

## **Chapter Five**

### **OTHER CEQA SECTIONS**

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*Airport Master Plan*  
*Final Program EIR*

#### **5.1 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES**

CEQA Guidelines, Section 15126.2(c) requires that the use of non-renewable resources and the commitment of future generations to similar uses be discussed in a project's Environmental Impact Report (EIR); the use of such resources is an irreversible effect of the development process. In addition, certain environmental accidents may cause irreversible damage to the environment.

The proposed Master Plan recommends that certain development or redevelopment projects be carried forth at the Airport over the next 20 years to increase the Airport's safety and efficiency. Construction of new buildings and paved surfaces would entail the commitment of energy and non-renewable natural resources, such as fossil fuels, sand and gravel, asphalt, metals and other minerals, and water, which could then no longer be utilized for other purposes. This commitment and consumption of building materials and energy is associated with any development in the region and would not be unique to the proposed project. Before any ground-disturbing actions take place, they must be authorized in subsequent site-specific environmental analyses. Therefore, adoption of the Master Plan itself would not cause an irreversible or irretrievable commitment of resources.

Future activities occurring at the Airport due to recommended projects would result in the ongoing irreversible commitment of energy, water, and land. For example, additional vehicle travel would utilize energy sources, while solid waste generation would utilize limited landfill capacity.

## 5.2 EFFECTS FOUND NOT TO BE SIGNIFICANT

An Initial Study was completed on the Airport's proposed Master Plan in June 2014 with an agency and public review period ending on July 25, 2014. Based on this environmental scoping process, the following possible effects of the proposed project have been determined to not be significant:

- Adverse impacts on visual resources, including changes in topography and impacts related to light or glare;
- Long-term emissions, including greenhouse gases (GHGs) and odors, such that applicable air quality and GHG emission goals would not be met;
- Disturbance of known human remains or unique paleontological or geological resources;
- Soil erosion or impacts related to the use of septic systems;
- Hazards to the public due to the routine use, transport, or accidental upset of hazardous materials;
- Additional safety hazards related to the Airport Influence Area or adopted emergency response plans or evacuation plans;
- Risk of loss, injury, or death involving wildland fires;
- Excessive noise or groundborne vibration;
- Displacement of existing housing;
- Impacts to the availability of public services such as waste water disposal service or treatment, storm water drainage, water service or treatment, fire protection, police protection, schools, or other public facilities;
- Impacts to parks or other recreational facilities;
- Circulation-related impacts, such as impediments to emergency access and safe design of the transportation system;
- Impacts to the availability of public transit, bicycle, or pedestrian facilities;
- Change in air traffic patterns;
- Placement of housing within a flood hazard area or risk of loss, injury, or death due to inundation by seiche, tsunami, or mudflow;

- The physical division of an existing community.

The project's Initial Study was incorporated by reference into the Draft [Program](#) EIR and was included as Appendix A.

Following additional analysis completed as a part of the Draft [Program](#) EIR, additional possible effects of the proposed project have also been found to be less than significant, i.e., Class III. These additional environmental effects are:

- Construction of new Airport facilities within Special Flood Hazard Areas. All projects at the Airport would be subject to the provisions of the City's flood development permit process as defined in Chapter 22.24 of the City *Municipal Code*.
- The proposed Master Plan is consistent with the City's General Plan, Climate Action Plan, and Water Quality Management Plan. It is also consistent with regional plans such as the County Air Pollution Control District's (APCD) 2013 *Clean Air Plan (CAP)*, the Regional Water Quality Control Board's (RWQCB) Basin Plan, and the Santa Barbara County Association of Government's (SBCAG) *Regional Transportation Plan and Sustainable Communities Strategy (RTP-SCS)*. SBCAG's existing Airport Land Use Plan (ALUP) is currently being updated in the form of an Airport Land Use Compatibility Plan (ALUCP) per the California Department of Transportation's airport planning handbook; the proposed Master Plan, if approved, would be incorporated in the next ALUCP update, as necessary.
- Long-term solid waste disposal for specific projects recommended by the proposed Master Plan are expected to be well below the City's 196-tons per year (tpy) threshold for project-specific impacts.
- The proposed Master Plan would not generate solid waste above what has already been accounted for by the City through its General Plan and Final General Plan EIR. Thus, the proposed Master Plan's cumulative solid waste disposal impacts have already been evaluated and mitigated through existing and proposed policies and programs of the City's General Plan.

### **5.3 UNAVOIDABLE SIGNIFICANT ENVIRONMENTAL EFFECTS**

CEQA Guidelines Section 15126.2(b) requires that significant environmental effects that cannot be avoided be specifically identified. These "Class I" impacts are those that cannot be mitigated below a level of significance with the project as proposed and are thus "unavoidable" unless the project is redesigned to ameliorate the impact.

The Master Plan's long-term cumulative traffic impacts fall into this category. Due to the proposed relocation of certain general aviation uses to the north side of the Airport, up to 15 additional PM peak-hour trips would use the Kellogg Avenue/Hollister Avenue intersection. In the years 2022 and 2032, this intersection is expected to operate at level of service (LOS) D. The City

of Goleta has established a significance threshold of 15 trips for those intersections that operate at LOS D. In the long-term scenario (year 2032), the project's contribution to cumulative impacts would be over this threshold. This number of additional trips would also be above the City of Santa Barbara cumulative traffic significance threshold.

In addition, implementation of the proposed Master Plan would generate an additional 12 trips through the South Fairview Avenue/US 101 NB ramps during the PM peak-hour by the year 2032. While not over the City of Goleta cumulative traffic significance threshold, this impact is above the City of Santa Barbara cumulative traffic significance threshold.

The additional trips cannot be avoided unless the proposed relocation of general aviation use does not occur. However, the consolidation of all general aviation uses to the north side of the Airport is one of the primary aspects of the proposed plan and has significant future safety and efficiency ramifications for the Airport. However, it should be noted that before any ground-disturbing actions take place, they must be authorized in subsequent site-specific environmental analyses. Therefore, adoption of the Master Plan itself would not cause unavoidable adverse impacts.

#### **5.4 GROWTH-INDUCING IMPACTS**

Under CEQA Guidelines Section 15126.2(d), a discussion of growth inducement should include “the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly in the surrounding environment,” “projects which would remove obstacles to population growth,” or “the characteristic[s] of some projects which may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively.” CEQA Guidelines Section 15126.2(d) also cautions against assuming that “growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.”

The Airport is currently (2011) operating at 48 percent of its annual service volume (ASV). The Federal Aviation Administration (FAA) recommends that when an airport reaches 60 percent of its total ASV then capacity-increasing development should be considered. The proposed Master Plan relies on FAA-approved forecasts of aviation activity at the Airport and provides development scenarios for the short term (2017), intermediate term (2022) and long term (2032). These development scenarios are not only reflective of the level of activity forecast to occur at the Airport, but are dependent on Federal funding cycles and the availability of grant money for aviation projects. (Refer to Chapter Two of the Master Plan for a detailed discussion of the Master Plan's forecast methodology and conclusions and to Exhibit 2G of this Program EIR for the project's proposed Capital Improvement Program.) The Airport is not expected to reach an operational level within the Master Plan's 20-year planning horizon that would require capacity-increasing improvements.

The proposed Master Plan would help to direct growth that is forecast by the FAA to occur at the Airport over the next 20 years and to ensure that it occurs in a safe and efficient manner. This

growth is expected to occur at an annual average rate of less than one percent of total and general aviation operations. Enplanements are expected to grow at an annual average rate of less than three percent, while based aircraft are expected to increase at an annual average rate of less than two percent. This moderate growth has been included in the City's General Plan and is an integral part of the City's overall anticipated economic activity. The previous Airport growth projections were based on the 2003 *Aviation Facilities Plan's* aviation demand forecast, which included scenarios for one to four percent annual growth rate of annual enplaned passengers and two percent per year growth in general aviation (GA) aircraft operations. Thus, new unforecasted growth is not anticipated to occur.

Since the proposed Master Plan recommends redevelopment of the Airport for safety and efficiency reasons, rather than capacity-increasing projects that would allow for additional airport operations, the project would not foster economic or population growth and is not considered growth-inducing. The project would not involve unanticipated employment growth that would substantially increase population or housing demand and would not involve a substantial increase in major public facilities such as extension of water or sewer lines or roads that would facilitate other growth in the area. Rather, the Airport is in an urbanized area that is currently served by all required infrastructure.

The proposed Master Plan does not recommend the construction of additional housing nor would it remove obstacles to population growth or encourage or facilitate other activities that would significantly affect the environment within the cities of Santa Barbara or Goleta. Potential cumulative impacts of the proposed Master Plan itself are discussed in the following section below.

## 5.5 CUMULATIVE IMPACTS

Pursuant to CEQA Guidelines Section 15130(a), an EIR shall discuss the cumulative impacts of a project in order to determine whether those impacts are cumulatively considerable. "Cumulatively considerable" is defined by CEQA Guidelines Section 15065(a)(3) to include those situations where "the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects." (See also CEQA Guidelines Section 15355(b), which refers to "reasonably foreseeable probable future projects.")

CEQA Guidelines Section 15130(b)(1) sets forth two methods for satisfying the cumulative impacts analysis requirement: (1) the "list-of-projects" approach; and, (2) the "summary-of-projections" approach. Under the former approach, the Lead Agency compiles a "list of past, present, and probable future projects producing related or cumulative impacts." Under the latter approach, the Lead Agency relies on a "summary of projections contained in an adopted local, regional or statewide plan, or related planning document, that describes or evaluates conditions contributing to the cumulative effect." Since this [Program EIR](#) ~~utilizes analysis~~ [utilizes analysis](#) ~~intiered-off~~ the City's Final General Plan EIR, the latter approach has been used for most of the cumulative analysis contained in this document. The exception to this is the cumulative traffic analysis, which is

based in part on a list of projects that have occurred, are occurring, or will occur within the City of Goleta, where the Airport's surrounding street network is located (see [Recirculated Draft Program EIR](#), Appendix D).

Based on the cumulative analysis provided in Chapter Four of this [Program EIR](#), the following possible cumulative effects of the proposed project could occur:

- Cumulative impacts to regional air quality would be Class III, Less than Significant Impact. The proposed Master Plan is consistent with the Santa Barbara County Air Pollution Control District's (APCD) 2013 *Clean Air Plan* (CAP).
- Cumulative impacts to GHG emission goals for the region would be Class III, Less than Significant Impact. The proposed Master Plan is consistent with the City's General Plan and adopted Climate Action Plan.
- The proposed Master Plan would be consistent with rules related to the southern California marine protected areas (MPA) for the Goleta Slough Marine Conservation Area; similarly, it would not preclude measures recommended in the *Goleta Slough Area Sea Level Rise and Management Plan* (Slough Management Plan). It may, however, be inconsistent with existing City Local Coastal Program (LCP) and General Plan policies and zoning regulations regarding protection of the Slough.

To the extent that adverse impacts occur to Goleta Slough, cumulative impacts would occur to a regional biological resource. Therefore, mitigation and design measures for specific Master Plan projects planned within the G-S-R zoning overlay must ensure that there is no net loss of wetlands and that other resources of the Slough are protected from indirect impacts. As long as project-specific impacts to the Slough are fully mitigated, cumulative impacts to the Slough would be less than significant. Thus, cumulative biological impacts would be Class II, Less than Significant Impact with Mitigation.

- Brome grasses present at the proposed Taxiway H Airfield Safety Project site could provide potential foraging for white-tailed kites, a California Fully Protected species. However, a lack of small mammals that serve as prey for kites, a lack of kite activity in the area north of the runway, and the distance of the Taxiway H project site from known nest locations indicate that the habitat is of low quality and is not essential for nesting white-tailed kites. Relative to the amount of available kite foraging habitat in the region, the potential loss of 6.1 acres of low-quality foraging habitat (1.2 percent of anticipated lost acreage in region) if the Taxiway H Airfield Safety Project is constructed would be Class III, Less than Significant Impact.
- The proposed Master Plan would not generate solid waste above what has already been accounted for by the City through its General Plan and Final General Plan EIR. Thus, the proposed Master Plan's cumulative solid waste disposal impacts have already been evaluated and mitigated through existing and proposed policies and programs of the City's General Plan and would be Class III, Less than Significant Impact.

- Cumulative traffic impacts would be Class I, Significant Environmental Impact unless local and regional traffic improvements are constructed within the City of Goleta. These measures are not within the City of Santa Barbara's ability to implement. Based on the revised Traffic Impact Study (Recirculated Draft Program EIR, Appendix C), in the intermediate and long term (years 2022 and 2032), the project's contribution to cumulative traffic impacts would exceed City of Santa Barbara's adopted cumulative thresholds of significance at two intersections within the project study area (South Fairview Avenue/US 101 northbound ramps and Kellogg Avenue/Hollister Avenue) during the PM peak-hour. The project's contribution to Kellogg Avenue/Hollister Avenue cumulative traffic impacts would also exceed the City of Goleta's adopted cumulative thresholds of significance in the year 2032. ~~The Development at the Airport would contribute an equitable share cost for afternoon peak-hour trips to these intersections. Equitable share will be calculated using the most recent cost for the improvement programmed for these intersections in the Goleta Transportation Improvement Plan (GTIP), and shall be based upon a traffic study prepared pursuant to the City of Santa Barbara Traffic Management Strategy for the Airport Area, including consultation and coordination with the City of Goleta. its fair-share cost allocation to the cost of future traffic improvements related to these impacts (based on the City of Goleta traffic impact mitigation fees).~~

No cumulative impacts related to cultural resources, geology and soils, hazards or hazardous materials, hydrology and water quality, or land use and planning would occur as a result of the proposed Master Plan.

## **Chapter Six**

### **SUMMARY OF ALTERNATIVES ANALYSIS**

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*Airport Master Plan*  
*Final Program EIR*

#### **6.1 PROJECT OBJECTIVES**

As previously discussed in Section 2.1, the primary objective of the Santa Barbara Airport Master Plan (Master Plan) is to provide the City of Santa Barbara (City) with guidance for future development which will safely meet aviation demand at the Airport for the next 20 years, i.e., 2012 to 2032. Accomplishing this in an environmentally sensitive manner is also an objective of the Master Plan.

The City's Airport Department has identified the following goals to be considered in the Master Plan:

- Relocation of general aviation facilities and new general aviation improvements.
- Airfield safety improvements.
- Consolidation of automobile parking associated with the Terminal.
- Terminal expansion.

Exhibit 3A contains a list of specific considerations related to Airport needs and opportunities for improvement; however, no actual development projects are proposed at this time. Future development projects at the Airport would be focused in one of three areas: airfield safety improve-



ments; landside redevelopment north of Runway 7-25; or airfield and landside improvements around the Terminal.

## 6.2 ALTERNATIVES CONSIDERED BUT REJECTED

Chapter Three of the ~~Draft Program~~ Environmental Impact Report (EIR) summarizes design alternatives considered as part of the master planning effort that were eventually “rejected” in favor of the recommended development concept plan depicted in Exhibit 2B. Several of these preliminary design alternatives are vetted in detail in Chapter Five of the Final Draft Airport Master Plan, which has been incorporated into this Program EIR by reference. The Master Plan originally identified two airfield design alternatives, two terminal area alternatives, and two north landside alternatives. The recommended development concept plan was selected as the best design alternative based on Federal Aviation Administration (FAA) design and safety guidelines and criteria as well as environmental considerations (refer to ~~Draft EIR, Exhibit 3B~~).

In addition, the draft Master Plan originally recommended the demolition of five older hangars (Building Nos. 248, 249, 267, 309, and 317) to make additional room for redevelopment of the north side general aviation area and to remove structures from the floodway. However, based on an historical evaluation of these buildings under Federal, State, and City historic regulations, it was determined early in the EIR process that the demolition of these buildings would result in significant impacts to historical resources under CEQA (Draft Program EIR, Appendix E). Instead, the recommended north side development concept plan was revised to include the retention of Buildings 267, 309, and 317 in their existing locations and the preservation and ultimate relocation of Buildings 248 and 249 out of the floodway.

The replacement of segments of perimeter fencing along Mesa Road was also originally considered in the draft Master Plan. In the long term, replacement of these perimeter fence segments would provide additional control over not only access to the Airport, but to the sensitive biological resources of the Goleta Slough Ecological Reserve (GSER). However, during the environmental scoping process for this Program EIR, the California Department of Fish and Wildlife (CDFW) and the Goleta Slough Management Committee (GSMC) both commented that the perimeter fence impedes the movement of wildlife through the area. Replacement of the fence with a higher chain link fence could exacerbate this situation. Therefore, it was determined that impacts related to higher chain link fencing that would restrict wildlife movement in and out of the Slough were potentially significant.

As mitigation, CDFW recommended that the existing fence be modified at key points to achieve a better balance within the Slough to support coyotes, gray foxes, and bobcats as key predators. This mitigation measure would need to be studied further by the Airport and FAA to ensure that such modifications did not hamper security and wildlife hazard management activities. It was determined that it would be better to reassess the situation in light of the findings of the Airport’s ongoing wildlife hazard assessment.

Alternative locations for the Airport would require a comprehensive study that is beyond the scope of this Program EIR. The proposed project is a Master Plan to accommodate minor redevelopment, safety improvements, and expansion of the Terminal to allow its continued safe and efficient functionality through a 20-year planning period. As discussed previously, Section 15126.6 (f)(3) of the CEQA Guidelines states, “An EIR need not consider an alternative whose effect cannot be reasonably ascertained and whose implementation is remote and speculative.” Therefore, alternative locations have not been evaluated further in this Program EIR.

### 6.3 COMPARISON OF ALTERNATIVES CONSIDERED

Two alternatives, in addition to the project as proposed, were carried forth for analysis in this Program EIR: a No Project alternative and an Environmentally Superior alternative. **Table 6A** compares the environmental effects of each. Under the No Project alternative, the Airport would remain in its present condition with no improvements to the existing facilities other than general maintenance; the Environmentally Superior alternative would be similar to the project as proposed, but without the Taxiway H Airfield Safety Project and related actions. The primary differences in impact between the project as proposed and the No Project alternative are a reduction in impacts related to demolition or construction, indirect impacts to the Goleta Slough, a reduction in additional impervious surfaces, and inconsistencies with policies of the Airport’s Local Coastal Program (LCP) and the City’s G-S-R, Goleta Slough Reserve zone. However, the environmental benefits of the project as proposed, for example, removing existing structures within the floodway would not be realized under the No Project alternative.

**TABLE 6A**  
**Summary of Alternatives Analysis Comparison**  
**Santa Barbara Airport**

Resource Category	Proposed Master Plan (Proposed Project)	Degree of Impact when Compared to Proposed Project	
		No Project Alternative (Degree of Impact when compared to Proposed Project)	Environmentally Superior Alternative (Degree of impact when compared to Proposed Project)
<b>Air Quality/ Greenhouse Gas Emissions</b>			
Impact AQ-1: Long-term (Operation) Impact	Class III, Less than Significant Impact	Same	Same
Impact AQ-2: Short-term (Demolition or Construction) Impact	Class II, Less than Significant Impact with Mitigation	Less	Less
Impact AQ-3: Cumulative Impact/ <i>Clean Air Plan</i> Consistency	Class III, Less than Significant Impact	Same	Same
Impact AQ-4: Global Climate Change/ <i>Climate Plan</i> Consistency	Class III, Less than Significant Impact	Same	Same
<b>Biological Resources</b>			
Impact BIO-1: Loss of jurisdictional wetlands, <u>uplands</u> , and indirect impact to Goleta Slough	Class II, Less than Significant Impact with Mitigation	Less	Less

**TABLE 6A (continued)**  
**Summary of Alternatives Analysis Comparison**  
**Santa Barbara Airport**

Resource Category	Proposed Master Plan (Proposed Project)	Degree of Impact when Compared to Proposed Project	
		No Project Alternative	Environmentally Superior Alternative (Degree of impact when compared to Proposed Project)
<b>Biological Resources (continued)</b>			
Impact BIO-2: Impacts to protected birds	Class II, Less than Significant Impact with Mitigation	Less	Less
Impact BIO-3: Indirect impacts to adjacent creeks	Class III, Less than Significant	Less	Less
Impact BIO-4: Cumulative impact to Goleta Slough	Class II, Less than Significant Impact with Mitigation	Less	Less
<b>Cultural Resources</b>			
Impact CR-1: Long-term relocation of Bldgs. 248 & 249 out of floodway	Class II, Less than Significant Impact with Mitigation	<b>Greater - Historic structures would remain in the floodway.</b>	Same
Impact CR-2: Impacts to Buildings 317, 309, and 267 (eligible for listing as City of Santa Barbara Structures of Merit)	Class III, Less than Significant Impact	Same	Same
Impact CR-3: Future projects could be located within a moderate sensitivity zone for cultural resources	Class II, Less than Significant Impact with Mitigation	Less	Same
<b>Geology and Soils/Hazards and Hazardous Materials</b>			
Impact G/HAZ-1: Risks due to seismic activity	Class II, Less than Significant Impact with Mitigation	Less	Same
Impact G/HAZ-2: Risks due to soil conditions	Class II, Less than Significant Impact with Mitigation (adverse soil conditions); Class III, Less than Significant Impact (erosion)	Less	Same
Impact G/HAZ-3: Risk due to routine handling and transport or accidents involving hazardous materials	Class III, Less than Significant Impact	Less	Same
Impact G/HAZ-4: Risks involving exposure to soil or groundwater contamination.	Class II, Less than Significant Impact with Mitigation	Less	Same
<b>Hydrology and Water Quality</b>			
Impact HYD-1: Potential drainage and water quality impact	Class III, Less than Significant Impact	Less	Less

**TABLE 6A (continued)**  
**Summary of Alternatives Analysis Comparison**  
**Santa Barbara Airport**

Resource Category	Proposed Master Plan (Proposed Project)	Degree of Impact when Compared to Proposed Project	
		No Project Alternative (Degree of impact when compared to Proposed Project)	Environmentally Superior Alternative (Degree of impact when compared to Proposed Project)
<b>Impact HYD-2: Potential flooding hazards</b>	Impact 2a: Class III, Less than Significant Impact; Impact 2b: Class IV, Beneficial Impact (re: development within Floodway)	<b>Greater - Existing structures would remain in the floodway.</b>	Less - Taxiway H would no longer be proposed for the floodway.
Impact HYD-3: Substantial unmitigated risk of tsunami inundation	Class III, Less than Significant Impact	Same	Same
<b>Land Use and Planning</b>			
Impact LU-1: Impact to established communities	Class III, Less than Significant Impact	Same	Same
Impact LU-2: Compatibility with applicable General Plan policies and other City plans	Class III, Less than Significant Impact	Less	Less
Impact LU-3: Compatibility with SP-6 Plan and SP-6 overlay zone	Class III, Less than Significant	Same	Same
Impact LU-4: Compatibility with Airport's LCP	Class II, Less than Significant with Mitigation	Less	Less
Impact LU-5: Consistency with the City of Goleta's General Plan/Zoning (aviation easements)	Class III, Less than Significant Impact	Same	Same
Impact LU-6: Consistency with the City's General Plan, G-S-R zone, GSER (Taxiway H Airfield Safety Project)	Class II, Less than Significant Impact with Mitigation	Less	Less
<b>Public Utilities (Solid Waste Disposal)</b>			
Impact SW-1: Long-term (operational) impact	Class III, Less than Significant Impact	Unknown	Same
Impact SW-2: Short-term (Demolition and/or Construction) Impact	Class II, Less than Significant Impact with Mitigation	Less	Less
Impact SW-3: Cumulative impact	Class III, Less than Significant Impact	Unknown	Same
<b>Transportation/Traffic</b>			
Impact T-1: Project-specific impacts to traffic and circulation in the short term	Class III, Less than Significant Impact	Same	Same
Impact T-2: <del>Project contributions to cumulative impacts</del> <del>Cumulative project impacts</del> to traffic and circulation in the intermediate term (Kellogg Avenue/Hollister Avenue)	Class I, Significant Environmental Impact <sup>1</sup>	Less	Same

**TABLE 6A (continued)**  
**Summary of Alternatives Analysis Comparison**  
**Santa Barbara Airport**

Resource Category	Proposed Master Plan (Proposed Project)	Degree of Impact when Compared to Proposed Project	
		No Project Alternative (compared to Proposed Project)	Environmentally Superior Alternative (compared to Proposed Project)
Impact T-3: <u>Project contributions to cumulative impacts</u> <del>Cumulative project impacts</del> to traffic and circulation in the long term (Kellogg Avenue/Hollister Avenue; South Fairview Avenue/US 101 NB ramps)	Class I, Significant Environmental Impact <sup>1</sup>	Less <sup>1,2</sup>	Same <sup>1,2</sup>

<sup>1</sup> Once Senate Bill (S.B.) 743 is implemented, it is possible that project-related cumulative impacts associated with the Atlantic Aviation relocation would no longer be considered significant under CEQA. The vehicle miles traveled (VMT) that are associated with Atlantic Aviation in its new location would be less than its old location since the new location is closer to major arterials (i.e., South Fairview Avenue and Hollister Avenue) as well as US 101.

<sup>2</sup> Some intersections within the study area are forecast to operate below an acceptable level of service with or without trips generated by the project.

#### 6.4 IDENTIFICATION OF ENVIRONMENTALLY SUPERIOR ALTERNATIVE

Based on the analysis contained in Chapter Four and summarized in **Table 6A**, the “environmentally superior” alternative involves not constructing the Taxiway H Airfield Safety Project and related projects. This would reduce environmental impacts to Goleta Slough and avoid inconsistencies with the City of Santa Barbara’s General Plan land use designation, the Airport’s LCP, and G-S-R zoning. Other differences in impact between the project as proposed and the Environmentally Superior alternative are a reduction in impacts related to construction, indirect impacts to Goleta Slough, and a reduction in additional impervious surfaces.

However, the “environmentally superior” alternative would not meet the project’s objectives to accommodate future airport operations in a safe manner. Although removing the Taxiway H Airfield Safety Project and related actions from the proposed Master Plan would reduce environmental impacts, it would continue unsafe and inefficient airfield circulation patterns at the Airport that create safety hazards to aircraft using the runway and taxiway system. In FAA Advisory Circular 150/5300-13A, *Airport Design*, the discussion of methods to reduce runway incursions includes the following (FAA ~~2012~~2014):

- (c) Limit runway crossings. The airport designer can reduce the opportunity for human error by reducing the need for runway crossings. The benefits of such design are twofold – through a simple reduction in the number of occurrences, and through a reduction in air traffic controller workload.

- (d) Avoid “high energy” intersections. These are intersections in the middle third of the runways. By limiting runway crossings to the outer thirds of the runway, the portion of the runway where a pilot can least maneuver to avoid a collision is kept clear.
- (f) Avoid “dual purpose” pavements. Runways used as taxiways and taxiways used as runways can lead to confusion. A runway should always be clearly identified as a runway and only a runway.
- (g) Indirect Access. Do not design taxiways to lead directly from an apron to a runway. Such configurations can lead to confusion when a pilot typically expects to encounter a parallel taxiway.

If a full-length parallel taxiway north of Runway 7-25 is not provided, aircraft utilizing the north general aviation ramps would continue to cross the active primary runway to get to the Runway 7 threshold. This situation has been identified by FAA as a safety “hot spot.”

## Chapter Seven

### MITIGATION, MONITORING, AND REPORTING

*Airport Master Plan  
Final Program EIR*

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The following ~~mitigation~~Mitigation, ~~monitoring~~Monitoring, and ~~reporting~~Reporting program Program (MMRP) has been prepared pursuant to Section 15097 of the *California Environmental Quality Act* (CEQA). Section 15097 requires all State and local agencies establish monitoring or reporting programs for projects approved by a public agency whenever approval involves the adoption of either a mitigated Negative Declaration or specified environmental findings related to Environmental Impact Reports.

The following MMRP for the proposed Master Plan at Santa Barbara Airport describes the mitigation measures identified in the Draft Program Environmental Impact Report (EIR) (as revised by the Recirculated Draft Program EIR), identifies responsible entities for implementing and monitoring the plan, and outlines the mitigation measure timeline. The intent of the MMRP is to identify and enforce a means for properly and successfully implementing the mitigation measures as identified within this Final Program ~~the Draft~~ EIR.

This MMRP is intended to be used by City of Santa Barbara (City) staff and mitigation monitoring personnel to ensure compliance with mitigation measures during project implementation. The MMRP will provide for monitoring activities prior to construction, during construction, and following project completion.

Airport staff will be responsible for the following:

- On-site, day-to-day monitoring of construction activities.
- Reviewing construction plans and equipment staging/access plans to ensure conformance with adopted mitigation measures.
- Ensuring contractor knowledge of and compliance with the MMRP.
- Obtaining assistance, as necessary, from technical experts in order to develop site-specific procedures for implementing the mitigation measures.
- Maintaining a log of all significant interactions, violations of permit conditions or mitigation measures, and necessary corrective measures.

In addition, individual projects under the Master Plan may be subject to existing or required permit conditions such as those associated with the Airport's National Pollutant Discharge Elimination System (NPDES) permit and storm water pollution prevention plan (SWPPP), the City's Storm Water Management Program (SWMP), and individual Special Flood Hazard Area development permits/variances, Coastal Development Permits (CDPs), Water Quality Management Plans (LCP Policy C-13), and Construction Phase Erosion Control and Polluted Runoff Control Plans (LCP Policy C-14). The City's Standard Conditions of Approval also apply to projects under the proposed Master Plan.



**SANTA BARBARA AIRPORT MASTER PLAN**

**Mitigation Monitoring Plan**

Mitigation Measure	Description	Implementing Entity	Monitoring Entity	Implementation Schedule	Date Initiated/ Date Completed
<b>Impact AQ-2. Construction and/or building removal occurring under the proposed Master Plan could exceed 25 tons of any <u>criteria</u> pollutant (except CO) within a 12-month period. (Short-term impact)</b>					
AQ/mm-1	As a condition of approval, all construction and/or building removal projects occurring under the proposed Master Plan shall be required to estimate said project's combined emissions from all construction equipment to ensure that the project would not exceed 25 tons of any <u>criteria</u> pollutant except CO within a 12-month period. Standard equipment exhaust mitigation measures recommended by the Air Pollution Control District (APCD) for such projects shall be implemented, as appropriate.	Developer or contractor	APCD	Prior to issuance of Authority to Construct permit from APCD.	
<b>Impact BIO-1 &amp; BIO-4. The proposed Taxiway H Airfield Safety Project could include a loss of jurisdictional wetlands, <u>uplands</u>, and indirect construction impacts to Goleta Slough and sensitive flora and/or fauna. (Project-specific &amp; cumulative impact)</b>					
BIO/mm-1	<u>Programmatic Mitigation Plan. This Programmatic Mitigation Plan is intended to provide a framework for future project-specific Habitat Mitigation and Monitoring Plan(s) (HMMPs) to provide compensatory mitigation for indirect and direct impacts to jurisdictional wetland habitat and established wetland and riparian setback/buffers from these protected habitats under this Program EIR. The HMMPs shall also address impacts to upland (i.e., grassland and shrubland) habitats, when appropriate. For example, under direction of this Programmatic Mitigation Plan, the Taxiway H Airfield Safety Project will be required to submit for regulatory agency (USACE, CDFW, CCC, and City, as appropriate) approval a project-specific HMMP for impacts to jurisdictional wetland and upland areas.</u>  <u>Future project-specific HMMPs must include the following requirements and information, as appropriate:</u>	City Planning	Airport staff	Prior to approval of Master Plan	

	<p><u>1. Mitigation for wetland habitat and and/or wetland and/or riparian buffers shall be a minimum of 4:1 (restoration to impact) ratio and upland habitat (i.e., grassland and shrubland) shall be replaced at a 3:1 ratio in a form and location acceptable to the permitting regulatory agencies. Regulatory agencies may require a higher ratio depending on the habitat value and function that is proposed to be impacted.</u></p> <p><u>2. Habitat mitigation should occur on Airport property (onsite) in lands historically part of the Goleta Slough wetland complex and on wetland and upland areas currently mapped as disturbed or dominated by areas of non-native invasive plant species which would be reasonably expected to establish sustainable wetland, transitional, and upland habitat(s) to the extent feasible.</u></p> <p><u>3. Any mitigation within the GSER shall be authorized by the CDFW and CCC under a LCP amendment.</u></p> <p><u>4. The Airport shall solicit comments from the GSMC, a technical advisory committee for the GSER.</u></p> <p><u>5. Focused biological surveys shall be conducted on potential mitigation area(s) within one year of approval of any future project-specific HMMPs. Depending on the amount of impacts to wetland and upland habitats, more than one mitigation area may require a biological survey. At minimum, the biological survey(s) shall consist of vegetation community mapping, floristic inventory, a wetland delineation and jurisdictional determination, and focused Belding's savannah sparrow surveys and raptor surveys, if suitable habitat exists for these species on the selected mitigation area(s). Additionally, each mitigation area shall be analyzed for physical habitat conditions including hydrology, salinity, and soil(s) by the appropriate technical specialists.</u></p>				
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	<p><u>6. All sensitive biological resources shall be avoided in the design and during implementation and maintenance of future mitigation. Sensitive biological resources include, but are not limited to, occurrences of nesting Belding’s savannah sparrow, southern tarplant, coulter’s goldfield, meadow barley, creeping ryegrass, and other native grassland and native wetland habitat (Dudek 2012; Dudek 2012).</u></p> <p><u>7. The Airport should comply with the conditions and recommendations of existing guiding documents to the extent feasible: LCP amendments, Slough Management Plan (GSMC 2015), and the Airport’s current WHMP (City of Santa Barbara 2017).</u></p> <p><u>8. The Airport shall assess the potential for an increase in wildlife hazards to airfield operations as described in the WHA (Dudek 2016) and the current WHMP (City of Santa Barbara 2017) with respect to the following criteria:</u></p> <p><u>a. Increasing the attractiveness of the Airport to hazard species or groups identified in the WHA/WHMP, as well as other species that may provide a hazard to aircraft. These include, but are not limited to, raptors, turkey vultures, gulls, waterfowl, pigeons and doves, flocks of blackbirds and European starlings, and coyotes.</u></p> <p><u>b. Increasing the attractiveness of the Airport to any species covered under a valid Airport depredation permit.</u></p> <p><u>c. Providing attractants to wildlife within 250 feet of a runway centerline.</u></p> <p><u>d. Attracting threatened or endangered species, California fully protected species, or any species for which the Airport’s ability to conduct wildlife</u></p>				
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	<p><u>hazard management activities (such as visual and acoustic hazing) may be limited.</u></p> <p><u>e. Increasing rodent populations on the Airport.</u></p> <p><u>f. Inundation of the airfield.</u></p> <p><u>g. Increasing trees or shrubs in the airfield vicinity.</u></p> <p><u>9. Restoration strategies shall be proposed that balance the criteria identified in BIO-1.1 through BIO-1.8 as well as agency requirements for wetland and upland restoration. Mitigation Areas 1 through 7 (as identified in Exhibit 4D) and potential restoration strategies have been considered in preparation of the Programmatic Mitigation Plan and shall continually be considered in project-specific HMMP(s). A summary of the mitigation areas, acreage available for mitigation, existing habitats, and potential restored and/or enhanced habitats are presented in <b>Table 4G</b>. Characteristics and restoration potential for each mitigation area are provided in <b>Appendix D</b> of this Program EIR.</u></p> <p><u>10. As necessary due to sea level rise or other changes in future conditions within the Slough, adaptive restoration measures consistent with the recommendations of the Slough Management Plan shall be implemented.</u></p> <p><u>11. The genetic origin of all native wetland and riparian propagules shall be from the Goleta Slough and for all native upland plants should be from the Goleta Valley. All wetland plants shall have a facultative, facultative wetland, or obligate wetland indicator status per the U.S. Army Corps of Engineers National List of Plant Species that Occur in Wetlands.</u></p> <p><u>12. Restoration shall be phased to ensure that all restoration plantings are in place with sufficient irrigation prior to final inspection. Irrigation shall be reduced or eliminated after Year 2 depending on environmental</u></p>				
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	<p><u>conditions (i.e., drought may prolong irrigation). The wetland restoration shall be without supplemental irrigation for at least two years prior to final approvals. This could result in a maintenance and monitoring period greater than five years.</u></p> <p><u>13. Prior to commencement of development activities, the Airport shall file a performance bond with the City to complete restoration and maintain plantings for a five-year period.</u></p> <p><u>14. The extent of development shall be restricted to those areas displayed on site grading plans to avoid additional impacts to wetland habitat and wetland and/or riparian buffers. Development boundaries shall be delineated (i.e., using wooden stake with highly visible environmentally-friendly paint) in the field prior to any ground-breaking activities.</u></p> <p><u>15. Performance Criteria. Mitigation success for future project-specific HMMP(s) shall be determined, at minimum, by the following performance criteria:</u></p> <ul style="list-style-type: none"> <li><u>• All installed plants must achieve a 70 percent survival rate by the end of the first year, and an 80 percent survival rate of the remaining plants by the end of the fifth year.</u></li> <li><u>• Non-native invasive weeds must remain below 15 percent of the total vegetative cover at all times. Naturalized, non-invasive, non-native grasses are not included in this performance criterion.</u></li> <li><u>• Native cover must be 75 percent after three years and 90 percent cover after five years.</u></li> <li><u>• All container plants and seeded areas must survive without supplemental irrigation for a minimum of two years.</u></li> </ul>				
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	<ul style="list-style-type: none"> <li>• <u>No single species shall constitute more than 50 percent of the vegetative cover.</u></li> <li>• <u>No woody invasive species shall be present and herbaceous invasive species, excluding naturalized, non-invasive grasses, shall not exceed five percent cover after five years.</u></li> <li>• <u>Replacement plants shall be monitored for a minimum of three years to ensure successful establishment.</u></li> </ul> <p><del>Programmatic Wetland Restoration Plan (PWRP). The PWRP is intended to provide a framework for future project-specific Habitat Mitigation and Monitoring Plans (HMMPs) to provide compensatory mitigation for indirect and direct impacts to jurisdictional wetland habitat and established wetland and riparian set-back/buffers. The PWRP shall be consistent with all Airport operation and management policies, the Wildlife Hazard Management Plan, the California Coastal Act and Airport Local Coastal Program (LCP), the Goleta Slough Area Sea Level Rise and Management Plan (Slough Management Plan), the California Fish and Game Code (CFG), the Clean Water Act (CWA), and other plans and polices that regulate wetland habitat. Under direction of the PWRP, the Taxiway H Airfield Safety Project will be required to submit for regulatory agency (United States Army Corps of Engineers [USACE], California Department of Fish and Wildlife [CDFW], California Coastal Commission [CCC], and City, as appropriate) approval of a HMMP for impacts to jurisdictional areas.</del></p> <p>Components of the PWRP shall include, at minimum, the following requirements and information:</p>				
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	<p><del>1. Mitigation for wetland habitat and and/or wetland and/or riparian buffers shall be a minimum of 2:1 (restoration to impact) ratio. Agencies may require a higher ratio depending on the habitat value and function that is proposed to be impacted. Upland habitat shall be replaced at a 1:1 ratio in a form and location acceptable to the Goleta Slough Management Committee.</del></p> <p><del>2. Wetland mitigation should occur on Santa Barbara Airport property (onsite) in lands historically part of the Goleta Slough wetland complex and on lands currently mapped as disturbed or dominated by non-native species which would be reasonably expected to establish sustainable wetland habitat.</del></p> <p><del>3. The Airport shall comply with the conditions and recommendation of existing guiding documents as well as those under development (i.e., Wildlife Hazard Assessment for the Airport, LCP amendments, and the Slough Management Plan).</del></p> <p><del>4. Restoration strategies shall be proposed that balance the criteria identified in Nos. 2 and 3 above, as well as agency requirements for wetland restoration. Mitigation Areas 1 through 4 (see below) and potential restoration strategies shall be considered in preparation of any project-specific HMMPs.</del></p> <p><del>Table 4G and Exhibit 4D identify four potential mitigation areas where areas within or adjacent to the Slough could be restored to create replacement wetlands. Areas 1 and 2 are located southwest of Tecolote Creek within the existing G-S-R zone; Areas 3 and 4 are located southwest of the intersection of the Airport's existing runway system within the existing A-F (Airfield Facilities) zone. As part of the mitigation effort, if selected, Mitigation Areas 3 and/or 4 would first be rezoned to G-S-R. Combined, the mitigation</del></p>				
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	<p><del>areas would provide an opportunity for almost 30 acres of new wetland.</del></p> <p><del>The mitigation area(s) shall be selected in consultation with USACE, Regional Water Quality Control Board (RWQCB), and CDFW, as appropriate. The areas would first be re-contoured, and then planted with a variety of short wetland vegetation. The desired plant composition shall be consistent with the Slough Management Plan and compliant with Airport safety regulations (for example saltgrass or meadow barley as key components).</del></p> <p><del>5. As necessary due to sea level rise or other changes in future conditions within the Slough, adaptive restoration measures consistent with the recommendations of the Slough Management Plan shall be implemented.</del></p> <p><del>6. The genetic origin of all native wetland and riparian propagules shall be from the Goleta Slough. Wetland plants shall be, at a minimum, facultative (FAC) species (i.e., equally likely to occur in wetlands [estimated probability 34 – 66 percent] or non-wetlands) per the USACE definition.</del></p> <p><del>7. Restoration shall be phased to ensure that all restoration plantings are in place with sufficient irrigation prior to final inspection. Irrigation shall be reduced or eliminated after Year 2 depending on environmental conditions (i.e., drought may prolong irrigation). The wetland restoration shall be without supplemental irrigation for at least two years prior to final approvals. This could result in a maintenance and monitoring period greater than five (5) years.</del></p> <p><del>8. Prior to commencement of development activities, the Airport shall file a performance bond with the City to complete restoration and maintain plantings for a five (5) year period.</del></p>				
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	<p><del>9. The extent of development shall be restricted to those areas displayed on site grading plans to avoid additional impacts to wetland habitat and wetland and/or riparian buffers. Development boundaries shall be delineated (i.e., using wooden stake with highly visible environmentally friendly paint) in the field prior to any ground-breaking activities.</del></p> <p><del>10. PWRP Timing and Approvals. The Airport shall submit the PWRP to the CCC for review and approval. The PWRP shall also be submitted to the USACE, CDFW, and RWQCB for their review; however, approvals are not required from these agencies. Future project-specific HMMPs will be reviewed and required as part of regulatory permitting (404/401, streambed alteration, etc.). For example, any activity that will divert or obstruct the natural flow, or change the bed, channel, or bank (and associated riparian resources, including salt marsh wetlands) of a river or stream may require a Lake and Streambed Alteration (LSA) agreement with the CDFW pursuant to Section 1602 of the CFGC.</del></p>				
BIO/mm-2	<p>During construction of the Taxiway H project, <del>all</del> applicable policies of the LCP shall be <del>required</del><u>implemented</u>, including but not limited to the following:</p> <ul style="list-style-type: none"> <li>• A buffer strip of a minimum of 100 feet in width shall be maintained in a natural condition along the periphery of all wetland communities. Where development of an airfield safety project renders maintenance of the buffer infeasible, the City shall provide the maximum amount of buffer area feasible and all impacts to wetland habitat shall be mitigated to the maximum extent feasible such that no net loss of wetland habitat occurs (Policy C-4).</li> </ul>	Contractor	City Planning or Airport staff	During/post construction	

	<ul style="list-style-type: none"> <li>Wetland areas temporarily affected by construction activities shall be restored to pre-construction conditions (Policy C-11).</li> <li>The project shall incorporate <u>water quality</u> best management practices (BMPs) or a combination of BMPs <u>(per City guidance) that are</u> best suited to reduce pollutant loading to the maximum extent feasible (Policy C-12).</li> <li>Special-status plant and wildlife protection measures shall be implemented (Policy C-15) <u>(refer to BIO/mm-1)</u>.</li> <li>All construction, habitat mitigation and restoration plans, and special-status plant and wildlife mitigation and protection measures, shall be reviewed and approved by the regulatory agency/agencies having jurisdiction over the identified resource (Policy C-16).</li> </ul>				
<b>Impact BIO-2. Potentially significant impacts to the Belding's savannah sparrow (i.e., potential take) could/would occur as a result of the Taxiway H Airfield Safety Project if this protected species is present during construction. In addition, indirect noise impacts during construction might occur to nesting birds along Carneros Creek. (Project-specific impact)</b>					
BIO/mm-3	No construction shall occur during the avian breeding season (February 1-September 1) unless a survey from qualified biologist with experience in conducting breeding bird surveys finds that no bird breeding habitat exists within 300 feet of the disturbance area (500 feet for raptors) or can state with certainty that such habitat does not contain nesting birds. Project personnel, including contractors working on the site, shall be instructed on the sensitivity of the area. Reductions in nest buffer distance may be approved by the City's Community Development Department depending on the avian species involved, ambient levels of human activity, screening vegetation, or other factors.	City Planning or Airport staff	City Planning or Airport staff	Prior to ground disturbance.	
BIO/mm-4	Taxiway H Airfield Safety Project and its habitat restoration project sites shall be monitored by a qualified biologist for Belding's savannah sparrow. Prior to site preparation and construction activities, the Airport	City Planning or Airport staff	City Planning or Airport staff	Prior to, and during, ground disturbance.	

	<p>shall have a qualified biologist survey all breeding/nesting habitat within the project site every seven days for eight consecutive weeks. Documentation of findings, including negative findings, shall be submitted to the CDFW. Site preparation and construction activities will only begin if no breeding/nesting birds are observed and concurrence has been received from CDFW. If breeding activities or an active nest is located in a work area, site preparation and construction activities shall not begin in that area until the nest becomes inactive, the young have fledged, the young are no longer being fed by the parents, the young have left the area, and the young will no longer be impacted by the project.</p> <p>Once site preparation and construction activities have commenced, the project site shall be monitored for Belding’s savannah sparrow on a weekly basis. Documentation of findings, including negative findings, shall be submitted to CDFW until construction is complete.</p> <p>Site preparation or construction activities shall be suspended immediately in a given area if the qualified biologist determines that breeding or nesting activity is occurring in that area. Site preparation and construction activities shall not resume until the monitor determines that the breeding and nesting activities described above have stopped.</p> <p>Noise levels will be monitored by a qualified biologist to determine if construction activities are disruptive to Belding’s savannah sparrow in or adjacent to the project site. If a significant disruption to foraging behavior is observed, construction activities in the area of disturbance will be stopped immediately until the qualified biologist develops recommendations to reduce or eliminate the disturbances <del>and</del>, receives concurrence from CDFW, <u>and required measures are implemented.</u></p>				
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**Impact CR-1. The Master Plan proposes to pursue a management plan for the General Western Aero hangars that would mothball and stabilize the buildings in their existing location until such time as they can be relocated out of the floodway. (Project-specific impact)**

CR/mm-1	<p>The following mitigation program shall be implemented:</p> <ol style="list-style-type: none"> <li>1. Mothball and stabilize following National Park Service (NPS) Preservation Brief 31;</li> <li>2. Prepare management plan, which includes: <ul style="list-style-type: none"> <li>- Nominate for National Register of Historic Properties (NRHP);</li> <li>- Seek approval to move hangars out of floodway to a location on the Airport that would preserve the integrity of the historic property;</li> <li>- Consult with interested parties to propose future uses and explore research/grant funding options;</li> <li>- Based on proposed uses, determine treatment plan to restore, preserve, or rehabilitate per Secretary of Interior standards.</li> </ul> </li> <li>3. Show relocation areas on “Development Concept Map” of proposed Master Plan.</li> </ol>	City Planning or Airport staff	City Planning or Airport staff	As soon as possible	
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**Impact CR-3. Proposed Master Plan projects located within a moderate sensitivity zone of the MARA could have project-specific or cumulative impacts on cultural resources protected by Federal, State or City laws and guidelines. (Project-specific impact)**

CR/mm-2	<p>All future projects under consideration within the Master Plan shall be evaluated based on the screening process set forth in the City’s <i>Master Archaeological Resources Assessment</i> (MARA). If a proposed project is located within a mapped <u>moderate</u> sensitivity zone, a determination shall be made <u>by the City’s Environmental Analyst</u> regarding whether or not all proposed earth disturbance would be confined to areas of previous disturbance. The proposed project shall then follow the appropriate mitigation and reporting requirements provided in the MARA <u>and in reports approved by the City’s Environmental Analyst or Historic Landmarks Commission</u>.</p>	City Planning or Airport staff	City Planning or Airport staff	Prior to individual project approval	
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	Native American consultation shall occur as each individual project is proposed and shall include, but not be limited to, the list of contacts provided by the Native American Heritage Commission, <del>in response to the environmental scoping process for this EIR.</del>				
CR/mm-3	The City's Standard Condition of Approval regarding "Unanticipated Archaeological Resources Contractor Notification" shall be implemented <del>as necessary for all projects.</del>	Contractor	City Planning or Airport staff	During construction	
<b>Impacts G/HAZ-1 &amp; G/HAZ-2. Future Master Plan development could be adversely affected by seismic activity or adverse soil conditions. (Project-specific impact)</b>					
G/HAZ/mm-1	The <del>design and</del> construction of load-bearing structures shall be subject to the recommendations of a site- and project-specific geotechnical investigation and/or engineering report. This mitigation is not necessary for minor development projects such as the installation of replacement fencing or above-ground storage tanks, <del>unless required by the building permit.</del>	Developer or contractor	City engineer	During project design	
<b>Impact G/HAZ-4. There is the potential for the exposure of project occupants or construction workers to hazardous materials at the Airport. (Project-specific impact)</b>					
G/HAZ/mm-2	A Construction Contingency Plan shall be developed that addresses methods to control potential migration of any contamination discovered during construction as well as safety practices for on-site construction personnel and the general public. Details of the plan shall include, but not be limited to: <ul style="list-style-type: none"> <li>• Soils monitoring for identification of contaminated soil during and after construction for all eroded and/or graded soils;</li> <li>• Measures to be taken to protect workers and the public (such as fencing or hazard flagging, covering contaminated soil with plastic, etc.) and to prevent migration of contaminants to the surrounding environment; and</li> </ul>	Contractor	City Planning	Prior to project construction	

	<ul style="list-style-type: none"> <li>Notification procedures including, but not limited to, Santa Barbara County Environmental Health Services.</li> </ul> <p>These Contingency Plans may be incorporated into the Construction Phase Erosion Control and Polluted Runoff Control Plans required per LCP Policy C-14 for projects requiring a CDP (see Section 4.5.2), if appropriate.</p>				
GEO/mm-3	If contamination is discovered, a project-specific remediation plan shall be prepared and implemented <u>per applicable regulations</u> that reduces all contaminant concentrations to acceptable levels <u>prior to issuance of grading or building permits or, if already under construction, prior to resuming work.</u>	Contractor	Airport staff	<u>Before or During</u> project construction	
<p><b><i>Impacts LU-4 and LU-6. Recommended projects within the proposed Master Plan, such as the proposed Taxiway H Airfield Safety Project, could result in inconsistencies with LCP policies related to Goleta Slough and with the City's General Plan designation and G-S-R zone for the GSER. <u>Amendments to planning documents and agreements would be necessary to establish policy consistency.</u> (Project-specific impact)</i></b></p>					
LU/mm-1	A detailed project-specific impact analysis and mitigation program for the Taxiway H Airfield Safety Project, and associated analysis of the project's consistency with the G-S-R zone and the policies of the Airport's LCP and <i>California Coastal Act</i> , shall be conducted during the CDP and/or LCP amendment review process. The analysis shall specifically address project alternatives, mitigation, and/or additional LCP policy requirements necessary to ensure that any permitted impacts to wetland and sensitive habitat and associated buffers will be adequately minimized and mitigated to ensure long-term protection of Goleta Slough habitats and open space.	City Planning	Airport staff	Prior to approval of individual projects	
LU/mm-2	A consistency review of the Taxiway H Airfield Safety Project with the Slough Management Plan shall be conducted during the project-specific CDP and/or LCP amendment review process, as applicable. Project-specific mitigation measures shall be identified and incorporated into the City's CDP, and/or LCP policies shall be identified and incorporated into Airport LCP, where determined necessary and feasible, to	City Planning	Airport staff	Prior to approval of the Taxiway H Airfield Safety Project	

	ensure project consistency with the Slough Management Plan. Required mitigation shall also be evaluated for consistency with the Slough Management Plan restoration goals.				
LU/mm-3	The City of Santa Barbara <del>and the CDFW</del> shall <del>amend</del> <u>undertake a process in coordination with the CDFW toward amending</u> the Cooperative Agreement dated August 25, 1987 (as revised) for the maintenance and management of the Goleta Slough <u>to accommodate the Taxiway H Airfield Safety Project and establish its consistency with the Cooperative Agreement. Amendments to be considered shall include an adjustment of <del>to adjust</del></u> the boundaries of the GSER to exclude the Taxiway H Airfield Safety Project site, <u>and inclusion of <del>and to include</del></u> a site of similar habitat value at an area ratio of 1:1 (i.e., if Taxiway H and associated actions removes 11 acres from the GSER, 11 acres would be added to the GSER from available Airport property adjacent to the Slough). <del>This</del> <u>Such a</u> mutually-accepted exchange shall be in addition to required biological mitigation. The Cooperative Agreement amendment shall be presented to the California Fish and Game Commission <u>for concurrence</u> .	City Planning	Airport staff	Prior to approval of the Taxiway H Airfield Safety Project	
<b>Impact SW-2. Some proposed building demolition or construction under the proposed Master Plan could result in significant impacts to regional solid waste disposal. (Short-term impact)</b>					
SW/mm-1	As a condition of approval, projects recommended by the proposed Master Plan must feasibly reduce, reuse, and recycle demolition and construction waste consistent with State and City diversion goals <u>in place at the time</u> .	Developer or contractor	City Planning or Airport staff	Prior/during construction	
<b>Impact T-1 and T-2. <del>Project contributions to cumulative traffic impacts</del> <u>Cumulative project impacts could occur to traffic and circulation</u> in the intermediate term (Kellogg Ave/Hollister Ave) and in the long term (Kellogg Ave/Hollister Ave; South Fairview Ave/US 101 NB ramps)</b>					
T/mm-1	<u>All development at the Airport will contribute an equitable share cost allocation for afternoon peak-hour trips added to the Hollister Avenue/Kellogg Avenue intersection and to the Fairview Avenue/US 101 NB ramps. Equitable share shall be calculated using the most recent cost for the improvement programmed</u>	City planning	City Planning or Airport staff	<del>When, and if, traffic improvements within the City of Goleta are constructed</del> <u>Prior to approval of any project contributing a trip to intersections</u>	

	<p><del>for these intersections in the Goleta Transportation Improvement Plan (GTIP), and shall be based upon a traffic study prepared pursuant to the City of Santa Barbara Traffic Management Strategy for the Airport Area, including consultation and coordination with the City of Goleta. The Airport will contribute its "fair share" cost allocation of traffic mitigation fees for the future construction of planned Goleta General Plan traffic improvement projects or a multi-modal transit center, based on adopted mitigation fee programs, at the time that such improvement projects go forward.</del></p>			<p><u>identified in T/mm-1</u></p>	
T/mm-2	<p>The City will pursue the implementation of transportation demand measures (TDM) measures within new north side lease agreements, consistent with City policy, as north side redevelopment opportunities become available.</p>	Airport staff	Airport staff	As part of north side lease agreements	



## Chapter Eight

### DOCUMENT PREPARERS AND REFERENCES

*Airport Master Plan*  
*Final Program EIR*

#### 8.1 REPORT PREPARERS

Persons responsible for preparation of this [Program](#) Environmental Impact Report (EIR) document are listed below.

NAME	EXPERTISE	PROFESSIONAL EXPERIENCE
<b>CITY OF SANTA BARBARA</b>		
Andrew R. Bermond, AICP	Airport Project Planning, Environmental Analysis, Coastal Resources Planning	MPA, Public Administration; B.A. History and Environmental Studies. Prepares and manages development review and long-range planning efforts for the 960-acre Santa Barbara Airport; oversees and prepares environmental review documentation, coordinating with up to twelve state, federal, and local government regulatory agencies pursuant to CEQA/NEPA.
<b>EIR PREPARERS</b>		
<b><i>Coffman Associates</i></b>		
Jim Harris, PE	Airport Master Planning, Environmental Analysis and Airport Management	B.S., Civil Engineering. Responsible for overall project management of airport master planning, noise and land use compatibility planning and environmental documentation for airports.

Judi Krauss	Transportation and Land Use Planning; Environmental Analysis and Documentation; Socio-economics	M.A., Economics w/ emphasis in Natural Resource Economics; B.A., Environmental Studies. Experience in transportation and land use planning, socioeconomic studies, and CEQA analysis/documentation. Has worked extensively in Santa Barbara County.
Kory Lewis	Land Use Planning, Environmental Analysis and Documentation, Noise Monitoring and Assessment, Air Quality Analysis	Masters, Urban Planning; B.A., Geography. Experience in land use management and noise assessment, and preparation of environmental documentation for airport development projects. Experienced in working with California Air Pollution Control Districts through southern California.
Eric Pfeifer, LEED Green Associate	Airport Master Planning, Environmental Analysis and Documentation	Masters, Business Administration; B.S., Airport Administration. Experienced in airport master planning and associated environmental documentation under both NEPA and CEQA. Prepares sustainability assessments and plans.
<b>Applied Earthworks, Inc.</b>		
M. Colleen Hamilton, RPA	Senior Architectural Historian	M.A., History; B.A., Anthropology. Conducts "built" environment surveys, building assessments, bridge evaluations, and data recovery of several historic archaeological sites in Santa Barbara. Developed and negotiated Memorandums of Agreement and Environmentally Sensitive Area action plans for historic properties in Santa Barbara.
Aubrie Morlet	Architectural Historian	M.A., Public History; B.A., History with emphasis in Architectural History. Specializes in history and architecture throughout the State. Prepared Historic Resource Evaluation Reports and Historic Property Survey Reports for the West Downtown Historic Building Survey; has a thorough understanding of the City Master Environmental Assessment (MEA) guidelines.

**Dudek**

<u>Dave Compton</u>	<u>Ornithologist, Biologist</u>	<u>M.A., U.S. History; B.A., History. Has over 18 years' experience providing natural resources planning expertise through habitat assessments, constraints analyses, impact analyses, managing projects related to biological resources, agency coordination, permitting services, and designing and leading biological surveys. Involved in bird air strike hazard (BASH) issues for the Santa Barbara Airport since 2001.</u>
John Davis IV	Senior Biologist	M.S., Biology; B.S. Ecology. Has over 15 years' experience, specializing in biological assessments; special-status plant and wild-life species surveys; habitat restoration; and environmental regulations, permitting, and compliance.
April Winecki	Coastal Planner; Senior Project Manager	B.S., Environmental Studies. Expert in California Coastal Commission procedures, including the facilitation of LCP amendments and policy consistency analysis. Experienced in land development permit processing, environmental planning, impact and constraint analysis, condition compliance, and mitigation monitoring.

**Kimley-Horn and Associates**

David K. Sorenson, PE	Senior Traffic Engineer	M.S., Transportation Planning; B.S. Civil Engineering. Specializes in traffic impact analysis, traffic operations, traffic modeling, military projects, transit planning, community planning, and master planning. Conducted hundreds of transportation and mobility studies ranging from airports, hospitals, shopping centers, military bases, and other commercial and residential developments.
David Park, PE	Traffic Analyst	M.S., Civil and Environmental Engineering (Transportation); B.S. Civil and Environmental Engineering. Specializes in traffic impact analysis studies and has conducted reports for airports, schools, casinos, military bases, residential lots, shopping centers, and other commercial developments.

## 8.2 LIST OF AGENCIES CONSULTED

The following agencies were notified and input solicited regarding the preparation of this EIR:

California Department of Transportation (Caltrans) – Division of Aeronautics  
Caltrans, District 5  
[California Coastal Commission](#)  
California Environmental Protection Agency, Air Resources Board  
California Governor’s Office of Planning and Research (State Clearinghouse)  
California Highway Patrol  
California Natural Resources Agency, Department of Conservation  
California Natural Resources Agency, Department of Fish and Wildlife (CDFW), Region 5  
California Natural Resources Agency, Department of Parks and Recreation  
California Natural Resources Agency, Department of Water Resources  
California Natural Resources Agency, Office of Historic Preservation  
City of Goleta, Advanced Planning Division  
City of Goleta, Public Works Department  
Federal Aviation Administration (FAA), Western-Pacific Region, Los Angeles Airport District Office  
Goleta Slough Management Committee (GSMC)  
Native American Indian Commission  
Regional Water Quality Control Board, Central Coast Region (3)  
Santa Barbara County Air Pollution Control District (SBCAPCD)  
Santa Barbara County Association of Governments (SBCAG)  
Santa Barbara County Flood Control and Water Conservation District (SBFCD)  
[State of California Public Utilities Commission](#)  
University of California, Santa Barbara (UCSB)  
[United States Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service](#)

## 8.3 REFERENCES

The following documents and websites ~~were utilized~~ [are source material](#) for the preparation of this [Program](#) EIR:

- [Atkinson, K.J. 2010. Habitat Conditions and Steelhead Abundance and Growth in a California Lagoon \(Master’s Thesis\), San Jose University.](#)
- [Beason, R.C. 1995. “Horned Lark \(\*Eremophila alpestris\*\),” In the \*Birds of North America Online\*. A. Poole, ed. Ithaca, N.Y.: Cornell Lab of Ornithology. Available at: \[bna.birds.cornell.edu/bna/DOI: 10.2173/bna.195\]\(http://bna.birds.cornell.edu/bna/DOI:10.2173/bna.195\), accessed June 28, 2017.](#)
- [Bond, M.H., S.A. Hayes, C.V. Hanson, and R.B. MacFarlane 2008. “Marine survival of steelhead \(\*Oncorhynchus mykiss\*\) enhanced by a seasonally closed estuary,” \*Canadian Journal of Fisheries and Aquatic Sciences\*. 65:2242-2252.](#)

Bond, M.H. 2006. Importance of Estuarine Rearing to Central California Steelhead (*Oncorhynchus mykiss*) Growth and Marine Survival (Master's Thesis), University of California, Santa Cruz.

CA.gov (California Climate Change Portal) 2014. *Our Changing Climate 2012 Vulnerability & Adaption to the Increasing Risks of Climate Change in California* (Publication #CEC-500-2012-007). Available at: [http://climatechange.ca.gov/climate\\_action\\_team/reports/third\\_assessment/index.html](http://climatechange.ca.gov/climate_action_team/reports/third_assessment/index.html), accessed June.

California Air Resources Board (CARB), California Environmental Protection Agency 2015. 2015 State Area Designation Maps. Available at: <http://www.arb.ca.gov/desig/adm/adm.htm>, accessed June 2016.

California Building Standards Commission 2014. Available at: <http://www.bsc.ca.gov/>, accessed June.

California Department of Fish and Game (CDFG) 2012. *Guide to the Southern California Marine Protected Areas - Point Conception to California-Mexico Border*, January.

California Department of Toxic Substances Control (DTSC) 2014. EnviroStor database. Available at: [http://www.envirostor.dtsc.ca.gov/public/mapfull.asp?global\\_id=42970004](http://www.envirostor.dtsc.ca.gov/public/mapfull.asp?global_id=42970004), accessed June.

California Department of Transportation (Caltrans) 2011. *California Airport Land Use Planning Handbook*, October.

California Natural Diversity Database (CNDDDB), California Department of Fish and Wildlife, 2011.

Central Coast Regional Water Quality Control Board (RWQCB), California Environmental Protection Agency, 2011. *Water Quality Control Plan for the Central Coast Region* (Basin Plan), June.

City of Goleta 2006, updated 2009. *Goleta General Plan/Coastal Land Use Plan*.

City of Goleta 2013. *Marriott Residence Inn and Hollister Project Center Project Final Environmental Report*, October.

City of Goleta 2014. *Village at Los Carneros Project Final Environmental Impact Report*, June.

City of Goleta 2015. Project Goleta, Featured Projects, <http://www.projectgoleta.com/featured-projects/ekwill-fowler-project/>, accessed January.

City of Santa Barbara 1997. *Goleta Slough Ecosystem Management Plan (GSEMP)*, prepared by Goleta Slough Management Committee. Available at: <http://www.goletaslough.org/gsmcplanlist.php?s=index>, accessed July 2014.

City of Santa Barbara 1998. *Santa Barbara Airport Industrial Area Specific Plan (SP-6)*, October.

City of Santa Barbara 2002. *Santa Barbara Airport Final Environmental Impact Statement/Environmental Impact Report for the Aviation Facilities Plan*, EIS No. 010183/SCH #2000111037, August.

City of Santa Barbara 2003. *Aviation Facilities Plan, Santa Barbara Airport*, March.

City of Santa Barbara 2003. *Coastal Plan: Airport and Goleta Slough*, including amendments certified by the California Coastal Commission.

City of Santa Barbara 2007. *Final Draft Greenhouse Gas (GHG) Inventory and Carbon Footprint Reduction Plan for Santa Barbara Airport*, prepared by HNTB and KB Environmental Sciences, Inc., November 6.

~~City of Santa Barbara 2008. *Santa Barbara Municipal Airport Draft Wildlife Hazard Management Plan*, July 14.~~

City of Santa Barbara 2009. *Master Archaeological Resources Assessment for the Santa Barbara Municipal Airport (MARA)*, Santa Barbara, California, prepared by Applied Earth Works, Inc., November.

City of Santa Barbara 2009. *National Pollutant Discharge Elimination System (NPDES) Storm Water Management Program (SWMP)*, January.

City of Santa Barbara 2010. *Certified Final Program Environmental Impact Report for the Plan Santa Barbara General Plan Update* (SCH #2009011031), prepared by AMEC Earth & Environmental, Inc., September.

City of Santa Barbara 2011. *Santa Barbara General Plan (Plan Santa Barbara)*, December.

City of Santa Barbara 2012. *Climate Action Plan (Climate Plan)*, September.

City of Santa Barbara 2014. *Municipal Code*, Titles 22, 28 and 29. Available with revisions at: <http://www.santabarbaraca.gov/gov/cityhall/municode.asp>, accessed July.

~~City of Santa Barbara 2015. *Industrial Activities Stormwater Pollution Prevention Plan for Santa Barbara Municipal Airport*, October.~~

~~City of Santa Barbara 2017. *Santa Barbara Municipal Airport Wildlife Hazard Management Plan*, February 21; approved by FAA on February 27, 2017.~~

County of Santa Barbara 2008. *Environmental Thresholds and Guidelines Manual*, October.

County of Santa Barbara 2014. *Coastal Land Use Plan, Santa Barbara County Comprehensive Plan, adopted 1982, republished May 2014.*

County of Santa Barbara Public Works 2014. Tajiguas Landfill. Available at: <http://www.countyofsb.org/pwd/pwrrwm.aspx?id=3242>, accessed July.

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe (Cowardin et al.) 1979. *Classification of Wetlands and Deepwater Habitats of the United States*, United States (U.S.) Fish and Wildlife Service Report No. FWS/OBS/-79/31, Washington, D.C.:U.S. Fish and Wildlife Service.

Dudek 2012. *Special-Status Species Inventory for the Santa Barbara Airport Master Plan Update*, prepared for Coffman Associates, October.

Dudek 2012. *Wetlands Inventory for the Santa Barbara Airport Master Plan*, prepared for Coffman Associates, October.

Dudek, Rincon Consultants, BASH, Inc. (Dudek et al.) 2016. *Santa Barbara Airport Wildlife Assessment*, May.

Federal Aviation Administration (FAA) 2000. Order 5090.3C, *Field Formulation of the National Plan of Integrated Airport Systems (NPIAS)*, December.

FAA 2005. "Wildlife Hazard Management at Airports," July.

FAA 2006. Order 1050.1E, *Environmental Impacts: Policies and Procedures*, March 20.

FAA 2006. Order 5050.4B, *National Environmental Policy Act (NEPA) Implementing Instructions for Airport Actions*, April 28.

FAA 2007. Advisory Circular 150/5200-33B, *Hazardous Wildlife Attractants On or Near Airports*, August 28.

FAA 2007. Engineering Brief No. 75, *Incorporation of Runway Incursion Prevention into Taxiway and Apron Design*.

FAA ~~2012~~2014. Advisory Circular 150/5300-13A, *Airport Design*, September 28, as amended.

FAA 2014. Order 5100.38D, *Airport Improvement Program Handbook*, September 30.

FAA 2016. Advisory Circular 150/5345-46E, *Specification for Runway and Taxiway Light Fixtures*, March 2.

Federal Emergency Management Agency (FEMA), U.S. Department of Homeland Security, Building Codes, 2014. Available at: <http://www.fema.gov/earthquake/building-codes>, accessed June.

Goleta Slough Management Committee (GSMC), in consultation with URS Corporation, 2014. Working draft Goleta Slough Ecosystem Existing Conditions Report, version dated September 17.

GSMC 1997. Draft Goleta Slough Ecosystem Management Plan.

GSMC 2015. Final *Goleta Slough Area Sea Level Rise and Management Plan*, dated August.

Grinnell, J., and A.H. Miller 1944. *The Distribution of the Birds of California*, Pacific Coast Avifauna, no. 27, Berkeley, California: Cooper Ornithological Club. Reprinted 1986, Lee Vining, California: Artemisia Press.

Harris Miller Miller & Hanson, Inc., 2006. *Noise Analysis of Taxi and Queuing Alternatives for the Centerfield Taxiway at Logan International Airport*, May.

Hayes, S.A., M.H. Bond, C.V. Hanson, A.W. Jones, A.J. Ammann, J.A. Harding, A.L. Collins, J. Peres, and R.B. MacFarlane 2011. "Down, up, down and "smolting" twice? Seasonal movement patterns by juvenile steelhead (*Oncorhynchus mykiss*) in a coastal watershed with a bar closing estuary," Canadian Journal of Fisheries and Aquatic Sciences 80:1341-1350.

Holmgren, M., and K. Burnell 1992. The Abundance and Distribution of Belding's Savannah Sparrow at Goleta Slough, Santa Barbara County, California. Submitted to ENTRIX for the Santa Barbara Municipal Airport, Santa Barbara, California.

Holmgren, M., and D. Kisner 1994. The Abundance and Distribution of Belding's Savannah Sparrow at Goleta Slough, Santa Barbara County, California, in 1994. Prepared for the Santa Barbara Municipal Airport, Santa Barbara, California.

Holmgren, M., and A. O'Loughlen 2017. Santa Barbara County Breeding Bird Study. Available at: <https://fusiontables.google.com/DataSource?docid=1KA8NNkMXi9v6449FM9Pi50-OgAuDXu4h5I9IKKXz#rows:id=1>, accessed June 28, 2017.

Kahn, Steve, Utilities Engineer, City of Santa Maria Utilities Division, 2014. Personal communication with Judi Krauss, Coffman Associates, August 18.

Kelley, E. 2008. Steelhead Trout Smolt Survival in the Santa Clara and Santa Ynez Rivers. Prepared for the California Department of Fish and Game. University of California, Santa Barbara.



Lehman, P.A. 2017. The Birds of Santa Barbara County, California, Revised edition. Originally published in 1994 by the University of California, Santa Barbara, Vertebrate Collection. Available at: <https://sites.google.com/site/lehmanbosbc/>, accessed June 28, 2017.

Milbrooke, Anne, Patrick Andrus, Jody Cook, and David B. Whipple (Milbrooke et al.) 1998. *Guidelines for Evaluating and Documenting Historic Aviation Properties*. National Register Bulletin. U.S. Department of Interior, National Park Service, Cultural Resources, Washington, D.C.

National Park Service (NPS), U.S. Department of the Interior, 1997, 2002. Bulletin 15, *How to Apply National Register Eligibility Criteria*. Available at: <http://www.nps.gov/nr/publications/bulletins/nrb15/>, accessed July 2014.

National Marine Fisheries Services 2012. *Southern California Steelhead Recovery Plan*, January.

Office of Historic Preservation (OHP), California Department of Parks and Recreation, 2014. *California Register and National Register: A Comparison (for purposes of determining eligibility for the California Register)*, California OHP Technical Assistance Series #6. Available at: <http://ohp.parks.ca.gov/pages/1069/files/technical%20assistance%20bulletin%206%202011%20update.pdf>, accessed September 12.

Office of Planning and Research (OPR), Governor's Office, California, 2005. *Tribal Consultation Guidelines, Supplement to General Plan Guidelines*, November 14.

Santa Barbara County Air Pollution Control District (SBCAPCD) 2014. Permits and Engineering, the APCD Permit Process. Available at: <http://www.sbcapcd.org/eng/ez/ez.htm>, accessed June.

SBCAPCD & Santa Barbara County Association of Governments (SBCAG) 2015. Final *2013 Clean Air Plan (CAP)*, Triennial Update to the 2010 Clean Air Plan, March.

SBCAG 2009. *Santa Barbara County Congestion Management Program*, June 18.

SBCAG 2013. *2040 Regional Transportation Plan & Sustainable Communities Strategy*, adopted August 15.

SBCAG 2014. Traffic Solutions, "Taking Transit in Santa Barbara County." Available at: <http://www.trafficsolutions.info/transit.htm>, accessed September.

Santa Barbara County Flood Control District (SBFCD) 2010. *Flood Control Maintenance Activities in the Goleta Slough Final Subsequent Environmental Impact Report (SCH #2000031092)*, October.

*Santa Barbara Independent* 2014. "Goleta Slough Ecosystem Plan Update and Sea Level Rise Study" – Notice of Public Meeting. Available at: <http://www.independent.com/events/2014/feb/11/33349/>, posted February 3.

State Water Resources Control Board, California Environmental Protection Agency, 2012. *California Ocean Plan*, adopted October 16; effective August 19, 2013.

Triem, Judith and Mitchel Stone 1995. *Determinations of Eligibility for Historic Resources at the Santa Barbara Municipal Airport*. San Buenaventura Research Associates, Santa Paula, California. Prepared for Science Applications International Corporation, Santa Barbara, California.

United States (U.S.) Army Corps of Engineers (USACE) 2014. National Wetland Plant List update. Available at: <http://rsgisias.crrel.usace.army.mil/NWPL/>, accessed January 2015.

U.S. Environmental Protection Agency (EPA) 2016. Green Book, California Nonattainment/Maintenance Status for Each County by Year for All Criteria Pollutants, as of June 17. Available at: [https://www3.epa.gov/airquality/greenbook/anayo\\_ca.html](https://www3.epa.gov/airquality/greenbook/anayo_ca.html), accessed June 2016.

U.S. EPA. My WATERS mapper. Available at: <http://watersgeo.epa.gov/mwm/>, accessed June 2014.

U.S. EPA. Surf Your Watershed, Santa Barbara Coastal Watershed—18060013. Available at: [http://cfpub.epa.gov/surf/huc.cfm?huc\\_code=18060013](http://cfpub.epa.gov/surf/huc.cfm?huc_code=18060013), accessed June 2014.

University of California, Santa Barbara research (UCSB) 2014. Santa Barbara Wildlife Linkages Project. Available at: <https://sites.google.com/site/cawildlifelinkagesproject/>, accessed September 16.

URS Corporation 2003. *Goleta Slough Tidal Restoration Project Feasibility Study for Field Experiment, prepared for the Santa Barbara Airport and California Coastal Conservancy, September.*

Weeks, Kay D., and Anne E. Grimmer 1995. *The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring & Reconstructing Historic Buildings*, National Park Service, U.S. Government Printing Office, Washington, D.C.

Wilken, Dr. Dieter 2010. *Rare Plants of Santa Barbara County*, Santa Barbara Botanic Garden.

Zemba, R., S. M. Hoffman, and R. T. Patton (Zemba et al.) 2010. "A Survey of Belding's Savannah Sparrow" with field work by Mark Holmgren, Nongame Wildlife Program Report No. 2010-10, prepared for State of California, The Resources Agency, Department of Fish and Game, Wildlife Branch.

Zemba et al. 2015. A Survey of the Belding's Savannah Sparrow (*Passerculus sandwichensis beldingi*), State of California, Natural Resources Agency, Department of Fish and Wildlife, Wildlife Branch, September.

#### **8.4 ACRONYMS AND ABBREVIATIONS**

A.B. – Assembly Bill (California State legislature)  
ACM – asbestos-containing materials  
A.D. – anno domini (dating system using the birth of Christ as a reference point in time)  
ADT – average daily traffic/trips  
AHPA – *Archaeological and Historic Preservation Act of 1974*  
AIA – Airport Industrial Area  
AIP- Airport Improvement Program  
ALUC – airport land use commission  
ALUCP – Airport Land Use Compatibility Plan  
ALUP – Airport Land Use Plan  
APCD – Air Pollution Control District  
ARC – Airport Reference Code  
ARFF – aircraft rescue and firefighting  
ASOS – automated surface observation system  
ASV – annual service volume (defined as the number of annual aircraft operations that may be accommodated by the runway system at an airport)  
ATC – Authority to Construct (type of permit from APCD)  
ATCT – airport traffic control tower  
A-A-O zone – Airport Approach and Operations (City of Santa Barbara)  
A-C zone – Airport Commercial (City of Santa Barbara)  
A-F zone – Airport Facilities (City of Santa Barbara)  
A-1-1 & 2 zones – Airport Industrial (City of Santa Barbara)

BAAQMD – Bay Area Air Quality Management District  
BMPs – best management practices

CAAQS – California Ambient Air Quality Standards  
Caltrans – California Department of Transportation  
CAP – *Clean Air Plan*  
CARB – California Air Resources Board  
CAT – Category  
CBIA – California Building Industry Association  
CBSC – California Building Standards Commission  
CCC – California Coastal Commission  
CCR – California Code of Regulations  
CDFG – California Department of Fish and Game (in January 2013, the CDFG was renamed CDFW)  
CDFW – California Department of Fish and Wildlife  
CDP – Coastal Development Permit

CEQA – *California Environmental Quality Act*  
 CERCLA – *Comprehensive Environmental Response, Compensation, Liability Act* (also known as Superfund)  
 CESA – *California Endangered Species Act*  
 CFCG – *California Fish and Game Code*  
 CFR – Code of Federal Regulations  
 CH<sub>4</sub> - methane  
 CIP – Capital Improvement Program  
 CIWMP – *California Integrated Waste Management Plan*  
 CMP – Congestion Management Plan  
 CNDDDB – California Natural Diversity Database  
 CNEL – Community Noise Equivalent Level  
 CNPS – California Native Plant Society  
 CO – carbon monoxide  
 CO<sub>2</sub> -carbon dioxide  
 CRHR – California Register of Historic Resources  
 CRPR – California Rare Plant Rank  
 CSC – California Species of Concern  
 CWA – Federal *Clean Water Act*  
 cy – cubic yards  
 C-M zone – Commercial Manufacturing (City of Santa Barbara)  
 C-R zone – Commercial Recreation (City of Santa Barbara)

DNL (also known as L<sub>dn</sub>) – Day-Night Noise Level  
 DOD – Federal Department of Defense  
 DOT – Federal Department of Transportation  
 DPR – California Department of Parks and Recreation  
 DPS – distinct population segment  
 DTSC – California Department of Toxic Substances Control  
 DTWL – dual tandem wheel loading  
 du – dwelling unit  
 DWL – dual wheel loading

EB – eastbound  
 EDMS – Emissions and Dispersion Modeling System (a computer program developed by the military and FAA to assess the air quality impacts of proposed airport development projects)  
 EFH – Essential Fish Habitat  
 EIR – Environmental Impact Report  
 E.O. – Executive Order  
 EPA – Federal Environmental Protection Agency  
 ESA – Federal *Endangered Species Act*  
 ESHA – environmentally sensitive habitat area (areas protected by the *California Coastal Act*)

FAA – Federal Aviation Administration

FAC – Facultative; equally likely to occur in wetlands (estimated probability 34 – 66 percent) or non-wetlands

FBO – fixed base operator

FEMA – Federal Emergency Management Agency

FIRM(s) – Flood Insurance Rate Map(s)

FP – Fully Protected

FR – Federal Register

FUDS – Formerly Used Defense Sites

FY – fiscal year

GA – general aviation

Gal. – gallon (or gallons)

GHG(s) – greenhouse gas (or gases)

GPS – global positioning system

GSE – ground service equipment

GSEMP – *Goleta Slough Ecosystem Management Plan*

GSER – Goleta Slough Ecological Reserve

GSMC – Goleta Slough Management Committee

GSSMCA – Goleta Slough State Marine Conservation Area

[GTIP – Goleta Transportation Improvement Plan](#)

GWP – global warming potential

GVSH – Goleta Valley Cottage Hospital

G-S-R zone – Goleta Slough Reserve Zone (City of Santa Barbara)

HABS/HAER - Historic American Buildings Survey/Historic American Engineering Record

HCM – Highway Capacity Manual

HIRL – high intensity runway edge lighting

HMMP – habitat mitigation and monitoring plan

H<sub>2</sub>O – water vapor

ICC – International Code Council

ICU – Intersection Capacity Utilization method

ILS – instrument landing system

IPCC – Intergovernmental Panel on Climate Change

IUCN – International Union for Conservation of Nature and Natural Resources

IWMF – Integrated Waste Management Facility

LAX – Los Angeles International Airport

LCP – Local Coastal Program

LiDAR – Light Detection and Ranging topographic data

LNAV – lateral navigation

LOS – Level of Service

LPV - localizer performance with vertical guidance

LR – locally rare (per *Rare Plants of Santa Barbara County*)

LSA – Lake and Streambed Alteration

MALSR – medium intensity approach lighting system (with runway alignment indicator lights)  
MARA – *Master Archaeological Resources Assessment for the Santa Barbara Municipal Airport*  
MBTA – *Migratory Bird Treaty Act of 1918*  
MCAS – Marine Corps Air Station  
MCMs – minimum control measures  
MEA-CR – *Master Environmental Assessment and its Guidelines for Archaeological Resources and Historic Structures and Sites* (City of Santa Barbara document)  
MIRL – medium intensity runway edge lighting  
MITL – medium intensity taxiway lighting  
MMRP – mitigation, monitoring, and reporting program  
MOA – Memorandum of Agreement  
MPA – marine protection area  
MRS – Munitions Response Site  
MSA - *Magnuson-Stevens Fishery Conservation and Management Act*  
msl – mean sea level  
MT CO<sub>2</sub>e – metric tons of carbon dioxide equivalent (GHG emissions are typically measured in terms of pounds or tons of “CO<sub>2</sub> equivalent” [CO<sub>2</sub>e]. The CO<sub>2</sub>e for a gas is derived by multiplying the mass of the gas by the associated global warming potential [GWP], i.e., potential of a gas or aerosol to trap heat in the atmosphere, such that MT CO<sub>2</sub>e = [metric tons of a GHG] x [GWP of the GHG]. For example, the GWP for CH<sub>4</sub> is 21.)  
MTD – Metropolitan Transit District  
M-RP zone – Industrial Research Park (City of Goleta)  
M-S-GOL zone – Service Industrial (City of Goleta)

NAAQS – National Ambient Air Quality Standards  
NAVD88 – North America Vertical Datum of 1988  
NB – northbound  
NEPA – *National Environmental Policy Act*  
NHPA – *National Historic Preservation Act of 1966*  
[NMFS – National Marine Fisheries Service](#)  
NOAA – National Oceanic and Atmospheric Administration  
~~NOAA Fisheries – National Marine Fisheries Service~~  
NOP – Notice of Preparation  
NO<sub>2</sub> – nitrogen dioxide  
NO<sub>x</sub> – nitrogen oxides  
NPDES – National Pollutant Discharge Elimination System  
NPIAS – National Plan of Integrated Airport Systems  
NPL – National Priorities List  
NPS – National Park Service  
NRC – Natural Research Council  
NRHP – National Register of Historic Places  
N<sub>2</sub>O – nitrous oxide

OHP – California Office of Historic Preservation  
OHWM – ordinary high water mark

OPR – Governor’s Office of Planning and Research  
O<sub>3</sub> - ozone

PAC – Airport Master Plan advisory committee  
PAPI – precision approach path indicator  
Pb – lead  
PCBs – polychlorinated biphenyls  
PM – particulate matter  
PM<sub>2.5</sub> – particulate matter measuring 2.5 micrometers in diameter  
PM<sub>10</sub> – particulate matter measuring 10 micrometers or less in diameter  
PRC – California Public Resources Code  
PTO – Permit to Operate (type of permit from APCD)  
PU zone – Public Utility (County of Santa Barbara)  
PUC – California Public Utilities Code  
PWRP – programmatic wetland restoration plan  
P-R zone – Park & Recreational (City of Santa Barbara)  
RCRA – *Resource Conservation Recovery Act*  
R&D – research and development  
REC zone – Recreation (County of Santa Barbara)  
REIL – runway end identifier lighting  
ROC – reactive organic compounds  
RPZ – runway protection zone  
RTP-SCS – *Regional Transportation Plan and Sustainable Communities Strategy*  
RSA – runway safety area  
RVZ – runway visibility zone  
RWQCB – Regional Water Quality Control Board

SAA – *State Aeronautics Act*  
SB – southbound  
S.B. – Senate Bill (California State legislature)  
SBA – Santa Barbara Municipal Airport  
SBCAG – Santa Barbara County Association of Governments  
SBCAPCD – Santa Barbara County Air Pollution Control District  
SBFCD – Santa Barbara County Flood Control and Water Conservation District  
SCH – State Clearinghouse (California Office of Planning and Research)  
sf – square foot (or feet)  
SMOOTH – Santa Maria Organization of Transportation Helpers  
SO<sub>2</sub> - sulfur dioxide  
SO<sub>x</sub> - sulfur oxides  
SPCC – spill preventions control and countermeasures  
SP-6 zone – Airport Industrial Area Specific Plan (City of Santa Barbara)  
SR – State Route  
SWL – single wheel loading  
SWMP – Storm Water Management Program  
SWPPP – storm water pollution prevention plan

sy – square yard (or yards)

S-D-3 zone – Special District 3 Coastal Overlay (City of Santa Barbara)

TAF – Terminal Area Forecast

TDM – travel demand management

TOFA – taxiway object free area

tpy – tons per year

TRACON – Terminal Radar Approach Control

TSCA – *Toxic Substances Control Act*

tsf – thousand square feet

U.S. – United States

USACE – United States Army Corps of Engineers

USC – United States Code

UCSB – University of California, Santa Barbara

USFWS – United States Fish and Wildlife Service

USGS – United States Geologic Survey

USTs – underground fuel storage tanks

UXO – unexploded ordnance

V/C – volume to capacity ratio

VMT – vehicle miles traveled

VNAV – vertical navigation

VOCs – volatile organic compounds

VOR – very high frequency omni-directional range

WB – westbound

WHA – Wildlife Hazard Assessment

WHMP – Wildlife Hazard Management Plan

WQMP – Water Quality Mitigation Plan

Zone AE – FEMA flood zone definition indicating a Special Flood Hazard Areas Subject to Inundation by the 1% Annual Chance Flood where Base Flood Elevations have been determined.