (2) to address airfield drainage. Based on the project purpose and need, a screening process was formulated for the alternatives under consideration.

The following criteria are consistent with FAA Order 5050.4B regarding the fulfillment of the project's purpose and need and was used when considering the alternatives:

- Would the alternative bring the ROFA/RSA areas into compliance with FAA design standards?
- Would the alternative provide for improved drainage at the airport?
- Would the alternative provide a connection between Taxiway Delta and Cajon Air Center?

2.3 Alternatives Considered But Eliminated

2.3.1 Pavement Installation Alternative

Under this design alternative, the existing slopes and open channel between Runways 9R-27L and 9L-27R would be re-graded and paved to bring the RSA and ROFA up to current FAA design standards. Converting approximately 18 acres from pervious to impervious surfaces increases the volume of storm water runoff. The capacity of the storm water conveyance through the area would have to incorporate additional drainage volume. The existing sizing of the downstream connection point for this segment of airfield storm water system would not provide sufficient conveyance because it was not designed to accommodate drainage from new asphalt surfaces. This would create a back-up of the system, and the downstream conveyance system would have to be considered for redesign. This alternative would meet the objective of meeting the FAA design standards, but would create a larger construction project that would extend outside of Airport property boundary. The County does not have ownership or land use authority over property outside the Airport property boundary. Therefore, this alternative is eliminated.

2.4 Alternatives Given Further Consideration

2.4.1 Proposed Action Alternative

The Proposed Action is described in detail in Section 1.2. Under the Proposed Action, the airfield drainage improvements and apron connection on the Proposed Action site would achieve the purpose and need of the project by providing an efficient storm water conveyance system through the airfield and bringing the ROFA and RSA up to FAA design standards, and providing a connection from Taxiway Delta to the Cajon Air Center.

2.4.2 No Action Alternative

Under the No Action alternative, no grading or drainage improvements would occur to the storm water conveyance system between Runways 9R-27L and 9L-27R. The variation from FAA's ROFA and RSA design standards would remain. The open channel could continue to pond and potentially create a safety hazard during large storm water events if water backs up onto aircraft movement areas. Taxiways Sierra and November would not be constructed to provide connection between Taxiway Delta and the adjacent 70-acre site.

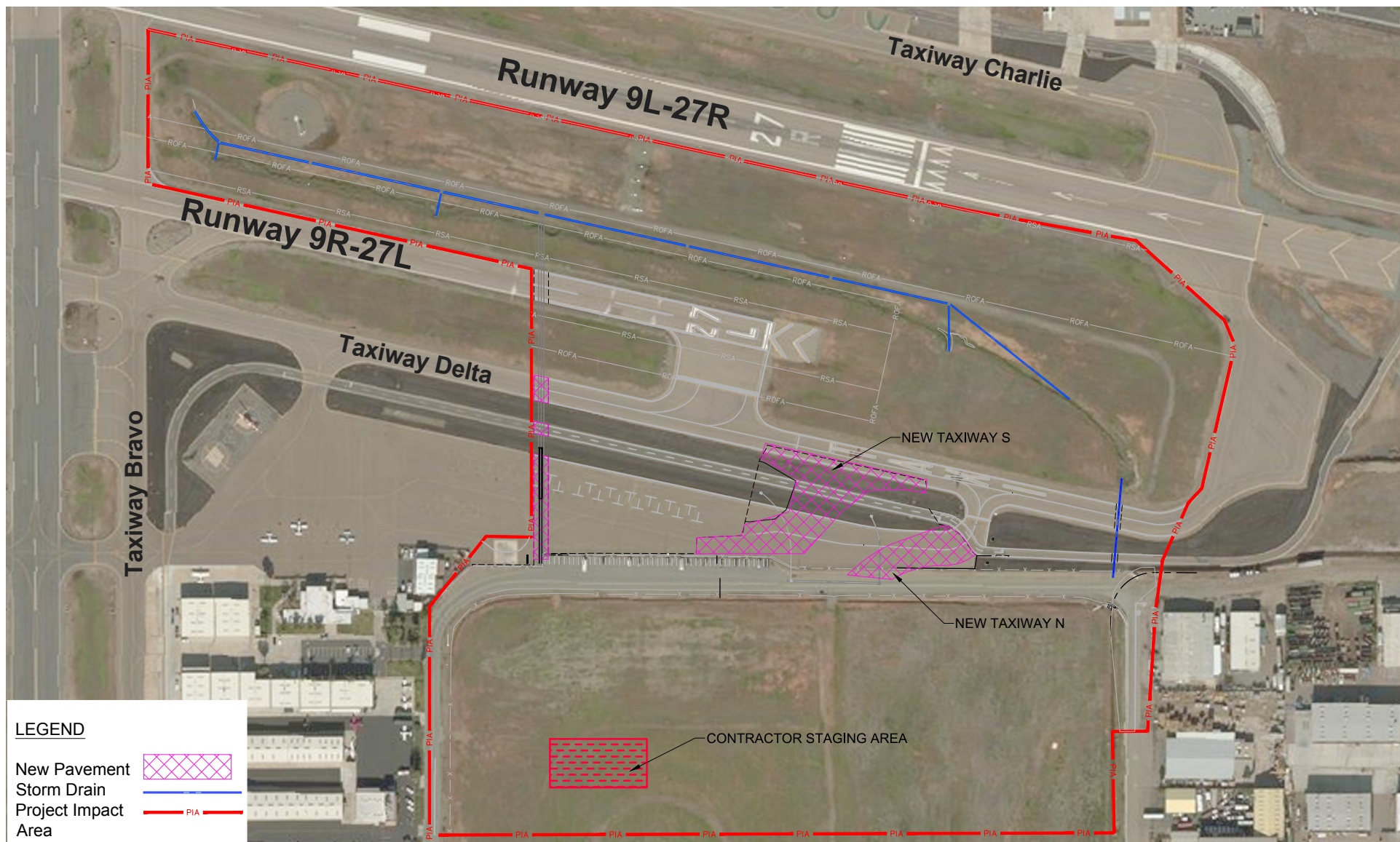
2.5 Applicable Federal Laws and Executive Orders

In addition to complying with NEPA, the CEQ Regulations for Implementing NEPA, and FAA Orders 1050.1F and 5050.4B, the Proposed Action must comply with the following federal laws and executive orders, which are addressed in this EA as applicable.

- Airport and Airway Improvement Act of 1982, as amended (Public Law [P.L.] 97-248; 43 CFR §2640)
- Archaeological and Historic Preservation Act of 1974 (P.L. 86-253, as amended by P.L. 93-291, 16 U.S.C. §469)
- Clean Air Act of 1977 (as amended) (42 U.S.C. §7409 et seq.)
- Coastal Zone Management Act (16 U.S.C. §1451-1464; P.L. 92-583)

- Comprehensive Environmental Response Compensation Liability Act (42 U.S.C. §9601; P.L. 96-510)
- Department of Transportation Act of 1966, as amended (P.L. 89-670)
- Federal Endangered Species Act of 1973 (P.L. 85-624; 16 U.S.C. §§661, 664 note, 1008 note)
- Executive Order 11988 – *Floodplain Management*
- Executive Order 11990 – *Protection of Wetlands*
- Executive Order 12088 – *Federal Compliance with Pollution Control Standards*
- Executive Order 12898 – *Environmental Justice*
- Farmland Protection Policy Act (P.L. 97-98; 7 CFR Part 658)
- National Historic Preservation Act of 1966 Section 106, (16 U.S.C. §470[f]; P.L. 89-665)
- Noise Control Act of 1972 (P.L. 92-574; 42 U.S.C. §4901)
- Water Pollution Control Act, as amended by the Clean Water Act of 1977 (33 U.S.C. §1251 et seq.)
- Wild and Scenic Rivers Act, as amended (16 U.S.C. §1271 et seq.; P.L. 90-542)

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Proposed Action Footprint
 GILLESPIE FIELD - ROFA/RSA PROJECT
 ENVIRONMENTAL ASSESSMENT
 Figure 3

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3.0 AFFECTED ENVIRONMENT

This chapter provides a description of the existing conditions within the study area. The environmental resource categories are organized as identified in FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures*, and FAA Order 5050.4B, *National Environmental Policy Act (NEPA) Implementing Instructions for Airport Actions*. The potential environmental impacts of the No Action and the Proposed Action alternatives retained for analysis of environmental consequences are presented in Chapter 4 of this EA. Refer to Figure 1 for a project vicinity map and Figure 2 for an aerial photograph of the Airport that shows the Proposed Action site and adjacent areas.

3.1 Proposed Action Site

The Proposed Action site is located within Airport property on undeveloped, vacant land within the active airfield. The Proposed Action site contains maintained, disturbed non-native grasses adjacent to aircraft facilities. Construction activities would include areas within and around the runways, Taxiway Delta, Joe Crosson Drive, and an apron. Figure 3 depicts the existing conditions of the Proposed Action site.

3.2 City of El Cajon

The Proposed Action site is located within the limits of the City of El Cajon. The Airport was annexed into the City of El Cajon in 1977, and the City maintains land use authority over the private development at the Airport. The County maintains authority over public airport development at Gillespie Field. The City of El Cajon is located approximately 15 miles east of the Pacific Ocean and 20 miles north of Tijuana, Mexico. The City's population is estimated to be 98,000 people, and is expected to increase by less than 1 percent annually by 2030. The City of El Cajon is largely built out; therefore, future development is largely constrained within its jurisdiction.

3.3 Air Quality

This analysis incorporates the results of the Air Quality Analysis prepared for the Proposed Action (RECON 2019a). The FAA provides guidance for assessing air quality impacts and determining conformity under the General Conformity regulations in the *Aviation Emissions and Air Quality Handbook Version 3 Update 1* (Air Quality Handbook). According to the Air Quality Handbook, there is a multi-stage process to determining the need for an air quality study, which includes four steps: (1) determine the need for the assessment; (2) select the assessment methodology; (3) conduct the assessment; and (4) coordinate/review and document the results. The Air Quality Handbook also defines what criteria the FAA use to assess in Chapter 8, Conformity, which states “[t]he General Conformity process begins with an ‘applicability analysis’ whereby the federal agency (or agencies) with jurisdiction over the action determines how and to what degree General Conformity applies.” This process has “three elements – (i) Applicability Analysis, (ii) Preparing a General Conformity Determination, and (iii) Interagency and Public Review Process...” (FAA 2015).

The Proposed Action site is located in the San Diego Air Basin (SDAB), which encompasses all of San Diego County. In the SDAB, the San Diego County Air Pollution Control District is the state designated agency responsible for maintaining air quality, including implementation and

enforcement of federal air quality regulations in the SDAB. At the federal level, the SDAB is classified as a non-attainment area for 8-hour ozone and a maintenance/attainment area for carbon monoxide (CO) (see Table 3 in Section 4.2.1.1 below).

Air quality is commonly expressed as the number of days per year in which air pollution levels exceed federal standards set by the U.S. Environmental Protection Agency (EPA). The SDAPCD maintains 10 air quality monitoring stations located throughout the greater San Diego metropolitan region. Air pollutant concentrations and meteorological information are continuously recorded at these stations. Measurements are then used by scientists to help forecast daily air pollution levels.

The El Cajon monitoring station is the nearest station to the project site. This station was originally located at 1155 Redwood Avenue at Lexington Elementary School, approximately three miles southeast of the project site. In 2014, the school began remodeling activities and the monitoring station was relocated to a vacant lot south of Gillespie Field at the intersection of Floyd Smith Drive and Bradley Avenue, adjacent to the project site. The El Cajon – Redwood Avenue monitoring station stopped operating in 2015 and the El Cajon – Floyd Smith Drive monitoring station began operating in 2014. Once remodeling is complete, the monitoring station will be located back at its original location. Table 1 provides a summary of measurements collected at the El Cajon monitoring station for the years 2013 through 2017.

Table 1. Summary of Air Quality Measurements Recorded at the El Cajon Monitoring Station

Pollutant/Standard	2013	2014	2015	2016	2017
Ozone					
Days 2008 Federal 8-hour Standard Exceeded (0.075 ppm)	1	0	0	1	5
Days 2015 Federal 8-hour Standard Exceeded (0.070 ppm)	3	2	0	3	9
Max. 1-hr (ppm)	0.090	0.083	0.082	0.096	0.096
Max 8-hr (ppm)	0.078	0.075	0.067	0.077	0.081
Nitrogen oxides (NO_x)					
Days Federal 1-hour Standard Exceeded (0.100 ppm)	0	0	0	0	0
Max 1-hr (ppm)	0.051	0.057	0.059	0.057	0.045
Annual Average (ppm)	0.012	--	--	--	0.010
Respirable Particulate Matter (PM₁₀)*					
Measured Days Federal 24-hour Standard Exceeded (150 µg/m ³)	0	0	0	0	0
Calculated Days Federal 24-hour Standard Exceeded (150 µg/m ³)	0.0	--	--	--	0.0
Federal Max. Daily (µg/m ³)	41.0	33.0	48.0	39.0	50.0
Federal Annual Average (µg/m ³)	24.4	18.3	22.3	20.0	22.6
Fine Particulate Matter (PM_{2.5})*					
Measured Days Federal 24-hour Standard Exceeded (35 µg/m ³)	0	0	0	0	0
Calculated Days Federal 24-hour Standard Exceeded (35 µg/m ³)	0.0	--	--	--	0.0
Federal Max. Daily (µg/m ³)	23.1	13.9	24.7	19.3	31.8
Federal Annual Average (µg/m ³)	10.6	--	--	--	9.5

Source: California Air Resources Board 2019

ppm = parts per million

µg/m³ = micrograms per cubic meter

-- = Not available.

NOTE: Measurements from 2013 were obtained at the Redwood Avenue location, measurements in 2014 through 2016 were obtained at the Floyd Smith Drive location, and 2017 data were obtained at the Lexington Elementary location.

*Calculated days value. Calculated days are the estimated number of days that a measurement would have been greater than the level of the standard had measurements been collected every day. The number of days above the standard is not necessarily the number of violations of the standard for the year.

3.4 Biological Resources

This section incorporates information from a Biological Letter Report prepared for the Proposed Action site (Amec Foster Wheeler Environment & Infrastructure, Inc. [AMEC] 2016a). A biological survey was conducted at the 26-acre Proposed Action site and the temporary construction staging area on May 25, 2016. As shown on Figure 4, the majority of the land within the survey area consists of disturbed habitat (i.e., areas that are mowed regularly and are dominated by exotic invasive plant species).

On March 21, 2017, the U.S. Fish and Wildlife Service (USFWS) provided the FAA with a list of threatened and endangered species that may occur in the Proposed Action site, and/or may be affected by the Proposed Action. Subsequently on April 20, 2017, the FAA prepared a memorandum finding that the Proposed Action will have no effect on any federally listed flora and fauna endangered or threatened species or designated critical habitat. Copies of the USFWS list and FAA memo are included in Appendix A.

3.4.1 Plants

During the biological survey, three vegetation communities were found within the survey area including disturbed habitat, urban/developed areas, and non-vegetated channel. No special status plant species were detected onsite and none are expected to occur. Non-native plant species encountered during the field survey include wild oat (*Avena fatua*), ripgut brome (*Bromus diandrus*), red brome (*Bromus madritensis*), Italian thistle (*Carduus pycnocephalus*), and lamb's quarters (*Chenopodium album*). A complete list of plant species encountered during the field survey is included as Attachment D of the Biological Letter Report prepared for the Proposed Action. A search of multiple databases found one special status plant species has historically occurred within a half-mile of the Proposed Action site: San Diego ambrosia (*Ambrosia pumila*). A population of San Diego ambrosia was previously located on the Cajon Air Center (70-acre) site; however, it was translocated to an offsite preserve in accordance with that project's mitigation. As such, San Diego ambrosia was not found on the Proposed Action site during the biological survey, nor is it expected to occur.

3.4.2 Wildlife

Due to the high level of disturbance, the Proposed Action site supports a low diversity of wildlife species. No special status wildlife species were detected onsite and none are expected to occur. Non-sensitive wildlife species encountered during the field survey include California ground squirrel (*Spermophilus beecheyi*), Botta's pocket gopher (*Thomomys bottae*), western kingbird (*Tyrannus verticalis*), Cassin's Kingbird (*Tyrannus vociferans*), and mourning dove (*Zenaida macroura*). A complete list of wildlife species encountered during the field survey is included as Attachment D of the Biological Letter Report prepared for the Proposed Action. The project site is not located within or adjacent to any USFWS designated critical habitat. A search of multiple databases found two special status wildlife species have historically occurred within a half-mile of the Proposed Action site: Quino checkerspot butterfly (*Euphydryas editha quino*) and coastal California gnatcatcher (*Polioptila californica californica*). No potentially suitable habitat was identified in the project survey area for either of these species, and they are not expected to occur onsite.

3.5 Climate

This analysis incorporates a Greenhouse Gas Analysis evaluation prepared for the Proposed Action (RECON 2019b).

The Proposed Action site is located in the City of El Cajon within the SDAB, which encompasses all of San Diego County. A possible concern is the potential impact of the Proposed Action on climate change. Greenhouse gases (GHG) are those that trap heat in the earth's atmosphere. Both naturally occurring and anthropogenic (man-made) GHGs include water vapor and carbon dioxide (CO₂). All GHG inventories measure carbon dioxide emissions, but beyond carbon dioxide different inventories include different GHGs: methane, nitrous oxide, and ozone. Research has shown that there is a direct link between fuel combustion and GHG emissions. Therefore, sources that require fuel or power at an airport are the primary sources that would generate GHGs.

3.6 Coastal Resources

The Proposed Action site is located approximately 18 miles east from the Pacific Ocean, and is not located within the boundaries of Coastal Zone established for San Diego County under the Coastal Zone Management Program.

3.7 Department of Transportation Act Section 4(f)

There are no Section 4(f) resources on or adjacent to the Proposed Action site. The closest 4(f) resources to the Proposed Action site are Hillside Park, which is located approximately 1.7 miles south of the Proposed Action site in the City of El Cajon; and Shadow Hill Park, which is located approximately 1.3 miles to the north in the City of Santee.

3.8 Farmlands

The Farmland Protection Policy Act regulates federal actions with the potential to convert farmland to non-agricultural uses. The Proposed Action site consists of vacant and disturbed land. No agricultural uses are on or adjacent to the site.

3.9 Hazardous Materials, Solid Waste, and Pollution Prevention

This section incorporates information from Environmental Due Diligence Audit (EDDA) Phase I Environmental Site Assessment (Rincon 2011) that was completed for the 70-acre Redevelopment Project.

A Phase I environmental site assessment was conducted for the 70-acre Redevelopment Project in accordance with FAA Order 1050.19B, *Environmental Due Diligence Audit (EDDA) in the Conduct of FAA Real Property Transactions*, and American Society for Testing and Materials (ASTM) Standard E 1527, *Standard Practice for Environmental Assessments: Phase I Environmental Site Assessment Process*. This assessment was conducted as a component of the overall project analysis, and was not completed specifically for the ROFA/RSA Drainage Improvement project. The purpose of the report was to identify the possible presence of recognized environmental conditions associated with soil and groundwater contamination.

As part of the Phase I EDDA, a database search was conducted of public lists of sites that generate, store, treat, or dispose of hazardous materials or sites for which a release or incident has occurred. The search was conducted for the adjacent 70-acre site and includes data from surrounding sites within a one-mile radius. The Proposed Action site is not on or eligible for the National Priorities List (NPL); however, one nearby site was identified to have an existing effect on and near the 70-acre site. The former Ketema Aerospace and Engineering facility resulted in a plume of contaminated groundwater containing chlorinated solvents. This plume is currently impacting the groundwater beneath the 70-acre site, and is located within the shallow unconfined aquifer approximately 10 to 14 feet below grade. The trichloroethene plume underlies approximately 75 percent of the 70-acre site and potentially the Proposed Action site with concentrations exceeding 1,000 micrograms per liter in some areas. The Ketema site continues to be subject to a Remedial Action Plan under the regulatory authority of the California Regional Water Quality Control Board (RWQCB), San Diego Region.

3.10 Historical, Architectural, Archaeological, and Cultural Resources

This section presents the results of a Cultural Resources Inventory Report for the Cajon Air Center: North RSA Drainage Improvement prepared for the Proposed Action (ICF International 2016).

Pursuant to FAA Order 1050.1F, an adverse cultural resources effect would occur pursuant to NEPA when an action adversely affects a protected property and the responsible FAA official determines that information from the State and/or Tribal Historic Preservation Officer addressing alternatives to avoid adverse effects warrants further study. On March 2, 2017, the FAA initiated Section 106 Consultation with the State of California, State Historic Preservation Office (SHPO) in accordance with the National Historic Preservation Act by requesting concurrence of the area of potential effect (APE). The SHPO stated that the “area is adequately delineated to account for both direct and indirect effects to historic properties” in a letter dated March 15, 2017. Copies of the correspondence between SHPO and FAA are included in Appendix A.

3.10.1 Cultural Resources within the Area of Potential Effect

A cultural resources records search was conducted on December 23, 2015 by the County of San Diego Department of Public Works at the South Coastal Information Center housed at San Diego State University. On May 25, 2016, five auger probes and an intensive pedestrian survey were conducted within the Proposed Action site. The records review, auger probes, and pedestrian survey identified no cultural or historic resources within the project area.

3.10.2 Tribal Correspondence

On November 15, 2016, the FAA received a listing of Native American contacts for the proposed undertaking from the Native American Heritage Commission. The FAA provided project information and the area of potential effect for the Proposed Action to thirteen federally recognized tribes and one non-recognized tribe by letters dated February 16, 2017. The FAA requested input on tribal concerns regarding the Proposed Action site. Appendix A to this EA includes the letter from the Native American Heritage Commission to FAA with the list of the tribal representatives, a sample of the letter sent to the thirteen federally recognized tribes and the letter sent to the Kwaaymii Laguna Band of Mission Indians. No tribes requested consultation or provided information regarding tribal cultural resources.

3.11 Land Use

In accordance with FAA Order 1050.1F, the compatibility of the existing and planned uses in the vicinity of an airport is usually associated with the extent of the airport's noise impacts. However, other potential impacts of FAA actions may also affect land use compatibility.

3.11.1 Existing Land Use

The Airport has been a part of the community operating as a general aviation airport since 1946. The Proposed Action site is located within Airport property on undeveloped, vacant land adjacent to existing aviation use areas. The Proposed Action site contains maintained, disturbed and non-native vegetation adjacent to aircraft facilities and roadways.

3.11.2 Planned and Future Land Use

Planned and future land uses in the vicinity of the Proposed Action include the previously approved Cajon Air Center (i.e., 70-acre Redevelopment Project), the Dentt Industrial development project, and various minor residential and commercial improvements in the City of El Cajon and unincorporated San Diego County.

3.11.3 Adjacent Land Uses

The 757-acre Airport property is bounded by Kenney Street and Prospect Avenue to the north, Magnolia Avenue to the east, W. Bradley Avenue to the south, N. Marshall Avenue to the southwest, and Cuyamaca Street to the west. Land uses within the vicinity of the Airport include existing industrial and residential uses to the north along Prospect Avenue. Industrial/commercial uses are located immediately to the east along Magnolia Avenue. Other industrial/commercial uses are located south and west of the Airport along Bradley Avenue and Marshall Avenue, respectively. Residential uses are also located further west and southwest of the Airport, and further east across SR-67.

Within the airfield, the Proposed Action site is bounded to the north by Runway 9L-27R, and further north is Taxiway Charlie and existing hangars. The site is bounded to the south by Runway 9R-27L and Taxiway Delta, and further south are existing aircraft tie-downs and the Cajon Air Center. The site is bounded to the east by the run-up area for Taxiway Delta, and further east is vacant disturbed habitat. Lastly, the site is bounded to the west by Taxiway Bravo.

3.11.4 Airport Area Environment

This section describes the land use and growth potential for the Airport area. The Gillespie Field Airport Land Use Compatibility Plan (ALUCP; San Diego County Regional Airport Authority [SDCRAA] 2010) describes the Airport area as follows (pg. 4-12; pg. 4-25):

The Airport is surrounded by urban development, including residential areas to the north, west, and east. Areas south of the Airport are developed with a mixture of commercial and industrial land uses. Portions of the cities of El Cajon and Santee and the unincorporated San Diego County surround the Airport. Planned

land uses in each jurisdiction include residential, commercial, industrial, and open space.

Figure 5 shows Airport area planned land uses, as depicted in the ALUCP.

There are four schools located less than one mile from the Proposed Action site. The two closest schools are Chaparral High School and Phoenix High School of the Grossmont Union High School District, which are located on the same property less than one mile to the southwest. Pepper Drive Elementary School of the Santee School District is located less than one mile to the northeast of the Proposed Action site and Magnolia Elementary School is located less than one mile southeast of the Proposed Action site.

The nearest medical facility is Grossmont Hospital, which is located approximately 3.8 miles southwest of the Proposed Action site at 5555 Grossmont Center Drive in the City of La Mesa.

A commercial shopping center (Westfield Parkway Plaza) is located approximately 1.5 miles south of the Proposed Action site at the intersection of North Johnson Avenue and Fletcher Parkway in the City of El Cajon.

3.11.5 Gillespie Field Airport Land Use Compatibility Plan

This plan is the fundamental guide used to provide for the compatibility of land uses surrounding the Airport. The SDCRAA reviews the compatibility of airports and adjacent land use development proposals.

3.11.6 City of El Cajon General Plan

As identified in the El Cajon General Plan, the site's land use is designated as "airport," while the legal zoning designation is manufacturing.

3.12 Natural Resources and Energy Supply

The proposed site supports existing aviation use areas. These uses generate some demand for energy and natural resources, and would not change demand. Energy demand generated by aviation uses include aviation fuel and electricity for business and ground support services, which is similar to energy demand generated at other general aviation airports.

3.13 Noise and Noise-Compatible Land Use

As described in Section 3.11.3, land uses within the vicinity of the Airport include existing industrial and residential uses to the north along Prospect Avenue. Industrial/commercial uses are located immediately to the east along Magnolia Avenue. Other industrial/commercial uses are located south and west of the Airport along Bradley Avenue and Marshall Avenue, respectively. Residential uses are also located further west and southwest of the Airport, and further east across SR-67. Additionally, four schools are located less than one mile from the Proposed Action site.

3.13.1 Noise

Regarding current noise conditions, the Gillespie Field ALUCP shows that the majority of the Proposed Action site is located in the 75+ Community Noise Equivalent Level (CNEL) noise contour for the Airport, and a small area is located within the 70 and 75 CNEL noise contour. The SDCRAA adopted the Gillespie Field ALUCP in January 2010, and amended it in December 2010. The ALUCP shows that the Proposed Action site is located within the 70 and 75 CNEL noise contour, and is entirely within airport boundaries.

3.13.2 Aircraft Safety

The Proposed Action site is located within the boundaries of the ROFA and RSA for Runways 9R-27L and 9L-27R. The site is located within the Airport safety zones, and does not comply with FAA design standards.

3.14 Socioeconomics, Environmental Justice, and Children's Environmental Health and Safety Risks

This analysis incorporates U.S. Department of Commerce data from the 2010 U.S. Census.

3.14.1 Socioeconomics

The Proposed Action site is within the existing airfield and does not support residences or commercial activity. As described in Section 3.3, the Airport is surrounded by urban development, including residential areas to the north, west, and east. Areas south of the Airport are developed with a mixture of commercial and industrial land uses.

3.14.2 Environmental Justice

Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, was enacted in 1994. This Executive Order was adopted to ensure the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Fair treatment means that no groups of people, including racial, ethnic, or socioeconomic groups, should bear a disproportionate share of negative environmental consequences resulting from industrial, municipal, and commercial operations or the execution of federal, state, tribal, and local programs and policies.

U.S. Census data indicates that the ethnic makeup of El Cajon is primarily White (69 percent), followed by lower percentages of Hispanic or Latino Origin (28 percent), Black or African American (6 percent), and Asian and Pacific Islander (4 percent). In comparison, the County of San Diego reported a lower percentage of White residents (64 percent) and higher percentage of Hispanic residents (32 percent). The percentage of the population of Asian or Pacific Island descent was significantly lower in the project study area (4 percent), as well as the population of Black or African American (5 percent) compared to the County (11 percent) (U.S. Department of Commerce 2010).

In terms of income comparisons, more residents in the El Cajon area (20.9 percent) were below the poverty level in 2010, compared to the County (10.2 percent). The estimated median

household income was \$43,820 for the City of El Cajon, significantly lower than the median income for the County (\$61,247). The median U.S. household income was \$51,484 (U.S. Department of Commerce 2010).

3.14.3 Children's Environmental Health and Safety Risks

Executive Order 13045, *Protection of Children from Environmental Health Risks and Safety Risks*, requires federal agencies to determine whether a Proposed Action would result in environmental health risks and safety risks that may disproportionately affect children. The Proposed Action site is undeveloped; therefore, it does not support activities that cause environmental health or safety risks to children. The airport property is fenced. The two closest schools are Chaparral High School and Phoenix High School of the Grossmont Union High School District, which are co-located at 1600 North Cuyamaca Street in El Cajon, less than one mile southwest of the Proposed Action site. As noted above, residences are located north of the Airport along Prospect Avenue, east of the Airport across SR-67, and further west and southwest of the Airport.

3.15 Visual Effects

3.15.1 Light Emission Effects

Sources of existing lighting in the vicinity include existing lighting at Gillespie Field and lighting associated with nighttime commercial, residential, and local roads in the surrounding area.

3.15.2 Visual Resources and Visual Character

The majority of the 757-acre Airport property is flat, with slopes of less than 15 percent and elevations ranging from 300 to 399 feet above mean sea level. The Proposed Action site is visible from adjacent residential and business parcels as well as from adjacent roadways. However, due to the flat topography and surrounding urban development, direct views of the Proposed Action site are either not provided or are partially obscured from areas farther away from the Airport (e.g., from SR-67, Magnolia Avenue, and Bradley Avenue). To viewers from adjacent parcels, the Proposed Action site appears as an undeveloped and disturbed area between runways. From within the Proposed Action site, the view is similar. There are no parks or scenic highways in the vicinity of the Proposed Action site. El Cajon Mountain and the Cuyamaca Mountain Range are visible to the east of the project site.

3.16 Water Resources

This section covers the following five topics: wetlands, floodplains, surface waters, groundwater, and wild and scenic rivers.

3.16.1 Wetlands

This section incorporates information from a Jurisdictional Delineation Report prepared for the Proposed Action (AMEC 2016b). A biological survey was conducted at the 26-acre Proposed Action site and the temporary construction staging area on May 25, 2016. The biological survey included a wetlands inventory. The existing man-made and regularly maintained earthen channel (as described in Section 2.1) was identified onsite as an unnamed ephemeral drainage running east-west through the Proposed Action site (Figure 6). The channel collects storm water

runoff from the Airport and transports it west and northwest through a series of man-made above-ground channels and culverts. Based on a review of aerial photographs and topographic maps, the drainage ultimately flows to Forester Creek approximately 3,000 feet northwest of the Proposed Action site.

The channel conveys surface water runoff from runway and taxiway surfaces as well as upstream sources. It originates from an underground storm drain culvert in the eastern portion of the Proposed Action site and flows to the west in a meandering soft-bottom drainage until it returns to an underground storm drain culvert beneath the existing runways. Portions of the drainage are underlain by old asphalt and/or rip-rap. The channel is approximately 2,200 feet in length and averages 1 to 2 feet in width. The estimated area under the U.S. Army Corps of Engineers (USACE) and RWQCB jurisdiction is 0.10-acre, as measured from the ordinary high watermark.

The USFWS has developed a series of maps, known as the National Wetlands Inventory (NWI) to illustrate wetlands and deepwater habitat across the country. After conducting a review of this database, there are no NWI features within the Proposed Action site. The field investigation confirmed the Proposed Action site lacks hydric soil indicators necessary to be classified as a wetland. Therefore, no wetlands exist within the Proposed Action site.

3.16.2 Floodplains

Executive Order 11988, *Floodplains Management*, directs federal agencies to take actions to “reduce the risk of flood loss, to minimize the impact of floods on human safety, health and welfare, and to restore and preserve the natural and beneficial values served by floodplains.” The FAA’s policies and procedures for implementing this executive order are contained in U.S. Department of Transportation (USDOT) Order 5650.2, *Floodplain Management and Protection*. The executive order and the USDOT order establish a policy to avoid taking an action within a 100-year floodplain where practicable.

The Proposed Action site is located outside of all Federal Emergency Management Agency (FEMA) floodplains (Figure 7). Flood conditions on the Proposed Action site were determined by reviewing Flood Insurance Rate Maps maintained by FEMA. The maps delineate areas that would be inundated by the “100-year” flood, indicating areas potentially at risk for flood-based hazards or damage. As shown, the Proposed Action site does not encroach upon the 100-year floodplain, which is designated as Zone AE, and is located approximately 0.46 mile south of the Proposed Action site and is contained by Broadway Channel.

3.16.3 Surface Waters & Groundwater

This section incorporates information from the Preliminary Engineering Report for Cajon Air Center (Kimley-Horn and Associates, Inc. 2009). The project is located within the San Diego River Watershed (Lower San Diego watershed hydrologic unit 7.13) which discharges to the San Diego River and eventually to the Pacific Ocean.

The Proposed Action site is located within the San Diego Hydrologic Unit (Unit 7.13) as defined in the Water Quality Control Plan for the San Diego Basin (California RWQCB 1994), referred to as the Basin Plan. This Hydrologic Unit consists of approximately 440 square miles drained by the San Diego River, and consists of four hydrologic areas: Lower San Diego, San Vicente, El

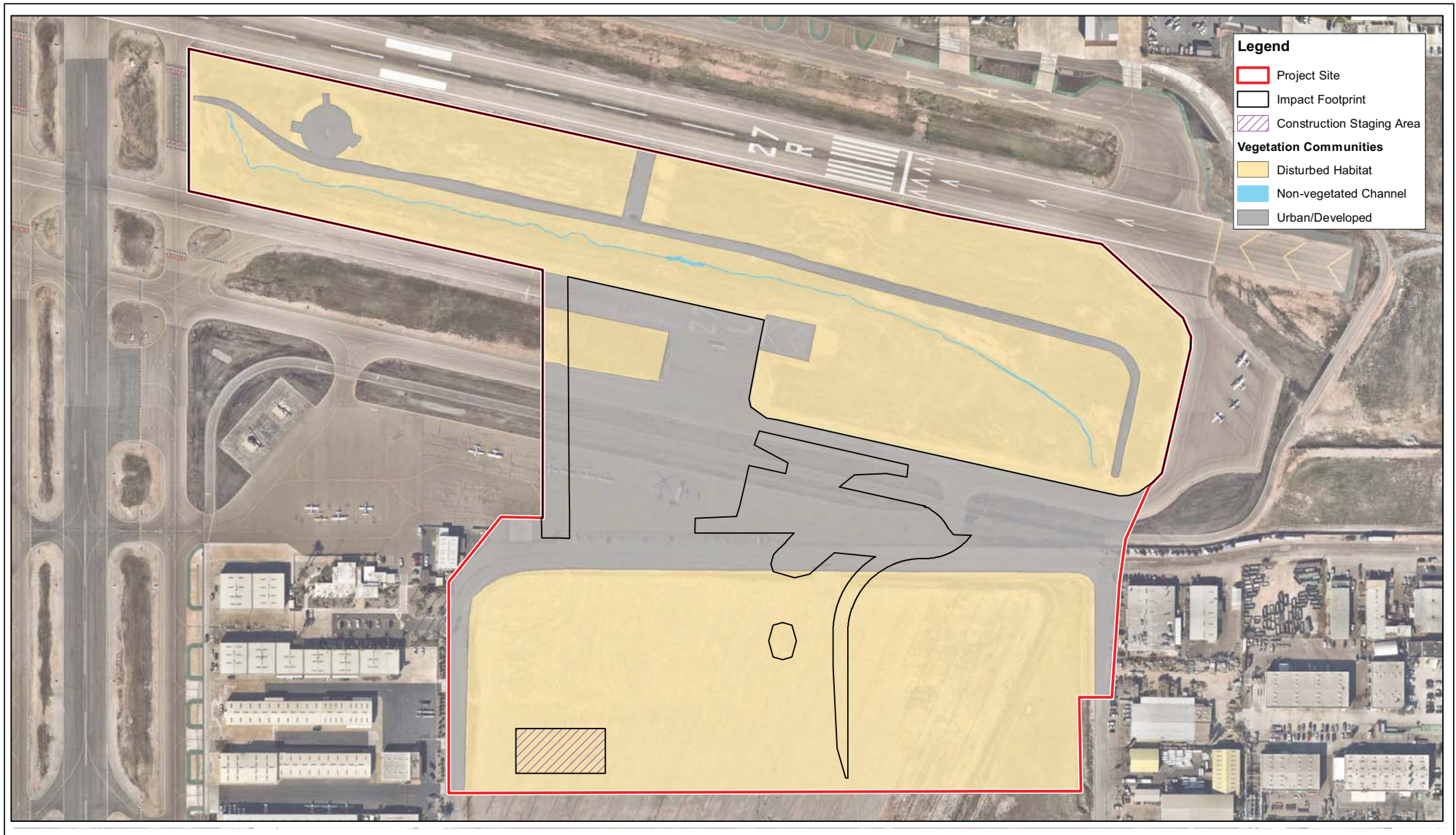
Capitan, and Boulder Creek. The Proposed Action site is located within the Lower San Diego Hydrologic Area, specifically the El Cajon Subarea.

The majority of the Proposed Action site is graded, earthen and undeveloped land within the active airfield. There are currently no activities conducted onsite which would result in non-storm water discharges to surface waters containing pollutants. Onsite water sources for the site are limited to storm water runoff. The majority of storm water that enters the Proposed Action site currently flows in a northwest direction. The existing swale drains through an existing storm water conveyance system towards the San Diego River via Forester Creek. Existing points of discharge from the site eventually flow into the San Diego River and then into the Pacific Ocean Shoreline; both of which are listed on the 2006 Clean Water Act (CWA) Section 303(d) List of Water Quality Limited Segments. Groundwater is anticipated to be encountered at depths of approximately 8 to 10 feet.

3.16.4 Wild and Scenic Rivers

According to the National Rivers Inventory, the closest wild and scenic river to the Proposed Action site is an 8.1-mile segment of Palm Canyon Creek, which is located approximately 60 miles away.

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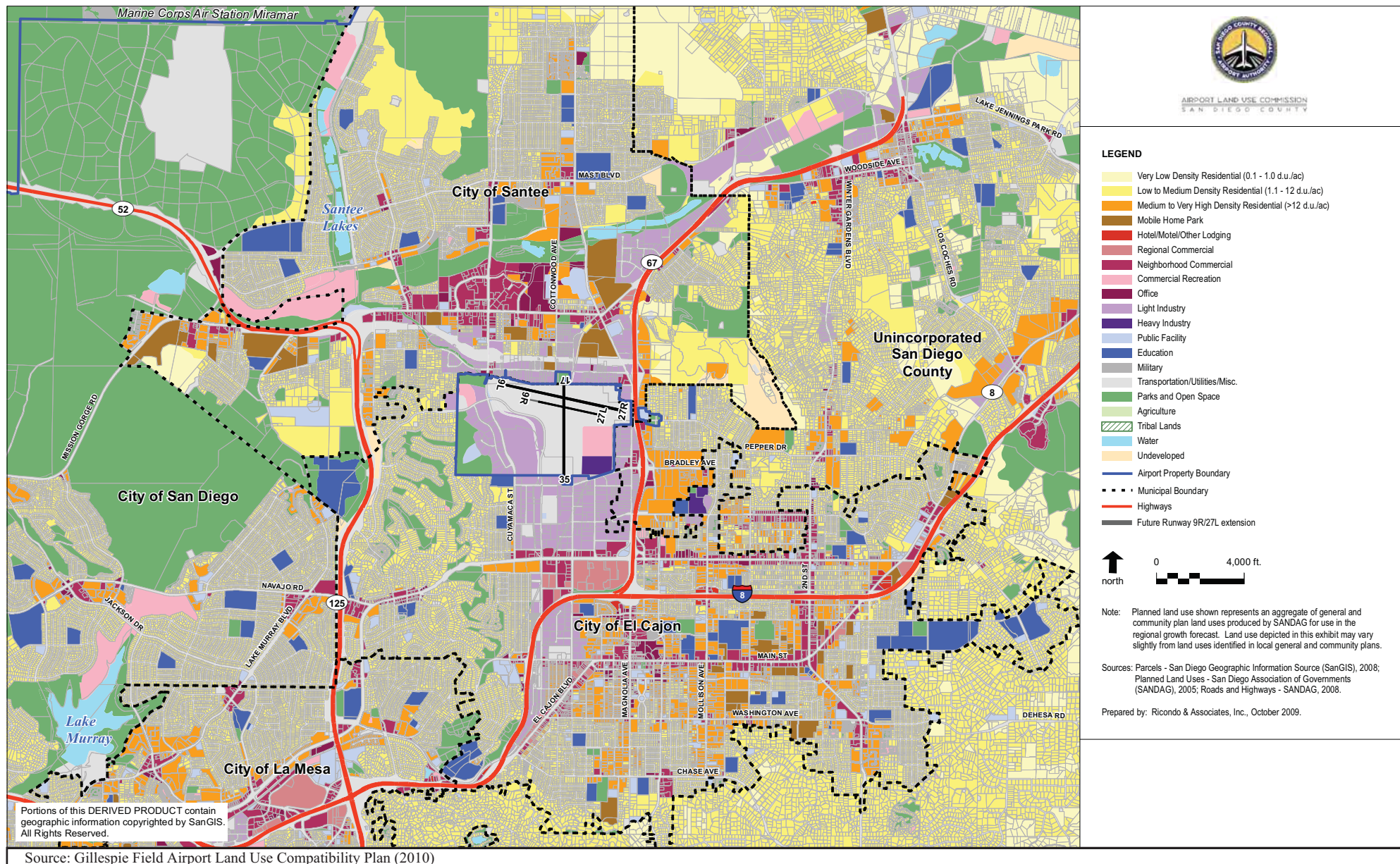


Vegetation Communities

GILLESPIE FIELD - ROFA/RSA PROJECT
ENVIRONMENTAL ASSESSMENT

Figure 4

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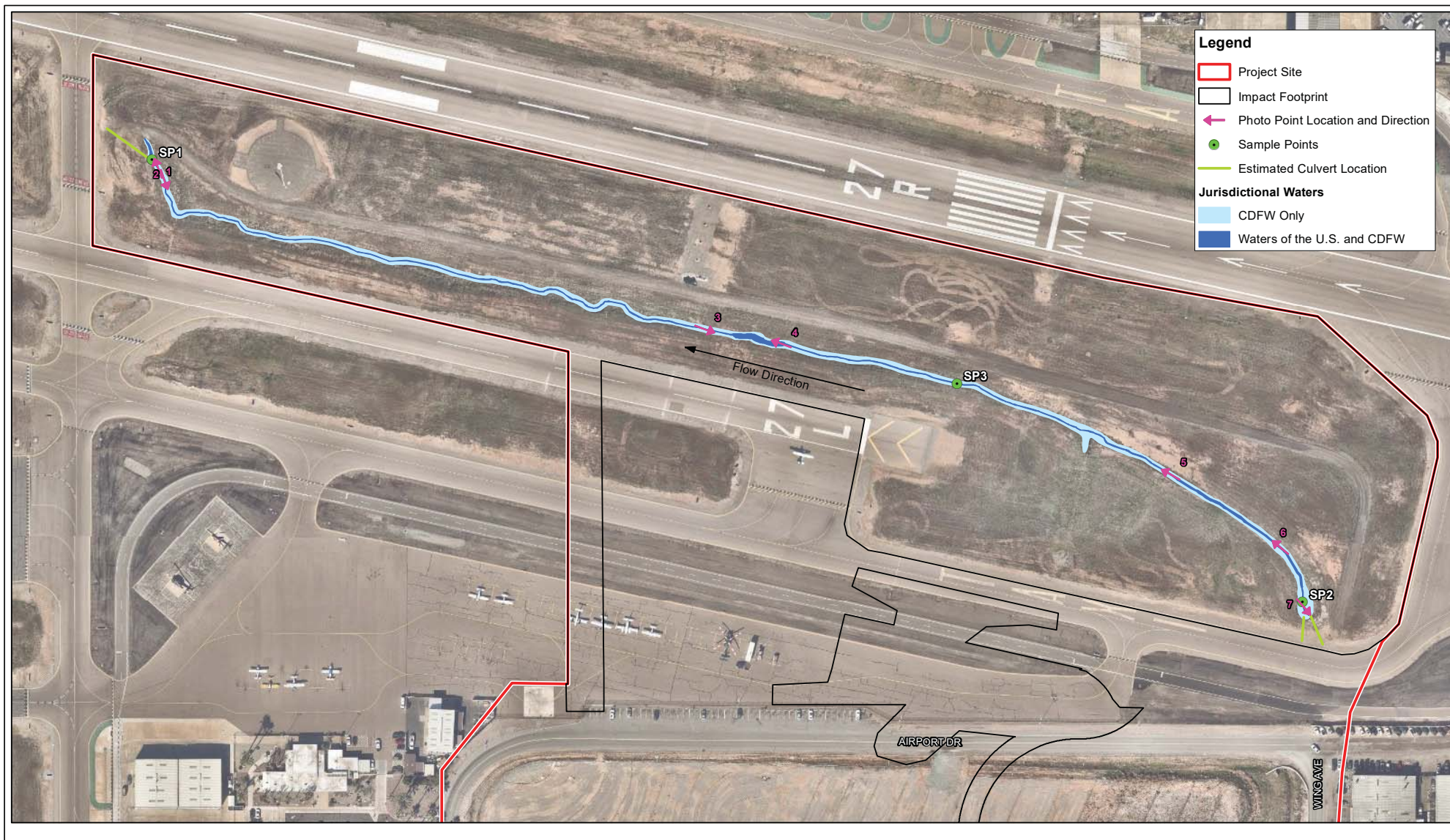
Planned Land Use - Airport Environs

GILLESPIE FIELD - ROFA/RSA PROJECT

ENVIRONMENTAL ASSESSMENT

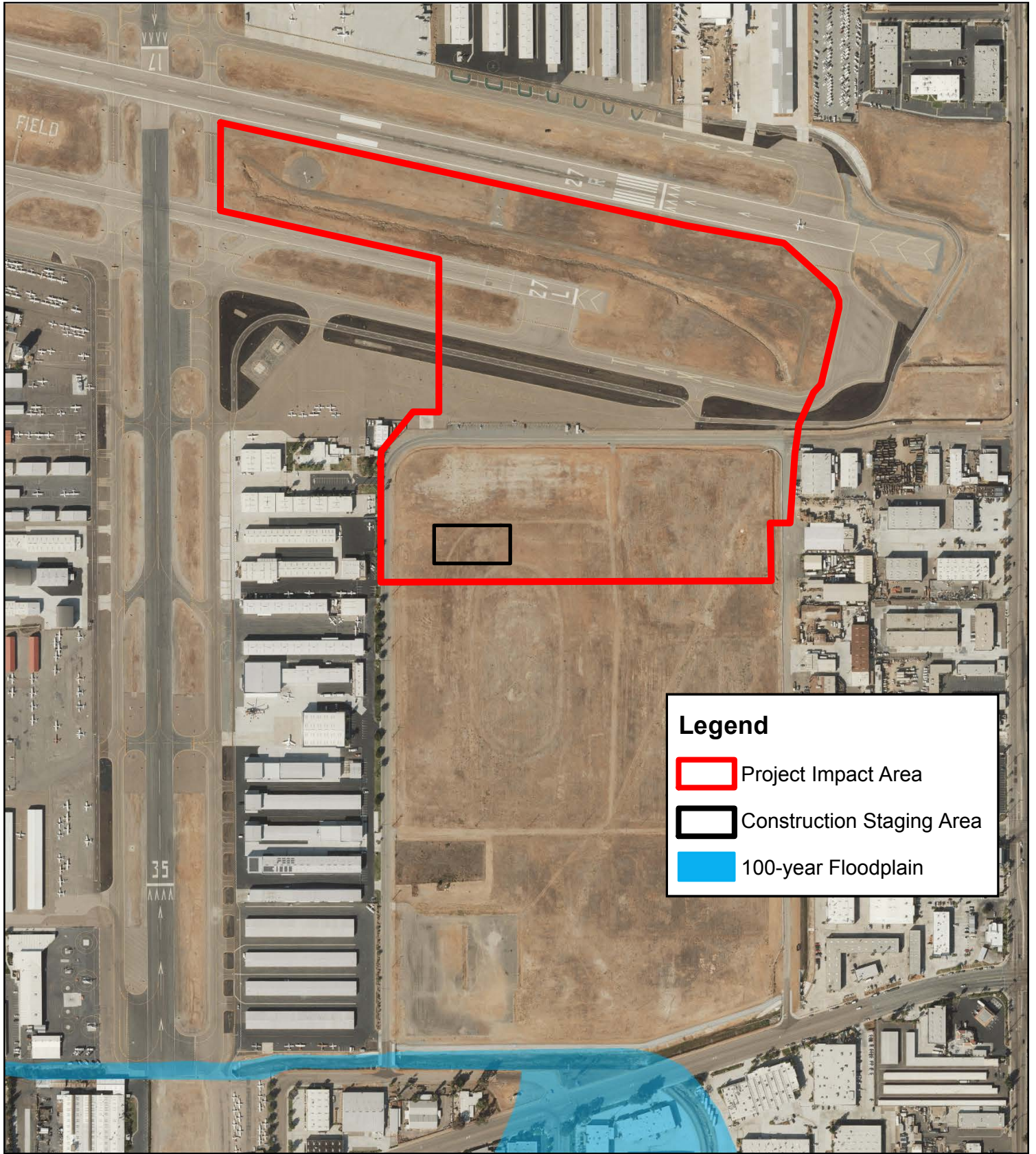
Figure 5

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Wetlands
 GILLESPIE FIELD ROFA/RSA PROJECT
 ENVIRONMENTAL ASSESSMENT
 Figure 6

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Legend

-  Project Impact Area
-  Construction Staging Area
-  100-year Floodplain

Floodplain
GILLESPIE FIELD - ROFA/RSA PROJECT
ENVIRONMENTAL ASSESSMENT
Figure 7

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4.0 ENVIRONMENTAL CONSEQUENCES AND MITIGATION

This chapter discusses the potential environmental impacts that could result from implementing the Proposed Action and the No Action Alternative. Specifically, this EA considers effects on the environmental resource categories identified in FAA Order 1050.1F and its associated Desk Reference. As defined by CEQ regulations (40 CFR Sections 1508.8(a) and 1508.8(b)), direct impacts are those which are caused by the action and occur at the same time and place (i.e., construction); whereas, indirect impacts are those which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable.

4.1 Resources Not Impacted By Project Alternatives

As stated in paragraph 4-2.c of FAA Order 1050.1F, “If an environmental impact category is not relevant to the Proposed Action or any of the reasonable alternatives identified (i.e., the resources included in the category are not present or the category is not otherwise applicable to the Proposed Action and alternative(s)), this should be briefly noted and no further analysis is required.” The following resources do not occur in the proposed project area or will not be directly or indirectly impacted by the project alternatives and are, therefore, not analyzed further in this report.

- Coastal Resources
- Department of Transportation Act, Section 4(f)
- Farmlands
- Historical, Architectural, Archaeological, and Cultural Resources

Based on the results of the cultural resource record search, Native American consultation, auger probes and pedestrian survey, and FAA’s determination there are no historic properties located within the Proposed Action, there would be no impact to these resources. The SHPO was notified of FAA’s determination on December 7, 2018. SHPO concurred with the FAA’s determination in a letter dated February 5, 2019 (Appendix A). The SHPO’s letter reminded the FAA that “in the event of an unanticipated discovery or change in the scale or scope of the project, the FAA may have additional consultation responsibilities under 36 CFR Part 800 Protection of Historic Properties.

- Land Use
- Socioeconomics, Environmental Justice, and Children’s Environmental Health and Safety Risks
- Visual Effects

4.2 Resources Potentially Impacted By Project Alternatives

The following sections contain impact analyses for those categories defined within FAA Order 1050.1F that could potentially be affected by project alternatives. The No Action Alternative provides an evaluation of future environmental conditions if the Proposed Action alternative is not undertaken. Where there is not a potential for a significant impact, the rationale for this conclusion is discussed.

4.2.1 Air Quality

This analysis incorporates the results of an air quality technical study prepared for the Proposed Action (RECON 2019a).

4.2.1.1 Regulatory Setting

Air quality is defined by ambient air concentrations of specific pollutants identified by the EPA to be of concern with respect to health and welfare of the general public.

Clean Air Act

The EPA is the agency responsible for enforcing the federal Clean Air Act (CAA) of 1970 and its 1977 and 1990 amendments. The purpose of the CAA is to establish the National Ambient Air Quality Standards (NAAQS), which classify areas as to their attainment status relative to NAAQS; develop schedules and strategies to meet the NAAQS; and to regulate emissions of criteria pollutants and hazardous air pollutants to protect public health and welfare. The CAA Amendments established timelines for the achievement of NAAQS, dependent upon the severity of nonattainment. The NAAQS are summarized in Table 2.

General Conformity

Under 40 CFR Part 93 and the provisions of Part 51, Subchapter C, Chapter I, Title 40, Appendix W, federal agencies are required to demonstrate that federal actions conform with the applicable State Implementation Plan (SIP). In order to ensure that federal activities do not hamper local efforts to control air pollution, Section 176(c) of the CAA, 42 U.S.C. §7506(c), prohibits federal agencies, departments, or instrumentalities from engaging in, supporting, providing financial assistance for, licensing, permitting or approving any action which does not conform to an approved state or federal implementation plan. The FAA provides guidance for assessing air quality impacts and determining conformity under the CAA in the *Aviation Emissions and Air Quality Handbook Version 3 Update 1* (Air Quality Handbook). According to the Air Quality Handbook, Chapter 8, Conformity, “[t]he General Conformity process begins with an “applicability analysis” whereby the federal agency (or agencies) with jurisdiction over the action determines how and to what degree General Conformity applies.” This process has “three elements – (i) Applicability Analysis, (ii) Preparing a General Conformity Determination, and (iii) Interagency and Public Review Process...” (FAA 2015).

Table 2. National Ambient Air Quality Standards

Table 2. National Ambient Air Quality Standards					
Pollutant		Primary/Secondary	Averaging Time	Level	Form
Carbon Monoxide (CO)		Primary	8 hour	9 ppm	Not to be exceeded more than once per year
			1 Hour	35 ppm	
Lead (Pb)		Primary and Secondary	Rolling 3 month average	15 µg/m ³⁽¹⁾	Not to be exceeded
Nitrogen Dioxide (NO ₂)		Primary	1 hour	100 ppb	98th percentile of 1-hour daily maximum concentrations, averaged over 3 years
		Primary and Secondary	1 year	53 ppb ⁽²⁾	Annual Mean
Ozone (O ₃)		Primary and Secondary	8 hours	0.070 ppm ⁽³⁾	Annual fourth-highest daily maximum 8-hour concentration, averaged over 3 years
Particle Pollution (PM)	PM _{2.5}	Primary	1 year	12.0 µg/m ³	annual mean, averaged over 3 years
		Secondary	1 year	15.0 µg/m ³	annual mean, averaged over 3 years
	PM ₁₀	Primary and Secondary	24 hours	35 µg/m ³	98th percentile, averaged over 3 years
		Primary and Secondary	24 hours	150 µg/m ³	Not to be exceeded more than once per year on average over 3 years
Sulfur Dioxide (SO ²)		Primary	1 hour	75 ppb ⁽⁴⁾	99th percentile of 1-hour daily maximum concentrations, averaged over 3 years
		Secondary	3 hours	0.5 ppm	Not to be exceeded more than once per year

Source: U.S. EPA 2019.

Note: ppm = parts per million; ppb = parts per billion; µg/m³ = micrograms per cubic meter.¹In areas designated nonattainment for the Pb standards prior to the promulgation of the current (2008) standards, and for which implementation plans to attain or maintain the current (2008) standards have not been submitted and approved, the previous standards (1.5 µg/m³ as a calendar quarter average) also remain in effect.²The level of the annual NO₂ standard is 0.053 ppm. It is shown here in terms of ppb for the purposes of clearer comparison to the 1-hour standard level.³Final rule signed October 1, 2015, and effective December 28, 2015. The previous (2008) O₃ standards additionally remain in effect in some areas. Revocation of the previous (2008) O₃ standards and transitioning to the current (2015) standards will be addressed in the implementation rule for the current standards.⁴The previous SO₂ standards (0.14 ppm 24-hour and 0.03 ppm annual) will additionally remain in effect in certain areas: (1) any area for which it is not yet 1 year since the effective date of designation under the current (2010) standards, and (2) any area for which an implementation plan providing for attainment of the current (2010) standard has not been submitted and approved and which is designated nonattainment under the previous SO₂ standards or is not meeting the requirements of a SIP call under the previous SO₂ standards (40 CFR 50.4(3)). A SIP call is an EPA action requiring a state to resubmit all or part of its State Implementation Plan to demonstrate attainment of the required NAAQS.

As part of the General Conformity applicability analysis, the FAA provides a range of factors to consider in determining whether the rule applies to the action. These factors include the following:

1. Will the action occur in a nonattainment or maintenance area(s);
2. Does a specific exemption allowed in the General Conformity Rule apply to the action;
3. Is the action, or portions of the project, included on the federal agency's list of "presumed to conform activities";
4. Do the total direct and indirect air emissions associated with the action exceed the General Conformity *de minimis* levels; and
5. Does the EPA-approved SIP have an emissions budget against which the emissions associated with the action could be compared and is the budget inclusive of the action?

If an action is not exempt or presumed to conform, or found to cause emissions above applicable *de minimis* levels in any nonattainment or maintenance area, the agency must prepare a General Conformity Determination prior to taking the action (FAA 2015).

Table 3 identifies the federal nonattainment pollutants and the relevant *de minimis* emission thresholds used in the evaluation of the Proposed Action.

Table 3. Attainment Status and De Minimis Levels for Determination of Applicability of General Conformity Rule

Pollutant	Status	De Minimis Level (tons/year)
Carbon Monoxide (CO)	Attainment/Maintenance	100
Ozone (O ₃)	Non-Attainment	NO _x -100 VOC-100
Nitrogen Dioxide (NO ₂)	Attainment	N/A
Sulfur Dioxide (SO ₂)	Attainment	N/A
Lead (Pb)	Attainment	N/A
Respirable Particulate Matter (PM ₁₀)	Attainment	N/A
Fine Particulate Matter (PM _{2.5})	Attainment	N/A

Source: EPA 2018

VOC = volatile organic compound; NO_x = nitrogen oxides

Executive Order 12088 – Federal Compliance with Pollution Control Standards

Executive Order 12088 – Federal Compliance with Pollution Control Standards requires each federal agency to comply with “applicable pollution control standards” defined as “the same substantive, procedural, and other requirements that would apply to a private person.” The Executive Order further requires federal agencies to cooperate with the EPA, state, and local environmental regulatory officials. To ensure cost-effective and timely compliance with applicable pollution control standards, the EPA Administrator is required to provide technical advice and assistance to executive agencies. Executive Order 12088 also states that disputes between the EPA and other federal agencies, regarding environmental violations, shall be elevated to the Office of Management and Budget for resolution. In 2000, Section 1-4, Pollution Control Plan, of Executive Order 12088 was revoked in part by Executive Order 13148.

4.2.1.2 Analysis Methodology and Significance Threshold

Construction emissions were calculated using the California Emissions Estimator Model (CalEEMod) 2016.3.2 (California Air Pollution Control Officers Association [CAPCOA] 2017) which incorporates the most currently approved EMFAC and Off-Road emissions factors models.

The FAA's significance threshold would be exceeded if the Proposed Action would cause pollutant concentrations to exceed one or more of the NAAQS, as established by the EPA under the CAA, for any of the time periods analyzed, or to increase the frequency or severity of any such existing violations. The significance criteria established by the applicable air pollution control district (SDAPCD) may be relied upon to make impact significance determinations.

4.2.1.3 Proposed Action

Direct Impacts

The Proposed Action would only generate construction air emissions. Primary emissions during construction would be from fugitive dust and exhaust emissions. Fugitive dust emissions vary greatly during construction and are dependent on the amount and type of activity, silt content of the soil, and the weather. Vehicles moving over paved and unpaved surfaces, demolition, excavation, earth movement, grading, and wind erosion from exposed surfaces are all sources of fugitive dust. Heavy-duty construction equipment is usually diesel powered. In general, emissions from diesel-powered equipment contain more NO_x, SO_x, and PM than gasoline-powered engines. However, diesel-powered engines generally produce less CO and less volatile organic compound (VOC) than do gasoline-powered engines.

As discussed, construction emissions were calculated using CalEEMod. The estimated annual emissions are summarized in Table 4.

**Table 4. Summary of Construction Emissions
(tons per year¹)**

	Pollutant		
	VOC	NO _x	CO
Annual Emissions	0.3	3.2	1.8
<i>De Minimis</i> Levels	100	100	100
Adverse Impact?	No	No	No

VOC = volatile organic compound; NO_x = nitrogen oxide;
CO = carbon monoxide.

As shown, annual construction emissions are projected to be less than the applicable *de minimis* levels criteria pollutants. Therefore, air quality impacts during construction activities would not result in adverse air quality impacts and a General Conformity determination is not applicable nor required.

Emissions for construction were compared with the General Conformity *de minimis* thresholds established by the SDAPCD for the SDAB to evaluate whether the Proposed Action is required to conduct a General Conformity Determination, and whether the Proposed Action's emissions

¹Construction duration is estimated at one year, commencing Fall 2019.

would be adverse. Table 5 presents a summary of Proposed Action construction emissions in comparison with the *de minimis* thresholds, and with the SDAB forecast emissions.

Based on the air quality analysis for the Proposed Action, the maximum estimated emissions would be below conformity *de minimis* levels for all criteria pollutants during construction (see Table 5).

Table 5. Estimated Construction Emissions

Construction Activity	Pollutant Emissions (pounds per day)					
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Maximum Daily Emissions	4.0	41.8	24.2	0.1	9.0	5.2
<i>Significance Threshold</i>	<i>75</i>	<i>250</i>	<i>550</i>	<i>250</i>	<i>100</i>	<i>55</i>
Exceeds threshold?	No	No	No	No	No	No

Source: RECON 2019a

VOC = volatile organic compound; NO_x = nitrogen oxides; CO = carbon monoxide;

SO_x = sulfur oxides; PM₁₀ = respirable particulate matter; PM_{2.5} = fine particulate matter

In conclusion the emissions of VOC, NO_x, and CO associated with construction of the Proposed Action would be less than the *de minimis* levels demonstrating compliance with air quality regulations. Therefore, the Proposed Action would not result in adverse effects to air quality related to the SDAB, the SIP, or NAAQS.

Indirect Impacts

The Proposed Action is limited to drainage improvements located within an active airfield between two active runways, connections to existing storm drains, and installation of two taxiways that would serve as separate ingress and egress connection points between the adjacent 70-acre site and Taxiway Delta. The Proposed Action would not result in an increase in operational activities at the airfield that would generate operational emissions. Installation of the two new taxiways would serve planned future aircraft operations. The emission impacts from an increase in aircraft operations were evaluated in the Proposed 70-Acre Redevelopment Project (Cajon Air Center) Finding of No Significant Impact (FONSI) and Record of Decision (ROD) signed November 27, 2013, and its accompanying environmental assessment (EA). The Proposed Action in this EA would not create capacity for additional aircraft operations. Therefore, the Proposed Action would not result in any indirect impacts related to air quality.

4.2.1.4 No Action Alternative

The No Action Alternative represents conditions at the Airport without improvements. Therefore, the No Action Alternative would not generate an impact to air quality.

The Proposed Action Alternative would produce temporary construction-related increases of emissions and PMs (see Table 5 above) compared to the No Action Alternative. These increases would not cause an exceedance of the NAAQS standards.

4.2.2 Biological Resources

4.2.2.1 Regulatory Setting

The Migratory Bird Treaty Act (MBTA) of 1918 is the primary legislation in the U.S. established to conserve migratory birds. It implements the United States' commitment to four bilateral treaties, or conventions, for the protection of a shared migratory bird resource. The MBTA prohibits the taking, killing, or possessing of migratory birds unless permitted by regulation. The species of birds protected by the MBTA appear in 50 CFR Part 10.13.

4.2.2.2 Analysis Methodology and Significance Threshold

The biological resources survey and record searches conducted for the Proposed Action determined that there are no federally threatened or endangered species identified in the Proposed Action site. The survey identified three vegetation communities: disturbed habitat, urban/developed areas, and non-vegetated channel.

The FAA's significance threshold would be exceeded if the Proposed Action would be likely to jeopardize the continued existence of a federally listed threatened or endangered species, or would result in the destruction or adverse modification of federally designated critical habitat. The FAA has not established a significance threshold for non-listed species.

4.2.2.3 Proposed Action

Direct Impacts

Vegetation

The Proposed Action would permanently impact 0.10 acre of non-vegetated channel within the Proposed Action site. This impact is associated with replacing the channel's existing earthen bottom with grate inlets that would connect to the proposed storm drain. The non-vegetated channel is considered non-wetland Waters of the U.S. under the jurisdiction of USACE. More detail regarding these impacts and mitigation can be found in Section 4.2.7.1 below. The Proposed Action would temporarily impact 26.5 acres of disturbed habitat and urban/developed areas resulting from re-grading the site to meet FAA design standards and temporary use of a construction staging area. The total acreage impacts are shown below in Table 6. No mitigation is required for impacts to disturbed habitat or urban/developed land. However, the Proposed Action would restore all temporarily impacted areas to pre-construction conditions at a 1:1 ratio by recontouring, compacting, and hydroseeding using a native seed mix for erosion control.

Table 6. Impacts to Vegetation Communities

Vegetation Community/Land Cover Type (Holland Code)	Permanent Impacts (acres)	Temporary Impacts (acres)
Disturbed Habitat (11300)	0.00	22.93
Non-vegetated Channel (64200)	0.10	0.00
Urban/Developed (12000)	0.00	3.57
Total	0.10	26.50

Source: AMEC 2016a

Wildlife

As described in Section 3.4.2, the Proposed Action site supports a low diversity of wildlife species. During the biological surveys, no sensitive species were observed onsite. Furthermore, no habitat for endangered, threatened, or special status wildlife species was identified in the study area. Because the Proposed Action site is highly disturbed due to ongoing maintenance and mowing activities, there is no evidence that sensitive wildlife would be impacted by the Proposed Action. However, there is low potential for the Proposed Action to impact nesting birds through removal of disturbed habitat during construction.

Indirect Impacts

Vegetation

The Proposed Action is limited to drainage improvements located within an active airfield between two active runways, connections to existing storm drains, and installation of two taxiways that would serve as separate ingress and egress connection points between the adjacent 70-acre site and Taxiway Delta. Construction impacts would be confined to the Proposed Action site, and the Proposed Action would not result in an increase in operational activities that could impact vegetation. Therefore, the Proposed Action would not result in any indirect impacts to vegetation outside the project area.

Wildlife

The Proposed Action is limited to drainage improvements located within an active airfield between two active runways, connections to existing storm drains, and installation of two taxiways that would serve as separate ingress and egress connection points between the adjacent 70-acre site and Taxiway Delta. Construction impacts would be confined to the Proposed Action site, and the Proposed Action would not result in an increase in operational activities that could impact wildlife. Therefore, the Proposed Action would not result in any indirect impacts to wildlife outside the project area.

4.2.2.4 Avoidance and Minimization Measures

As described herein, the Proposed Action site incorporates design features to minimize project effects.

Although the Proposed Action site is composed of regularly mowed disturbed habitat that is considered low quality habitat and adjacent to active airfield, there is still low potential for nesting birds to use the site for foraging and/or nesting habitat. Therefore, per the MBTA, clearing and grubbing will be prohibited during the bird breeding season to avoid indirect effects to potential nesting birds/raptors. Any clearing would occur between September 15 and February 15. If grading and/or removal of potential nesting sites occur during the nesting season, the following measures will be implemented:

- Pre-construction surveys will be conducted by a qualified biologist in appropriate habitat to inspect for the presence of nesting birds no more than seven days prior to construction.
- If nests of listed birds, migratory birds, raptors, or other sensitive species are located, they will be flagged and a protective buffer will be established by the monitoring

biologist. All construction activity will be prohibited within this area until the biologist has determined that the nesting young have fledged or the nest has been abandoned, whichever occurs first.

4.2.2.5 No Action Alternative

Under the No Action Alternative, there would be no vegetation removal or ground disturbance that would impact fish, wildlife, or plants.

The Proposed Action Alternative would have temporary impacts to 26.50 acres of disturbed, developed, or non-vegetated areas and 0.10 acre of permanent impacts to a non-vegetated channel (see further discussion under the Wetland section) compared to the No Action Alternative. By following the avoidance measures above, migratory birds would not be impacted.

4.2.3 Climate

4.2.3.1 Regulatory Setting

The FAA provides guidance for assessing GHG emissions and determining impacts in the Air Quality Handbook. According to the Air Quality Handbook, there are currently no federal requirements for reporting GHG emissions from aviation sources as well as no significance thresholds. Rather, the information is to be provided for informational purposes as a means of disclosing the project's potential effects on GHG emissions and climate change.

4.2.3.2 Analysis Methodology and Significance Threshold

This analysis incorporates the results of a GHG Analysis evaluation prepared for the Proposed Action (RECON 2019b). Construction emissions were calculated using the CalEEMod program which incorporates the most currently approved EMFAC and Off-Road emissions factors models. CalEEMod calculates GHG emissions based on fuel consumption from construction and land use projects. GHG emissions are estimated in terms of metric tons carbon dioxide equivalent (MT CO₂e). As noted by the FAA, CO₂e emissions are the preferred way to assess GHG emissions because they give weight to the global warming potential of different gases.

As described in the regulatory setting above, there are currently no federal requirements for reporting GHG emissions from aviation sources as well as no significance thresholds.

4.2.3.3 Proposed Action

Direct Impacts

GHG emissions associated with the Proposed Action would be due to construction activities. Once construction is complete, the project would not be a source of operational emissions, including mobile sources, energy sources (electricity and natural gas), area sources (landscaping), water and wastewater, and solid waste. Construction activities emit GHGs primarily through the combustion of fuels in the engines of off-road construction equipment (primarily diesel) and in the engines of on-road vehicles used for the delivery of materials and the commute vehicles of the construction workers.

Based on the GHG Analysis prepared for the project (RECON 2019b), construction of the Proposed Action is anticipated to generate approximately 13 MT CO₂e amortized over 30 years as shown in Table 7. The project would not result in a change to airport operations.

Table 7. Estimated Construction Greenhouse Gas Emissions

Emission Source	CO₂e (metric tons per year)
On-Site Equipment	352
Soil Hauling	4
Worker Commute	43
Total Construction Emissions	399
<i>Amortized Over 30 Years</i>	<i>13</i>

Source: RECON 2019b

The level of emissions that would occur as a result of construction of the Proposed Action are shown in Table 7. As described in the regulatory setting above, there are currently no federal requirements for reporting GHG emissions from aviation sources as well as no significance thresholds. Therefore, this information is provided for informational purposes as a means of disclosing the project's potential effects on GHG emissions and climate change and no further analysis at the federal level is required.

Indirect Impacts

The Proposed Action is limited to drainage improvements located within an active airfield between two active runways, connections to existing storm drains, and installation of two taxiways that would serve as separate ingress and egress connection points between the adjacent 70-acre site and Taxiway Delta. The Proposed Action would not result in an increase in operational activities at the airfield that would generate operational GHG emissions. Installation of the two new taxiways would serve planned future aircraft operations. The emission impacts from an increase in aircraft operations were evaluated in the Proposed 70-Acre Redevelopment Project (Cajon Air Center) Finding of No Significant Impact (FONSI) and Record of Decision (ROD) signed November 27, 2013, and its accompanying environmental assessment (EA). The Proposed Action in this EA would not create capacity for additional aircraft operations. Therefore, the Proposed Action would not result in any indirect impacts related to GHG.

4.2.3.4 No Action Alternative

The No Action Alternative represents conditions at the Airport without improvements. Therefore, the No Action Alternative would not generate GHG emissions, and would not result in an adverse effect.

The Proposed Action Alternative would generate construction GHG emissions of approximately 13 MT CO₂e amortized over 30 years compared to the No Action Alternative. As described in the Regulatory Setting section above, there are currently no federal requirements for reporting GHG emissions nor significance thresholds. Therefore, this information is provided for informational purposes as a means of disclosing the project's potential effects associated with GHG emissions and climate change and no further analysis is required.

4.2.4 Hazardous Materials, Solid Waste, and Pollution Prevention

4.2.4.1 Regulatory Setting

Federal, state, and local laws regulate the transportation, storage, use, and disposal of hazardous materials, solid waste, and pollution. These laws extend to past, present, and future landowners of properties containing hazardous materials. Development or other activities disturbing sites containing hazardous materials may create pathways that allow contaminants to affect human health and the environment.

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) establishes liability for those parties responsible for hazardous substance releases to pay cleanup costs, and establishes a trust fund to finance cleanup costs in situations in which no responsible party could be identified. CERCLA enables the creation of the National Priority List, a list of sites with known releases or threatened releases of hazardous substances in the United States and its territories used to guide the EPA in determining which sites warrant further investigation. As conditions of a sale, release, or transfer of federal lands or facilities used to store hazardous materials or where a release or disposal of hazardous materials has occurred, federal agencies must identify those lands or facilities, and complete waste or contaminate cleanup of these lands or facilities.

The Oil Pollution Act requires oil storage facilities and vessels (with at least 1,320 gallons in above ground storage containers equal to or greater than 55 gallons each or greater than 42,000 gallons in underground storage tanks) to submit to the EPA plans detailing how the facilities will respond to large oil discharges.

Pollution Prevention Act of 1990⁶¹ requires pollution prevention and source reduction controls to reduce the effect of these wastes on the environment.

The Resource Conservation and Recovery Act (RCRA) establishes guidelines for hazardous waste and non-hazardous solid waste management activities in the United States. The RCRA also regulates the generation, storage, treatment, and disposal of waste.

The Toxic Substances Control Act provides the EPA with the authority to regulate the production, importation, use, and disposal of chemicals defined as toxic, including lead, radon, asbestos, and polychlorinated biphenyls (PCBs), that have the potential to cause unreasonable risk of injury to public health or the environment.

The Hazardous Materials Transportation Act regulates the transportation of hazardous materials to protect human life, property and the environment from the risks inherent in the transportation of hazardous materials.

Executive Order 12088, *Federal Compliance with Pollution Control Standards* directs federal agencies to comply with applicable pollution control standards in the prevention, control, and abatement of environmental pollution.

Executive Order 12580, Superfund Implementation delegates to a number of federal departments and agencies the authority and responsibility to implement certain provisions of CERCLA.

Executive Order 13834, *Efficient Federal Operations* instructs federal agencies to meet statutory requirements that increases efficiency, optimizes performance, eliminates unnecessary use of resources, and protects the environment. This EO includes implementing waste prevention and recycling measures and complying with federal requirements with regard to solid, hazardous, and toxic waste management and disposal.

The terms “hazardous waste,” “hazardous substance,” and “hazardous material” are generally associated with industrial wastes, petroleum products, and other contaminants. These terms are described below:

- Hazardous wastes are defined as solid wastes that are ignitable, corrosive, reactive, or toxic. These are also known as “characteristic wastes.” The EPA has deemed certain solid wastes hazardous. These may be referred to as “listed wastes.”²
- Hazardous substances: Include hazardous waste, hazardous air pollutants, hazardous substances as defined under the CWA and Toxic Substances Control Act, and elements, compounds, mixtures, solutions, or substances listed in 40 CFR Part 302 that pose substantial harm to human health or environmental resources. Hazardous substances do not include any petroleum or natural gas substances and materials pursuant to Comprehensive Environmental Response, Compensation, and Liability Act.
- Hazardous material: Any commercially transported substances or materials that pose unreasonable risk to public health, safety, and property. Hazardous materials include hazardous waste and hazardous substances, as well as petroleum and natural gas materials and substances.³

4.2.4.2 Analysis Methodology and Significance Threshold

As discussed in Section 3.9, a Phase I Environmental Site Assessment was conducted for the 70-acre Redevelopment Project in accordance with FAA Order 1050.19B, *Environmental Due Diligence Audit (EDDA) in the Conduct of FAA Real Property Transactions*, and ASTM Standard E 1527, *Standard Practice for Environmental Assessments: Phase I Environmental Site Assessment Process*. The Phase I EDDA included a database search of public lists of sites that generate, store, treat, or dispose of hazardous materials or sites for which a release or incident has occurred. The search was conducted for the adjacent 70-acre site and includes data from surrounding sites within a one-mile radius.

In accordance with FAA Order 1050.1F, a Proposed Action would have an adverse effect if it were to involve a property on or eligible for the NPL. FAA Order 1050.1F does not establish significance thresholds for pollution prevention or solid waste. In addition, Executive Order 12088, as amended, directs federal agencies to comply with applicable pollution control standards. Construction and demolition waste is required to be disposed of in a manner consistent with local solid waste recycling, collection and disposal regulations, including the County Construction and Demolition Materials Diversion Program, as described in Sections 68.508 through 68.518 of the *San Diego County Code of Regulatory Ordinances*.

² 40 CFR Part 261, Subpart C.

³ 49 CFR Part 172, Table 172.101.

4.2.4.3 Proposed Action

Direct Impacts

Hazardous Materials

As discussed in Section 3.9, the Phase I EDDA Environmental Site Assessment prepared for the 70-acre Redevelopment Site found that the Proposed Action site is not on or eligible for the NPL. However, one site located in the vicinity was identified to have an existing effect on the Proposed Action site. The former Ketema Aerospace and Engineering facility resulted in a plume of contaminated groundwater containing chlorinated solvents. As discussed in Section 3.9, this plume is impacting the groundwater and soil beneath the 70-acre site. Therefore, due to the close proximity of the 70-acre site, grading or excavation on the Proposed Action site also has the potential to encounter the contaminated soil and groundwater. If exposed, the contaminants could present potential health risks to workers onsite or during construction of the Proposed Action. The following design features shall be implemented to ensure no impact would occur:

- The Airport Sponsor shall prepare a hazardous materials management plan or similar to remove, treat, or otherwise reduce the contaminant concentrations to below human or ecological health risk thresholds related to the construction of the Proposed Action.
 - The plan shall outline methods for characterizing and classifying soil for offsite disposal, as needed.
 - The Airport Sponsor shall ensure that a qualified environmental monitor be present during construction to document the presence of contaminated soil and/or groundwater. The environmental monitor shall assist in the excavation and off-site disposal of such soil or the treatment and onsite reuse of such soil and/or groundwater.

Construction activities would include the use and transport of hazardous substances, including fuels for construction equipment. As such, the Proposed Action would have the potential to result in an accidental discharge of hazardous substances during construction activities. Compliance with safety precautions and federal, state, and local hazardous materials regulatory requirements would be required and would reduce the risk of an accidental release of hazardous materials. All applicable construction Best Management Practices (BMPs) would be used to avoid accidents. The following design features, when incorporated into the Proposed Action design, would ensure the Proposed Action would not create a significant hazard to the public or the environment.

- The Airport Sponsor shall ensure that all contractors and subcontractor project personnel receive training regarding the appropriate work practices necessary to comply with the applicable environmental laws and regulations related to hazardous material spill prevention and response measures. The Airport Sponsor shall prepare and implement a spill prevention, control, and countermeasure plan to address routine use of hazardous materials, in conformance with title 40 CFR Part 112; and a Storm Water Pollution Prevention Plan (SWPPP) in conformance with State Water Resources Control

Board prior to the construction of facilities improvements to reduce pollutants in storm water runoff.

Therefore, no adverse effects related to an *accidental discharge* of hazardous substances during construction activities would occur.

Implementation of these design features, and compliance with federal, state, and local hazardous materials regulatory requirements would reduce the risk of hazardous materials encountered during construction. Therefore, no direct adverse effects would occur as a result of the Proposed Action.

Pollution Prevention

The Proposed Action does not contain project elements with a unique or increased potential to cause pollution. Emissions of air pollutants would not result in adverse effects as described in Section 4.2.1, Air Quality, and the potential for storm water runoff to carry pollutants offsite would not result in direct adverse effects as described in Section 4.2.7, Water Resources.

Solid Waste

Construction of the Proposed Action would generate construction waste (e.g., scrap wood, concrete, asphalt). All waste would be disposed of at appropriate landfills or, for inert waste, other appropriate disposal sites in accordance with all local and state regulations and ordinances. Solid waste generated by the Proposed Action would not cause or contribute to a direct adverse effect to solid waste.

Indirect Impacts

Hazardous Materials

The Proposed Action is limited to drainage improvements located within an active airfield between two active runways, connections to existing storm drains, and installation of two taxiways that would serve as separate ingress and egress connection points between the adjacent 70-acre site and Taxiway Delta. The Proposed Action would not result in an increase in operational activities at the airfield that would generate hazardous materials. Therefore, the Proposed Action would not result in any indirect impacts related to hazardous materials.

Pollution Prevention

The Proposed Action does not contain project elements with a unique or increased potential to cause pollution. The Proposed Action would not result in an increase in operational activities at the airfield that would emit air pollutants. Increased runoff generated by impervious surfaces associated with the proposed taxiways would be minimal, and the proposed drainage improvement has capacity to accommodate these flows. Therefore, the Proposed Action would not result in any indirect impacts related to pollution prevention.

Solid Waste

The Proposed Action is limited to drainage improvements located within an active airfield between two active runways, connections to existing storm drains, and installation of two taxiways that would serve as separate ingress and egress connection points between the

adjacent 70-acre site and Taxiway Delta. The Proposed Action would not generate operational waste (e.g., scrap wood, concrete, asphalt). Therefore, the Proposed Action would not result in any indirect impacts related to solid waste.

4.2.4.4 No Action Alternative

The No Action Alternative would not involve ground disturbance, introduce any new substances to the Proposed Action site, and/or generate new sources of trash; accordingly, it would not cause or contribute to hazardous materials, pollution, or solid waste impact.

The Proposed Action Alternative would implement design features described above to avoid direct adverse effects related to hazardous materials compared to the No Action Alternative. These design features would not be required under the No Action Alternative.

4.2.5 Natural Resources and Energy Supply

4.2.5.1 Regulatory Setting

Executive Order 13693, *Planning for Federal Sustainability in the Next Decade*, establishes an integrated strategy towards sustainability in the federal government and makes reduction of GHG emissions a priority for federal agencies. The Independence and Security Act (Public Law 110-140, 2007) requires federal agencies to take actions to move the United States toward greater energy independence and security, to increase the production of clean renewable fuels, to protect consumers, to increase the efficiency of products, buildings, and vehicles, to promote research on and deploy GHG capture and storage options, and to improve the energy performance of the federal government.

4.2.5.2 Analysis Methodology and Significance Threshold

FAA order 1050.1F does not establish significance thresholds for energy supply or natural resources. The Order requires the Proposed Action to be examined to identify any proposed major changes that would have a measurable effect on local supplies of energy or natural resources. The Order further states that, “For most actions, changes in energy demands or other natural resource consumption will not result in significant impacts.”

4.2.5.3 Proposed Action

Direct Impacts

During construction, fuel would be used by construction vehicles and equipment. In addition, electricity provided by San Diego Gas & Electric or diesel fuel would be required to supply power tools on-site during construction. Reclaimed water provided the Helix Water District may be used during construction to control fugitive dust and wash equipment, as available. Asphalt, lumber, and other construction materials derived from natural sources would not be used in unusually large quantities, nor volumes of energy or natural resources. Therefore, there would not be an adverse direct impact to natural resources and the energy supply resulting from the Proposed Action.

Indirect Impacts

The Proposed Action is limited to drainage improvements located within an active airfield between two active runways, connections to existing storm drains, and installation of two taxiways that would serve as separate ingress and egress connection points between the adjacent 70-acre site and Taxiway Delta. The Proposed Action would not result in an increase in operational activities at the airfield that would use energy or other natural resources. Operational use of energy or other natural resources would not change due to the Proposed Action. Therefore, the Proposed Action would not result in any indirect impacts related to natural resources and energy supply.

4.2.5.4 No Action Alternative

The No Action Alternative would not change existing conditions at the site or consume resources for construction activities; therefore, it would not result in an effect to natural resources or energy supply.

The Proposed Action Alternative would result in a temporary increase in use of energy and natural resources associated with construction (aggregate, building materials) and there would be no indirect impacts compared to the No Action Alternative. The Proposed Action Alternative impacts would not exceed available or future supplies of these resources.

4.2.6 Noise and Noise-Compatible Land Use

In accordance with FAA Order 1050.1F, the following discusses the potential for the Proposed Action to result in impacts related to noise. The Proposed Action and No Action Alternatives would not impact noise from aircraft operations, departures and arrivals, runway utilization, or runway configuration. Therefore, analysis of the affected noise environment for this EA focuses on the ambient noise conditions from construction of the Proposed Action.

4.2.6.1 Regulatory Setting

Federal regulations regarding aircraft noise have been put into place primarily by FAA including the Aviation Safety and Noise Abatement Act of 1979, Airport and Airway Improvement Act of 1982, and Airport Noise and Capacity Act of 1990. These laws and regulations provide a basis for local development of airport plans, analysis of potential impacts from airport development, and compatibility policies. As the Proposed Action Alternative and No Action Alternative would not result in any changes to aircraft operations, departures and arrivals runway utilization, or runway configuration, noise from aircraft operations would not be affected by the Proposed Action Alternative or No Action Alternative. Therefore, analysis of the affected noise environment for this EA focuses on construction noise.

4.2.6.2 Analysis Methodology and Significance Threshold

The FAA's significance threshold would be exceeded if the Proposed Action would cause an increase in noise of 1.5 decibel (dB) day-night average sound level (DNL—also recognized as the Community Noise Equivalent Level [CNEL] in the State of California) or more for a noise sensitive area that is exposed to noise at or above 65 dB DNL noise exposure level, or that would be exposed at or above the 65 dB DNL due to a 1.5 dB DNL or greater increase, when compared to the No Action Alternative for the same timeframe.

The Proposed Action site is located within the active airfield and adjacent airport property to the south of Joe Crosson Drive. In addition, the properties immediately surrounding Gillespie Field Airport are all zoned industrial. Noise exposure maps, published in the ALUCP⁴, depicting the 65 dB CNEL associated with Gillespie Field do not incorporate areas of residential, or other noise sensitive receptors.

The nearest noise sensitive receptor to the airport is an apartment complex located approximately 1,300 feet southeast of the closest Proposed Action site boundary. Between the Proposed Action site and the residential receivers, there are large industrial buildings, warehouses, a dumpster storage yard, and near constant commercial truck traffic through the business district around the airport. SR-67, a major north/south corridor, is located between the Proposed Action site and the residential receivers. According to the City of Santee's General Plan Noise Element⁵, vehicle traffic noise level in the proximity of SR-67 exceeds 70 CNEL. Due to distance, the existing noise environment, and obstructions between noise sources and the residential receptors, construction noise levels would not be discernable over the existing ambient noise environment.

4.2.6.3 Proposed Action

Direct Impacts

Short-term noise is associated with the operation of construction equipment within the Proposed Action site.

During the construction period, night work and temporary periodic runway closures may be used in part to minimize impacts to airport operations. Gillespie Field Airport has a Voluntary Noise Abatement Program which advises pilots to discontinue operations between 10:00 p.m. and 7:00 a.m., and to use the airport's crosswind Runway 17/35 as the preferred route at night. Temporary construction activities, and closure of Runways 9L-27R and 9R-27L and reroute of aircraft operations to Runway 17/35 during temporary night work are a minimal change in the noise environment, and would reduce aircraft flights over the closest residential areas. Residential receivers are located approximately 1,070 feet east of the closest project footprint boundary. The minimal temporary night work and rerouting of air traffic to Runway 17/35 would not constitute a discernable increase in noise of 1.5 dB DNL/CNEL or more in noise sensitive areas that is exposed to noise at or above 65 dB DNL/CNEL noise exposure level, or that would be exposed at or above the 65 dB DNL/CNEL due to a 1.5 dB DNL or greater increase, when compared to the No Action Alternative for the same timeframe.

During construction the following noise avoidance/reduction BMPs shall be incorporated into construction plans and construction site management practices.

1. Staging areas for the construction equipment shall be located the farthest reasonable distance from offsite receptors.
2. Electric power shall be provided to the construction site as soon as feasible to minimize the use of continuous operation of portable generators.

⁴https://www.san.org/DesktopModules/Bring2mind/DMX/Download.aspx?Command=Core_Download&EntryId=2984&language=en-US&PortalId=0&TabId=225

⁵<http://cityofsantee.ca.gov/services/development-services/planning-and-zoning-services/general-plan>

3. Stationary noise-generating devices such as generators, compressors, welders, etc. shall be positioned as far from offsite receptors as feasible.
4. All construction equipment shall have manufacturer's mufflers or better installed and in good condition.

The Proposed Action would generate temporary short-term noise associated with construction activities. However, given the location within an active airfield and lack of proximity to sensitive receptors, along with BMPs, the Proposed Action would not create an adverse direct impact.

Indirect Impacts

The Proposed Action is limited to drainage improvements located within an active airfield between two active runways, connections to existing storm drains, and installation of two taxiways that would serve as separate ingress and egress connection points between the adjacent 70-acre site and Taxiway Delta. The Proposed Action would not result in an increase of operational noise. Ongoing airport operations, including takeoffs and landings and vehicular activity, are the primary existing noise sources within the airport vicinity. The Proposed Action Alternative would not change the numbers or types of aircraft operations or equipment used at the Airport. This project will not change the existing operational noise levels in and around the airport. No long-term changes to the noise environment would result from the slope and drainage improvements. Therefore, the Proposed Action would not result in any indirect impacts related noise.

4.2.6.4 No Action Alternative

The No Action Alternative would not create or change any elements of the noise environment. Therefore, the No Action Alternative would not generate a noise impact.

The Proposed Action Alternative would generate temporary construction noise as compared to the No Action Alternative, but a noise level change would not be discernable to the receptors due to distance and obstructions, including SR-67. The Proposed Action Alternative would not result in an increase in airport operational noise compared to the No Action Alternative. No noise sensitive areas are within airports 65 dB CNEL contour levels and the temporary increase in noise levels would not put new areas in the 65 dB CNEL contours; therefore, there would be no significant noise impacts due to the construction.

4.2.7 Water Resources

As indicated in Chapter 3, the Proposed Action site is not within the 100-year floodplain or near a wild and scenic river. Therefore, the Proposed Action would have no impact on floodplains or wild and scenic rivers and do not require further analysis.

4.2.7.1 Wetlands

4.2.7.1.1 Regulatory Setting

Executive Order 11990, *Protection of Wetlands* requires federal agencies to “avoid to the extent possible the long and short term adverse impacts associated with the destruction or modification of wetlands and to avoid direct or indirect support of new construction in wetlands wherever there is a practicable alternative.” The stated purpose of this Executive Order is to “minimize the

destruction, loss or degradation of wetlands, and to preserve and enhance the natural and beneficial values of wetlands.” USDOT Order 5660.1A, *Preservation of the Nation’s Wetlands* implements the guidelines set forth in Executive Order 11990. Transportation facilities should be planned, constructed, and operated in order to assure the protection and enhancement of wetlands to the fullest extent practicable. The CWA establishes the basic structure for regulating the discharge of pollutants into Waters of the United States, including wetlands, and is administered by the USACE. Section 404 and Section 401 are the two primary sections of the CWA relating to wetland impacts and permitting. Section 404 establishes a program to regulate the discharge of dredged or fill material into Waters of the United States, including wetlands. Section 401 requires a Water Quality Certificate for a project to ensure it does not violate state or tribal water quality standards. Section 401 certifications are generally issued by the state or tribe with jurisdictional authority.

The USACE *Wetland Delineation Manual* defines wetland areas that have positive indicators for hydrophytic vegetation, wetland hydrology, and hydric soils as:

areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

The USACE typically takes jurisdiction over wetlands only when they lie within or adjacent to navigable waters, or tributaries of such waters where those tributaries bear an ordinary high water mark. An ordinary high water mark is defined as:

that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in soil character, destruction of terrestrial vegetation, presence of litter or debris, or other appropriate means that consider the characteristics of the surrounding areas.

The RWQCB administers the California Porter-Cologne Water Quality Control Act and are responsible for issuance of state water quality certification consistent with the requirements of Section 401 of the CWA. In addition, the California Department of Fish and Wildlife regulates alterations to the flow, bed, channel, or bank of rivers, streams, and lakes pursuant to Sections 1600 et seq. of the California Fish and Game Code.

4.2.7.1.2 Analysis Methodology and Significance Threshold

A biological survey was conducted at the 26-acre Proposed Action site and the temporary construction staging area on May 25, 2016. The biological survey included a wetlands inventory, the results of which were documented in the Jurisdictional Delineation Report prepared for the Proposed Action (AMEC 2016b).

The FAA’s significance threshold would be exceeded if the Proposed Action would:

- Adversely affect a wetland’s function to protect the quality or quantity of municipal water supplies, including surface waters and sole source and other aquifers;

- Substantially alter the hydrology needed to sustain the affected wetland system's values and functions or those of a wetland to which it is connected;
- Substantially reduce the affected wetland's ability to retain floodwaters or storm runoff, thereby threatening public health, safety or welfare (the term welfare includes cultural, recreational, and scientific resources or property important to the public);
- Adversely affect the maintenance of natural systems supporting wildlife and fish habitat or economically important timber, food, or fiber resources of the affected or surrounding wetlands;
- Promote development of secondary activities or services that would cause the circumstances listed above to occur; or
- Be inconsistent with applicable state wetland strategies.

4.2.7.1.3 Proposed Action

Direct Impacts

As noted in Section 3.16, an existing man-made and regularly maintained earthen flood control channel is located within the Proposed Action site. The channel conveys surface water runoff from runway and taxiway surfaces as well as upstream sources. As a component of the Proposed Action, the channel would be re-graded to comply with FAA design standards and moved outside of the ROFA. Along the re-graded earthen channel, grate inlets will be installed at the channel's bottom connecting to the proposed underground conveyance system. Conversion of pavement for the installation of the proposed two taxiways would contribute a minimal amount of additional runoff to the existing storm drain system.

The field investigation confirmed the Proposed Action site lacks hydric soil indicators necessary to be classified as a wetland. Therefore, no wetlands exist within the Proposed Action site. However, the Proposed Action contains approximately 0.10-acre of non-wetland Waters of the U.S. which would be directly impacted by replacing the channel's existing earthen bottom with grate inlets and installation of 42-inch RCP.

As described above, installation of the underground conveyance structure would require conversion of the existing drainage ditch designated as a non-wetland Waters of the U.S. Grading and trenching activities would occur within these areas as temporary impacts during construction.

As discussed in the alternatives analysis presented in Chapter 2 of this EA, there is no other practicable alternative that could further reduce impacts to wetlands. The Proposed Action Alternative is the only alternative that achieves the purpose and need of the project as defined in Chapter 1, and the Proposed Action includes all practicable measures to minimize impacts to wetlands.

Indirect Impacts

The project is limited to drainage improvements located within an active airfield between two active runways, connections to existing storm drains, and installation of two taxiways that would serve as separate ingress and egress connection points between the adjacent 70-acre site and Taxiway Delta. Construction impacts would be confined to the Proposed Action site, and the

Proposed Action would not result in an increase in operational activities that could impact wetlands or non-wetland Waters of the U.S. Therefore, the Proposed Action would not result in any indirect impacts to wetlands or non-wetland Waters of the U.S. outside the project area.

4.2.7.1.4 Mitigation Measures

The Proposed Action involves an alteration to an existing stormwater facility that contains Waters of the U.S. and Waters of the State. A pre-construction notification permit application will be submitted and evaluated by the USACE and RWQCB under Sections 404 and 401 of the CWA prior to construction. In coordination with the USACE, the County has requested a Nationwide Permit (NWP) 12 verification for the proposed construction activities. NWP 12 has undergone NEPA review at a national level, and no further NEPA review would be necessary for USACE to issue the NWP 12 verification determination if the project is consistent with the terms and conditions of the permit. The RWQCB issued a 2017 General Water Quality Certification Order pursuant to Section 401 of the CWA to conditionally certify projects approved by USACE under NWP 12 in accordance with notification requirements. As the Proposed Action would result in 0.10-acre of impact, the USACE District Engineer may determine on a case-by-case basis whether compensatory mitigation is required to ensure that the activity results in only minimal adverse environmental effects. As such, mitigation will be analyzed as part of the permit application and verification process. If mitigation is required by jurisdictional agencies, measures will be implemented as special conditions of the verification.

4.2.7.1.5 No Action Alternative

Under the No Action Alternative, there would be no change to the existing site conditions. Therefore, the No Action Alternative would not result in adverse effects to riparian, aquatic, or wetland habitat. And no impacts to jurisdictional resources would occur.

The Proposed Action Alternative would have permanent impacts to 0.10 acre of non-wetland Waters of the U.S. compared to the No Action Alternative. Adherence to the steps described in Section 4.2.7.1.4 would ensure that impacts to non-wetland Waters of the U.S. and State would be in conformance with CWA requirements.

4.2.7.2 Surface Waters and Groundwater

An adverse effect to surface or ground water quality would occur if there is a potential for exceeding water quality standards, if water quality problems are identified that cannot be avoided or satisfactorily mitigated, or if difficulties in obtaining required permits are anticipated.

4.2.7.2.1 Regulatory Setting

The Federal Water Pollution Control Act, as amended (commonly referred to as the Clean Water Act or CWA), provides the authority to establish water quality standards, control discharges, and regulate other issues concerning water quality. In accordance with the CWA, the EPA promulgated regulations for permitting storm water discharges, including those from construction activities, through the National Pollutant Discharge Elimination System (NPDES) program. The NPDES program for construction applies to activities that disturb an area of one acre or more. The County is currently regulated by Order No. R9-2013-0001 (as amended by

Order Nos. R9-2015-0001 and R9-2015-0100) and the Co-Permittees⁶ within the County of San Diego were directed to enforce new storm water discharge requirements. Additionally, construction BMPs and associated plans must conform with the State of California's General Construction Permit. BMPs must be used to meet the NPDES permit requirements for storm water treatment. The main objective is to reduce runoff pollutants from urbanized areas discharging into the San Diego River.

The State Water Resources Control Board (SWRCB) develops statewide policy and regulations for water quality control. The agency with local jurisdiction over water quality at the Proposed Action site is the RWQCB. The RWQCB has adopted the Basin Plan, which contains specific objectives for the San Diego Hydrologic Unit that encompasses the Proposed Action site. The Basin Plan includes mandates to comply with NPDES requirements and use of BMPs.

4.2.7.2.2 Analysis Methodology and Significance Threshold

The FAA's significance threshold for surface waters would be exceeded if the Proposed Action would:

- Exceed water quality standards established by federal, state, local, and tribal regulatory agencies; or
- Contaminate public drinking water supply such that public health may be adversely affected.

In addition to the threshold above, Exhibit 4-1 of FAA Order 1050.1F provides additional factors to consider when evaluating the context and intensity of potential environmental impacts for surface waters. Factors to consider that may be applicable to surface waters include, but are not limited to, situations in which the Proposed Action or alternative(s) would have the potential to:

- Adversely affect natural and beneficial water resource values to a degree that substantially diminishes or destroys such values;
- Adversely affect surface waters such that the beneficial uses and values of such waters are appreciably diminished or can no longer be maintained and such impairment cannot be avoided or satisfactorily mitigated; or
- Present difficulties based on water quality impacts when obtaining a permit or authorization.

The FAA's significance threshold for groundwater would be exceeded if the Proposed Action would:

- Exceed groundwater quality standards established by federal, state, local, and tribal regulatory agencies; or
- Contaminate an aquifer used for public water supply such that public health may be adversely affected.

In addition to the threshold above, Exhibit 4-1 of FAA Order 1050.1F provides additional factors to consider when evaluating the context and intensity of potential environmental impacts for

⁶ Co-Permittees are defined by R9-2013-0001, as amended, including but not limited to various county and city municipalities throughout San Diego, Orange, and Riverside counties.

groundwater. Factors to consider that may be applicable to groundwater include, but are not limited to, situations in which the Proposed Action or alternative(s) would have the potential to:

- Adversely affect natural and beneficial groundwater values to a degree that substantially diminishes or destroys such values;
- Adversely affect groundwater quantities such that the beneficial uses and values of such groundwater are appreciably diminished or can no longer be maintained and such impairment cannot be avoided or satisfactorily mitigated; or
- Present difficulties based on water quality impacts when obtaining a permit or authorization.

4.2.7.2.3 Proposed Action

Direct Impacts

Construction of the Proposed Action would comply with NPDES permit requirements, including the preparation of and adherence to a SWPPP during construction. Construction-related water quality and (storm water) pollution controls would be in conformance with the Construction General Permit that is issued by the SWRCB under Order No. 2009-0009-DWQ (as amended by 2010-0014-DWQ and 2012-006-DWQ). Conformance with Order No. 2009-0009-DWQ is required for the development of applicable sites exceeding one acre. Specific requirements for the Proposed Action under this permit would be determined during SWPPP development, after completion of project plans and application submittal to the SWRCB. The SWPPP shall identify site-specific BMPs to be employed during and post-construction, an implementation schedule, and a monitoring program and reporting requirements to reduce pollutants such as oil and grease, heavy metals, sediments, and trash and debris. Based on compliance with the Construction General Permit and its associated requirements, project construction would not cause an adverse effect with regard to water quality or storm water pollution.

Indirect Impacts

With regard to post-construction water quality, the Proposed Action would neither increase the peak discharge nor degrade the quality of storm water runoff discharging from the site since the site would primarily remain undeveloped. The Proposed Action includes installation of grate inlets that daylight along the swale's low-flow that will quickly capture storm water flows and prevent ponding on aircraft movement surfaces. Captured runoff will continue to be dispersed from runway surfaces to the adjacent pervious drainage channels to allow for percolation. Increased runoff generated by impervious surfaces associated with the proposed taxiways would be minimal, and the proposed drainage improvement has capacity to accommodate these flows.

The Proposed Action would improve site drainage and would not cause an operational increase in pollutants that could affect water quality. Therefore, the Proposed Action would not result in any indirect impacts related to water quality.

4.2.7.2.4 No Action Alternative

Under the No Action Alternative, there would be no change to the existing drainage patterns or quality of storm water runoff traversing or originating on the Proposed Action site. Therefore, the

No Action Alternative would not result in adverse effects to groundwater or surface water quality.

The Proposed Action Alternative would improve site drainage compared to the No Action Alternative and would not cause an operational increase in pollutants that could affect water quality.

4.3 Cumulative Effects

Per Section 4-2.d(3) of FAA Order 1050.1F, an EA must discuss the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions, whether federal or non-federal. Analysis of the cumulative impact of the Proposed Action Alternative, the No Action Alternative, and the consequences of subsequent related actions are required to determine the significance of potential cumulative impacts on the environment. Cumulative impacts can result from individually minor, but collectively significant, actions taking place over a period of time. Cumulative impact analysis considers connected actions, projects related and dependent upon the completion of the Proposed Action. It also considers similar actions or projects having a common geography or timing that provide a basis for considering their impact, together with impacts related to the Proposed Action or the No Action Alternative. For this analysis, cumulative projects are those that will occur within a one-mile radius of the Proposed Action Alternative site.

For this analysis, past actions are those known to have occurred within the five years prior to the Proposed Action Alternative implementation. Present actions are those that are ongoing and will continue during the Proposed Action Alternative construction. Reasonably foreseeable actions are those that have: (1) federal, state, or local approval, permits, or funding for implementation; or (2) are programmed into the five-year Airport District Capital Improvement Program. A list of the projects considered in the cumulative impact analysis is presented in Table 8. The locations of these projects are presented in Figure 8.

The significance of cumulative impacts should be determined by evaluating the Proposed Action or the No Action Alternative combined with the impacts of other projects to determine the significance of the impact. Specific significant thresholds are not established for cumulative impacts; however, the cumulative impact should not exceed the significant threshold established in FAA Order 1050.1F for the affected resource.

Table 8. Cumulative Projects

	Project Name	Project Status	Description
1	Village Run Homes LLC	In progress. Timing of implementation is unknown.	Residential Development
2	Michael Grant	In progress. Timing of implementation is unknown.	Residential Development
3	Circle Air Hangers	In progress. Timing of implementation is unknown.	Construction of three airplane hangars and offices at Gillespie Field.
4	Dentt Industries	Under Construction	112,000-square-foot industrial complex.
5	MTS Bus Maintenance Facility	Under Construction	Expansion of East County Bus Facility to improve support facilities and offices.
6	Fox Racing Shox	Constructed	Tenant improvement for new manufacturing production line.
7	Burning Beard Brewing	Constructed	Tenant improvement for new brewery and tasting room.
8	Hampton Inn Commercial Development	Under Construction	96-room hotel and approximately 15,000 square feet of commercial retail space including a drive-through.
9	New Industry Building	Approved, but not yet constructed.	16,000 square-foot industrial building.
10	Cajon Air Center	Phase I completed. Phases 3 and 4 pending FAA authorizations.	Infrastructure improvements within the existing airport limits.
11	KSEE_181206_54 Mission Bay Departure Amended Procedure Request	Pending FAA review.	Aircraft flight procedure change to MISSION BAY ONE departure to preclude early southbound turns.

4.3.1 Proposed Action

It has been determined through the analysis contained in Chapters 3 and 4 that the following resources are either not present at the Proposed Action site or will not be impacted by the Proposed Action Alternative or No Action Alternative. Therefore, no project specific or cumulative impact will occur to these resources: climate, coastal resources; Department of Transportation Act, Section 4(f); farmlands; historical, architectural, archaeological, and cultural resources; land use; noise and natural resources and energy supply; noise-compatible land use; socioeconomic, environmental justice, and children's environmental health and safety risks; and visual effects.

Resource issues that are appropriate for analysis under a cumulative impact assessment are addressed below and include potential impacts to air quality, biological resources, hazardous

materials, solid waste, and pollution prevention; and water resources. These categories were identified for cumulative impact analysis because of the potential for impacts related to the Proposed Action.

Air Quality: Implementation of the Proposed Action would be consistent with the SIP for criteria air pollutants and, as a result, would not contribute to an inability of the SDAB to be brought into compliance with NAAQS or California Ambient Air Quality Standards. Due to the temporary nature of construction emissions, regional construction emissions from the Proposed Action would not result in an adverse cumulative effect. While other known or foreseeable actions could occur during the same timeframe as the Proposed Action, implementation of fugitive dust control measures during construction of cumulative projects listed in Table 8 would ensure that all PM emissions from proposed construction and operational activities within the SDAB project region, in combination with any reasonably foreseeable future emission source, would not produce adverse cumulative effects.

Biological Resources (Migratory Birds): The Proposed Action identifies low potential for nesting birds to use the site for foraging and/or nesting habitat under the MBTA. Implementation of avoidance and minimization measures described in Section 4.2.2 above would avoid impacts to nesting birds. Other cumulative projects would also be required to comply with the MBTA. Cumulative projects listed in Table 8 would also be required to implement preconstruction nesting bird surveys and other protective measures prior to development, as necessary, to avoid construction during the nesting season and/or avoid impacts to migratory bird nests. Therefore, compliance by the Proposed Action and cumulative projects listed in Table 8 with appropriate federal, state, local regulations, and implementation of avoidance and minimization measures as necessary, would prevent cumulative impacts.

Climate: Post-construction, the Proposed Action would not change or contribute to GHG emissions. Construction emissions would be less than *de minimus* levels for all criteria pollutants, and given the related uncertainties involving the assessment of such emissions regionally and globally, the incremental contribution from construction of the Proposed Action on climate change/greenhouse gases cannot be adequately assessed given the current state of the science and assessment methodology.⁷

Hazardous Materials, Solid Waste, and Pollution Prevention: While other known or foreseeable actions could occur during the same timeframe as the Proposed Action, the Airport Sponsor would: implement project design features; comply with all federal, state, and local hazardous materials regulatory requirements; and implement safety precautions to reduce the risk of accidental releases. Grading or excavation on the Proposed Action site also has the potential to encounter contaminated soil and groundwater; however, project design features identified in Section 4.2.4 would put a plan into place in order to address and avoid impacts should the project encounter hazardous materials. Cumulative projects listed in Table 8 would also be required to implement appropriate design features and comply with applicable federal, state, and local hazardous materials regulatory requirements to avoid and minimize impacts. Therefore, the Proposed Action in conjunction with other known or foreseeable actions would not result in a cumulative impact involving hazardous materials, pollution prevention, or solid waste.

⁷NEPA Regulations, CEQ, 40 CFR Section 1502.22, *Incomplete or Unavailable Information*.

Natural Resources and Energy Supply: Construction of the Proposed Action and cumulative projects listed in Table 8 would utilize natural resources and energy such as fuel, electricity, water, asphalt, lumber, and other construction materials derived from natural sources. However, construction of the Proposed Action would not use unusually large quantities, nor volumes of energy or natural resources, and the Proposed Action would not increase operational use of energy or other natural resources at the airfield. Due to this relatively small and temporary use of energy or other natural resources, the Proposed Action, in combination with any reasonably foreseeable future projects, would not result in adverse cumulative effects.

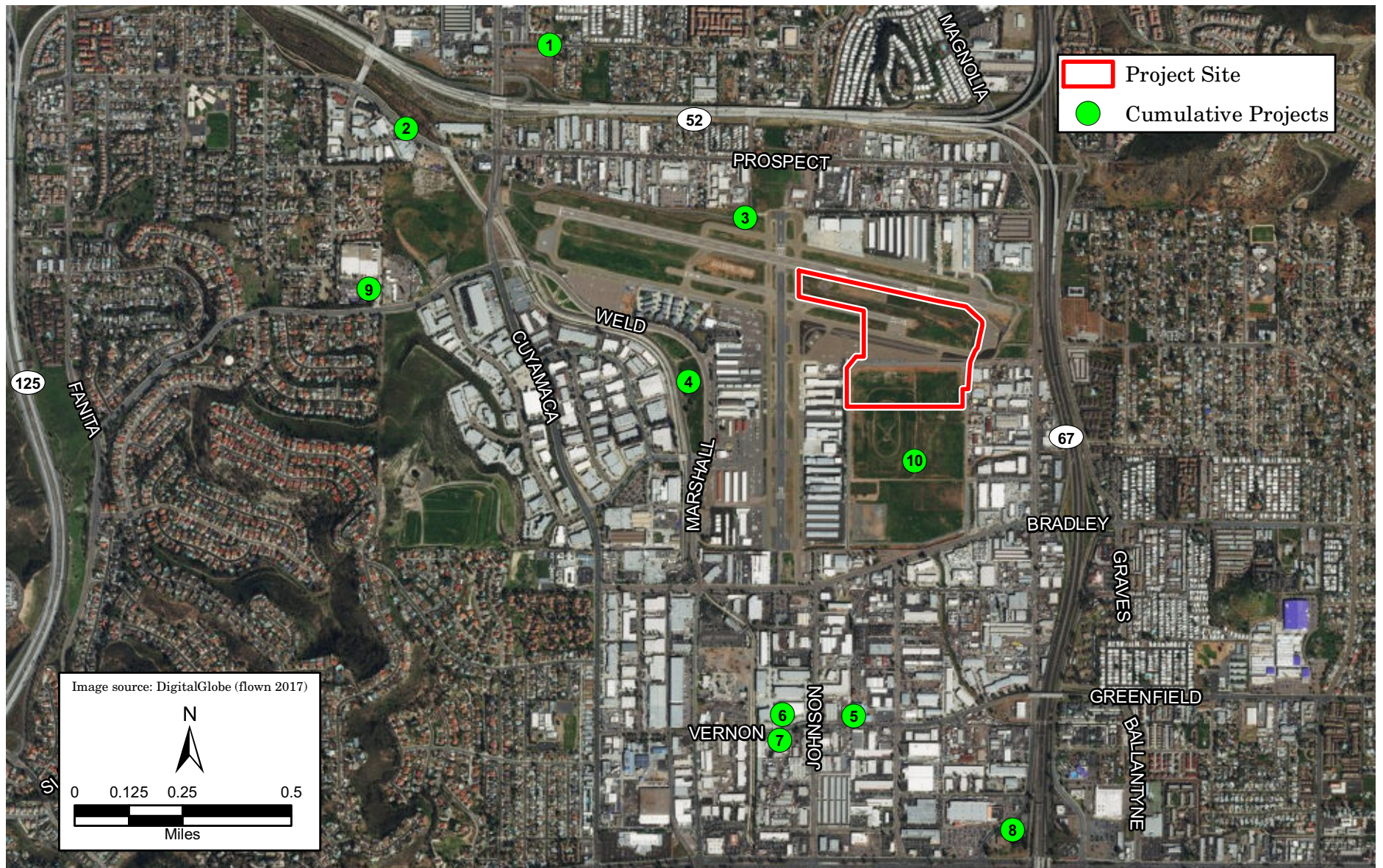
Noise: Section 4.2.6 of the EA determined that construction of the Proposed Action would not result in any noise impacts. Due to the varied schedules for construction of cumulative projects listed in Table 8 and their distances from the Proposed Action site, it is unlikely construction activities would overlap with or result in cumulative increases in noise in conjunction with the Proposed Action, thereby avoiding significant cumulative noise impacts. The Proposed Action would not increase operational noise. Therefore, the Proposed Action, in combination with any reasonably foreseeable future projects, would not result in adverse cumulative effects.

Water Resources (Wetlands): As described above in Section 4.2.7.1 Wetlands, the Proposed Action would result in permanent impacts, and no temporary impacts related to construction would occur. Due to impacts to Waters of the U.S., the Proposed Action would require review and consultation from the USACE under Section 404 of the Clean Water Act. Mitigation will be analyzed as part of the consultation process. If mitigation is required, measures will be implemented as conditions of the project. Cumulative projects listed in Table 8 would also require review and consultation from the USACE and implementation of avoidance, minimization, and mitigation measures as necessary to comply with applicable sections of the Clean Water Act. Compliance and implementation of avoidance, minimization, and mitigation measures as necessary by the Proposed Action and cumulative projects listed in Table 8 would minimize cumulative impacts on wetlands.

4.3.2 No Action Alternative

The No Action Alternative would not result in effects on the environment; therefore, it would not be combined or considered in conjunction with other known or foreseeable actions resulting in cumulative effects on the resources addressed in this EA.

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Cumulative Projects
GILLESPIE FIELD - ROFA/RSA PROJECT
ENVIRONMENTAL ASSESSMENT
Figure 8

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5.0 AGENCY AND PUBLIC INVOLVEMENT

5.1 Agency Involvement

Appendix A to this EA includes public notices and agency correspondence associated with the Proposed Action and this EA.

State Historic Preservation Officer

On December 7, 2018, the FAA initiated Section 106 Consultation with the State of California, SHPO in accordance with the National Historic Preservation Act. SHPO concurred with the FAA's determination on February 5, 2019. Copies of the correspondence between SHPO and FAA are included in Appendix A.

Tribal Consultations

On November 15, 2016, the Native American Heritage Commission submitted to FAA a list of tribes culturally affiliated to the Proposed Action site. Consultation letters dated February 16, 2017 were sent to thirteen federally recognized tribes and one non-recognized tribe requesting further information regarding the Proposed Action site. Appendix A to this EA includes the letter from the Native American Heritage Commission to FAA, the list of the tribal representatives, a sample of the letter sent to the thirteen federally recognized tribes, and a letter sent to the Kwaaymii Laguna Band of Mission Indians. No tribes requested consultation or provided information regarding tribal cultural resources.

5.2 Public Involvement

This Draft EA was distributed for public review and comment for 30 days, from April 15, 2019 through May 15, 2019. A Notice of Availability (NOA) was published in the San Diego Union Tribune on April 15, 2019. No comments were received during this public review period.

The County will prepare a Final EA for transmittal to FAA for review and approval. The FAA, based on the information contained in the EA and comments submitted, will make a decision on the Proposed Action and issue a finding. The Final EA and FAA's finding will be available to the public.

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6.0 LIST OF PREPARERS

6.1 U.S. Department of Transportation, Federal Aviation Administration

Western-Pacific Region Airports Division
Los Angeles Airports District Office
777 South Aviation Boulevard
El Segundo, California 90245

Gail Campos – Environmental Protection Specialist, FAA Los Angeles Airports District Office: M.S. Biology, B.S. Biology, B.S. Recreation Management. 24 years of experience. Responsible for the FAA review of the environmental assessment; coordination with the California State Historic Preservation Office, and the U.S. Fish and Wildlife Service.

6.2 County of San Diego, Department of Public Works

Environmental Services Unit
5510 Overland Avenue, Suite 410
San Diego, CA 92123

Cynthia Curtis – Environmental Planning Manager: B.A. Environmental Studies; M.S. Conservation Biology. 16 years experience. Responsible for County Airports CEQA/NEPA impacts analysis.

Jeff Kashak – Environmental Planner III: B.S. Environmental Sciences – Social Science. 10 years experience. Responsible for County Airports CEQA/NEPA impacts analysis.

6.3 Consultants

The EA incorporates information from a number of technical reports, as listed below.

- **Amec Foster Wheeler Environment & Infrastructure, Inc.:** biological resources, jurisdictional delineation, preparation of EA
- **ICF International:** cultural resources
- **RECON Environmental:** air quality, greenhouse gas emissions
- **Rincon Consultants, Inc.:** hazardous materials

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7.0 REFERENCES

Amec Foster Wheeler Environment & Infrastructure, Inc. (AMEC)

2016a Biological Letter Report for the Gillespie Field ROFA/RSA Improvement Project at Gillespie Field in El Cajon, San Diego County, California. June 24.

2016b Jurisdictional Delineation Report of Waters of the U.S. and State for the Gillespie Field ROFA/RSA Improvement Project at Gillespie Field in El Cajon, San Diego County, California. June 24.

California Air Pollution Control Officers Association (CAPCOA)

2017 California Emissions Estimator model (CalEEMod). User's Guide Version 2016.3.2. October.

California Air Resources Board

2019 California Air Quality Data Statistics. California Air Resources Board. Available at <http://www.arb.ca.gov/adam/welcome.html>. Top 4 Summary and Hourly Listing. Accessed March 28, 2019.

California Regional Water Quality Control Board

1994 Water Quality Control Plan for the San Diego Basin (9). (With Amendments Effective on or Before May 17, 2016). Available at https://www.waterboards.ca.gov/sandiego/water_issues/programs/basin_plan/.

Federal Aviation Administration (FAA)

2015 Aviation Emissions and Air Quality Handbook Version 3 Update 1, January. Available at https://www.faa.gov/regulations_policies/policy_guidance/envir_policy/airquality_handbook/media/Air_Quality_Handbook_Appendices.pdf.

Federal Highway Administration (FHWA)

2006 Roadway Construction Noise Model User's Guide. FHWA-HEP-05-054, SOT-VNTSC-FHWA-05-01. Final Report. January.

ICF International

2016 Cultural Resources Inventory Report for the Cajon Air Center Phase II: North RSA Drainage Improvement, El Cajon, San Diego County, California. June.

Kimley-Horn and Associates, Inc.

2009 Preliminary Engineering Report, Cajon Air Center at Gillespie. August 31.

RECON Environmental, Inc. (RECON)

2019a Air Quality Analysis for the ROFA/RSA Drainage Project (RECON Number 8453). April.

2019b Greenhouse Gas Analysis for the ROFA/RSA Drainage Project (RECON Number 8453). April.

Rincon Consultants, Inc. (Rincon)

2011 Environmental Due Diligence Audit Phase I Environmental Site Assessment. May 26.

San Diego County Regional Airport Authority (SDCRAA)

2010 Airport Land Use Compatibility Plan: Gillespie Field. January 25. Amended December 20.

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2010 Census of Population and Housing.

U.S. Environmental Protection Agency (EPA)

2018 Green Book: Nonattainment Areas for Criteria Pollutants. Available at <https://www.epa.gov/green-book>. Accessed July 13, 2018.

2019 NAAQS Table. Available at <https://www.epa.gov/criteria-air-pollutants/naaqs-table>. Accessed April 11, 2019.

**GILLESPIE FIELD - RUNWAY OBJECT FREE AREA / RUNWAY SAFETY AREA
(ROFA/RSA) DRAINAGE IMPROVEMENT PROJECT**

DRAFT ENVIRONMENTAL ASSESSMENT

APPENDIX A

PUBLIC INVOLVEMENT AND AGENCY/TRIBAL CONSULTATIONS

TRIBAL CONSULTATIONS

NATIVE AMERICAN HERITAGE COMMISSION

1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691
(916) 373-3710
Fax (916) 373-5471



November 15, 2016

Gail Campos
Federal Aviation Administration

Sent by E-mail: gail.campos@faa.gov

RE: Proposed Gillespie Field Runway Object Free Area/ Runway Safety Area Drainage
Improvement Project, City of El Cajon; El Cajon USGS Quadrangle, San Diego County,
California

Dear Ms. Campos:

A record search of the Native American Heritage Commission (NAHC) *Sacred Lands File* was completed for the area of potential project effect (APE) referenced above with negative results however the area is sensitive for potential tribal cultural resources. Please note that the absence of specific site information in the *Sacred Lands File* does not indicate the absence of Native American cultural resources in any APE.

Attached is a list of tribes culturally affiliated to the project area. I suggest you contact all of the listed Tribes. If they cannot supply information, they might recommend others with specific knowledge. The list should provide a starting place to locate areas of potential adverse impact within the APE. By contacting all those on the list, your organization will be better able to respond to claims of failure to consult. If a response has not been received within two weeks of notification, the NAHC requests that you follow-up with a telephone call to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from any of these individuals or groups, please notify me. With your assistance we are able to assure that our lists contain current information. If you have any questions or need additional information, please contact via email: gayle.totton@nahc.ca.gov.

Sincerely,

Gayle Totton, M.A., PhD.
Associate Governmental Program Analyst

**Native American Contact List
San Diego County
November 15, 2016**

Barona Band of Mission Indians
Clifford LaChappa, Chairperson
1095 Barona Road Diegueno
Lakeside , CA 92040
cloyd@barona-nsn.gov
(619) 443-6612

(619) 443-0681

Ewilaapaay Band of Kumeyaay Indians
Robert Pinto Sr., Chairperson
4054 Willows Road Diegueno/Kumeyaay
Alpine , CA 91901
(619) 445-6315

(619) 445-9126 Fax

La Posta Band of Diegueño Mission Indians
Gwendolyn Parada, Chairperson
8 Crestwood Road Diegueno/Kumeyaay
Boulevard , CA 91905
LP13boots@aol.com
(619) 478-2113
(619) 478-2125 Fax

Manzanita Band of Kumeyaay Nation
Leroy J. Elliott, Chairperson
P.O. Box 1302 Diegueno/Kumeyaay
Boulevard , CA 91905
(619) 766-4930

(619) 766-4957 Fax

San Pasqual Band of Diegueño Mission Indians
Allen E. Lawson, Chairperson
P.O. Box 365 Diegueno
Valley Center , CA 92082
allenl@sanpasqualtribe.org
(760) 749-3200

(760) 749-3876 Fax

Sycuan Band of the Kumeyaay Nation
Cody J. Martinez, Chairperson
1 Kwaaypaay Court Diegueno/Kumeyaay
El Cajon , CA 92019
ssilva@sycuan-nsn.gov
(619) 445-2613

(619) 445-1927 Fax

Viejas Band of Mission Indians of the Viejas Reservation
Robert J. Welch, Jr., Chairperson
1 Viejas Grade Road Diegueno/Kumeyaay
Alpine , CA 91901
jhagen@viejas-nsn.gov
(619) 445-3810

(619) 445-5337 Fax

Campo Band of Diegueño Mission Indians
Ralph Goff, Chairperson
36190 Church Road, Suite 1 Diegueno/Kumeyaay
Campo , CA 91906
rgoff@campo-nsn.gov
(619) 478-9046

(619) 478-5818 Fax

Jamul Indian Village of California
Erica Pinto, Chairperson
P.O. Box 612 Diegueno/Kumeyaay
Jamul , CA 91935
(619) 669-4785

(619) 669-4817

Mesa Grande Band of Diegueño Mission Indians
Virgil Oyo, Chairperson
P.O. Box 270 Diegueno
Santa Ysabel , CA 92070
mesagrandeband@msn.com
(760) 782-3818

(760) 782-9092 Fax

This list is current only as of the date of this document and is based on the information available to the Commission on the date it was produced.

Distribution of this list does not relieve any person or agency of statutory responsibility as defined in Public Resources Code Sections 21080.3.1 Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed Gillespie Field Runway Object Free Area/ Runway Safety Area Drainage Improvement Project; City of El Cajon, San Diego County, California.

**Native American Contact List
San Diego County
November 15, 2016**

Kwaaymii Laguna Band of Mission Indians
Carmen Lucas

P.O. Box 775 Diegueno-Kwaaymii
Pine Valley , CA 91962 Kumeyaay
(619) 709-4207

Ewiiapaayp Band of Kumeyaay Indians
Michael Garcia, Vice Chairperson

4054 Willows Road Diegueno/Kumeyaay
Alpine , CA 91901
michaelg@leaningrock.net
(619) 445-6315

(619) 445-9126 Fax

Inaja Band of Diegueño Mission Indians

Rebecca Osuna, Chairman
2005 S. Escondido Blvd. Diegueno
Escondido , CA 92025
(760) 737-7628

(760) 747-8568 Fax

Iipay Nation of Santa Ysabel

Clint Linton, Director of Cultural Resources
P.O. Box 507 Diegueno/Kumeyaay
Santa Ysabel , CA 92070
cjlinton73@aol.com
(760) 803-5694

Soboba Band of Luiseno Indians

Joseph Ontiveros, Cultural Resource Department
P.O. BOX 487 Luiseno
San Jacinto , CA 92581 Cahuilla
jontiveros@soboba-rnsn.gov
(951) 663-5279
(951) 654-5544, ext 4137
(951) 654-4198 Fax

Iipay Nation of Santa Ysabel

Virgil Perez, Chairperson
P.O. Box 130 Diegueno/Kumeyaay
Santa Ysabel , CA 92070
(760) 765-0845

(760) 765-0320 Fax

This list is current only as of the date of this document and is based on the information available to the Commission on the date it was produced.

Distribution of this list does not relieve any person or agency of statutory responsibility as defined in Public Resources Code Sections 21080.3.1 Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed Gillespie Field Runway Object Free Area/ Runway Safety Area Drainage Improvement Project; City of El Cajon, San Diego County, California.

Federally Recognized Tribes

Clifford LaChappa
Chairperson
Barona Band of Mission Indians
1095 Barona Road
Lakeside, California 92040

Gwendolyn Parada
Chairperson
La Posta Band of Diegueno Mission Indians
8 ½ Crestwood Road
Boulevard, California 91905

Ralph Goff
Chairperson
Campo Band of Mission Indians
36190 Church Road, Suite 1
Campo, California 91906

Leroy J. Elliott
Chairperson
Manzanita Band of Kumeyaay Nation
P.O. Box 1302
Boulevard, California 91905

Robert Pinto
Chairperson
Ewiiapaayp Band of Kumeyaay Indians
4054 Willows Road
Alpine, California 91901

Virgil Oyos
Chairperson
Mesa Grande Band of Diegueno Mission
Indians
P.O. Box 270
Santa Ysabel, California 92070

Virgil Perez
Chairperson
Iipay Nation of Santa Ysabel
P.O. Box 130
Santa Ysabel, California 92070

Allen E. Lawson
Chairperson
San Pasqual Band of Mission Indians
P.O. Box 365
Valley Center, California 92082

Rebecca Osuna
Chairman
Inaja Band of Diegueno Mission Indians
2005 S. Escondido Blvd.
Escondido, California 92025

Joseph Ontiveros
Cultural Resource Department
Soboba Band of Luiseno Indians
P.O. Box 487
San Jacinto, California 92581

Erica Pinto
Chairperson
Jamul Indian Village of Californis
P.O. Box 612
Jamul, California 91935

Cody J. Martinez
Chairperson
Sycuan Band of Kumeyaay Nation
1 Kwaaypaay Court
El Cajon, California 92019

Robert J. Welch, Jr.
Chairperson
Viejas Band of Mission Indians of the
Viejas Reservation
1 Viejas Grade Road
Alpine, California 91901

Non Federal Tribes

Carmen Lucas
Kwaaymil Laguna Band of Mission Indians
P.O. Box 775
Pine Valley, California 91962
Arroyo Grande, California 93420



U.S Department
of Transportation

**Federal Aviation
Administration**

Western-Pacific Region
Airports Division

P.O. Box 92007
Los Angeles, CA 90009-2007

FEB 16 2017

Allen E. Lawson
Chairperson
San Pasqual Band of Diegueno Mission Indians
P.O. Box 365
Valley Center, California 92082

Proposed Runway Object Free Area/Runway Safety Area Drainage Improvement
Gillespie Field Airport
El Cajon, San Diego County, California,
Government-to-Government Consultation Initiation

Dear Mr. Lawson:

Government-to-Government Consultation Initiation

The Federal Aviation Administration (FAA) and the County of San Diego (County) are preparing an Environmental Assessment (EA) evaluating the potential impacts resulting from the proposed Runway Object Free Area/Runway Safety Area Drainage Improvement at Gillespie Field Airport. The County is the sponsor for Gillespie Field Airport. The FAA is the lead Federal Agency for Government-to-Government consultation for the proposed project. Tribal sovereignty, culture, traditional values, and customs will be respected at all times during the consultation process.

Purpose of Government-to-Government Consultation

The primary purpose of Government-to-Government consultation, as described in Federal Executive Order 13175, *Consultation and Coordination with Indian Tribal Governments*, and FAA Order 1210.20, *American Indian and Alaska Native Tribal Consultation Policy and Procedures*, is to ensure that Federally Recognized Tribes are given the opportunity to provide meaningful and timely input regarding proposed FAA actions that uniquely or significantly affect the Tribes. I am the FAA Official with the responsibility of coordinating Government-to-Government consultations with Tribes under FAA Order 1210.20.

Consultation Initiation

With this letter, the FAA is seeking input on concerns that uniquely or significantly affect your Tribe related to proposed airport improvements. Early identification of Tribal concerns, or known properties of traditional, religious, and cultural importance, will allow the FAA to consider ways to avoid or minimize potential impacts to Tribal resources as project planning and alternatives are developed and refined. We are available to discuss the details of the proposed project with you.

Project Information

The proposed undertaking consists of installing approximately 2,300 feet of 42-inch reinforced concrete pipe (RCP) in the location of the existing earthen swale used for stormwater conveyance. The RCP will connect to existing storm drains to the northwest at the intersection of runway 9L-27R and taxiway B and on the southeast end at the intersection of taxiways D and D8 (the infield area north of the intersection of Joe Crosson Drive and Wing Avenue). The RCP would be covered leaving grated openings to capture stormwater flows. The area would be graded to comply with FAA's engineering design standards for the runway object free area (ROFA)(1.5 – 5 percent grade) and runway safety area (RSA) (0 – 3 percent grade).

This undertaking also includes the installation of an additional 800 feet of RCP from approximately the center of the previous mentioned RCP south connecting to an underground detention basin in the proposed El Cajon Development area just south of Joe Crosson Drive. The installation of this RCP would require trenching under runway 9R-27L, taxiway D and an apron to connect to the detention basin. Enclosed is an exhibit that shows the Area of Potential Effect for the proposed undertaking.

Confidentiality

We understand that you may have concerns about the confidentiality of information on areas or resources of traditional, religious, and cultural importance to your Tribe. We are available to discuss these concerns and develop procedures to ensure the confidentiality of such information is maintained.

FAA Contact Information

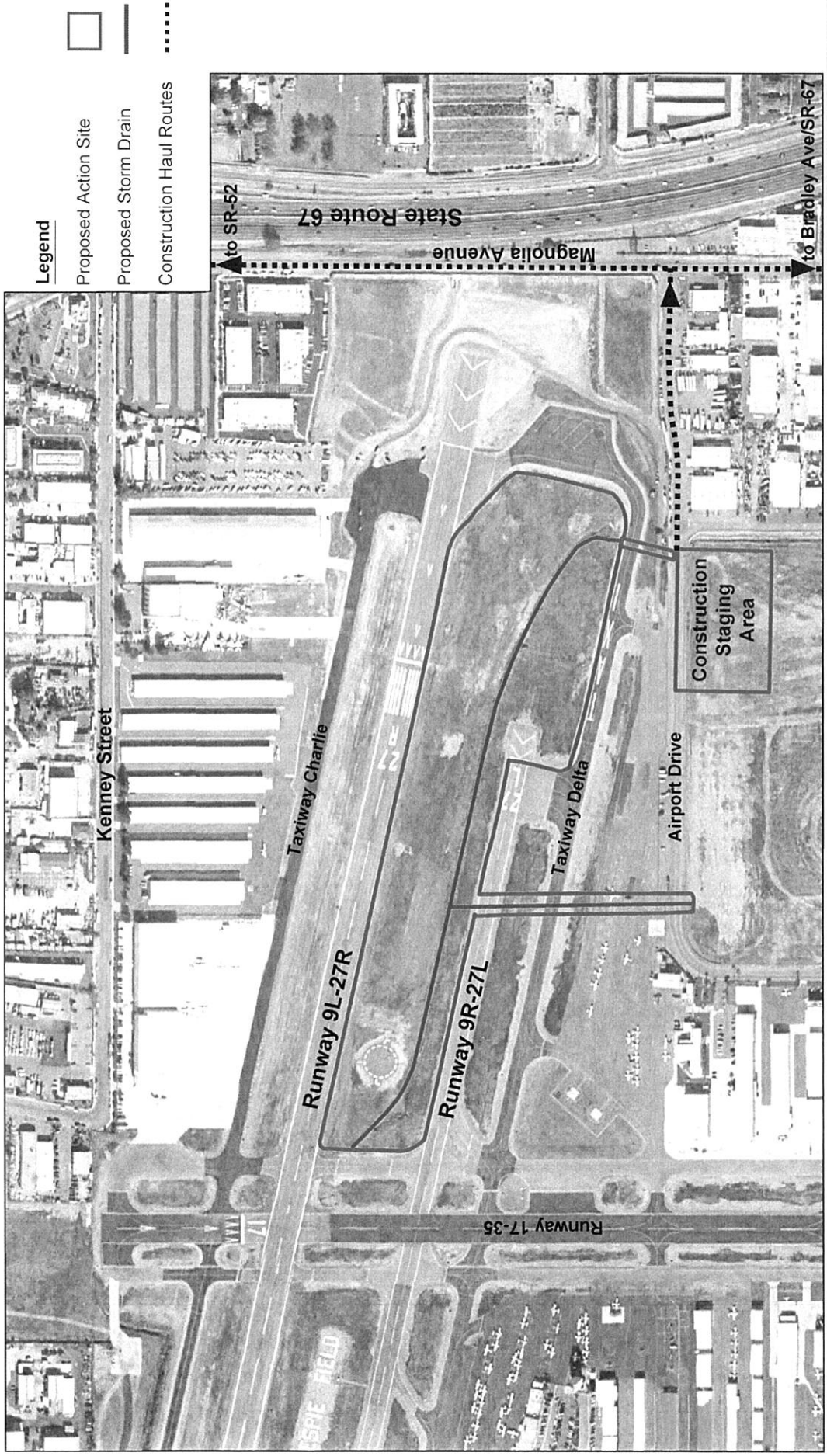
Your timely response within 30-days of receipt of this correspondence will greatly assist us in incorporating your concerns into project planning. If you wish to provide comments related to this proposed project, please contact Gail M. Campos, Environmental Protection Specialist, at the address above or by telephone at 310-725-3614 or by e-mail at gail.campos@faa.gov. Please feel free to contact me directly at 310-725-3600 or mark.mcclardy@faa.gov.

Sincerely,



Mark A. McClardy
Director, Office of Airports
Western-Pacific Region

1 Enclosure



Cultural Resources: Area of Potential Effects

GILLESPIE FIELD ROFA/RSA PROJECT
ENVIRONMENTAL ASSESSMENT



U.S Department
of Transportation
**Federal Aviation
Administration**

Western-Pacific Region
Airports Division
Los Angeles Airports District Office

P.O. Box 92007
Los Angeles, CA 90009-2007

February 17, 2017

Carmen Lucas
Kwaaymil Laguna Band of Mission Indians
P.O. Box 775
Pine Valley, California 91962

Dear Ms. Lucas:

**Proposed Airport Object Free Area/Runway Safety Area Drainage Improvement
San Diego County, California, Native American Consultation Initiation**

The Federal Aviation Administration (FAA) and the County of San Diego (County) are preparing an Environmental Assessment (EA) evaluating the potential impacts resulting from the proposed Runway Object Free Area/Runway Safety Area Drainage Improvement at Gillespie Field Airport. The County is the sponsor for Gillespie Field Airport. The FAA is the lead Federal Agency for Native American consultation for the proposed project. Tribal sovereignty, culture, traditional values, and customs will be respected at all times during the consultation process.

Consultation Initiation

With this letter, the FAA is seeking input on concerns that uniquely or significantly affect your Tribe related to proposed airport improvements. Early identification of Tribal concerns, or known properties of traditional religious and cultural importance, will allow the FAA to consider ways to avoid or minimize potential impacts to Tribal resources as project planning and alternatives are developed and refined. We are available to discuss the details of the proposed project with you.

Project Information

The proposed undertaking consists of installing approximately 2,300 feet of 42-inch reinforced concrete pipe (RCP) in the location of the existing earthen swale used for stormwater conveyance. The RCP will connect to existing storm drains to the northwest at the intersection of runway 9L-27R and taxiway B and on the southeast end at the intersection of taxiways D and D8 (the infield area north of the intersection of Joe Crosson Drive and Wing Avenue). The RCP would be covered leaving grated openings to capture stormwater flows. The area would be graded to comply with FAA's engineering design standards for the runway object free area (ROFA)(1.5 – 5 percent grade) and runway safety area (RSA) (0 – 3 percent grade).

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Confidentiality

We understand that you may have concerns about the confidentiality of information on areas or resources of religious, traditional, and cultural importance to your Tribe. We are available to discuss these concerns and develop procedures to ensure the confidentiality of such information is maintained.

FAA Contact Information

If you wish to provide comments related to this proposed project, please contact me, at the address above or by telephone at 310-725-3614 or by e-mail at gail.campos@faa.gov.

Sincerely,

A handwritten signature in black ink that reads "Gail Campos". The signature is fluid and cursive, with the first name "Gail" and last name "Campos" clearly distinguishable.

Gail Campos
Environmental Protection Specialist

Enclosure



**DEPARTMENT OF PARKS AND RECREATION
OFFICE OF HISTORIC PRESERVATION**

Lisa Ann L. Mangat, Director

Julianne Polanco, State Historic Preservation Officer

1725 23rd Street, Suite 100, Sacramento, CA 95816-7100

Telephone: (916) 445-7000 FAX: (916) 445-7053

calshpo.ohp@parks.ca.gov www.ohp.parks.ca.gov

February 5, 2018

Reply In Reference To: FAA_2017_0313_001

Gail Campos
Environmental Protection Specialist
Federal Aviation Administration
Western-Pacific Region, LA Airports District Office
PO Box 92007
Los Angeles, CA 90009

RE: Area of Potential Effects, Runway Object Free Area/Runway Safety Area Drainage Improvement, Gillespie Field Airport, El Cajon, San Diego County, California

Dear Ms. Campos:

The Federal Aviation Administration (FAA) is consulting with the State Historic Preservation Officer (SHPO) in order to comply with Section 106 of the National Historic Preservation Act of 1966 (54 U.S.C. § 306108), as amended, and its implementing regulations at 36 CFR Part 800. The FAA is requesting concurrence with a finding of no historic properties affected.

The FAA and the County of San Diego are planning to improve the water drainage system between Runways 9L-27R and 9R-27L. Project components include the installation of approximately 3,100 feet of 42-inch reinforced concrete pipe, culvert construction, and earth contouring. Two taxiways will be constructed to allow access to the Cajon Air Center development area. The undertaking will also require the establishment of a 200' by 100' foot staging area.

The FAA previously consulted with SHPO on the adequacy of the project's Area of Potential Effects (APE), but the description has since changed. The APE now includes two taxiways and a construction staging area.

In an effort to identify historic properties in the APE, the FAA performed records searches, conducted Native American consultation, and retained the services of an archaeologist to perform a pedestrian archaeological survey of areas of the APE not subject to previous surveys. No historic properties were identified in the APE.

Having reviewed your submittal, SHPO has the following comments:

- 1) SHPO concurs with the FAA's No Historic Properties Affected finding;
- 2) SHPO has no concerns with the FAA's delineation of the APE;
- 3) Please be reminded that in the event of an unanticipated discovery or a change in the scale or scope of the project, the FAA may have additional consultation responsibilities under 36 CFR Part 800.

If the FAA has any questions or comments, please contact staff historian Tristan Tozer at (916) 445-7027 or at Tristan.Tozer@parks.ca.gov.

Sincerely,

A handwritten signature in blue ink, consisting of a stylized 'J' followed by a horizontal line.

Julianne Polanco
State Historic Preservation Officer

U.S. FISH AND WILDLIFE SERVICE CONSULTATION



United States Department of the Interior



FISH AND WILDLIFE SERVICE

Carlsbad Fish and Wildlife Office
2177 SALK AVENUE - SUITE 250
CARLSBAD, CA 92008
PHONE: (760)431-9440 FAX: (760)431-5901
URL: www.fws.gov/carlsbad/

Consultation Code: 08ECAR00-2017-SLI-0615

March 21, 2017

Event Code: 08ECAR00-2017-E-01255

Project Name: Runway Object Free Area/Runway Safety Area (ROFA/RSA) Drainage Improvement Project

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, and proposed species, designated critical habitat, and candidate species that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment



United States Department of Interior
Fish and Wildlife Service

Project name: Runway Object Free Area/Runway Safety Area (ROFA/RSA) Drainage Improvement Project

Official Species List

Provided by:

Carlsbad Fish and Wildlife Office
2177 SALK AVENUE - SUITE 250
CARLSBAD, CA 92008
(760) 431-9440
<http://www.fws.gov/carlsbad/>

Consultation Code: 08ECAR00-2017-SLI-0615

Event Code: 08ECAR00-2017-E-01255

Project Type: ** OTHER **

Project Name: Runway Object Free Area/Runway Safety Area (ROFA/RSA) Drainage Improvement Project

Project Description: The proposed undertaking consists of installing approximately 2,300 feet of 42-inch reinforced concrete pipe (RCP) in the location of the existing earthen swale used for stormwater conveyance. The RCP will connect to existing storm drains to the northwest at the intersection of runway 9L-27R and taxiway B and on the southeast end at the intersection of taxiways D and D8 (the infield area north of the intersection of Joe Crosson Drive and Wing Avenue). The RCP would be covered leaving grated openings to capture stormwater flows. The area would be graded to comply with FAA's engineering design standards for the runway object free area (ROFA)(1.5 – 5 percent grade) and runway safety area (RSA) (0 – 3 percent grade).

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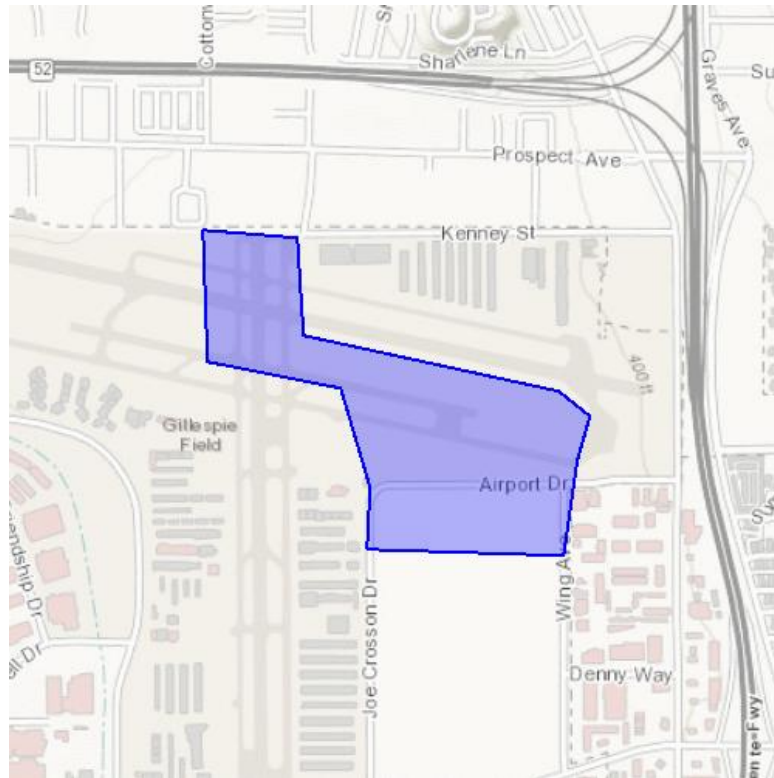
Please Note: The FWS office may have modified the Project Name and/or Project Description, so it may be different from what was submitted in your previous request. If the Consultation Code matches, the FWS considers this to be the same project. Contact the office in the 'Provided by' section of your previous Official Species list if you have any questions or concerns.



United States Department of Interior
Fish and Wildlife Service

Project name: Runway Object Free Area/Runway Safety Area (ROFA/RSA) Drainage
Improvement Project

Project Location Map:



Project Coordinates: MULTIPOLYGON (((-116.97377872362269 32.82956274660553, -116.97147845959991 32.82938965199091, -116.97134113259382 32.827399047926924, -116.96516132302351 32.826273903340926, -116.96444034314483 32.825783452312415, -116.96471500239569 32.824889091198905, -116.9650583251496 32.82295608762126, -116.96979618020124 32.82307149242775, -116.96972751407885 32.82434093100118, -116.97044849133819 32.82636045427707, -116.97367572574878 32.82687975262017, -116.97377872362269 32.82956274660553)))

Project Counties: San Diego, CA



United States Department of Interior
Fish and Wildlife Service

Project name: Runway Object Free Area/Runway Safety Area (ROFA/RSA) Drainage Improvement Project

Endangered Species Act Species List

There are a total of 12 threatened or endangered species on your species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Critical habitats listed under the **Has Critical Habitat** column may or may not lie within your project area. See the **Critical habitats within your project area** section further below for critical habitat that lies within your project. Please contact the designated FWS office if you have questions.

Amphibians	Status	Has Critical Habitat	Condition(s)
arroyo toad (<i>Anaxyrus californicus</i>) Population: Wherever found	Endangered	Final designated	
Birds			
California condor (<i>Gymnogyps californianus</i>) Population: U.S.A. only, except where listed as an experimental population	Endangered	Final designated	
Coastal California gnatcatcher (<i>Polioptila californica californica</i>) Population: Wherever found	Threatened	Final designated	
Least Bell's vireo (<i>Vireo bellii pusillus</i>) Population: Wherever found	Endangered	Final designated	
Southwestern Willow flycatcher (<i>Empidonax traillii extimus</i>) Population: Wherever found	Endangered	Final designated	
Flowering Plants			
San Diego ambrosia (<i>Ambrosia</i>	Endangered	Final designated	



United States Department of Interior
Fish and Wildlife Service

Project name: Runway Object Free Area/Runway Safety Area (ROFA/RSA) Drainage Improvement Project

<i>pumila</i> Population: Wherever found			
San Diego button-celery (<i>Eryngium aristulatum</i> var. <i>parishii</i>) Population: Wherever found	Endangered		
San Diego mesa-mint (<i>Pogogyne abramsii</i>) Population: Wherever found	Endangered		
San Diego thornmint (<i>Acanthomintha ilicifolia</i>) Population: Wherever found	Threatened	Final designated	
Thread-Leaved brodiaea (<i>Brodiaea filifolia</i>) Population: Wherever found	Threatened	Final designated	
Willow monardella (<i>Monardella viminea</i>) Population: Wherever found	Endangered	Final designated	
Insects			
Quino Checkerspot butterfly (<i>Euphydryas editha quino</i> (= <i>e. e. wrighti</i>)) Population: Wherever found	Endangered	Final designated	



United States Department of Interior
Fish and Wildlife Service

Project name: Runway Object Free Area/Runway Safety Area (ROFA/RSA) Drainage
Improvement Project

Critical habitats that lie within your project area

There are no critical habitats within your project area.



U.S Department
of Transportation
**Federal Aviation
Administration**

Memorandum

Western-Pacific Region
Office of Airports
Los Angeles Airports District Office
15000 aviation Blvd., Suite 3000
Lawndale, CA 90009-2007

Subject: FAA Section 7 No Effect Determination for
Gillespie Field Airport, San Diego, San Diego
County, California Proposed Runway Object Free
Area / Runway Safety Area (ROFA/RSA) Drainage
Improvement Project

Date: April 20, 2017

From: Gail Campos, LAX-600.2

Reply to
Attn. of:

To: File

In an effort to ensure compliance with the *Endangered Species Act of 1973*, as amended, the potential effects of the proposed project on special status fish, wildlife, and plant species were evaluated. Based on the information provided in the *Draft Biological Letter Report for the Gillespie Field ROFA/RSA Improvement Project at Gillespie Field in El Cajon, San Diego County, California*, dated June 24, 2016; No special-status plants were observed in the study area and no adverse impacts to federally protected plants are likely to occur as a result of the project. No adverse impacts to federally protected wildlife are anticipated due to a lack of suitable conditions and habitat within the project area. No designated critical habitat is in the proposed project vicinity; therefor, no impacts will occur to designated critical habitat. Avoidance and minimization measures have been included to reduce any potential impacts to Migratory Bird Treaty Act (MBTA) species.

Therefore, the FAA has determined that the proposed undertaking will have no effect on any federally listed flora and fauna endangered or threatened species or designated critical habitat.