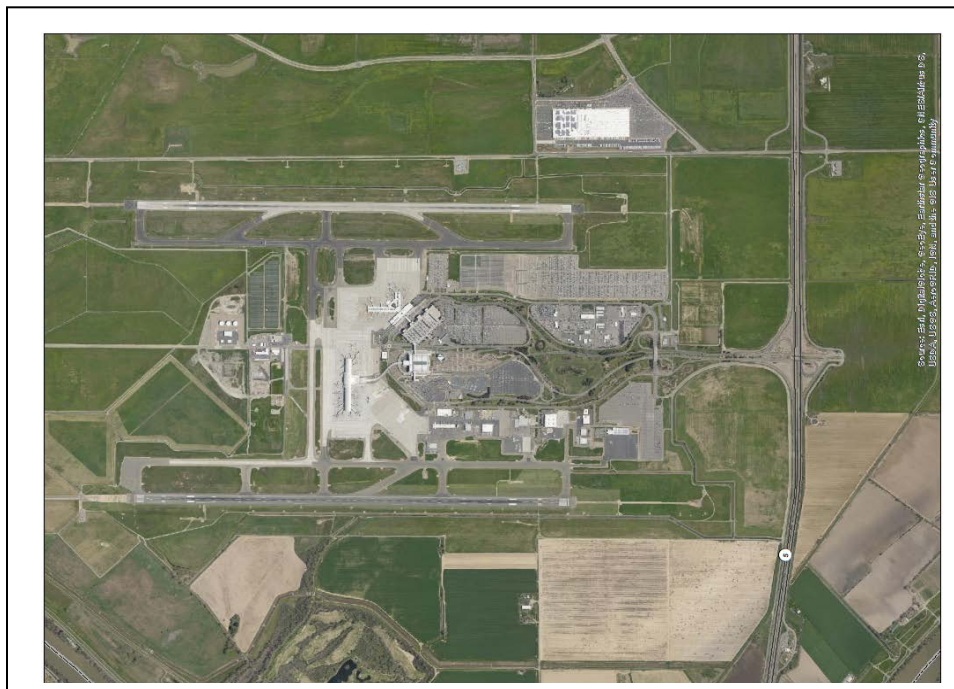


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# DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT

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## *SACRAMENTO INTERNATIONAL AIRPORT MASTER PLAN UPDATE*



*Control Number: PLER2020-00037*  
*State Clearinghouse Number: 2005082017*  
*May 2021*

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COUNTY OF SACRAMENTO  
OFFICE OF PLANNING AND ENVIRONMENTAL REVIEW  
827 7TH STREET, ROOM 225  
SACRAMENTO, CALIFORNIA 95814



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County of Sacramento  
Office of Planning and Environmental Review

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# DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT

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## *SACRAMENTO INTERNATIONAL AIRPORT MASTER PLAN UPDATE*

*Control Number: PLER2020-00037*

*State Clearinghouse Number: 2005082017*

This Supplemental Environmental Impact Report has been prepared pursuant to the California Environmental Quality Act of 1970 (Public Resources Code Division 13). A Supplemental Environmental Impact Report is an informational document which, when this Office requires its preparation shall be considered by every public agency prior to its approval or disapproval of a project. The purpose of a Supplemental Environmental Impact Report is to provide public agencies with detailed information about the effect that a proposed project is likely to have on the environment; to list ways in which any adverse effects of such a project might be minimized; and to suggest alternatives to such a project.

Prepared by the  
COUNTY OF SACRAMENTO  
OFFICE OF PLANNING AND ENVIRONMENTAL REVIEW  
827 7<sup>TH</sup> STREET, ROOM 225  
SACRAMENTO, CALIFORNIA 95814  
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5/14/21

TO: All Interested Parties

SUBJECT: DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT FOR SACRAMENTO  
INTERNATIONAL AIRPORT MASTER PLAN UPDATE (CONTROL NUMBER: PLER2020-00037)

The subject Draft Supplemental Environmental Impact Report (DSEIR) is attached for your review and comment. The DSEIR can also be reviewed at:

<https://planningdocuments.saccounty.net/ViewProjectDetails.aspx?ControlNum=PLER2020-00037>

Reviewers should focus on the sufficiency of the DSEIR in discussing possible impacts upon the environment, ways in which adverse effects might be minimized, and alternatives to the proposed project. Reviewers who wish to comment on the adequacy of this DSEIR are urged to submit written or emailed comments to the Sacramento County Department of Community Development by close of business on 6/28/21 at the address below:

Joelle Inman, Environmental Coordinator  
Office of Planning and Environmental Review  
827 7th Street, Room 225, Sacramento, CA 95814  
or via e-mail at: [CEQA@saccounty.net](mailto:CEQA@saccounty.net).

A public hearing on the Sacramento International Airport Master Plan Update project will be held by the Sacramento County Board of Supervisors at the Board of Supervisors Chambers, at 700 H Street in Sacramento. A notice of the date and time of the public hearing will be provided by the hearing body authorized to conduct the public hearing for the proposed project. Interested individuals may check the materials for upcoming hearings on the website of the Board of Supervisors at:

<https://sccob.saccounty.net/Pages/BOSPublicMeetings.aspx>

For questions about the project, please contact Alison Little of this office at (916) 874-8620 or [littlea@saccounty.net](mailto:littlea@saccounty.net).

Sincerely,

[Original Signature on File]

Joelle Inman,  
Environmental Coordinator

# Table of Contents

<b>1 Project Description .....</b>	<b>1</b>
Introduction.....	1
Project Background.....	1
Project Location.....	3
Project Proponents.....	3
Environmental Setting.....	5
Project Proposal .....	6
Project Objectives .....	19
Intended Uses of the EIR .....	20
<b>Executive Summary.....</b>	<b>1</b>
SEIR Scope and Impacts Evaluated.....	1
Mitigation Monitoring and Reporting Program .....	47
Terminology Used in this EIR .....	47
<b>1 Project Description .....</b>	<b>1</b>
Introduction.....	1
Project Background.....	1
Project Location.....	3
Project Proponents.....	3
Environmental Setting.....	5
Project Proposal .....	6
Project Objectives .....	19
Intended Uses of the EIR .....	20
<b>2 Alternatives .....</b>	<b>1</b>
Introduction.....	1

**Range of Alternatives** ..... 1

**Description of Alternatives** ..... 2

**Impacts And Analysis** ..... 7

**Environmentally Superior Alternative**..... 11

**3 Air Quality**..... 1

**Introduction**..... 1

**Air Quality Setting** ..... 1

**Regulatory Setting**..... 4

**Methodology** ..... 10

**Impacts And Analysis** ..... 13

**4 Biological Resources** ..... 1

**Introduction**..... 1

**Environmental Setting**..... 1

**Regulatory Setting**..... 18

**Significance Criteria** ..... 25

**Methodology** ..... 25

**Impacts And Analysis** ..... 26

**5 Climate Change**..... 1

**Introduction**..... 1

**Emissions Setting**..... 1

**Sacramento County Emissions** ..... 2

**Regulatory Setting**..... 4

**Sacramento County Climate Action Planning**..... 6

**Significance Criteria** ..... 7

**Methodology** ..... 10

Impacts And Analysis ..... 12

**6 Cultural Resources ..... 1**

    Introduction..... 1

    Environmental Setting..... 1

    Regulatory Setting..... 1

    Significance Criteria ..... 7

    Methodology ..... 8

    Impacts And Analysis ..... 9

**7 Hydrology ..... 1**

    Introduction..... 1

    Environmental Setting..... 1

    Regulatory Setting..... 2

    Significance Criteria ..... 7

    Impacts And Analysis ..... 7

**8 Land Use ..... 1**

    Introduction..... 1

    Environmental Setting..... 1

    Regulatory Setting..... 7

    Impact Assessment Methodology ..... 9

    Impacts And Analysis ..... 11

**9 Noise ..... 1**

    Introduction..... 1

    Environmental Setting..... 1

    Regulatory Setting..... 4

    Significance Criteria ..... 5

Impacts And Analysis ..... 5

**10 Public Services/Utilities..... 1**

    Introduction..... 1

    Environmental Setting..... 1

    Regulatory Setting..... 4

    Significance Criteria ..... 5

    Impacts And Analysis ..... 6

**11 Transportation and Circulation..... 1**

    Introduction..... 1

    Transportation Setting ..... 1

    Regulatory Setting..... 2

    Significance Criteria ..... 3

    Methodology ..... 7

    Impacts And Analysis ..... 8

**12 Tribal Cultural Resources ..... 1**

    Introduction..... 1

    Tribal Resources Environmental Setting..... 1

    Regulatory Setting..... 3

    Significance Criteria ..... 5

    Methodology ..... 6

    Impacts And Analysis ..... 8

**13 Summary of Impacts and Their Disposition..... 1**

    Potentially Significant Effect Which Cannot be Avoided Even with  
    Implementation of Mitigation Measures ..... 1

    Potentially Significant Effects Which Could be Avoided with Implementation of  
    Mitigation Measures ..... 2



**Effects Found Not to be Significant ..... 3**

**Irreversible Environmental Changes ..... 4**

**Cumulative Impacts and Analysis ..... 5**

**14 Bibliography ..... 1**

**List of Plates**

**Plate PD-1: Project Location with 2018 Aerial Photo ..... 4**

**Plate PD-2: 2004 Master Plan Facilities Phasing Exhibit ..... 12**

**Plate PD-3: Master Plan Update PALs 1-4..... 13**

**Plate PD-4: Master Plan Update PAL 1 ..... 14**

**Plate PD-5: Master Plan Update PAL 2..... 15**

**Plate PD-6: Master Plan Update PAL 3..... 16**

**Plate PD-7: Master Plan Update PAL 4..... 17**

**Plate PD-8: Conceptual Cargo Plan (North Airfield)..... 18**

**Plate PD-1: Project Location with 2018 Aerial Photo ..... 4**

**Plate PD-2: 2004 Master Plan Facilities Phasing Exhibit ..... 12**

**Plate PD-3: Master Plan Update PALs 1-4..... 13**

**Plate PD-4: Master Plan Update PAL 1 ..... 14**

**Plate PD-5: Master Plan Update PAL 2..... 15**

**Plate PD-6: Master Plan Update PAL 3..... 16**

**Plate PD-7: Master Plan Update PAL 4..... 17**

**Plate PD-8: Conceptual Cargo Plan (North Airfield)..... 18**

**Plate ALT-1: Alternative 1 ..... 4**

**Plate ALT-2: Envision Verification Table..... 5**

**Plate ALT-3: No Project Alternative ..... 6**

**Plate AQ-1: Sacramento Federal Nonattainment Area (SNFA) for  
Ozone ..... 3**

**Plate BR-1: Aerial Photo Overview ..... 3**

**Plate BR-2a: 2016 Revised Wetland Delineation ..... 4**

**Plate BR-2b: 2016 Revised Wetland Delineation ..... 5**

**Plate BR-2c: 2016 Revised Wetland Delineation ..... 6**

**Plate BR-2d: 2016 Revised Wetland Delineation ..... 7**

**Plate BR-2e: 2016 Revised Wetland Delineation ..... 8**

**Plate BR-2f: 2016 Revised Wetland Delineation ..... 9**

**Plate BR-2g: 2016 Revised Wetland Delineation ..... 10**

**Plate BR-2h: 2016 Revised Wetland Delineation ..... 11**

**Plate BR-2i: 2016 Revised Wetland Delineation ..... 12**

**Plate BR-2j: 2016 Revised Wetland Delineation ..... 13**

**Plate BR-2k: 2016 Revised Wetland Delineation ..... 14**

**Plate BR-2l: 2016 Revised Wetland Delineation ..... 15**

**Plate BR-3: North of Elverta Road Wetland Delineation (2006) ..... 16**

**Plate BR-4: CDFW Land Cover Classifications North of Elverta Road 17**

**Plate BR-5: CNDDDB Occurrence Map ..... 42**

**Plate BR-6: GGS Aquatic Habitat Map 2017 ..... 57**

**Plate BR-7: GGS Aquatic Habitat Map 2020 ..... 58**

**Plate BR-8: GGS Aquatic Habitat Map 2020 (close up of northern section) ..... 59**

**Plate HY-1: SAFCA ULOP Plan Projects ..... 6**

**Plate HY-2: Levee Protected ULOP Areas ..... 11**

**Plate HY-3: Non-Levee Protected ULOP Areas ..... 12**

**Plate LU-1: Aerial Photo (2018) of Project Site ..... 2**

**Plate LU-2: General Plan Land Use Exhibit.....3**

**Plate LU-3: Zoning Exhibit .....4**

**Plate LU-4: SMF ALUCP Safety Zones .....13**

**Plate LU-5: 2018 Farmland Map .....16**

**Plate NO-1: SMF Noise Contours.....3**

## List of Tables

<b>Table PD-1: Master Plan Project Comparison Table .....</b>	<b>8</b>
<b>Table PD-2: Subsequent Permits, Approvals, Review, and Consultation Requirements .....</b>	<b>21</b>
<b>Table ALT-1: Alternatives Summary Matrix .....</b>	<b>12</b>
<b>Table AQ-1: State and Federal Ambient Air Quality Standards .....</b>	<b>6</b>
<b>Table AQ-2: Sacramento County Attainment Status .....</b>	<b>7</b>
<b>Table AQ-3: SMAQMD Significance Thresholds.....</b>	<b>12</b>
<b>Table AQ-4: CAAQS Thresholds.....</b>	<b>13</b>
<b>Table AQ-5: Summary of Mitigated Construction Emissions for the Cargo Facility .....</b>	<b>16</b>
<b>Table AQ-6: Summary of Mitigated Construction Emissions for Master Plan Update .....</b>	<b>17</b>
<b>Table AQ-7: Summary of Operational Emissions for the Cargo Facility .....</b>	<b>21</b>
<b>Table AQ-8: Summary of Operational Emissions for the Master Plan Update .....</b>	<b>22</b>
<b>Table BR-1: 2012 v. 2016 Delineation Comparisons .....</b>	<b>27</b>
<b>Table BR-2: Potential Wetland Impacts for AOA (south of Elverta Rd. &amp; north of I-5) .....</b>	<b>28</b>
<b>Table BR-3: Special Status Species .....</b>	<b>32</b>
<b>Table BR-4: Recommended Survey Periods for Swainson’s Hawk (TAC 2000).....</b>	<b>44</b>
<b>Table BR-5: Swainson’s Hawk Foraging Habitat Value by Zoning Category .....</b>	<b>45</b>
<b>Table BR-6: Summary of Giant Garter Snake Conservation Measures .....</b>	<b>61</b>

**Table CC-1: 2005 Community Emissions by Sector..... 4**

**Table CC-2: GHG Thresholds..... 10**

**Table CC-3: Project Assumptions Used in CalEEMod ..... 11**

**Table CC-4: Construction-Related GHG Emissions for the Cargo Facility ..... 13**

**Table CC-5: Operational GHG Emissions for Cargo Facility ..... 14**

**Table CC-6: Operational GHG Emissions for the Master Plan Update Projects ..... 15**

**Table CC-7: Total GHG Emissions for the Master Plan Update..... 15**

**Table LU-1: Airport Land Use Compatibility Plan Safety Zone..... 12**

**Table NO-1: Existing Roadway Noise..... 2**

**Table PS-1: SMF Wastewater Generation ..... 8**

**Table TC-1: Sacramento County Transportation Analysis Guidelines Screening Criteria for CEQA Transportation Analysis for Development Projects ..... 4**

**Table TC-2: CEQA VMT Thresholds for Development Projects..... 6**

**Table TC-3: VMT Calculations..... 9**

**Table TC-4: Passenger VMT..... 9**

**Table TC-5: Summary of VMT Analysis for the Master Plan Update ... 10**

**Table TC-6: Rural Roadway Functionality..... 13**

## **List of Appendices**

AQ-1\_Air Quality Assessment

BR-1\_Biological Assessment

CC-1\_GHG Assessment

NO-1\_Noise Assessment

PD-1\_SMF Master Plan Update

TC-1\_Transportation Study

## EXECUTIVE SUMMARY

The subject of this Supplemental Environmental Impact Report (SEIR) is a project known as Sacramento International Airport Master Plan Update. The project site is located in the Natomas community of unincorporated Sacramento County. The Sacramento County Board of Supervisors certified the original FEIR on August 7, 2007 and approved the Sacramento International Airport Master Plan.

The project site is located approximately 10 miles north of downtown Sacramento, north of I-5 east of the Sacramento River. The project is located within Sections 13, 24, 25, 36 of Township 10N and Range 3E; Sections 18, 19, 30, 31, Township 10N and Range 4E; and Sections 6, Township 9N, Range 4E of the USGS Taylor Monument quadrangle map.

### SEIR SCOPE AND IMPACTS EVALUATED

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As an initial step in the environmental review process, the Project was compared with the prior FEIR prepared for the Airport Master Plan. Changes to the prior project along with new topical environmental analyses were considered to determine whether the Project would have the potential to result in significant impacts. During the Notice of Preparation (NOP) scoping process comments were received from the following agencies:

- California Department of Fish and Wildlife (CDFW)
- California Department of Transportation (Caltrans)
- City of Sacramento
- Native American Heritage Commission
- Regional Water Quality Control Board (RWQCB)
- Sacramento Area Sewer District (SASD)
- Sacramento Metropolitan Air Quality Management District (SMAQMD)
- Sacramento Municipal Utility District (SMUD)

**This report identifies significant and unavoidable impacts** related to air quality long-term emissions, operational greenhouse gas emissions, farmland conversion, transportation and circulation related to an increase in vehicle miles traveled.

**This report identifies impacts that are less than significant with mitigation for impacts associated** with air quality short-term emissions, biological resources, cultural resources, land use compatibility, noise, public services, transportation and circulation related to safety, and tribal resources. These impacts are identified as significant or potentially significant, which could be reduced to a less than significant level through inclusion of recommended mitigation measures.



Impacts associated with aesthetics, geology and soils, hazards and hazardous materials, hydrology, mineral resources, population and housing, and public services and utilities **are considered less than significant.**

The following environmental impact and mitigation summary table (*Table ES-1: Executive Summary of Impacts and Mitigation on page 3*) briefly describes the project impacts evaluated in the Draft SEIR and the mitigation measures recommended to eliminate or reduce the impacts. The residual impact after mitigation is also identified. Detailed discussions of each of the identified impacts and mitigation measures, including pertinent supporting data, can be found in the specific topic sections in the remainder of this report.

**Table ES-1: Executive Summary of Impacts and Mitigation**

Impacts	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
<b>AIR QUALITY</b>			
<p><u>Construction Emissions– Increase of Any Criteria Pollutant for which the Project Region is Non-Attainment</u></p> <p>The project will involve the construction of buildings, cargo aprons, parking structures, and a new concourse which will release air pollutants (NO<sub>x</sub>, ROG and Particulate Matter). Project specific modeling was completed to determine if the project exceeds Sacramento Metropolitan Air Quality Management District thresholds of significance. Project construction will continue through the life of the Master Plan (2040). The number of projects occurring at once is unknown at this time and projects may overlap. This would result in construction emissions exceeding thresholds established for NO<sub>x</sub> and particulate matter. Adherence to recommended mitigation measures reduces construction emissions impacts to less than significant.</p>	<p>S</p>	<p>AQ-1 (Prior EIR Mitigation Measure AQ-1 and 2 Revised) All future construction projects which exceed the SMAQMD construction ozone precursor screening thresholds in effect at the time of project submittal shall include an ozone precursor analysis. If the analysis results indicate that the project will generate ozone precursors that exceed the current Sacramento Metropolitan Air Quality Management District thresholds, this mitigation shall apply. This mitigation may be modified if guidance from the Sacramento Metropolitan Air Quality Management District changes in the future.</p> <p>a. The project applicant, or its designee, shall provide a plan for approval by the Sac Metro Air District that demonstrates the heavy-duty off-road vehicles (50 horsepower or more) to be used 8 hours or more during the construction project will achieve a project wide fleet-average 10% NO<sub>x</sub> reduction compared to the most recent California Air Resources Board (CARB) fleet average. The plan shall have two components: an initial report submitted before construction and a final report submitted at the completion. (Acceptable options for reducing emissions may include use of cleaner engines, low-emission</p>	<p>LS</p>

Impacts	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
		<p>diesel products, alternative fuels, engine retrofit technology, after-treatment products, and/or other options as they become available.)</p> <ul style="list-style-type: none"> <li>b. Submit the initial report at least four (4) business days prior to construction activity using the Sac Metro Air District's Construction Mitigation Tool (<a href="http://www.airquality.org/businesses/cega-land-use-planning/mitigation">http://www.airquality.org/businesses/cega-land-use-planning/mitigation</a>).</li> <li>c. Provide project information and construction company information.</li> <li>d. Include the equipment type, horsepower rating, engine model year, projected hours of use, and the CARB equipment identification number for each piece of equipment in the plan. Incorporate all owned, leased and subcontracted equipment to be used.</li> <li>e. Submit the final report at the end of the job, phase, or calendar year, as pre-arranged with Sac Metro Air District staff and documented in the approval letter, to demonstrate continued project compliance.</li> </ul> <p>The SMAQMD may conduct periodic site inspections to determine compliance. Nothing in this mitigation shall supersede other air</p>	

Impacts	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
		<p>district, state or federal rules or regulations.</p> <p>This mitigation will sunset on January 1, 2028, when full implementation of the CARB InUse Off-Road Regulation is expected.</p> <p>AQ-2 (Prior EIR Mitigation Measure AQ-4 Revised) To mitigate the additional construction emissions that cannot be offset through implementation of Mitigation Measure AQ-1, above, the following shall apply: Prior to construction activities, SCDA or the project proponent will submit proof that the off-site air quality mitigation fee has been paid to SMAQMD, and that the construction air quality mitigation plan has been approved by SMAQMD and the Environmental Coordinator. The fee will be calculated based on the most current SMAQMD recommended methodology and fee rate available at the time of ground disturbance.</p> <p>AQ-3 (Prior EIR Mitigation Measure AQ-5) The following mitigation measures will be incorporated into the project to minimize the generation of PM<sub>10</sub> dust during dry construction conditions:</p> <ul style="list-style-type: none"> <li>a. Enclose, cover, or water twice daily all soil piles.</li> <li>b. Water exposed soil with adequate frequency for continued moist soil.</li> </ul>	

Impacts	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
		<p>c. Water all haul roads twice daily.</p> <p>d. Cover loads of all haul/dump truck securely.</p>	
<p><u>Operational Emissions– Increase of Any Criteria Pollutant for which the Project Region is Non-Attainment</u></p> <p>The project consists of the construction of several new structures including a large cargo facility, new concourse, consolidated rental car facility, and commercial uses. All of these facilities will introduce long-term emissions. Modeling indicates that the proposed operational activities will exceed thresholds established for NO<sub>x</sub> and ROG. Mitigation is recommend to reduce these emissions, but not to a less than significant level.</p>	<p>S</p>	<p>AQ-4 All projects which include loading docks, including the proposed cargo facility, shall ensure, through sale or leasing agreements, that the haul fleet consist of trucks that as a minimum meet the emissions standards of a 2010 vehicle model, and as trucks are replaced they are replaced with the newest available model. In addition, the project shall include electrical hookups at all loading bays, and electric vehicle charging stations and/or infrastructure (e.g., conduit and panel space) to support future installation of truck charging stations for future zero-emission heavy-duty vehicles.</p> <p>AQ-5 For the proposed cargo facility and other projects which exceed the SMAQMD operational screening levels, Prior to issuance of occupancy permits, project operator(s) shall prepare and submit a Transportation Demand Management (TDM) program detailing strategies that would reduce the use of single-occupant vehicles by employees by increasing the number of trips by walking, bicycle, carpool, vanpool, and transit. The TDM program shall include, but is not limited to, the following:</p>	<p>SU</p>

Impacts	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
		<p>a. Provide transportation information center and on-site TDM coordinator to educate employers, employees, and visitors of surrounding transportation options;</p> <p>b. Promote bicycling and walking through design features, such as showers for employees, self-service bicycle repair area, etc. around the project site;</p> <p>c. Promote and support carpool/vanpool/rideshare use through parking incentives and administrative support, such as ride-matching service; and</p> <p>d. Incorporate incentives for using alternative travel modes, such as preferential load/unload areas or convenient designated parking spaces for carpool/vanpool users.</p> <p>AQ-6 The proposed cargo facility and other projects which exceed the SMAQMD operational screening levels, shall establish a new, or join and maintain membership in an existing Transportation Management Association.</p> <p>AQ-7 Future development projects under the Airport Master Plan Update shall use low VOC content paints that exceed the regulatory VOC limits put forth by SMAQMD's Rule 442. Low VOC paints shall be no more than 10 grams per liter (g/L) of VOC. Alternatively, the pre-painted material that do not require the use of architectural</p>	

Impacts	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
		coating may be utilized.	
<p><u>Mobile Source CO Emissions</u>                      The proposed project was evaluated to determine if there would be a significant increase in CO emissions. While the project will decrease the level of service for some area roadways, none of the roadways intersections exceed 31,600 vehicles per hour, nor are they limited by vertical or horizontal mixing, and the project fleet average is typical of the Sacramento region. Impacts associated with mobile source CO emissions are less than significant.</p>	LS	None recommended.	LS
<p><u>Expose Sensitive Receptors to Substantial Pollutant Concentrations</u>                      The only toxic air contaminant generated by the project is diesel particulate matter (DPM). Given the projects distance from surrounding receptors, prevalent wind direction, and topography DPM emissions will not exceed standards at surrounding receptors.                      Potential health effects were screened using the latest guidance. Based on the results of the tool, the percent of background health indices would be less than one percent. Therefore, the health effects associated with the proposed cargo facility and Master Plan Update would be negligible.</p>	LS	None Recommended	LS

Impacts	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
<p><u>Odors</u></p> <p>Diesel exhaust produced during construction-related activities and associated with truck trips is the primary source of odors associated with the proposed project. Construction emissions are temporary and generally disperse rapidly. Truck trips are along an unpopulated portion of Elverta Road. Further, the nearest sensitive receptor (i.e., school, day-care, nursing home, hospital) is three miles from the project site.</p>	LS	None Recommended.	LS
<b>BIOLOGICAL RESOURCES</b>			
<p><u>Wetlands and Surface Waters</u></p> <p>The project site contains 174 acres of wetlands, of which 9.39 acres may be directly impacted. The project applicant will need to obtain any and all permits from the U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, California Department of Fish and Wildlife, and the Central Valley Regional Water Quality Control Board prior to any new ground disturbance. Application of the recommended mitigation measure will reduce impacts to less than significant.</p>	S	<p>BR-1 In order to reduce impacts to wetland habitat the applicant shall comply with one or a combination of the following prior to every project which involves wetlands or waters of the U.S. or State:</p> <ul style="list-style-type: none"> <li>a. Where a Section 404 Permit has been issued by the U.S. Army Corps of Engineers, or an application has been made to obtain a Section 404 Permit, the Mitigation and Management Plan required by that permit or proposed to satisfy the requirements of the USACE for granting a permit may be submitted for purposes of achieving a no net-loss of wetlands. The required Plan shall be submitted to the Sacramento County Environmental Coordinator, U.S. Army Corps of Engineers and U.S. Fish and Wildlife Service for approval prior to its</li> </ul>	LS



Impacts	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
		<p>implementation.</p> <p>b. If regulatory permitting processes result in less than a 1:1 compensation ratio for loss of wetlands, the project applicant shall demonstrate that the wetlands which went unmitigated/uncompensated as a result of permitting have been mitigated through other means. Acceptable methods include payment into a mitigation bank or protection of off-site wetlands through the establishment of a permanent conservation easement, subject to the approval of the Environmental Coordinator.</p>	
<p><u>Swainson's Hawk Nesting Habitat</u></p> <p>There are recorded Swainson's Hawk nesting sites within Airport property. The project site provides nesting habitat for the hawk and expanded use of the site would result in a potentially significant impact to nesting Swainson's hawk. Preconstruction surveys will be required to determine if there are nesting Swainson's hawks on or within ½ mile of the project site.</p>	PS	<p>BR-2 Initiation of ground disturbance (clearing and grubbing, grading, or construction) for any proposed construction project shall be conducted between September 15 and March 1. If new disturbance must be conducted during the nesting season, March 1 to September 15, a focused survey for Swainson's hawk nests on the site and within ½ mile of the site shall be conducted by a qualified biologist in accordance with the Swainson's Hawk Survey Protocol outlined in the Swainson's Hawk Technical Advisory Committee 2000 paper. Note that multiple surveys may be required depending on the timing of the surveys. If active nests are found, a qualified biologist shall be retained to prepare a site-specific take avoidance plan that proposes measures to comply with the California Endangered Species Act and the Fish and Game Code, and these measures</p>	LS

Impacts	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
		<p>shall be implemented prior to the start of any ground-disturbing activities. Measures may include but are not limited to nest-specific no disturbance buffers, biological monitoring, rescheduling project activities around sensitive periods for the species (e.g. nest establishment), or implementation of construction best practice such as staging equipment out of the species' line of sight from the nest tree. In the event take of Swainson's hawk cannot be avoided, the project proponent may seek related take authorization as provided by Fish and Game Code. If no active nests are found during the focused survey, no further mitigation will be required.</p>	
<p><u>Swainson's Hawk Foraging Habitat</u></p> <p>The project site north of Elverta Road provides foraging habitat for the hawk and development of the site would result in a potentially significant loss of that habitat. In total, the project will require 135 acres of mitigation to compensate for the loss of Swainson's hawk foraging habitat.</p>	<p>S</p>	<p>BR-3 Prior to any development north of Elverta Road as shown in PAL 3, such as clearing or grubbing, the issuance of any permits for grading, building, or other site improvements, implement one of the following options to mitigate for the loss of up to 135 acres of Swainson's hawk foraging habitat on the project site:</p> <ul style="list-style-type: none"> <li>a. The project proponent shall utilize one or more of the mitigation options (land dedication and/or fee payment) established in Sacramento County's Swainson's Hawk Impact Mitigation Program (Chapter 16.130 of the Sacramento County Code).</li> <li>b. The project proponent shall, to the satisfaction of the California Department of Fish and Wildlife, prepare and implement a</li> </ul>	<p>LS</p>

Impacts	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
		<p>Swainson's hawk mitigation plan that will include preservation of Swainson's hawk foraging habitat.</p> <p>c. Should the County Board of Supervisors adopt a Swainson's hawk mitigation policy/program (which may include a mitigation fee payable prior to issuance of building permits) prior to the implementation of one of the measures above, the project proponent may be subject to that program instead.</p>	
<p><u>Nesting Raptors</u></p> <p>Since the project area may provide suitable tree nesting habitat (specifically north of Elverta Road), construction activities may impact nesting raptors if they occur within 500 feet of suitable nesting trees. Pre-construction surveys for nesting raptors are required prior to construction or land clearing activities that occur during nesting season (generally March through mid-September), for all mature trees within 500 feet of project construction activities. For this project, construction activities associated with building construction may take place over multiple years and nesting surveys will need to be completed at construction outset.</p>	PS	<p>BR-4 If construction activity (which includes clearing, grubbing, or grading) is to commence within 500 feet of suitable nesting habitat between February 1 and September 15, a survey for raptor nests shall be conducted by a qualified biologist. The survey shall cover all potential tree,-ground, or manmade (e.g. utility poles) suitable nesting habitat on-site and off-site up to a distance of 500 feet from the project boundary. The survey shall occur within 15 days of the date that project activities will encroach within 500 feet of suitable habitat. The biologist shall supply a brief written report (including date, time of survey, survey method, name of surveyor and survey results) to the Environmental Coordinator prior to ground disturbing activity. If no active nests are found during the survey, no further mitigation will be required.</p> <p>If any active nests are found, the Environmental</p>	LS

Impacts	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
		<p>Coordinator and a site-specific take avoidance plan that purposes measures to comply with the Fish and Game Code shall be prepared in consultation with a qualified biologist. The avoidance/protective measures shall be implemented prior to the commencement of construction within 500 feet of an identified nest. Measures may include but are not limited to nest-specific no disturbance buffers, biological monitoring, rescheduling project activities around sensitive periods for the species (e.g. nest establishment), or implementation of construction best practice such as staging equipment out of the species' line of sight from the nest tree. If a lapse in project-related work of 15 days or longer occurs, the qualified biologist shall perform a new focused survey, and if nests are found, perform the tasks described in this measure.</p>	
<p><u>Burrowing Owl</u></p> <p>Burrowing owls have been known to use areas within the Airport Operation Area for breeding, wintering, foraging, and/or migration stopovers. There are potential burrowing sites within Airport property. In order to reduce potential impacts to owl nests which may be undiscovered, the applicant shall have a qualified biologist perform a focused survey, prior to the construction of improvements or buildings, for burrowing owls.</p>	<p>PS</p>	<p>BR-5 Prior to ground disturbance (which includes clearing, grubbing, or grading) within 500 feet of suitable burrow habitat, a survey for burrowing owl shall be conducted by a qualified biologist. The survey shall occur within 30 days of the date that construction will encroach within 500 feet of suitable habitat. Surveys shall be conducted in accordance with the following:</p> <ol style="list-style-type: none"> <li>1. A survey for occupied burrows and owls should be conducted by walking through suitable habitat over the area to be disturbed and in areas within 150 meters (~500 feet) of the project impact zone.</li> <li>2. Pedestrian survey transects should be</li> </ol>	<p>LS</p>

Impacts	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
		<p>spaced to allow 100 percent visual coverage of the ground surface. The distance between transect center lines should be no more than 30 meters (~100 feet), and should be reduced to account for differences in terrain, vegetation density, and ground surface visibility. To efficiently survey projects larger than 100 acres, it is recommended that two or more surveyors conduct concurrent surveys. Surveyors should maintain a minimum distance of 50 meters (~160 feet) from any owls or occupied burrows. It is important to minimize disturbance near occupied burrows during all seasons.</p> <ol style="list-style-type: none"> <li>3. If no occupied burrows or burrowing owls are found in the survey area, a letter report documenting survey methods and findings shall be submitted to the Environmental Coordinator and no further mitigation is necessary.</li> <li>4. If occupied burrows or burrowing owls are found, then a complete burrowing owl survey is required. This consists of a minimum of four site visits conducted on four separate days, which must also be consistent with the Survey Method, Weather Conditions, and Time of Day sections of Appendix D of the California Fish and Wildlife "Staff Report on Burrowing Owl Mitigation" (March 2012). Submit a survey report to the</li> </ol>	

Impacts	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
		<p>Environmental Coordinator which is consistent with the Survey Report section of Appendix D of the California Fish and Wildlife “Staff Report on Burrowing Owl Mitigation” (March 2012).</p> <p>5. If occupied burrows or burrowing owls are found the applicant shall contact the Environmental Coordinator and confer with California Fish and Wildlife prior to construction, and will be required to submit a Burrowing Owl Mitigation Plan (subject to the approval of the Environmental Coordinator and in consultation with California Fish and Wildlife). This plan must document all proposed measures, including avoidance, minimization, exclusion, relocation, or other measures, and include a plan to monitor mitigation success. The California Fish and Wildlife “Staff Report on Burrowing Owl Mitigation” (March 2012) shall be followed in the development of the mitigation plan.</p>	
<p><u>White-tailed Kite</u></p> <p>The project study area includes habitat types that are suitable for foraging and nesting white-tailed kites. These habitat types consist of agricultural fields and freshwater marshland. Nesting habitat includes riparian trees found north of Elverta Road and oak woodland found along the</p>	<p>PS</p>	<p>See BR-3.</p>	<p>LS</p>

Impacts	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
<p>Sacramento River.</p> <p>Construction of the proposed commercial development will result in the loss of foraging habitat for white-tailed kite which will be a significant impact. The white-tailed kite foraging habitat requirements overlap with Swainson’s hawk foraging habitat requirements; therefore, implementation of mitigation measures for the loss of Swainson’s hawk foraging habitat will reduce the impact to white-tailed kite foraging habitat to less than significant. Consequently, no specific mitigation will be required for the white-tailed kite.</p>			
<p><u>Loggerhead Shrike</u></p> <p>Open wooded areas on the north and west side of the airport and agricultural fields provide suitable foraging habitat for the loggerhead shrike and the species has been observed on airport property. Construction of the commercial development will result in the loss of foraging habitat for loggerhead shrike which will be a significant impact. The loggerhead shrike foraging habitat requirements overlap with Swainson’s hawk foraging habitat requirements; therefore, implementation of mitigation measures for the loss of Swainson’s hawk foraging habitat will reduce the impact to loggerhead shrike foraging habitat to less than significant. Consequently, no specific mitigation will be required for the loggerhead shrike.</p>	PS	See BR-3.	LS

Impacts	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
<p><u>Tricolored Blackbird</u></p> <p>The project study area includes freshwater marsh areas, ditches, and grassy areas that are suitable for foraging tricolored blackbirds. Freshwater marsh north of Elverta Road offers suitable nesting habitat, and ditches and canals that have not been recently cleared of cattails and tules also provide potential nesting habitat for this species.</p> <p>The large swaths of riparian and marsh habitats north of Elverta Road will not be directly impacted by the proposed commercial development identified in PAL 3; however, construction noise and removal of patches of tules and blackberries growing in the drainage ditches may result in the disturbance to, or loss of suitable nesting for tricolored blackbirds. This is a potentially significant impact. Mitigation is recommended to reduce potential impacts to nesting tricolored blackbirds.</p>	<p>PS</p>	<p>BR-6 If construction activity (which includes clearing, grubbing, or grading) is to commence within 300 feet of suitable tricolored blackbird nesting habitat between March 1 and July 31, a survey for nesting tricolored blackbirds shall be conducted by a qualified biologist. The survey shall cover all potential nesting habitat on-site and off-site up to a distance of 300 feet from the project boundary. The survey shall occur within 30 days of the date that construction will encroach within 300 feet of suitable habitat. The biologist shall supply a brief written report (including date, time of survey, survey method, name of surveyor and survey results) to the Environmental Coordinator prior to ground disturbing activity. If no tricolored blackbird were found during the pre-construction survey, no further mitigation would be required. If an active tricolored blackbird colony is found on-site or within 300 feet of the project site the project proponent shall do the following:</p> <ol style="list-style-type: none"> <li>1. Consult with the California Department of Fish and Wildlife to determine if project activity will impact the tricolored blackbird colony(s). Provide the Environmental Coordinator with written evidence of the consultation or a contact name and number from the California Department of Fish and Wildlife. Implement all protective measures recommended by the California Department of Fish and Wildlife.</li> <li>2. With the California Department of Fish and Wildlife permission, the applicant may avoid</li> </ol>	<p>LS</p>



Impacts	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
		<p>impacts to tricolored blackbird by establishing a 300-foot temporary setback, with fencing that prevents any project activity within 300 feet of the colony. A qualified biologist shall verify that setbacks and fencing are adequate and will determine when the colonies are no longer dependent on the nesting habitat (i.e. nestling have fledged and are no longer using habitat). The breeding season typically ends in July.</p> <p>3. If tricolored blackbird habitat is permanently destroyed follow the California Department of Fish and Wildlife procedure to mitigate for habitat loss, and submit documentation of the mitigation to the Environmental Coordinator.</p>	
<p><u>Giant Garter Snake</u></p> <p>The project will impact GGS aquatic habitat. Impacts may be temporary where the proposed project is within 200 feet of suitable or marginal aquatic habitat, or they may be permanent associated with filling or culverting the aquatic feature. PAL 2 and 3 may impact up to two acres of marginal habitat.</p> <p>Compensatory mitigation for giant garter snake habitat impacts will take place as PALs of the Master Plan project become ready for implementation, beginning with PAL 1. Consultation with the USFWS and CDFW will be required for any ground disturbance of suitable or marginal aquatic habitat and all uplands within</p>	<p>S</p>	<p>BR-7 Prior to construction activities within 200 feet of the appropriate habitat on the project site, the applicant shall consult with the U.S. Fish and Wildlife Service and California Department of Fish and Wildlife regarding the giant garter snake and shall obtain any required permits. Unless otherwise indicated by permits or other documentation provided by the U.S. Fish and Wildlife Service, provide mitigation and protective measures consistent with those published in the Programmatic Consultation for the species (“Programmatic Formal Consultation for U.S. Army Corps of Engineers 404 Permitted Projects with Relatively Small Effects on the Giant Garter Snake within Butte, Colusa, Glenn, Fresno, Merced, Sacramento, San Joaquin, Solano, Stanislaus, Sutter and Yolo Counties, California”. 1-1-F-97-</p>	<p>LS</p>

Impacts	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
<p>200 feet of these features. At a minimum, avoidance and minimization measures pursuant to Programmatic Consultation Guidelines, must be implemented; however, additional avoidance and minimization measures may be determined through the consultation process.</p> <p>The loss of giant garter snake habitat resulting from project construction will be a-significant impact. Implementation of recommended mitigation measure BR-7 will ensure impacts are less than significant.</p>		<p>149. November 13, 1997.). Confine any ground disturbing activity (i.e. clearing, grubbing, grading, and excavation) in giant garter snake habitat to May 1<sup>st</sup> to October 1<sup>st</sup> (which is the snake's active period).</p> <p>At a minimum the following avoidance and minimization measures shall be implemented;</p> <ul style="list-style-type: none"> <li>• Construction activity within habitat should be conducted between May 1 and October 1. This is the active period for giant garter snakes and direct mortality is lessened, because snakes are expected to actively move and avoid danger. Between October 2 and April 30 contact the USFWS's Sacramento office to determine if additional measures are necessary to minimize and avoid take.</li> <li>• Confine clearing to the minimal area necessary to facilitate construction activities. Flag and designate avoided giant garter snake habitat within or adjacent to the project area as Environmentally Sensitive Areas. This area should be avoided by all construction personnel.</li> <li>• Construction personnel should receive Service-approved worker environmental awareness training. This training instructs workers to recognize giant garter snakes and their habitat(s).</li> <li>• 24-hours prior to construction activities, the project area should be surveyed for giant garter</li> </ul>	

Impacts	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
		<p>snakes. Survey of the project area should be repeated if a lapse in construction activity of two weeks or greater has occurred. If a snake is encountered during construction, activities shall cease until appropriate corrective measures have been completed or it has been determined that the snake will not be harmed. Report any sightings and any incidental take to the USFWS.</p> <ul style="list-style-type: none"> <li>• Any dewatered habitat should remain dry for at least 15 consecutive days after April 15 and prior to excavating or filling of the dewatered habitat.</li> <li>• After completion of construction activities, remove any temporary fill and construction debris and, wherever feasible, restore disturbed areas to pre-project conditions. Restoration work may include such activities as replanting species removed from banks or replanting emergent vegetation in the active channel.</li> </ul>	
<p><u>Western Pond Turtle</u></p> <p>The marsh habitat north of Elverta Road is directly connected to the Sacramento River and does provide suitable habitat for western pond turtle. The Species was not observed during species surveys conducted in 2020. However, the eventual development of commercial uses north of Elverta identified in PAL 3 may encroach into the 1,650 foot recommended buffer. Mitigation is</p>	<p>PS</p>	<p>BR-8 To avoid impacts to western pond turtles the following shall apply:</p> <ol style="list-style-type: none"> <li>1. Twenty four hours prior to the commencement of ground-disturbing activity (i.e. clearing, grubbing, or grading) suitable habitat within the project area shall be surveyed for western pond turtle by a qualified biologist. The survey shall include aquatic habitat and 1,650 feet of adjacent uplands surrounding aquatic habitat</li> </ol>	<p>LS</p>

Impacts	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
<p>recommended to ensure no turtles are impacted.</p>		<p>within the project area. The biologist shall supply a brief written report (including date, time of survey, survey method, name of surveyor and survey results) to the Environmental Coordinator prior to ground disturbing activity.</p> <ol style="list-style-type: none"> <li>2. Construction personnel shall receive worker environmental awareness training. This training instructs workers how to recognize western pond turtles and their habitat.</li> <li>3. If a western pond turtle is encountered during active construction, all construction shall cease until the animal has moved out of the construction area on its own or relocated by a qualified biologist. If the animal is injured or trapped, a qualified biologist shall move the animal out of the construction area and into a suitable habitat area. California Fish and Wildlife and the Environmental Coordinator shall be notified within 24-hours that a turtle was encountered.</li> </ol>	
<p><u>Have a Substantial Effect on Any Riparian Habitat or Other Sensitive Natural Community</u></p> <p>The area north of Elverta Road contains annual grasslands, agricultural lands, riparian woodlands, marsh and pasture. Improvements along Elverta Road and potential commercial development will remove some agricultural land and isolated oak trees. The larger swaths of riparian, marsh or valley oak woodland habitat would be avoided.</p>	<p>LS</p>	<p>See BR-10.</p>	<p>LS</p>

Impacts	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
<p>The project would not substantially reduce the natural communities in and surrounding the project area. Native tree mitigation will further reduce this impact.</p>			
<p><u>Interfere with the Movement of any Native Resident or Migratory Fish or Wildlife Species or with Established Native Resident or Migratory Wildlife Corridors</u></p> <p>The project is within the Natomas Basin which contains several wildlife corridors for a variety of species. The proposed commercial development north of Elverta Road has the potential to affect non-special-status native nesting birds protected by the Migratory Bird Treaty Act and/or California Fish and Game Code. If the project causes a bird to abandon an active nest may cause harm to egg(s) or chick(s) and is therefore considered “take.” To avoid take of nesting migratory birds, mitigation has been included to require that activities either occur outside of the nesting season, or to require that nests be buffered from construction activities until the nest or nesting tree becomes inactive.</p>	<p>LS</p>	<p>BR-9 To Avoid impacts to nesting migratory birds the following shall apply:</p> <ol style="list-style-type: none"> <li>1. If construction activity (which includes clearing, grubbing, or grading) is to commence within 50 feet of nesting habitat between February 1 and August 31, a survey for active migratory bird nests shall be conducted no more than 14 day prior to construction by a qualified biologist.</li> <li>2. Trees slated for removal shall be removed during the period of September through January, in order to avoid the nesting season. Any trees that are to be removed during the nesting season, which is February through August, shall be surveyed by a qualified biologist and will only be removed if no nesting migratory birds are found.</li> <li>3. If active nest(s) are found in the survey area, a non-disturbance buffer, the size of which has been determined by a qualified biologist, shall be established and maintained around the nest to prevent nest failure. All construction activities shall be avoided within this buffer area until a qualified biologist determines that nestlings have fledged, or until September 1.</li> </ol>	<p>LS</p>

Impacts	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
<p><u>Conflict with Local Policies or Ordinances</u>  <u>Protecting Biological Resources</u></p> <p>Sacramento County has identified the value of its native and landmark trees and has adopted measures for their preservation. The Tree Ordinance (Chapter 19.04 and 19.12 of the County Code) provides protections for landmark trees and heritage trees. The project site contains native oak trees along Elverta Road and north of Elverta Road. A tree inventory has not been completed for these areas, but will be required prior to project development and plan approval. Mitigation consistent with adopted policies and ordinances protecting native tree resources is recommended.</p>	<p>PS</p>	<p>BR-10 Prior to project approval of Elverta Road Improvements associated with the cargo facility (PAL 1) and the commercial development north of Elverta Road (PAL 3), a tree inventory shall be completed which includes all native trees over six (6) inches in diameter at breast height must be inventoried including species, size, dripline radius, health condition within the proposed areas of impact. The removal of native trees shall be compensated for by planting in-kind native trees equivalent to the dbh inches lost, based on the ratios listed below, at locations that are authorized by the Environmental Coordinator. On-site preservation of native trees that are less than 6 inches (&lt;6 inches) dbh, may also be used to meet this compensation requirement. Native trees include: valley oak (<i>Quercus lobata</i>), interior live oak (<i>Quercus wislizenii</i>), blue oak (<i>Quercus douglasii</i>), or oracle oak (<i>Quercus morehus</i>), California sycamore (<i>Platanus racemosa</i>), California black walnut (<i>Juglans californica</i>, which is also a List 1B plant), Oregon ash (<i>Fraxinus latifolia</i>), western redbud (<i>Cercis occidentalis</i>), gray pine (<i>Pinus sabiniana</i>), California white alder (<i>Alnus rhombifolia</i>), boxelder (<i>Acer negundo</i>), California buckeye (<i>Aesculus californica</i>), narrowleaf willow (<i>Salix exigua</i>), Gooding's willow (<i>Salix gooddingii</i>), red willow (<i>Salix laevigata</i>), arroyo willow (<i>Salix lasiolepis</i>), shining willow (<i>Salix lucida</i>), Pacific willow (<i>Salix lasiandra</i>), and</p>	<p>PS</p>

Impacts	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
		<p>dusky willow (<i>Salix melanopsis</i>).</p> <p>Replacement tree planting shall be completed prior to approval of grading or improvement plans, whichever comes first.</p> <p>Equivalent compensation based on the following ratio is required:</p> <ul style="list-style-type: none"> <li>• one preserved native tree &lt; 6 inches dbh on-site = 1 inch dbh</li> <li>• one D-pot seedling (40 cubic inches or larger) = 1 inch dbh</li> <li>• one 15-gallon tree = 1 inch dbh</li> <li>• one 24-inch box tree = 2 inches dbh</li> <li>• one 36-inch box tree = 3 inches dbh</li> </ul> <p>Prior to the approval of Improvement Plans or Building Permits, whichever occurs first, a Replacement Tree Planting Plan shall be prepared by a certified arborist or licensed landscape architect and shall be submitted to the Environmental Coordinator for approval. The Replacement Tree Planting Plan(s) shall include the following minimum elements:</p> <ol style="list-style-type: none"> <li>1. Species, size and locations of all replacement plantings and &lt; 6-inch dbh trees to be preserved</li> <li>2. Method of irrigation</li> <li>3. If planting in soils with a hardpan/duripan or</li> </ol>	

Impacts	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
		<p>claypan layer, include the Sacramento County Standard Tree Planting Detail L-1, including the 10-foot deep boring hole to provide for adequate drainage</p> <ol style="list-style-type: none"> <li>4. Planting, irrigation, and maintenance schedules;</li> <li>5. Identification of the maintenance entity and a written agreement with that entity to provide care and irrigation of the trees for a 3-year establishment period, and to replace any of the replacement trees which do not survive during that period.</li> <li>6. Designation of 20-foot root zone radius and landscaping to occur within the radius of trees &lt; 6 inches dbh to be preserved on-site.</li> </ol> <p>No replacement tree shall be planted within 15 feet of the driplines of existing native trees or landmark size trees that are retained on-site, or within 15 feet of a building foundation. The minimum spacing for replacement native trees shall be 20 feet on-center. Examples of acceptable planting locations are publicly owned lands, common areas, and landscaped frontages (with adequate spacing). Generally unacceptable locations are utility easements (PUE, sewer, storm drains), under overhead utility lines, private yards of single family lots (including front yards), and roadway medians.</p> <p>Native trees &lt;6 inches dbh to be retained on-site shall have at least a 20-foot radius suitable root</p>	



Impacts	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
		<p>zone. The suitable root zone shall not have impermeable surfaces, turf/lawn, dense plantings, soil compaction, drainage conditions that create ponding (in the case of oak trees), utility easements, or other overstory tree(s) within 20 feet of the tree to be preserved. Trees to be retained shall be determined to be healthy and structurally sound for future growth, by an ISA Certified Arborist subject to Environmental Coordinator approval.</p> <p>If tree replacement plantings are demonstrated to the satisfaction of the Environmental Coordinator to be infeasible for any or all trees removed, then compensation shall be through payment into the County Tree Preservation Fund. Payment shall be made at a rate of \$325.00 per dbh inch removed but not otherwise compensated, or at the prevailing rate at the time payment into the fund is made.</p> <p>BR-11 For the purpose of this mitigation measure, a native tree is defined as a those listed in Mitigation Measure BR-10 having a diameter at breast height (dbh) of at least 6 inches, or if it has multiple trunks of less than 6 inches each, a combined dbh of at least 10 inches.</p> <p>With the exception of the trees removed and compensated for through Mitigation Measure BR-10, above, all native trees on the project site, all portions of adjacent off-site native trees which have driplines that extend onto the project site,</p>	

Impacts	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
		<p>and all off-site native trees which may be impacted by utility installation and/or improvements associated with this project, shall be preserved and protected as follows:</p> <ol style="list-style-type: none"> <li>1. A circle with a radius measurement from the trunk of the tree to the tip of its longest limb shall constitute the dripline protection area of the tree. Limbs must not be cut back in order to change the dripline. The area beneath the dripline is a critical portion of the root zone and defines the minimum protected area of the tree. Removing limbs which make up the dripline does not change the protected area.</li> <li>2. Chain link fencing or a similar protective barrier shall be installed one foot outside the driplines of the native trees prior to initiating project construction, in order to avoid damage to the trees and their root system.</li> <li>3. No signs, ropes, cables (except cables which may be installed by a certified arborist to provide limb support) or any other items shall be attached to the native trees.</li> <li>4. No vehicles, construction equipment, mobile home/office, supplies, materials or facilities shall be driven, parked, stockpiled or located within the driplines of the native trees.</li> <li>5. Any soil disturbance (scraping, grading, trenching, and excavation) is to be avoided within the driplines of the native trees. Where this is necessary, an ISA Certified Arborist will</li> </ol>	

Impacts	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
		<p>provide specifications for this work, including methods for root pruning, backfill specifications and irrigation management guidelines.</p> <ol style="list-style-type: none"> <li>6. All underground utilities and drain or irrigation lines shall be routed outside the driplines of native trees. Trenching within protected tree driplines is not permitted. If utility or irrigation lines must encroach upon the dripline, they should be tunneled or bored under the tree under the supervision of an ISA Certified Arborist.</li> <li>7. If temporary haul or access roads must pass within the driplines of oak trees, a roadbed of six inches of mulch or gravel shall be created to protect the root zone. The roadbed shall be installed from outside of the dripline and while the soil is in a dry condition, if possible. The roadbed material shall be replenished as necessary to maintain a six-inch depth.</li> <li>8. Drainage patterns on the site shall not be modified so that water collects or stands within, or is diverted across, the dripline of oak trees.</li> <li>9. No sprinkler or irrigation system shall be installed in such a manner that it sprays water within the driplines of the oak trees.</li> <li>10. Tree pruning that may be required for clearance during construction must be performed by an ISA Certified Arborist or Tree Worker and in accordance with the American National Standards Institute (ANSI) A300</li> </ol>	

Impacts	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
		<p>pruning standards and the International Society of Arboriculture (ISA) "Tree Pruning Guidelines".</p> <p>11. Landscaping beneath the oak trees may include non-plant materials such as boulders, decorative rock, wood chips, organic mulch, non-compacted decomposed granite, etc. Landscape materials shall be kept two (2) feet away from the base of the trunk. The only plant species which shall be planted within the driplines of the oak trees are those which are tolerant of the natural semi-arid environs of the trees. Limited drip irrigation approximately twice per summer is recommended for the understory plants.</p> <p>12. Any fence/wall that will encroach into the dripline protection area of any protected tree shall be constructed using grade beam wall panels and posts or piers set no closer than 10 feet on center. Posts or piers shall be spaced in such a manner as to maximize the separation between the tree trunks and the posts or piers in order to reduce impacts to the trees.</p> <p>13. For a project constructing during the months of June, July, August, and September, deep water trees by using a soaker hose (or a garden hose set to a trickle) that slowly applies water to the soil until water has penetrated at least one foot in depth. Sprinklers may be used to water deeply by watering until water</p>	

Impacts	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
		begins to run off, then waiting at least an hour or two to resume watering (provided that the sprinkler is not wetting the tree's trunk. Deep water every 2 weeks and suspend watering 2 weeks between rain events of 1inch or more.	
<p><u>Conflict with the Provisions of an Adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other Approved Local, Regional, or State Habitat Conservation Plan</u></p> <p>The project area is located within the boundary of the Natomas Basin and adjacent to the Metro Air Park Habitat Conservation Plans, but the County is not a participating partner. The project will not impede the ability of the HCP's to be implemented.</p>	LS	None Recommended.	LS
<b>CLIMATE CHANGE</b>			
<p><u>Generate Greenhouse Gas Emissions that may Impact the Environment</u></p> <p>Implementation of the project would contribute to increases of GHG emissions that are associated with global climate change, primarily attributed to mobile (vehicle emissions) sources and utility usage (building operation). The majority of the GHG emissions are associated with employee mobile emissions. Passenger emissions are expected to decrease regionally as passengers are recaptured with the addition of service. The proposed cargo facility will be operational before</p>	S	<p>CC-1 Prior to approval of future development projects under the SMF Master Plan Update, the Airport shall demonstrate compliance with SMAQMD Tier 1 BMPs (required for all projects) and Tier 2 BMPs (Mitigation Measures AQ-6 through AQ-8). Upon adoption of the Sacramento County Communitywide Climate Action Plan (CAP) and CAP Checklist, future SMF Master Plan Development projects shall demonstrate consistency with and adopt applicable CAP Checklist measures.</p>	SU

Impacts	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
<p>the regional GHG emission reduction is realized; therefore, those GHG emissions are considered significant in the short-term. Overall, the Master Plan Update in its entirety will result in 5,827 MT CO<sub>2</sub>e/year above the baseline condition. This exceeds the SMAQMD screening threshold of 1,100 MT CO<sub>2</sub>e/year threshold. Mitigation measures are recommended to reduce GHG operational emission, but not to a level less than significant.</p>			
<p><u>Conflict with Plans, Policies, or Regulations Adopted to Reduce Greenhouse Gas Emissions</u></p> <p>The proposed Master Plan Update is estimated to result in a net increase of approximately 5,827 MTCO<sub>2</sub>e per year. This exceeds established thresholds and could impede the ability of SMAQMD to meet the goals and policies of the State to meet 2030 emission reductions.</p> <p>The proposed Master Plan Update demonstrates consistency with State goals and would not conflict with any applicable plan, policy, or regulation adopted to reduce GHG emissions, including Title 24, AB 32, and SB32.</p> <p>Since the project does exceed local plans adopted to reduce GHG and despite implementation of recommended mitigation measures, GHG emission impacts remain significant and unavoidable.</p>	S	See CC-1.	SU

Impacts	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
<b>CULTURAL RESOURCES</b>			
<p><u>Historical Resources</u></p> <p>A cultural resources survey was conducted as part of the prior FEIR. A supplemental cultural resources survey was conducted the portion of the Airport Operation Area that was not previously surveyed. The original survey indicated that the airport buildings constructed in the 1960s were not yet eligible for historic review and by 2016, most of the original airport buildings have been demolished. The only other historic resources is the RD1000 historic district, a system of roadways, drainages and canals. The project will not impact historic-period structures or historic districts, but as with any project that involves the disturbance of soil, there is a potential of inadvertent discovery of subsurface historic deposits. Potentially significant impacts can be reduced with implementation of recommended mitigation.</p>	LS	None Recommended.	LS
<p><u>Archeological or Prehistoric Resources</u></p> <p>The cultural resource inventories prepared for the majority of the project site did not identify known prehistoric resources. There are known prehistoric sites along the Sacramento River. Even though much of Airport land has been disturbed in the past, this does not preclude the possibility of buried prehistoric archaeological materials or previously undiscovered surface</p>	PS	<p>CR-1 Cultural Resources Unanticipated Discoveries In the event that human remains are discovered in any location other than a dedicated cemetery, work shall be halted and the County Coroner contacted. For all other unexpected cultural resources discovered during project construction, work shall be halted until a qualified archaeologist may evaluate the resource encountered.</p> <p>1. <b>Unanticipated human remains.</b> Pursuant to</p>	LS

Impacts	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
<p>resources within the project area and therefore is potentially significant. Recommended mitigation measure CR-1 reduce impacts to less than significant.</p>		<p>Sections 5097.97 and 5097.98 of the State Public Resources Code, and Section 7050.5 of the State Health and Safety Code, if a human bone or bone of unknown origin is found during construction, all work is to stop and the County Coroner and the Office of Planning and Environmental Review shall be immediately notified. If the remains are determined to be Native American, the coroner shall notify the Native American Heritage Commission within 24 hours, and the Native American Heritage Commission shall identify the person or persons it believes to be the most likely descendent from the deceased Native American. The most likely descendent may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposition of, with appropriate dignity, the human remains and any associated grave goods.</p> <p>2. <b>Unanticipated cultural resources.</b> In the event of an inadvertent discovery of cultural resources (excluding human remains) during construction, all work must halt within a 100-foot radius of the discovery. A qualified professional archaeologist, meeting the Secretary of the Interior’s Professional Qualification Standards for prehistoric and historic archaeology, shall be retained at the Applicant’s expense to evaluate the significance of the find. If it is determined due to the types of deposits discovered that a</p>	



Impacts	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
		<p>Native American monitor is required, the Guidelines for Monitors/Consultants of Native American Cultural, Religious, and Burial Sites as established by the Native American Heritage Commission shall be followed, and the monitor shall be retained at the Applicant's expense.</p> <ul style="list-style-type: none"> <li>a. Work cannot continue within the 100-foot radius of the discovery site until the archaeologist and/or tribal monitor conducts sufficient research and data collection to make a determination that the resource is either 1) not cultural in origin; or 2) not potentially eligible for listing on the National Register of Historic Places or California Register of Historical Resources.</li> <li>b. If a potentially-eligible resource is encountered, then the archaeologist and/or tribal monitor, Planning and Environmental Review staff, and project proponent shall arrange for either 1) total avoidance of the resource, if possible; or 2) test excavations or total data recovery as mitigation. The determination shall be formally documented in writing and submitted to the County Environmental Coordinator as verification that the provisions of CEQA for managing unanticipated discoveries have been</li> </ul>	

Impacts	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
		<p>met.</p> <p>3. <b>Tribal cultural resources worker awareness.</b> The appended Tribal Cultural Resources (TCRs) Awareness Brochure, provides a definition and examples of TCRs that may be encountered during construction. The brochure was developed to assist construction teams with the identification and protection of TCRs. The brochure shall be shared with construction teams prior to ground disturbance.</p> <p>CR-2 Tribal Monitoring Prior to initiation of ground disturbance, the Sacramento County Department of Airports, or contractor, shall contact the United Auburn Indian Community and the Wilton Rancheria to determine if a Tribal Monitor is required at least two weeks prior to ground disturbance. Provide a copy of Tribal correspondence to the Environmental Coordinator. If a Tribal Monitor is required the following measures are necessary:</p> <ul style="list-style-type: none"> <li>a. A compensated (paid) Tribal Monitor from a traditionally and culturally affiliated Native American Tribe shall be retained to monitor specified ground disturbing project related activities.</li> <li>b. The duration of the monitoring and construction schedule shall be determined</li> </ul>	

Impacts	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
		<p>at this time.</p> <ul style="list-style-type: none"> <li>c. The Tribal Monitor will identify areas requiring monitoring in the project area during vegetation grubbing, stripping, grading or other ground-disturbing activities. All field monitoring activities will be logged by the Tribal Monitor.</li> <li>d. The Tribal Monitor shall wear the appropriate safety equipment and shall have the necessary background training in construction safety protocols.</li> <li>e. Tribal Monitors or Tribal Representatives have the authority to request that work be temporarily stopped, diverted, or slowed within 100 feet of the direct impact area if sites or objects of significance are identified. Only a Tribal Monitor or Representative from a culturally affiliated tribe can recommend appropriate treatment and final disposition of Tribal Cultural Resources.</li> </ul>	
<p><u>Human Remains</u></p> <p>There are no known human remain on the project site. However, the project will involve ground disturbance and there is always the potential to encounter unknown burials. If human remains are encountered, recommended mitigation measures</p>	<p>PS</p>	<p>See CR-1.</p>	<p>LS</p>

Impacts	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
CR-1 will reduce impacts to less than significant.			
<b>HYDROLOGY</b>			
<p><u>Substantially Alter Drainage Patterns in a Manner Which Would Impede or Redirect Flood Flows or, Substantially Increase the Rate or Volume of Runoff that Would Result in Flooding</u></p> <p>Approximately 150 additional acres of pervious area will be converted to impervious surfaces. Additional impervious surfaces would result in an increase of stormwater runoff rates and volumes. On-site stormwater drainage systems will be modified to accommodate the additional impervious areas; however, overall drainage patterns will not be significantly changed. Compliance with existing regulations will ensure on-site drainage is adequate and impacts to off-site drainage facilities are less than significant.</p>	LS	None Recommended.	LS
<p><u>Violate any Stormwater Quality Standards or Waste Discharge Requirements</u></p> <p>Construction- and operational-related activities may release pollutants to surface waters. All projects are required to comply with the County NPDES permit which involves implementation of Best Management Practices consistent with the Sacramento Region Stormwater Quality Design Manual. Compliance with existing requirements will ensure impacts are less than significant.</p>	LS	None Recommended.	LS

Impacts	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
<p><u>Increase Potential Release of Pollutants Due to Flood Hazard, Tsunamis, or Seiches or Develop within and Area Subject to 200-year Urban Levels of Flood Protection</u></p> <p>The project site is located in two ULOP areas – one levee-protected and one non-levee protected. Several levee improvement projects are underway or completed in the Sacramento region including: the Natomas Levee Improvement Project, American River Common Features Natomas Basin Project, and the Folsom Dam Raise Project, which will provide flood protection equal or greater than the ULOP in urban or urbanizing areas by 2025. Impacts associated with urban levels of flood protection are less than significant.</p>	LS	None Recommended.	LS
<b>LAND USE</b>			
<p><u>Conflict with Land Use Plans, Policies and Regulations Including the General Plan and Zoning Code</u></p> <p>The project is consistent with the County General Plan and Zoning Code. New development within and adjacent to SMF are subject to the policies in the Airport Land Use Compatibility Plan for noise, safety and air space protection. The proposed changes to the SMF Master Plan will not impact surrounding communities.</p>	LS	None recommended.	LS
<u>Conversion of Farmland to Non-Agricultural Uses</u>	S	LU-1. Prior to conversion of approximately 100 acres of Farmland of Local Importance north of Elverta	SU

Impacts	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
<p>The proposed commercial development north of Elverta Road is considered Farmland of Local Importance according to the latest Department of Conservation Farmland Map. A total of 135 acres will be developed with urban uses. Pursuant to County Policy AG-5 loss of farmland over 50 acres requires in-kind compensation. Even though the project proponent is required to compensate for the loss of farmland, the impact remains significant.</p>		<p>Road, an equal amount of land must be set aside with permanent farmland conservation easement.</p>	
<p><u>Conflict with Existing Zoning for Agricultural Uses or Williamson Act Contract</u></p> <p>The SCDA owns approximately 6,000 acres in and around SMF. None of the parcels are under a Williamson Act Contract. The conversion of the land to urban uses will not conflict with surrounding agricultural uses as most of the land is owned by the County and managed to reduce wildlife attractants. Impacts associated with potential conflicts with existing agricultural uses or Williamson Act contracts are less than significant.</p>	<p>LS</p>	<p>None Recommended.</p>	<p>LS</p>
<p><b>NOISE</b></p>			
<p><u>Generate Substantial Temporary or Permanent Increase in Ambient Noise Levels in Excess of Standards in the General Plan or Noise Ordinance</u></p> <p>Permanent increases to ambient noise associated with the construction of the cargo facility, new commercial uses, roadway improvements and realignments, and runway extension, in and</p>	<p>LS</p>	<p>None Recommended.</p>	<p>LS</p>

Impacts	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
<p>surrounding SMF are expected. Since the nearest sensitive receptors are located over 0.5 miles to the west and south along the Garden Highway and two miles to the southeast in the Natomas community, the proposed project will not increase the ambient noise and impacts.</p>			
<p><u>Generation of Excessive Groundborne Vibration or Noise Levels</u></p> <p>The proposed project involves the construction of new buildings and infrastructure. Methods of construction are not known at this time in the planning phase, but construction methods involving pile driving or directional tunneling may generate some level of groundborne vibration or noise. There are no sensitive receptors within 0.5 miles of proposed construction areas and groundborne vibration or noise would dissipate before reaching those receptors.</p>	LS	None Recommended.	LS
<p><u>Expose People Residing or Working in the Project Area to Excessive Noise Levels</u></p> <p>The project serves the needs of the Airport. Many of the proposed airport facilities are located adjacent to the existing terminals, parking lots/structures, or airport support facilities. The proposed cargo facility adjacent to Runway 16R, and the identified commercial land use areas, would place people working within 60-75 dB noise contours depending on the specific location within the airport. Even though specific development and uses are not known for any of the identified commercial land use areas, application of</p>	LS	None Recommended.	LS

Impacts	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
<p>standard building construction techniques should achieve General Plan and ALUCP policies for interior noise levels (45dB).</p>			
<b>PUBLIC SERVICES/UTILITIES</b>			
<p><u>Result in Inefficient, Wasteful, and Unnecessary Consumption of Energy</u></p> <p>The proposed project will result in construction of new buildings, which will increase consumption of energy (electric and natural gas). Expansion of existing facilities will be required to meet these needs. Additionally, all new construction must comply with Tier 1 Best Management Practices – no natural gas, which will further reduce future natural gas consumption. Coordination with utility providers will ensure siting and construction comply with Public Utilities Commission clearance requirements. No significant impacts to energy consumption have been identified.</p>	LS	None recommended.	LS
<p><u>Require the Construction or Expansion of Water Facilities or Result in a Service Demand that Cannot be Met</u></p> <p>Potable water is supplied to SMF via a water supply line, booster pump station and two storage tanks. The tanks have a storage capacity of 2.8 million gallons. The water supply system is designed to meet the airport's projected 2038 maximum day demand of 3,708 gallons per minute. The propose project will increase waste water, but project demand will not exceed the</p>	LS	None Recommended.	LS



Impacts	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
existing water supply system. The proposed project will not have an impact on water supply facilities.			
<p><u>Require the Construction or Expansion of Wastewater Facilities or Result in a Service Demand that Cannot be Met</u></p> <p>The sewer infrastructure of SMF property is private and there is an agreement between the Sacramento Area Sewer District and SCDA to discharge up to 1.4 million gallons per day. The propose project will increase waste water, but project demand will not exceed the existing discharge agreement. The proposed project will not have an impact on regional wastewater treatment facilities.</p>		None Recommended.	LS
<p><u>Result in the Need for Additional Landfill Capacity for Solid Waste Disposal</u></p> <p>The proposed project will generate construction debris and add passengers over the life of the project. The additional solid waste associated with construction and operations will not significantly impact the capacity of any local disposal facility.</p>	LS	None Recommended.	LS
<p><u>Result in Substantial Adverse Physical Impacts Associated with the Provisions of Emergency Services</u></p> <p>The only fire station in the project area is the ARFF facility at SMF. A community fire station located near the airport entrance is planned for PAL 1 to provide fire and paramedic services to recent and ongoing commercial, industrial, and</p>	LS	None Recommended.	LS

Impacts	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
residential development near SMF. Construction of a new community fire station together with the ARFF facility at SMF will ensure adequate fire protection and emergency response to the airport and existing and planned commercial, industrial, and residential development in SMF’s vicinity.			
<p><u>Result in Substantial Adverse Physical Impacts Associated with the Provisions of Law Enforcement Services</u></p> <p>Law enforcement demand will increase in proportion to passenger activity and increases in commercial and industrial uses at SMF with the proposed project. The SCDA will coordinate with the Sheriff’s Department to provide sufficient space for law enforcement activities.</p>	LS	None Recommended.	LS
<b>TRANSPORTATION AND CIRCULATION</b>			
<p><u>Increase Vehicle Miles Traveled</u></p> <p>The average VMT per employee for the SACOG Region is 12.58 vehicle miles, and the average VMT per employee for SMF and the cargo facility is 20.52 and 22.59 vehicle miles, respectively. Since the project would increase vehicle miles over the existing SACOG regional average the impact is considered significant. Recommended mitigation will reduce employee VMT, but not to a level of less than significant.</p>	S	<p>TC-1 The following measures shall be implemented by the Cargo Facility proponent to reduce employee VMT:                      Prior to issuance of occupancy permits, project operator(s) shall prepare and submit a Transportation Demand Management (TDM) program detailing strategies that would reduce the use of single-occupant vehicles by employees by increasing the number of trips by walking, bicycle, carpool, vanpool, and transit. The TDM program shall include, but is not limited to, the following:</p> <p>e. Provide transportation information center</p>	SU

Impacts	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
		<p>and on-site TDM coordinator to educate employers, employees, and visitors of surrounding transportation options;</p> <p>f. Promote bicycling and walking through design features, such as showers for employees, self-service bicycle repair area, etc. around the project site;</p> <p>g. Promote and support carpool/vanpool/rideshare use through parking incentives and administrative support, such as ride-matching service; and</p> <p>h. Incorporate incentives for using alternative travel modes, such as preferential load/unload areas or convenient designated parking spaces for carpool/vanpool users.</p> <p>TC-2 Prior to issuance of Occupancy permits, the Cargo Facility proponent shall establish a new, or join and maintain membership in an existing Transportation Management Association.</p>	
<p><u>Conflict with Program or Policy Addressing Circulation System Including Transit, Roadway, Bicycle and Pedestrian Facilities</u></p> <p>The project is consistent the County Transportation Plan, Bicycle Master Plan and Pedestrian Master Plan. The project includes local and on-site transit service and continues to show proposed extension of those services.</p>	<p>LS</p>	<p>None recommended.</p>	<p>LS</p>

Impacts	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
Compliance with applicable access and circulation requirements of the County Improvements Standards and the Uniform Fire Code.			
<p><u>Substantially Increase Roadway Hazards</u></p> <p>The project will increase traffic on local roadways and freeways. Roadway safety hazards were identified along Elverta Road from Earhart Road to State Route 99. This is a substandard rural roadway where recommended mitigation to widen travel lanes and construct paved should will reduce this safety hazard. Other roadway safety hazards were identified for the southbound I-5/Airport Boulevard off-ramp. In the cumulative conditions, traffic may result in queuing extending onto the freeway. Mitigation involving monitoring and installation of a signalized intersection or roundabout, will reduce this impact to less than significant.</p>	S	<p>TC-3 <u>Elverta Road Improvements (Earhart Road to Power Line Road)</u></p> <p>Install roadway improvements along this segment of Elverta Road to County standards of 12-foot vehicle lanes with 6-foot paved shoulders.</p> <p>TC-4 <u>Elverta Road Improvements (Power Line Road to State Route 99)</u> If required by the County of Sacramento Department of Transportation, install roadway improvements along this segment of Elverta Road to County standards of 12-foot vehicle lanes with 6-foot paved shoulders. OR Pay fair share, as determined by the County of Sacramento Department of Transportation, for this segment of Elverta Road widening.</p> <p>TC-5 The southbound Airport Boulevard off-ramp shall be monitored as each PAL is completed (PAL 1- 2024, PAL 2- 2028, PAL 3- 2032). If the queue length begins to impede the mainline, the Department of Airports shall install intersection improvements in consultation with Sacramento County Department of Transportation and Caltrans. Improvements</p>	LS

Impacts	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
		could consist of signalization or roundabout.	
<p><u>Result in Inadequate Emergency Services</u></p> <p>The project includes provisions for emergency services and no impacts have been identified to existing or proposed emergency services.</p>	LS	None recommended.	LS
<b>TRIBAL CULTURAL RESOURCES</b>			
<p>Pursuant to the AB52 consultation process, response from Tribes did not identify a known sacred site or Tribal Cultural Resource; however, as with historic and pre-historic cultural resources, there is always the possibility of uncovering buried resources when ground disturbance is proposed. The United Auburn Indian Community and Wilton Rancheria requested Tribal awareness training and Tribal monitors during initial ground disturbance. Recommended mitigation measure CR-2 would further reduce this impact.</p>	PS	See CR-1 and CR-2.	LS

## MITIGATION MONITORING AND REPORTING PROGRAM

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It shall be the responsibility of the project applicant/owner to provide written notification to the Environmental Coordinator, in a timely manner, of the completion of each Mitigation Measure. The Environmental Coordinator will verify that the project is in compliance with the adopted Mitigation Monitoring and Reporting Program (MMRP). It shall be the responsibility of the project applicant to reimburse the Office of Planning and Environmental Review for all expenses incurred in the implementation of the MMRP, including any necessary enforcement actions. Any non-compliance will be reported to the project applicant/owner, and it shall be the project applicant's/owner's responsibility to rectify the situation by bringing the project into compliance and re-notifying the Environmental Coordinator. Any indication that the project is proceeding without good-faith compliance could result in the imposition of administrative, civil and/or criminal penalties upon the project applicant/owner in accordance with Chapter 20.02 of the Sacramento County Code.

## TERMINOLOGY USED IN THIS EIR

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This Draft SEIR uses the following terminology to describe environmental effects of the project.

**Significance Criteria.** A set of criteria used by the lead agency to determine at what level, or "threshold," an impact would be considered significant. Significance criteria used in this EIR include those that are set forth in the CEQA Guidelines, or can be discerned from the CEQA Guidelines; criteria based on factual or scientific information; criteria based on regulatory standards of local, state, and federal agencies; and criteria based on goals and policies identified in the Sacramento County General Plan.

**Less than Significant Impact.** A project impact is considered less than significant when it does not reach the standard of significance and would therefore cause no substantial change in the environment. No mitigation is required for less than significant impacts.

**Potentially Significant Impact.** A potentially significant impact is a substantial, or potentially substantial, adverse change in the environment. Physical conditions which exist within the area will be directly or indirectly affected by the proposed project. Impacts may also be short-term or long-term. A project impact is considered significant if it reaches the threshold of significance identified in the EIR. Mitigation measures may reduce a potentially significant impact to less than significant.

**Significant Unavoidable Impact.** A project impact is considered significant and unavoidable if it is significant and cannot be avoided or mitigated to a less-than-significant level once the project is implemented.

**Cumulative Significant Impact.** A cumulative impact can result when a change in the environment results from the incremental impact of a project when added to other related past, present or reasonably foreseeable future projects. Significant cumulative impacts may result from individually minor but collectively significant projects.

**Mitigation.** Mitigation measures are revisions to the project that would minimize, avoid, or reduce a significant effect on the environment. CEQA Guidelines §15370 identifies 5 types of mitigation:

- a) Avoiding the impact altogether by not taking a certain action or parts of an action.
- b) Minimizing impacts by limiting the degree or magnitude of the action and its implementation.
- c) Rectifying the impact by repairing, rehabilitating, or restoring the impacted environment.
- d) Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.
- e) Compensating for the impact by replacing or providing substitute resources or environments.

# 1 PROJECT DESCRIPTION

## INTRODUCTION

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The proposed project is the Sacramento International Airport (SMF) Master Plan Update. The Master Plan Update revises the existing program for modifications of existing facilities and development of new facilities at SMF through the year 2038. The Master Plan addresses all aspects of the airport including the airfield, terminals and related passenger services, cargo, general aviation (GA), airport support, airport access and commercial development. The Master Plan Update is included as Appendix PD-1 and is available online at:

<https://planningdocuments.saccounty.net/ViewProjectDetails.aspx?ControlNum=PLER2020-00037>.

## PROJECT BACKGROUND

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The Sacramento County Department of Airports (SCDA) previously adopted a Master Plan in 2007 for the SMF (County Control Number 2004-0018). The SMF Master Plan was prepared in order to plan for the future growth of the airport through 2020. The EIR analyzed environmental impacts associated with Phase 1 (near-term 2007-2012) and Phase 2 (near-term 2013-2020) projects (reference Plate PD-2 for adopted Master Plan projects and phasing). Phase 3 projects, those beyond 2020, were identified; however, they were not developed at the level required for decision-making, and the FEIR did not contain project specific analysis for Phase 3 projects.

Under the California Environmental Quality Act (CEQA), a supplemental EIR (SEIR) is required when one or more of the following occurs:

- substantial changes are proposed in a project, which will require revisions to the previous EIR;
- substantial changes in circumstances under which the project is undertaken, which will require revisions to the previous EIR;
- the discovery of new information of substantial importance occurs after an EIR has been certified; and,

When “only minor additions or changes would be necessary to make the previous EIR adequately apply to the project in the changed situation” (State CEQA Guidelines §§15162, 15163[a][2]). Because the updated SMF Master Plan contains modified elements that were not considered in the previous analysis, the County determined that an SEIR should be prepared to revise the analysis of environmental impacts presented in the previous EIR.



In 2007, the original forecast used to determine possible airport needs assumed a growth rate of approximately 3.5 percent every year over the life of the Master Plan. However, during the planning horizon of the 2007 Master Plan, an economic recession hit, and the volume of air travel decreased. As a result, some of the expansion projects included in Phases 1 and 2 of the 2007 Master Plan were not completed. However, the most significant project of the Master Plan, Terminal/Concourse B, was completed.

Since 2014, air travel and cargo transportation has increased steadily, prompting SCDA to review the status of the Master Plan and re-evaluate proposed projects identified in the Master Plan to determine the continued need for, and appropriate phasing of, projects included in the 2007 Master Plan that have not yet been completed<sup>1</sup>. To ensure SMF continues serving the air transportation and economic development needs of the Sacramento Region, a Master Plan Update has been commissioned to provide a strategic vision for the growth in operation of SMF over the next 20 years and guidance for land use and development decisions on and near the SMF.

The Master Plan Update addresses these changes to ensure the region's aviation needs continue to be met in a feasible and fiscally responsible manner. The Master Plan Update also ensures ongoing SMF development maintains the safe and efficient movement of passengers and products, while being compatible with the surrounding community and environment. In order to identify updates, an aircraft operations forecast was prepared using 2018 as the base year and annual forecasts were prepared for four future demand years – 2023, 2028, 2033, and 2038. The Master Plan Update also includes, Planning Activity Levels (PALs) used to identify when improvement should be made to the airport. These indicators allow for flexibility for improving the airport in the event of unexpected changes in passenger numbers throughput at the airport. In the event there are large changes in the passenger numbers, projects may change from the currently predicted demand year, or PAL, to another. PALs are used to evaluate improvement needs associated with certain activity levels. Many of the updates shift proposed airport projects that have not been completed from current planning phases to future planning phases or PALs.

A comparison of the 2007 Master Plan forecast (2020) with the Master Plan Update forecast (2038) indicates that total passenger enplanements for 2020 will not be met until PAL 2 (2028), and total aircraft operations (flights) identified for 2020 will not be met in the life of the Master Plan Update. Passenger enplanements can increase without an equivalent increase in aircraft operations, because the size and capacity of aircraft continue to increase, i.e., there are more passengers per plane.

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<sup>1</sup> The Master Plan Update has been prepared in accordance with Federal Aviation Administration Advisory Circular 150/5070-6B.

## PROJECT LOCATION

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The Sacramento International Airport (SMF) is located approximately 10 miles northwest of downtown Sacramento. SMF is generally bounded by Power Line Road to the east, Garden Highway to the west, Interstate-5(I-5)/Sacramento River to the west and south, and West Elverta Road to the north (reference Plate PD-1). The project site is located within the Taylor Monument U.S. Geological Service quadrangle: Townships 9 and 10 N, Range 3 and 4 East, Sections 13, 18, 19, 24, 25, 30, 31, 36, and 6.

**Project APNs:** Various

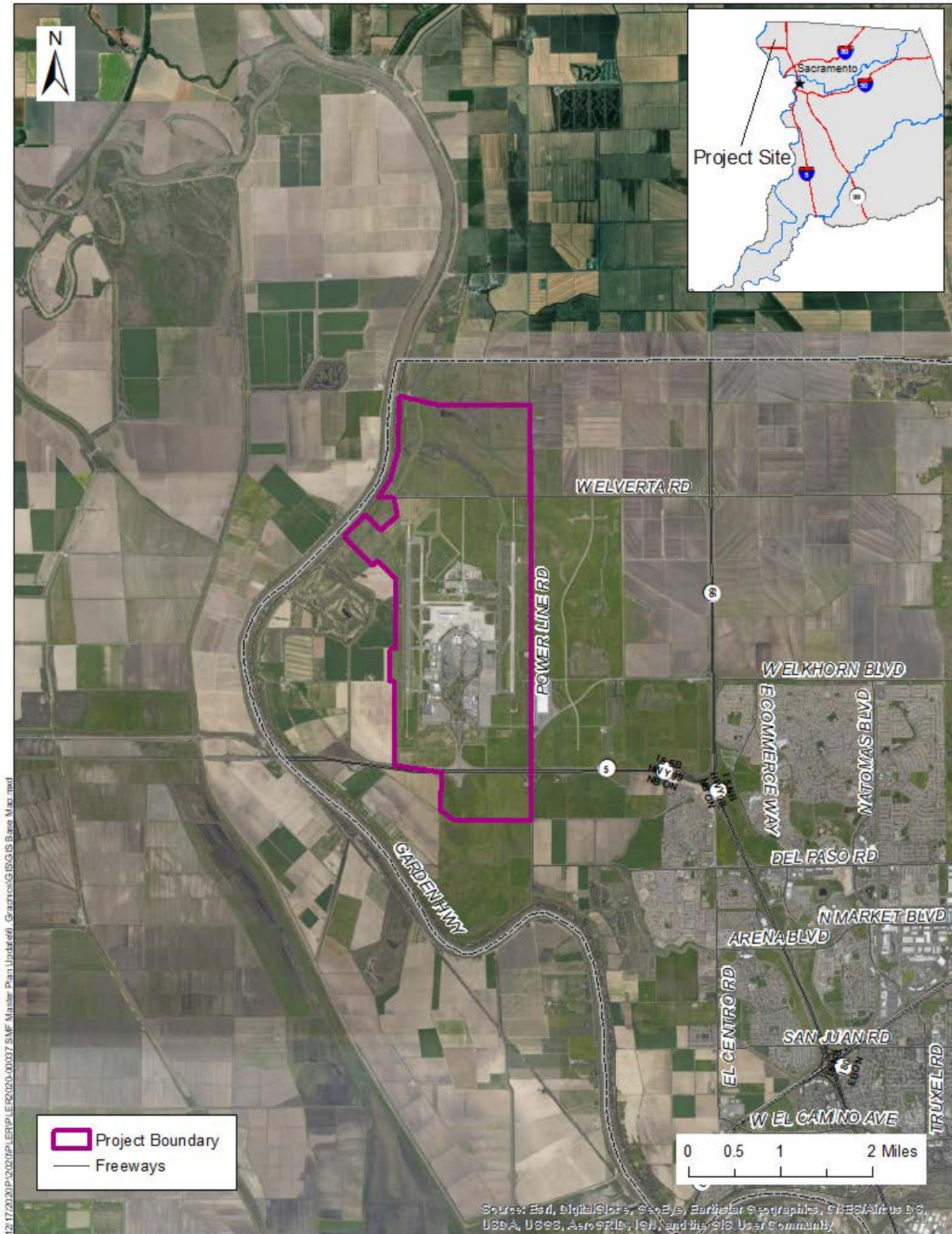
## PROJECT PROPONENTS

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**Owner/Applicant:** Sacramento County Department of Airports (SCDA)

6900 Airport Boulevard, Sacramento, CA 95837

Plate PD-1: Project Location with 2018 Aerial Photo



## ENVIRONMENTAL SETTING

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Sacramento International Airport is in the 55,000-acre Natomas Basin. Due to its proximity to the Sacramento and American Rivers and the relatively low elevation of the land, this basin has historically been prone to flooding. Reclamation projects over the years have transformed Natomas into a highly productive agricultural area, mostly in rice.

The fenced and developed portion of the airport covers approximately 2,800 acres. This area contains two 8,600-foot-long parallel runways (150-foot-wide) with full-length parallel taxiways and one crossfield taxiway connecting the two runways and the passenger terminal aprons. Two terminal buildings (Terminals A and B) provide a total of 31 gates. The runways and taxiways are designed to accommodate scheduled airline and large cargo aircraft such as the Airbus A330-200 and McDonnell Douglas MD-11F, but under emergency circumstances can handle aircraft as large as the Boeing 747-400. A general aviation (GA) ramp, managed by a Fixed Base Operator provides access to the airport for non-commercial GA operations with space for approximately 50 very small aircraft or a few large aircraft. The Fixed Base Operator also manages a large corporate hangar. Other GA facilities include a Specialized Aviation Service Operator providing maintenance to GA aircraft, and three corporate hangars, which are rented. Three cargo buildings provide a total of approximately 81,500 square feet of space for integrated cargo carriers and the belly cargo of commercial passenger aircraft operations. SMF provides parking for over 15,000 cars. The airport also has rental car facilities, airline ground support facilities, shuttle bus service areas and a service station.

The remaining 3,200 acres of County property outside the Air Operations Area (AOA) and terminal complex area is kept in annual grasslands to reduce the potential for conflicts between aircraft and wildlife, or is under cultivation for rice, corn, safflower, and other crops. Land bordering the County property is used primarily for agriculture.

Single-family residences are located to the west and south of the airport along Elkhorn Boulevard, Garden Highway, and the Sacramento River, with the closest residences approximately one-half miles from the airport. Immediately east of the airport is Metro Air Park, a commercial and industrial complex intended to complement and support the airport. Further to the east is north Natomas community in the City of Sacramento. A golf course, the Teal Bend Golf Club, is located immediately west of the airport. The land north of the County property is used for agriculture.

Remnant riparian woodland is located along the Sacramento River to the south and west of the airport, and in patches north of Elverta Road. Trees are also present along old fence lines within and adjacent to the AOA at the southern end of the airport.

An extensive network of drainage and agricultural supply ditches are present throughout the region including the AOA. At present, some of the ditches in the AOA are used to transport irrigation water to agricultural fields off County property. All of the drainage

and agricultural supply ditches are hydrologically connected to the Sacramento River to the west and south of the project area.

## PROJECT PROPOSAL

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The Sacramento County Department of Airports has recently completed a review of the existing Master Plan (2007) for SMF (reference Plate PD-2 for the existing Master Plan exhibit). The current project looks at a development and operation horizon of 20 years (2018 through 2038) with four Planning Activity Levels (PALs). Due to the extended 20 year planning horizon, Master Plan projects or facilities identified in PAL 4 (2034-2038) are beyond the scope of this SEIR and are not analyzed at the project level.

The update largely consists of revisions to proposed airport projects and facilities based on revised aviation forecasts. The update looks at previously identified projects and projected growth at SMF. Many of the updates center on the timing of the project (planning phase) along with minor changes to locations and size of facilities. A direct comparison of the Master Plan and Master Plan Update (MPU) facilities and planning phasing are presented in Table PD-1 and MPU exhibits are presented in Plate PD-3 through 7; notable changes are highlighted below:

- Removal of the third runway and taxiway system;
- Relocating the economy parking lot from south of I-5 to north of I-5, east of Airport Boulevard;
- Changing the economy parking lot south of I-5 to commercial uses and moving it to PAL 4;
- Changing the location of Elkhorn Boulevard extension;
- Construction of a third Concourse (C), adjacent to Concourse B;
- Construction of new airline maintenance, rehabilitation and overall MRO facilities;
- Construction of a new consolidated rental car facility;
- Revising the acreage, location and phasing of commercial development proposed north of I-5, from 77 acres to approximately 189 acres;
- Move phasing of 135 acres of commercial development north of Elverta Road to PAL 3; and
- Movement of the new cargo building and apron from the southwest side to the north airfield, east of Runway 16R and increasing the size from 226k thousand square feet (kft<sup>2</sup>) to 950kft<sup>2</sup>.
  - The Cargo Facility is comprised of three buildings (sortation building, a ground crew building, and an equipment maintenance building),

associated parking, and a taxi lane on 192 acres on the north side of the airport (Plate PD-8). As shown on the conceptual plan, the three buildings would total 950,000 square feet, have 13 aircraft parking spaces, 1,314 parking spaces, and 343 trailer parking spaces. Access to the project site is provided on Earhart Drive from West Elverta Road. Intersection improvements for Earhart Drive and West Elverta Road, which include widening and signalization, are proposed as part of this project.

**Table PD-1: Master Plan Project Comparison Table**

Location	Master Plan Element	
2007 EIR Phase 1 (2007-2013)		MPU Notes
Passenger Terminal	New landside passenger terminal (Terminal B), airside concourse (Concourse B; accommodating a total of 23 aircraft gates), aircraft apron, and associated on-airport roadway modifications.	Completed 19 of 23 gates
	Expanded Concourses A and B. By PAL 4, the 2020 MPU recognizes the requirement for an additional 13 gates. Based on forecasts, the preferred alternatives took into account the building lifespan of Concourse A and physical constraints to recommend that focus be shifted to Concourse B expansion and the long-term Concourse C construction. However, if it is determined that enough useful life exists in Concourse A at the time PAL 1 is met or other fiscal constraints are of concern in the near future, then a minimal expansion of the Concourse A may also occur (Up to the 4 gates as considered in the 2007 MP). Therefore, the expansion Concourse A has not been entirely ruled out, but in most cases does not make sense monetarily.	No Change
	Expansion to passenger Terminal B	PAL 2 Relocated adjacent to Concourse B
	Hotel The hotel was initially design feature of Terminal B as a close-in amenity, but was never constructed. Its need is to be determined based on the construction of other hotel properties in the vicinity of SMF in the near future.	PAL 4 Location moved to south of Elkhorn Blvd, north of I-5
	Parking Garage	Shifted south to avoid roadway impacts
Airside (including support facilities)	New Taxiway Y (Taxiway W) parallel to existing Taxiway Y and south of Cy Homer Road	Completed
	Full-length parallel Taxiway A rehabilitation	PAL 2
	Taxiway A, holdpads, and high-speed taxiway exits for Runway 16R/34L (west runway)	PAL 3
	New Airport Traffic Control Tower (ATCT) north of Cy Homer Road and west of Earhart Drive	PAL 4
	New airport, airfield, and equipment maintenance buildings north of Cy Homer Road	PAL 2
General aviation area including corporate hangars, fixed base operator facility, and apron	PAL 2	
Landside	Expanded rental car parking surface lot between Airport Boulevard and Earhart Drive, and expanded	Remove

	rental car terminal facility east of Airport Boulevard and McNair Circle	
	Elkhorn Boulevard extension from Metro Air Park to Crossfield Drive	No Change
	Employee parking surface lot north of I-5 and west of Airport Boulevard to accommodate 1,500 automobile parking spaces	Complete
	Landscape maintenance area south of the General Aviation area and employee parking lot	No Change
	New remote economy parking and rental car overflow facility to accommodate 13,800 automobile parking spaces south of I-5. Access to I-5 and SMF would be provided with an extension of Airport Boulevard to the parking facility.	Economy parking and over flow moved north of I-5, PAL 2,3 South of I-5, changed to commercial uses (114 acres) and moved to PAL 4
	New ground service equipment maintenance building east of Aviation Drive. The prior 2007 MP location conflicts with the construction of the future EV bus charging lot surrounding the existing East Vault.	Removed
	New community fire station at northwestern corner of Lindbergh Drive and Crossfield Drive. The fire station is to be built by the City of Sacramento Fire Department on County-owned land.	PAL 1
	Expanded flight kitchen facility The space available for this project is now occupied by the air cargo sort/warehouse facility constructed in FY 2019/2020.	Remove
	New shuttle bus maintenance and staging facility east of Aviation Drive	No Change
	Strengthen and overlay Earhart Drive to the existing Elverta Road intersection	No Change
	Widen Cy Homer Road to two lanes	No Change
	Acquire two areas (48 acres and 313 acres) north of I-5 for buffer area and one area (442-460 acres) south of I-5 for aircraft approach protection	Remove
2007 EIR Phase 2 (2014-2020)		MPU Notes
Passenger Terminal	Expand landside Terminal B to create a centralized landside terminal Expansion allows for future proposed Concourse C and additional gates to Concourse B	No Change
	Expand Concourse B to add four gates	PAL 2 Changed to 6 Gates
	Expand Terminal B parking garage	PAL 3
	Extend Terminal A Concourse piers to accommodate four additional aircraft gates	No Change



Airside (including support facilities)	2,400-foot extension of Runway 16L/34R (east runway) to provide a total runway length of 11,000 feet	PAL 4
	New localizer, Instrument Landing System (ILS) glide slope, and High Intensity Approach Lighting System with Sequenced Flashing Lights (ALSF-2) for new ILS approach to Runway 34R	PAL 4
	New high-speed taxiway exits for Runway 16R/34L	PAL 2 Modified to partial parallel taxiways on the ends of the runway only
	New full-length parallel Taxiway E and holding pads	Remove
	Runway 16L/34R high-speed taxiway exits	Completed
	New north crossfield Taxiway V (north of Taxiway W)	PAL 4 No Change
	Additional terminal apron in proximity to Terminal A concourse	In Progress
	New air cargo building and air cargo apron with a taxiway connector to the Runway 34R end The air cargo building shown near the 34R end in the 2004 MP no longer meets the existing needs. The future building was moved to the north airfield along 34L for ample space and access.	PAL 1 Moved to north airfield and expanded, Runway 16R end
	New Aircraft Rescue & Fire Fighting (ARFF) building north of CY Homer Road and west of Earhart Drive	In Progress
	Extension of Cy Homer Road to both existing runways	PAL 2; No Change
Landside	Relocate Elverta Road to avoid Runway 16L Runway Protection Zone (RPZ) and extend Earhart Drive to the relocated Elverta Road	PAL 4
	Clearer signage on Bayou Way between Airport Boulevard and Power Line Road	PAL 1
	Commercial development on approximately 79 acres south of I-5	PAL 4
Ditch Modifications	Place ditches within culverts and pipes in RPZ and road areas	PAL 4
2007 EIR Phase 3 (Beyond 2020)		MPU Notes
Passenger Terminal	New Concourse to serve third runway The 2007 MP Alternative E2 placed the future Concourse C expansion perpendicular to Concourse B without any direct connection. In the 2020 MPU, the placement has been shifted to allow for a moving walkway connection between both concourses, which provides an alternative means of movement and a shared, security screening check point that will be expanded to accommodate	PAL 2 New concourse to serve increase in passenger demand; relocated adjacent to Concourse B

	both concourses.	
Airside	New 8,600-foot runway parallel to and 1,200 feet west of existing Runway 16R/34L. The Airport's existing and forecasted operations through the planning horizon are below the maximum capacity for the current two runways. There is no longer a justification for this project.	Remove
Landside	Light rail and/or bus rapid transit service to SMF passenger terminal	PAL 4 No Change
	Commercial development on approximately 77 acres north of I-5 and east of Airport Boulevard, and approximately 135 acres north of existing Elverta Road	PAL 3 Commercial development north of I-5, south of Elverta Road expanded to 189 acres; no change to development north of existing Elverta Road
	Commercial development on approximately 46.5 acres south of I-5	PAL4
<b>New Master Plan Elements</b>		
Airside	Airline maintenance, rehabilitation and overhaul MRO facility	PAL 1, 2; Aircraft MRO East and Northwest PAL 4 Aircraft MRO Northeast
Landside	Construct new consolidated rental car facility to the east of Airport Blvd., west and south of parking garage; this replaces rental car parking lot and terminal expansion	PAL 2

## Plate PD-2: 2004 Master Plan Facilities Phasing Exhibit

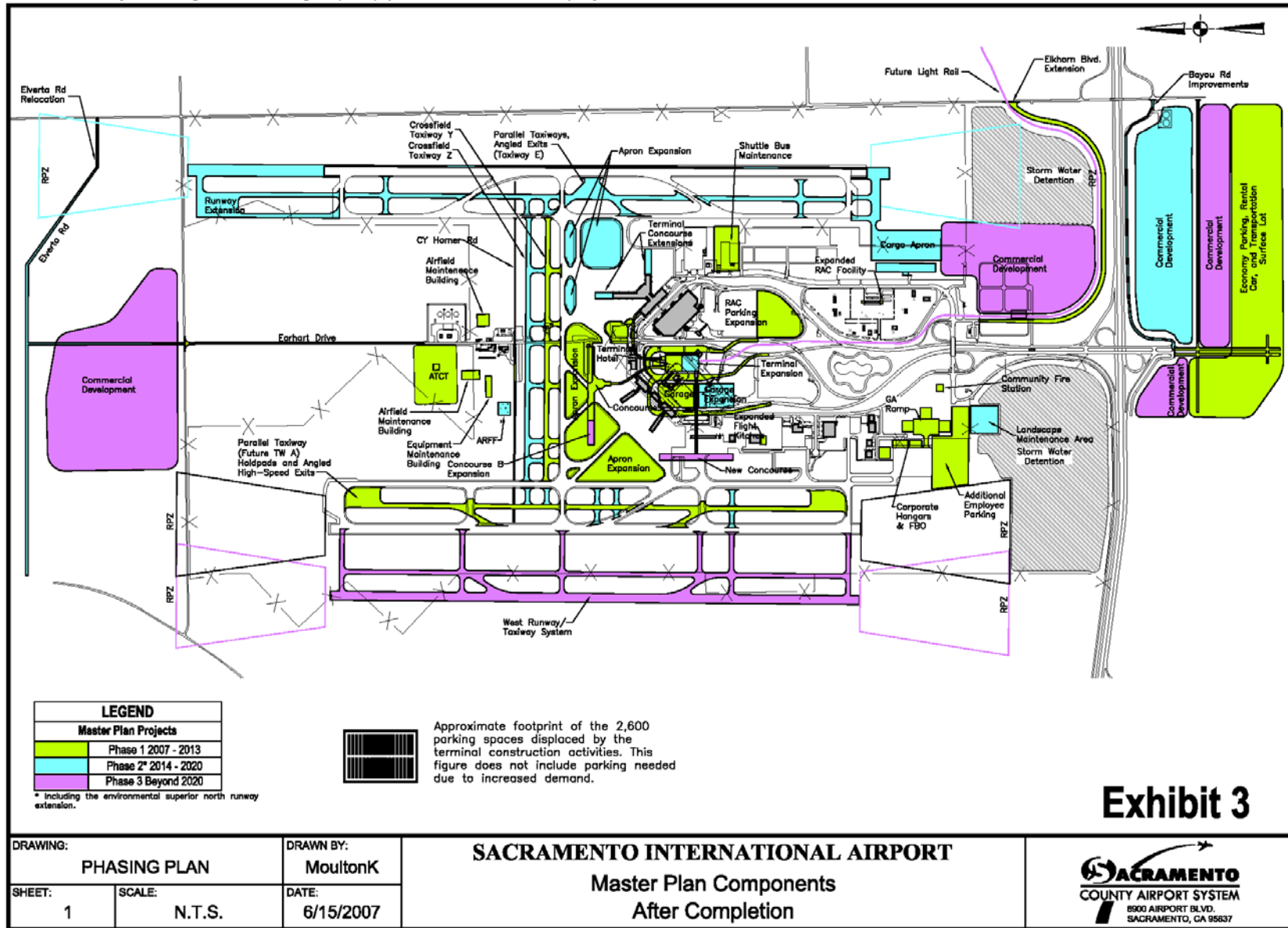


Plate PD-3: Master Plan Update PALs 1-4

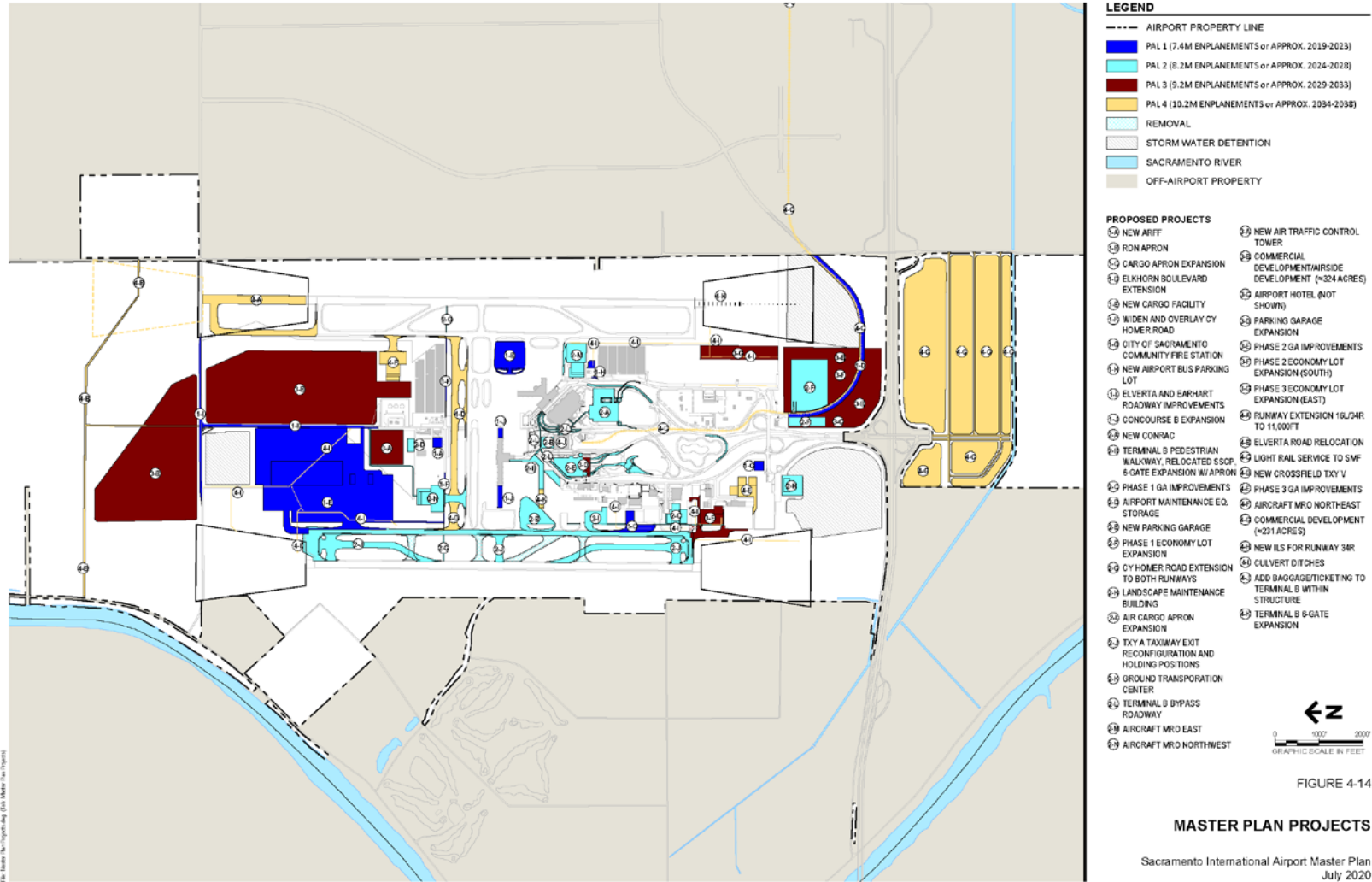


Plate PD-4: Master Plan Update PAL 1

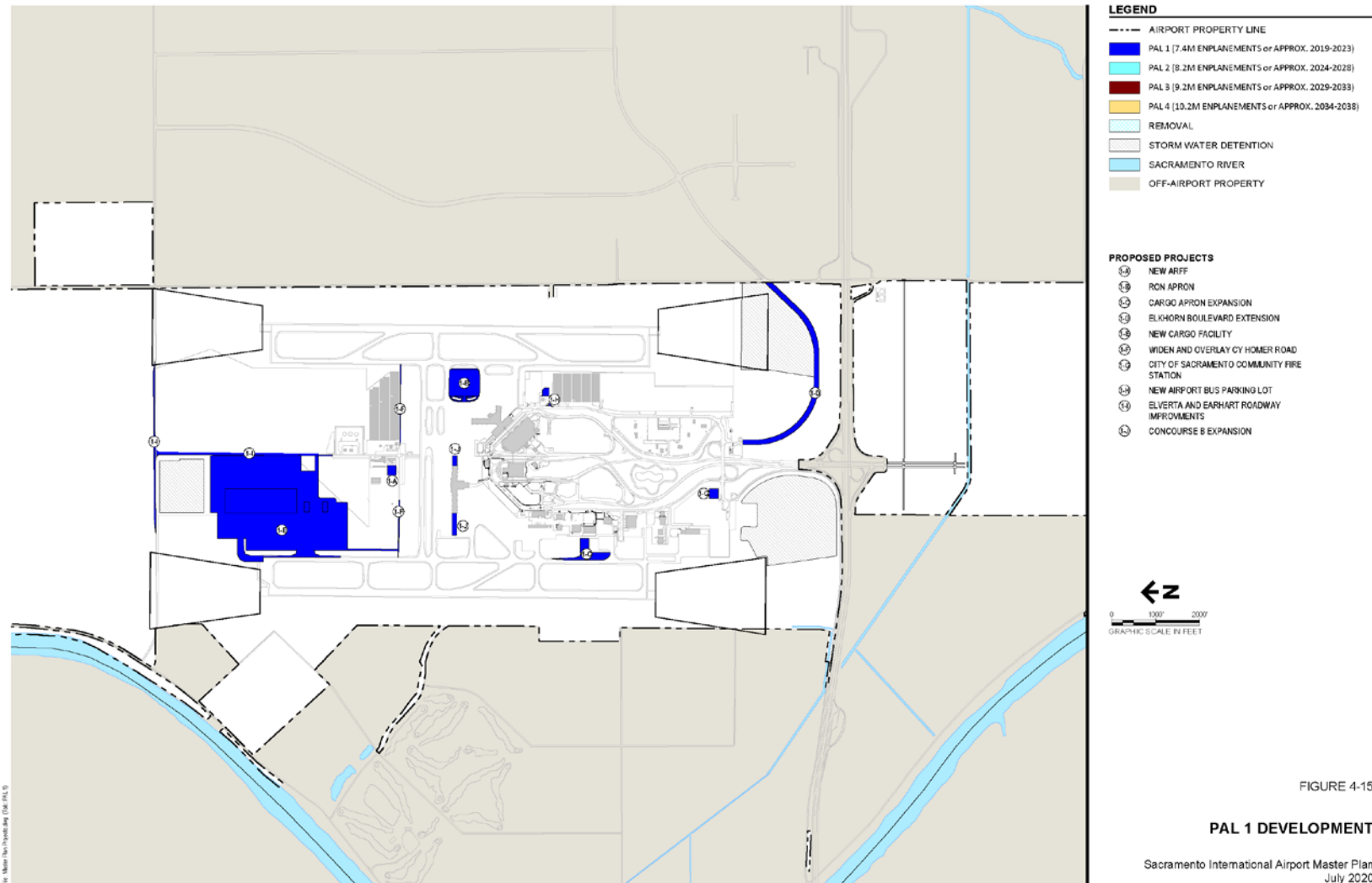


Plate PD-5: Master Plan Update PAL 2

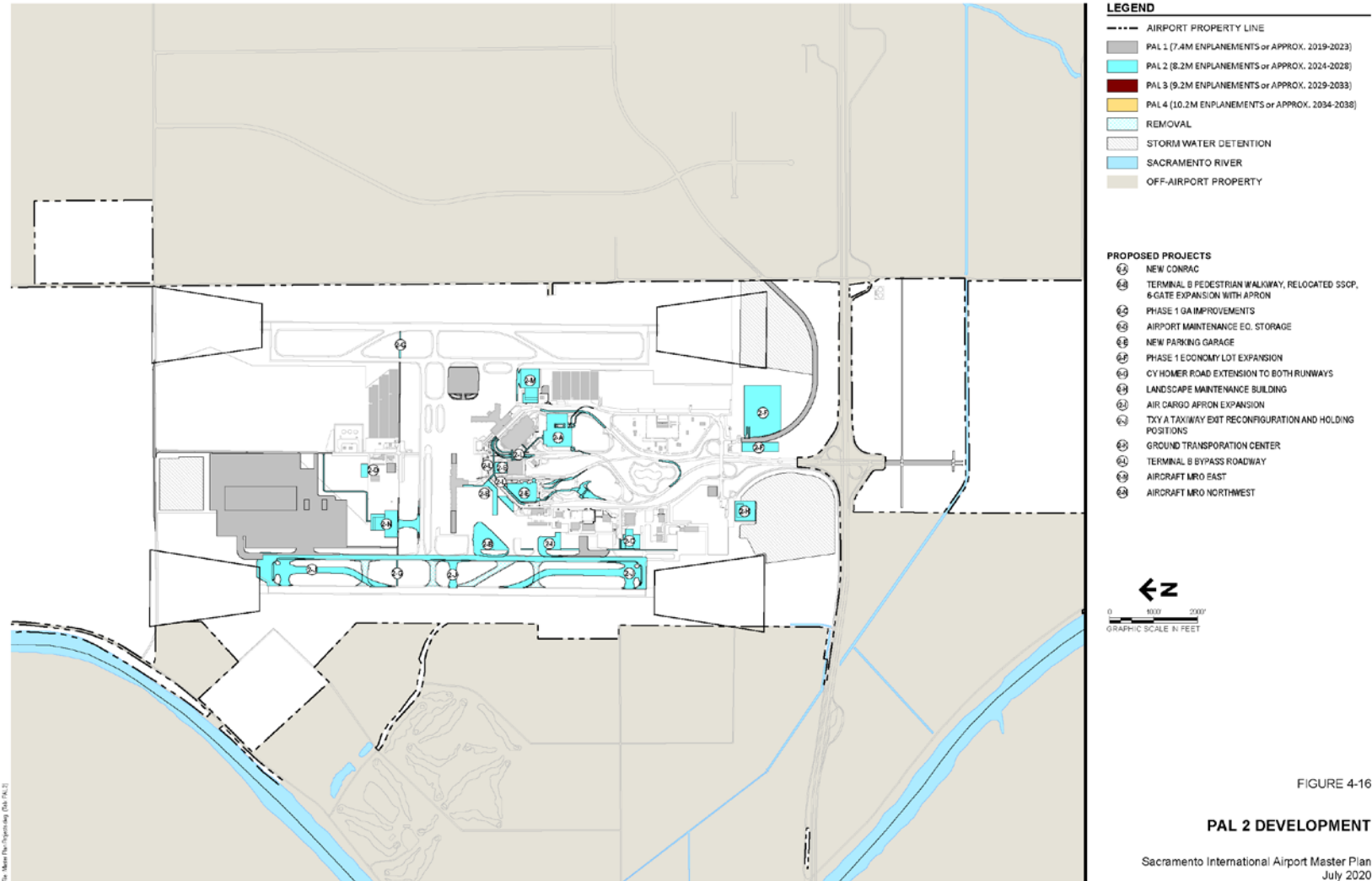


Plate PD-6: Master Plan Update PAL 3

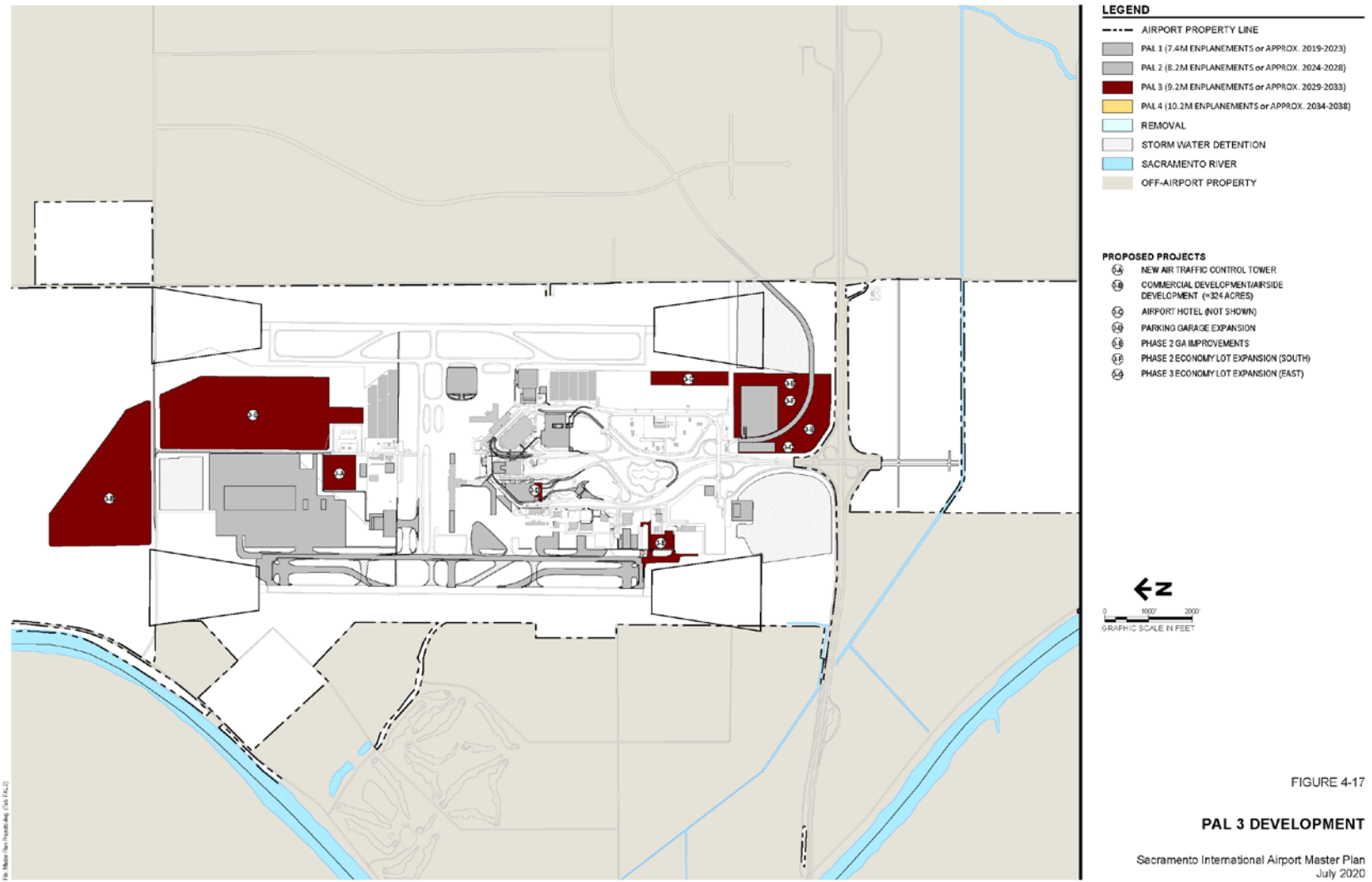


Plate PD-7: Master Plan Update PAL 4

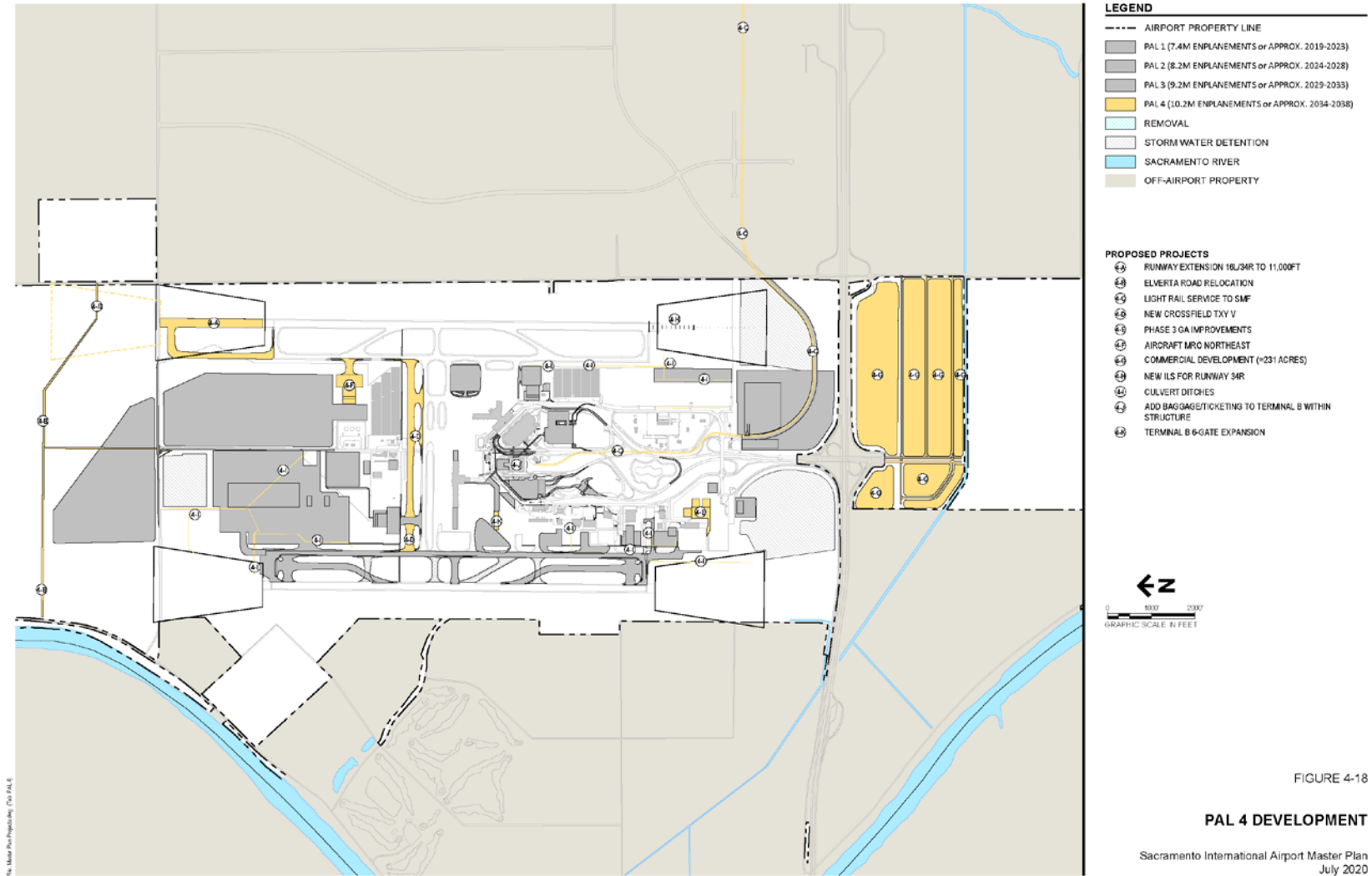
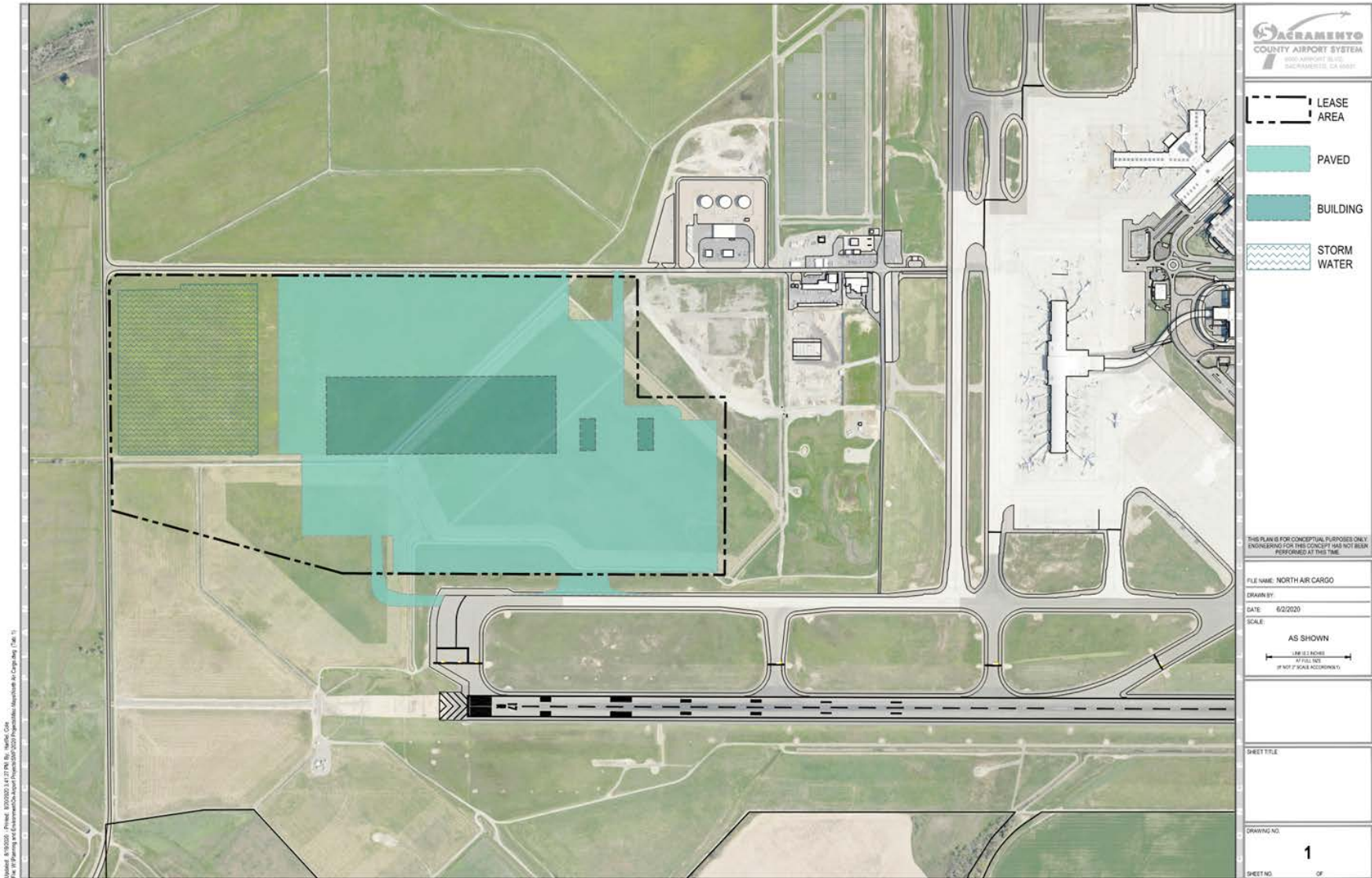




Plate PD-8: Conceptual Cargo Plan (North Airfield)



## PROJECT OBJECTIVES

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The objectives for the SMF Master Plan Update project are based on the visions for the future of the airport developed during the planning process with input from stakeholders and the public. The project objectives are to:

- Surround the airport with compatible and supportive land uses that provide for airport expansion and buffering from incompatible land uses, as well as providing opportunities for compatible development and wildlife habitat.
- Provide high quality, multimodal, and congestion-free access to the airport that facilitates a seamless trip for passengers between their point of origin and the gate.
- Create a customer friendly, easily accessible airport that provides opportunities for additional passenger amenities (e.g., sit-down restaurant, close-in hotel, and meeting place), improves passenger connectivity between terminals, and eases use for physically challenged individuals (number of level changes).
- Accommodate regional air travel needs by serving domestic and international destinations (from Sacramento travelers can get anywhere) and satisfying increasing travel needs of the region’s growing conference, convention, and tourism activities.
- Provide adequate capacity to serve travel demand for the next 20 years and beyond, accommodate Group VI aircraft, and accommodate cargo and GA<sup>[1]</sup> with the flexibility to serve changing demand levels among commercial, cargo, and GA.
- Provide an international gateway for the Sacramento region by having a runway of adequate length to serve international markets and a Federal Inspection Services facility that is integral to the domestic flight facilities.
- Provide safe and efficient operations by having a facility layout that enables passengers to move safely and efficiently, and an airfield with all-weather capability that is compatible with airspace needs of other airports and resolves the current inefficient movement of aircraft on the Terminal A apron inherent in the apron’s V-shaped design.
- Convey a Sacramento “sense of place”.

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<sup>[1]</sup> Group VI aircraft are aircraft with a tail height of 66 feet up to 79 feet and a wing span of 214 feet up to 261 feet. **The aircraft currently in this aircraft group are the Airbus A380 and 747-8.**

- Provide an airport that is environmentally responsible by minimizing existing impacts and preventing new impacts, and minimizing aircraft and ground transportation movements and congestion.
- Provide facilities that have the flexibility to accommodate traffic activity changes such as more commercial traffic than forecast and more cargo traffic than forecast.
- Provide an airport that plays a lead role in regional economic development efforts.
- Provide an airport that is financially solvent and efficient in terms of capital costs and operating and maintenance costs.

## INTENDED USES OF THE EIR

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The Sacramento County Board of Supervisors will use the information contained in the SEIR in evaluating the proposed project and rendering a decision to approve or deny the Master Plan update and proposed cargo facility. The SEIR will serve as an informational document for the general public as well. Responsible agencies may also use the SEIR as needed for subsequent discretionary actions. Based on the potential effects known at this time, responsible agencies may include (but may not be limited to) the Federal Aviation Administration, United States Fish and Wildlife Service, United States Army Corps of Engineers, California Department of Fish and Wildlife, the Central Valley Regional Water Quality Control Board, Sacramento Municipal Utility District and/or Pacific Gas and Electric

Table PD-2 below includes information required by Section 15124 of the CEQA Guidelines and summarizes the following intended used of the EIR:

- A list of agencies that are expected to use the EIR in their decision making.
- A list of permits and other approvals required to implement the project.
- A list of related environmental review and consultation requirements required by federal, state, or local laws, regulations, or polices.

**Table PD-2: Subsequent Permits, Approvals, Review, and Consultation Requirements**

Agency	Approval
Sacramento County Board of Supervisors	Final Supplemental Environmental Impact Report Certification
Sacramento County Board of Supervisors	Project Approval
Federal Aviation Administration	Project Approval
Sacramento Metropolitan Air Quality Management District	Fugitive Dust Prevention and Control Plan
Regional Water Quality Control Board – Central Valley Region	NPDES Waste Discharge Permit
Regional Water Quality Control Board – Central Valley Region	Section 401 Certification
California Department of Fish and Wildlife	Streambed Alteration Agreement, California Endangered Species Act Take Permit
U.S. Army Corps of Engineers	Section 404 Permit
U.S. Fish and Wildlife Service	Federal Endangered Species Act Take Permit

## 2 ALTERNATIVES

### INTRODUCTION

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This chapter describes alternative versions of the proposed project that may lessen environmental impacts, or that provide meaningful information to foster informed decisions. Impact discussion are presented in a qualitative rather than quantitative manner and are briefer than those found in the project chapters, consistent with the California Environmental Quality Act (CEQA) Guidelines Section 15126.6(d). This chapter does not repeat background discussions or other subject matter that has already been described in the topical chapters of this EIR, but focuses on those Alternative impacts, which are substantively different from the impacts described for the project. Reviewers are encouraged to read the topical chapters describing project impacts prior to reading the Alternatives chapter.

### RANGE OF ALTERNATIVES

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According to Section 15126.6 of CEQA Guidelines:

An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibility attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives.

The purpose of this section is to identify alternative project designs that would mitigate, lessen, or avoid the significant effects of the project. The project would result in significant and unavoidable impacts to air quality, climate change, land use and transportation; and less than significant impacts with mitigation to biological resources, cultural resources, and tribal cultural resources. To foster meaningful public discussion and informed decision-making, a range of reasonable alternatives to the project is provided. This range includes the “No Project” alternative, the purpose of which is to allow the hearing body to compare the impacts of approving the project to the impacts of not approving the project. The “No Project” alternative describes what would happen if the existing land use plan remained in effect.

### ALTERNATIVES CONSIDERED BUT REJECTED

The following alternative was considered but ultimately rejected due to infeasibility and/or little benefit to the environment.

#### **ALTERNATIVE LOCATION**

Pursuant to CEQA Guidelines Section 15126.6(f)(2)(A), only alternative locations that would avoid or substantially lessen any of the significant effects of the project need to be considered. One of the significant changes to the existing SMF Master Plan is the

proposed cargo facility. The proposed cargo facility is identified in Planning Activity Level (PAL)1, and could be accommodated at Mather Airport. The SMF location has been cited as being preferable in prior inquiries due to its location and proximity to both Interstate 5 and 80 and recent local distribution facility development. If the facility was located at Mather Airport, the cargo would have to be trucked further to local distribution facilities across the region. This would demonstrably increase GHG emissions for the Sacramento region. For this reason, an alternative location is rejected from further analysis. Further, as the court in *Mira Mar Mobile Community v. City of Oceanside* (2004) 119 Cal.App. 4th 477, held, an EIR for a development consistent with applicable land use policies does not need to examine alternate sites for the project because a development proposal that implements existing planning policies should not prompt reconsideration of those policies, which themselves have already undergone environmental review. Here, the project is generally consistent with existing Airport Master Plan planning policies, in that a new cargo facility was anticipated at the airport, further rendering an alternative project location unnecessary.

## DESCRIPTION OF ALTERNATIVES

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### ALTERNATIVE 1: REMOVE COMMERCIAL DEVELOPMENT NORTH OF ELVERTA ROAD

This alternative would reduce the proposed commercial development area in PAL 3 by removing the approximate 135-acre area north of Elverta Road (reference Plate ALT-1). This alternative would still meet the applicant's project objectives to provide potential areas to surround the airport with compatible and supportive land uses. The remaining available commercial acreage north of I-5 and south of Elverta Road is approximately 189 acres.

### ALTERNATIVE 2: NEW CONSTRUCTION MEETS ENVISION VERIFICATION

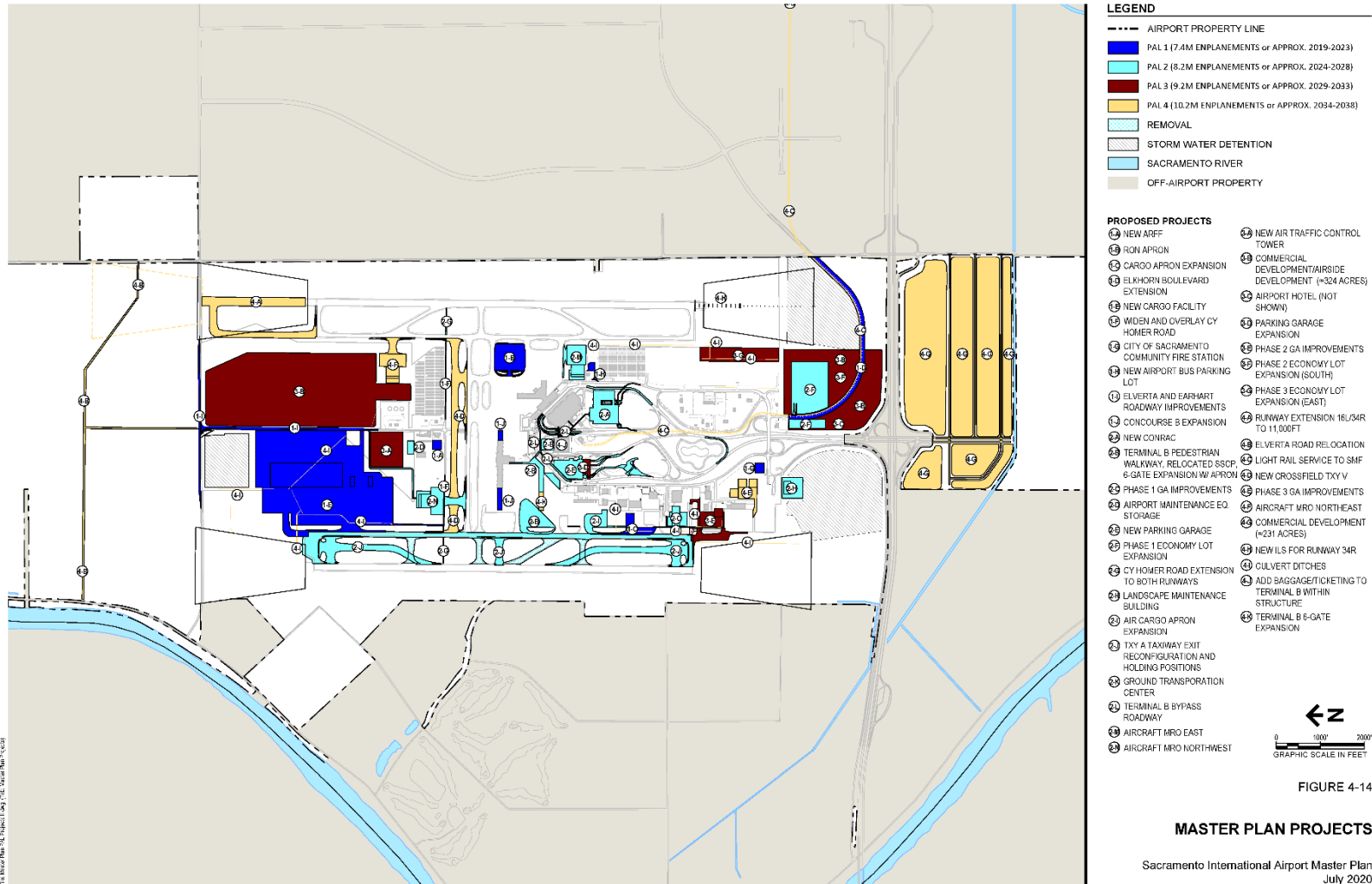
This alternative would require all new development to meet Envision verification silver or above, and meet conservation point level for Resources Allocation- Energy and Water, and Climate Change and Resilience- Emissions (Plate ALT-2). Envision is a Sustainable Infrastructure Framework developed by the Institute for Sustainable Infrastructure. Envision is a guide to plan and build more sustainable and resilient infrastructure. There are five categories and 64 sustainable and resilience indicators or "credits". Depending on the conservation measures implemented, credits are assigned a point value. Based on the overall point total, the project is verified to one of four levels – Verified (20% of maximum point value), Silver (30%), Gold (40%), and Platinum (50%).

This alternative would further reduce construction and operational air quality and GHG emissions associated with new Master Plan elements, while meeting the applicant's objective to provide an airport that is environmentally responsible and is financially solvent in operating and maintenance costs.

## NO PROJECT ALTERNATIVE

The no project alternative would assume that the existing SMF Master Plan would continue to be the guiding land use planning document for the airport. The Master Plan elements would continue to be implemented as facilities become necessary based on airport projections (reference Plate ALT-3).






Plate ALT-1: Alternative 1





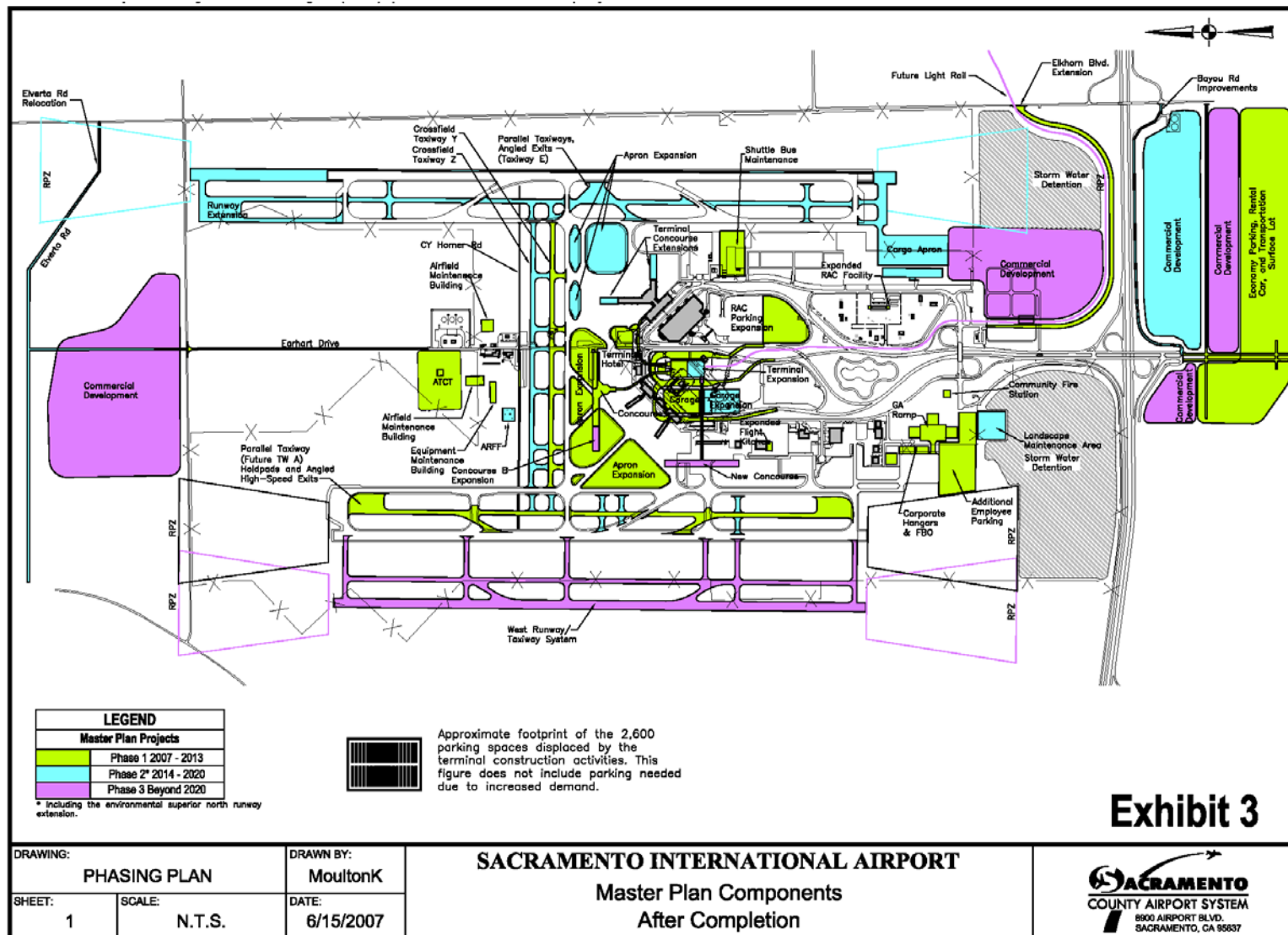
**Plate ALT-2: Envision Verification Table**

**ENVISION POINTS TABLE**

			Improved	Enhanced	Superior	Conserving	Restorative	Maximum Points		
 <b>Quality of Life</b>	<b>Wellbeing</b>	QL1.1 Improve Community Quality of Life	2	5	10	20	26	200		
		QL1.2 Enhance Public Health & Safety	2	7	12	16	20			
		QL1.3 Improve Construction Safety	2	5	10	14	—			
		QL1.4 Minimize Noise & Vibration	1	3	6	10	12			
		QL1.5 Minimize Light Pollution	1	3	6	10	12			
		QL1.6 Minimize Construction Impacts	1	2	4	8	—			
	<b>Mobility</b>	QL2.1 Improve Community Mobility	1	3	7	11	14			
		QL2.2 Encourage Sustainable Transportation	—	5	8	12	16			
		QL2.3 Improve Access & Wayfinding	1	5	9	14	—			
	<b>Community</b>	QL3.1 Advance Equity & Social Justice	3	6	10	14	18			
		QL3.2 Preserve Historic & Cultural Resources	—	2	7	12	18			
		QL3.3 Enhance Views & Local Character	1	3	7	11	14			
QL3.4 Enhance Public Space & Amenities		1	3	7	11	14				
 <b>Leadership</b>	<b>Collaboration</b>	LD1.1 Provide Effective Leadership & Commitment	2	5	12	18	—	182		
		LD1.2 Foster Collaboration & Teamwork	2	5	12	18	—			
		LD1.3 Provide for Stakeholder Involvement	3	6	9	14	18			
		LD1.4 Pursue Byproduct Synergies	3	6	12	14	18			
	<b>Planning</b>	LD2.1 Establish a Sustainability Management Plan	4	7	12	18	—			
		LD2.2 Plan for Sustainable Communities	4	6	9	12	16			
		LD2.3 Plan for Long-Term Monitoring & Maintenance	2	5	8	12	—			
		LD2.4 Plan for End-of-Life	2	5	8	14	—			
	<b>Economy</b>	LD3.1 Stimulate Economic Prosperity & Development	3	6	12	20	—			
		LD3.2 Develop Local Skills & Capabilities	2	4	8	12	16			
		LD3.3 Conduct a Life-Cycle Economic Evaluation	5	7	10	12	14			
 <b>Resource Allocation</b>	<b>Materials</b>	RA1.1 Support Sustainable Procurement Practices	3	6	9	12	—	196		
		RA1.2 Use Recycled Materials	4	6	9	16	—			
		RA1.3 Reduce Operational Waste	4	7	10	14	—			
		RA1.4 Reduce Construction Waste	4	7	10	16	—			
		RA1.5 Balance Earthwork On Site	2	4	6	8	—			
	<b>Energy</b>	RA2.1 Reduce Operational Energy Consumption	6	12	18	26	—			
		RA2.2 Reduce Construction Energy Consumption	1	4	8	12	—			
		RA2.3 Use Renewable Energy	5	10	15	20	24			
		RA2.4 Commission & Monitor Energy Systems	3	6	12	14	—			
	<b>Water</b>	RA3.1 Preserve Water Resources	3	5	7	9	12			
		RA3.2 Reduce Operational Water Consumption	4	9	13	17	22			
		RA3.3 Reduce Construction Water Consumption	1	3	5	8	—			
RA3.4 Monitor Water Systems		1	3	6	12	—				
 <b>Natural World</b>	<b>Siting</b>	NW1.1 Preserve Sites of High Ecological Value	2	6	12	16	22	232		
		NW1.2 Provide Wetland & Surface Water Buffers	2	5	10	16	20			
		NW1.3 Preserve Prime Farmland	—	2	8	12	16			
		NW1.4 Preserve Undeveloped Land	3	8	12	18	24			
	<b>Conservation</b>	NW2.1 Reclaim Brownfields	11	13	16	19	22			
		NW2.2 Manage Stormwater	2	4	9	17	24			
		NW2.3 Reduce Pesticide & Fertilizer Impacts	1	2	5	9	12			
		NW2.4 Protect Surface & Groundwater Quality	2	5	9	14	20			
	<b>Ecology</b>	NW3.1 Enhance Functional Habitats	2	5	9	15	18			
		NW3.2 Enhance Wetland & Surface Water Functions	3	7	12	18	20			
		NW3.3 Maintain Floodplain Functions	1	3	7	11	14			
		NW3.4 Control Invasive Species	1	2	6	9	12			
	NW3.5 Protect Soil Health	—	3	4	6	8				
 <b>Climate and Resilience</b>	<b>Emissions</b>	CR1.1 Reduce Net Embodied Carbon	5	10	15	20	—	190		
		CR1.2 Reduce Greenhouse Gas Emissions	8	13	18	22	26			
		CR1.3 Reduce Air Pollutant Emissions	2	4	9	14	18			
	<b>Resilience</b>	CR2.1 Avoid Unsuitable Development	3	6	8	12	16			
		CR2.2 Assess Climate Change Vulnerability	8	14	18	20	—			
		CR2.3 Evaluate Risk and Resilience	11	18	24	26	—			
		CR2.4 Establish Resilience Goals and Strategies	—	8	14	20	—			
		CR2.5 Maximize Resilience	11	15	20	26	—			
		CR2.6 Improve Infrastructure Integration	2	5	9	13	18			
	<b>Maximum TOTAL Points</b>								<b>1,000</b>	

The Envision framework can be found at: <https://sustainableinfrastructure.org/wp-content/uploads/EnvisionV3.9.7.2018.pdf>

Plate ALT-3: No Project Alternative



## IMPACTS AND ANALYSIS

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A summary matrix is included at the end of this document clearly identifying the range of Alternatives and their respective impacts to select environmental topics in relation to the proposed project.

### AGRICULTURAL LAND USE RESOURCES

The proposed project's impacts to agricultural and land use resources are significant and unavoidable. Only Alternative 1 would further reduce impacts associated with the permanent loss of Farmland of Local Importance.

#### **ALTERNATIVE 1**

Much of the Airport land is currently classified as Farmland of Local Importance on the 2018 Farmland Inventory Map for Sacramento County. As noted in SEIR Chapter 8, the lands in between the runways and within the Airport Operation Area (AOA) would not ever be farmed due to conflicts with airport operations. Therefore only the area outside of the AOA is considered in the impacts analysis. By removing the proposed commercial development north of Elverta Road, there is no longer an impact to Important Farmlands. Development South of I-5 is shown on the ultimate Master Plan; however, impacts are not considered in this document. This alternative would remove impacts associated with the permanent loss of Farmland of Local Importance.

#### **ALTERNATIVE 2**

The development north of Elverta Road would remain and therefore impacts to agricultural land use resources would remain the same.

#### **NO PROJECT ALTERNATIVE**

The existing SMF Master Plan identified development north of Elverta Road and south of I-5; however, much of that development was in Phase 3, considered beyond the scope of the prior EIR. Agricultural land use impacts were not identified for the area north of Elverta Road, but were identified for the areas to be converted for urban uses south of I-5 (remote economy parking and commercial development). A total of 190 acres of prime farmland would be converted and mitigation was required pursuant to General Plan policies. This alternative would slightly increase the impacts to farmland as compared to the proposed project.

### AIR QUALITY/GREENHOUSE GASES

The proposed project's impacts to air quality and greenhouse gas emissions are significant even with mitigation for operational impacts. All Alternatives would further reduce these impacts.

**ALTERNATIVE 1**

The proposed reduction of 135 acres of commercial development would slightly reduce air quality and GHG emissions associated with construction, operation of the buildings, and new mobile emissions over the proposed project.

**ALTERNATIVE 2**

The proposed requirement to have all new master plan elements meet Envision verification silver, and specifically the conservation point level for energy consumption, water consumption and GHG emissions, would reduce construction and operational air quality and GHG emissions associated with the building emissions. This would reduce the project's contribution to air quality and GHG emissions over the life of the buildings.

**NO PROJECT ALTERNATIVE**

The existing air quality emissions were considered significant and unavoidable in the prior EIR. Greenhouse gas emissions were discussed in the prior EIR; however, at the time, there were no set thresholds for GHG emissions and no impact conclusion was made. This alternative has less acreage of commercial uses and therefore would have reduced operational and GHG emissions associated with construction, building operation, and new mobile emissions (employees) as compared to the proposed project.

**BIOLOGICAL RESOURCES**

The proposed project's impacts to biological resources consist of: loss of wetlands, nesting and foraging habitat disruption, removal of giant garter snake habitat, and loss of trees/riparian habitat. Impacts are potentially significant, but can be reduced to less than significant with mitigation. Only Alternative 1 would further reduce impacts associated with biological resources.

**ALTERNATIVE 1**

Removing the area north of Elverta Road would eliminate impacts associated with Swainson's hawk foraging habitat, removal of riparian and oak woodlands. Approximately 1.89 acres of wetlands and waters of the U.S. would not be filled, and as such, impacts to giant garter snake aquatic and upland habitat would be reduced.

**ALTERNATIVE 2**

There would not be a change in the impacts to biological resources since the development areas would not be changed.

**NO PROJECT ALTERNATIVE**

The prior EIR identified similar impacts associated with biological resources (wetlands and species) for Master Plan elements identified in Phases 1 and 2. This alternative did not evaluate impacts for commercial development north of Elverta Road; therefore, there would be a reduction in impacts to wetland, riparian and species as compared to the proposed project. It did evaluate impacts associated with development south of I-5,

which would have greater impacts to wetlands and species than the proposed project. Overall, this alternative would have similar impacts as the proposed project.

## CULTURAL AND TRIBAL RESOURCES

The proposed project's impacts to cultural resources are already less than significant with mitigation. Only Alternative 1 would further reduce these impacts.

### **ALTERNATIVE 1**

This alternative reduces the acreage of ground disturbance by 135 acres. Further the area north of Elverta Road is closer to known archeological and tribal resources. Thereby the distance of proposed ground disturbance from these resources would be increased, reducing the potential to uncover buried deposits. Impacts associated with unanticipated cultural or tribal resource discoveries is reduced under this alternative.

### **ALTERNATIVE 2**

There is no change to the proposed area of ground disturbance; therefore, the impacts associated with cultural and Tribal resources remain the same.

### **NO PROJECT ALTERNATIVE**

The prior EIR concluded a less than significant impact to cultural resources with recommended mitigation. Again, Master Plan projects identified in Phase 3 were not evaluated in the prior EIR; therefore, the commercial development north of Elverta Road was not specifically analyzed. The area was part of the Master Plan Survey area and the recommended mitigation measures would equally apply to this area as well. The impacts to cultural and tribal resources remain the same.

## HYDROLOGY AND WATER QUALITY

The proposed project's impacts to hydrology and water quality are already less than significant. Alternative 1 and the No-Project Alternative would further reduce these impacts.

### **ALTERNATIVE 1**

This alternative would remove 135 acres of commercial development north of Elverta Road and would result in less ground disturbance and impervious surfaces, thereby reducing hydrology and water quality impacts. This alternative would slightly reduce these impacts over the proposed project.

### **ALTERNATIVE 2**

Hydrology and water quality impacts under Alternative 2 would be similar as those predicted for the project. While the Envision verification framework has categories for hydrology and water quality conservation, it is not the primary category enhanced by this alternative.

**NO PROJECT ALTERNATIVE**

The prior EIR analyzed impacts associated with hydrology and water quality. This alternative reduces impervious acreages over the proposed project, thereby reducing hydrology and water quality impacts. This alternative would slightly reduce these impacts over the proposed project.

## NOISE

The proposed project's impacts to noise are less than significant without mitigation. Since there are no sensitive receptors near the project, even the slightest reduction of traffic and mechanical noise that would occur from removing the commercial development north of Elverta Road, would not be perceptible. By far, the dominating source of noise is associated with aviation flights and is not anticipated to change. All alternatives would have similar noise impacts.

## PUBLIC SERVICES/UTILITIES

The proposed project's impacts to public service and utilities are less than significant without mitigation. It is recognized that growth at the airport is to occur with or without the proposed project. Over the last decade, public services and utilities have been upgraded and sized to accommodate future growth at the airport. All alternatives would reduce impacts to public services and utilities.

**ALTERNATIVE 1**

This alternative would remove 135 acres of commercial development north of Elverta Road directly corresponding to less demand for public services and utilities. This alternative would slightly reduce these impacts over the proposed project.

**ALTERNATIVE 2**

This alternative would implement construction and building techniques to substantially reduce consumption of energy and water. This would correspond in a reduction in demand for public utilities. This alternative would reduce these impacts over the proposed project.

**NO PROJECT ALTERNATIVE**

The prior EIR analyzed impacts associated with public services and utilities. The total acreages of commercial development are less with this alternative, which would correspond to less demand for public services and utilities. This alternative would slightly reduce these impacts over the proposed project.

## TRANSPORTATION

The proposed project identified significant impacts associated employee vehicle miles traveled (VMT). Both the Master Plan Update and the proposed cargo facility (PAL 1) will exceed the regional employee average. The Master Plan Update will increase the number of passengers; however, a percentage of those passengers are recaptured, thereby resulting in an overall reduction in passenger VMT. This reduction will not be

realized until PAL 2 or beyond; therefore, projects in PAL 1 (proposed cargo facility) will result in significant VMT impacts. Additionally, safety impacts were identified for area roadways (Elverta Road and I-5 southbound off-ramp intersection) due to the increase of vehicles generated by the proposed project. The No Project Alternative would reduce these impacts.

### **ALTERNATIVE 1**

A small number of VMT associated with employees of the commercial development north of Elverta Road would be removed with this alternative. This would account for a slight reduction in VMT for the Master Plan overall; however, the overall employee VMT would remain significant.

This alternative would reduce the number of vehicles using Elverta Road; however, the proposed cargo facility was the major contributor to the increase of daily vehicles resulting in the safety concerns for the roadway. Likewise, this alternative would not significantly reduce the potential safety impact for the I-5 southbound off-ramp intersection. Safety impacts would not change.

### **ALTERNATIVE 2**

There would be no change the in acreage of proposed commercial development; therefore, the impacts to traffic would not change.

### **NO PROJECT ALTERNATIVE**

The prior EIR used a level of service (LOS) threshold to determine traffic and circulation impacts. This metric is no longer a valid metric to use in determining significant impacts and therefore, there is no a direct comparison with the proposed project and the No Project alternative. However, one can assume under the prior EIR analysis, the additional gates and concourse was included in the analysis and these facilities allow for additional passengers and greater capacity. It is expected that under this alternative a similar amount of recaptured passengers would be expected, thus impacts associated with passenger VMT would be similar. This alternative does not include the proposed cargo facility or additional commercial acreage and employee VMT associated with these uses would not occur; therefore, employee VMT impacts would be reduced.

## **ENVIRONMENTALLY SUPERIOR ALTERNATIVE**

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CEQA requires that an environmentally superior alternative be identified. The above analysis includes the No Project Alternative along with a range of alternatives in order to develop a reasoned choice. Often the No Project Alternative is the environmentally superior alternative; however, it cannot be considered because CEQA requires that if the environmentally superior alternative is the No Project Alternative, the EIR must identify another environmentally superior alternative from those remaining. Considering all remaining alternatives, the environmentally superior alternative is Alternative 1. This alternative would meet the applicant's need to provide updates to Master Plan elements,

accommodate the proposed cargo facility and continue to provide a reasonable amount of commercial development areas.

**Table ALT-1: Alternatives Summary Matrix**

Environmental Impact	Alternative 1	Alternative 2	No Project Alternative
Agricultural Land Use	Reduced+++	Similar	Increased+
Air Quality & Greenhouse Gas	Reduced+	Reduced++	Reduced++
Biological Resources	Reduced++	Similar	Similar
Cultural & Tribal Resources	Reduced+	Similar	Similar
Hydrology and Water Quality	Reduced+	Similar	Reduced+
Noise	Similar	Similar	Similar
Public Services/Utilities	Reduced+	Reduce++	Reduced+
Transportation	Reduced+	Similar	Reduced++
	Impact level in comparison to the proposed project: Similar = environmental impacts are similar to those identified for the proposed project Reduced+ = environmental impacts are slightly reduced as compared to the proposed project Reduced++ = environmental impacts are moderately reduced as compared to the proposed project Reduced+++ = no environmental impact		



## 3 AIR QUALITY

### INTRODUCTION

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The prior EIR certified in 2007 for the Sacramento International Airport (SMF) Master Plan (Master Plan) evaluated impacts to air quality for Master Plan elements (or facilities) identified in Phase 1 or 2 (through year 2020). Master Plan elements identified in Phase 3 were not evaluated. The Federal Aviation Administration (FAA) recommends an airport master plan be updated every ten years or when there is a large-scale shift to proposed airside or landside facilities.

The proposed project shifts the phasing or timing of some facilities and increases the scale of other facilities. Notably, the proposed cargo facility increases from 226 thousand square feet to 950 thousand square feet; a change to location and phase of new concourse and number of gates; addition of a consolidated rental car facility; and changing the acreage, location and phasing of the commercial development north of I-5.

### AIR QUALITY SETTING

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The Sacramento Metropolitan Area is a federal ozone non-attainment area, and one of the top ten worst air quality areas nationally<sup>1</sup>. In Sacramento County, pollutants of greatest concern are ozone precursors (hydrocarbons and nitrogen oxides), carbon monoxide (CO), particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>), and other visibility-reducing material.

### ATMOSPHERIC CONDITIONS

The geography and weather patterns of the Sacramento Valley are conducive to high air pollution levels. The mountain ranges surrounding the valley are natural air current barriers, which restrict most of the circulating winds of lower elevations from mixing and dispersing air pollutants of the valley. Sacramento is also subject to thermal air inversions, especially during the summer and fall months, wherein a layer of cool air is overlain by warmer air. Also, solar radiation from the abundant sunshine in Sacramento acts as a catalyst to drive chemical reactions between atmospheric pollutants such as reactive hydrocarbons and nitrogen oxides; the result is photochemical smog. Thus, the combination of surrounding mountains, abundant sunshine, thermal air inversions and wind patterns make the Sacramento area susceptible to high levels of air pollution.

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<sup>1</sup> American Lung Association, State of the Air 2019, ranked #5 for ozone.

*EXISTING AIR QUALITY*

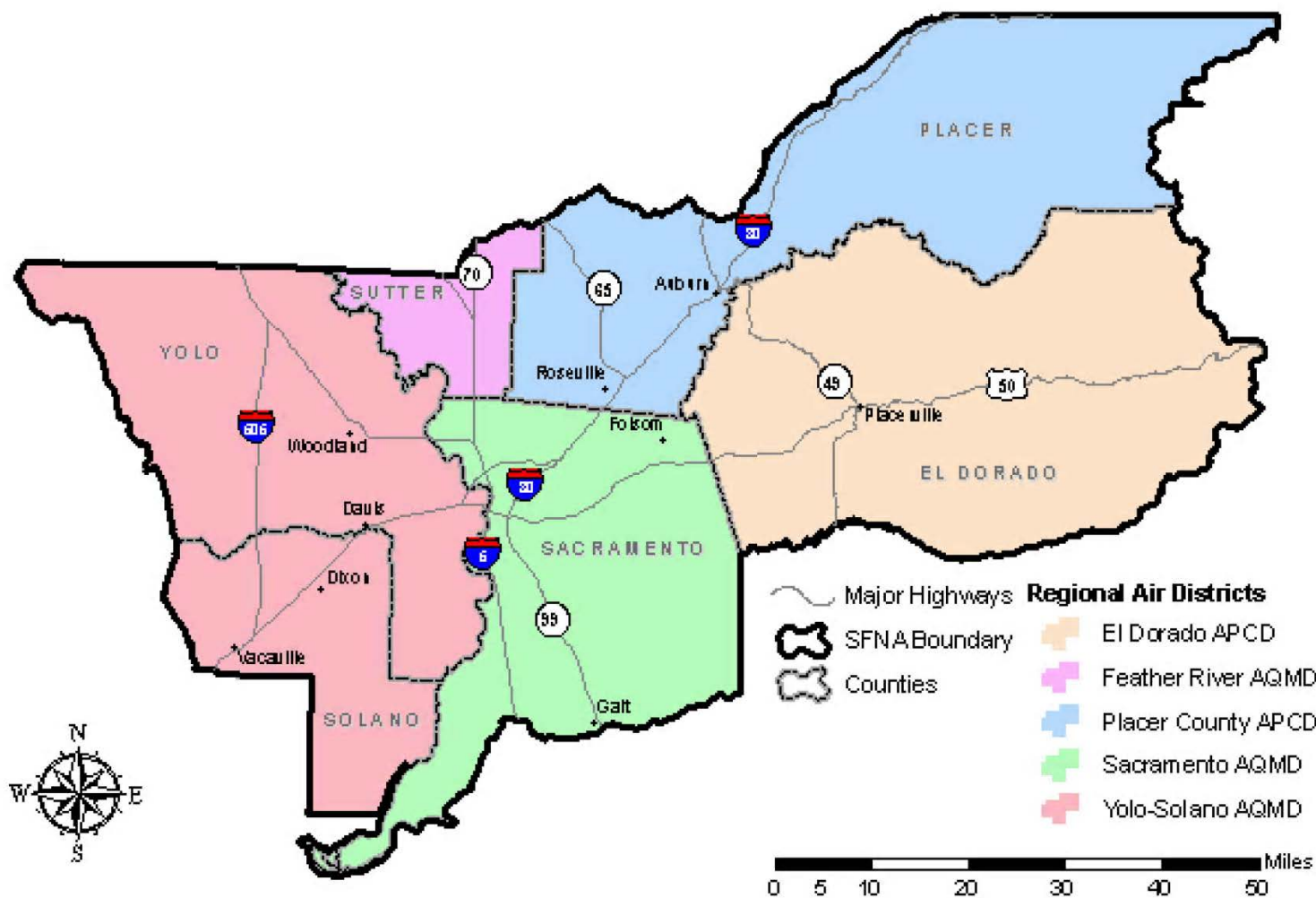
The Sacramento Federal Nonattainment Area for ozone (SFNA) is comprised of five air districts in the southern portion of the Sacramento air basin. The SFNA air districts include all of Sacramento and Yolo Counties, and portions of El Dorado, Placer, Sutter and Solano Counties (see Plate AQ-1). With the exception of ozone and particulate matter standards, this area is in attainment for all state and national ambient air quality standards (AAQS). However, the SFNA is designated a “severe” nonattainment area for the federal eight hour AAQS for ozone. As a part of the SFNA, Sacramento County is out of compliance with the state one hour and the federal eight hour AAQS for ozone.

With respect to particulate matter, Sacramento County is designated as nonattainment for the state PM<sub>10</sub> 24 hour standard and annual mean, the state PM<sub>2.5</sub> annual standard and the federal PM<sub>2.5</sub> 24 hour standard.

Ambient air quality standards define clean air. Specifically, federal and state AAQS establish the concentration above which a pollutant is known to cause adverse health effects to sensitive groups within the population, such as children and the elderly. Because AAQS have been established for specific pollutants using health-based criteria, the pollutants for which standards have been set are known as “criteria” pollutants. For some of the criteria pollutants, the state standards are more stringent than the federal standards. The differences in the standards are due to variations in health studies and interpretations involved in the standard-setting process.

The amount of pollutants released and the atmosphere’s ability to transport and dilute the pollutants affect a given pollutant’s concentration in the atmosphere. Factors affecting transport and dilution include terrain, wind, atmospheric stability, and, for photochemical pollutants, sunlight. Sacramento’s poor air quality can largely be attributed to emissions, geography, and meteorology.

Plate AQ-1: Sacramento Federal Nonattainment Area (SNFA) for Ozone



Source: Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan, December 19, 2008 (revised in 2011, 2013 and 2017). The map in the adopted plan and the proposed revision are identical.

## REGULATORY SETTING

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### POLLUTANTS AND AIR QUALITY STANDARDS

The criteria pollutants of greatest concern are due to construction activities and vehicle emissions. The pollutants from these activities are carbon monoxide (CO), ozone (O<sub>3</sub>), and respirable particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>). A summary of state and federal ambient air quality standards for criteria pollutants is shown in Table AQ-1, below. Table AQ-2 shows the pollutants of concern within Sacramento County and their attainment status with state and federal standards.

#### *CARBON MONOXIDE (CO)*

State and Federal CO standards have been set for both 1-hour and 8-hour averaging times. The State 1-hour standard is 20 parts per million (ppm) by volume, while the Federal 1-hour standard is 35 ppm. Both State and Federal standards are 9 ppm for the 8-hour averaging period. CO is a public health concern because it combines readily with hemoglobin and thus reduces the amount of oxygen transported in the bloodstream.

Motor vehicles are the dominant source of CO emissions in most areas. High CO levels develop primarily during winter when periods of light winds combine with the formation of ground level temperature inversions (typically from the evening through early morning). These conditions result in reduced dispersion of vehicle emissions. Motor vehicles also exhibit increased CO emission rates at low air temperatures.

#### *PARTICULATE MATTER (PM<sub>10</sub> & PM<sub>2.5</sub>)*

Health concerns associated with suspended particulate matter focus on those particles small enough to reach the lungs when inhaled. Few particles larger than 10 microns in diameter reach the lungs, but the smaller particles have been shown to have the most serious health risks. Consequently, there are Federal and State air quality standards for particulate matter 10 microns or less in diameter (PM<sub>10</sub>) and for particulate matter 2.5 microns or less in diameter (PM<sub>2.5</sub>).

The State PM<sub>10</sub> standards are 50 micrograms per cubic meter (µg/m<sup>3</sup>) as a 24-hour average and 20 µg/m<sup>3</sup> as an annual arithmetic mean. The Federal PM<sub>10</sub> standard is 150 µg/m<sup>3</sup> as a 24-hour average. The PM<sub>2.5</sub> standard has been set by the State at a concentration of 12 µg/m<sup>3</sup> as an annual arithmetic mean, and the Federal Standards are 12 µg/m<sup>3</sup> as an annual arithmetic mean and 35 µg/m<sup>3</sup> in a 24-hour period.

Particulate matter conditions in Sacramento County reflect a mix of rural and urban sources, including agricultural activities, industrial emissions, dust suspended by vehicle traffic, and secondary aerosols formed by reactions in the atmosphere.

*OZONE (O<sub>3</sub>)*

Ozone is not usually emitted directly into the air, but is created at ground level by a chemical reaction between oxides of nitrogen (NO<sub>x</sub>) and volatile organic compounds (VOC) in the presence of sunlight. The United States Environmental Protection Agency formerly called VOC reactive organic gases, or ROG – the latter term is still in use in most modeling programs and by the Sacramento Metropolitan Air Quality Management District. For this reason, both the term VOC and ROG may be used; the reader should be aware that these are the same constituents. Because photochemical reaction rates depend on the intensity of ultraviolet light and air temperature, ozone is primarily a summer air pollution problem. Ozone is a respiratory irritant and an oxidant that increases susceptibility to respiratory infections and can cause substantial damage to vegetation and other materials.

State and federal standards for ozone have been set for an 8-hour averaging time, and the State also has set a standard for a 1-hour averaging time. There is a Federal 1-hour standard in existence, but the standard only applies to Early Action Compact Areas, and Sacramento County is not in such an area. The State 8-hour standard is 0.070 ppm (137 µg/m<sup>3</sup>) and the 1-hour standard is 0.09 ppm (180 µg/m<sup>3</sup>). The Federal 8-hour standard is 0.070 ppm (137 µg/m<sup>3</sup>).

Table AQ-1: State and Federal Ambient Air Quality Standards

Pollutant	Symbol	Average Time	Standard, as <u>parts per million</u>		Standard, as <u>micrograms per cubic meter</u>		<u>Violation Criteria</u>	
			California	National	California	National	California	National
Ozone	O <sub>3</sub>	1 hour	0.09	--	180	--	If exceeded	If exceeded more than 3 days in 3 years
		8 hours	0.070	0.070	137	--	If exceeded	If exceeded more than 3 days in 3 years
Carbon monoxide	CO	8 hours	9.0	9	10,000	10,000	If exceeded	If exceeded more than 1 day per year
		1 hour	20	35	23,000	40,000	If exceeded	If exceeded more than 1 day per year
Nitrogen dioxide	NO <sub>2</sub>	Annual arithmetic mean	0.030	0.053	57	100	If exceeded	If exceeded
		1 hour	0.18	0.100	339	188	If exceeded	
Sulfur dioxide	SO <sub>2</sub>	24 hours	0.04	--	105	--	If exceeded	If exceeded more than 1 day per year
		3 hour	--	0.5	--	1,300	N/A	If exceeded more than 1 day per year
		1 hour	0.25	0.075	655	196	If exceeded	N/A
Hydrogen sulfide	H <sub>2</sub> S	1 hour	0.03	--	42	--	If ≥	N/A
Vinyl chloride	C <sub>2</sub> H <sub>3</sub> Cl	24 hours	0.01	--	26	--	If ≥	N/A
Respirable particulate matter	PM <sub>10</sub>	Annual arithmetic mean	--	--	20	--	If exceeded	N/A
		24 hours	--	--	50	150	If exceeded	If exceeded more than 1 day per year
Fine particulate matter	PM <sub>2.5</sub>	Annual arithmetic mean	--	--	12	12	If exceeded	If exceeded over 3-year average
		24 hours	--	--	--	35	If exceeded	If exceeded over 3-year average
Sulfate particles	SO <sub>4</sub>	24 hours	--	--	25	--	If ≥	N/A
Lead particles	Pb	Calendar Quarter	--	--	--	1.5	N/A	If exceeded more than 1 day per year
		Rolling 3-month average	--	--	--	0.15	If ≥	N/A
		30-day average	--	--	1.5	--	If ≥	N/A

**Source:** California Air Resources Board. "Ambient Air Quality Chart". May 4, 2016. Accessed: March 15, 2019. <http://www.arb.ca.gov/research/aags/aags2.pdf>

**NOTES:** **1)** All standards are based on measurements at 25 C and 1 atmosphere pressure. **2)** National standards shown are the primary (health effects) standards. **3)** N/A = not applicable

**Table AQ-2: Sacramento County Attainment Status**

Pollutant	Attainment with State Standards	Attainment with Federal Standards
Ozone	Non-Attainment (1 hour Standard <sup>1</sup> and 8 hour Standard)	Attainment (1 hour Standard <sup>2</sup> ) Non-Attainment, Classification = Severe -15* (8 hour <sup>3</sup> Standards)
Particulate Matter 10 Micron	Non-Attainment (24 hour Standard and Annual Mean)	Attainment (24 hour Standard)
Particulate Matter 2.5 Micron	Attainment (Annual Standard)	Non-Attainment (24 hour Standard) and Attainment (Annual)
Carbon Monoxide	Attainment (1 hour and 8 hour Standards)	Attainment (1 hour and 8 hour Standards)
Nitrogen Dioxide	Attainment (1 hour Standard and Annual)	Unclassified/Attainment (1 hour and Annual)
Sulfur Dioxide <sup>4</sup>	Attainment (1 hour and 24 hour Standards)	Attainment/Unclassifiable <sup>5</sup>
Lead	Attainment (30 Day Standard)	Attainment (3-month rolling average)
Visibility Reducing Particles	Unclassified	No Federal Standard
Sulfates	Attainment (24 hour Standard)	No Federal Standard
Hydrogen Sulfide	Unclassified (1 hour Standard)	No Federal Standard
<p>1. Per Health and Safety Code (HSC) § 40921.59(c), the classification is based on 1989-1001 data, and therefore does not change.</p> <p>2. Air Quality meets Federal 1-hour Ozone standard (77 FR 64036). EPA revoked this standard, but some associated requirements still apply. The SMAQMD attained the standard in 2009.</p> <p>3. For both that 1997 and the 2008 Standard.</p> <p>4. Cannot be classified.</p> <p>5. Designation was made as part of EPA's designations for the 2010 SO<sub>2</sub> Primary National Ambient Air Quality Standard – Round 3 Designation in December 2017.</p> <p>*Designations based on information from <a href="http://www.arb.ca.gov/desig/changes.htm#reports">http://www.arb.ca.gov/desig/changes.htm#reports</a> Source: SMAQMD. "Air Quality Pollutants and Standards". Web. Accessed: March 15, 2019. <a href="http://airquality.org/air-quality-health/air-quality-pollutants-and-standards">http://airquality.org/air-quality-health/air-quality-pollutants-and-standards</a></p>		

## FEDERAL, STATE AND LOCAL AGENCIES

Air quality in Sacramento County is regulated by several agencies, which include the U.S. Environmental Protection Agency (EPA), California Air Resources Board (CARB), and Sacramento Metropolitan Air Quality Management District (SMAQMD). Each of these agencies develops rules and/or regulations to attain the goals or directives

imposed upon them through legislation. Although EPA regulations may not be superseded, both State and Local regulations may be more stringent. In general, air quality is evaluated based upon standards developed by Federal and State agencies. Mobile sources of air pollutants are largely controlled by Federal and State agencies, while Local air pollution control districts or air quality management districts (AQMD) regulate stationary sources.

Air pollution problems in Sacramento County are primarily the result of locally generated emissions. However, Sacramento County has been identified as a source of ozone precursor emissions that occasionally contribute to air quality problems in the San Joaquin Valley Air Basin and the Northern Sacramento Valley Air Basin. Consequently, the air quality planning for Sacramento County must not only correct local air pollution problems but must also reduce the impacts from the area on downwind air basins.

#### *SACRAMENTO METROPOLITAN AIR QUALITY RULES AND REGULATIONS*

SMAQMD regulates air quality in Sacramento County through its permit authority over stationary sources of emissions, through its vehicle and fuels management program, and through planning and review activities. All projects are subject to SMAQMD Rules and Regulations in effect at the time of construction. Several SMAQMD Rules pertinent to the project are discussed below.

**RULE 201: GENERAL PERMIT REQUIREMENTS.** Any project that includes the use of equipment capable of releasing emissions to the atmosphere may require permit(s) from SMAQMD prior to equipment operation. The applicant, developer or operator of a project that includes an emergency generator, boiler, or heater should contact the District early to determine if a permit is required, and to begin the permit application process. Portable construction equipment (e.g. generator, compressors, pile drives, lighting equipment, etc.) with an internal combustion engine over 50 horsepower are required to have a SMAQMD permit or a California Air Resources Board portable equipment registration.

**RULE 403: FUGITIVE DUST.** The developer or contractor is required to control dust emissions from earth moving activities or any other construction activity to prevent airborne dust from leaving the project site.

**RULE 442: ARCHITECTURAL COATINGS.** The developer or contractor is required to use coatings that comply with the volatile organic compound content limits specified in the rule.

The SMAQMD was created by State law to enforce Local, State, and Federal air pollution regulations within the Sacramento Valley Air Basin. The SMAQMD's overall mission is to achieve clean air goals by leading the Sacramento region in protecting public health and the environment through effective programs, community involvement, and public education. The SMAQMD interacts with local, state, and federal government agencies, the business community, environmental groups, and private citizens to achieve these goals. The SMAQMD regulates air pollutant emissions from stationary



sources through permit limitations and inspection programs and oversees compliance with state and federal mandates by adopting rules and regulations as necessary.

Because the Sacramento Valley Air Basin is in nonattainment for ozone, PM<sub>10</sub>, and PM<sub>2.5</sub>, the SMAQMD requires the implementation of the following Basic Construction Emission Control Practices (BCECPs), regardless of the project's significance determination under CEQA. Since these are already required by existing rules and regulations, it is not necessary to include them as mitigation.

- Water all exposed surfaces two times daily. Exposed surfaces include, but are not limited to, soil piles, graded areas, unpaved parking areas, staging areas, and access roads;
- Cover or maintain at least two feet of free board space on haul trucks transporting soil, sand, or other loose material on the site. Any haul trucks that would be traveling along freeways or major roadways should be covered;
- Use wet power vacuum street sweepers to remove any visible trackout mud or dirt onto adjacent public roads at least once a day. Use of dry power sweeping is prohibited;
- Limit vehicle speeds on unpaved roads to 15 miles per hour (mph);
- All roadways, driveways, sidewalks, and parking lots to be paved should be completed as soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used;
- Minimize idling time by either shutting equipment off when not in use or reducing time of idling to 5 minutes. Provide clear signage that posts this requirement for workers at the entrances to the site; and
- Maintain all construction equipment in proper working condition according to manufacturer's specifications. The equipment must be checked by a certified mechanic and determine to be running in proper condition before it is operated.

#### *SACRAMENTO COUNTY*

Local governments, such as Sacramento County, have the authority and responsibility to reduce air pollution through the land use decision-making authority allowed by their police power. Specifically, local governments are responsible for the mitigation of emissions resulting from land use decisions and for the implementation of transportation control measures as outlined in Federal, State and Local air quality attainment plans. In general, a first step toward implementation of a local government's responsibility is accomplished by identifying air quality goals, policies, and implementation measures in the agency's General Plan. Through capital improvement programs, local governments can fund infrastructure that contributes to improved air quality, by requiring such improvements as bus turnouts, energy-efficient street lights, and synchronized traffic signals. In accordance with CEQA requirements and the CEQA review process, local governments assess air quality impacts, require mitigation of potential air quality impacts by conditioning discretionary permits, and monitor and enforce implementation of such mitigation.

The Sacramento County General Plan includes the following policies that pertain to air quality for the proposed project:

- AQ-3. Buffers and/or other appropriate mitigation shall be established on a project-by-project basis and incorporated during review to provide for protection of sensitive receptors from sources of air pollution or odor. The California Air Resources Board’s “Air Quality and Land Use Handbook: A Community Health Perspective”, and the AQMD’s approved Protocol (Protocol for Evaluating the Location of Sensitive Land uses Adjacent to Major Roadways) shall be utilized when establishing these buffers.
- AQ-4. Developments which meet or exceed thresholds of significance for ozone precursor pollutants as adopted by the Sacramento Metropolitan Air Quality Management District (SMAQMD), shall be deemed to have a significant environmental impact. An Air Quality Mitigation Plan shall be submitted to the County of Sacramento prior to project approval, subject to review and recommendation as to technical adequacy by the Sacramento Metropolitan Air Quality Management District.
- AQ-10. Encourage vehicle trip reduction and improved air quality by requiring development projects that exceed the SMAQMD’s significance thresholds for operational emissions to provide on-going, cost-effective mechanisms for transportation services that help reduce the demand for existing roadway infrastructure.
- AQ-16. Prohibit the idling of on-and off-road engines when the vehicle is not moving or when the off-road equipment is not performing work for a period of time greater than five minutes in any one-hour period.
- AQ-17. Promote optimal air quality benefits through energy conservation measures in new development.
- AQ-19. Require all feasible reductions in emissions for the operation of construction vehicles and equipment on major land development and roadway construction projects.
- AQ-21. Support SMAQMD’s particulate matter control measures for residential wood burning and fugitive dust.

## METHODOLOGY

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The SMAQMD “Guide to Air Quality Assessment in Sacramento County” (December 2009, as amended, hereinafter called the SMAQMD Guide) contains screening thresholds for significant impacts. The California Emissions Estimator Model (CalEEMod) version 2016.3.2, a statewide model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify air quality emissions including greenhouse gas emissions from land use projects, was used to quantify the construction and operation emissions of the proposed

cargo facility (reference Appendix AQ-1, Air Quality Assessment AMF Cargo Facility Project and Master Plan Update. Prepared by Kimley-Horn and Associates, Inc. January 2021).

The other proposed changes to the Master Plan facilities including the new Concourse C (PAL 2), consolidated car rental facility (PAL 2) and commercial development areas (PAL 3) are evaluated using CalEEMod defaults for land use types and square footage to provide an estimate for potential air quality impacts.

#### CONSTRUCTION IMPACT METHODOLOGY

Construction air quality modeling requires detailed information about the exact amount of acreage of construction involved, the amount of pavement, and the number and type of construction equipment.

CalEEMod version 2016.3.2 was used to calculate the emissions generated during the construction of the proposed cargo facility, concourse, consolidated rental car facility and commercial development area. The building square footage and modifications to the construction schedule were entered into the model. Model results are then compared with the significance thresholds of 80 lbs/day (14.6 tons/year) for PM<sub>10</sub>, 82 lbs/day (15 tons/year) for PM<sub>2.5</sub> and 85 lbs/day for NO<sub>x</sub>.

#### OPERATIONAL IMPACT METHODOLOGY

For this analysis, operational impacts include emissions associated with ozone precursors (NO<sub>x</sub> and Reactive Organic Gases (ROG)) and fugitive dust (PM<sub>10</sub> and PM<sub>2.5</sub>). Most ozone precursor emissions result from mobile and area sources. Mobile sources include motor vehicle traffic, while area sources include pollutants generated from furnaces, water heaters/boilers, facility maintenance equipment, and consumer products.

CalEEMod version 2016.3.2 was used to calculate the emissions generated during the operation of the proposed cargo facility. Specific vehicle trip information based on the traffic analysis prepared by Kimley-Horn was entered into the model. Similarly, the proposed Concourse C, consolidated rental car facility and commercial development areas identified in PALs 2 and 3 are evaluated using CalEEMod defaults since specific building and use information is not known at this time. Model results are then compared with the significance thresholds of 80 lbs/day (14.6 tons/year) for PM<sub>10</sub>, 82 lbs/day (15 tons/year) for PM<sub>2.5</sub> and 65 lbs/day for NO<sub>x</sub> and ROG. . The full list of the assumptions, calculations, and data is provided in Appendix AQ-1.

#### SIGNIFICANCE CRITERIA

According to the CEQA Appendix G criteria a project may be deemed to have a significant effect on the environment if it:

1. Conflict with or obstruct implementation of the applicable air quality plan;

2. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment;
3. Expose sensitive receptors to substantial pollutant concentrations; or,
4. Result in other emissions (e.g. odors) adversely affecting a substantial number of people.

SMAQMD has adopted significance thresholds for CEQA projects within the District. The adopted significance thresholds for criteria pollutants of the greatest concern in the Sacramento area are shown, below, in Table AQ-3:

**Table AQ-3: SMAQMD Significance Thresholds**

	ROG <sup>1</sup> (lbs/day)	NO <sub>x</sub> (lbs/day)	CO (µg/m <sup>3</sup> )	PM <sub>10</sub> (lbs/day)	PM <sub>2.5</sub> (lbs/day)
Construction (short-term)	None	85	CAAQS <sup>2</sup>	80 <sup>3</sup>	82 <sup>3</sup>
Operational (long-term)	65	65	CAAQS	80 <sup>3</sup>	82 <sup>3</sup>
1. Reactive Organic Gas 2. California Ambient Air Quality Standards (see Table AQ-4). 3. Only applies to projects for which all feasible best available control technology (BACT) and best management practices (BMPs) have been applied. Projects that fail to apply all feasible BACT/BMPs must meet a significance threshold of 0 lbs/day. 4. Annual Thresholds are determined for PM <sub>10</sub> and PM <sub>2.5</sub> , 14.6 tons/year and 15 tons/year, for both construction and operational.					

Short-term impacts are associated with project construction, and long-term impacts are associated with mobile and area emissions during operation of a completed project. The analyses below focus on ozone precursors and particulate matter (ROG, NO<sub>x</sub>, PM<sub>10</sub> and PM<sub>2.5</sub>), which is consistent with the SMAQMD Guidelines. Analyses are not included for sulfur dioxide, lead, and other constituents because there are no mass emission thresholds; these are concentration-based limits in the AAQS, which require substantial, point-source emissions before exceedance will occur. The project does not include any elements that will generate substantial point-source emissions. More specifically:

- a. Page 3-1 of the SMAQMD Guide states that for construction activities, carbon monoxide, sulfur dioxide, and lead are of less concern because construction activities are not likely to generate substantial quantities of these criteria air pollutants (CAPs).
- b. Page 4-1 of the SMAQMD Guide states that for most land use projects pollutants such as sulfur dioxide and lead are of less concern because operational activities are not likely to generate substantial quantities of these CAPs and the Sacramento Valley Air basin has been in attainment for these CAPs for multiple years.

- c. Page 4-7 of the SMAQMD Guide states that except for carbon monoxide, land use development projects do not typically have the potential to result in localized concentrations of CAPs that exceed or contribute to an exceedance of the respective AAQS.

**Table AQ-4: CAAQS Thresholds**

Pollutant	Concentration Thresholds
PM <sub>10</sub>	50 µg/m <sup>3</sup> 24-hour standard; 20 µg/m <sup>3</sup> Annual Arithmetic Mean
PM <sub>2.5</sub>	12 µg/m <sup>3</sup> Annual Arithmetic Mean
CO	20 ppm 1- hour standard; 9 ppm 8- hour standard
NO <sub>2</sub>	0.18 ppm 1- hour standard; 0.03 ppm Annual Arithmetic Mean
SO <sub>2</sub>	0.25 ppm 1- hour standard; 0.04 ppm 24- hour standard
Lead	1.5 µg/m <sup>3</sup> 30-day average
Visibility-Reducing Particles	Extinction coefficient of 0.23 per kilometer - visibility of ten miles or more due to particles when relative humidity is less than 70 percent
Sulfates	25 µg/m <sup>3</sup> 24-hour standard
H <sub>2</sub> S	42 µg/m <sup>3</sup> or 0.03 ppm 1-hour standard
Vinyl Chloride	26 µg/m <sup>3</sup> or 0.01 ppm 24-hour standard

## IMPACTS AND ANALYSIS

In the following section, impacts of the proposed project related to air quality are discussed. As provided above, these determinations are based on the criteria identified by the SMAQMD and the air quality analysis provided in Appendix AQ-1. The results of air quality modeling are described, and a determination of significance is made.

### IMPACT: CONFLICT WITH OR OBSTRUCT THE IMPLEMENTATION OF APPLICABLE AIR QUALITY PLAN

#### *GENERAL CONFORMITY*

General Conformity requirements only apply to federally designated maintenance and nonattainment areas. The proposed project is located in an area federally designated as severe nonattainment for the 8-hour ozone standard and the 24-hour PM<sub>2.5</sub> standard. The applicable General Conformity *de minimis* threshold values are 25 tons per year for NO<sub>x</sub> and ROG, and 70 tons per year for PM<sub>2.5</sub>.

The prior EIR determined that buildout of Phase 1 and 2 of the SMF Master Plan conforms with the applicable SIP. The proposed project will accommodate growth over the next 20 years; however, this growth would not substantially increase the number of aircraft operations as projected in the prior document. The aviation emissions of the

proposed project are included in the Sacramento Regional Ozone SIP for the 2015 Ozone Standard and the Second 10-year PM<sub>10</sub> Maintenance Plan. SMAQMD is coordinating with the SCDA to provide emissions estimates from the proposed project for inclusion in future SIPs.

Changes from the prior EIR analysis include the proposed cargo facility, new Concourse C, consolidated rental car facility, and the proposed commercial development area. The construction and operational emissions are provided in Table AQ-5 and Table AQ-7 for the proposed cargo facility. The estimated construction and operational emissions are provided in Table AQ-6 and Table AQ-8 for the new Master Plan Update projects. Construction emissions that exceed thresholds would be mitigated through payment of in-lieu fees. The mitigated project will not exceed General Conformity and therefore, no further General Conformity review is necessary.

The emissions from the proposed project will be incorporated into future SIPs for the Sacramento Region to ensure regional emissions do not cause or contribute to new violations of NAAQS, do not worsen existing violations of the NAAQS, and/or delay attainment of the NAAQS. No further conformity determination is required and impacts are ***less than significant***.

#### MITIGATION MEASURES

None recommended.

#### IMPACT: CONSTRUCTION EMISSIONS – INCREASE OF ANY CRITERIA POLLUTANT FOR WHICH THE PROJECT REGION IS IN NON-ATTAINMENT

Construction activities require the use of various combinations and types of construction equipment. Much of this equipment is likely to be diesel-fueled and would emit NO<sub>x</sub> and particulate matter as part of the fuel combustion process. In addition, the disturbance of paved surfaces and soils produces fugitive dust.

#### **PROPOSED CARGO FACILITY**

The project was entered in to CalEEMod with project specifics and an assumption of construction activities lasting approximately 16 months. All other program defaults were assumed. In addition, it is assumed that a concrete batch plant will be set up on-site. The primary emissions associated with concrete batch plants are particulate matter which escapes during loading of raw material and mixing. Modeling results are presented in Table AQ-5 below. Considering that the proposed cargo facility is one of many proposed projects in the Master Plan Update, there is a possibility of multiple projects occurring at one time. In order to further reduce construction related emissions, the previously adopted Mitigation Measures AQ-1 and AQ-2 (combined and renumber to AQ-1 in this document) and AQ 5 (renumbered to AQ-3 in this document) are still applicable to ensure compliance with existing SMAQMD rules and Best Management Practices to control fugitive dust and equipment emissions. AQ-1 has been updated to reflect current mitigation language provided by SMAQMD.

Construction of the proposed cargo facility will not exceed thresholds and impacts are ***less than significant with mitigation.***

#### **PROPOSED MASTER PLAN UPDATE PROJECTS**

Master Plan projects not previously analyzed include the new Concourse C, consolidated rental car facility and the commercial development areas. These projects are identified in PALs 2 and 3 and therefore, project specific information is not known. However, estimates of project building size, footprints, and acreage has been assigned for the proposed projects and entered into CalEEMod to determine approximate emissions associated with these projects. While the construction of the Master Plan Update projects would be built over the long-term planning horizon, the projects were entered into the model with nearest construction date and assumes all projects are built at the same time. Model defaults were used for all other project unknowns. Modeling results are provided in Table AQ-6 below.

**Table AQ-5: Summary of Mitigated Construction Emissions for the Cargo Facility**

Construction Year	Estimated Emissions (Pounds per day)				Estimated Emissions (Tons per year)			
	NO <sub>x</sub>	ROG	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>x</sub>	ROG	PM <sub>10</sub>	PM <sub>2.5</sub>
2021	77.70	9.32	14.29	5.79	3.37	0.33	0.48	0.27
2022	72.63	110.61	14.12	4.53	4.55	4.79	0.59	0.27
Concrete Batch Plant	0	0	16.34	15.15	0	0	0.72	0.67
Maximum (including Concrete Batch Plant)	77.70	110.61	30.63	20.94	4.45	5.28	1.73	1.15
<i>Threshold</i>	85	N/A	80	82	Federal 25	Federal 25	Federal N/A SMAQMD 14.6	Federal 100 SMAQMD 15
<b><i>Exceed Threshold?</i></b>	<b>No</b>	<b>--</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>
Information from Table 12 of the Air Quality Analysis Appendix AQ-1.								



**Table AQ-6: Summary of Mitigated Construction Emissions for Master Plan Update**

Construction Year	Estimated Emissions (Pounds per day)				Estimated Emissions (Tons per year)			
	NO <sub>x</sub>	ROG	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>x</sub>	ROG	PM <sub>10</sub>	PM <sub>2.5</sub>
2021	131.81	15.87	26.08	8.05	4.75	0.49	0.80	0.36
2022	126.46	622.13	29.75	8.98	13.65	21.21	2.85	0.88
<i>Threshold</i>	85	N/A	80	82	Federal 25	Federal 25	Federal N/A SMAQMD 14.6	Federal 100 SMAQMD 15
<b><i>Exceed Threshold?</i></b>	<b>Yes</b>	--	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>
Information from Table 14 of the Air Quality Analysis, Appendix AQ-1.								

As seen above, construction of Master Plan projects together would exceed SMAQMD thresholds for NO<sub>x</sub>. These emissions represent a worst case scenario of simultaneous project construction that could, but is unlikely, to occur during each PAL of the Master Plan Update. Consistent with the proposed cargo facility analysis above, all construction projects would be required to apply mitigation measures AQ-1 and 3 to further reduce construction emissions. Further, if an individual project is shown to exceed construction thresholds, the project will be required to implement prior mitigation measure AQ-4 (revised and renumbered to AQ-2 in this document) in addition to prior mitigation measures AQ-1 and 2(combined and revised) and AQ-5 (renumbered to AQ-3 in this document). Pursuant to mitigation measure AQ-2, if the project remains above the threshold, the project will be required to pay construction mitigation fee determined by the SMAQMD at the prevailing rate (currently \$30,000 per ton of emission plus a one-time administrative fee of 5%). Implementation of revised existing mitigation measures will ensure that construction impacts are ***less than significant with mitigation***.

#### MITIGATION MEASURES:

AQ-1 (Prior EIR Mitigation Measure AQ-1 and 2 Revised) All future construction projects which exceed the SMAQMD construction ozone precursor screening thresholds in effect at the time of project submittal shall include an ozone precursor analysis. If the analysis results indicate that the project will generate ozone precursors that exceed the current Sacramento Metropolitan Air Quality Management District thresholds, this mitigation shall apply. This mitigation may be modified if guidance from the Sacramento Metropolitan Air Quality Management District changes in the future.

- a. The project applicant, or its designee, shall provide a plan for approval by the Sac Metro Air District that demonstrates the heavy-duty off-road vehicles (50 horsepower or more) to be used 8 hours or more during the construction project will achieve a project wide fleet-average 10% NO<sub>x</sub> reduction compared to the most recent California Air Resources Board (CARB) fleet average. The plan shall have two components: an initial report submitted before construction and a final report submitted at the completion. (Acceptable options for reducing emissions may include use of cleaner engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, and/or other options as they become available.)
- b. Submit the initial report at least four (4) business days prior to construction activity using the Sac Metro Air District's Construction Mitigation Tool (<http://www.airquality.org/businesses/ceqa-land-use-planning/mitigation>).
- c. Provide project information and construction company information.
- d. Include the equipment type, horsepower rating, engine model year, projected hours of use, and the CARB equipment identification number for

each piece of equipment in the plan. Incorporate all owned, leased and subcontracted equipment to be used.

- e. Submit the final report at the end of the job, phase, or calendar year, as pre-arranged with Sac Metro Air District staff and documented in the approval letter, to demonstrate continued project compliance.

The SMAQMD may conduct periodic site inspections to determine compliance. Nothing in this mitigation shall supersede other air district, state or federal rules or regulations.

This mitigation will sunset on January 1, 2028, when full implementation of the CARB In Use Off-Road Regulation is expected.

AQ-2 (Prior EIR Mitigation Measure AQ-4 Revised) To mitigate the additional construction emissions that cannot be offset through implementation of Mitigation Measure AQ-1, above, the following shall apply: Prior to construction activities, SCDA or the project proponent will submit proof that the off-site air quality mitigation fee has been paid to SMAQMD, and that the construction air quality mitigation plan has been approved by SMAQMD and the Environmental Coordinator. The fee will be calculated based on the most current SMAQMD recommended methodology and fee rate available at the time of ground disturbance.

AQ-3 (Prior EIR Mitigation Measure AQ-5 Revised) The following mitigation measures will be incorporated into the project to minimize the generation of PM<sub>10</sub> dust during dry construction conditions:

- a. Enclose, cover, or water twice daily all soil piles.
- b. Water exposed soil with adequate frequency for continued moist soil.
- c. Water all haul roads twice daily.
- d. Cover loads of all haul/dump truck securely.

IMPACT: OPERATIONAL EMISSIONS – INCREASE OF ANY CRITERIA  
POLLUTANT FOR WHICH THE PROJECT REGION IS NON-ATTAINMENT

Once project construction is completed, additional pollutants are emitted through the use or operation of the site. Long-term emissions of ozone precursors (ROG and NO<sub>x</sub>), particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>) and carbon monoxide (CO) generated by the project are associated with the operation of the buildings (energy), mobile sources (tailpipe emissions) and area sources (architectural coatings, new landscaping).

**PROPOSED CARGO FACILITY**

The operational emissions associated with the proposed cargo facility are largely due to the mobile emissions associated with employee trips and truck trips. Table AQ-7,

below, identifies the estimated emissions. The proposed cargo facility will exceed the daily thresholds for NO<sub>x</sub> and ROG and both the daily and annual thresholds for particulate matter (PM<sub>10</sub>). These emissions are largely from mobile source emissions. Additional mitigation measures are recommended to further reduce this impact. These measures consist of upgrading trucks to newer engine models, and establishing a Transportation Demand Management program for new employers/employees and to establish a new, or join an existing, local Transportation Management Association. However, the impact cannot be reduced to less than significant and operational impacts associated with the proposed cargo facility are **significant and unavoidable**.

### **MASTER PLAN UPDATE**

Operational emissions were estimated for projects beyond the scope of the 2007 EIR to determine if the proposed project would result in a potentially significant impact. The majority of operational emissions are from mobile sources, (employee trips) with a smaller amount from area sources (building operation). The assumptions used in this analysis include: operational by 2022, no natural gas, and mitigation applied for transportation management demand, EV infrastructure, reduce water usage, exceedance of Title 24 and low VOC paints and cleaners. The operational emissions estimate is detailed in Table AQ-8, below. Generally, projects within the Master Plan Update will become operational over the planning horizon of the Master Plan. It is possible that individual projects and facilities will not exceed operational emission thresholds determined by the SMAQMD; however, as shown in the analysis here, the eventual construction of all Master Plan projects will result in significant operational emissions for NO<sub>x</sub> and ROG. Implementation of Mitigation Measures AQ-4 through AQ-7 are required for all projects and will further reduce operational impacts, but not to a less than significant level, and impacts are **significant and unavoidable**.

### **SMF MASTER PLAN UPDATE MOBILE SOURCE EMISSIONS ASSOCIATED WITH VEHICLE MILES TRAVELED (VMT)**

The Master Plan Update continues to involve expansion to accommodate growth over the next 20 years. The proposed expansion would serve unmet local demand, meaning that passengers whom traveled to the Bay Area to meet their domestic travel needs will be able to stay local. Therefore, the total trip length decreases, but the decrease is only applicable to the Yolo-Solano Air District; other air districts will see a nominal increase in VMT. Emissions associated with the increase in VMT are presented in Table AQ-9, below. The emission thresholds employed by the SMAQMD and other air districts in the SACOG region (i.e., Yolo-Solano AQMD, Feather River AQMD, Placer County APCD, and El Dorado County AQMD) would not be exceeded with implementation of the Master Plan Update and impacts are **less than significant**.

**Table AQ-7: Summary of Operational Emissions for the Cargo Facility**

Total Emissions	Estimated Emissions (Pounds per day)					Estimated Emissions (Tons per year)				
	NO <sub>x</sub>	ROG	CO	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>x</sub>	ROG	CO	PM <sub>10</sub>	PM <sub>2.5</sub>
Area Source	0	23.80		0	0	0	4.34	0.01	0	0
Energy	0	0		0	0	0	0	0	0	0
Mobile	121.02	62.59	459.88	117.92	32.04	21.03	7.75	72.29	20.73	5.65
Total Unmitigated	121.02	86.39	459.88	117.92	32.04	21.03	12.09	72.3	20.73	5.65
Area Source	0	23.80	0.10	0	0	0	4.34	0.01	0	0
Energy	0	0	0	0	0	0	0	0	0	0
Mobile	120.19	62.47	455.62	116.60	31.68	20.89	7.73	71.65	20.5	5.59
Total Mitigated	120.19	86.27	455.62	116.60	31.68	20.89	12.07	71.67	20.5	5.59
<i>Threshold</i>	65	65	N/A	80	82	Federal 25	Federal 25	N/A	Federal N/A SMAQMD 14.6	Federal 100 SMAQMD 15
<b><i>Exceed Threshold?</i></b>	<b>Yes</b>	<b>Yes</b>	<b>--</b>	<b>Yes</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>--</b>	<b>Yes</b>	<b>No</b>
Information from Table 12 of the Air Quality Assessment Appendix AQ-1.										

**Table AQ-8: Summary of Operational Emissions for the Master Plan Update**

Total Emissions	Estimated Emissions (Pounds per day)					Estimated Emissions (Tons per year)				
	NO <sub>x</sub>	ROG	CO	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>x</sub>	ROG	CO	PM <sub>10</sub>	PM <sub>2.5</sub>
Area Source	0.01	101.00	0.66	0	0	0	18.43	0.82	0	0
Energy	0	0		0	0	0	0	0	0	0
Mobile	110.71	43.42	334.72	71.05	19.52	16.68	8.34	50.34	10.98	3.03
<b>Total Unmitigated</b>	<b>110.72</b>	<b>144.42</b>	<b>335.38</b>	<b>71.05</b>	<b>19.52</b>	<b>16.68</b>	<b>26.77</b>	<b>51.16</b>	<b>10.98</b>	<b>3.03</b>
Area Source	0.01	84.62	0.66	0	0	15.44	0	0.08	0	0
Energy	0	0	0	0	0	0	0	0	0	0
Mobile	109.92	43.31	331.63	69.93	19.22	8.32	16.56	49.84	10.81	2.98
<b>Total Mitigated</b>	<b>109.93</b>	<b>127.93</b>	<b>332.29</b>	<b>69.93</b>	<b>19.22</b>	<b>23.76</b>	<b>16.56</b>	<b>49.92</b>	<b>10.81</b>	<b>2.98</b>
<i>Threshold</i>	65	65	N/A	80	82	Federal 25	Federal 25	N/A	Federal N/A SMAQMD 14.6	Federal 100 SMAQMD 15
<b>Exceed Threshold?</b>	<b>Yes</b>	<b>Yes</b>	<b>--</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>Yes<sup>1</sup></b>	<b>--</b>	<b>No</b>	<b>No</b>
	1. The project exceed thresholds unmitigated. Mitigation does reduce to below thresholds. Information from Table 15 of the Air Quality Assessment Appendix AQ-1.									

Table AQ-9: SMF Master Plan Update Mobile Source Emissions Associated with VMT

Air District	Net Emissions			
	NO <sub>x</sub>	ROG	PM <sub>10</sub>	PM <sub>2.5</sub>
SMAQMD	0.12 lbs/day	0.07 lbs/day	0.00 lbs/day	0.00 lbs/day
Threshold	65 lbs/day	65 lbs/day	80 lbs/day	82 lbs/day
<b>Exceed Threshold</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>
Yolo-Solano AQMD	-0.58 tons/year	-0.36 tons/year	-0.01 tons/year	-0.01 tons/year
<i>Threshold</i>	10 tons/year	10 tons/year	80lbs/day	N/A
<b>Exceed Thresholds?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>
Feather River AQMD	0.57 lbs/day	0.24 lbs/day	0.01 lbs/day	0.01 lbs/day
<i>Thresholds</i>	25	25	80	N/A
<b>Exceed Thresholds?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>
Placer County APCD	0.26 lbs/day	0.14 lbs/day	0.01 lbs/day	0.01 lbs/day
<i>Thresholds</i>	55 lbs/day	55 lbs/day	82 lbs/day	82 lbs/day
<b>Exceed Thresholds?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>
El Dorado County AQMD	0.04 lbs/day	0.02 lbs/day	0.00 lbs/day	0.00 lbs/day
<i>Thresholds</i>	82 lbs/day	82 lbs/day	N/A	N/A
<b>Exceed Thresholds?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>
Emission were calculated using EMFAC2017 emissions rates and VMT data for each air district in the SACOG region. This VMT data differs slightly from that in the Traffic Impact Study (Kimley-Horn, July 2020) and was used for analytical purposes only. Source Table 13 of Appendix AQ-1.				

## MITIGATION MEASURES:

AQ-4 All projects which include loading docks, including the proposed cargo facility , shall ensure, through sale or leasing agreements, that the haul fleet consist of trucks that as a minimum meet the emissions standards of a 2010 vehicle model, and as trucks are replaced they are replaced with the newest available model. In addition, the project shall include electrical hookups at all loading bays, and electric vehicle charging stations and/or infrastructure (e.g., conduit and panel space) to support future installation of truck charging stations for future zero-emission heavy-duty vehicles.

AQ-5 For the proposed cargo facility and other projects which exceed the SMAQMD operational screening levels, Prior to issuance of occupancy permits, project operator(s) shall prepare and submit a Transportation Demand Management (TDM) program detailing strategies that would reduce the use of single-occupant vehicles by employees by increasing the number of trips by walking, bicycle, carpool, vanpool, and transit. The TDM program shall include, but is not limited to, the following:

- a. Provide transportation information center and on-site TDM coordinator to educate employers, employees, and visitors of surrounding transportation options;
- b. Promote bicycling and walking through design features, such as showers for employees, self-service bicycle repair area, etc. around the project site;
- c. Promote and support carpool/vanpool/rideshare use through parking incentives and administrative support, such as ride-matching service; and
- d. Incorporate incentives for using alternative travel modes, such as preferential load/unload areas or convenient designated parking spaces for carpool/vanpool users.

AQ-6 The proposed cargo facility and other projects which exceed the SMAQMD operational screening levels, shall establish a new, or join and maintain membership in an existing Transportation Management Association.

AQ-7 Future development projects under the Airport Master Plan Update shall use low VOC content paints that exceed the regulatory VOC limits put forth by SMAQMD's Rule 442. Low VOC paints shall be no more than 10 grams per liter (g/L) of VOC. Alternatively, the pre-painted material that do not require the use of architectural coating may be utilized.

## IMPACT: MOBILE SOURCE CO EMISSIONS

The 2007 EIR previously analyzed the maximum CO concentrations at intersections in the airport's vicinity that would result from increased traffic from buildout of the Master Plan. The analysis looked at the following intersections: Airport Boulevard/I-5, Elkhorn



Boulevard/State Route 99 and Elverta Road/State Route 99. The analysis determined that when combined with background CO concentrations, the Master Plan would not be expected to exceed the Federal or State standards.

Potential impacts associated with the Master Plan Update are analyzed consistent with current guidelines. The SMAQMD CEQA Guide provides a preliminary screening methodology to determine whether project related vehicle trips will result in CO emissions that contribute to an exceedance of the threshold of significance. The screening criteria is divided into two tiers to help discern if project-specific CO dispersion modeling is required. The SMAQMD CEQA Guide includes the following guidance:

The proposed project will result in a less-than-significant impact to air quality for local CO if:

- Traffic generated by the proposed project will not result in deterioration of intersection level of service (LOS) to LOS E or F; and
- The project will not contribute additional traffic to an intersection that already operates at LOS of E or F.

The Master Plan Update would not satisfy this first tier of screening criteria. As identified in the project VMT Assessment and Local Access, Safety, and Circulation Study prepared by Kimley Horn (Appendix TC-1), there are several intersections that would be affected by the Master Plan Update such that the project would contribute additional traffic to some intersections that already operate at LOS of E or F. Therefore, the project would not satisfy the first tier of the SMAQMD's recommended screening criteria.

The SMAQMD guidance states that, if the first tier of screening criteria is not met, then a second tier of screening criteria shall be examined. The second tier of screening criteria is listed below. According to the SMAQMD, the project would result in a less than significant impact to air quality for local CO if all of the following criteria are met:

- The project will not result in an affected intersection experiencing more than 31,600 vehicles per hour;
- The project will not contribute traffic to a tunnel, parking garage, bridge underpass, urban street canyon, or below-grade roadway; or other locations where horizontal or vertical mixing of air will be substantially limited; and
- The mix of vehicle types at the intersection is not anticipated to be substantially different from the County average (as identified by the EMFAC or CalEEMod models).

The Master Plan Update meets each of these three criteria. The project does not result in an affected intersection experiencing more than 31,600 vehicles per hour, would not contribute traffic at a location where horizontal or vertical mixing of air will be

substantially limited, and the mix of vehicles types at the intersection would not be substantially different than the County average.

Therefore, project related mobile source CO concentrations do not exceed SMAQMD thresholds and ***will not be considered cumulatively considerable***.

#### MITIGATION MEASURES

None recommended.

#### IMPACT: EXPOSE SENSITIVE RECEPTORS TO SUBSTANTIAL POLLUTANT CONCENTRATIONS

##### *DIESEL PARTICULATE MATTER*

The only Toxic Air Containments (TAC) emitted from the project would be Diesel Particulate Matter (DPM). When evaluating whether a project has the potential to result in localized impacts, one must consider:

- The nature of the air pollutant emissions;
- The proximity between the emitting facility and sensitive receptors;
- The direction of prevailing winds; and,
- Local topography.

The proposed project will consists of construction of multiple airport related facilities and development over the life of the Master Plan. The airport is located in the Sacramento Valley that generally has prevailing winds from the southwest with occasional winds from the north. The nearest single-family receptor is approximately a half-mile west of the SMF. The nearest sensitive receptor (i.e., school, nursing home, daycare, hospital) is approximately three miles to the east. Considering distances to nearest receptors and prevailing wind direction, construction-related diesel particulate matter would not result in significant TACs for nearby sensitive receptors.

The proposed cargo facility, will have loading docks to accommodate up to 100 trucks. This type of facility, if placed near sensitive receptors, would need to have a health risk assessment completed to determine if the sensitive receptors would be exposed to TACs in higher concentrations than allowed. The proposed cargo facility is located between the two runways, over three miles from the nearest sensitive receptor. The diesel particulate emissions generated at the facility would not expose sensitive receptor to substantial pollution concentrations and therefore impacts are ***less than significant***.

*HEALTH EFFECTS OF CRITERIA POLLUTANTS*

The EPA and CARB have established AAQS at levels above which concentrations could be harmful to human health and welfare, with an adequate margin of safety. Further, California air districts, like the SMAQMD, have established emission-based thresholds that provide project-level estimates of criteria air pollutant quantities that air basins can accommodate without affecting the attainment dates for the AAQS. Accordingly, elevated levels of criteria air pollutants as a result of a project's emissions could cause adverse health effects associated with these pollutants. However, as discussed below, the health risks associated with exposure to criteria pollutants are evaluated on a regional level. As a result, the mass emissions significance thresholds used in CEQA air quality analysis are not necessarily indicative of any localized human health impact that a project may have (SCAQMD 2015; SJVAPCD 2015). Therefore, even if the project were to exceed the mass regional emissions thresholds, this would not necessarily indicate that the project would cause or contribute to the exposure of sensitive receptors to ground-level concentrations in excess of health-protective levels.

In *Sierra Club v. County of Fresno* (Sierra Club) the Supreme Court held that CEQA requires environmental impact reports to either (i) make a "reasonable effort" to substantively connect the estimated amount of a given air pollutant a project will produce and the health effects associated with that pollutant, or (ii) explain why such an analysis is infeasible (6 Cal.5th at 1165-66). However, the Court also clarified that CEQA "does not mandate" that EIRs include "an in-depth risk assessment" that provides "a detailed comprehensive analysis ... to evaluate and predict the dispersion of hazardous substances in the environment and the potential for exposure of human populations and to assess and quantify both the individual and population wide health risks associated with those levels of exposure." *Id.* at 1665.

NO<sub>x</sub> and ROG are precursor emissions that form O<sub>3</sub> in the atmosphere in the presence of sunlight where the pollutants undergo complex chemical reactions. It takes time and the influence of meteorological conditions for these reactions to occur, so O<sub>3</sub> may be formed at a distance downwind from the sources. Breathing ground-level O<sub>3</sub> can result in health effects that include reduced lung function, inflammation of airways, throat irritation, pain, burning, or discomfort in the chest when taking a deep breath, chest tightness, wheezing, or shortness of breath. In addition to these effects, evidence from observational studies strongly indicates that higher daily O<sub>3</sub> concentrations are associated with increased asthma attacks, increased hospital admissions, increased daily mortality, and other markers of morbidity. The consistency and coherence of the evidence for effects upon asthmatics suggests that O<sub>3</sub> can make asthma symptoms worse and can increase sensitivity to asthma triggers.

There is currently no methodology available that can accurately quantify regional health effects from CO, NO<sub>2</sub> or O<sub>3</sub> exposure associated with an individual project's ROG or NO<sub>x</sub> emissions. The SCAQMD reached a similar conclusion in its *Amicus Curiae* brief filed with the California Supreme Court in the case of *Sierra Club v. County of Fresno*, when, speaking about ozone, the SCAQMD stated that it does not know of a way to accurately quantify health impacts caused by emissions produced on a scale as small

as individual projects. One existing tool, U.S. EPA's Environmental Benefits Mapping and Analysis Program (BenMAP), calculates the number and economic value of air pollution-related deaths and illnesses resulting from changes in O<sub>3</sub> and PM<sub>2.5</sub> concentration. However, the expected changes in regional O<sub>3</sub> concentrations associated with the proposed project would be so low that BenMAP would likely produce estimates of health effects that are near zero.

The SMAQMD prepared Guidance to Address the Friant Ranch Ruling for CEQA Projects in the District (October 2020). The guidance provides screening health information for projects at or below regional CEQA thresholds of significance emissions levels and selected strategic areas above thresholds of significance emissions levels. Modeling guidance for large projects located outside strategic areas is also included.

The SMAQMD provided five potential strategic area project locations for use in the health effects screening modeling. These five locations are intended to be used as proxy locations for nearby projects exceeding the thresholds of significance. The Sacramento Strategic Area is applicable to the proposed project. The screening modeling addressed hypothetical sources at each of the five strategic area project locations at emission levels that were two times (2x) and 8 times (8x) the maximum threshold of significance level. The SMAQMD developed a Strategic Area Projects Health Effects Screening Tool spreadsheet that can be used to estimate health effects for potential projects with emissions below the 8x the threshold of significance level. The proposed cargo facility's and Master Plan Update's anticipated operational emissions (see Table AQ-7 and Table AQ-8) were input into the SMAQMD Health Effects Screening Tool, which can be reviewed in Appendix AQ-1. It should be noted that both the proposed cargo facility's and Master Plan Update's operational emissions were less than 2x the threshold of significance. Based on the results of the tool, the percent of background health indices would be less than one percent (i.e., no more than 0.011 percent). Therefore, the health effects associated with the proposed cargo facility and Master Plan Update would be negligible.

## MITIGATION MEASURES

None recommended.

## IMPACT: CREATE OBJECTIONABLE ODORS AFFECTING A SUBSTANTIAL NUMBER OF PEOPLE

SMAQMD does not have a specific methodology to quantify odors from a proposed project. Rather, SMAQMD's Guide anticipates a project by project analysis that reviews several factors including nature of operational activities and type of odors, metrological conditions, and surrounding land uses. Understanding odor is subjective; thus, this analysis provides a qualitative analysis based on these three factors to assess potential odor from the proposed project.

The proposed project does not include land uses that typically produce objectionable odors. However, activities on nearby properties include agricultural crops, recreational

uses (golf) and industrial development. Agricultural practices typically include use of off-road heavy-duty diesel equipment, including trucks, tractors, and stationary machinery and can be a source of objectionable odors.

Diesel exhaust produced during construction-related activities and associated with truck trips is the primary source of odors associated with the proposed project. Construction emissions are temporary and generally disperse rapidly. Truck trips are along an unpopulated portion of Elverta Road. Further, the nearest sensitive receptor (i.e., school, day-care, nursing home, hospital) is two miles from the project site. Implementation of best management practices and mitigation measures AQ-1 and AQ-4 and AQ-5 reduce diesel particulate matter. Consistent with the prior EIR analysis, the proposed project would not create objectionable odors and impacts are ***less than significant***.

#### MITIGATION MEASURES

None recommended.

## 4 BIOLOGICAL RESOURCES

### INTRODUCTION

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The Sacramento International Airport (SMF) is located in the Natomas Basin, which is habitat for endangered and threatened species and is within the Pacific Flyway for migratory birds. Over the years, biological assessments have been completed for various projects in and around SMF. Information presented in this chapter builds upon the biological resources identified during the preparation of the 2007 Master Plan EIR.

### ENVIRONMENTAL SETTING

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Most of the land adjacent to airport property, as well as County of Sacramento (County) land north of Interstate 5 (I-5) and south of Elverta Road is in agricultural uses (Plate BR-1). Much of this land has traditionally been in rice cultivation. Airport land outside the airport operations area (AOA) that has been acquired as a buffer against incompatible land uses has been farmed by individuals who lease the land from the County.

The project study area includes an extensive network of drainage and/or agricultural supply ditches interconnected by underground pipelines, culverts, gates, and drop structures (Plate BR-2a through Plate BR-2i), some of which are located within and adjacent to the AOA. With the exception of four gunite-lined ditches in the AOA, all of the ditches in the project area are earthen. Some of these ditches contain instream freshwater marsh vegetation, whereas others are devoid of vegetation at most times because of frequent mechanical clearing. A number of these ditches were originally installed by Reclamation District 1000, the Natomas Central Mutual Water Company (NCMWC), or by farmers on what is now airport property for the purpose of moving water from one part of the Natomas Basin to another. Although some ditches may now function as airport stormwater facilities, many are merely artifacts of past activities and no longer serve any function related to the airport.

All of the drainage and/or agricultural supply ditches in the project area are hydrologically connected to the Sacramento River through a series of drainages and pumping stations. The U.S. Army Corps of Engineers (USACE) has assumed jurisdiction over all of the ditches in the project study area south of Elverta Road under Section 404 of the Clean Water Act.

Freshwater marshes, which consist of herbaceous wetlands that are dominated by emergent vegetation such as grasses, reeds, rushes, and sedges, are present in the project study area. This marsh habitat is most frequently associated with low depressions at the edges of irrigation and drainage ditches. In addition to overflow from adjacent canals, many areas of freshwater marsh are supported by surface and sub-surface water flows from adjacent uplands that naturally drain into the marsh areas due

to topographic gradients, such as the large remnant patches of freshwater marsh at Prichard Lake north of Elverta Road.

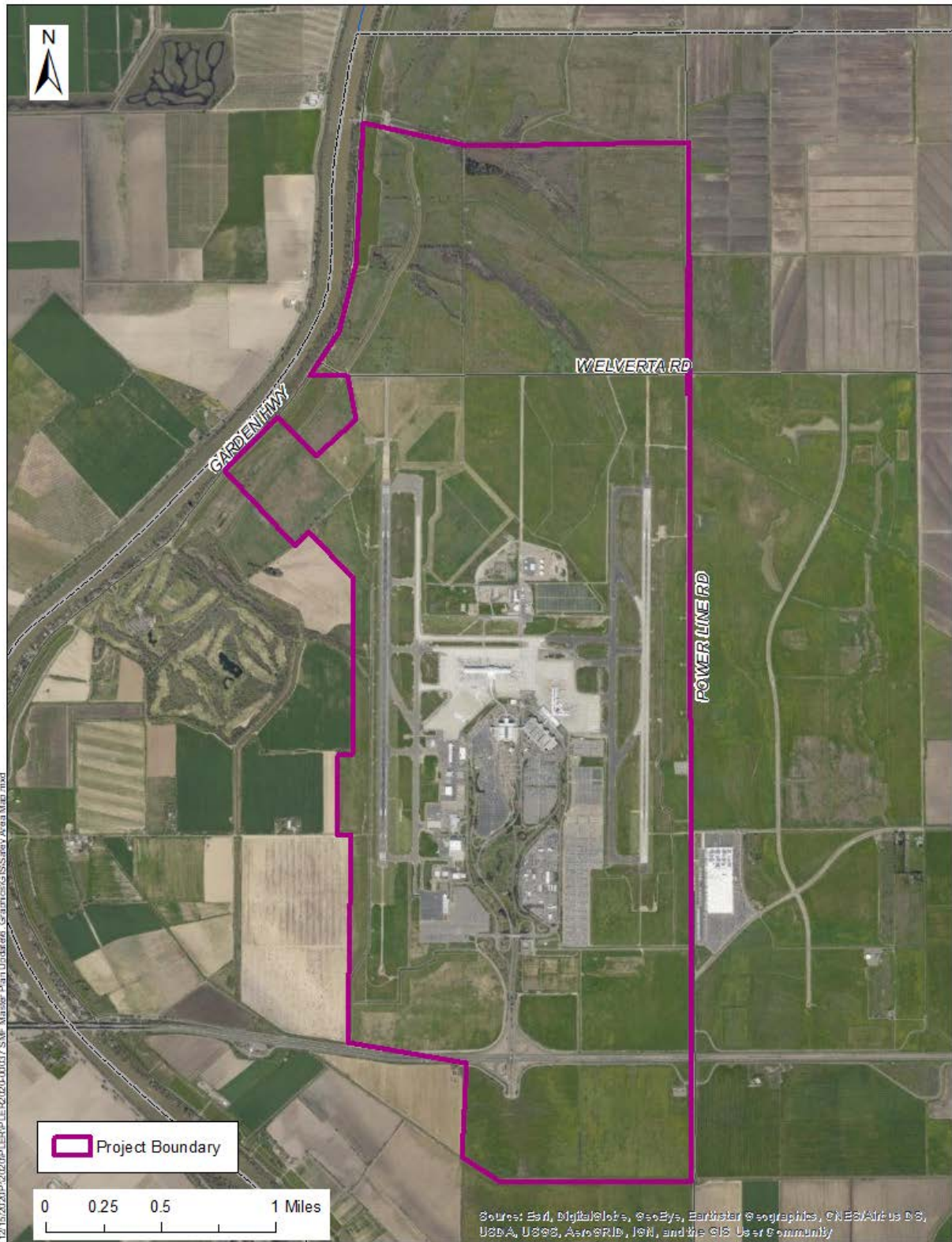
Seasonal wetlands dominated by grasses and forbs are present in the areas that pond or remain flooded for long periods during a portion of the year, generally the rainy winter season, then dry up after regular rainfall ceases, typically in the spring. Within the project study area, seasonal wetlands are found in four general locations: 1) at the upland edges of freshwater marshes; 2) in association with small drainage ditches; 3) at the toe of the Sacramento River levee; and 4) farmed seasonal wetlands north of Elverta Road that are apparently sustained by groundwater seepage from the adjacent Sacramento River and high groundwater levels.

A pasture consisting of grasses and legumes north of Elverta Road (Plate BR-3) also qualifies as a seasonal wetland. This pasture is likely fed by overflow from a bordering ditch and overland and sub-surface flows from surrounding, topographically higher uplands to the west. There is no obvious evidence that this area has been irrigated, at least in the recent past.

Remnant patches of riparian habitat are present in the project study area north of Elverta Road and west of the AOA along the drainage ditch DD21 (Plate BR-3). This habitat consists primarily of woodlands containing Fremont cottonwood (*Populus fremontii*), valley oak (*Quercus labata*), Oregon ash (*Fraxinus latifolia*), California black walnut (*Juglans californica* var. *hindsii*), box elder (*Acer negundo*), and Goodding's willow (*Salix gooddingii*). In some areas, riparian scrub, dominated by willow species such as arroyo willow (*Salix lasiolepis*) and sandbar willow (*S. exigua*), occurs as a subcanopy within the riparian woodland. Riparian scrub also occurs as a distinct habitat type along several ditches north of Elverta Road. These areas typically consist of an open to dense shrubby thicket dominated by a mixture of sandbar willow, arroyo willow, red willow (*Salix laevigata*), and immature stands of mixed riparian woodland tree species.

Oak woodland occurs in relatively small patches in the project study area, primarily along ditches north of Elverta Road (Plate BR-4). The patches range from dense stands of oak trees that dominate the upper canopy to oak savannas, in which mature oak trees provide an open canopy over annual grassland. Many of the same tree and shrub species found in mixed riparian woodlands are also found in oak woodlands; however, oak trees provide the dominant upper canopy cover in this habitat type.

# Plate BR-1: Aerial Photo Overview





# Plate BR-2a: 2016 Revised Wetland Delineation

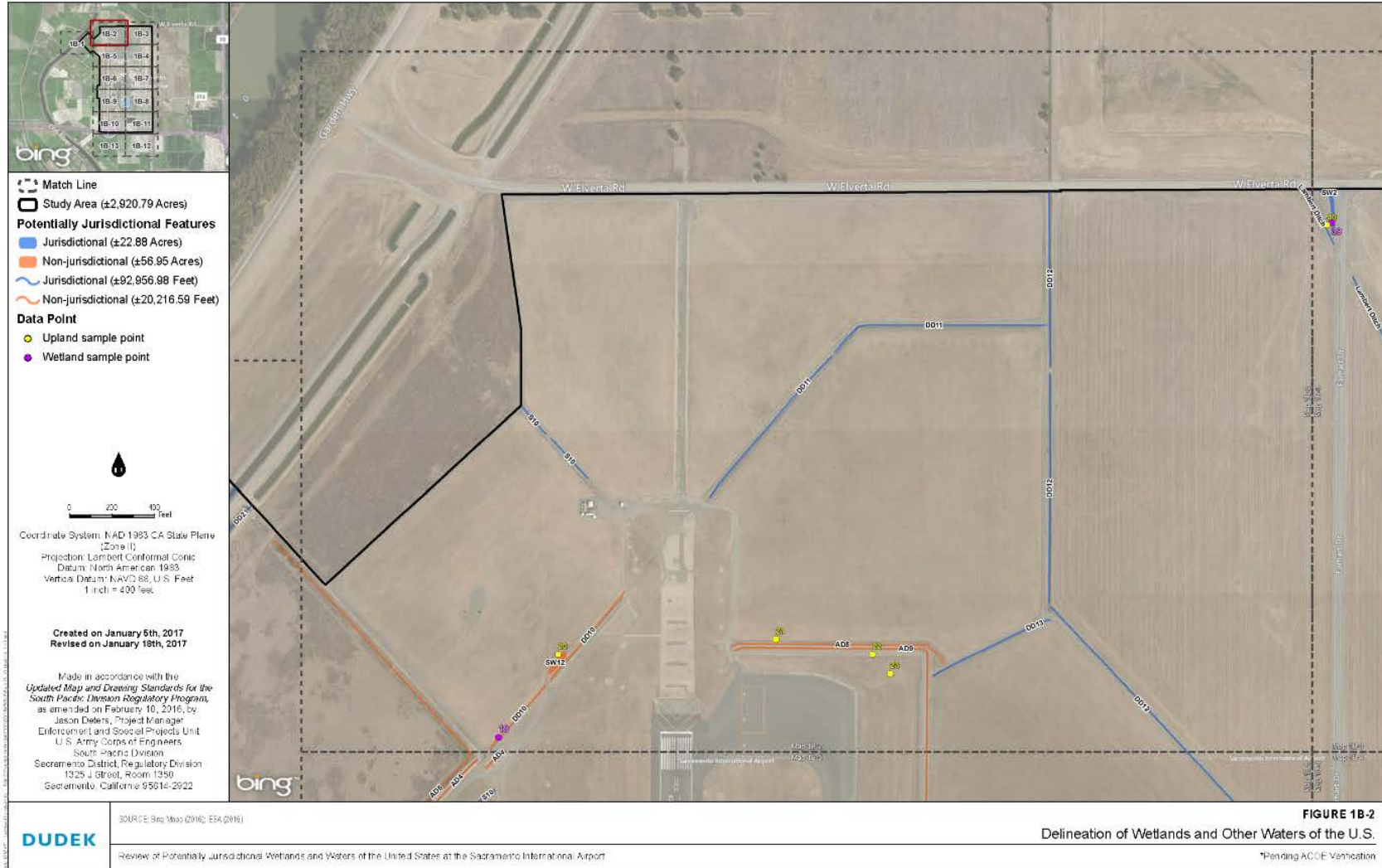


Plate BR-2b: 2016 Revised Wetland Delineation

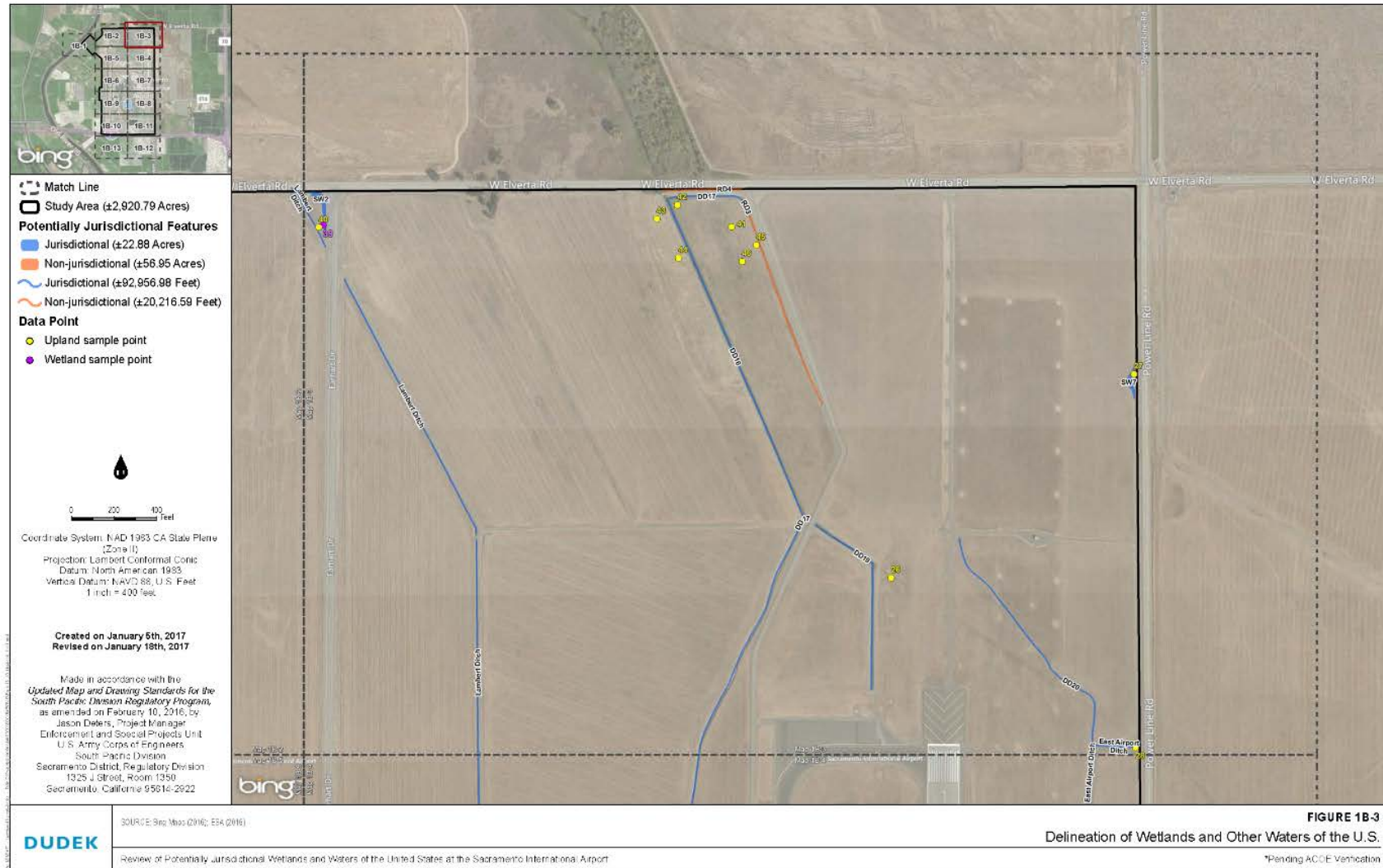


Plate BR-2c: 2016 Revised Wetland Delineation

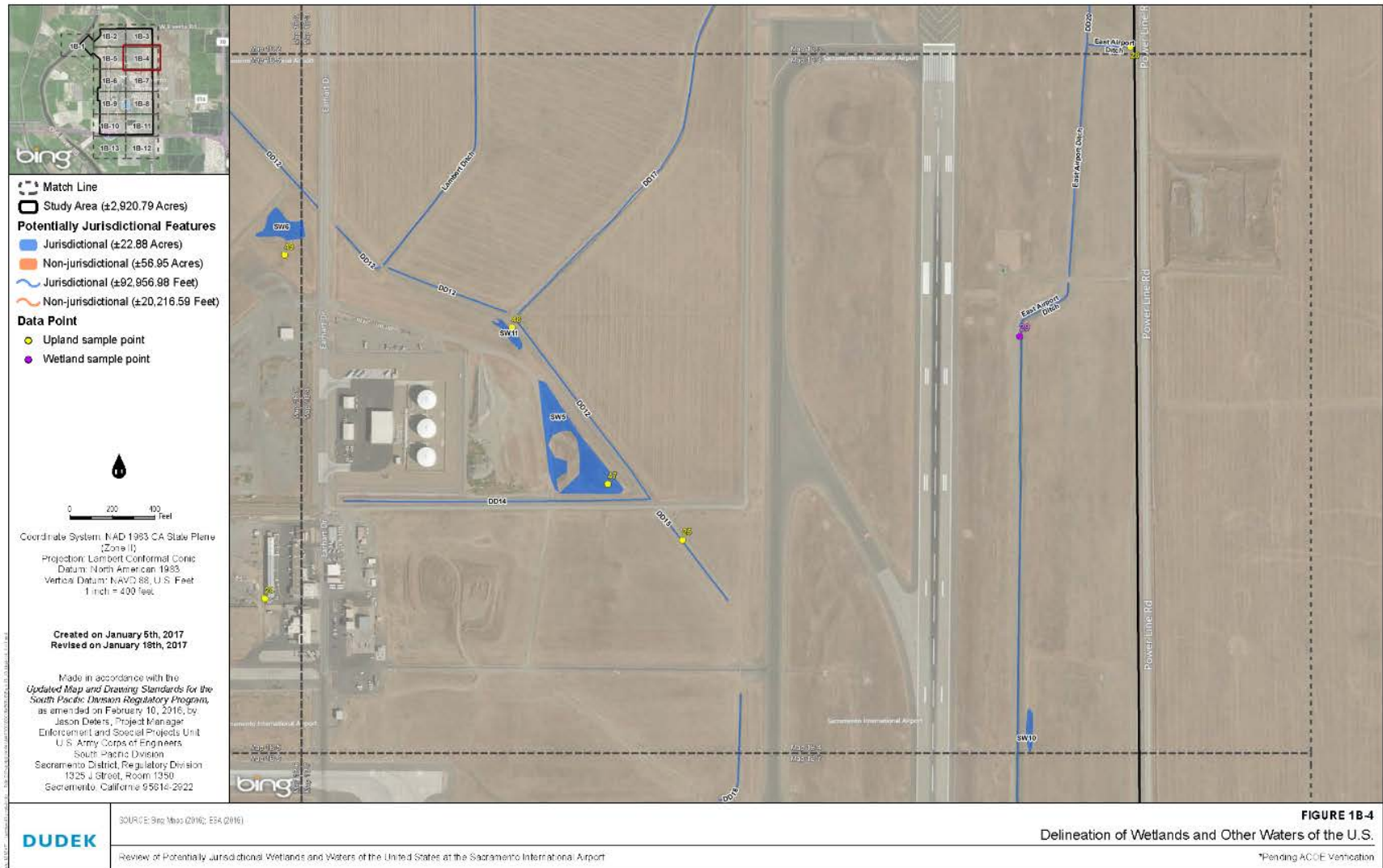


Plate BR-2d: 2016 Revised Wetland Delineation

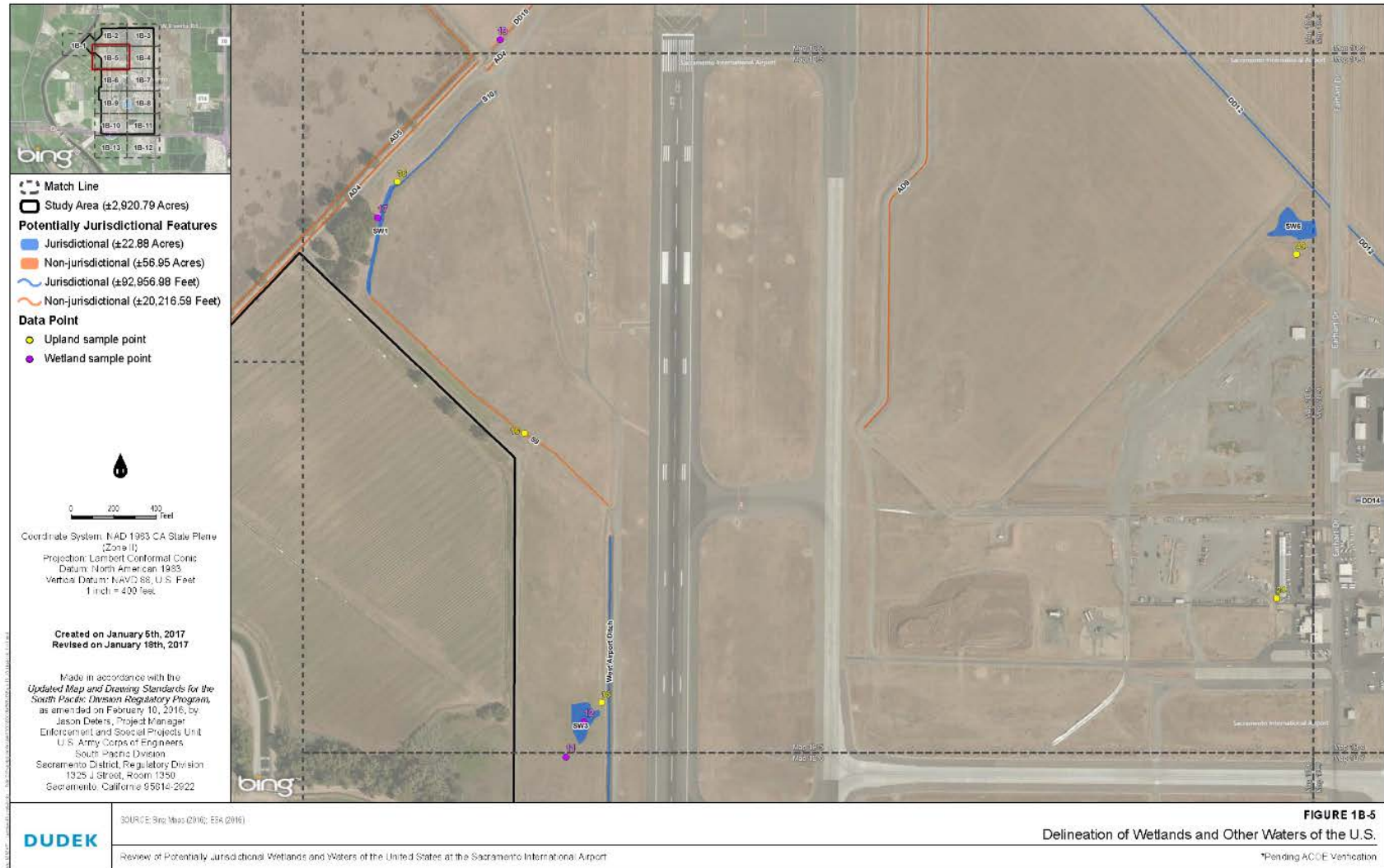


Plate BR-2e: 2016 Revised Wetland Delineation

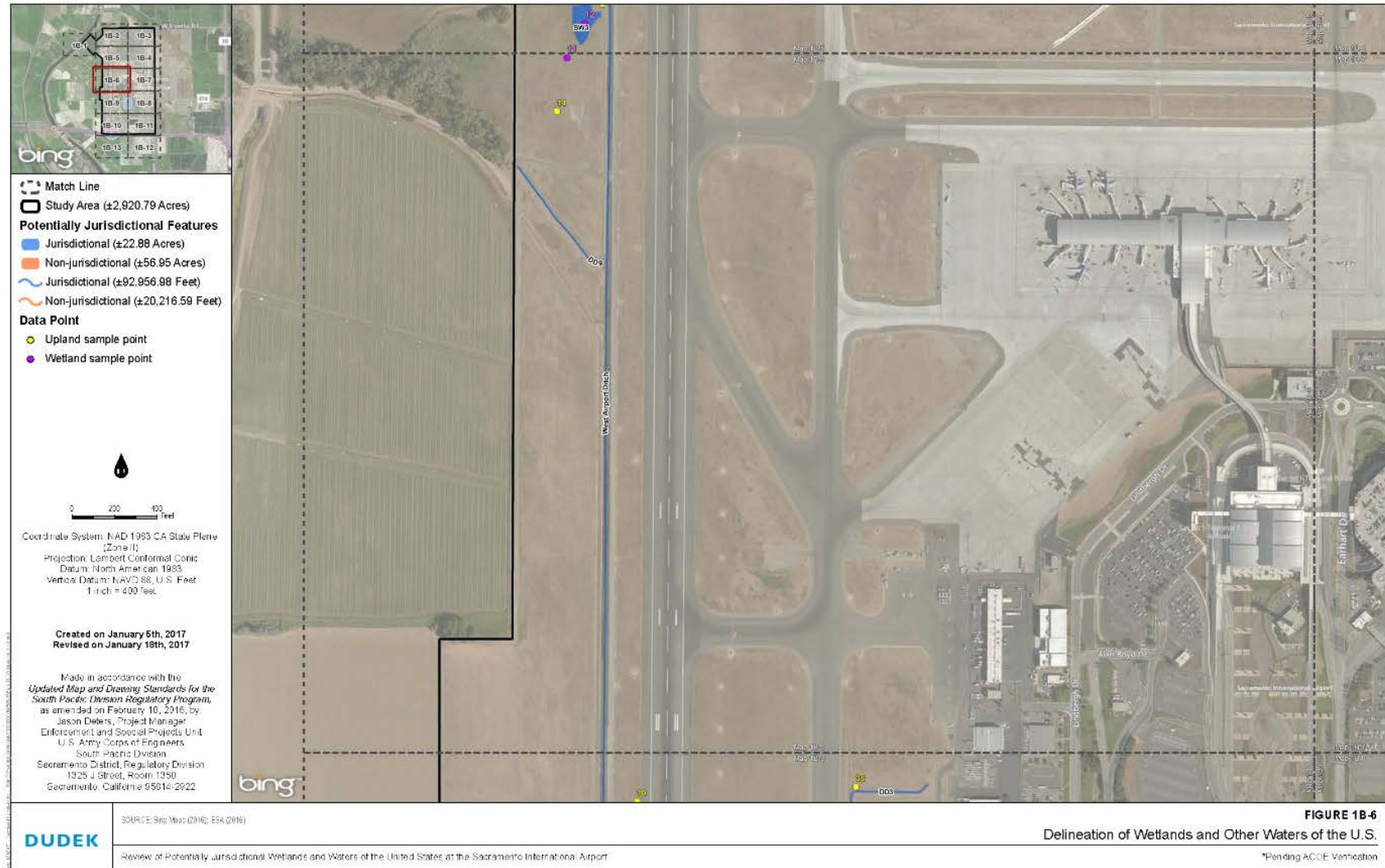


Plate BR-2f: 2016 Revised Wetland Delineation





Plate BR-2h: 2016 Revised Wetland Delineation

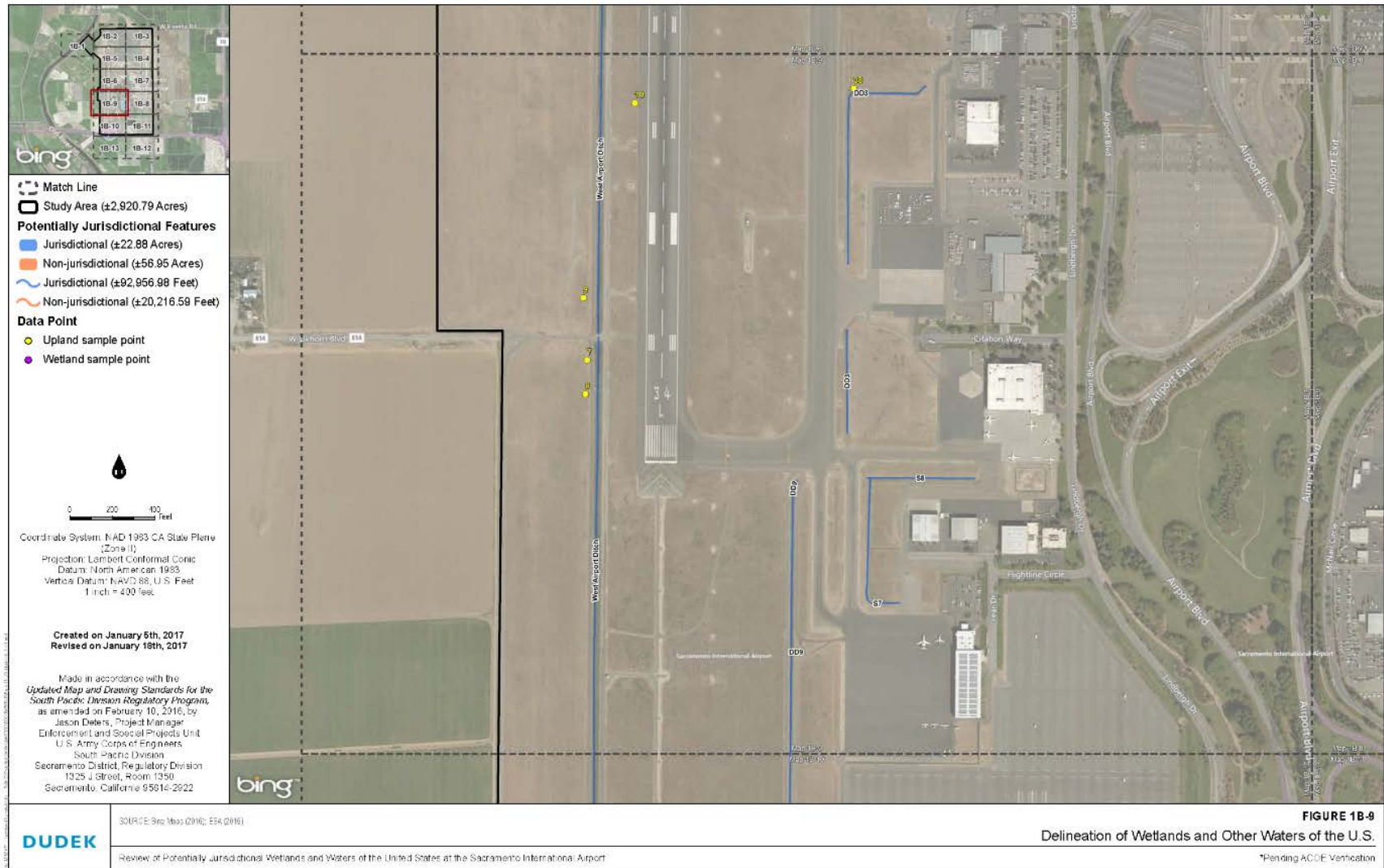




Plate BR-2i: 2016 Revised Wetland Delineation

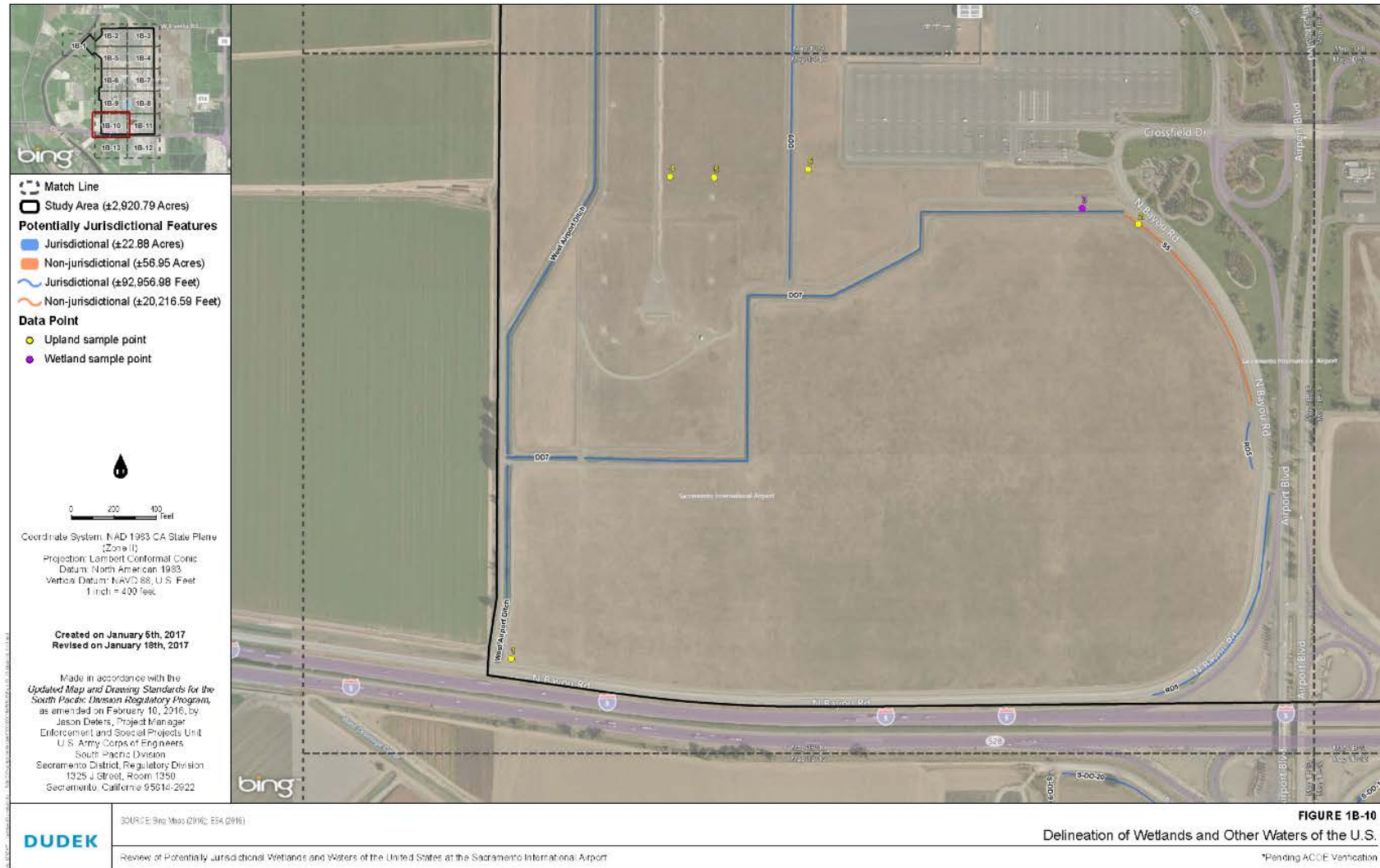


Plate BR-2j: 2016 Revised Wetland Delineation

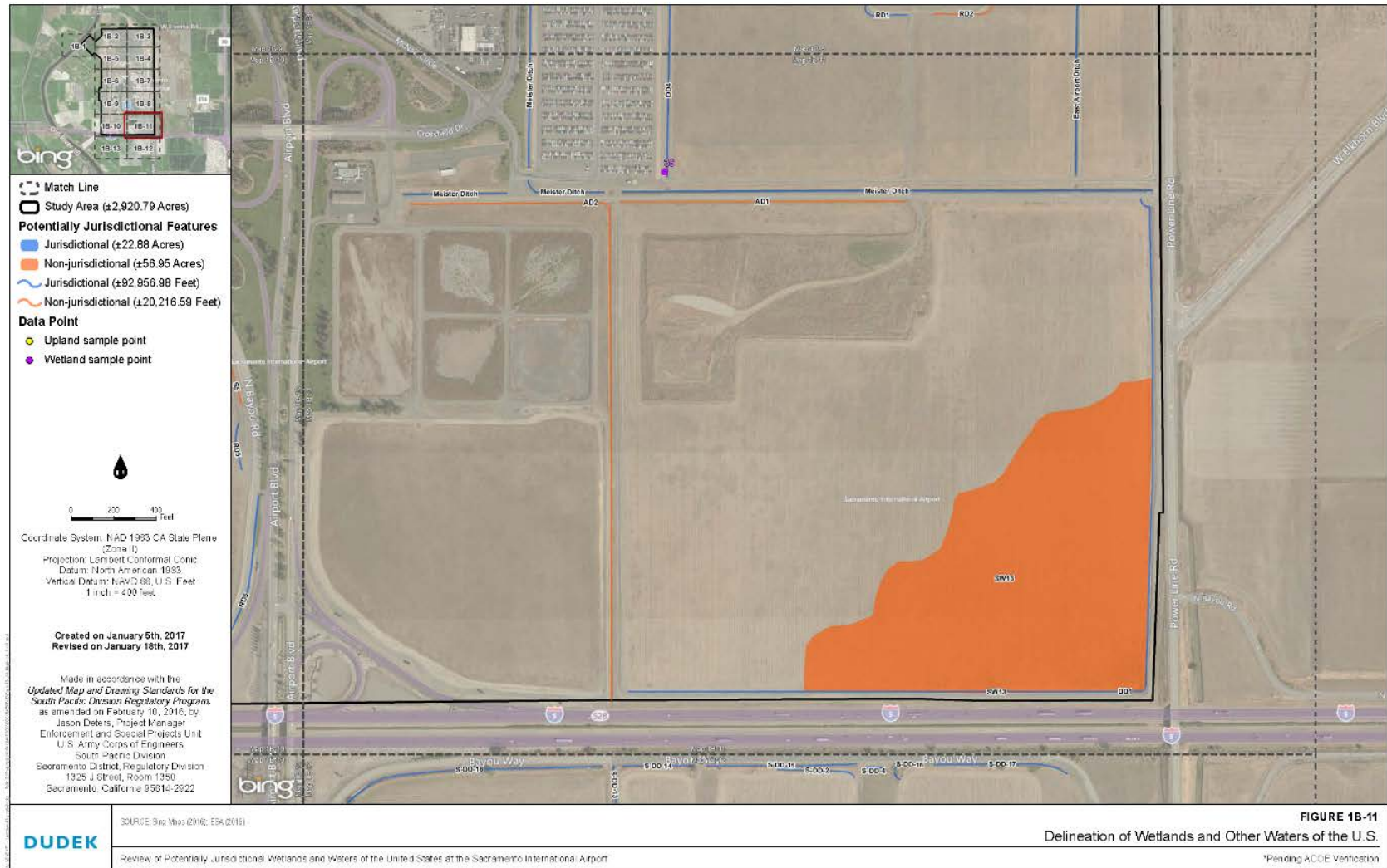


Plate BR-2k: 2016 Revised Wetland Delineation

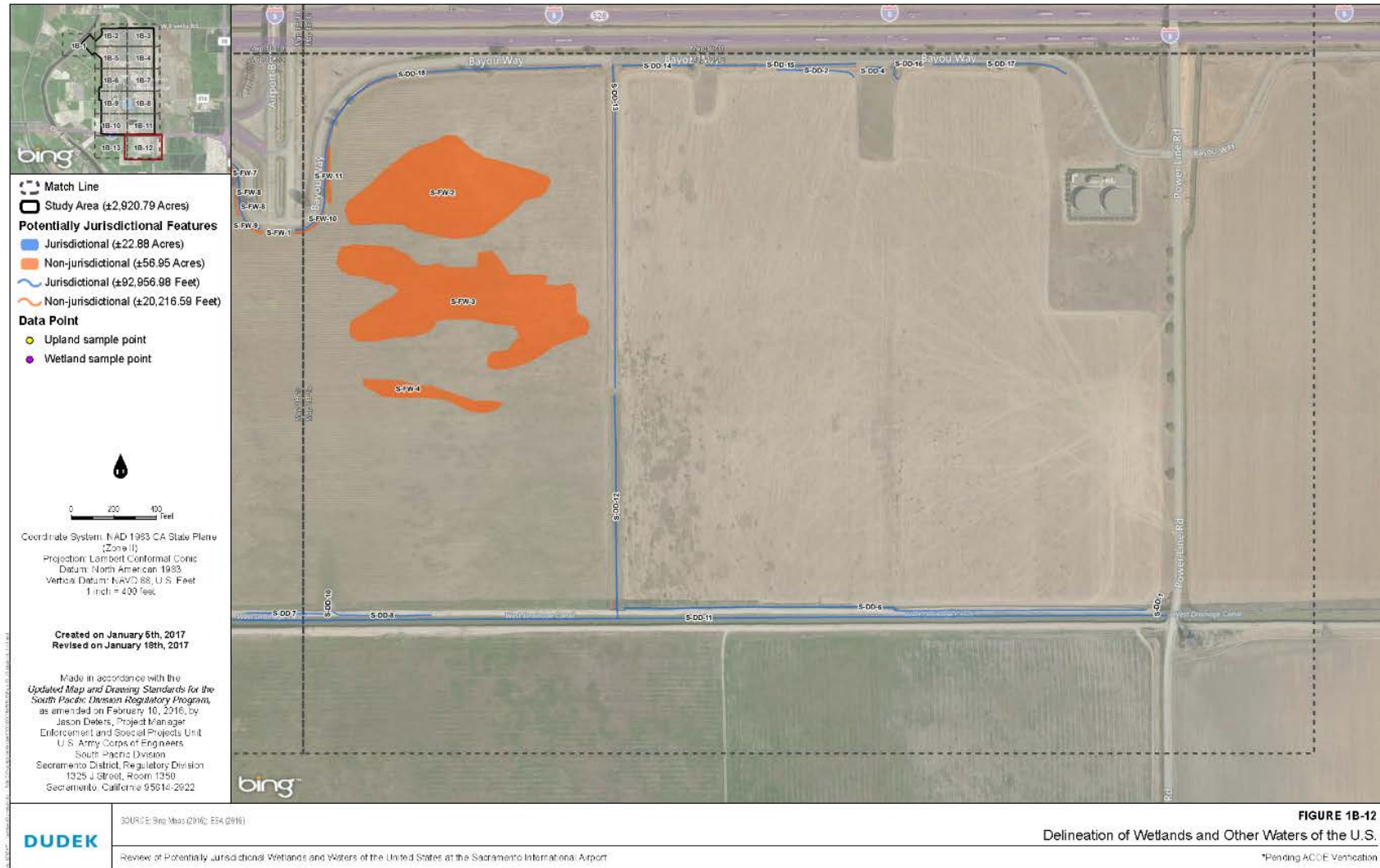


Plate BR-2I: 2016 Revised Wetland Delineation

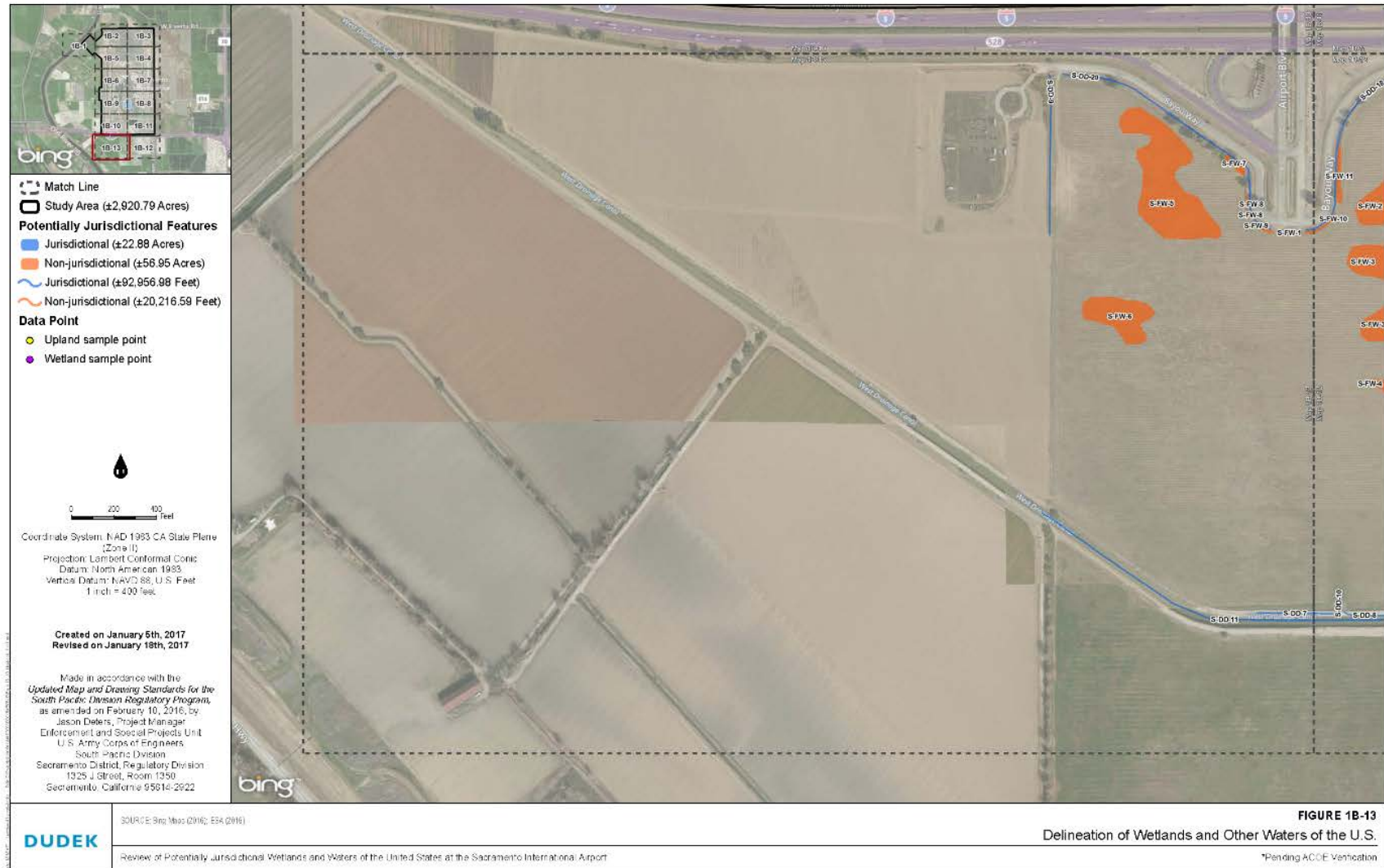
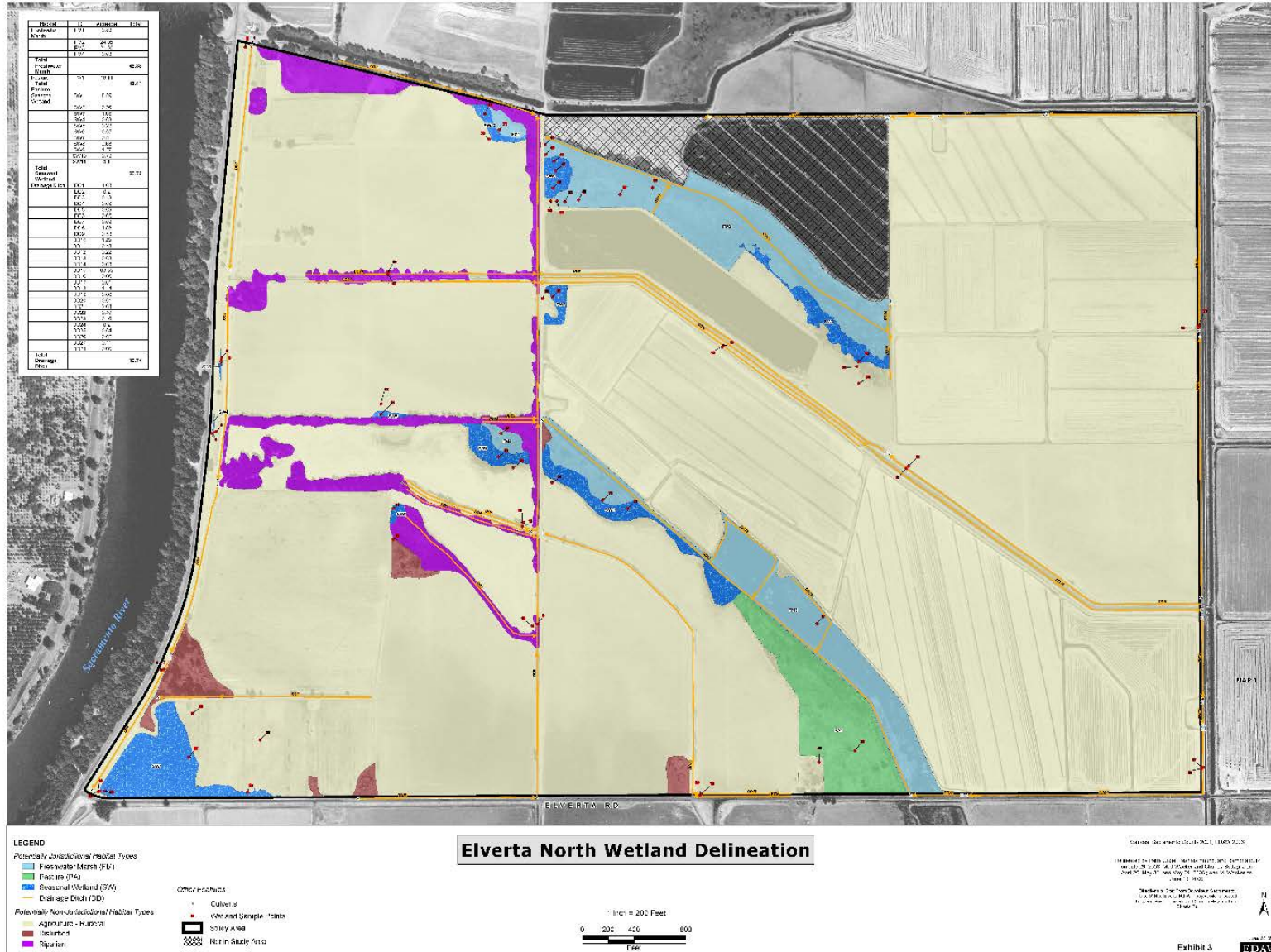


Plate BR-3: North of Elverta Road Wetland Delineation (2006)





## REGULATORY SETTING

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### FEDERAL

#### *FEDERAL ENDANGERED SPECIES ACT*

Under the Federal Endangered Species Act (FESA) of 1973, the Secretary of the Interior and the Secretary of Commerce jointly have the authority to list a species as endangered or threatened. FESA defines “endangered” species as any species in danger of extinction throughout all or a significant portion of its range. A “threatened” species is any species that is likely to become an “endangered” species within the foreseeable future throughout all or a significant portion of its range. Additional special-status species include “candidate” species and “species of concern.” “Candidate” species are those for which the Department of Interior, United States Fish and Wildlife Service (USFWS) has enough information on file to propose listing as endangered or threatened. “Species of concern” are those for which listing is possibly appropriate but for which the USFWS lacks sufficient information to support a listing proposal. A species that has been “delisted” is one whose population has met its recovery goal target and is no longer in jeopardy of extinction. Taking of federally listed species is prohibited under Section 9 of FESA. To “take” is defined by FESA (Section 3[19]) to mean “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct.”

All government agencies must review their actions and determine if a “may affect” situation occurs with respect to a federally listed or proposed species. If the agency makes a “may affect” determination, it is then required to request concurrence with a “may affect, but not likely to adversely affect” finding or formally consult with the USFWS or National Marine Fisheries Service (NMFS).

For federal agencies, the consultation is conducted under Section 7 of FESA. The agency submits a Biological Assessment to USFWS that evaluates the potential adverse effects to federally listed species. The USFWS then prepares a Biological Opinion that addresses the requirements that must be followed to avoid, minimize, and compensate for impacts to federally listed species and their habitat.

For non-federal agencies, the consultation is conducted under Section 10 of FESA. The agency submits an incidental take<sup>1</sup> permit application to USFWS accompanied by a habitat conservation plan (HCP). The purpose of the habitat conservation planning process associated with the permit is to ensure there is adequate minimization and mitigation of the effects of the authorized incidental take. The purpose of the permit is to authorize the incidental take of a listed species, not to authorize the activities that result in take (USFWS 2005).

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<sup>1</sup> Incidental take is take of listed fish or wildlife species that results from, but is not the purpose of, carrying out an otherwise lawful activity conducted by a federal agency or applicant (50 CFR 402.2).

**USFWS SACRAMENTO OFFICE DISCLAIMER**

There are a number of biological resources located on the project site, including wetlands and special status species. As a requirement of the USFWS, the following notification is provided to proponents of any project that has the potential to adversely affect threatened or endangered species:

“The applicant is hereby notified of additional conditions as stipulated by the U.S. Fish and Wildlife Service. Features of the applicant’s project may adversely affect federally listed threatened or endangered species. An applicant must go through one of two processes to obtain authorization to take federally listed species incidental to completing his or her project. One of the processes is formal consultation. When the authorization or funding of a Federal agency is an aspect of a project that may affect federally listed species, Section 7 of the Endangered Species Act requires the Federal agency to formally consult with the Service. Formal consultation is concluded when the Service issues a biological opinion to the Federal agency. The biological opinion includes terms and conditions to minimize the effect of take on listed species. The Federal agency must make the terms and conditions of the biological opinion into binding conditions of its own authorization to the project applicant. An example of this process is when the U.S. Army Corps of Engineers consults with the Service prior to issuing a permit to fill jurisdictional waters under Section 404 of the Clean Water Act. The terms and conditions of the biological opinion become binding on the project applicant through the Corps’ 404 authorization. When no Federal funding or authorization is involved in a project, an applicant must prepare a habitat conservation plan and obtain a permit directly from the Service in accordance with Section 10(a)(1)(B) of the Act. For additional information on these processes please contact the Endangered Species Division of the U.S. Fish and Wildlife Service’s Sacramento Fish and Wildlife Office at (916) 414-6600”.

*FISH AND WILDLIFE COORDINATION ACT*

The Fish and Wildlife Coordination Act authorizes the USFWS and State agencies responsible for fish and wildlife resources to investigate all proposed federal undertakings and nonfederal actions that need a federal permit or license that would control or modify a stream or water body and to make mitigation and enhancement recommendations to the involved federal agency. “Recommendations...shall be as specific as practicable with respect to features recommended for wildlife conservation and development, lands to be utilized or acquired for such purposes, the results expected, and shall describe the damage to wildlife attributable to the project and the measures proposed for mitigating or compensating for these damages (16 U.S.C. §661).” In addition, the Act requires that wildlife conservation be coordinated with other features of water resource development programs.

*MIGRATORY BIRD TREATY ACT*

The Migratory Bird Treaty Act of 1918 (16 U.S.C. §703-711) makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed in 50 CFR 10, including



feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 CFR 21). Disturbance that causes nest abandonment and/or loss of reproductive effort (e.g., killing or abandonment of eggs or young) may be considered a “take” and is potentially punishable by fines and/or imprisonment. Take is defined as any attempt to pursue, hunt, take, capture, kill, attempt to take, capture, or kill, possess, offer for sale, sell, offer to barter, barter, offer to purchase, purchase, deliver for shipment, ship, export, import, cause to be shipped, exported, or imported, deliver for transportation, transport or cause to be transported, carry or cause to be carried, or receive for shipment, transportation, carriage, or export, any migratory bird, (and) any part, nest, or eggs of any such bird.

*EXECUTIVE ORDER 13186: RESPONSIBILITIES OF FEDERAL AGENCIES TO PROTECT MIGRATORY BIRDS*

Executive Order 13186 was created in 2001 to further the intent of the migratory bird conventions, the Migratory Bird Treaty Act, the Bald and Golden Eagle Protection Acts, the Fish and Wildlife Service Coordination Act, and FESA. It requires federal agency actions that have, or are likely to have, a measurable negative effect on migratory bird populations to develop and implement, within two years, a Memorandum of Understanding with the USFWS that will promote the conservation of migratory bird populations. Each memo will establish protocols for implementation of the memo and for reporting accomplishments.

*EXECUTIVE ORDER 13112: INVASIVE SPECIES*

Under Executive Order 13112, projects that occur on federal lands or are federally funded must, subject to the availability of appropriations, and within administration budgetary limits, use relevant programs and authorities to (i) prevent the introduction of invasive species; (ii) detect and respond rapidly to, and control, populations of such species in a cost-effective and environmentally sound manner; (iii) monitor invasive species populations accurately and reliably; and (iv) provide for restoration of native species and habitat conditions in ecosystems that have been invaded.

*CLEAN WATER ACT*

The USACE has jurisdiction and permitting authority under Section 404 of the Clean Water Act over the discharge of dredged or fill material into waters of the United States, including wetlands. The USACE determines the significance of and approves, restricts, or prohibits discharges through application of the Section 404(b)(1) guidelines, the substantive criteria for dredging and fill material discharges under this act. These guidelines have been developed by the U.S. Environmental Protection Agency in conjunction with the USACE. The guidelines are based on the precept that dredged and fill material should not be discharged into aquatic ecosystems, unless it can be demonstrated that such a discharge will not have an unacceptable adverse impact either individually or in combination with known and/or probably impacts of other activities affecting the ecosystems of concern. Under the Fish and Wildlife Coordination Act, the USFWS advises the USACE on projects involving dredge and fill activities in

waters and wetlands of the United States. Work on this project may require the County to obtain a USACE 404 Permit.

#### *WILDLIFE HAZARD MANAGEMENT PLAN*

In accordance with 14 CFR 139.337(b), the FAA requires commercial airports to conduct a wildlife hazard assessment when any of the following events occur on or near the airport:

- An air carrier aircraft experiences multiple wildlife strikes;
- An air carrier aircraft experiences substantial damage from striking wildlife. Substantial damage means damage or structural failure incurred by an aircraft that adversely affects the structural strength, performance, or flight characteristics of the aircraft and that would normally require major repair or replacement of the affected component;
- An air carrier aircraft experiences an engine ingestion of wildlife; and/or,
- Wildlife of a size, or in numbers, capable of causing an event described above is observed to have access to any airport flight pattern or aircraft movement area.

The wildlife hazard assessment shall contain at least the following [14CFR 139.337(c)]:

- An analysis of the events or circumstances that prompted the assessment;
- Identification of the wildlife species observed and their numbers, locations, local movements, and daily and seasonal occurrence;
- Identification and location of features on and near the airport that attract wildlife;
- A description of wildlife hazards to air carrier operations; and,
- Recommended actions for reducing identified wildlife hazards to air carrier operations.

Sacramento County Department of Airports (SCDA) used the U.S. Department of Agriculture Wildlife Service (USDA-WS) to conduct the required wildlife hazard assessment. From this assessment, the FAA determined that a wildlife hazard management plan was needed for the airport. SCDA prepared the initial plan for SMF in 1996. During 2006, a comprehensive revision to the Wildlife Hazard Management Plan for SMF was submitted to FAA for review. Modifications to the plan were made in response to FAA comments received in 2006. The final plan revision was submitted to the FAA in early March 2007.

In 2003, the FAA, U.S. Air Force, U.S. Army, U.S. Environmental Protection Agency, USFWS, and U.S. Department of Agriculture entered into a Memorandum of Agreement (MOA) to address aircraft-wildlife strikes. Among other things, the signatories to the MOA agreed to cooperate with airport operators to develop a specific, wildlife hazard management plan for a given location when a potential wildlife hazard is identified. The plan will meet applicable FAA, U.S. Air Force, and other relevant requirements. In developing the plan, the appropriate agencies will use their expertise and attempt to

integrate their respective programmatic responsibilities while complying with existing laws, regulations, and policies.

## STATE OF CALIFORNIA

### *CALIFORNIA ENDANGERED SPECIES ACT*

Section 2080 of the California Endangered Species Act (CESA) prohibits the “take” of state-listed threatened and endangered species. The CESA defines take as any action or attempt to hunt, pursue, catch, capture, or kill any listed species. If a proposed project may result in take of a listed species, a permit pursuant to Section 2080 of CESA is required from the California Department of Fish and Wildlife (CDFW). Take of state-listed species is authorized by Section 2081 through a permit process. Take can also be authorized through Section 2835 with an approved Natural Community Conservation Plan (NCCP).

The CDFW also designates “fully protected” or “protected” species as those that may not be taken or possessed without a permit from the Fish and Game Commission and/or the CDFW. Species designated as fully protected or protected may or may not be listed as endangered or threatened.

### *LAKE AND STREAMBED ALTERATION PROGRAM*

Fish and Game Code Section 1602 requires any person, state or local governmental agency, or public utility to notify CDFW before beginning any activity that will do one or more of the following: 1) substantially obstruct or divert the natural flow of a river, stream, or lake; 2) substantially change or use any material from the bed, channel, or bank of a river, stream, or lake; or 3) deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into a river, stream, or lake. Fish and Game Code Section 1602 applies to all perennial, intermittent, and ephemeral rivers, streams, and lakes in the state.

Notification is generally required for any project that will take place in the vicinity of a river, stream, or lake. CDFW will determine whether a Lake or Streambed Alteration Agreement is required for the activity. An agreement will be required if the activity could substantially adversely affect an existing fish and wildlife resource. If an agreement is required, it will be prepared by CDFW in coordination with the applicant. The agreement will include measures, as necessary, to protect fish and wildlife resources while conducting the project. Numerous canals and ditches cross airport property, and, as indicated above, many of these are under USACE jurisdiction; therefore, a Streambed Alteration Agreement may be required for the project.

## LOCAL

*SACRAMENTO COUNTY GENERAL PLAN*

The Sacramento County General Plan contains numerous goals, policies, concepts and strategies to protect and/or preserve biological resources. The following provides the goals and policies applicable to the proposed Project:

- AG-17. The establishment of conservation easements combining preservation of agricultural uses, habitat values, and open space on the same property should be encouraged where feasible.
- CO-25. Support the preservation, restoration, and creation of riparian corridors, wetlands and buffer zones.
- CO-58. Ensure no net loss of wetlands, riparian woodlands, and oak woodlands.
- CO-59. Ensure mitigation occurs for any loss of or modification to the following types of acreage and habitat function:
- vernal pools,
  - wetlands,
  - riparian,
  - native vegetative habitat, and
  - special status species habitat.
- CO-60. Mitigation should be directed to lands identified on the Open Space Vision Diagram and associated component maps (please refer to the Open Space Element).
- CO-61. Mitigation should be consistent with Sacramento County-adopted habitat conservation plans.
- CO-62. Permanently protect land required as mitigation.
- CO-66. Mitigation sites shall have a monitoring and management program including an adaptive management component including an established funding mechanism. The programs shall be consistent with Habitat Conservation Plans that have been adopted or are in draft format.
- CO-67. Preserves and conservation areas should have an established funding mechanism, and where needed, an acquisition strategy for its operation and management in perpetuity. This includes existing preserves such as the American River Parkway, Dry Creek Parkway, Cosumnes River Preserve and other plans in progress for riparian areas like Laguna Creek.

CO-68. Preserves shall be planned and managed to the extent feasible so as to avoid conflicts with adjacent agricultural activities (Please also refer to the Agricultural Element).

CO-138. Protect and preserve non-oak native trees along riparian areas if used by Swainson's hawk, as well as landmark and native oak trees measuring a minimum of 6 inches in diameter or 10 inches aggregate for multi-trunk trees at 4.5 feet above ground.

CO-139. Native trees other than oaks, which cannot be protected through development, shall be replaced with in-kind species in accordance with established tree planting specifications, the combined diameter of which shall equal the combined diameter of the trees removed.

#### *NATOMAS BASIN HABITAT CONSERVATION PLAN*

The Natomas Basin Habitat Conservation Plan (NBHCP) establishes a conservation program to mitigate for the loss of biological resources that is expected to result from urban development, operation of irrigation and drainage systems, and rice farming in the Natomas Basin. NBHCP's overall goals include biological protection, economic development, and conservation of agricultural uses. The NBHCP covers 53,341 acres of the interior of the Natomas Basin in northern Sacramento County and southern Sutter County. The basin encompasses both incorporated and unincorporated areas within the jurisdiction of the City of Sacramento, Sacramento County and Sutter County. Most of the basin is in Sacramento County north and east of the Sacramento River and extends north to the Cross Canal in Sutter County. The NBHCP was approved by the U.S. Fish and Wildlife Service (USFWS) in 2003. Only the City of Sacramento and Sutter County are signatories to the NBHCP. The County of Sacramento is not subject to the program and the adjacent "Metro Air Park" has its own habitat conservation plan as outlined below.

#### *METRO AIR PARK HABITAT CONSERVATION PLAN*

The Metro Air Park Property Owners Association (Association) has received an Incidental Take Permit from USFWS under Section 10 of the FESA covering development within the 1,892-acre Metro Air Park site and 123 acres of off-site lands. As part of the application for this permit, the Association prepared a habitat conservation plan in accordance with FESA Section 10. The habitat conservation plan requires acquisition of mitigation land for Association development including infrastructure requirements. The Association uses the Natomas Basin Conservancy (Conservancy) to secure mitigation land via fee title or conservation easement and transfers ownership of the lands over to the Conservancy to manage in perpetuity for the benefit of species selected for mitigation.

## SIGNIFICANCE CRITERIA

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Standards for determining thresholds of significance were established based on the State CEQA Guidelines and professional standards. Impacts to biological resources were considered significant if the project would result in any of the following:

1. Have a substantial adverse effect, either directly or through habitat modification, on any species identified as a special-status-species in local or regional regulatory guidance, plans, policies, or regulations or by CDFW or USFWS;
2. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plan, policies, regulations, or by CDFW or USFWS;
3. Have a substantial adverse effect on protected State or federally protected wetlands or surface waters, as defined by the Army Corps of Engineers Wetland Delineation Manual (1987 ed.) and/or as defined by Sections 401 and 404 of the Clean Water Act (including, but not limited to, seeps, vernal pools, swales, drainages, and perennial waterways) through direct removal, filling, hydrological interruption, or other means;
4. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
5. Conflict with any local policies or ordinances protecting biological resources; or
6. Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or approved local, regional, or state habitat conservation plan.

## METHODOLOGY

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The methodologies used to determine significance rely on documents published by or endorsed by regulatory agencies. The applicable documents and methods are cited and described in the applicable impact discussions, below. In absence of such published documents, the analyses rely on the general definitions of significance. In addition, a Biological Resource Assessment prepared by Dudek Consultants was completed for a portion of the project area. Information from the report is incorporated into the impact analysis and the entire report is available on-line as Appendix BR-1 at: <https://planningdocuments.saccounty.net/ViewProjectDetails.aspx?ControlNum=PLER2020-00037>.

## IMPACTS AND ANALYSIS

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### IMPACT: HAVE A SUBSTANTIAL ADVERSE EFFECT ON PROTECTED STATE OR FEDERALLY PROTECTED WETLANDS OR SURFACE WATERS

A wetland delineation was prepared as part of the prior EIR and Federal Environmental Impact Statement (EIS) process. Airport staff received an Approved Jurisdictional Determination (AJD) for the majority of airport land in 2006. AJDs are only valid for five years and upon expiration, the owner needs to resubmit a new wetland delineation for either an AJD or a Preliminary Jurisdictional Determination (PJD). Airport staff began the process to re-validate the AJD, and ESA Associates prepared and submitted a new wetland delineation to the USACE in 2011. The wetland delineation covers approximately 3,168 acres – 2,858 acres north of I-5 and 310 acres south of I-5 (not including the area north of Elverta Road). The USACE issued a PJD (SPK-2003-00776) on October 13, 2011. A final Wetland delineation report was prepared in January 2012. The PJD identifies 78.6 acres of wetlands or waters in the 3,168 acres study area that are subject to the Clean Water Act (CWA). The PJD does not expire and can be used for future permitting actions. However, if there are changes in the environment or changes to jurisdictional definitions, the applicant can request an AJD at any time with supporting evidence.

In December 2016, Dudek reviewed and revised, as necessary, the 2012 wetland delineation in response to changing regulatory guidance. The revised AJD request was submitted to the USACE, but the review has not been completed by the USACE. Currently, airport staff are no longer pursuing an AJD; therefore, the PJD remains valid for future permitting actions within the study boundary, if desired.

To determine potential impacts associated with the project, the features and corresponding acreages presented in the 2016 revised delineation have been used in this document. The revised delineation does propose slight differences in acreages of jurisdictional and non-jurisdictional features; these differences are presented in Table BR-1.

**Table BR-1: 2012 v. 2016 Delineation Comparisons**

Feature Type	2012 Delineation Acreage	2016 Revised Delineation Acreage
North of I-5 (south of Elverta Road)		
Freshwater Emergent Wetland/Seasonal Wetland	38.79	37.15
Drainage Ditch	11.18	16.53
Agricultural Ditch	0.61	2.86
Roadside Ditch	0.15	0.26
Swales	0.50	0.54
South of I-5		
Farmed Wetlands	20.40	20.32
Drainage Ditch	4.73	4.75
<b>Total Jurisdictional Features</b>	<b>76.36</b>	<b>22.47</b>
<b>Total Non-Jurisdictional Features</b>	<b>--</b>	<b>57.25</b>

The project is largely within the boundaries of the prior wetland delineations. The area proposed for commercial development north of Elverta Road is not included in the most recent delineation. However, the wetland delineation prepared in 2006 by EDAW Consultants is referenced to determine potential impacts for the proposed commercial development shown in PAL 3. The analysis presented in this document is based on these delineation reports. There are approximately 174 acres of wetlands within the Master Plan Update area (area south of I-5 to north of Elverta Road), of which about 117 acres meet the qualifications to be under the jurisdiction of the USACE in accordance with Clean Water Act Section 404. Of the total potentially jurisdictional wetlands, 44 percent (46.9 acres) is freshwater marsh, 22 percent (23.8 acres) is seasonal wetlands, 26 percent (28 acres) is earthen irrigation or drainage ditches, and 15 percent (16 acres) is pasture. Of the total potentially non-jurisdictional wetlands, five percent (2.9 acres) is agricultural and roadside ditches or isolated swales, and 95 percent (54.3 acres) is farmed or seasonal wetlands.

Table BR-2 provides the maximum areas of jurisdictional and non-jurisdictional wetlands that will be impacted by the project south of Elverta Road. Engineering design has not been completed for project elements, so specific areas of temporary wetland disturbance caused during construction cannot be determined at this time. To provide a worst-case analysis, this assessment includes an area of temporary construction disturbance in the estimate of permanent wetland impacts.



**Table BR-2: Potential Wetland Impacts for AOA  
(south of Elverta Rd. & north of I-5)**

<b>Wetland Feature</b>	<b>Impacted Acreage</b>
<b>PAL 1</b>	
Drainage Ditch	0.99 Jurisdictional 0.11 Non-Jurisdictional
Agricultural Ditch	0.67 Jurisdictional
Seasonal Wetland	0.46 Jurisdictional
Swale	0.05 Non-Jurisdictional
<b>PAL 2</b>	
Drainage Ditch	0.6 Jurisdictional 0.19 Non-Jurisdictional
Roadside Ditch	0.02 Jurisdictional 0.03 Non-Jurisdictional
Swale	0.01 Non-Jurisdictional
<b>PAL 3</b>	
Drainage Ditch	2.06 Jurisdictional
Agricultural Ditch	0.61 Jurisdictional
Seasonal Wetland	1.79 Jurisdictional
<b>Total for AOA</b>	<b>7.2 - Jurisdictional 0.39 - Non-Jurisdictional</b>

According to the 2006 wetland delineation prepared by EDAW, a large portion of the freshwater marsh and seasonal wetlands north of the AOA are at least partially supported by seepage from irrigation and drainage ditches. The proposed northward extension of Earhart Drive will place small segments of ditches DD13, DD14, DD21, and DD26 (0.14 acre) into culverts. The proposed commercial development shown in PAL 3, may impact up to 1.54 acres of drainage ditches DD3, DD4, DD5, DD6, DD8 (portion), DD16, DD22, and 0.26 acres of seasonal wetland SW 2. In total, approximately, 1.8 acres of wetlands or waters may be impacted north of Elverta Road; however, this is conservative assumption that the entire feature is filled or culverted. Depending on how the features are augmented, the proposed commercial development may reduce the amount of seepage for freshwater marsh and seasonal wetlands adjacent to these ditches (Plate BR-3).

### **CONCLUSION**

Filling of wetlands or waters of the U.S. or State require permits from the USACE for all jurisdictional features, the Regional Water Quality Control Board (RWQCB) for all

waters, and the CDFW for features that meet the definition under Section 1600 of the Fish and Game Code. Permits may require mitigation to compensate for the temporary or permanent removal of wetlands or waters. SCDA has indicated that individual projects may pursue an individual permit from the USACE. If the PJD is not used, a new delineation and determination would be required before a permit is issued. This may be beneficial, as site conditions could change based on surrounding hydrological alterations (such as those in Metro Air Park), or changing regulatory guidance.

The permanent removal of wetlands associated with the proposed project is a **significant impact**. This impact will be reduced to a **less than significant** level with implementation of compensatory mitigation in accordance with the Sacramento County *General Plan* Wetland Policies (CO 58 and 59) at a minimum. Compensatory mitigation for wetland impacts will take place as projects of the Master Plan become ready for implementation, beginning with those listed in PAL 1 (approximately 2.28 acres). Potential impacts associated with future PALs may account for an additional loss of up to potentially 9.39 acres.

#### MITIGATION MEASURES:

BR-1 In order to reduce impacts to wetland habitat the applicant shall comply with one or a combination of the following prior to every project which involves wetlands or waters of the U.S. or State:

- a. Where a Section 404 Permit has been issued by the U.S. Army Corps of Engineers, or an application has been made to obtain a Section 404 Permit, the Mitigation and Management Plan required by that permit or proposed to satisfy the requirements of the USACE for granting a permit may be submitted for purposes of achieving a no net-loss of wetlands. The required Plan shall be submitted to the Sacramento County Environmental Coordinator, U.S. Army Corps of Engineers and U.S. Fish and Wildlife Service for approval prior to its implementation.
- b. If regulatory permitting processes result in less than a 1:1 compensation ratio for loss of wetlands, the project applicant shall demonstrate that the wetlands which went unmitigated/uncompensated as a result of permitting have been mitigated through other means. Acceptable methods include payment into a mitigation bank or protection of off-site wetlands through the establishment of a permanent conservation easement, subject to the approval of the Environmental Coordinator.

IMPACT: HAVE A SUBSTANTIAL ADVERSE EFFECT, EITHER DIRECTLY OR THROUGH HABITAT MODIFICATION, ON ANY SPECIES IDENTIFIED AS A SPECIAL STATUS SPECIES

A special status species is one that has been identified as having relative scarcity and/or declining populations. Special status species include those formally listed as threatened or endangered, those proposed for formal listing, candidate for federal

listing, and those classified as species of special concern. Also included are those species considered to be “fully protected” by CDFW, those granted “special animal” status for tracking and monitoring purposes, and those plant species considered to be rare, threatened, or endangered in California by the California Native Plant Society (CNPS).

Multiple species status designations are applied to animals and plants; relevant definitions are provided below<sup>2</sup>.

*Endangered Species:* Any species, which is in danger of extinction throughout all or a significant portion of its range.

*Threatened Species:* Any species, which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

*Species of Concern:* Any species with declining population levels, limited ranges, and/or other factors that make them vulnerable to extinction and may ultimately qualify the species for threatened or endangered status.

*Fully Protected:* The classification of Fully Protected was California’s initial effort to identify and provide additional protection to those animals that were rare or faced possible extinction. Most have subsequently been defined as endangered or threatened, but there are exceptions.

*Special Animals:* A general term that refers to all of the taxa that CDFW is interested in tracking, regardless of their legal or protection status. Though the species themselves have not declined to the extent that they are listed by one of the classifications noted above (endangered, etc), such species are closely associated with a habitat that is declining in California.

*List 1B Plants:* Plants that are rare throughout their range, and have declined significantly over the last century. The majority of plants on this list are endemic to California.

*List 2 Plants:* The same as List 1B plants, except that List 2 plants are common outside of California.

Relevant species for analysis were identified based on species information gathered from the USFWS Sacramento office, CDFW, and from CNPS. A California Fish and Wildlife California Natural Diversity Database (CNDDDB 2020) search was also conducted. For the initial CNDDDB search the study area was all lands within ten miles

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<sup>2</sup> Source: California and Federal Endangered Species Acts, <http://www.dfg.ca.gov/wildlife/nongame/ssc/>, [http://www.dfg.ca.gov/wildlife/nongame/t\\_e\\_spp/fully\\_pro.html](http://www.dfg.ca.gov/wildlife/nongame/t_e_spp/fully_pro.html), and <http://www.cnps.org/cnps/rareplants/ranking.php>

of the project boundary, while the USFWS list was based on species present within the Taylor Monument 7.5-minute United States Geological Survey quadrangle.

Table BR-3 reports the species examined as a result of the initial species evaluations. Table BR-3 reports the likelihood of occurrence based on habitat presence either on the site or in proximity of the site, survey results (if any), and nearby recorded species occurrences. Habitat proximity is based on published buffers established by a regulatory agency. For instance, guidance for the Swainson's hawk establishes a nesting buffer of one-half mile, and includes mitigation requirements for construction activities in that range. Note, that some species are listed for loss of foraging habitat, while others may be listed for loss of breeding habitat. If the species is listed for loss of a particular habitat, it is so reported in Table BR-3 and the likelihood of occurrence will be based specifically on that habitat type. Likelihood of occurrence is rated as Not Present, Low Potential, Moderate Potential, High Potential, or Present, which are defined as:

- *Not Present:* A survey was performed by a qualified biologist, and the species was not found or habitat is absent both on the site and within one mile of the site.
- *Low Potential:* Absence cannot be definitively stated because no surveys were performed, but habitat is near-absent or marginal.
- *Moderate Potential:* Habitat is present, but the species has not been observed within two miles of the site.
- *High Potential:* Habitat is present and the species has been observed within two miles of the site.
- *Present:* The CNDDDB contains a recorded occurrence on the site, or the species was found during site-specific surveys.

Species that are not present or were found to have a low potential of occurrence are not discussed further in subsequent analysis sections. Plate BR-5 shows the CNDDDB occurrences as of December 2020.

**Table BR-3: Special Status Species**

Species	Status <sup>1</sup>	Habitat <sup>1</sup>	Potential for Occurrence
<b>BIRDS</b>			
Bald Eagle <i>Haliaeetus leucocephalus</i>	SE	Bald eagles both winter and nest along rivers, lakes, or reservoirs that support abundant fish or waterbird prey and that have large trees or snags for perch and roost sites. Nesting is from February through July. Bald eagles are not known to nest in Sacramento County, but have been observed wintering in the County.	Not Present. Project is located at least 0.5 mile from the Sacramento River, where suitable habitat is available.
Bank Swallow <i>Riparia riparia</i>	ST	Requires vertical banks and cliffs with fine-textured or sandy soils near streams, rivers, ponds, lakes, and the ocean for nesting. Feeds primarily over grassland, shrubland, savannah, and open riparian areas. Primarily listed for destruction of nesting habitat.	Not Present. Suitable habitat not present within airport property.
Black-Crowned Night Heron	SA	Found along rivers and brackish emergent wetlands, the species is a colonial nester. Nests are usually in densely foliated trees or vine tangles. Nesting season is February to July. Listed for nesting colonies.	Low Potential. There is a recorded observance from 1989, but there are no other occurrences in the vicinity. There is marginal habitat north of Elverta Road.
Burrowing Owl <i>Athene cunicularia hypugea</i>	CSC	Frequents open grasslands and shrublands with perches and burrows. Nests and roosts in old burrows of small mammals and rubble piles. Listed for breeding habitat.	High Potential. Species documented within airport property in 2006 but was not observed during Dudek surveys in 2020. Species has been observed at several locations surrounding SMF.

Species	Status <sup>1</sup>	Habitat <sup>1</sup>	Potential for Occurrence
California Black Rail <i>Laterallus jamaicensis coturniculus</i>	ST	A yearlong resident of saline, brackish, and fresh emergent wetlands, the majority of the species are found in the tidal salt marshes of the northern San Francisco Bay region. The only known occurrence in the County is within the Cosumnes River Preserve.	Not Present. Suitable nesting and foraging habitat is not present on or nearby airport property.
Cooper's Hawk <i>Accipiter cooperii</i>	SA	Frequents landscapes with wooded patches and groves, along with woodland edge habitats. Nests in riparian areas. Listed for nesting impacts.	Moderate Potential. Suitable habitat is present near the Elverta Road realignment, but there are no recorded occurrences within two miles.
Double-Crested Cormorant <i>Phalacrocorax auritus</i>	SA	Associated with estuaries, rivers, and oceans, the species is known to occur along major rivers in the Central Valley. A colonial nester, the species prefers cliffs, rugged slopes, or tall trees beside water. Range is restricted to 5 – 10 miles of the nesting area. Listed for the protection of nesting colonies.	Not Present. Suitable habitat is not present on airport property.
Ferruginous Hawk <i>Buteo regalis</i>	SA	Frequents open grasslands, sagebrush flats, desert scrub, low foothills surrounding valleys, and fringes of pinyon-juniper habitats. Listed for preservation of wintering habitat.	Low Potential. Suitable foraging habitat is present surrounding the project area. There are no known occurrences within five miles.
Golden Eagle <i>Aquila chrysaetos</i>	CFP, SA	Found in rolling foothills with open grasslands, scattered trees, and cliff-walled canyons. Nests on cliffs and in large trees in open areas. Listed for nesting habitat.	Not Present. Project site is in the Valley floor and does not contain the supporting nesting habitat.

Species	Status <sup>1</sup>	Habitat <sup>1</sup>	Potential for Occurrence
Grasshopper Sparrow <i>Ammodramus savannarum</i>	CSC	Occurs in dry, dense grasslands, especially those with a variety of grasses and tall forbs and scattered shrubs for singing perches. Builds nest of grasses and forbs in a slight depression in ground, hidden at base of an overhanging clump of grasses or forbs. Listed for loss of nesting/breeding habitat.	Not Present. Wildlife management within the AOA eliminates potential nesting habitat. Lands surrounding the airport are all active in various agricultural farming practices which eliminate potential nesting habitat.
Great Blue Heron <i>Ardea herodias</i>	SA	Associated with estuaries, rivers, and oceans, the species is known to occur along major rivers in the Central Valley. A colonial nester, the species prefers tall trees beside water. The range is restricted to within 10 miles of the nesting area. Listed for the protection of nesting colonies.	Low Potential. The Sacramento River provides suitable habitat, but there are no known occurrences within two miles, nor will the project directly impact potential nesting habitat.
Great Egret <i>Ardea alba</i>	SA	Associated with estuaries, rivers, and oceans, the species is known to occur along major rivers in the Central Valley. A colonial nester, the species prefers cliffs, rugged slopes, or tall trees beside water. Listed for the protection of nesting colonies.	Low Potential. There is a recorded observance from 1989, but there are no other occurrences in the vicinity. There is marginal habitat north of Elverta Road.
Greater Sandhill Crane <i>Grus canadensis tabida</i>	ST	Listed for both nesting and wintering habitat, the species prefers open shortgrass plains, grain fields, and open wetlands for foraging, and typically nests within remote portions of extensive wetlands. The species does not nest in Sacramento County, but does winter in the County.	Low Potential. In Sacramento County, wintering populations are typically observed within the Cosumnes River floodplain, in areas of the Delta, and at the Stone Lakes National Wildlife Refuge. There are no known occurrences within a five-mile radius and are likely not present around the airport due to their sensitivity to humans.

Species	Status <sup>1</sup>	Habitat <sup>1</sup>	Potential for Occurrence
Loggerhead Shrike <i>Lanius ludovicianus</i>	CSC	Listed for loss of breeding habitat, the species places nests in large shrubs or trees. Breed mainly in shrublands or open woodlands with a fair amount of grass cover and areas of bare ground.	Moderate Potential. The land surrounding the airport provide suitable nesting and foraging habitat. The species has been observed at the airport in the past.
Northern Harrier <i>Circus cyaneus</i>	CSC	Frequents meadows, grasslands, open rangelands, desert sinks, and fresh and saltwater emergent wetlands. Harriers nest on the ground, mostly within patches of dense, often tall, vegetation in undisturbed areas. The species is listed for nesting.	Moderate Potential. The species has not been observed within the Airport Operations Area; however, suitable habitat is present north of Elverta Road and south of I-5.
Snowy Egret <i>Egretta thula</i>	SA	Listed for the protection of nesting colonies, the species is common in the Central Valley all year. Colonies will nest on either the ground, in marsh habitat, or at very low heights within trees (5 – 10 feet from the ground). Breeding season is from late April to late August.	Low Potential. There is a recorded observance from 1989, but there are no other occurrences in the vicinity. There is marginal habitat north of Elverta Road.
Swainson's Hawk <i>Buteo swainsoni</i>	ST	Breeds in stands with few trees in juniper-sage flats, riparian areas, and oak savannah. Requires adjacent suitable foraging areas such as grasslands or grain fields supporting rodent populations.	Present. Swainson's hawk are known to nest and forage within airport property.
Tricolored Blackbird <i>Agelaius tricolor</i>	ST	The species is listed for breeding habitat. Known to nest near marshes in large (several hundred to several thousand birds) breeding colonies in habitat made up of blackberry thickets, bulrush ( <i>Scirpus</i> sp.) or cattails ( <i>Typha</i> sp.) patches.	Moderate Potential. There are no known occurrences within the airport operations area, however, there is suitable habitat present within Himalayan blackberry shrubs north of Elverta Road.



Species	Status <sup>1</sup>	Habitat <sup>1</sup>	Potential for Occurrence
Western Yellow-Billed Cuckoo	FE (state candidate)	Inhabits extensive deciduous riparian thickets or forests with dense, low-level or understory foliage, and which abut on slow-moving watercourses, backwaters, or seeps.	Not Present. This segment of the Sacramento River is not within the species critical habitat. There is no suitable habitat present on airport property.
White-Tailed Kite <i>Elanus leucurus</i>	CFP, SA	Inhabit low-elevation grasslands, wetlands dominated by grasses, oak woodlands, and agricultural and riparian areas. The species is listed for nesting.	Moderate Potential. There is suitable habitat along the Sacramento River.
<b>MAMMALS</b>			
Pallid Bat <i>Antrozous pallidus</i>	CSC	A wide variety of habitats is occupied, including grasslands, shrublands, woodlands, and forests from sea level up through mixed conifer forests. Day roosts are in caves, crevices, mines, and occasionally in hollow trees and buildings. Maternity colonies form in early April, and may have a dozen to 100 individuals.	Low Potential. Suitable habitat exists along the Sacramento River 0.5-1.5 miles to the west and south.
Western Red Bat <i>Lasiurus blossevillii</i>	CSC	Roosting habitat includes forests and woodlands from sea level up through mixed conifer forests. Feeds over a wide variety of habitats including grasslands, shrublands, open woodlands and forests, and croplands. Young are born from May through early July.	Low Potential. Suitable habitat exists along the Sacramento River 0.5-1.5 miles to the west and south.
Yuma Myotis Bat <i>Myotis yumanensis</i>	SA	Optimal habitats are open forests and woodlands with sources of water over which to feed, but it is found in a variety of habitats. The species roosts in buildings, mines, caves, or crevices. Young are born from May to mid-June.	Low Potential. Suitable habitat exists along the Sacramento River 0.5-1.5 miles to the west and south.

Species	Status <sup>1</sup>	Habitat <sup>1</sup>	Potential for Occurrence
<b>REPTILES</b>			
Giant Garter Snake <i>Thamnophis gigas</i>	FT, ST	Endemic to valley floors of the Sacramento and San Joaquin Valleys. Prefers freshwater marsh and low gradient streams. Has adapted to rice agriculture, drainage channels, and irrigation ditches. Requires permanent water, emergent vegetation, and upland habitat for basking and cover.	Present. Occurrence have been observed all over the Natomas Basin. Suitable habitat is present on-site.
Western Pond Turtle <i>Emys marmorata</i>	CSC	Occurs in perennial ponds, lakes, rivers, and streams with suitable basking habitat (mud banks, mats of floating vegetation, partially submerged logs) and submerged shelter. Require some slack- or slow-water aquatic habitat. Nests upland, on unshaded south-facing slopes with friable soils that have a high percentage of clay or silt.	Moderate Potential. Western pond turtles are known to inhabit the Sacramento River and there is a direct connection to the river via the drainage channel north of Elverta Road. The nearest known occurrence is 0.5 miles to the west along the Sacramento River, #1216 documented in 2009.
<b>AMPHIBIANS</b>			
California Tiger Salamander <i>Ambystoma californiense</i>	FT, ST	Endemic to annual grasslands and valley-foothill habitats in California. Adults spend most time in subterranean refugia, particularly in ground squirrel burrows. Seasonal ponds or vernal pools are required for breeding.	Not Present. Project site is outside of species known range within the Sacramento Valley.
California Red-Legged Frog <i>Rana draytonii</i>	FT, CSC	Adults prefer dense, shrubby or emergent riparian vegetation near deep (at least two feet), still, or slow-moving water. The species aestivate in upland burrows and in leaf litter.	Not Present. The nearest confirmed, documented breeding population is located near Pollock Pines in El Dorado County (CNDDDB occurrence 586). There are no occurrences documented in Sacramento County, and the species is considered extirpated in the Central Valley (USFWS, Recovery Plan for the California Red-legged Frog, 2002).

Species	Status <sup>1</sup>	Habitat <sup>1</sup>	Potential for Occurrence
Western Spadefoot Toad <i>Scaphiopus (Spea) hammondi</i>	CSC	Occurs primarily in grasslands but occasionally populates valley-foothill hardwood woodlands. Almost entirely terrestrial, but requires temporary rain pools that lack predators (fish, bullfrogs, crayfish) for breeding. Also needs burrows for refuge.	Not Present. Suitable breeding habitat is not present on the project site.
<b>FISH</b>			
Central Valley Spring-Run Chinook Salmon <i>Oncorhynchus tshawytscha</i>	ST, FT	Distribution occurs throughout the Sacramento River and through a portion of the American River, but the distribution maps do not include the Cosumnes River as habitat. (NMFS 2009) State listing is for runs in the Sacramento River, specifically. Federal listing is for the Sacramento River and its tributaries.	Not Present. Species is limited to the Sacramento River. Any stormwater runoff from the airport is confined to local canals and drainage ditches before it released in to the Sacramento River, which provides time for pollutant and sediments to filter out.
Central Valley Winter-Run Chinook Salmon <i>Oncorhynchus tshawytscha</i>	SE, FE	Distribution as above for spring-run salmon. Federal listing is for the Sacramento River, specifically. The state-listing application is unspecified.	Not Present. Species is limited to the Sacramento River. Any stormwater runoff from the airport is confined to local canals and drainage ditches before it released in to the Sacramento River, which provides time for pollutant and sediments to filter out.
Central Valley Steelhead <i>Oncorhynchus mykiss</i>	FT	Most of Sacramento County is within the distinct population segment area for this species. Critical habitat has been designated within Sacramento County on the Sacramento River, American River, Mokelumne River, and Dry Creek (both north and south creeks). Spawning has been documented on the Cosumnes River. (NMFS 2009) The listing applies to the Sacramento and San Joaquin Rivers and their tributaries.	Not Present. Species is limited to the Sacramento River. Any stormwater runoff from the airport is confined to local canals and drainage ditches before it is released in to the Sacramento River, which provides time for pollutants and sediments to filter out.

Species	Status <sup>1</sup>	Habitat <sup>1</sup>	Potential for Occurrence
Delta Smelt <i>Hypomesus transpacificus</i>	FT, SE	The delta smelt is a small, slender-bodied fish with a typical adult size of two to three inches that is found only in the Sacramento-San Joaquin Estuary. This species occurs in the Sacramento River as far upstream as the confluence with the American River. Delta smelt may also be found in the Cosumnes River and San Joaquin River.	Not Present. Species is limited to the Sacramento River. Any stormwater runoff from the airport is confined to local canals and drainage ditches before it is released in to the Sacramento River, which provides time for pollutants and sediments to filter out.
Green Sturgeon <i>Acipenser medirostris</i>	FT	Distribution occurs within the San Francisco Bay System, which includes the Delta. The species enters the Sacramento River to spawn, and has been observed as far north as Red Bluff. Spawning occurs from March to July.	Not Present. Species is limited to the Sacramento River. Any stormwater runoff from the airport is confined to local canals and drainage ditches before it is released in to the Sacramento River, which provides time for pollutants and sediments to filter out.
Longfin Smelt <i>Spirinchus thaleichthys</i>	ST	Distribution includes the Sacramento River below Rio Vista, and in the middle and lower Delta (below Medford Island).	Not Present. The species occurs in portions of the Sacramento River and the Delta which are not within Sacramento County.
Sacramento Splittail <i>Pogonichthys macrolepidotus</i>	CSC	The species prefers low-salinity, shallow-water habitat. The species is primarily found in the Delta, and are only rarely found in the main Sacramento River channel unless spawning. Spawning may occur in the Sacramento River below the Feather River confluence, and runs from late January through July.	Not Present. Species is limited to the Sacramento River. Any stormwater runoff from the airport is confined to local canals and drainage ditches before it is released in to the Sacramento River, which provides time for pollutants and sediments to filter out.

Species	Status <sup>1</sup>	Habitat <sup>1</sup>	Potential for Occurrence
<b>INVERTEBRATES</b>			
Valley Elderberry Longhorn Beetle <i>Desmocerus californicus dimorphus</i>	FT	Associated with mature elderberry ( <i>Sambucus</i> spp.) trees/shrubs found in riparian forests in the Central Valley (USFWS, 1999).	Low Potential. There are known elderberry shrubs along the Sacramento River, known populations of VELB have been recorded to the south and west of the airport. There is a direct connection to the riparian vegetation north of Elverta Road; however, no project facilities are proposed near this area.
Vernal Pool Fairy Shrimp <i>Branchinecta lynchi</i>	FT	Inhabit alkaline pools, ephemeral drainages, rock outcrop pools, ditches, stream oxbows, stockponds, vernal pools, vernal swales, and other seasonal wetlands. Also found in basalt flow depression pools in unplowed grasslands. <sup>2</sup>	Not Present. There are no vernal pools within the project area nor are there any known occurrences within the project vicinity.
Vernal Pool Tadpole Shrimp <i>Lepidurus packardii</i>	FE	Inhabits small to large vernal pools containing clear to highly turbid water. <sup>2</sup>	Not Present. There are no vernal pools within the project area.
<b>PLANTS</b>			
Sanford's Arrowhead <i>Sagittaria sanfordii</i>	List 1B	Marshes and swamps; elevation 0 – 2,000 ft (blooms May – Oct.)	Low Potential. The marsh area located north of Elverta Road does provide suitable habitat, but there are no known occurrences and recent surveys by Dudek did not observe any.
Suisun Marsh Aster <i>Aster lentus</i>	List 1B	Marshes and swamps; elevation 0 – 10 ft (blooms May – Nov.) In Sacramento County, found only in the Delta.	Low Potential. The marsh area located north of Elverta Road does provide suitable habitat, but there are no known occurrences and recent surveys by Dudek did not observe any.

Relevant species compiled from the California Dept. of Fish and Wildlife Natural Diversity Data Base (2020) and the U.S. Fish and Wildlife Species List for the Project Boundary

1. Listing status sources and, unless otherwise specified, habitat description sources (life history accounts) are:

California Species: <https://wildlife.ca.gov/Conservation/SSC> for the general webpage where you can use the links, or use the “search” field in the upper right-hand corner – for instance, enter “American Badger life history” – to obtain life history accounts. Most Bird Accounts are <https://wildlife.ca.gov/Conservation/SSC/Birds>, most Mammal Accounts are <https://wildlife.ca.gov/Conservation/SSC/Mammals>, most Fish Accounts are <https://wildlife.ca.gov/Conservation/SSC/Fishes>, and most reptile and amphibian accounts are <https://wildlife.ca.gov/Conservation/SSC/Amphibians-Reptiles> Last accessed October 20, 2020.

Federal Species: [https://www.fws.gov/sacramento/es\\_species/Accounts/](https://www.fws.gov/sacramento/es_species/Accounts/) Last accessed January 17, 2019.

California Native Plant Society: <http://www.rareplants.cnps.org/> Last accessed October 20, 2020.

2. United States Fish and Wildlife Service, “Recovery Plan for Vernal Pool Ecosystems of California and Southern Oregon”, December 2005.

FE = Federal Endangered; FT = Federal Threatened; FC = Federal Candidate

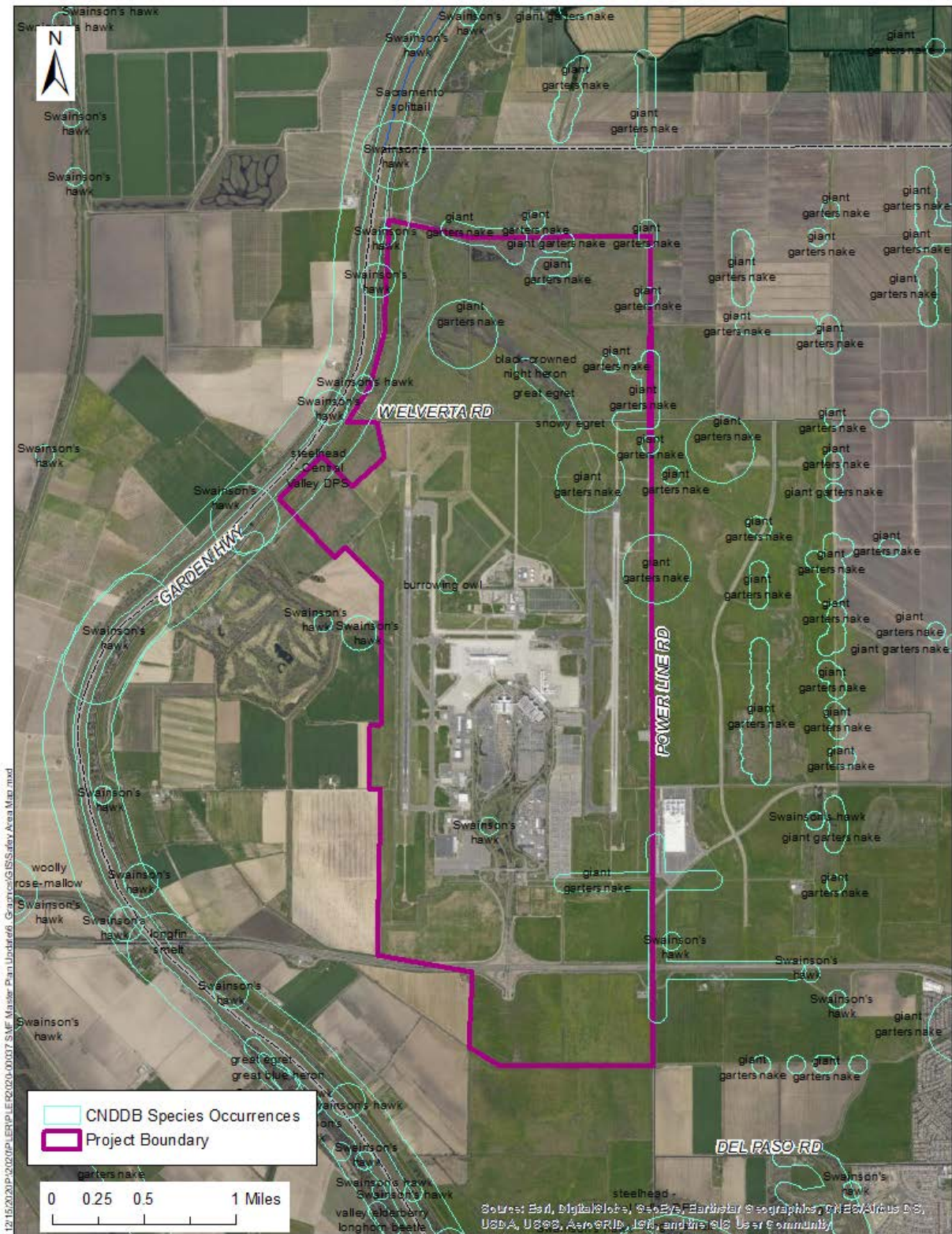
Species	Status <sup>1</sup>	Habitat <sup>1</sup>	Potential for Occurrence
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SE = State of California Endangered; ST = State of California Threatened; CSC = State of California Species of Special Concern; CFP = State of California Fully Protected; SA = Special Animal

List 1B = California Native Plant Society Endangered, Threatened, or Rare in California

List 2 = California Native Plant Society Endangered, Threatened, or Rare in California but more common elsewhere

# Plate BR-5: CNDDB Occurrence Map



## *BIRDS*

Based on the species table and types of habitat present on or near the project site, the following special status avian species have been identified as having potential to occur on or near the project site: burrowing owl, Cooper's hawk, Swainson's hawk, northern harrier, and white-tailed kite. This section also addresses nesting raptors and migratory birds in general, which are afforded minimum protections pursuant to the California Fish and Game Code or the MBTA regardless of status.

### **SWAINSON'S HAWK**

The Swainson's hawk (*Buteo swainsoni*) is listed as a threatened species by the State of California and is a candidate for federal listing as threatened or endangered. It is a migratory raptor typically nesting in or near valley floor riparian habitats during spring and summer months. Swainson's hawks were once common throughout the state, but various habitat changes, including the loss of nesting habitat (trees) and the loss of foraging habitat through the conversion of native Central Valley grasslands to certain incompatible agricultural and urban uses has caused an estimated 90% decline in their population.

Swainson's hawks feed primarily upon small mammals, birds, and insects. Their typical foraging habitat includes native grasslands, alfalfa, and other hay crops that provide suitable habitat for small mammals. Certain other row crops and open habitats also provide some foraging habitat. The availability of productive foraging habitat near a Swainson's hawk's nest site is a critical requirement for nesting and fledgling success. In central California, about 85% of Swainson's hawk nests are within riparian forest or remnant riparian trees. CEQA analysis of impacts to Swainson's hawks consists of separate analyses of impacts to nesting habitat and foraging habitat.

The CEQA analysis provides a means to ascertain impacts to the Swainson's hawk. When the analysis identifies impacts, mitigation measures are established that will reduce impacts to the species to a less than significant level. Project proponents are cautioned that the mitigation measures are designed to reduce impacts and do not constitute an incidental take permit under the CESA. Anyone who directly or incidentally takes a Swainson's hawk, even when in compliance with mitigation measures established pursuant to CEQA, may violate the CESA.

### ***NESTING HABITAT IMPACT METHODOLOGY***

For determining impacts to and establishing mitigation for nesting Swainson's hawks in Sacramento County, CDFW recommends utilizing the methodology set forth in the Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley (Swainson's Hawk TAC 2000). The document recommends that surveys be conducted for the two survey periods immediately prior to the *start of construction*. The five survey periods are defined by the timing of migration, courtship, and nesting in a typical year (refer to Table BR-4). Surveys should extend a ½-mile radius around all project activities, and if active nesting is identified, CDFW should be contacted.



**Table BR-4: Recommended Survey Periods for Swainson’s Hawk (TAC 2000)**

Period #	Timeframe	# of surveys required	Notes
I.	Jan. 1 – Mar. 20	1	Optional, but recommended
II.	Mar. 20 – Apr. 5	3	
III.	Apr. 5 – Apr. 20	3	
IV.	Apr. 21 – June 10	N/A	Initiating surveys is not recommended during this period
V.	June 10 – July 30	3	

For example, if a project is scheduled to begin on June 20, three surveys should be completed in Period III and three surveys in Period V, as surveys should not be initiated in Period IV. It is always recommended that surveys be completed in Periods II, III and V.

#### ***FORAGING HABITAT IMPACT METHODOLOGY***

Swainson’s hawks are known to forage up to 18 miles from their nest site; however, that is the extreme range of one individual bird’s daily movement. It is more common for a Swainson’s hawk to forage within 10 miles of its nest-site. Therefore it is generally accepted and CDFW recommends evaluating projects for foraging habitat impacts when they are within 10 miles of a known nest site. Virtually all of Sacramento County is within 10 miles of a known nest.

Statewide, CDFW recommends implementing the measures set forth in the CDFW Staff Report Regarding Mitigation for Impacts to Swainson’s Hawks (*Buteo swainsoni*) in the Central Valley of California (November 1, 1994) for determining impacts to Swainson’s hawk foraging habitat unless local jurisdictions develop an individualized methodology designed specifically for their location. Sacramento County has developed such a methodology and received confirmation from CDFW in May of 2006 that the methodology is a better fit for unincorporated Sacramento County and should replace the statewide, generalized methodology for determining impacts to foraging habitat.

Swainson’s hawk foraging habitat value is greater in large expansive open space and agricultural areas than in areas which have been fragmented by agricultural-residential or urban development. The methodology for unincorporated Sacramento County is based on the concept that impacts to Swainson’s hawk foraging habitat occur as properties develop to increasingly more intensive uses on smaller minimum parcel sizes. As part of methodology development, County and CDFW staff analyzed aerial photography of the County and compared this to the underlying zoning. It was

determined that there was a strong correlation in most areas between the presence of suitable habitat and zoning for large agricultural parcels, and conversely that areas zoned for agricultural-residential or more dense uses tended to have fragmented or absent habitat. Therefore, the methodology relies mainly on the minimum parcel size allowed by zoning to determine habitat value. Exceptions include Rio Linda/Elverta and the Rancho Murieta areas, in which this methodology does not apply because there are very large parcels with high-quality habitat which are zoned A-2 or similar. Though there may be individual properties, which do not follow the observed regional trend, it was concluded that adherence to this methodology would result in adequate cumulative mitigation for the species.

For the purpose of the methodology, properties with zoning of AG-40 and larger are assumed to maintain 100% of their foraging habitat value and properties with AR-5 zoning and smaller are assumed to have lost all foraging habitat value. Table BR-5, below, illustrates the continuum between AG-40 and AR-5 that represents the partial loss of habitat value that occurs with fragmentation of large agricultural landholdings. The large, 50% loss of habitat value between AG-20 and AR-10 is due to the change in land use from general agriculture to agricultural-residential. The methodology does allow case-by-case analysis for projects with unique characteristics.

**Table BR-5: Swainson’s Hawk Foraging Habitat Value by Zoning Category**

Zoning Category	Habitat Value Remaining
AG-40 and above (e.g., AG-80, 160 etc.)	100%
AG-20	75%
AR-10	25%
AR-5 and smaller (e.g., AR-2, 1 or RD-5, 7, 10, 15, 20 etc.)	0%

***SWAINSON’S HAWK IMPACT MITIGATION PROGRAM***

In 1997, in response to the need to mitigate for the loss of Swainson’s hawk foraging habitat in Sacramento County, the Board of Supervisors adopted an ordinance that established a Swainson’s Hawk Impact Mitigation Program (Chapter 16.130 of the Sacramento County Code). The Program has been amended several times; the latest amendment went into effect in December of 2009.

By adopting the Program, the Board of Supervisors found that “the most effective means of mitigation for the loss of suitable Swainson’s hawk foraging habitat is the direct preservation, in perpetuity, of equally suitable foraging habitat on an acre-per-acre basis based on the project’s determined acreage impact”. On an individual basis, the acquisition of lands for habitat conservation may not always be feasible or prudent and many small, disconnected preserves do not benefit the species as well as large, connected preserve systems. Therefore, the ordinance provides for the establishment of impact mitigation fees, which in some circumstances, may be paid in lieu of providing habitat lands. These fees accumulate and are held in trust by the County until used for the acquisition of foraging habitat of a size large enough to be biologically and

economically viable. The current fee is \$12,925 per acre. In addition, there is a one-time administrative fee of \$500. These fees may be amended from time to time to ensure they accurately reflect market-rate land prices.

Under the Swainson's Hawk Impact Mitigation Program, only projects which have an impact of less than 40 acres are eligible to pay fees. Projects impacting 40 acres or more of foraging habitat must provide land acceptable to CDFW and the County. Land can be provided in fee title or through conservation easement. The Sacramento County Office of Planning and Environmental Review (Planning) administers the Swainson's Hawk Impact Mitigation Program and more information on lands likely to be determined as acceptable replacement habitat can be found at their website [Swainson's Hawk Ordinance \(sccounty.net\)](http://sccounty.net).

### **SWAINSON'S HAWK PROJECT IMPACTS**

#### **NESTING**

There are historic nesting sites within the Airport boundary and adjacent to the Sacramento River. As presented in the Biological Resources Assessment, biologists conducted a total of nine surveys for nesting Swainson's hawks within one-half mile of the biological study area. Surveys were completed consistent with the 2000 Technical Advisory Committee (TAC) recommendations. Swainson's hawks were observed along Elverta Road (foraging and nesting) and north of the proposed northern commercial area. Hawks were also observed in the trees along the south side of I-5, in the area identified for commercial development.

Since there are Swainson's hawk nests within or adjacent to Airport property, nesting surveys will be required consistent with the TAC 2000 recommendations prior to new construction associated with the proposed Master Plan facilities. The purpose of the survey requirement is to ensure that construction activities do not agitate nesting hawks, potentially resulting in nest abandonment or other harm to nesting success. If Swainson's hawk nests are found, the developer is required to contact CDFW to determine what measures need to be implemented in order to ensure that nesting hawks remain undisturbed. The measures selected will depend on many variables, including the distance of activities from the nest, the types of activities, and whether the landform between the nest and activities provides any kind of natural screening. According to the Staff Report Regarding Mitigation for Impacts to Swainson's Hawks (*Buteo swainsoni*) in the Central Valley of California (November 1, 1994), the mitigation described above will ensure that impacts to nesting Swainson's hawk will be ***less than significant***.

#### **FORAGING**

There is grassland within the broader AOA (including the area from I-5 north to Elverta Road and in-between the runways); however, it is actively managed to discourage wildlife to reduce possible bird strikes and therefore is not considered suitable foraging habitat. The open grassland/agricultural land north of Elverta Road and South of I-5 is suitable foraging habitat and remains so until the proposed development is constructed.

The prior EIR evaluated foraging impacts to lands south of I-5. The County's methodology was applied and impacts were determined for Phase 1 (economy parking lot - 111 acres) and Phase 2 (commercial development - 79 acres). The EIR concluded that a total of 142.5 acres would be impacted (applying the 75% remaining habitat value according to the methodology); however, the adopted Mitigation Measure, BR-11, required preservation of 190 acres of foraging habitat. The mitigation was completed in December 2014 with a recordation of a Declaration of Covenants and Restrictions on 495 acres of County owned land south of I-5 adjacent to the Sacramento River. Of the 495 acres, 490 are suitable foraging habitat. The Covenants and Restrictions include the Swainson's Hawk Foraging Mitigation Plan prepared by County Airports (2008) and mitigates for both the 1992 East Terminal Project mitigation requirement of 270<sup>3</sup> acres and the 2007 Mitigation Measure BR-11 of 190 acres. In addition, the solar field construction project added 7.5 acres to the impacted acreages. As of this date, there is a surplus of 22.5 acres of protected foraging habitat.

The prior EIR only assessed impacts to foraging habitat for Phase 1 and 2. Therefore, only a portion of the land south of I-5 was assessed and no land north of Elverta Road was evaluated for impacts to Swainson's hawk foraging impacts. Even though land within the Airport Master Plan is not required to be rezoned for the proposed commercial development, the land will be developed with urban uses and will permanently remove foraging habitat for Swainson's hawk. Applying the County's methodology, all land north of Elverta Road is zoned AG-80 and retains 100% of its habitat value. A total of 135 acres are proposed for commercial development north of Elverta Road and will require 100% or 1:1 mitigation for impacts to Swainson's hawk foraging habitat.

Since the area south of I-5 has not been constructed, and PAL 4 is no longer within the scope of this analysis, it is reasonable to transfer the 190 acres mitigated through mitigation measure BR-11 and apply it to the area north of Elverta Road if such development occurs first. Regardless, the total surplus of County-owned Swainson's hawk mitigation land (22.5 acres) could be applied towards the commercial development north of Elverta Road (PAL 3). Prior to commercial development north of Elverta Road (PAL 3), a total of 135 acres of foraging habitat will require mitigation. Since the project is impacting over 40 acres, the County's Swainson's Hawk Impact Mitigation Program cannot be used. Mitigation can be accomplished by transferring current mitigation acres applied to south of I-5 or implementing a mitigation plan acceptable to CDFW and the County. Mitigation should take place within the Natomas Basin, preferably contiguous with other preserve lands. Mitigation Measure BR-3 that compensates for the loss of Swainson's hawk foraging habitat will reduce singular and cumulative impacts to ***less than significant levels***.

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<sup>3</sup> Airports mitigated for the 270 acres on a single parcel south of I-5, but was located within the 10,000 foot FAA-designated Safety zone and is no longer able to serve as mitigation land pursuant to FAA policies.

## **NESTING RAPTORS**

Raptors are defined as members of the order Falconiformes (vultures, eagles, hawks, and falcons) and the order Strigiformes (owls). Common species of raptors found locally include Cooper's hawk (*Accipiter cooperii*) red-tailed hawk (*Buteo jamaicensis*), red-shouldered hawk (*Buteo lineatus*), American kestrel (*Falco sparverius*), Northern Harrier (*Circus cyaneus*), barn owl (*Tyto alba*), and great horned owl (*Bubo virginianus*).

Raptors and their active nests are protected by the California Fish and Game Code Sections 3503.5, 3511, and 3513. The Code states the following: "It is unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird." Because most raptors migrate they are also protected by the Federal Migratory Bird Treaty Act of 1918, which states "unless and except as permitted by regulations, it shall be unlawful at any time, by any means or in any manner, to pursue, hunt, take, capture, kill, attempt to take, capture, or kill" a migratory bird. Section 3(18) of the Federal Endangered Species Act defines the term "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. Causing a bird to abandon an active nest may cause harm to egg(s) or chick(s) and is therefore considered "take."

The project area predominantly contains open agricultural field, riverine woodlands, and open urban development. Mature trees of sufficient size to support tree-nesting raptors are located along the Sacramento River and scattered along the ditches and canals traversing the Basin. Raptors, in general, build nests in large mature trees; though there are some ground-nesting species such as the northern harrier and the burrowing owl (refer to species-specific discussions, below).

Since the project area may provide suitable tree or ground-nesting habitat, particularly north of Elverta Road south of I-5, construction activities may impact nesting raptors if they occur within 500 feet of suitable nesting trees; 500 feet is the buffer used by Sacramento County and other nearby jurisdictions as a screening tool, and has been accepted by CDFW. To avoid impacts to tree-nesting raptors, mitigation is recommended requiring pre-construction nesting surveys. The purpose of the survey requirement is to ensure that construction activities do not agitate nesting raptors, potentially resulting in nest abandonment or other harm to nesting success. If raptor nests are found, the applicant is required to contact CDFW to determine what measures need to be implemented in order to ensure that nesting raptors remain undisturbed. The measures selected will depend on many variables, including the distance of activities from the nest, the types of activities, whether the landform or built environment between the nest and activities provides any kind of natural screening, and other variables.

If no nesting raptors are observed, no further mitigation will be required. For this project, construction activities associated with building construction may take place over multiple years and likewise every time the field training area is rotated, nesting surveys will need to be completed.

With implementation of recommended Mitigation Measure BR-4, impacts to nesting raptors are ***less than significant***.

### **WESTERN BURROWING OWL**

According to the CDFW life history account for the species, burrowing owl (*Athene cunicularia*) habitat can be found in annual and perennial grasslands, deserts, and arid scrublands characterized by low-growing vegetation. Burrows are the essential component of burrowing owl habitat. Both natural and artificial burrows provide protection, shelter, and nesting sites for burrowing owls. Burrowing owls typically use burrows made by fossorial mammals, such as ground squirrels or badgers, but also use human-made structures such as cement culverts; cement, asphalt, or wood debris piles; or openings beneath cement or asphalt pavement. Burrowing owls are listed as a California Species of Special Concern due to loss of breeding habitat.

Burrowing owls may use a site for breeding, wintering, foraging, and/or migration stopovers. Breeding season is generally defined as spanning February 1 to August 31 and wintering from September 1 to January 31. Occupancy of suitable burrowing owl habitat can be verified at a site by detecting a burrowing owl, its molted feathers, cast pellets, prey remains, eggshell fragments, or excrement at or near a burrow entrance. Burrowing owls exhibit high site fidelity, reusing burrows year after year.

According to the CDFW “Staff Report on Burrowing Owl Mitigation” (March 2012), surveys for burrowing owl should be conducted whenever suitable habitat is present within 500 feet of a proposed impact area; this is also consistent with the “Burrowing Owl Survey Protocol and Mitigation Guidelines” published by The California Burrowing Owl Consortium (April 1993). Occupancy of burrowing owl habitat is confirmed whenever one burrowing owl or burrowing owl sign has been observed at a burrow within the last three years.

The CDFW Staff Report on Burrowing Owl Mitigation indicates that the impact assessments should address the factors which could impact owls, the type and duration of disturbance, the timing and duration of the impact, and the significance of the impacts. The assessment should also take into account existing conditions, such as the visibility and likely sensitivity of the owls in question with respect to the disturbance area and any other environmental factors which may influence the degree to which an owl may be impacted (e.g. the availability of suitable habitat).

Burrowing owls are known to use airport property between Elverta Road and Interstate 5. Past occurrences have been reported in the CNDDDB, most recently one pair was recorded in 2006 along an irrigation canal in the northern portion of the AOA. One owl was observed during a field reconnaissance survey on February 22, 2006 along the Airport East Ditch.

Burrowing owls surveys were completed for the area covered by the Biological Resources Assessment prepared by Dudek. Numerous burrows were observed throughout the study area and follow-up surveys were conducted during the owls’ active time (6am to 10am) in June and July 2020. Owls were not observed, nor was there

evidence of owls (pellets, whitewash, feathers) around these burrows. The biologist further consulted with SCDA wildlife management staff inquiring if there have been owl sightings recently. SCDA staff confirmed that owls have not been observed and the AOA is actively managed to discourage wildlife use. The surveys completed only cover a small portion of SCDA property and are only valid for a short timeframe; however, it does assist in determining the potential for the species to be present. It is clear that habitat does exist within SCDA property, further, proposed development will occur over 20 years and suitable habitat or species location could change. Therefore, the adopted mitigation in the prior EIR is still applicable to this project, but it has been updated to reflect current survey methods. Implementation of mitigation measure BR-5 will ensure impacts are ***less than significant***.

### **WHITE-TAILED KITE**

The white-tailed kite is a resident of coastal and valley lowlands, foraging near agricultural fields, grasslands, meadows, and emergent wetlands. Kites soar or hover about 100 feet from the ground in search of prey. They slowly descend vertically on prey with wings outstretched. Prey includes small rodents, occasionally some small birds, reptiles, amphibians, and insects. Kites construct nests of loosely piled sticks in the tops of dense oak or willow trees near foraging areas.

The project study area includes habitat types that are suitable for foraging and nesting white-tailed kites. These habitat types consist of agricultural fields and freshwater marshland. Nesting habitat includes riparian trees found north of Elverta Road and oak woodland found along the Sacramento River. The nearest nesting occurrence reported in the CNDDDB was in 2002 approximately 5.5 miles east of the project study area along the railroad tracks in a valley oak tree.

Construction of the proposed commercial development will result in the loss of foraging habitat for white-tailed kite which will be a significant impact. The white-tailed kite foraging habitat requirements overlap with Swainson's hawk foraging habitat requirements; therefore, implementation of mitigation measures for the loss of Swainson's hawk foraging habitat will reduce the impact to white-tailed kite foraging habitat to ***less than significant***. Consequently, no specific mitigation will be required for the white-tailed kite.

### **LOGGERHEAD SHRIKE**

According to the CDFW Life History Account for the loggerhead shrike (*Lanius ludovicianus*), it is a resident of much of California's lowlands and foothills, and has a breeding range that extends from southern Canada to southern Mexico. The shrike feeds mostly on large insects, but will feed occasionally on small mammals, reptiles, fish, and crustaceans. Foraging habitat includes open areas with sparse shrubs and trees for perching. Loggerhead shrikes prefer open habitat characterized by grasses interspersed with shrubs or low trees, although they occur in a wide variety of habitats such as prairies, grazed grasslands, fencerows of agricultural fields, riparian areas, open woodlands, suburban areas, mowed roadsides, and golf courses. They prefer edge habitat and frequently nest along roadsides and hedgerows in agricultural areas. They prefer tree species with thorns on which they impale their prey. The bird is very

territorial through the non-breeding season defending its foraging and perching areas. The loggerhead shrike nests from March to August building its nest in well-concealed brush or trees. The species is listed as a California Species of Special Concern due to loss of nesting habitat.

Open wooded areas on the north and west side of the airport and agricultural fields provide suitable foraging habitat for the loggerhead shrike and the species has been observed on airport property. Construction of the commercial development will result in the loss of foraging habitat for loggerhead shrike which will be a significant impact. The loggerhead shrike foraging habitat requirements overlap with Swainson's hawk foraging habitat requirements; therefore, implementation of mitigation measures for the loss of Swainson's hawk foraging habitat will reduce the impact to loggerhead shrike foraging habitat to **less than significant**. Consequently, no specific mitigation will be required for the loggerhead shrike.

### **TRICOLORED BLACKBIRD**

The tricolored blackbird (*Agelaius tricolor*) is protected under the California Fish and Game Code (Sections 3503 and 3800). In March of 2019 tricolored blackbird was listed as a State threatened species under the California Endangered Species Act.

Reasons for decline of tricolored blackbird populations include loss of nesting and foraging habitat. According to the CDFW Life History Account for the tricolored blackbird (*Agelaius tricolor*), the species is mostly a resident in California, and common locally throughout the Central Valley. The species is a colonial nester which breeds near fresh water, preferably in emergent wetland with tall, dense cattails or tules, but also in thickets of willow, blackberry, wild rose, and tall herbs. Nesting colonies usually support a minimum of 50 pairs. The species feeds in grassland and cropland habitats. The usual breeding season is mid-April into late July.

The project study area includes freshwater marsh areas, ditches, and grassy areas that are suitable for foraging tricolored blackbirds. Freshwater marsh north of Elverta Road offers suitable nesting habitat, and ditches and canals that have not been recently cleared of cattails and tules also provide potential nesting habitat for this species.

No tricolored blackbirds have been observed during biological field surveys of the project study area and the nearest known CNDDDB occurrence is located 2.5 miles east of the project study area where the species was observed in 1992 nesting in willows along an irrigation ditch adjacent to rice fields. There is suitable habitat for nesting north of Elverta Road and large numbers of red-winged blackbirds (*Agelaius phoeniceus*) were observed north of Elverta Road during field surveys conducted by Mr. Jason Pearson of URS Corporation in January 2007. Because tricolored and red-winged blackbirds share similar nesting habitat, it is possible that tricolored blackbirds could use the blackberry patches and willows growing along ditches and swales north of the existing alignment of Elverta Road.

The large swaths of riparian and marsh habitats north of Elverta Road will not be directly impacted by the proposed commercial development identified in PAL 3;



however, construction noise and removal of patches of tules and blackberries growing in the drainage ditches may result in the disturbance to, or loss of suitable nesting for tricolored blackbirds. This is a potentially significant impact.

In order to reduce potential impacts to nesting tricolored blackbirds, mitigation measures have been included. Equipment operation and noise associated with construction activities may disturb nesting birds. If construction activities are proposed during the breeding season (March 1 through July 31) pre-construction surveys shall be conducted where suitable nesting habitat is present within 300 feet of the Project site. If tricolored blackbirds are found nesting within 300 feet of the survey area, the California Department of Fish and Wildlife shall be contacted and appropriate avoidance and impact minimization measures shall be implemented. This may include establishing a buffer or postponing construction until fledging of all nestlings (about July 31). Specific measures cannot be outlined at this time, because the extent and type of measures required are highly situational, depending on distance to the nest, the number of nesting individuals, the type of nesting substrate, and other factors. If no tricolored blackbirds are found during the pre-construction survey, no further mitigation would be required. With implementation of the recommended mitigation measure BR-6, impacts to tricolored blackbirds are ***less than significant***.

#### MITIGATION MEASURES:

BR-2 Initiation of ground disturbance (clearing and grubbing, grading, or construction) for any proposed construction project shall be conducted between September 15 and March 1. If new disturbance must be conducted during the nesting season, March 1 to September 15, a focused survey for Swainson's hawk nests on the site and within ½ mile of the site shall be conducted by a qualified biologist in accordance with the Swainson's Hawk Survey Protocol outlined in the Swainson's Hawk Technical Advisory Committee 2000 paper. Note that multiple surveys may be required depending on the timing of the surveys. If active nests are found, a qualified biologist shall be retained to prepare a site-specific take avoidance plan that proposes measures to comply with the California Endangered Species Act and the Fish and Game Code, and these measures shall be implemented prior to the start of any ground-disturbing activities. Measures may include but are not limited to nest-specific no disturbance buffers, biological monitoring, rescheduling project activities around sensitive periods for the species (e.g. nest establishment), or implementation of construction best practice such as staging equipment out of the species' line of sight from the nest tree. In the event take of Swainson's hawk cannot be avoided, the project proponent may seek related take authorization as provided by Fish and Game Code. If no active nests are found during the focused survey, no further mitigation will be required.

BR-3 Prior to any development north of Elverta Road as shown in PAL 3, such as clearing or grubbing, the issuance of any permits for grading, building, or other site improvements, implement one of the following options to mitigate for the loss of up to 135 acres of Swainson's hawk foraging habitat on the project site:

- a. The project proponent shall utilize one or more of the mitigation options (land dedication and/or fee payment) established in Sacramento County's Swainson's Hawk Impact Mitigation Program (Chapter 16.130 of the Sacramento County Code).
- b. The project proponent shall, to the satisfaction of the California Department of Fish and Wildlife, prepare and implement a Swainson's hawk mitigation plan that will include preservation of Swainson's hawk foraging habitat.
- c. The project proponent may transfer the mitigation acres allocated for the proposed development south of I-5 through the 2007 Mitigation Measure BR-11 to PAL 3 developments north of Elverta Road.

BR-4 If construction activity (which includes clearing, grubbing, or grading) is to commence within 500 feet of suitable nesting habitat between February 1 and September 15, a survey for raptor nests shall be conducted by a qualified biologist. The survey shall cover all potential tree, ground, or manmade (e.g. utility poles) suitable nesting habitat on-site and off-site up to a distance of 500 feet from the project boundary. The survey shall occur within 15 days of the date that project activities will encroach within 500 feet of suitable habitat. The biologist shall supply a brief written report (including date, time of survey, survey method, name of surveyor and survey results) to the Environmental Coordinator prior to ground disturbing activity. If no active nests are found during the survey, no further mitigation will be required.

If any active nests are found, the Environmental Coordinator and a site-specific take avoidance plan that purposes measures to comply with the Fish and Game Code shall be prepared in consultation with a qualified biologist. The avoidance/protective measures shall be implemented prior to the commencement of construction within 500 feet of an identified nest. Measures may include but are not limited to nest-specific no disturbance buffers, biological monitoring, rescheduling project activities around sensitive periods for the species (e.g. nest establishment), or implementation of construction best practice such as staging equipment out of the species' line of sight from the nest tree. If a lapse in project-related work of 15 days or longer occurs, the qualified biologist shall perform a new focused survey, and if nests are found, perform the tasks described in this measure.

BR-5 Prior to ground disturbance (which includes clearing, grubbing, or grading) within 500 feet of suitable burrow habitat, a survey for burrowing owl shall be conducted by a qualified biologist. The survey shall occur within 30 days of the date that construction will encroach within 500 feet of suitable habitat. Surveys shall be conducted in accordance with the following:

1. A survey for occupied burrows and owls should be conducted by walking through suitable habitat over the area to be disturbed and in areas within 150 meters (~500 feet) of the project impact zone.
2. Pedestrian survey transects should be spaced to allow 100 percent visual coverage of the ground surface. The distance between transect center lines should be no more than 30 meters (~100 feet), and should be reduced to account for differences in terrain, vegetation density, and ground surface visibility. To efficiently survey projects larger than 100 acres, it is recommended that two or more surveyors conduct concurrent surveys. Surveyors should maintain a minimum distance of 50 meters (~160 feet) from any owls or occupied burrows. It is important to minimize disturbance near occupied burrows during all seasons.
3. If no occupied burrows or burrowing owls are found in the survey area, a letter report documenting survey methods and findings shall be submitted to the Environmental Coordinator and no further mitigation is necessary.
4. If occupied burrows or burrowing owls are found, then a complete burrowing owl survey is required. This consists of a minimum of four site visits conducted on four separate days, which must also be consistent with the Survey Method, Weather Conditions, and Time of Day sections of Appendix D of the California Fish and Wildlife "Staff Report on Burrowing Owl Mitigation" (March 2012). Submit a survey report to the Environmental Coordinator which is consistent with the Survey Report section of Appendix D of the California Fish and Wildlife "Staff Report on Burrowing Owl Mitigation" (March 2012).
5. If occupied burrows or burrowing owls are found the applicant shall contact the Environmental Coordinator and confer with California Fish and Wildlife prior to construction, and will be required to submit a Burrowing Owl Mitigation Plan (subject to the approval of the Environmental Coordinator and in consultation with California Fish and Wildlife). This plan must document all proposed measures, including avoidance, minimization, exclusion, relocation, or other measures, and include a plan to monitor mitigation success. The California Fish and Wildlife "Staff Report on Burrowing Owl Mitigation" (March 2012) shall be followed in the development of the mitigation plan.

BR-6 If construction activity (which includes clearing, grubbing, or grading) is to commence within 300 feet of suitable tricolored blackbird nesting habitat between March 1 and July 31, a survey for nesting tricolored blackbirds shall be conducted by a qualified biologist. The survey shall cover all potential nesting habitat on-site and off-site up to a distance of 300 feet from the project boundary. The survey shall occur within 30 days of the date that construction will encroach within 300 feet of suitable habitat. The biologist shall supply a brief written report (including date, time of survey, survey method, name of surveyor and survey results) to the Environmental Coordinator prior to ground disturbing activity. If no

tricolored blackbird were found during the pre-construction survey, no further mitigation would be required. If an active tricolored blackbird colony is found on-site or within 300 feet of the project site the project proponent shall do the following:

1. Consult with the California Department of Fish and Wildlife to determine if project activity will impact the tricolored blackbird colony(s). Provide the Environmental Coordinator with written evidence of the consultation or a contact name and number from the California Department of Fish and Wildlife. Implement all protective measures recommended by the California Department of Fish and Wildlife.
2. With the California Department of Fish and Wildlife permission, the applicant may avoid impacts to tricolored blackbird by establishing a 300-foot temporary setback, with fencing that prevents any project activity within 300 feet of the colony. A qualified biologist shall verify that setbacks and fencing are adequate and will determine when the colonies are no longer dependent on the nesting habitat (i.e. nestling have fledged and are no longer using habitat). The breeding season typically ends in July.
3. If tricolored blackbird habitat is permanently destroyed follow the California Department of Fish and Wildlife procedure to mitigate for habitat loss, and submit documentation of the mitigation to the Environmental Coordinator.

## *REPTILES*

### **GIANT GARTER SNAKE**

The following discussions are based on the Programmatic Formal Consultation<sup>4</sup> published for the giant garter snake (*Thamnophis gigas*). Endemic to wetlands in the Sacramento and San Joaquin valleys, the giant garter snake inhabits marshes, sloughs, ponds, small lakes, low gradient streams, and other waterways and agricultural wetlands, such as irrigation and drainage canals and rice fields. During the day the snake basks in the sun in emergent vegetation of tules and cattails and finds refuge during extreme heat in animal burrows or water. The snake rarely leaves aquatic areas. Upland areas surrounding aquatic areas are typically used only for overwintering and short periods of time to avoid storm water flooding, molting, and basking (USFWS 1997). Essential habitat components consist of (1) adequate water during the snake's active period (i.e., early spring through mid-fall) to provide a prey base and cover, (2) emergent, herbaceous wetland vegetation, such as cattails and bulrushes, for escape cover and foraging habitat; (3) upland habitat for basking, cover, and retreat sites; and (4) high elevation uplands for cover and refuge from floodwaters. Giant garter snakes

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<sup>4</sup> United States Fish and Wildlife Service. November 13, 1997. Programmatic Formal Consultation for U.S. Army Corps of Engineers 404 Permitted Projects with Relatively Small Effects on the Giant Garter Snake within Butte, Colusa, Glenn, Fresno, Merced, Sacramento, San Joaquin, Solano, Stanislaus, Sutter and Yolo Counties, California.

are typically absent from larger rivers and other water bodies that support introduced populations of large, predatory fish, and from wetlands with sand, gravel, or rock substrates. Riparian woodlands do not provide suitable habitat because of excessive shade, lack of basking sites, and absence of prey populations.

Historically the giant garter snake occupied much of the Natomas Basin in a variety of freshwater marsh habitat that was a part of the Sacramento River and American River floodplains. The conversion of land to agriculture, residential, and industrial land uses has modified the habitats that are available to the snakes. The giant garter snake has adapted to the marsh-like habitat associated with the numerous drainage ditches and rice fields throughout the basin (USFWS 1999).

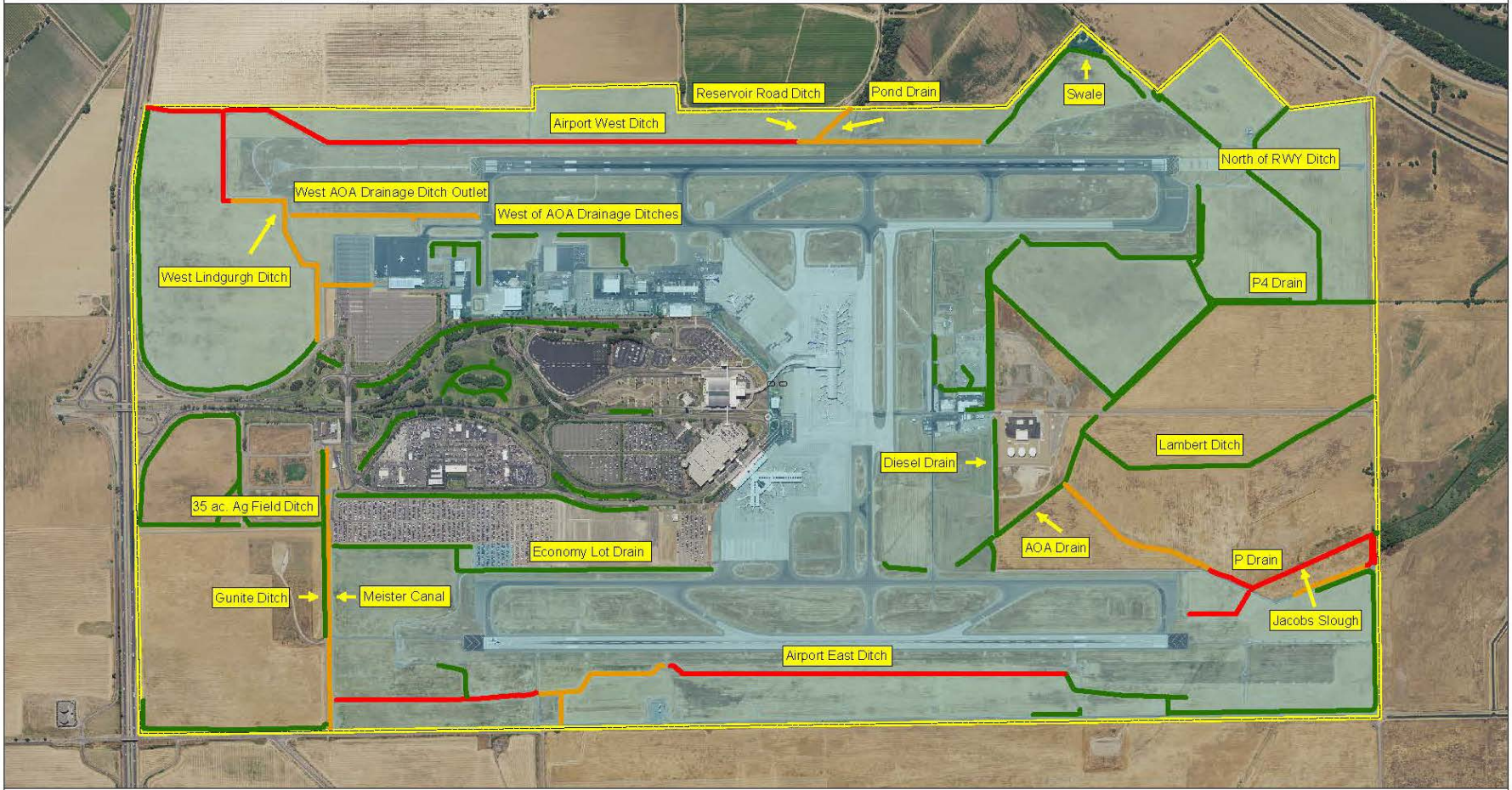
The Biological Resources Assessment prepared by Dudek for the proposed cargo facility development during PAL 1, evaluated the potential impacts to giant garter snake. Eric Hansen, consulting Environmental Biologist, surveyed the study area for snake presence and potential dispersal corridors, including the collection of DNA. The report includes results of prior occupancy analyses conducted within the Natomas Basin (Hansen *et al.* 2017). The results of the study identified 62,303 linear feet of potential aquatic habitat, of which 12,225 linear feet were deemed suitable, 21,708 linear feet were deemed marginal and 28,370 linear feet were deemed unsuitable within the study area. The occupancy data, and patterns of spatial and temporal distribution suggest that occurrence is most likely within the northern, southern and eastern extents of the project area. The area within the AOA is low due to habitat value and occurrences. The study area is only a portion of the Master Plan area and for all remaining land, the prior GGS survey and assessment prepared by Eric Hansen in 2017, remains valid. The aquatic features and corresponding habitat value are shown in plates Plate BR-6 through Plate BR-8.

## Plate BR-6: GGS Aquatic Habitat Map 2017

Note: This exhibit replaces all previously published exhibits

Source: Eric Hansen 2017, NAIP 2016

July 12, 2017

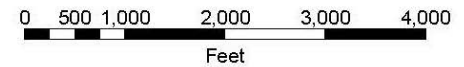


### Legend

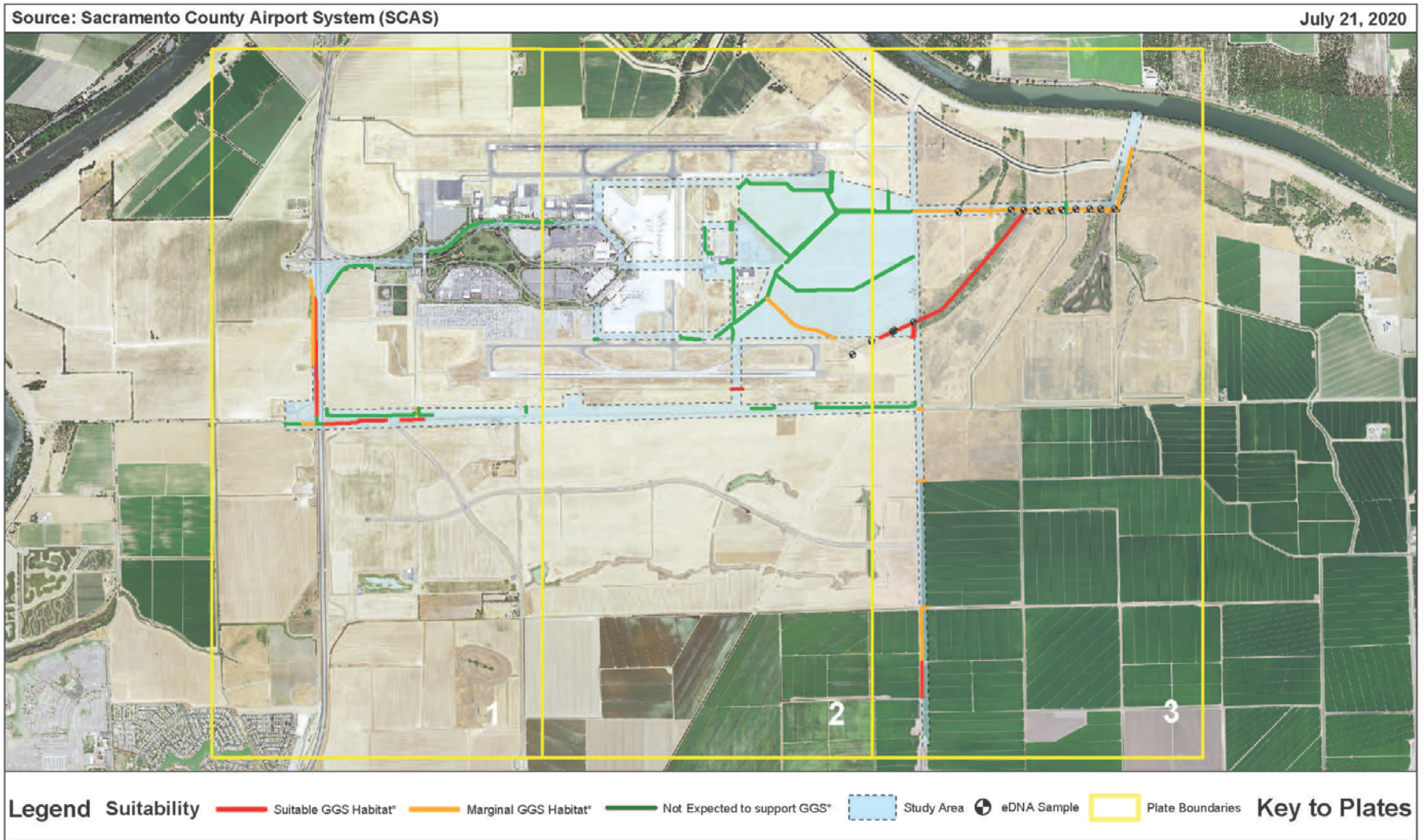
\*Based on July 12, 2017 Survey Results

- |                |  |   |   |   |  |
|----------------|--|---|---|---|--|
| <b>Ditches</b> | <span style="color: red;">—</span> Suitable GGS Habitat* | <span style="color: orange;">—</span> Marginal GGS Habitat* | <span style="color: green;">—</span> Not Expected to support GGS* | <span style="background-color: lightblue; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span> Airport Operations Area (AOA) | <span style="border: 2px solid yellow; display: inline-block; width: 20px; height: 10px;"></span> AOA+ |
|----------------|--|---|---|---|--|

### Giant Garter Snake (GGS) Aquatic Habitat at Sacramento International Airport



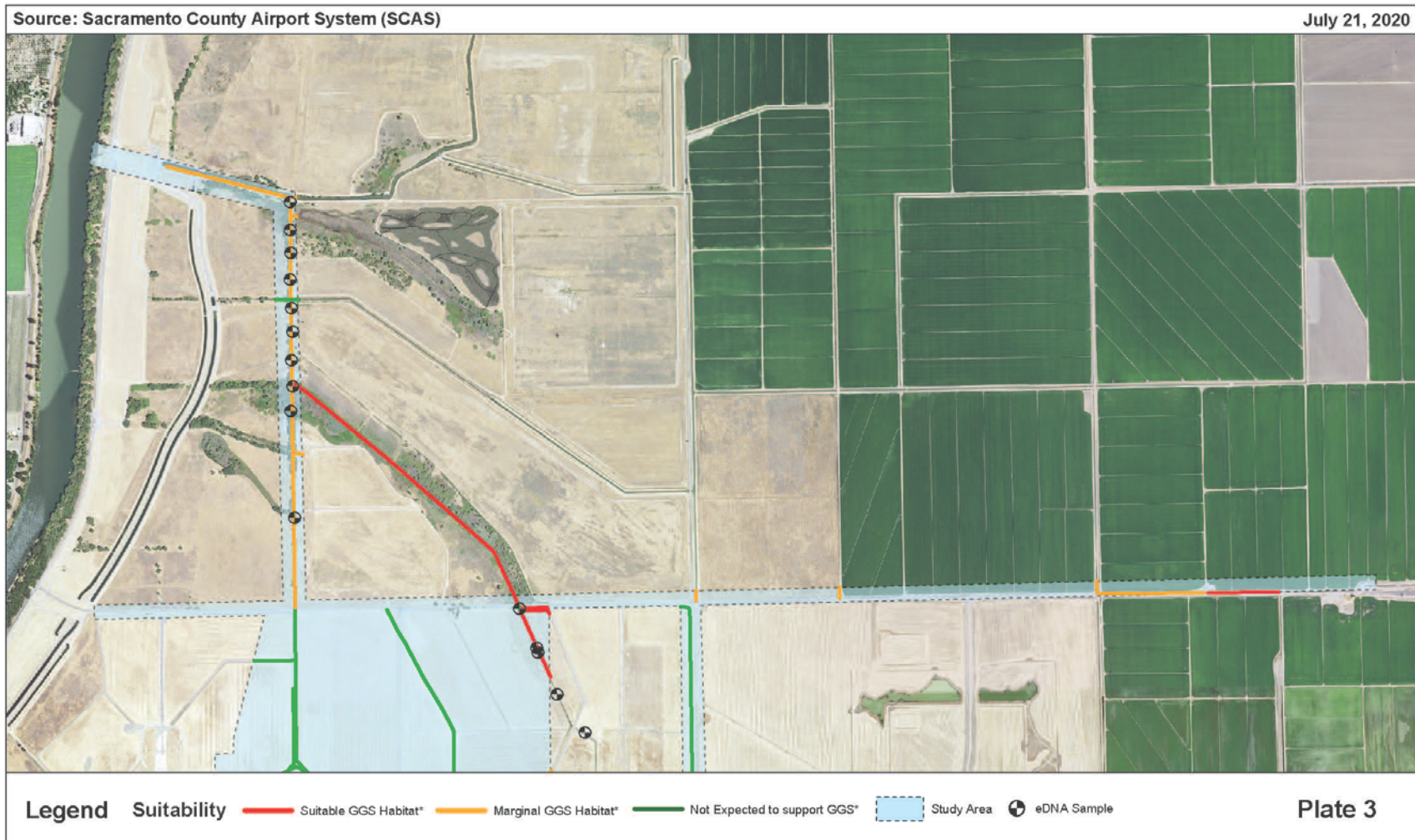
### Plate BR-7: GGS Aquatic Habitat Map 2020



Suitability of Giant Gartersnake Habitat on Sacramento County Airport System Properties



Plate BR-8: GGS Aquatic Habitat Map 2020 (close up of northern section)



Suitability of Giant Gartersnake Habitat on Sacramento County Airport System Properties





The Programmatic Formal Consultation defines giant garter snake habitat as two acres of upland for every one acre of aquatic habitat – or put another way, it encompasses the water plus 200 feet of upland on either side. This establishes that a 200-foot setback from aquatic habitat must be implemented in order to achieve complete avoidance. If this is not possible, an applicant with relatively small impacts, categorized as Level 1, 2, or 3 may rely on the compensation requirements of the Programmatic Formal Consultation. The compensation measures are described in Table BR-6. The applicant will also be required to implement the following avoidance and minimization measures:

- Construction activity within habitat should be conducted between May 1 and October 1. This is the active period for giant garter snakes and direct mortality is lessened, because snakes are expected to actively move and avoid danger. Between October 2 and April 30 contact the USFWS's Sacramento office to determine if additional measures are necessary to minimize and avoid take.
- Confine clearing to the minimal area necessary to facilitate construction activities. Flag and designate avoided giant garter snake habitat within or adjacent to the project area as Environmentally Sensitive Areas. This area should be avoided by all construction personnel.
- Construction personnel should receive Service-approved worker environmental awareness training. This training instructs workers to recognize giant garter snakes and their habitat(s).
- 24-hours prior to construction activities, the project area should be surveyed for giant garter snakes. Survey of the project area should be repeated if a lapse in construction activity of two weeks or greater has occurred. If a snake is encountered during construction, activities shall cease until appropriate corrective measures have been completed or it has been determined that the snake will not be harmed. Report any sightings and any incidental take to the USFWS.
- Any dewatered habitat should remain dry for at least 15 consecutive days after April 15 and prior to excavating or filling of the dewatered habitat.
- After completion of construction activities, remove any temporary fill and construction debris and, wherever feasible, restore disturbed areas to pre-project conditions. Restoration work may include such activities as replanting species removed from banks or replanting emergent vegetation in the active channel.

**Table BR-6: Summary of Giant Garter Snake Conservation Measures**

Impact Level	Impacts: Duration	Impacts: Acres	Conservation Measure
LEVEL 1	1 season	Less than 20 and temporary	Restoration
LEVEL 2	2 season	Less than 20 and temporary	Restoration plus 1:1 replacement
LEVEL 3	More than 2 seasons and temporary	Less than 20 and temporary	3:1 replacement (or restoration plus 2:1 replacement)
	Permanent loss	Less than 3 acres total giant garter snake habitat AND less than 1 acre aquatic habitat OR less than 218 linear feet bank habitat	3:1 replacement

The project will impact GGS aquatic habitat. The following potential impacts have been identified:

- Elverta Road improvements for the proposed cargo facility (PAL 1)
- Economy lot expansion (PAL 2)
- Taxiway A reconfiguration (PAL 2)
- Landscape maintenance building (PAL 2)
- Commercial development within AOA (PAL 3)
- Commercial development north of Elverta Road (PAL 3)
- Culvert ditches (PAL 1-3)

Impacts may be temporary where the proposed project is within 200 feet of suitable or marginal aquatic habitat, or they may be permanent associated with filling or culverting the aquatic feature. PAL 2 and 3 may impact up to two acres of marginal habitat (DD-2, 7, 9, 17 and DD-22 (north Elverta)).

Compensatory mitigation for giant garter snake habitat impacts will take place as PALs of the Master Plan project become ready for implementation, beginning with PAL 1. Consultation with the USFWS and CDFW will be required for any ground disturbance of suitable or marginal aquatic habitat and all uplands within 200 feet of these features. At a minimum, avoidance and minimization measures pursuant to Programmatic Consultation Guidelines, must be implemented; however, additional avoidance and minimization measures may be determined through the consultation process.

The proposed project is not expected to impact dispersal corridors for giant garter snakes within the Natomas Basin. None of the ditches impacted by the project between Elverta Road and I-5 provide important dispersal corridors. The proposed commercial development north of Elverta Road may potentially impact aquatic and upland habitat associated with the possible filling of drainage ditch DD-8 (aka P-Drain), considered marginal habitat.

The loss of giant garter snake habitat resulting from project construction will be a significant impact. The adopted mitigation in the prior EIR is still applicable to this project, but it has been updated to reflect current survey methods. Implementation of Mitigation Measure BR-7 will ensure impacts are ***less than significant***.

### **WESTERN POND TURTLE**

The western pond turtle (*Emys marmorata*)<sup>5</sup>, is listed as a California Species of Special Concern by CDFW. According to the CDFW Life and History Account for the species, the western pond turtle is an aquatic turtle that usually leaves the aquatic site to reproduce, aestivate, or overwinter. Western pond turtles require some slack- or slow-water aquatic habitat. High-gradient streams with minimal cover or basking habitat are not suitable. In pond environments the species typically only leaves the water to reproduce, whereas in stream environments the turtles more commonly leave the water to aestivate or overwinter, in addition to leaving for reproduction. Turtles leave the water to overwinter in October or November, and typically become active in March or April. Mating typically occurs in late April or early May, but may occur year-round. Most egg-laying occurs in May or June, but may occur as early as April or as late as August. The hatchlings remain in the nest over the winter, and emerge in the spring. Suitable nesting locations have dry soils (usually in a substrate with a high clay or silt fraction) on a slope that is unshaded and may be at least partially south-facing. The nest site can be up to 1,300 feet from the aquatic habitat, but it is more typical for the nest to be within 650 feet of aquatic habitat. The Life History Account conservatively recommends a buffer of 1,650 feet to ensure that neither adults nor nests will be impacted. During surveys conducted for other species in the limited survey area, western pond turtles were not observed in the drainage ditches or canals. The marsh habitat north of Elverta Road is directly connected to the Sacramento River and does provide suitable habitat for western pond turtle. Eventual development of commercial uses north of Elverta identified in PAL 3 may encroach into the 1,650 foot recommended buffer and is considered a potentially significant impact.

The CDFW has not published mitigation or other regulatory guidance for the treatment of impacts to this species. As a result, mitigation is focused on preventing construction activities from resulting in direct mortality of a western pond turtle. The applicant will be required to perform surveys 24-hours prior to ground-disturbing activity to ensure that there are no western pond turtles within or near the construction area. Mitigation will ensure that no turtles are impacted during project construction. Impacts to western pond turtle are ***less than significant***.

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<sup>5</sup> The western pond turtle was identified as being comprised of two subspecies, one of which was the northwestern pond turtle (*Clemmys marmorata marmorata*). It is still listed as such in the Fish and Game Life History Account, as the account was written in 1994; however, the current special animals list clarifies that subsequent research has shown that the subspecies designations were not warranted, and the western pond turtle is now tracked only by species, not subspecies.

## MITIGATION MEASURES:

BR-7 Prior to construction activities within 200 feet of the appropriate habitat on the project site, the applicant shall consult with the U.S. Fish and Wildlife Service and California Department of Fish and Wildlife regarding the giant garter snake and shall obtain any required permits. Unless otherwise indicated by permits or other documentation provided by the U.S. Fish and Wildlife Service, provide mitigation and protective measures consistent with those published in the Programmatic Consultation for the species ("Programmatic Formal Consultation for U.S. Army Corps of Engineers 404 Permitted Projects with Relatively Small Effects on the Giant Garter Snake within Butte, Colusa, Glenn, Fresno, Merced, Sacramento, San Joaquin, Solano, Stanislaus, Sutter and Yolo Counties, California". 1-1-F-97-149. November 13, 1997.). Confine any ground disturbing activity (i.e. clearing, grubbing, grading, and excavation) in giant garter snake habitat to May 1<sup>st</sup> to October 1<sup>st</sup> (which is the snake's active period).

At a minimum the following avoidance and minimization measures shall be implemented;

- Construction activity within habitat should be conducted between May 1 and October 1. This is the active period for giant garter snakes and direct mortality is lessened, because snakes are expected to actively move and avoid danger. Between October 2 and April 30 contact the USFWS's Sacramento office to determine if additional measures are necessary to minimize and avoid take.
- Confine clearing to the minimal area necessary to facilitate construction activities. Flag and designate avoided giant garter snake habitat within or adjacent to the project area as Environmentally Sensitive Areas. This area should be avoided by all construction personnel.
- Construction personnel should receive Service-approved worker environmental awareness training. This training instructs workers to recognize giant garter snakes and their habitat(s).
- 24-hours prior to construction activities, the project area should be surveyed for giant garter snakes. Survey of the project area should be repeated if a lapse in construction activity of two weeks or greater has occurred. If a snake is encountered during construction, activities shall cease until appropriate corrective measures have been completed or it has been determined that the snake will not be harmed. Report any sightings and any incidental take to the USFWS.
- Any dewatered habitat should remain dry for at least 15 consecutive days after April 15 and prior to excavating or filling of the dewatered habitat.
- After completion of construction activities, remove any temporary fill and construction debris and, wherever feasible, restore disturbed areas to pre-project conditions. Restoration work may include such activities as replanting species removed from banks or replanting emergent vegetation in the active channel.

BR-8 To avoid impacts to western pond turtles the following shall apply:

1. Twenty four hours prior to the commencement of ground-disturbing activity (i.e. clearing, grubbing, or grading) suitable habitat within the project area shall be surveyed for western pond turtle by a qualified biologist. The survey shall include aquatic habitat and 1,650 feet of adjacent uplands surrounding aquatic habitat within the project area. The biologist shall supply a brief written report (including date, time of survey, survey method, name of surveyor and survey results) to the Environmental Coordinator prior to ground disturbing activity.
2. Construction personnel shall receive worker environmental awareness training. This training instructs workers how to recognize western pond turtles and their habitat.
3. If a western pond turtle is encountered during active construction, all construction shall cease until the animal has moved out of the construction area on its own or relocated by a qualified biologist. If the animal is injured or trapped, a qualified biologist shall move the animal out of the construction area and into a suitable habitat area. California Fish and Wildlife and the Environmental Coordinator shall be notified within 24-hours that a turtle was encountered.

IMPACT: HAVE A SUBSTANTIAL ADVERSE EFFECT ON ANY RIPARIAN HABITAT OR OTHER SENSITIVE NATURAL COMMUNITY IDENTIFIED IN LOCAL OR REGIONAL PLAN, POLICIES, REGULATIONS, OR BY THE CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE OR U.S FISH AND WILDLIFE SERVICE

Beyond the AOA, north of Elverta Road, the project area contains annual grasslands, agricultural lands, riparian woodlands, marsh and pasture. The roadway improvements associated with Elverta Road in PAL 1 may result in the removal of agricultural lands and isolated oak trees. The proposed commercial development identified in PAL 3 would not directly remove the larger swaths of riparian, marsh or valley oak woodland habitats. However, blackberry habitat and valley oak woodland habitat may be removed for development (reference Plate BR-4). The proposed project is designed to avoid the large, intact, riparian and woodland areas. The potential removal associated with commercial development north of Elverta Road would not substantially reduce the natural communities in and surrounding the project area. In addition, mitigation recommended later in this chapter for removal of native tree vegetation, would compensate for habitat removal. Impact is ***less than significant***.

MITIGATION MEASURES:

Reference BR-10.

IMPACT: INTERFERE SUBSTANTIALLY WITH THE MOVEMENT OF ANY NATIVE RESIDENT OR MIGRATORY FISH OR WILDLIFE SPECIES OR WITH

## ESTABLISHED NATIVE RESIDENT OR MIGRATORY WILDLIFE CORRIDORS, OR IMPEDE THE USE OF NATIVE WILDLIFE NURSERY SITES

The project is located within the Natomas Basin, which contains several wildlife corridors for a variety of species. The project does not directly impact the Sacramento River to the west and south of the project. Therefore, the project will not substantially interfere with the movement of native resident or migratory fish.

As discussed in the individual species impact sections above, the project may remove giant garter snake transportation corridors through the filling of drainage ditches within the project area. The snake's dispersal corridors have been altered over the decades as urban development, including the airport, have expanded. The ditches in and around the airport are not high quality and are likely not used as a main transportation corridor. The project will not substantially interfere with established native resident wildlife corridors.

The project is located within the Pacific Flyway and there are hundreds of thousands of birds that pass through Sacramento Valley in a given year. Due to the potential conflicts from aircraft bird strikes, airport staff implement a Wildlife Hazard Management Plan to reduce this conflict. Regardless, it is impossible to prevent all migrating birds from utilizing the project area or immediately surrounding area. Commercial development north of Elverta Road may remove potential nesting habitat for migratory birds resulting in a potentially significant impact. Therefore, mitigation measure BR-9 is recommended to ensure migratory nesting birds are not disturbed. With recommended mitigation, impacts to migratory nesting birds is ***less than significant***.

### MITIGATION MEASURES:

BR-9 To Avoid impacts to nesting migratory birds the following shall apply:

1. If construction activity (which includes clearing, grubbing, or grading) is to commence within 50 feet of nesting habitat between February 1 and August 31, a survey for active migratory bird nests shall be conducted no more than 14 days prior to construction by a qualified biologist.
2. Trees slated for removal shall be removed during the period of September through January, in order to avoid the nesting season. Any trees that are to be removed during the nesting season, which is February through August, shall be surveyed by a qualified biologist and will only be removed if no nesting migratory birds are found.
3. If active nest(s) are found in the survey area, a non-disturbance buffer, the size of which has been determined by a qualified biologist, shall be established and maintained around the nest to prevent nest failure. All construction activities shall be avoided within this buffer area until a qualified biologist determines that nestlings have fledged, or until September 1.

## IMPACT: CONFLICT WITH ANY LOCAL POLICIES OR ORDINANCES PROTECTING BIOLOGICAL RESOURCES

### *NATIVE TREES*

Sacramento County has identified the value of its native and landmark trees and has adopted measures for their preservation. The Tree Ordinance (Chapter 19.04 and 19.12 of the County Code) provides protections for landmark trees and heritage trees. The County Code defines a landmark tree as “an especially prominent or stately tree on any land in Sacramento County, including privately owned land” and a heritage tree as “native oak trees that are at or over 19” diameter at breast height (dbh).” Chapter 19.12 of the County Code, titled Tree Preservation and Protection, defines native oak trees as valley oak (*Quercus lobata*), interior live oak (*Quercus wislizenii*), blue oak (*Quercus douglasii*), or oracle oak (*Quercus morehus*) and states that “it shall be the policy of the County to preserve all trees possible through its development review process.” It should be noted that to be considered a tree, as opposed to a seedling or sapling, the tree must have a diameter at breast height (dbh) of at least 6 inches or, if it has multiple trunks of less than 6 inches each, a combined dbh of 10 inches. The Sacramento County General Plan Conservation Element policies CO-138 and CO-139 also provide protections for native trees:

CO-138. Protect and preserve non-oak native trees along riparian areas if used by Swainson’s Hawk, as well as landmark and native oak trees measuring a minimum of 6 inches in diameter or 10 inches aggregate for multi-trunk trees at 4.5 feet above ground.

CO-139. Native trees other than oaks, which cannot be protected through development, shall be replaced with in-kind species in accordance with established tree planting specifications, the combined diameter of which shall equal the combined diameter of the trees removed.

Native trees other than oaks include Fremont cottonwood (*Populus fremontii*), California sycamore (*Platanus racemosa*), California black walnut (*Juglans californica*), Oregon ash (*Fraxinus latifolia*), western redbud (*Cercis occidentalis*), gray pine (*Pinus sabiniana*), California white alder (*Alnus rhombifolia*), boxelder (*Acer negundo*), California buckeye (*Aesculus californica*), narrowleaf willow (*Salix exigua*), Gooding’s willow (*Salix gooddingii*), red willow (*Salix laevigata*), arroyo willow (*Salix lasiolepis*), shining willow (*Salix lucida*), Pacific willow (*Salix lasiandra*), and dusky willow (*Salix melanopsis*).

### **NATIVE TREE PROJECT IMPACTS**

There are native trees along Elverta Road east of the intersection of Earhart Drive. Depending on the extent of roadway improvements required for the proposed cargo facility (PAL 1), native trees may be removed. A tree inventory has not been completed for this area; therefore, the exact species, size and health of the trees are unknown. In order to comply with County General Plan policies, a tree inventory will be required prior to project development and plan approval.

Similarly, the area north of Elverta Road identified for commercial development during PAL 3 contains native trees. It is unknown at this time when or where improvements may take place. A tree inventory has not been completed for this area, and mitigation consistent with adopted policies and ordinances protecting native tree resources is recommended.

Where trees cannot be avoided in the proposed development areas, implementation of mitigation measures BR-10 and BR-11 will reduce impacts associated with native tree removal. However, since the final tree inventory and removal quantity is unknown, impacts remain ***potentially significant***.

#### MITIGATION MEASURES:

BR-10 Prior to project approval of Elverta Road Improvements associated with the cargo facility (PAL 1) and the commercial development north of Elverta Road (PAL 3), a tree inventory shall be completed which includes all native trees over six (6) inches in diameter at breast height must be inventoried including species, size, dripline radius, health condition within the proposed areas of impact. The removal of native trees shall be compensated for by planting in-kind native trees equivalent to the dbh inches lost, based on the ratios listed below, at locations that are authorized by the Environmental Coordinator. On-site preservation of native trees that are less than 6 inches (<6 inches) dbh, may also be used to meet this compensation requirement. Native trees include: valley oak (*Quercus lobata*), interior live oak (*Quercus wislizenii*), blue oak (*Quercus douglasii*), or oracle oak (*Quercus morehus*), California sycamore (*Platanus racemosa*), California black walnut (*Juglans californica*, which is also a List 1B plant), Oregon ash (*Fraxinus latifolia*), western redbud (*Cercis occidentalis*), gray pine (*Pinus sabiniana*), California white alder (*Alnus rhombifolia*), boxelder (*Acer negundo*), California buckeye (*Aesculus californica*), narrowleaf willow (*Salix exigua*), Gooding's willow (*Salix gooddingii*), red willow (*Salix laevigata*), arroyo willow (*Salix lasiolepis*), shining willow (*Salix lucida*), Pacific willow (*Salix lasiandra*), and dusky willow (*Salix melanopsis*).

Replacement tree planting shall be completed prior to approval of grading or improvement plans, whichever comes first.

Equivalent compensation based on the following ratio is required:

- one preserved native tree < 6 inches dbh on-site = 1 inch dbh
- one D-pot seedling (40 cubic inches or larger) = 1 inch dbh
- one 15-gallon tree = 1 inch dbh
- one 24-inch box tree = 2 inches dbh
- one 36-inch box tree = 3 inches dbh

Prior to the approval of Improvement Plans or Building Permits, whichever occurs first, a Replacement Tree Planting Plan shall be prepared by a certified



arborist or licensed landscape architect and shall be submitted to the Environmental Coordinator for approval. The Replacement Tree Planting Plan(s) shall include the following minimum elements:

1. Species, size and locations of all replacement plantings and < 6-inch dbh trees to be preserved
2. Method of irrigation
3. If planting in soils with a hardpan/duripan or claypan layer, include the Sacramento County Standard Tree Planting Detail L-1, including the 10-foot deep boring hole to provide for adequate drainage
4. Planting, irrigation, and maintenance schedules;
5. Identification of the maintenance entity and a written agreement with that entity to provide care and irrigation of the trees for a 3-year establishment period, and to replace any of the replacement trees which do not survive during that period.
6. Designation of 20-foot root zone radius and landscaping to occur within the radius of trees < 6 inches dbh to be preserved on-site.

No replacement tree shall be planted within 15 feet of the driplines of existing native trees or landmark size trees that are retained on-site, or within 15 feet of a building foundation. The minimum spacing for replacement native trees shall be 20 feet on-center. Examples of acceptable planting locations are publicly owned lands, common areas, and landscaped frontages (with adequate spacing). Generally unacceptable locations are utility easements (PUE, sewer, storm drains), under overhead utility lines, private yards of single-family lots (including front yards), and roadway medians.

Native trees <6 inches dbh to be retained on-site shall have at least a 20-foot radius suitable root zone. The suitable root zone shall not have impermeable surfaces, turf/lawn, dense plantings, soil compaction, drainage conditions that create ponding (in the case of oak trees), utility easements, or other overstory tree(s) within 20 feet of the tree to be preserved. Trees to be retained shall be determined to be healthy and structurally sound for future growth, by an ISA Certified Arborist subject to Environmental Coordinator approval.

If tree replacement plantings are demonstrated to the satisfaction of the Environmental Coordinator to be infeasible for any or all trees removed, then compensation shall be through payment into the County Tree Preservation Fund. Payment shall be made at a rate of \$325.00 per dbh inch removed but not otherwise compensated, or at the prevailing rate at the time payment into the fund is made.

BR-11 For the purpose of this mitigation measure, a native tree is defined as a those listed in Mitigation Measure BR-10 having a diameter at breast height (dbh) of at

least 6 inches, or if it has multiple trunks of less than 6 inches each, a combined dbh of at least 10 inches.

With the exception of the trees removed and compensated for through Mitigation Measure BR-10, above, all native trees on the project site, all portions of adjacent off-site native trees which have driplines that extend onto the project site, and all off-site native trees which may be impacted by utility installation and/or improvements associated with this project, shall be preserved and protected as follows:

1. A circle with a radius measurement from the trunk of the tree to the tip of its longest limb shall constitute the dripline protection area of the tree. Limbs must not be cut back in order to change the dripline. The area beneath the dripline is a critical portion of the root zone and defines the minimum protected area of the tree. Removing limbs which make up the dripline does not change the protected area.
2. Chain link fencing or a similar protective barrier shall be installed one foot outside the driplines of the native trees prior to initiating project construction, in order to avoid damage to the trees and their root system.
3. No signs, ropes, cables (except cables which may be installed by a certified arborist to provide limb support) or any other items shall be attached to the native trees.
4. No vehicles, construction equipment, mobile home/office, supplies, materials or facilities shall be driven, parked, stockpiled or located within the driplines of the native trees.
5. Any soil disturbance (scraping, grading, trenching, and excavation) is to be avoided within the driplines of the native trees. Where this is necessary, an ISA Certified Arborist will provide specifications for this work, including methods for root pruning, backfill specifications and irrigation management guidelines.
6. All underground utilities and drain or irrigation lines shall be routed outside the driplines of native trees. Trenching within protected tree driplines is not permitted. If utility or irrigation lines must encroach upon the dripline, they should be tunneled or bored under the tree under the supervision of an ISA Certified Arborist.
7. If temporary haul or access roads must pass within the driplines of oak trees, a roadbed of six inches of mulch or gravel shall be created to protect the root zone. The roadbed shall be installed from outside of the dripline and while the soil is in a dry condition, if possible. The roadbed material shall be replenished as necessary to maintain a six-inch depth.
8. Drainage patterns on the site shall not be modified so that water collects or stands within, or is diverted across, the dripline of oak trees.

9. No sprinkler or irrigation system shall be installed in such a manner that it sprays water within the driplines of the oak trees.
10. Tree pruning that may be required for clearance during construction must be performed by an ISA Certified Arborist or Tree Worker and in accordance with the American National Standards Institute (ANSI) A300 pruning standards and the International Society of Arboriculture (ISA) "Tree Pruning Guidelines".
11. Landscaping beneath the oak trees may include non-plant materials such as boulders, decorative rock, wood chips, organic mulch, non-compacted decomposed granite, etc. Landscape materials shall be kept two (2) feet away from the base of the trunk. The only plant species which shall be planted within the driplines of the oak trees are those which are tolerant of the natural semi-arid environs of the trees. Limited drip irrigation approximately twice per summer is recommended for the understory plants.
12. Any fence/wall that will encroach into the dripline protection area of any protected tree shall be constructed using grade beam wall panels and posts or piers set no closer than 10 feet on center. Posts or piers shall be spaced in such a manner as to maximize the separation between the tree trunks and the posts or piers in order to reduce impacts to the trees.

For a project constructing during the months of June, July, August, and September, deep water trees by using a soaker hose (or a garden hose set to a trickle) that slowly applies water to the soil until water has penetrated at least one foot in depth. Sprinklers may be used to water deeply by watering until water begins to run off, then waiting at least an hour or two to resume watering (provided that the sprinkler is not wetting the tree's trunk. Deep water every 2 weeks and suspend watering 2 weeks between rain events of 1 inch or more.

IMPACT: CONFLICT WITH THE PROVISIONS OF AN ADOPTED HABITAT CONSERVATION PLAN, NATURAL COMMUNITY CONSERVATION PLAN, OR APPROVED LOCAL, REGIONAL, OR STATE HABITAT CONSERVATION PLAN

The County of Sacramento is not a party to the Natomas Basin or Metro Air Park Habitat Conservation Plans. All of the project elements involving ground disturbing activities through 2038 will take place on existing County property. None of the land owned by the County is identified as potential mitigation land for the Natomas Basin or Metro Air Park Conservancies. The full build-out of the Master Plan will not impair the Conservancies' ability of obtaining mitigation land.

Species mitigation is consistent with the habitat conservation plans and in some cases is more demanding, for example, County Swainson's hawk mitigation requires compensatory mitigation greater than 0.5:1 acre. Species covered by the conservation plans have been included in this project's species table.

All of the land north of I-5 disturbed by project activities is currently managed to minimize wildlife hazards to aircraft. The commercial development north of Elverta Road will result in the loss of approximately 135 acres of agricultural land and

Swainson's hawk foraging habitat. Mitigation for the habitat loss and land conversion is provided above in the Swainson's hawk discussion and in Chapter 8, Land Use, of this SEIR. This conversion will not interfere with implementation of the Natomas Basin or Metro Air Park Habitat Conservation Plans.

MITIGATION MEASURES:

None recommended.

## 5 CLIMATE CHANGE

### INTRODUCTION

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The Sacramento International Airport (SMF) has been in operation since 1967. The baseline greenhouse gas emissions include SMF's current operations and Master Plan elements that remain unchanged. The prior EIR certified in 2007 for the SMF Master Plan included a brief discussion regarding climate change in the Air Quality Chapter; however, CEQA thresholds had not been established and no significance determinations were made. This chapter focuses on potential greenhouse gas emissions impacts associated with the proposed changes to the Master Plan elements.

### EMISSIONS SETTING

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The principal greenhouse gases (GHGs) that enter the atmosphere because of human activities are carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), and fluorinated gases. From 1750 to 2004, concentrations of CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O have increased globally by 35, 143, and 18 percent, respectively. Other greenhouse gases, such as fluorinated gases, are created and emitted solely through human activities. (EPA 2012) Carbon dioxide is the gas that is most commonly referenced when discussing climate change because it is the most commonly emitted gas. While some of the less common gases do make up less of the total greenhouse gases emitted to the atmosphere, some have a greater climate-forcing effect per molecule and/or are more toxic than carbon dioxide.

### CARBON DIOXIDE

Carbon dioxide emissions are mainly associated with combustion of carbon-bearing fossil fuels such as gasoline, diesel, and natural gas used in mobile sources and energy-generation-related activities. The U.S. Environmental Protection Agency (EPA) estimates that CO<sub>2</sub> emissions accounted for 84.6% of greenhouse gas emissions in the United States in 2004 (EPA 2012). The California Energy Commission (CEC) estimates that CO<sub>2</sub> emissions account for 84% of California's anthropogenic (manmade) greenhouse gas emissions, nearly all of which is associated with fossil fuel combustion (CEC 2005). Total CO<sub>2</sub> emissions in the United States increased by 20% from 1990 to 2004 (EPA 2012).

### METHANE

CH<sub>4</sub> has both natural and anthropogenic sources. Landfills, natural gas distribution systems, agricultural activities, fireplaces and wood stoves, stationary and mobile fuel combustion, and gas and oil production fields are the major sources of these emissions. The EPA estimates that CH<sub>4</sub> emissions accounted for 7.9% of total greenhouse gas emissions in the United States in 2004 (EPA 2012). The CEC estimates that CH<sub>4</sub>

emissions from various sources represent 6.2% of California's total greenhouse gas emissions (CEC 2005). Total CH<sub>4</sub> emissions in the United States decreased by 10% from 1990 to 2004 (EPA 2012).

## NITROUS OXIDE

N<sub>2</sub>O is produced by microbial processes in soil and water, including those reactions, which occur in fertilizers that contain nitrogen. Global concentration for N<sub>2</sub>O in 1998 was 314 ppb, and in addition to agricultural sources for the gas, some industrial processes (fossil fuel fired power plants, nylon production, nitric acid production, and vehicle emissions) also contribute to its atmospheric load (EPA 2012).

The EPA estimates that N<sub>2</sub>O emissions accounted for 5.5% of total greenhouse gas emissions in the United States in 2004 (EPA 2012). The CEC estimates that nitrous oxide emissions from various sources represent 6.6% of California's total greenhouse gas emissions (CEC 2005). Total N<sub>2</sub>O emissions in the United States decreased by 2% from 1990 to 2004 (EPA 2012).

## FLUORINATED GASES (HFCs, PFCs, AND SF<sub>6</sub>)

Fluorinated gases, such as hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulfur hexafluoride (SF<sub>6</sub>), are powerful greenhouse gases that are emitted from a variety of industrial processes. The primary sources of fluorinated gas emissions in the United States include the production of HCFC-22, electrical transmission and distribution systems, semiconductor manufacturing, aluminum production, magnesium production and processing, and substitution for ozone-depleting substances. The EPA estimates that fluorinated gas (HFC, PFC, and SF<sub>6</sub>) emissions accounted for 2.0% of total greenhouse gas emissions in the United States in 2004. (EPA 2012) The CEC estimates that fluorinated gas emissions from various sources represent 3.4% of California's total greenhouse gas emissions (CEC 2005). Total fluorinated gas emissions in the United States increased by 58% from 1990 to 2004 (EPA 2012).

## SACRAMENTO COUNTY EMISSIONS

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The ICLEI (Local Governments for Sustainability) Clean Air and Climate Protection Model was used to estimate unincorporated Sacramento County emissions, along with the emissions of all of the incorporated cities in the County. This complete inventory was done to provide a regional picture, but the County does not have control over incorporated city emissions (<http://www.green.saccounty.net/Pages/GreenLinksandResources.aspx>). The baseline year 2005 was chosen based on availability of information. In cases where 2005 data was unavailable, 2006 or other recent-year data was substituted. The software inventories community GHG emissions for all operations, with a separate government analysis tab that determines GHG emissions of local government operations as a subset of the community analysis. The community analysis divides GHG emissions among residential (energy usage), commercial and industrial (energy usage), transportation (exhaust emissions), off-road vehicle use (exhaust emissions), waste (landfill emissions),

wastewater treatment (energy usage), agriculture (fertilizers, enteric fermentation, etc), High GWP (high global warming potential, such are refrigerants), and airport (emissions from County buildings and fleets – does not include fleet owned by airlines) sectors. The government analysis divides emissions among buildings, vehicle fleet, employee commute, streetlights, water/sewage, and waste sectors.

For the community analysis, energy use was obtained for the Sacramento Municipal Utility District (SMUD) and the Pacific Gas and Electric Company (PG&E). Community waste generation for Sacramento County was collected through the California Integrated Waste Management Board web site and through consultation with staff of Sacramento County Municipal Services Agency. SMUD reported its 2005 GHG emissions and an emissions factor for all electricity sold to customers that was verified and certified by the California Climate Action Registry. This emissions factor was input into the model as a replacement for the statewide emissions factor for electricity consumption to generate more accurate GHG emissions estimates for Sacramento County electricity consumption. The analysis also uses localized vehicle miles traveled information using the outputs from the Sacramento Regional Travel Demand Model and the emissions factors from the Emission Factors Model 2007 (EMFAC 2007). The software default emissions factors for other GHGs, which are based on statewide averages, were used in all other instances.

As shown in Table CC-1, the County 2005 emission baseline is approximately 5.0 MMT per year, with the transportation sector as the largest contributor at 41% of the total. The emissions per sector drop precipitously from there, with the residential sector emitting only half of the transportation sector total. However, the residential and commercial sectors can be combined to give a more overarching view, because though these sectors operate differently, the source of emissions are the same: private building and interior equipment energy usage. Combining these sectors, transportation accounts for 40% of emissions, and operation of residential, commercial, and industrial buildings accounts for 36% of emissions. The off-road vehicle, waste, wastewater, water, agriculture, and high global warming potential greenhouse gases (High GWP GHG) sectors combined are responsible for only 20% of the County emissions, with the airport as an additional 4%.

**Table CC-1: 2005 Community Emissions by Sector**

<b>Sector</b>	<b>CO<sub>2</sub>e (metric tons)</b>	<b>Percent</b>
Residential	1,033,142	20.7
Commercial and Industrial	772,129	15.4
Transportation	2,066,970	41.4
Off-Road Vehicle Use	236,466	4.7
Waste	201,350	4.0
Wastewater Treatment	70,662	1.4
Water-Related	5,885	0.1
Agriculture	197,132	4.0
High GWP GHGs	203,528	4.1
Airport	200,404	4.0
<b>Total</b>	<b>4,987,668</b>	<b>100</b>

## REGULATORY SETTING

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### EXECUTIVE ORDER S-3-05

Executive Order S-3-05 was the precursor to Assembly Bill 32 (AB 32 is described in the next section) and was signed by Governor Schwarzenegger in June 2005. The Executive Order states that California is “particularly vulnerable” to the impacts of climate change, and that climate change has the potential to reduce Sierra snowpack (a primary source of drinking water), exacerbate existing air quality problems, adversely impact human health, threaten coastal real estate and habitat by causing sea level rise, and impact crop production. The Executive Order also states that “mitigation efforts will be necessary to reduce greenhouse gas emissions”. To address the issues described above, the Executive Order established emission reduction targets for the State: reduce GHG emissions to 2000 levels by 2010, to 1990 levels by 2020 and to 80% below 1990 levels by 2050. Currently only the 2020 and 2030 targets have been adopted by the State through legislation (see Assembly Bill and Senate Bill 32, below). As a result, all of the impact discussions, mitigation, and strategies are based on meeting the 2030 target, not the longer-term 2050 target.

### RENEWABLE PORTFOLIO STANDARD (RPS)

Established in 2002 under SB 1078, accelerated in 2006 under SB 107, and expanded in 2011 under SB 2, California's RPS is one of the most ambitious renewable energy standards in the country. The RPS program requires investor-owned utilities, electric service providers, and community choice aggregators to increase procurement from



eligible renewable energy resources to 33 percent of total procurement by 2020. In 2015, SB 350 was signed into law by Governor Jerry Brown. This bill extended the State's RPS program by requiring that publicly owned utilities procure 50 percent of their electricity from renewable energy sources by 2030. This bill was further modified by SB 100 in 2018 to establish a 60 percent RPS target by 2030.

It should be noted that SMUD was the only large California utility to meet the statewide goal of supplying 20 percent of its power from renewables in 2010. In fact, SMUD exceeded the statewide goal and their own goal of 23.8 percent by supplying more than 24 percent of its retail sales with renewable energy in 2010. SMUD has chosen to meet or exceed the State requirements of 33 percent by 2020 and is developing strategies to meet the 2030 goal of 60 percent renewable energy. SMUD has also adopted a Climate Emergency Declaration that establishes a policy goal for SMUD electricity generation to be carbon neutral by 2030. That plan is anticipated to be presented to the SMUD Board of Directors in March 2021.

#### ASSEMBLY BILL 32

In September 2006, Assembly Bill (AB) 32 was signed by Governor Schwarzenegger of California. AB 32 requires that California GHG emissions be reduced to 1990 levels by the year 2020, just like Executive Order S-3-05. However, AB 32 is a comprehensive bill that requires ARB to adopt regulations requiring the reporting and verification of statewide greenhouse gas emissions, and it establishes a schedule of action measures. AB 32 also requires that a list of emission reduction strategies be published to achieve emissions reduction goals.

#### SENATE BILL 375

On September 30, 2008, Senate Bill (SB) 375 was signed by Governor Schwarzenegger. SB 375 combines regional transportation planning with sustainability strategies in order to reduce greenhouse gas emissions in California's urbanized areas. Existing law requires each regional transportation planning agency, which in Sacramento County's case is the Sacramento Area Council of Governments (SACOG), to adopt a Metropolitan Transportation Plan. SB 375 required the California Air Resources Board (CARB) to set performance targets for reduction of passenger vehicle emissions per capita in each of 16 Metropolitan Planning Organizations (MPOs) in the state for 2020 and 2035. For the SACOG MPO, these targets were set at 7% below 2005 per capita emissions for 2020 and 16% below 2005 per capita emissions for 2035. MPOs are not required to meet the greenhouse gas emission targets established by ARB, but if they conclude it is not feasible to do so, they must prepare an Alternative Planning Scenario to demonstrate what further land use and/or transportation actions would be required to meet the targets. SB 375 also requires that the Metropolitan Transportation Plan for each MPO include a Sustainable Communities Strategy (SCS) that integrates the land use and transportation components, and amends CEQA to provide incentives for housing and mixed use projects that help to implement an MTP/SCS that meets the CARB targets.

## SENATE BILL 32

On September 8, 2016 Senate Bill (SB) 32 was signed by Governor Jerry Brown. SB 32 builds upon previous GHG reduction goals by requiring that the CARB ensures that statewide GHG emissions are reduced by 40 percent below the 1990 level by the year 2030. Additionally, SB 32 emphasized the critical role that reducing GHG emissions would play in protecting disadvantaged communities and the public health from adverse impacts of climate change. Enactment of SB 32 was predicated on the enactment of Assembly Bill 197, which seeks to make the achievement of SB 32's mandated GHG emission reductions more transparent to the public and responsive to the Legislature.

## ENDANGERMENT FINDING

On December 7, 2009, the U.S. EPA made an Endangerment Finding and a Cause or Contribute Finding related to greenhouse gases. The U.S. EPA Administrator found that the current and projected concentrations of the six key well-mixed greenhouse gases – carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF<sub>6</sub>) – in the atmosphere threaten the public health and welfare of current and future generations (endangerment). The Administrator also found that the combined emissions of these well-mixed greenhouse gases from new motor vehicles and new motor vehicle engines contribute to the greenhouse gas pollution which threatens public health and welfare (Cause or Contribute).

## SACRAMENTO COUNTY GENERAL PLAN

The Land Use Element of the Sacramento County General Plan contains the following applicable policy:

LU-115. It is the goal of the County to reduce greenhouse gas emissions to 1990 levels by the year 2020. This shall be achieved through a mix of State and local action.

## SACRAMENTO COUNTY CLIMATE ACTION PLANNING

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In November of 2011, Sacramento County approved the Phase 1 Climate Action Plan Strategy and Framework document (Phase 1 CAP), which is the first phase of developing a community-level Climate Action Plan. The Phase 1 CAP provides a framework and overall policy strategy for reducing greenhouse gas emissions and managing our resources in order to comply with AB 32. It also highlights actions already taken to become more efficient, and targets future mitigation and adaptation strategies. This document is available at [http://www.green.saccounty.net/Documents/sac\\_030843.pdf](http://www.green.saccounty.net/Documents/sac_030843.pdf). The Phase 1 CAP contains policies/goals related to agriculture, energy, transportation/land use, waste, and water.

Goals in the section on agriculture focus on promoting the consumption of locally-grown produce, protection of local farmlands, educating the community about the intersection of agriculture and climate change, educating the community about the importance of open

space, pursuing sequestration opportunities, and promoting water conservation in agriculture. Actions related to these goals cover topics related to urban forest management, water conservation programs, open space planning, and sustainable agriculture programs.

Goals in the section on energy focus on increasing energy efficiency and increasing the usage of renewable sources. Actions include implementing green building ordinances and programs, community outreach, renewable energy policies, and partnerships with local energy producers.

Goals in the section on transportation/land use cover a wide range of topics but are principally related to reductions in vehicle miles traveled, usage of alternative fuel types, and increases in vehicle efficiency. Actions include programs to increase the efficiency of the County vehicle fleet, and an emphasis on mixed use and higher density development, implementation of technologies and planning strategies that improve non-vehicular mobility.

Goals in the section on waste include reductions in waste generation, maximizing waste diversion, and reducing methane emissions at Kiefer Landfill. Actions include solid waste reduction and recycling programs, a regional composting facility, changes in the waste vehicle fleet to use non-petroleum fuels, carbon sequestration at the landfill, and methane capture at the landfill.

Goals in the section on water include reducing water consumption, emphasizing water efficiency, reducing uncertainties in water supply by increasing the flexibility of the water allocation/distribution system, and emphasizing the importance of floodplain and open space protection as a means of providing groundwater recharge. Actions include metering, water recycling programs, water use efficiency policy, water efficiency audits, greywater programs/policies, river-friendly landscape demonstration gardens, participation in the water forum, and many other related measures.

The Phase 1 CAP is a strategy and framework document. The County adopted the Phase 2A CAP (Government Operations) on September 11, 2012. Neither the Phase 1 CAP nor the Phase 2A CAP are “qualified” plans through which subsequent projects may receive CEQA streamlining benefits. The County is currently developing a Communitywide CAP, which will flesh out the strategies involved in the strategy and framework CAP, and will include economic analysis, intensive vetting with all internal departments, community outreach/information sharing, timelines, and detailed performance measures.. The Communitywide CAP is targeted for adoption in summer 2021.

## SIGNIFICANCE CRITERIA

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CEQA Guidelines section 15064.4 states that an agency should make a “good faith effort . . . to describe, calculate, or estimate the amount of greenhouse gas emissions resulting

from a project”. It is left to the lead agency’s discretion to use a quantitative or qualitative approach. Factors that should be considered when determining significance are:

1. The extent to which the project may increase or decrease greenhouse gas emissions compared to the baseline;
2. Whether the project exceeds any applicable significance threshold; and
3. The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions.

The guidelines do not include a numeric significance threshold, but instead defer to the lead agency to determine whether there are thresholds which apply to the project. With regard to the third item, statewide plans include AB 32 and SB 375, as described in the Regulatory setting. The underlying strategy and assumptions of the AB 32 Scoping Plan were used to develop County thresholds. AB 32 requires emissions be reduced to 1990 levels by the year 2020, which is estimated in the AB 32 2008 Scoping Plan to be 15% below *existing (2005) emissions*. The text is emphasized to note that the goal is not 15% below what is known as “business-as-usual” conditions or unmitigated project emissions; it is 15% below the emissions which were existing in California in the year 2005. In the AB 32 2017 Scoping Plan, emissions need to be reduced to 40% below 1990 levels by 2030.

In April 2020, SMAQMD adopted an update to their land development project operational GHG threshold, which requires a project to demonstrate consistency with CARB’s 2017 Climate Change Scoping Plan. SMAQMD’s technical support document, “Greenhouse Gas Thresholds for Sacramento County”, identifies operational measures that should be applied to a project to demonstrate consistency.

All projects must implement Tier 1 Best Management Practices (BMP) to demonstrate consistency with the Climate Change Scoping Plan. After implementation of Tier 1 BMPs, project emissions are compared to the operational land use screening levels table (equivalent to 1,100 metric tons of CO<sub>2e</sub> per year). If a project’s operational emissions are less than or equal to 1,100 metric tons of CO<sub>2e</sub> per year after implementation of Tier 1 BMPs, the project will result in a less than cumulatively considerable contribution and has no further action. Tier 1 BMPs include:

- BMP 1 – no natural gas: projects shall be designed and constructed without natural gas infrastructure.
- BMP 2 – electric vehicle (EV) Ready: projects shall meet the current CalGreen Tier 2 standards (Multi-family dwellings = 20% of total parking spaces to be EV Capable), except all EV Capable spaces shall be instead EV Ready.
  - EV Capable requires the installation of “raceway” (the enclosed conduit that forms the physical pathway for electrical wiring to protect it from damage)

and adequate panel capacity to accommodate future installation of a dedicated branch circuit and charging station(s).

- EV Ready requires all EV Capable improvements plus installation of dedicated branch circuit(s) (electrical pre-wiring), circuit breakers, and other electrical components, including a receptacle (240-volt outlet) or blank cover needed to support future installation of one or more charging stations.

For large or inefficient projects (exceed screening levels), additional analysis is required to assess GHG impacts and projects must implement Tier 2 BMP:

BMP 3 – Residential projects shall achieve a 15% reduction in VMT per resident, and office projects should achieve a 15% reduction in VMT per worker compared to existing average VMT per capita for the county, or for the city if a more local SB 743 target has been established. Retail project should achieve no net increase in total VMT, as required to show consistency with SB 743. These reductions can be achieved by many strategies, such as:

Located in an area that already has low VMT due to location, transit service, etc.

Adopt CAPCOA measure

Join a Transportation Management Association

Incorporate traffic calming measures

Incorporate pedestrian facilities and connections to public transportation

Promote electric bicycle or other micro-mobility options

SMAQMD's GHG construction and operational emissions thresholds for Sacramento County are shown in Table CC-2. The County of Sacramento adopted the SMAQMD thresholds on December 16, 2020 by Resolution #2020-0855.

**Table CC-2: GHG Thresholds**

<b>Land Development and Construction Projects</b>		
	<b>Construction Phase</b>	<b>Operational Phase</b>
Greenhouse Gas as CO <sub>2</sub> e	1,100 metric tons per year	1,100 metric tons per year
<b>Stationary Source Only</b>		
	<b>Construction Phase</b>	<b>Operational Phase</b>
Greenhouse Gas as CO <sub>2</sub> e	1,100 metric tons per year	10,000 metric tons per year

## METHODOLOGY

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SMAQMD has established recommended thresholds that ensure that 90 percent of emissions from projects in the region are reviewed to determine the need for additional mitigation. According to SMAQMD's methodology, a land use development project with operational emissions that are less than 1,100 metric tons (MT) of carbon dioxide equivalent (CO<sub>2</sub>e) per year will not result in a significant impact and will not require additional mitigation. SMAQMD assumes that projects with operational emissions below 1,100 MT of CO<sub>2</sub>e per year will not exceed their construction GHG threshold of significance as long as the project does not include buildings that are more than four stories tall, significant trenching, demolition activities, a compact construction schedule, significant cut and fill operations, or significant truck activity.

SMAQMD has established an Operational Screening Levels table, which shows the size of development, by land use type, that SMAQMD has determined would not exceed the operational GHG emissions thresholds. Projects that are smaller than those listed in the table and, which meet the construction parameters listed above, and commit to Tier 1 BMPs, are considered to have a less than significant impact related to Climate Change. For large and inefficient projects or cannot meet Tier 1 BMPs, SMAQMD recommends the use of CalEEMod to quantify the GHG emissions that would be generated by the project.

The proposed project is considered a large project under the new guidance. A *Greenhouse Gas Emissions Assessment for the Proposed Cargo Facility and SMF Master Plan Update* was prepared by Kimley-Horn and Associates in January 2021 (reference Appendix CC-1). The assessment studied the significant changes to the Master Plan Update including the proposed cargo facility (PAL 1), new concourse (PAL 2), consolidated rental car facility (PAL 2) and 330 acres of commercial development (PAL 3). Where specific project information is not known, general project size (acres) and building square footage was estimated to make a meaningful analysis. Table CC-3 below illustrates the respective building assumptions.

**Table CC-3: Project Assumptions Used in CalEEMod**

Land Use Type	Size (Thousand Square Feet)	Lot Acreage	Daily Trip Rate	Total Daily Trips
<b>Cargo Facility (PAL 1)</b>				
Cargo Facility (Unrefrigerated Warehouse)	950	21.81	9.8	9,310
Parking, Ramp, and Taxi Lane (Parking Lot/Other Non-Asphalt [Concrete] Surface)	2,434.57	55.89	0	0
<b>Total</b>	<b>3,384.57</b>	<b>77.70</b>	<b>--</b>	<b>9,310</b>
<b>Airport Master Plan</b>				
New Concourse (PAL 2)	267.73	6.15	27.92	7,475
Consolidated Car Rental Facility (PAL 2)	2,252.50	10.30	0	0
Commercial Development (PAL 3)	3,908.23	329.59	1.68	6,566
<b>Total</b>	<b>6,428.46</b>	<b>346.04</b>	<b>--</b>	<b>14,041</b>

The assessment used CalEEMod version 2016.3.2 to determine the proposed projects GHG emissions. CalEEMod is a statewide model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify air quality emissions, including GHG emissions, from land use projects. The model applies inherent default values for various land uses, including electricity and natural gas usage, water supply and distribution, wastewater treatment, and solid waste disposal. However, where project-specific data was available, such data was input into the model (e.g., vehicle trips, applied mitigation). Modifications to the model include adjustments to the CalEEMod energy inputs to be consistent with the most current version of Title 24, Part 6 Building Energy Efficiency Standards and natural gas usage to comply with SMAQMD BMP-1, no natural gas. Emissions associated with the SMF Master Plan Update were determined using the VMT information contained in the VMT Assessment prepared for the project. Values were inserted into EMFAC 2017 to yield an emissions value for mobile sources. Emissions were modeled for operational year 2022.

## IMPACTS AND ANALYSIS

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### IMPACT: GENERATE GREENHOUSE GAS EMISSIONS THAT MAY IMPACT THE ENVIRONMENT

As stated in the introduction, the proposed project is a modification of the SMF Master Plan adopted in 2007. The prior EIR constitutes the CEQA baseline and includes many of the identified airport facilities. The proposed changes that deviate significantly from the prior EIR are the proposed cargo facility, new concourse, consolidated car rental facility and the commercial development north of I-5. The GHG Assessment prepared by Kimley-Horn conducted GHG emissions modeling for the cargo facility, new concourse, consolidated car rental facility and the commercial development, and the Master Plan Update as a whole, using the vehicle miles traveled assessment prepared for the proposed project. The emissions are presented below for construction (short-term) and operational (long-term) emissions.

#### *CONSTRUCTION-RELATED GHG EMISSIONS*

##### **CARGO FACILITY**

As seen in Table CC-3, construction of the proposed cargo facility would generate a total of approximately 2,212 MTCO<sub>2e</sub>, (year 1- 755, year 2- 1,457). Emissions would exceed SMAQMD construction phase GHG threshold of 1,100 MTCO<sub>2e</sub> per year. The Air Quality Guide allows for construction emissions to be amortized over the expected operational (long-term) life of the project. The amortized project construction emissions would be 74 MTCO<sub>2e</sub> per year.

##### **MASTER PLAN UPDATE**

The modeling for the Master Plan Update was completed assuming all three Master Plan elements were being constructed at the same time. While this could happen with various Master Plan elements within the same PAL, the specific elements (or projects) modeled here are in separate phases, but this gives a conservative estimate of GHG emissions that may be produced at any given time. As seen in Table CC-4, construction of all three Master Plan Update projects would generate a total of approximately 5,843 MTCO<sub>2e</sub>, (year 1- 1,020, year 2- 4,823). Emissions would exceed SMAQMD construction phase GHG threshold of 1,100 MTCO<sub>2e</sub> per year. The Air Quality Guide allows for construction emissions to be amortized over the expected operational (long-term) life of the project. The amortized project construction emissions would be 195 MTCO<sub>2e</sub> per year. For commercial development projects that meet the construction screening criteria, it can be assumed that the project would not exceed GHG thresholds.



**Table CC-4: Construction-Related GHG Emissions for the Cargo Facility**

	MTCO <sub>2</sub> e
<b>Cargo Facility</b>	
Construction Year 1	755
Construction Year 2	1,457
Total Construction Emissions	2,212
30-Year Amortized Construction Emissions	74
<b>Master Plan Update</b>	
Construction Year 1	1,020
Construction Year 2	4,823
Total Construction Emissions	5,843
30-Year Amortized Construction Emissions	195

*OPERATIONAL GHG EMISSIONS***CARGO FACILITY**

The operational GHG emissions associated with the proposed cargo facility would result from direct emissions associated with project-generated vehicular traffic and operation of landscape equipment. Indirect GHG emissions would be produced by off-site generation of electricity, energy to convey water and wastewater, solid waste and fugitive refrigerant from air conditioning or refrigerators. The total unmitigated GHG emission associated with the proposed cargo facility are presented in Table CC-5 below. Since the construction emissions were amortized, they are included in the operational totals.

Consistent with the SMAQMD GHG Guidelines, Tier 1 BMPs 1 and 2 were applied to the project and the model was adjusted accordingly. In addition, mitigation measures consistent with those recommended in the *SMF Cargo Facility Project and Master Plan Update Air Quality Assessment* (Kimley-Horn, January 2021) were incorporated into the model. These measures include: 2010 or newer trucks, hookups and EV charging stations to support future zero-emission heavy-duty vehicles; a Transportation Demand Management (TDM) program; and establishing a new, or joining and maintaining membership in an existing Transportation Management Association (TMA).

**Table CC-5: Operational GHG Emissions for Cargo Facility**

<b>Emissions Source</b>	<b>MTCO<sub>2e</sub> per Year</b>
<b>Unmitigated</b>	
Area	0.03
Energy	818
Mobile	20,606
Waste	449
Water	306
Amortized Construction Emissions	74
<b>Total Annual GHG Emissions - Unmitigated</b>	<b>22,253</b>
<b>Mitigated</b>	
Area	0.03
Energy	807
Mobile	20,392
Waste	225
Water	245
Amortized Construction Emissions	74
<b>Total Annual GHG Emissions - Mitigated</b>	<b>21,743</b>

**MASTER PLAN UPDATE**

The proposed Master Plan Update shifts the timing, configuration and number of previously identified concourses and gates. This is in response to accommodate growth over the next 20 years. In addition to the proposed cargo facility detailed above, significant changes proposed in the Master Plan Update include the new concourse, consolidated car rental facility and 330 acres of commercial development north of I-5. These Master Plan facilities will generate approximately 18,202 MTCO<sub>2e</sub> per year (Table CC-6).

Currently, more than 2.1 million domestic passengers and 1.6 million international passengers travel to airports outside the Sacramento region, largely the Bay area. If the expansion at the airport is not completed, this travel is expected to continue as demand for service and population increases over time. Estimates for future air travel prepared for the Master Plan Update anticipate that half of the anticipated growth at SMF will result from recapturing passengers that would have traveled to the Bay Area.

The length of trips for some passengers will shorten (reduction in VMT), thereby directly corresponding in a reduction of mobile source GHG emissions. Using the CARB's

EMFAC2017 model, a VMT reduction of 486,941 vehicle miles per day as calculated in the VMT Assessment prepared for the project, the SMF Master Plan Update would have an emissions reduction of -34,313 MTCO<sub>2e</sub> per year.

**Table CC-6: Operational GHG Emissions for the Master Plan Update Projects**

<b>Emissions Source</b>	<b>MTCO<sub>2e</sub> per Year</b>
<b>Unmitigated</b>	
Area	0.17
Energy	4,166
Mobile	11,918
Waste	2,615
Water	1,352
Amortized Construction Emissions	195
<b>Total Annual GHG Emissions - Unmitigated</b>	<b>20,247</b>
<b>Mitigated</b>	
Area	0.17
Energy	4,056
Mobile	11,755
Waste	1,307
Water	1,084
Amortized Construction Emissions	195
<b>Total Annual GHG Emissions - Mitigated</b>	<b>18,397</b>

**Table CC-7: Total GHG Emissions for the Master Plan Update**

<b>Emissions Source</b>	<b>MTCO<sub>2e</sub> per Year</b>
<i>Total SMF Master Plan Update Emissions (Construction + Operations)</i>	18,397
<i>Total Annual Cargo Facility GHG Emissions</i>	21,743
<i>SMF Master Plan Update VMT Emissions Reduction</i>	-34,313
<b>Total Net Emissions</b>	<b>5,827</b>

**OPERATIONAL GHG EMISSION CONCLUSIONS**

The SMF Master Plan Update will result in an overall increase of GHG emissions. As shown in Table CC-7 above, the total GHG emissions from Master Plan projects will result

in an increase of 40,140 MTCO<sub>2e</sub> per year. This exceeds the GHG threshold of 1,100 MTCO<sub>2e</sub>. According to the SMAQMD GHG threshold guidance, projects that exceed GHG thresholds after application of Tier 1 BMPs are considered large or inefficient projects and must implement Tier 2 BMP. Under Tier 2 BMP, the project's VMT is compared to the County's VMT target for the project type (16.4 for industrial uses and no net increase for regional public facilities; Table TC-2). If the project is at, or below, the County's target, then no further mitigation is required. However, if the project exceeds the County's target, then the project should reduce the VMT by 15 percent over the existing County target (16.4). The proposed cargo facility and Master Plan Update would generate average VMTs of 22.59 and 20.52 respectively; which exceeds the County's VMT targets. In order to meet Tier 2 BMP, projects should reduce employee VMT 15 percent below the County's VMT target to 13.9.

Even after applying the Master Plan Update VMT emissions reductions, the total net GHG emissions associated with the SMF Master Plan Update will result in an increase of 5,827 MTCO<sub>2e</sub> per year, exceeding thresholds. Therefore, additional mitigation is recommended to develop a TDM program and establish a new or join an existing TMA in compliance with Tier 2 BMP.

Mitigation is recommended to reduce operational GHG emissions to the extent feasible. Measures include the compliance with Tier 1 and 2 BMPs of SMAQMD GHG Guidelines, and to implement applicable County CAP checklist measures when they become available in the future. Since the County CAP is not yet adopted, the recommended mitigation measure cannot be applied in its entirety until a future date and its effects are not currently quantifiable, GHG emissions impacts from the SMF Master Plan Update are considered ***significant and unavoidable***.

## MITIGATION MEASURES

CC-1 All future development projects under the SMF Master Plan Update shall demonstrate compliance with SMAQMD Tier 1 BMPs (required for all projects) and Tier 2 BMPs (Mitigation Measures AQ-6 through AQ-7). Upon adoption of the Sacramento County Communitywide Climate Action Plan (CAP) and CAP Checklist, future SMF Master Plan Development projects shall demonstrate consistency with and adopt applicable CAP Checklist measures.

## IMPACT: CONFLICT WITH PLANS, POLICIES, OR REGULATIONS ADOPTED TO REDUCE GREENHOUSE GAS EMISSIONS

The proposed Master Plan Update is estimated to result in a net increase of approximately 5,827 MTCO<sub>2e</sub> per year. This exceeds established thresholds and could impede the ability of SMAQMD to meet the goals and policies of the State to meet 2030 emission reductions. Mitigation is recommended to reduce GHG emissions to the extent feasible consistent with existing Best Management Practices and future County CAP measures.

With respect to State goals and policies, a complete table of consistency with the CARB 2017 Scoping Plan is provided in Table 7 of Appendix GHG-1. The project is consistent with strategies that are applicable to the proposed project.

Executive Order S-3-05 requires the State to reach 80% below 1990 levels by the year 2050. At this time it is not possible to quantify the emissions savings from future regulatory measures, as they have not been developed. Nevertheless, it can be anticipated that operation of the proposed project would benefit from the implementation of current and potential future regulations (e.g., improvements in vehicle/engine emissions renewable electricity portfolios, etc.) that are enacted to meet this goal.

The proposed Master Plan Update demonstrates consistency with State goals and would not conflict with any applicable plan, policy, or regulation adopted to reduce GHG emissions, including Title 24, AB 32, and SB32. However, the project does exceed local plans adopted to reduce GHG and despite implementation of recommended mitigation measures, GHG emission impacts remain ***significant and unavoidable***.

#### MITIGATION MEASURES

Implement Mitigation Measure CC-1.

## 6 CULTURAL RESOURCES

### INTRODUCTION

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A cultural resources report was completed initially for the Airport in 2006 during the preparation of the EIR for the Master Plan. The FEIR identified potentially significant impacts associated with buried archeological and historical resources. Mitigation measures were adopted to reduce these impacts to less than significant. This document will assess potential impacts associated with the proposed airport facilities paying particular attention to areas not previously surveyed.

### ENVIRONMENTAL SETTING

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The Sacramento International Airport (SMF) is located in the Natomas Basin of the Sacramento Valley. The airport is located just east of the Sacramento River, which bends south of SMF. This region is rich in agricultural history and Native American history. The contextual environmental setting presented in the FEIR remains applicable to this analysis.

### REGULATORY SETTING

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#### FEDERAL

Cultural resources are considered during federal undertakings chiefly under Section 106 of the National Historic Preservation Act (NHPA) of 1966 (as amended) through one of its implementing regulations, 36 CFR 800 (Protection of Historic Properties), as well as the National Environmental Policy Act (NEPA). Properties of traditional religious and cultural importance to Native Americans are considered under Section 101(d)(6)(A) of NHPA. Other federal laws pertinent to cultural resources include the Archaeological Data Preservation Act of 1974, the American Indian Religious Freedom Act (AIRFA) of 1978, the Archaeological Resources Protection Act (ARPA) of 1979, the Native American Graves Protection and Repatriation Act (NAGPRA) of 1989, among others. Below is a more detailed description of applicable federal regulations.

#### *ANTIQUITIES ACT*

The Federal Antiquities Act of 1906 was created with the intent to protect cultural resources in the United States. The Antiquities Act prohibits appropriation, excavation, injury, and destruction of “any historic or prehistoric ruin or monument, or any object of antiquity” located on lands owned or controlled by the federal government, without permission of the secretary of the Federal department with jurisdiction. Accordingly, the Antiquities Act provided early framework to protect cultural resources within the United States.

*NATIONAL ENVIRONMENTAL POLICY ACT*

The National Environmental Policy Act (NEPA) requires that federal agencies assess whether federal actions would result in significant effects on the human environment. The Council on Environmental Quality's (CEQ's) NEPA regulations further stipulate that identification of significant effects should incorporate "the degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register for Historic Places or may cause loss or destruction of significant scientific, cultural, or historic resources" (40 CFR 1508.27[b][8]).

*NATIONAL HISTORIC PRESERVATION ACT*

Archaeological and built environment resources (buildings and structures) are protected through the National Historic Preservation Act (NHPA of 1966, as amended (16 United States Code [USC] 470f) and its implementing regulations: Protection of Historic Properties (36 Code of Federal Regulations [CFR] Part 800), the Archaeological and Historic Preservation Act of 1974, and the Archaeological Resources Protection Act of 1979.

Prior to implementing an undertaking (e.g., issuing a federal permit), federal agencies (e.g., U.S. Army Corps of Engineers [USACE]) are required under Section 106 of NHPA to consider the effects of the undertaking on historic properties and to afford the Advisory Council on Historic Preservation (ACHP) and the State Historic Preservation Officer (SHPO) a reasonable opportunity to comment on any undertaking that would adversely affect properties eligible for listing in the National Register of Historic Places (NRHP). NHPA Section 101(d)(6)(A) allows properties of traditional religious and cultural importance to a tribe to be determined eligible for inclusion in the NRHP. Under the NHPA, a find is significant if it meets the NRHP listing criteria under 36 CFR 60.4, as stated below.

The quality of *significance* in American history, architecture, archaeology, engineering and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling and association and that:

- a. Are associated with events that have made a significant contribution to the broad patterns of our history; or
- b. Are associated with the lives of persons significant in our past; or
- c. Embody the distinctive characteristics of a type, period, or method of installation, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- d. Have yielded, or may be likely to yield, information important in prehistory or history.

## STATE

The State of California implements NHPA through its statewide comprehensive cultural resource preservation programs. The California Office of Historic Preservation (OHP), an office of the California Department of Parks and Recreation (DPR), implements the policies of NHPA on a statewide level. OHP also maintains the California Historical Resources Inventory. The SHPO is an appointed official who implements historic preservation programs within the State's jurisdiction.

*CALIFORNIA ENVIRONMENTAL QUALITY ACT*

The California Environmental Quality Act (CEQA), as codified in Public Resource Code (PRC) Sections 21000 et seq. and implemented via the State CEQA Guidelines (14 California Code of Regulations [CCR] Section 15000 et seq.), is the principal statute governing the environmental review of projects in the State. CEQA requires a lead agency to determine whether a project may have a significant effect on historical resources. If it can be demonstrated that a project will cause damage to a unique archaeological resource, the lead agency may require reasonable efforts to be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that they cannot be left undisturbed, mitigation measures are required (Section 21083.2 (a), (b), and (c)). Section 21083.2(g) describes a *unique archaeological resource* as an archaeological artifact, object, or site about which it can be clearly demonstrated that without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

- (1) Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
- (2) Has a special and particular quality such as being the oldest of its type or the best available example of its type.
- (3) Is directly associated with a scientifically recognized important prehistoric or historic event or person.

A *historical resource* is a resource listed, or determined to be eligible for listing, in the California Register of Historical Resources (CRHR) (Section 21084.1); a resource included in a local register of historical resources (Section 15064.5(a)(2)); or any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant (Section 15064.5 (a)(3)). Sacramento County does not currently have a local register.

Public Resources Code (PRC) Section 5024.1, Section 15064.5 of the Guidelines, and Sections 21083.2 and 21084.1 of the Statutes of CEQA were used as the basic guidelines for the cultural resources study. PRC Section 5024.1 requires evaluation of historical resources to determine their eligibility for listing on the CRHR. The purpose of the register is to maintain listings of the State's historical resources and to indicate which properties are to be protected from substantial adverse change. The criteria for



listing resources on the California Register were expressly developed to be in accordance with previously established criteria developed for listing on the NRHP.

In order to be considered a historical resource, a resource must be at least 50 years old. In addition, the State CEQA Guidelines define a historical resource as follows:

- a. A resource listed in the California Register of Historical Resources (CRHR).
- b. A resource included in a local register of historical resources, as defined in PRC Section 5020.1(k) or identified as significant in a historical resource survey meeting the requirements of PRC Section 5024.1(g).
- c. Any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California, provided the lead agency's determination is supported by substantial evidence in light of the whole record. The CRHR is "an authoritative listing and guide to be used by state and local agencies, private groups, and citizens in identifying the existing historical resources of the state and to indicate which resources deserve to be protected, to the extent prudent and feasible, from substantial adverse change" (PRC Section 5024.1[a]). The CRHR criteria are based on National Register of Historic Places (NRHP) criteria (PRC Section 5024.1[b]). Certain resources are determined by CEQA to be automatically included in the CRHR, including California properties formally eligible for or listed in the NRHP. To be eligible for listing in the CRHR as a historical resource, a prehistoric or historic-period resource must be significant at the local, state, and/or federal level under one or more of the following criteria:
  1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
  2. Is associated with the lives of persons important in our past.
  3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
  4. Has yielded, or may be likely to yield, information important in prehistory or history (14 CCR Section 4852[b]).

For a resource to be eligible for the CRHR, it must also retain enough integrity to be recognizable as a historical resource and to convey its significance. A resource that does not retain sufficient integrity to meet NRHP criteria may still be eligible for listing in the CRHR.

CEQA requires lead agencies to determine if a proposed project would have a significant effect on important historical resources or unique archaeological resources. If a lead agency determines that an archaeological site is a historical resource, the

provisions of PRC Section 21084.1 and State CEQA Guidelines Section 15064.5 would apply. If an archaeological site does not meet the State CEQA Guidelines criteria for a historical resource, then the site may meet the threshold of PRC Section 21083.2 regarding unique archaeological resources. A *unique archaeological resource* is an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

- Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
- Has a special and particular quality such as being the oldest of its type or the best available example of its type.
- Is directly associated with a scientifically recognized important prehistoric or historic event or person (PRC Section 21083.2 [g]).

The State CEQA Guidelines note that if a resource is neither a unique archaeological resource nor a historical resource, the effects of the project on that resource shall not be considered a significant effect on the environment (14 CCR Section 15064[c][4]).

*MADERA OVERSIGHT COALITION, INC. V. COUNTY OF MADERA (2011)*

In the past, it was common practice for many CEQA practitioners to provide performance-based mitigation for cultural resources, stipulating that further evaluation and treatment of resources would be performed in the future. The 2011 decision from the *Madera Oversight Coalition, Inc. v. County of Madera* (2011 [199 Cal. App.4th 48, 81]) case determined this practice to be unacceptable under CEQA and required evaluation of cultural resources subject to CEQA to be performed at a level sufficient to characterize the resources prior to environmental impact report (EIR) certification (instead of waiting until preconstruction or construction stages of a project). Cultural resources evaluations in this EIR have been completed consistent with the *Madera Oversight* decision.

SACRAMENTO COUNTY GENERAL PLAN

The Sacramento County General Plan Conservation Element, states under Section VIII, Cultural Resources, the following goal and six objectives:

Promote the inventory, protection and interpretation of the cultural heritage of Sacramento County, including historical and archaeological settings, sites, buildings, features, artifacts and/or areas of ethnic historical, religious or socio-economic importance.

1. Comprehensive knowledge of archeological and historic site locations.

2. Attention and care during project review and construction to ensure that cultural resource sites, either previously known or discovered on the project site, are properly protected with sensitivity to Native American values.
3. Structures with architectural or historical importance preserved to maintain contributing design elements.
4. Known cultural resources protected from vandalism unauthorized excavation, or accidental destruction.
5. Properly stored and classified artifacts for ongoing study.
6. Public awareness and appreciation of both visible and intangible historic and cultural resources.

To implement the primary goal and the objectives, the Conservation Element contains the following policies:

CO-150. Utilize local, state and national resources, such as the NCIC, to assist in determining the need for a cultural resources survey during project review.

CO-155. Native American burial sites encountered during preapproved survey or during construction shall, whenever possible, remain in situ. Excavation and reburial shall occur when in situ preservation is not possible or when the archeological significance of the site merits excavation and recording procedure. On-site reinternment shall have priority. The project developer shall provide the burden of proof that offsite reinternment is the only feasible alternative. Reinternment shall be the responsibility of local tribal representatives.

CO-157. Monitor projects during construction to ensure crews follow proper reporting, safeguards, and procedures.

CO-158. As a condition of approval of discretionary permits, a procedure shall be included to cover the potential discovery of archaeological resources during development or construction.

CO-169. Restrict the circulation of cultural resource location information to prevent potential site vandalism. This information is exempt from the "Freedom of Information Act".

#### DISCLOSURE OF CULTURAL RESOURCES INFORMATION

Public disclosure of site-specific cultural resources information is expressly exempt from the California Public Records Act, Government Code Sections 6250-6270. Furthermore, information obtained during Native American consultation or through consultation with the local and state agencies, including the North Central Information Center (NCIC), should remain confidential and is exempt from public disclosure under Senate Bill 922. Pursuant to General Plan Policy CO-169, Sacramento County staff has

signed an “Agreement to Confidentiality” with the NCIC that states that site-specific information will not be distributed or released to the public or unauthorized individuals. An authorized individual is a professional archaeologist or historian that qualifies under the Secretary of Interior’s standards to view confidential cultural resources materials.

## SIGNIFICANCE CRITERIA

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In order for a cultural resource to be considered a “historic property” under NRHP criteria (i.e., eligible for inclusion on the NRHP), it must be demonstrated that the resource possesses *integrity* of location, design, setting, materials, workmanship, feeling and association, and must meet at least one of the following four criteria delineated by Section 106 (Advisory Council on Historic Preservation 2000), as listed in 36 CFR 60.4:

- (a) That are associated with events that have made a significant contribution to the broad patterns of our history; or
- (b) That are associated with the lives of persons significant in our past; or
- (c) That embody the distinctive characteristics of a type, period or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- (d) That have yielded, or may be likely to yield, information important in prehistory or history.

The criteria for listing resources on the CRHR were expressly developed to be in accordance with previously established criteria developed for listing on the NRHP, enumerated above, and require similar protection to what NHPA Section 106 mandates for historic properties. According to PRC Section 5024.1(c)(1-4), a resource is considered *historically significant* if it meets at least one of the following criteria:

- (1) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- (2) Is associated with the lives of persons important in our past;
- (3) Embodies the distinctive characteristics of a type, period, region or method of installation, or represents the work of an important creative individual, or possesses high artistic values; or
- (4) Has yielded, or may be likely to yield, information important in prehistory or history.

Under CEQA, if an archeological site is not a significant “historical resource” but meets the definition of a “unique archeological resource” as defined in PRC Section 21083.2, then it should be treated in accordance with the provisions of that section. A unique archaeological resource is defined as follows:

An archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

- (1) Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
- (2) Has a special and particular quality such as being the oldest of its type or the best available example of its type.
- (3) Is directly associated with a scientifically recognized important prehistoric or historic event or person.

Resources that neither meet any of these criteria for listing on the NRHP or CRHR nor qualify as a “unique archaeological resource” under CEQA PRC Section 21083.2 are viewed as not significant. Under CEQA, “A non-unique archaeological resource need be given no further consideration, other than the simple recording of its existence by the lead agency if it so elects” (PRC Section 21083.2(h)).

Impacts to *significant* cultural resources (“historic properties” under NHPA and “historical resources” under CEQA) that affect the characteristics of any resource that qualify it for the NRHP or adversely alter the significance of a resource listed on or eligible for listing on the CRHR are considered a significant effect on the environment (CEQA guidelines 15065(a)(1)). Impacts to *significant* cultural resources from a proposed Project are thus considered significant if a project physically destroys or damages all or part of a resource, changes the character of the use of the resource or physical feature within the setting of the resource which contribute to its significance or introduces visual, atmospheric, or audible elements that diminish the integrity of significant features of the resource.

In accordance with Appendix G of the State CEQA Guidelines, a project would be considered to have a significant effect if it would result in any of the conditions listed below.

- Cause a substantial adverse change in the significance of an archaeological resource that is a historical resource as defined in Section 15064.5.
- Cause a substantial adverse change in the significance of a built environment resource that is a historical resource pursuant to Section 15064.5.
- Disturb any human remains, including those interred outside of formal cemeteries.

## METHODOLOGY

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Dudek Consultants have prepared a cultural resources report, *Draft Cultural Resources Inventory Report for the Sacramento International Airport Cargo Facility Project*,

*Sacramento County, October 2020*, focusing on the area north of the terminals to be developed with commercial and industrial uses. The report analyzes the historical and archeological context of the project area. This report along with the prior report prepared for the 2007 Master Plan EIR are used to assess project impacts.

#### INFORMATION CENTER RECORD SEARCH

In 2020, the North Central Information Center (NCIC), California Historical Resources Information System conducted a records search for the project site. NCIC staff identified 44 previous cultural resource surveys within a half-mile of the project site and 24 that cover at least a portion of the area of potential effect. The records search identified two cultural resources (districts) intersecting the APE, and an additional 21 cultural resources were identified with a half-mile of the APE.

#### FIELD ASSESSMENT

Dudek staff archaeologists conducted archeological field surveys of the project. A reconnaissance-level survey was conducted for all areas that were not restricted. Pedestrian transects every 15 meters were completed. The ground surface visibility was overall low due to vegetation and paved surfaces at the time of survey. Special attention was paid to areas of erosion, mechanical cuts, drainage ditches or animal burrows; however, no cultural materials were observed on the ground surface for the areas surveyed.

A pedestrian survey of the built environment was completed by walking and/or driving accessible portions of the APE. Character-defining features, spatial relationships were observed and noted.

## IMPACTS AND ANALYSIS

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#### IMPACT: HISTORICAL RESOURCES

No new historical resources were identified in the Dudek report. During the cultural resources inventory and evaluation for the 2007 Master Plan EIR, the airport buildings and facilities built in 1966 were reviewed to determine if any would meet the criteria under the CRHR or NRHP even though the structures were not yet 50 years old. The report findings determined that the buildings did not meet the qualifications to be considered a historical resource. As of 2016, when many of the buildings would become eligible, most, if not all, have been demolished and replaced. The only identified historical resources within or near the project site is the Reclamation District 1000 complex of canals and drainages.

#### **RD 1000 (P-34-005251)**

The Historic American Engineering Record (HAER) identifies RD 1000 for its importance as a part of a regional reclamation plan that transformed the region from its original floodplain to a distinct open rural landscape consisting of large blocks of fields

intersected by levees, canals, and roads that characterize the landscape today. Along with the physical transformation of the landscape came significant changes to the social and economic character of the region. This district, identified as significant at the State level for the period from 1911 to 1939, was among the first and largest reclamation districts in the State and was determined eligible for the National Register of Historic Places in 1994. Several of the resources recorded within the half-mile buffer of the project area are components of RD 1000 including the East Drainage Canal (P-34-002101), and structures and features associated with the Prichard Lake Pumping Plant (P-34-001558, -1559, -4511, -5162).

In 1994, the California Office of Historic Preservation (OHP) in consultation with the United State Army Corps of Engineers (USACE) concurred with the finding that the RD 1000 rural historic landscape district is eligible for inclusion in the NRHP at the State level of significance under NRHP Criterion A for importance within the historic context of reclamation within the period of significance of 1911 to 1939 (JRP 2007: 20, 21).

Types of actions which constitute a substantial adverse change in the significance of a historical resource include physical demolition, destruction, relocation, renovation or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired (State CEQA Guidelines Section 15064.5).

The proposed project may alter some of the contributing factors that make up the historic district. Primarily, a portion of the P-4 drain (Lambert Ditch) may be culverted as it is within the proposed commercial development area north of Elverta Road identified in PAL 3. Development of this area is unknown at this time and while it is unlikely that the entire drainage ditch would be culverted, as a conservative approach it is assumed. Water conveyance would continue and would not significantly impact the function of the District. Shoulder improvements to Elverta Road identified in PAL 1 would not compromise the alignment, function or integrity of the roadway; however, the eventual relocation of Elverta Road identified in PAL 4 will change the alignment, but the road would maintain function to support the District needs.

Since the RD 1000 historic district was initially documented in the mid-1990s many of its contributing roads, canals, and drainages have been modified and maintained to support its continued use. Changes proposed as part of this project help support continued use of RD 1000 contributing resources. The overall historic district will still be able to convey its significance as a large rural historic landscape featuring, agricultural fields set within a vast network of canals, drainage ditches, roads, trees, and sparse farmsteads. Therefore, the overall finding for the project in consideration of impacts to historical built environment resources is ***less than significant***.

#### MITIGATION MEASURES:

None recommended.

## IMPACT: ARCHEOLOGICAL OR PREHISTORIC RESOURCES

SMF is located within an area of the County that has been subjected to frequent flooding events, which deposit alluvial sands and silts potentially burying prehistoric artifacts. Additionally, the Sacramento River was an attractive resource for prehistoric peoples and areas along the riverbank have a higher potential for buried deposits. Prior cultural resource surveys have documented Native American resources along the banks of the Sacramento River (P34-002226, P-34-003712).

Subsurface impacts associated with project construction are at least a half-mile from the banks of the Sacramento River. The nearest ground disturbance to known resources is associated with the proposed cargo facility in PAL 1. Given the relatively high number of known cultural resources within a surrounding area, the low visibility of the ground surface during pedestrian survey, and geomorphic setting, the project does have a moderate potential of encountering unanticipated cultural resources within undeveloped areas of the Master Plan area. Mitigation is recommended to reduce this potentially significant impact to ***less than significant***.

## MITIGATION MEASURES:

### CR-1 Cultural Resources Unanticipated Discoveries

In the event that human remains are discovered in any location other than a dedicated cemetery, work shall be halted and the County Coroner contacted. For all other unexpected cultural resources discovered during project construction, work shall be halted until a qualified archaeologist may evaluate the resource encountered.

1. **Unanticipated human remains.** Pursuant to Sections 5097.97 and 5097.98 of the State Public Resources Code, and Section 7050.5 of the State Health and Safety Code, if a human bone or bone of unknown origin is found during construction, all work is to stop and the County Coroner and the Office of Planning and Environmental Review shall be immediately notified. If the remains are determined to be Native American, the coroner shall notify the Native American Heritage Commission within 24 hours, and the Native American Heritage Commission shall identify the person or persons it believes to be the most likely descendent from the deceased Native American. The most likely descendent may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposition of, with appropriate dignity, the human remains and any associated grave goods.
2. **Unanticipated cultural resources.** In the event of an inadvertent discovery of cultural resources (excluding human remains) during construction, all work must halt within a 100-foot radius of the discovery. A qualified professional archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for prehistoric and historic archaeology, shall be retained at the Applicant's expense to evaluate the significance of the find. If



it is determined due to the types of deposits discovered that a Native American monitor is required, the Guidelines for Monitors/Consultants of Native American Cultural, Religious, and Burial Sites as established by the Native American Heritage Commission shall be followed, and the monitor shall be retained at the Applicant's expense.

- a. Work cannot continue within the 100-foot radius of the discovery site until the archaeologist and/or tribal monitor conducts sufficient research and data collection to make a determination that the resource is either 1) not cultural in origin; or 2) not potentially eligible for listing on the National Register of Historic Places or California Register of Historical Resources.
  - b. If a potentially-eligible resource is encountered, then the archaeologist and/or tribal monitor, Planning and Environmental Review staff, and project proponent shall arrange for either 1) total avoidance of the resource, if possible; or 2) test excavations or total data recovery as mitigation. The determination shall be formally documented in writing and submitted to the County Environmental Coordinator as verification that the provisions of CEQA for managing unanticipated discoveries have been met.
3. **Tribal cultural resources worker awareness.** The appended Tribal Cultural Resources (TCRs) Awareness Brochure, provides a definition and examples of TCRs that may be encountered during construction. The brochure was developed to assist construction teams with the identification and protection of TCRs. The brochure shall be shared with construction teams prior to ground disturbance.

#### CR-2 Tribal Monitoring

Prior to initiation of ground disturbance, the Sacramento County Department of Airports, or contractor, shall contact the United Auburn Indian Community and the Wilton Rancheria to determine if a Tribal Monitor is required at least two weeks prior to ground disturbance. Provide a copy of Tribal correspondence to the Environmental Coordinator. If a Tribal Monitor is required the following measures are necessary:

- a. A compensated (paid) Tribal Monitor from a traditionally and culturally affiliated Native American Tribe shall be retained to monitor specified ground disturbing project related activities.
- b. The duration of the monitoring and construction schedule shall be determined at this time.
- c. The Tribal Monitor will identify areas requiring monitoring in the project area during vegetation grubbing, stripping, grading or other ground-

disturbing activities. All field monitoring activities will be logged by the Tribal Monitor.

- d. The Tribal Monitor shall wear the appropriate safety equipment and shall have the necessary background training in construction safety protocols.
- e. Tribal Monitors or Tribal Representatives have the authority to request that work be temporarily stopped, diverted, or slowed within 100 feet of the direct impact area if sites or objects of significance are identified. Only a Tribal Monitor or Representative from a culturally affiliated tribe can recommend appropriate treatment and final disposition of Tribal Cultural Resources.

#### IMPACT: DISTURB HUMAN REMAINS

Section 5097.94 of the Public Resources Code and Section 7050 of the California Health and Safety Code protect Native American burials, skeletal remains and grave goods, regardless of age and provide methods and means for the appropriate handling of such remains. This is supported by County General Plan Policies CO-155. If human remains are encountered, work should halt in that vicinity and the County coroner should be notified immediately. At the same time, an archaeologist should be contacted to evaluate the situation. If the human remains are of Native American origin, the coroner must notify the Native American Heritage Commission within 24 hours of such identification. In the event that a burial is discovered during implementation of the Project, strict adherence to mitigation as outlined in Mitigation Measure CR-1 ensures impact is ***less than significant***.

#### MITIGATION MEASURES:

Implement Mitigation Measure CR-1, CR-2.

# 7 HYDROLOGY

## INTRODUCTION

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The prior SMF Master Plan EIR (2004-0018) Water Quality and Hydrology chapter evaluated potential water quality and hydrology impacts associated with the Master Plan. The analyses evaluated existing aquatic features, groundwater, drainage facilities, runoff volumes and trajectories, and flood protection for planning years 2013 and 2020.

The prior analyses of the 2007 EIR remain appropriate to the current project. This chapter will focus primarily on increases in impervious surfaces, new drainage facilities, and regulatory updates to increase the urban level of protection (ULOP) to a 200-year flood protection standard. This chapter will describe potential impacts associated with an increase in impervious surfaces and the recent construction to meet the ULOP standard and potential impacts of developing within the Natomas Basin. Discussions concerning groundwater use included in the prior EIR will not be revisited.

## ENVIRONMENTAL SETTING

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SMF is located east and north of the Sacramento River in the Natomas Basin. The Natomas Basin covers approximately 55,000 acres and is bounded by the Natomas Cross Canal on the north, the Sacramento River on the west and south, the American River on the southeast, and the Natomas East Main Drainage Canal on the east.

The Natomas Basin is relatively flat and was historically part of the Sacramento/American River floodplain. Currently, the area is enclosed by levees that separate it from the Sacramento and American rivers. Most of the primary levee system was constructed in the 1910s as part of the Sacramento River Flood Control Project (USFWS et al. 2003 as cited in EDAW 2005). Because of the levees, all stormwater runoff from the basin must be collected and pumped to the Sacramento River. Reclamation District (RD) 1000 operates a system of canals, ditches, and pump stations to convey and pump stormwater runoff from the area to the Sacramento River. Most of these drainage and flood control facilities were developed by RD 1000 between 1905 and 1915 (EDAW 2005) and have been upgraded over the years.

The airport and surrounding County property are crossed by an extensive system of interconnected canals and ditches. Irrigation ditches and drainage canals serve to convey the stormwater runoff within the airport to RD 1000's main canals, which eventually discharge into the Sacramento River. The airport's stormdrain system, consisting of an underground pipe collection system and ditches, is maintained by SCDA.

During large storm events, runoff can exceed the capacity of RD 1000's canal and pump system. Under these conditions, stormwater runoff from the airport will temporarily pond within detention basins, infield areas, and canals/ditches within the

airport property. For example, a 100-year, 24-hour storm event, may result in rainfall on the order of 1.5 inches over the entire Natomas Basin area of 55,000 acres, or 6,875 acre-feet<sup>1</sup>. The total volume of water that can be removed from the basin by pumping all eight RD 1000 pumps continuously for 24 hours is approximately 2,750 acre-feet. Therefore, water could pond locally (e.g., within the ditch system) within the Natomas Basin for a day or more.

## REGULATORY SETTING

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### WATER QUALITY

#### *STATE OF CALIFORNIA*

The Porter-Cologne Water Quality Control Act is the principal law governing water quality regulation in California. This statute established the State Water Resources Control Board (SWRCB) and the nine Regional Water Quality Control Boards, which are charged with implementing its provisions. This act establishes a comprehensive program for the protection of water quality and the beneficial uses of waters in the State of California.

SMF is located within Region 5 administered by the Regional Water Quality Control Board. The applicable Basin Plan for the project area is the *Water Quality Control Plan for the Sacramento and San Joaquin River Basins* (CVRWQCB 2004a). The Basin Plan establishes water quality objectives and implementation programs to meet stated objectives and to protect the beneficial uses of water in the basin, in compliance with the federal Clean Water Act and the Porter-Cologne Water Quality Control Act.

The Porter-Cologne Act also incorporates many provisions of the federal Clean Water Act such as delegation of the National Pollutant Discharge Elimination System (NPDES) program to the SWRCB and Regional Water Quality Control Boards. The SWRCB provides program guidance and oversight, allocates funds, and reviews Regional Water Quality Control Boards decisions. The Regional Water Quality Control Boards have responsibility for individual permitting, inspection, and enforcement actions within each of the nine hydrologic regions of California. SWRCB Order 99-08-DWQ, *NPDES General Permit for Stormwater Discharges Associated with Construction Activity* (General Permit), authorizes a general permit for stormwater discharges associated with construction activities that disturb one or more acre of land. SWRCB Order 97-03-DWQ, *NPDES General Permit to Discharge Stormwater Associated with Industrial Activity* (General Industrial Permit) authorizes a general permit to regulate industrial stormwater discharges.

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<sup>1</sup> An acre-foot is the amount of water required to cover 1 acre to the depth of 1 foot. It is equal to approximately 325,851 gallons.

*LOCAL*

Sacramento County has a National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit issued by Regional Water Quality Control Board. The Municipal Stormwater Permit requires the County to reduce pollutants in stormwater discharges to the maximum extent practicable and to effectively prohibit non-stormwater discharges. The County complies with this permit in part by developing and enforcing ordinances and requirements to reduce the discharge of sediments and other pollutants in runoff from newly developing and redeveloping areas of the County.

The Sacramento area-wide NPDES Municipal Stormwater Permit is a Phase I permit and applies to the County of Sacramento along with the Cities of Citrus Heights, Elk Grove, Folsom, Galt, Rancho Cordova and Sacramento. Originally issued in 1990, the Sacramento stormwater permit has been reissued several times. The most recent permit (NPDES Permit No. CAS082597) was adopted in December 2002, reissued in September 2008, and reissued again in April 2015. The Regional Water Quality Control Board replaced it with a region-wide MS4 permit in June 2016. The Permittees function independently on many tasks, including reviewing, processing and permitting plans for new development and redevelopment in their respective jurisdictions. New construction is required to comply with the Sacramento Region Stormwater Quality Design Manual (SQDM; 2018).

The County has established a Stormwater Ordinance (Sacramento County Code 15.12). The Stormwater Ordinance prohibits the discharge of unauthorized non-stormwater to the County's stormwater conveyance system and local creeks. It applies to all private and public projects in the County, regardless of size or land use type. In addition, Sacramento County Code 16.44 (Land Grading and Erosion Control) requires private construction sites disturbing one or more acres or moving 350 cubic yards or more of earthen material to obtain a grading permit. To obtain a grading permit, project proponents must prepare and submit for approval an Erosion and Sediment Control Plan describing erosion and sediment control best management practices (BMPs) that will be implemented during construction to prevent sediment from leaving the site and entering the County's storm drain system or local receiving waters. Construction projects not subject to SCC 16.44 are subject to the Stormwater Ordinance (SCC 15.12) described above.

In addition to complying with the County's ordinances and requirements, construction sites disturbing one or more acres are required to comply with the State's General Stormwater Permit for Construction Activities (CGP). CGP coverage is issued by the State Water Resources Control Board [http://www.waterboards.ca.gov/water\\_issues/programs/stormwater/construction.shtml](http://www.waterboards.ca.gov/water_issues/programs/stormwater/construction.shtml) and enforced by the Regional Water Board. Coverage is obtained by submitting a Notice of Intent (NOI) to the State Board prior to construction and verified by receiving a WDID#. The CGP requires preparation and implementation of a site-specific Stormwater Pollution Prevention Plan (SWPPP) that must be kept on site at all times for review by the State inspector.

Applicable projects applying for a County grading permit must show proof that a WDID # has been obtained and must submit a copy of the SWPPP. Although the County has no enforcement authority related to the CGP, the County does have the authority to ensure sediment/pollutants are not discharged and is required by its Municipal Stormwater Permit to verify that SWPPPs include the minimum components.

The project must include an effective combination of erosion, sediment and other pollution control BMPs in compliance with the County ordinances and the State's CGP.

## URBAN LEVEL OF PROTECTION (ULOP)

### *STATE OF CALIFORNIA*

In 2007, several bills were passed that amended the California Water Code and Government Code to strengthen flood protection and link land use planning to flood planning, including SB 5 (2007), as amended by SB 1278 (2012) and AB 1259 (2013). One of the primary purposes of SB-5 and related legislation is to better tie local land use decisions that allow development in floodplains to the potential consequences in the event of a levee break.

A key requirement of SB-5 is that local jurisdictions amend their General Plans and Zoning Code to require 200-year flood protection standard in urban or urbanizing areas, and establish the requirement that when land uses are approved in Flood Hazard Zones, the county must make one of the following findings:

1. The facilities of the State Plan of Flood Control or other flood management facilities protect the property to the Urban Level of Flood Protection (ULOP) in urban and urbanizing areas or the Federal Emergency Management Agency (FEMA) standard of flood protection in non-urbanized areas.
2. The county has imposed conditions on the entitlement or permit that will protect the property to the ULOP in urban and urbanizing areas or the FEMA standard of flood protection in non-urbanized areas.
3. The local flood management agency has made adequate progress on the construction of a flood protection system that will result in flood protection equal to or greater than the ULOP in urban or urbanizing areas by 2025.
4. The property is in an undetermined risk area and has met the ULOP.

In most cases, the ULOP is defined as protection against a 200-year flood, although there are exceptions for shallow flooding or flooding from small watersheds. Levee systems in the Sacramento region require major improvements to provide 200-year flood protection.

### *LOCAL*

The County and other land use authorities must make a finding of adequate progress in order to approve new development in the areas being protected. When considering

development applications within flood hazard areas within an ULOP area, the County relies upon the 2016 Sacramento Area Flood Control Agency's (SAFCA) ULOP Plan and its subsequent annual reports to provide evidence necessary to make an "adequate progress finding".

California Government Code Section 65007(a)(5) requires local agencies to "annually report to the Central Valley Flood Protection Board (CVFPB) on the efforts in working toward completion of the flood protection system." State requirements are further described in the Urban Level of Flood Protection Criteria (ULOP Criteria; DWR, 2013). The most recent annual report for the region was submitted on August 12, 2020 to the CVFPB. The SAFCA prepares the annual report to the CVFPB.

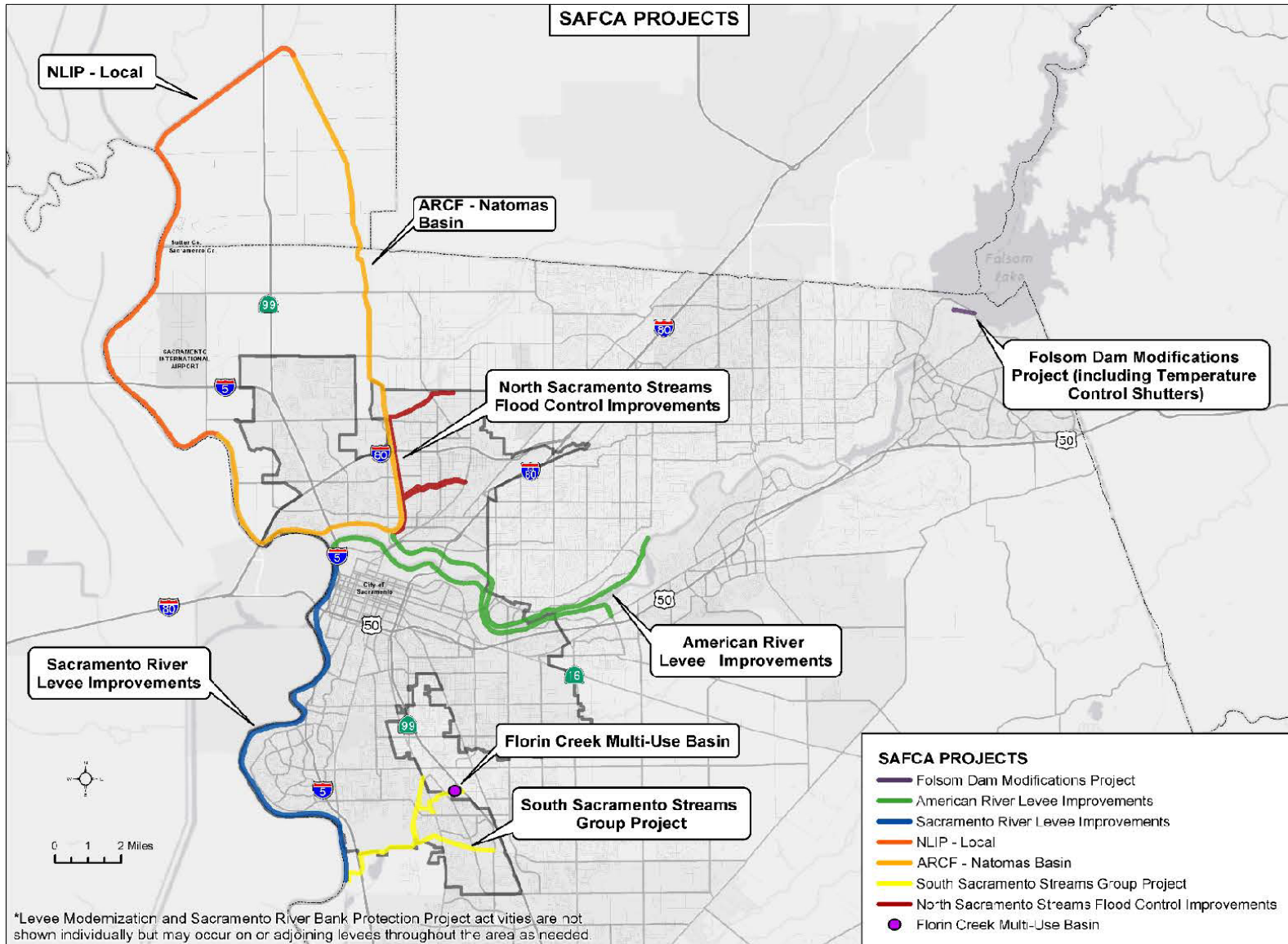
SAFCA was formed in 1989 by local agencies to address the deficiencies in Sacramento's flood control system identified by the USACE following the flood of 1986. Through a joint exercise of powers agreement, the City of Sacramento (City), County of Sacramento, the Sacramento County Water Agency (SCWA), Sutter County, the Sutter County Water Agency, the American River Flood Control District, and Reclamation District 1000 (RD 1000) pooled their common flood control authorities, established a management structure, and identified a program for improving Sacramento's flood control system. This program has three elements:

- Ensure the structural integrity of the existing levee system;
- Provide at least a 100-year level of flood protection as quickly as possible to the areas within the FEMA 100-year floodplain by, among other actions, increasing the space available for flood control at Folsom Dam and Reservoir (Folsom); and
- Work toward achieving at least a 200-year level of flood protection for the Sacramento area.

SAFCA finances the local share of the cost to improve Sacramento's flood control system, by creating assessment districts and levying annual assessments on properties that benefit from the improvements. These assessments are billed on Sacramento County's and Sutter County's annual real property tax bills.

Completed and on-going projects to meet the 200-year ULOP standard are shown in Plate HY-1.

# Plate HY-1: SAFCA ULOP Plan Projects





## SIGNIFICANCE CRITERIA

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In accordance with Appendix G of the State CEQA Guidelines, a project would be considered to have a significant effect if it would:

- Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantially additional sources of polluted runoff.
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on or off site.
- Violate any water quality standards or waste discharge requirements.
- Develop in an area that is subject to 200-year urban levels of flood protection (ULOP) area that could not make one of the four required findings.

## IMPACTS AND ANALYSIS

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IMPACT: CREATE OR CONTRIBUTE RUNOFF WATER THAT WOULD EXCEED THE CAPACITY OF EXISTING OR PLANNED STORMWATER DRAINAGE SYSTEMS OR PROVIDE SUBSTANTIALLY ADDITIONAL SOURCES OF POLLUTED RUNOFF;

AND/OR,

SUBSTANTIALLY ALTER THE EXISTING DRAINAGE PATTERN OF THE SITE OR AREA, INCLUDING THROUGH THE ALTERATION OF THE COURSE OF A STREAM OR RIVER, IN A MANNER THAT WOULD RESULT IN SUBSTANTIAL EROSION OR SILTATION ON OR OFF SITE

The northern most portions PAL 1, PAL 3, & PAL 4 will result in approximately 200 of acres of new development not previously analyzed in the prior FEIR. Planned developments include the construction of a new aircraft apron and connecting taxiway, several commercial buildings, landside parking lots, and associated roadway improvements. Approximately 150 acres of pervious area will be compacted and converted to impervious surfaces. Additional impervious surfaces would result in an increase in stormwater peak runoff rates and volumes, which without appropriate stormwater quality controls could result in downstream flooding, erosion and siltation, and other issues affecting water quality.

Stormwater runoff at the existing site drains overland to an existing network of drainage channels that were formerly used for agricultural purposes. The channel network drains north toward a culvert under W. Elverta Road, before entering a channel system north of W. Elverta Road that is managed by Reclamation District 1000 (RD 1000). That

channel system drains north to the North Drainage Canal and then west to RD 1000 Pumping Plant 2, where flows are then pumped west across the levee into the Sacramento River.

On-site channels within the development footprint will be filled and replaced by a new subsurface / closed stormwater conveyance system, including inlets, trench drains, storm sewers, culverts, and manholes. The proposed drainage system will include a new culvert crossing W. Elverta Road that will continue to convey flow into the RD 1000 network to the north. Due to the proposed size of the development, there will be a significant “hydraulic drop” or difference in gravity storm sewer inverts between the south (upstream) side of the site and the north (downstream) side of the site, which will not be compatible with the relatively shallow depth of the receiving channel. It is expected that lift stations will need to be incorporated into the drainage system design, potentially upstream of on-site stormwater controls (to keep the stormwater controls shallow) or downstream of the controls to lift the outflow up into the discharge system. The transition from an overland flow and open channel-based drainage system to a closed conveyance system will result in shorter drain times and larger peak flows, without mitigation.

The planned development will incorporate perforated gravity underdrains below planned airfield pavement and around structure footers, in accordance with best professional design practices to minimize the risk of structural damage due to groundwater uplift, as well as comply with FAA drainage design guidance. Due to high seasonal groundwater levels anticipated at the project site, it is anticipated that a groundwater pumping system may be required to lower groundwater levels around the post-construction stormwater detention facility. The underdrains and groundwater pumping system will discharge into the on-site stormwater drainage system that will route any collected groundwater to the stormwater outfall. These groundwater collection systems may have a localized impact on groundwater levels.

Drainage patterns will not be significantly changed, as the site will continue draining to the north and discharging to the RD 1000 channel system. The project will incorporate stormwater detention and attenuate peak flows, at minimum to meet RD 1000 requirements. Compliance with these requirements is intended to minimize the potential for impacts to the capacity of the RD 1000 channel network or increase flooding risks within the floodplain. Risks of erosion and siltation within the channel network are expected to be minimal due to overall flows within the RD 1000 channel network being controlled by operations at the RD 1000 pump station (Pumping Plant 2) downstream. The project is not expected to impede or redirect flood flows, as it is not located within a regulatory floodway.

Compliance with existing regulations will ensure that the on-site storm drainage is adequate and impacts to off-site drainage facilities are ***less than significant***.

#### MITIGATION MEASURES

None required.

## IMPACT: VIOLATE ANY WATER QUALITY STANDARDS OR WASTE DISCHARGE REQUIREMENTS

### **CONSTRUCTION-RELATED WATER QUALITY**

Land clearing/grading activities at project construction sites and installing new culverts in existing ditches and canals will disturb the ground surface, remove the vegetative cover, and temporarily increase the potential for soil erosion that could lead to an increase in suspended solids in runoff and local receiving waters. In addition, stormwater runoff quality during construction could be impacted by leaks or spills of fuel or hydraulic fluid from construction equipment or spills of paints, solvents, or other potentially hazardous materials commonly used in construction.

In accordance with the County's Land Grading and Erosion Control Ordinance, a grading plan that includes an erosion and sediment control plan will be prepared and implemented by SCDA. SCDA will also be required to prepare and implement a SWPPP for project construction. Sediment generated by demolition, grading, or construction activities for the proposed project will be contained on the construction and demolition sites and controlled using the BMPs contained in the erosion and sediment control plan and SWPPP. Industry standard BMPs that will be included in the plan to prevent discharge of sediments off site include silt fences, sandbags, fiber rolls, and stabilized construction entrances, and secondary containment for equipment refueling and maintenance. Once construction is complete, the site will be covered with buildings, paving, or other erosion protection material (e.g., geotextiles) or hydroseeded so that sediment production will be negligible. Project construction is not expected to violate any water quality standards because of implementation of these required control plans.

Construction-related stormwater quality impacts are considered ***less than significant***.

### **OPERATIONAL WATER QUALITY**

The project will result in approximately 150 acres of new impervious surfaces. The SQDM requires that Commercial/Industrial Development resulting in more than one acre of impervious surfaces implement source control, hydromodification, low impact development control, treatment control, and full capture trash control.

The project will obtain NPDES permit coverage (either under the general permit or as an individual permit) for discharges associated with industrial activities once the site is operational. Outfall discharges will need to comply with discharge limits or numeric action levels, and regular outfall monitoring will occur to demonstrate compliance. Compliance with the permit will require that the operators of implement a SWPPP that identifies measures to reduce pollutants in industrial stormwater discharges to receiving waters. Dischargers are required to implement non-structural (operational) BMPs (e.g., preventative maintenance, good housekeeping, employee training) to the extent feasible, as well as supplementary structural BMPs as needed to comply with permitted discharge requirements. Oil-water separators will be installed as structural controls in the aircraft fueling areas.

The facility design will incorporate industrial activity-based source control measures, low-impact development measures, stormwater detention facilities, water quality treatment controls, hydromodification controls, and full capture trash control as outlined by the Stormwater Quality Design Manual. The proposed measures are subject to the review and approval of the County Department of Water Resources.

Existing regulations and compliance with the Stormwater Quality Design Manual will ensure that impacts related to operational water quality are ***less than significant***.

#### MITIGATION MEASURES

None required.

#### IMPACT: DEVELOP IN AN AREA THAT IS SUBJECT TO 200-YEAR URBAN LEVELS OF FLOOD PROTECTION (ULOP) AREA THAT COULD NOT MAKE ONE OF THE FOUR REQUIRED FINDINGS

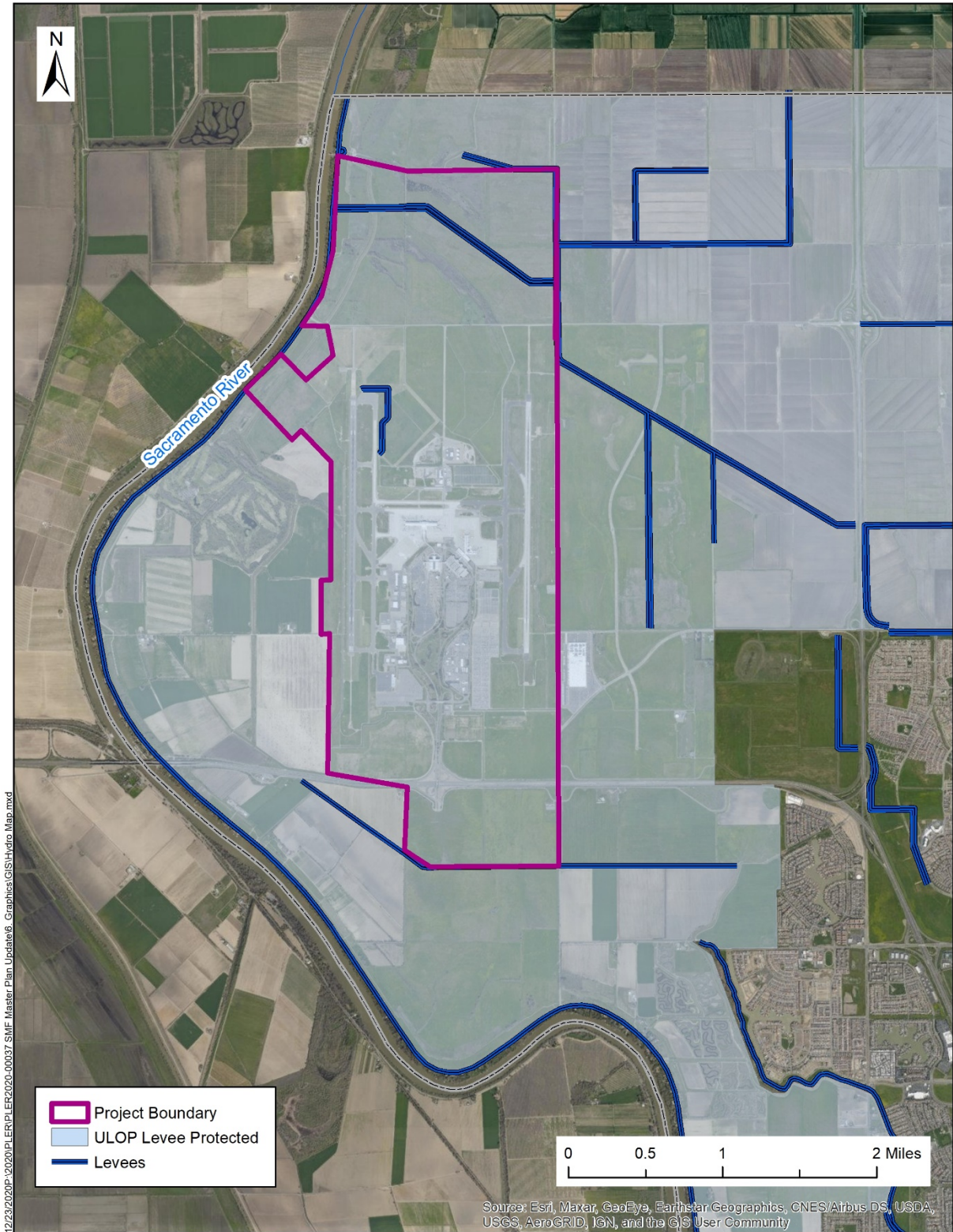
SMF and the project are located in two ULOP areas within the Natomas Basin; one area is classified as levee-protected and the other is non-levee protected (Plate HY-2 and Plate HY-3). The non-levee protected areas within the project area are associated with the RD-1000 West Drainage Channel floodplain. The non-levee protected area south of I-5 (reference Plate HY-3) represents the modeled flood extent expected until RD-1000's pump stations can pump to the Sacramento River.

The surrounding levee systems protect lands within the Natomas Basin from external flooding by the Sacramento and American Rivers; however, since the basin is relatively flat, localized flooding can occur when runoff exceeds the ability of RD-1000's pumps to discharge it to the Sacramento River.

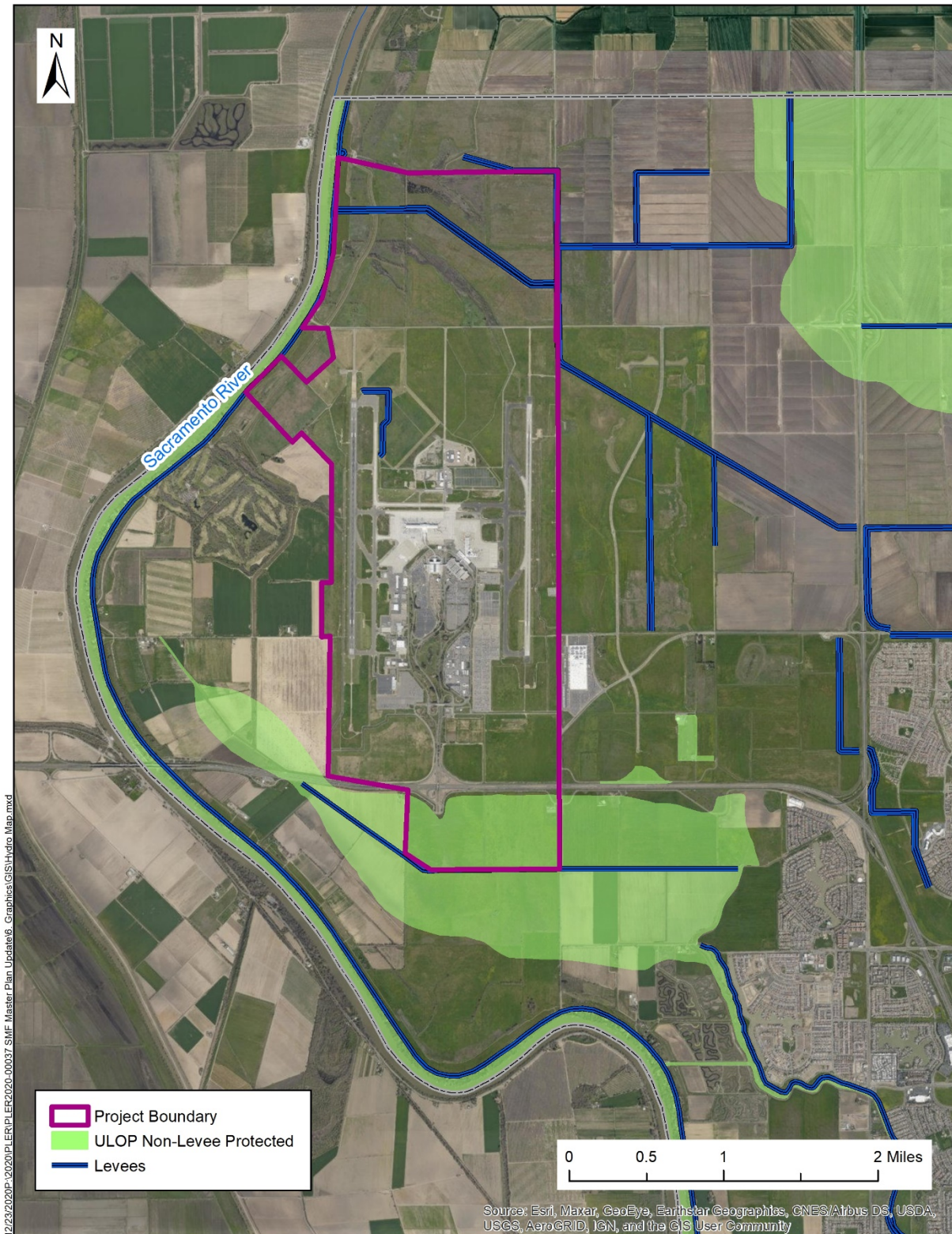
In 2007, SAFCA commenced the Natomas Levee Improvement Program (NLIP) to meet the 200-year flood protection standard. The project improved levees on the north and portion of the west perimeter of the Natomas Basin. SAFCA completed NLIP construction in 2016.

The American River Common Features Natomas Basin Project is improving the basin's remaining west, east and south levees and is expected to be completed by 2025. The American River Common Features Natomas Basin Project consists of levee improvements around the remainder of the 42-mile Natomas Basin perimeter. The USACE is planning and implementing the remaining elements Construction in Reach D is nearly complete pending installation of monitoring wells. Reach I included a blanket drain constructed under the I-5 overpass that is now complete, with the remainder of the cutoff wall in the reach along the Garden Highway expected to be complete by the end of 2020. Reach B and Reach H construction is also underway. The USACE has completed 65% design of Reach A with 95% design due in August. USACE design work continues on the "Interstate 5 window" and Reach E. The Natomas Basin and its flood control facilities also benefit from the Folsom Dam Modifications.

# Plate HY-2: Levee Protected ULOP Areas



### Plate HY-3: Non-Levee Protected ULOP Areas



The Folsom Dam Modifications include three projects: the Folsom Joint Federal Project (JFP), the Folsom Dam Raise, and the Folsom Dam Water Control Manual Update. All three projects are expected to be completed by 2025.

The JFP is a joint project of the US Bureau of Reclamation, the USACE, California Department of Water Resources (DWR), and SAFCA. The JFP created a new, gated auxiliary spillway on the east abutment of the dam, enabling the dam to be operated to accommodate a 200-year flood with discharges no greater than 160,000 cubic feet per second (cfs).

The Folsom Dam Raise will raise the height of the structures comprising Folsom Dam, including the main dam, wing dams, and dikes that contain Folsom Reservoir. Congress has authorized raising the height of the wing dams and dikes by 3.5 feet. This will allow flood operators to store more flood water when forecasted inflows are decreasing (resulting in no imminent threat to the dam) and the additional storage is required to maintain releases from the dam at a level that can be safely contained by the downstream levee system. The project includes improving the flood gates on the main dam.

The Folsom Dam Water Control Manual Update optimizes operations at the dam with the JFP improvements. Once the raise is completed, the manual will be adjusted again to reflect the increased reservoir storage capacity created by that project. With the raise, studies indicate that in a 200-year flood, discharges into the American River will not exceed 115,000 cfs.

While waters from the Folsom Dam do not flow directly into Natomas Basin, improvements to the Folsom Dam benefit Natomas Basin. This is due to the interconnectedness of the two rivers. Since the Natomas Basin drains into the Sacramento River and the American River has a confluence with the Sacramento River, high floodwaters along the American River could potentially impede drainage or prolong flooding upstream on the Sacramento in the Natomas Basin area.

The completion of the NLIP Project and the progress towards expected completion of the American River Common Features Natomas Basin Project and Folsom Dam Modifications in 2025 allows an adequate progress finding (Finding #3). The local flood management agency, SAFCA, has made adequate progress on the construction of a flood protection system that will result in flood protection equal to or greater than the ULOP in urban or urbanizing areas by 2025. Impacts are considered ***less than significant***.

#### MITIGATION MEASURES

None required.

## 8 LAND USE

### INTRODUCTION

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The proposed project updates the current Sacramento International Airport (SMF) Master Plan primarily by revising facility phasing, the expansion and relocation of the previously identified cargo facility, a new consolidated car rental facility, change in location and phase of Concourse C, changing the acreage, location and phasing of the commercial development north of I-5, and removal of the third runway. As stated in the Project Description chapter, only Planning Activity Levels (PALs) 1 through 3, are analyzed at a project level in this document. This chapter addresses potential physical environmental impacts related to land use. Areas of analysis include project compatibility and consistency with adopted land use plans of Sacramento County, consistency with adopted Sacramento County General Plan policies, division or disruption of an established neighborhood, and the displacement of housing.

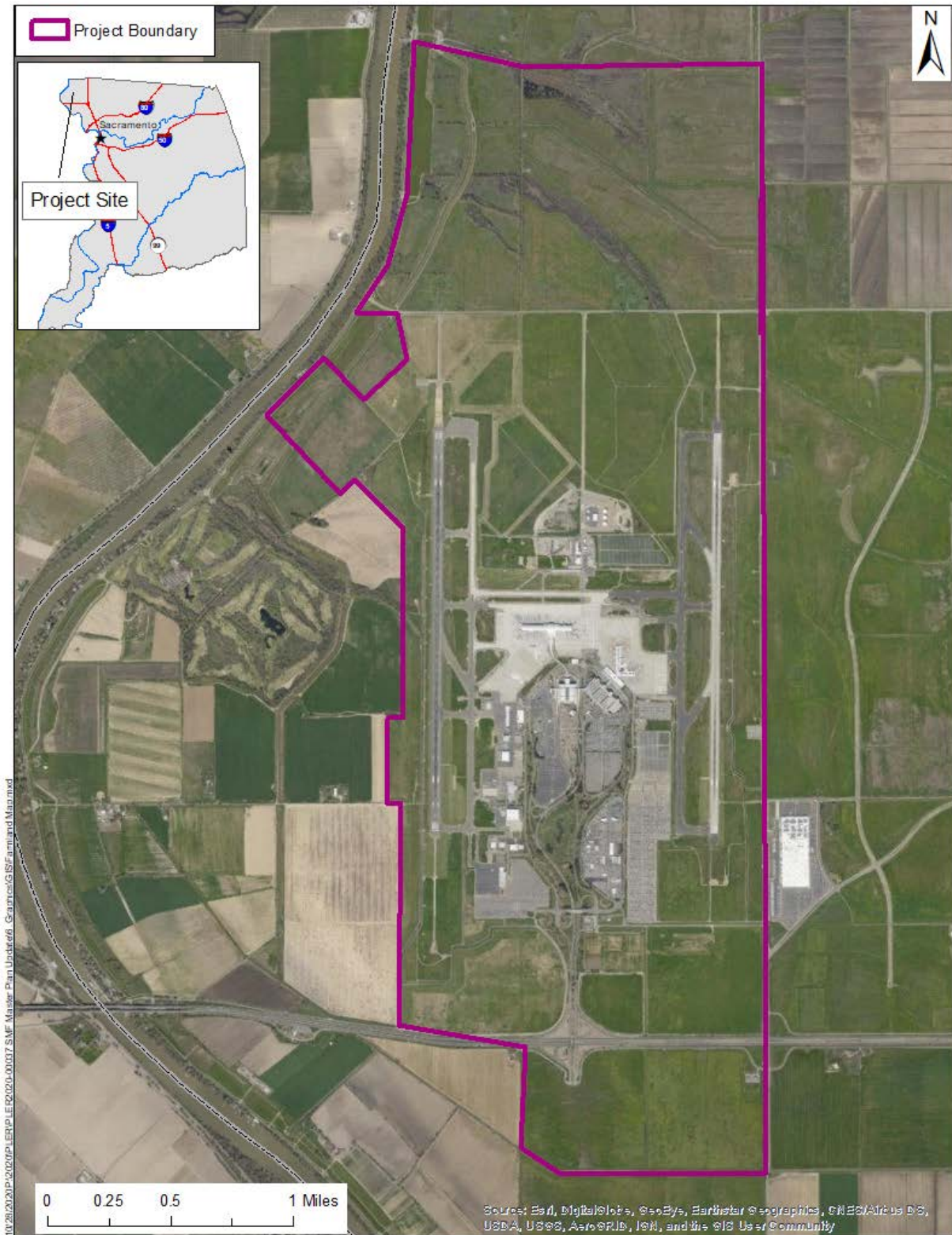
### ENVIRONMENTAL SETTING

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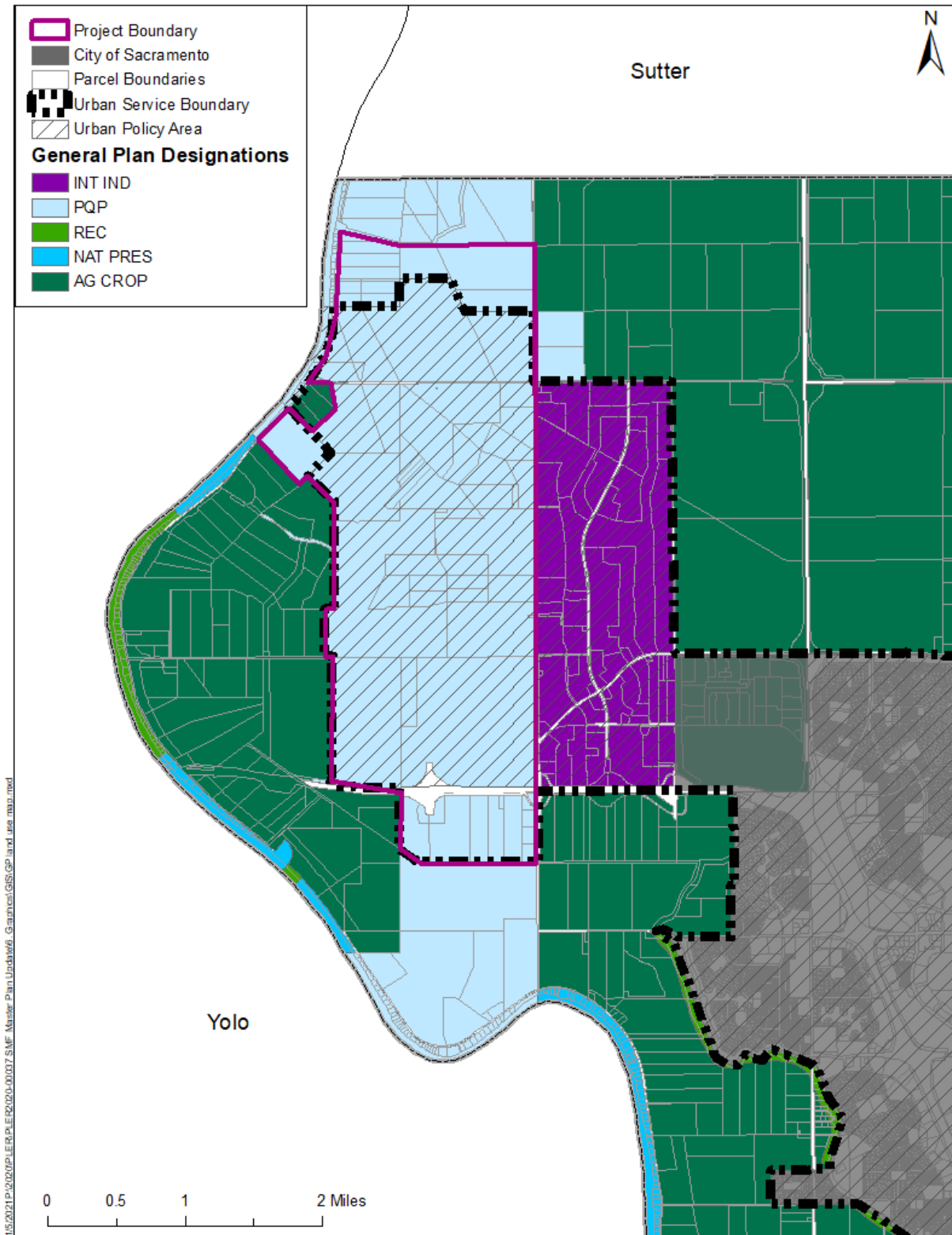
SMF is in a region called the Natomas Basin, which covers 55,000 acres of land bordered by the Natomas Cross Canal on the north, the Sacramento River on the west and south, the American River on the southeast, and the Natomas East Main Drainage Canal on the east. Historically, most of the basin was used for agriculture, particularly rice cultivation. As shown on Plate LU-1, most of the land surrounding the airport is still used for agriculture, although crops other than rice (e.g., corn, safflower, and winter wheat) are grown in SMF's vicinity. Urban development has accelerated in the Natomas Basin over the past decade with greater flood protection. As a result, industrial, commercial, and residential developments are planned and underway in SMF's vicinity, as discussed below.



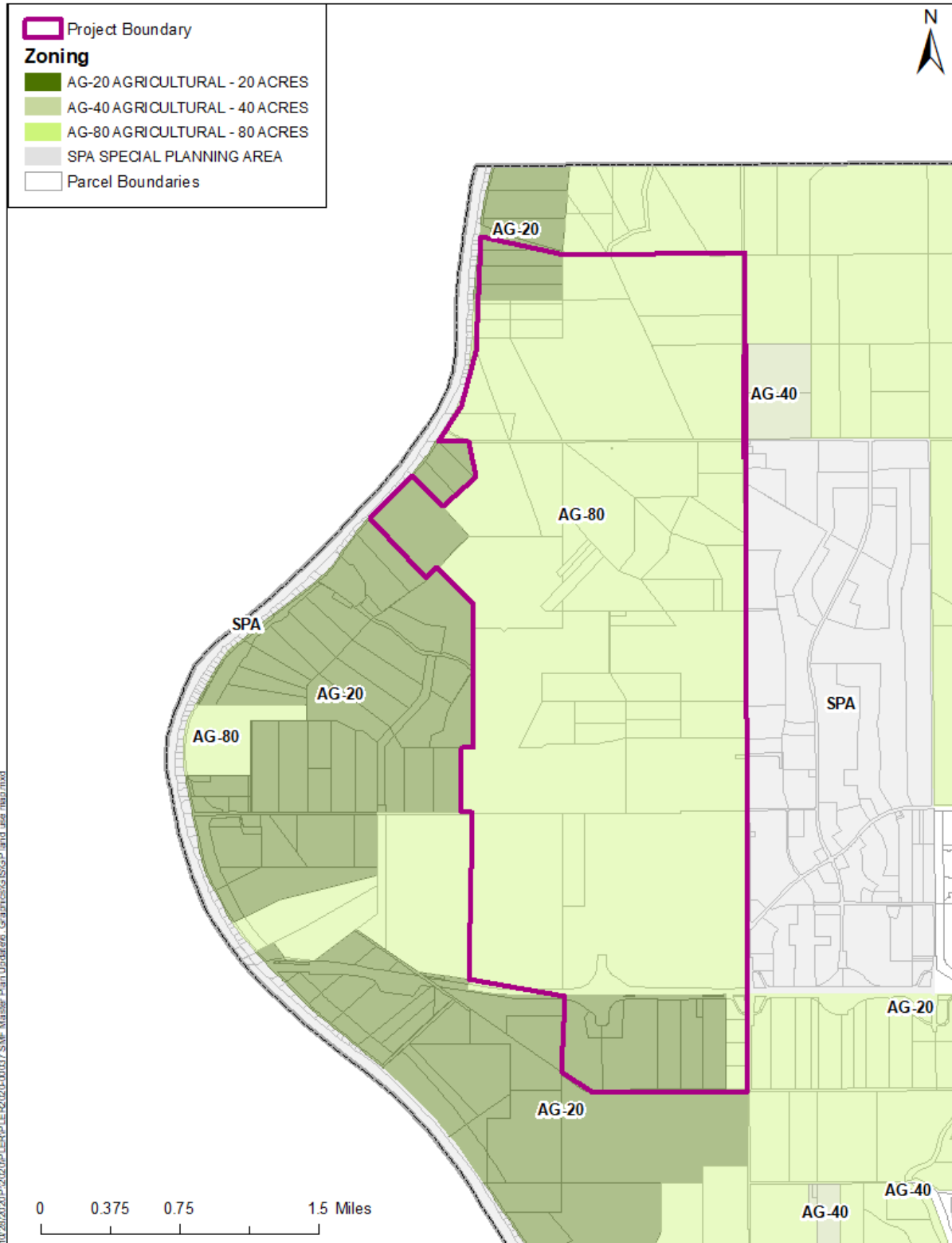
Plate LU-1: Aerial Photo (2018) of Project Site



### Plate LU-2: General Plan Land Use Exhibit



### Plate LU-3: Zoning Exhibit



## PLANNED AND PROPOSED DEVELOPMENT

### *GRANDPARK SPECIFIC PLAN (FORMERLY NATOMAS JOINT VISION)*

The Grandpark Specific Plan (formerly North Natomas Precinct and part of the Natomas Vision Plan) has had a detailed and lengthy history. In September 2014, the Grandpark Landowners' Group submitted an application that was later modified to include urbanization for the unincorporated County area north of Elkhorn Boulevard and east of Highway 99. The application will require the approval of General Plan amendments to move the Urban Services Boundary (USB) and Urban Policy Area (UPA) and to amend the Land Use Diagram, and adoption of the Specific Plan. Other entitlements may be identified as the master-planning process progresses.

The Specific Plan process continues the effort begun many years ago and includes opportunities for public comment and input. The revised Notice of Preparation was released in December 2017. The current land use plan includes approximately 23,892 dwelling units and 6.2 million square feet of commercial, with acreage set aside for a hospital/medical campus, schools, parks, greenbelts, flood control, and open space.

### *UPPER WESTSIDE SPECIFIC PLAN*

The Upper Westside Specific Plan (Upper Westside) application was accepted and initiated by the Board of Supervisors on February 26, 2019.

The application will require the approval of General Plan amendments to move the Urban Services Boundary (USB) and Urban Policy Area (UPA) and to amend the Land Use Diagram, and adoption of the Specific Plan. Other entitlements may be identified as the master-planning process progresses.

Upper Westside's initial boundaries encompass approximately 2,066 acres located north of Interstate 80 between the City of Sacramento and the Sacramento River in the Natomas community. This area was formerly referred to as the "Boot Precinct" in the Natomas Joint Vision.

The land use plan in the October 5, 2020 Notice of Preparation includes approximately 9,356 residential units and 3,100,000 square feet of commercial, with acreage set aside for schools, parks, urban farms/greenbelts, flood control, and open space.

### *METRO AIR PARK*

In 1997, Sacramento County approved a General Plan Amendment and rezoning to amend the Metropolitan Airport/Vicinity Special Planning Area (SPA) for a project known as Metro Air Park. The Metro Air Park SPA is a 1,892-acre site located just east of the airport on the north side of I-5. The SPA is bordered by Elverta Road to the north, Lone Tree Road to the east, Bayou Way to the south, and Power Line Road to the west. The SPA is intended to allow development of a multidistrict industrial business park with complementary recreation and open-space components. The following land uses are proposed for the Metro Air Park: industrial, airport-related, office/light commercial, and recreation/open space. Mitigation for the Metro Air Park project includes expansion of

various local infrastructure components based on development triggers and level-of-service monitoring, including the I-5/Metro Air Parkway Interchange (under construction), expansion of the I-5/Airport Boulevard Interchange and the mainline of I-5, and sewage conveyance facilities.

#### *GREENBRIAR MIXED USE PROJECT*

The Greenbriar Mixed Use Project was approved by the Sacramento City Council in May 2017. The project is located in the City of Sacramento at the northwest corner of the intersection of I-5 and SR 70/99. The development proposes the following land uses: approximately 3,000 residential units, 37 acres of commercial land use, one school site, and 49 acres of parks.

#### *NORTH NATOMAS COMMUNITY PLAN*

The North Natomas Community Plan was adopted by the Sacramento City Council on May 3, 1994 (Resolution No. 94-259) and amended by Resolution No. 96-156 on April 16, 1996. The community of Natomas borders the east side of SR 70/99 and the area south of I-5 for a short distance west of SR 70/99. The Community Plan shows light industrial and agricultural uses adjacent to the freeways in the southwestern quadrant of I-5 and SR 70/99. On the east side of SR 70/99, the plan shows low- and medium-density residential. The main goals of the North Natomas Community Plan include a well-integrated mix of residential, employment, commercial, and civic uses.

#### *SUTTER POINTE SPECIFIC PLAN*

Sutter Pointe Specific Plan encompasses approximately 7,528 acres of land in south Sutter County. The site is generally bound by Natomas Road on the east and Powerline Road on the west. The southern boundary is approximately 4 miles north of the City of Sacramento and adjacent to the Sutter/Sacramento county line. State Route 99/70 divides the southern portion of the site and serves as the western boundary of the northern portion of the project site.

The project envisions establishment of an eventual city in south Sutter County. The project proposes a diverse mix of land uses, including employment centers, many different housing types, retail shopping villages, recreation amenities, schools, community services, supporting on-and off-site infrastructure, roadway improvements, open space and various public uses.

The Sutter Pointe Specific Plan was approved by the Sutter County Board of Supervisors on June 30, 2009, with an amendment in 2014 to the eastern portion of the Plan.

## REGULATORY SETTING

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### *FEDERAL AVIATION ADMINISTRATION*

The FAA's foremost mission is to ensure a safe national air navigation system. To meet this objective, 14 CFR Part 77, imaginary surfaces, establish standards for determining obstructions in navigable airspace. These imaginary surfaces extend out from the runway in a manner that reflects where aircraft are likely to fly. The FAA conducts aeronautical studies of proposed activities that could impact airspace. These studies review physical incursions of proposed structures into airspace, interference with radar communications, and any other conditions that might negatively impact air traffic. For projects proposed on airport property, airport sponsors must file documentation with the FAA so that it can complete an airspace review and assess the potential impact of the project on air navigation and issue a determination of hazard or no hazard.

### *SACRAMENTO COUNTY GENERAL PLAN*

Sacramento County's *General Plan* (General Plan) includes countywide goals, objectives, policies, and implementation measures to address the distribution and density of land uses within the County. The *Land Use Element* of the General Plan is intended to foster an orderly pattern of land use that concentrates urban development; enhances community character and identity through the creation and maintenance of neighborhoods; is functionally linked with transit; and protects the County's natural, environmental, and agricultural resources. The following General Plan policies specifically address land use near SMF:

- LU-1. The County will not provide urban services beyond the Urban Policy Area, except when the County determines the need for health and safety purposes and the extension provisions as provided in Policy LU-1.1.
- LU-17. Support implementation of the design review program on a project-by-project basis to ensure that all development applications positively contribute to the immediate neighborhood and the surrounding community.
- LU-31. Strive to achieve a natural nighttime environment and an uncompromised public view of the night sky by reducing light pollution.
- LU-51. New industrial uses using large amounts of material and with low employment densities, such as warehousing, shall be located outside new growth areas and targeted commercial corridors along primary transportation routes such as Interstate facilities, airports, railroads, or navigable waterways, except in areas around airports where adopted policy and/or regulations limit uses and development densities and intensities.
- LU-53. Protect the availability of industrial areas near SMF for airport-related uses.
- LU-71. Reduce the energy impacts from new residential and commercial projects through investigation and implementation of energy-efficiency measures during all phases of design and development.

- LU-72. The County will coordinate with regional planning agencies setting land use and environmental policies and programs and cooperate in the implementation of programs consistent with General Plan policy.
- LU-73. The County will consult with state and federal regulatory and resource agencies during initial review of development projects to identify potential environmental conflicts and establish, if appropriate, concurrent application processing schedules.
- LU-87. Because land use decisions around airports by local governments have a direct impact on an airport's long-term viability and utility, proposed new land use projects and land use practices near airports within Sacramento County shall consider consistency with current federal, State, and local airport land use compatibility regulations, orders, policies, plans, standards and guidance pertaining to public safety and minimization of hazardous wildlife attractants within five statute miles of County airports.

The *Agricultural Element* of the *General Plan* is intended to promote the achievement of two general goals: maintenance of the County's agricultural lands, their agricultural productivity, and natural resource benefits they provide; and maintenance of farming and related industries as a strong and viable sector of the economy of a rapidly urbanizing county. The following General Plan policies specifically address agriculture near SMF:

- AG-1. The County shall protect prime, statewide importance, unique and local importance farmlands located outside of the USB from urban encroachment.
- AG-5. Projects resulting in the conversion of more than fifty (50) acres of farmland shall be mitigated within Sacramento County, except as specified in the paragraph below, based on a 1:1 ratio, for the loss of the following farmland categories through the specific planning process or individual project entitlement requests to provide in-kind or similar resource value protection (such as easements for agricultural purposes):
  - prime, statewide importance, unique, local importance, and grazing farmlands located outside the USB;
  - prime, statewide importance, unique, and local importance farmlands located inside the USB.

The Board of Supervisors retains the authority to override impacts to Unique, Local, and Grazing farmlands, but not with respect to Prime and Statewide farmlands.

However, if that land is also required to provide mitigation pursuant to a Sacramento County endorsed or approved Habitat Conservation Plan (HCP), then the Board of Supervisors may consider the mitigation land provided in accordance with the HCP as meeting the requirements of this section including land outside of Sacramento County.

Note: This policy is not tied to any maps contained in the Agricultural Element. Instead, the most current Important Farmland map from the Department of Conservation should be used to calculate mitigation.

- AG 17. The establishment of conservation easements combining preservation of agricultural uses, habitat values, and open space on the same property should be encouraged where feasible.

The *Conservation Element* of the *General Plan* is intended to manage and protect the County's natural resources for the use and enjoyment of present and future generations while maintaining the long-term ecological health and balance of the environment. The following General Plan policies specifically address agriculture near SMF:

- CO-51. Direct development away from prime or statewide importance farmlands or otherwise provide for mitigation as required by AG-5 slowing the loss of additional farmland conversion to other uses.

#### *SACRAMENTO INTERNATIONAL AIRPORT LAND USE COMPATIBILITY PLAN*

The Sacramento International Airport Land Use Compatibility Plan (ALUCP) was first adopted in October 1984 and last amended in 2013. The ALUCP contains land use compatibility guidelines for height, noise, and safety. The ALUCP was prepared by the Sacramento Area Council of Governments (SACOG) Airport Land Use Commission (ALUC). The ALUC is responsible for adopting basic airport land use policies, adopting ALUCPs for area airports, incorporating land use compatibility guidelines established in the ALUCPs into the general plans of the jurisdictions that have land use authority in areas subject to the ALUCPs, and reviewing development proposals and land use plans for areas around the airports.

## IMPACT ASSESSMENT METHODOLOGY

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The land use analysis considers existing and future plans of the jurisdictions in the project study area along with the various environmental analyses conducted in conjunction for this SEIR to determine whether implementation of the proposed project will result in significant land use impacts.

The Natural Resources Conservation Service (NRCS) maintains a list of prime and unique farmlands and farmlands of statewide/local importance for Sacramento, Sutter, and Yolo counties based on soil classifications (NRCS 1972, 1988, and 1993). These soil classifications were incorporated into a Geographic Information System (GIS) and analyzed to determine the amount of prime and unique farmlands and farmlands of statewide/local importance in the project study area. The locations of these soil types were then compared to the study area zoning to determine whether the soils had already been committed to urban development or whether they are planned for agricultural production into the future.



Existing farm operations and local trends in agricultural production in SMF's vicinity were reviewed. The analysis also identified lands owned by Sacramento County and leased for agricultural activities. The review of existing conditions included such factors as soil viability, water availability, farming operation size, crop patterns and values, and population. Other existing programs and plans, including the County Agricultural Commissions; the California Department of Conservation's Farmland Mapping and Monitoring Program; and the existing General Plans for Sacramento County, City of Sacramento, Sutter County, and Yolo County were also reviewed for applicable policies and regulations to determine whether implementation of the project would result in impacts.

#### THRESHOLDS OF SIGNIFICANCE

Impacts to land uses and agricultural resources are significant if the project would:

1. Physically divide an established community.
2. Cause a significant environmental impact due to conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.
3. Induce a substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).
4. Displace substantial numbers of existing housing or businesses, necessitating the construction of replacement structures elsewhere.
5. Convert Prime, Unique or Farmland of Statewide Importance as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use.
6. Conflict with existing zoning for agricultural use or a Williamson Act contract.
7. Involve other changes in the existing environment that due to their location or nature could result in conversion of farmland to a non-agricultural use.

Significance criteria items 1, 3 and 4 above are not applicable to the project since the project is an established use and there is no new expansion to the project boundaries and does not involve the unplanned population growth or displace existing housing or businesses.

## IMPACTS AND ANALYSIS

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IMPACT: CAUSE A SIGNIFICANT ENVIRONMENTAL IMPACT DUE TO CONFLICT WITH ANY LAND USE PLAN, POLICY, OR REGULATION ADOPTED FOR THE PURPOSE OF AVOIDING OR MITIGATING AN ENVIRONMENTAL EFFECT

### *SACRAMENTO COUNTY LAND USE PLANS*

The Sacramento County General Plan Land Use designation is Public/Quasi Public and the County Zoning Code designates SMF's property north of I-5 as AG-80, and property south of I-5 as AG-20 and AG-80, which permits a minimum lot size of 20 or 80 acres (respectively) for agricultural land uses (Plate LU-2 and Plate LU-3). However, this zoning designation also permits public uses such as the airport. Therefore, the proposed project facilities shown in the Master Plan Update are consistent with the provisions of these zoning designations.

Beyond zoning consistency, the prior Master Plan EIR contained Mitigation Measure LU-1 to move the Urban Services Boundary (USB) south of I-5 to include the proposed parking and commercial uses. The USB defines the ultimate urban boundary for the County. Within the USB is the Urban Policy Area (UPA), which defines the limits of urban services (water and sewer). These boundaries are shown on Plate LU-2. The movement of the USB was accomplished through resolution 2008-0391. However, the Urban Policy Area was not moved through this process and remains along the I-5 corridor. The General Plan now contains policies specific to the movement of the UPA to address logical growth, smart growth principles, and fiscal neutrality. General Plan Policy LU-1 directs the County's urban development to areas inside the UPA; however, Policy LU-12 does allow for consideration of new development that is contiguous to the UPA when there is a logical extension of services. The project does show future commercial development south of I-5 in PAL 4. As stated in the Project Description chapter, development proposed in PAL 4 is not considered in this document due to the 20 year planning timeframe. If PAL 4 becomes ripe for development, additional environmental review and an amendment to the General Plan will be necessary to determine consistency with General Plan Policies LU-12, 13, 119, 120, and 123 to move the UPA.

The proposed project is consistent with Sacramento County General Plan and Zoning Code and impacts are ***less than significant***.

### *SACRAMENTO INTERNATIONAL AIRPORT LAND USE COMPATIBILITY PLAN*

The Airport Land Use Compatibility Plan (ALUCP) is intended to guide development in and around the airport to ensure that development is compatible with airport operations. The proposed Master Plan Update (MPU) alters the size and location of commercial uses within the airport property. The proposed land uses have been evaluated using the methods presented in the ALUCP with regard to noise contours, safety zones and height restrictions.

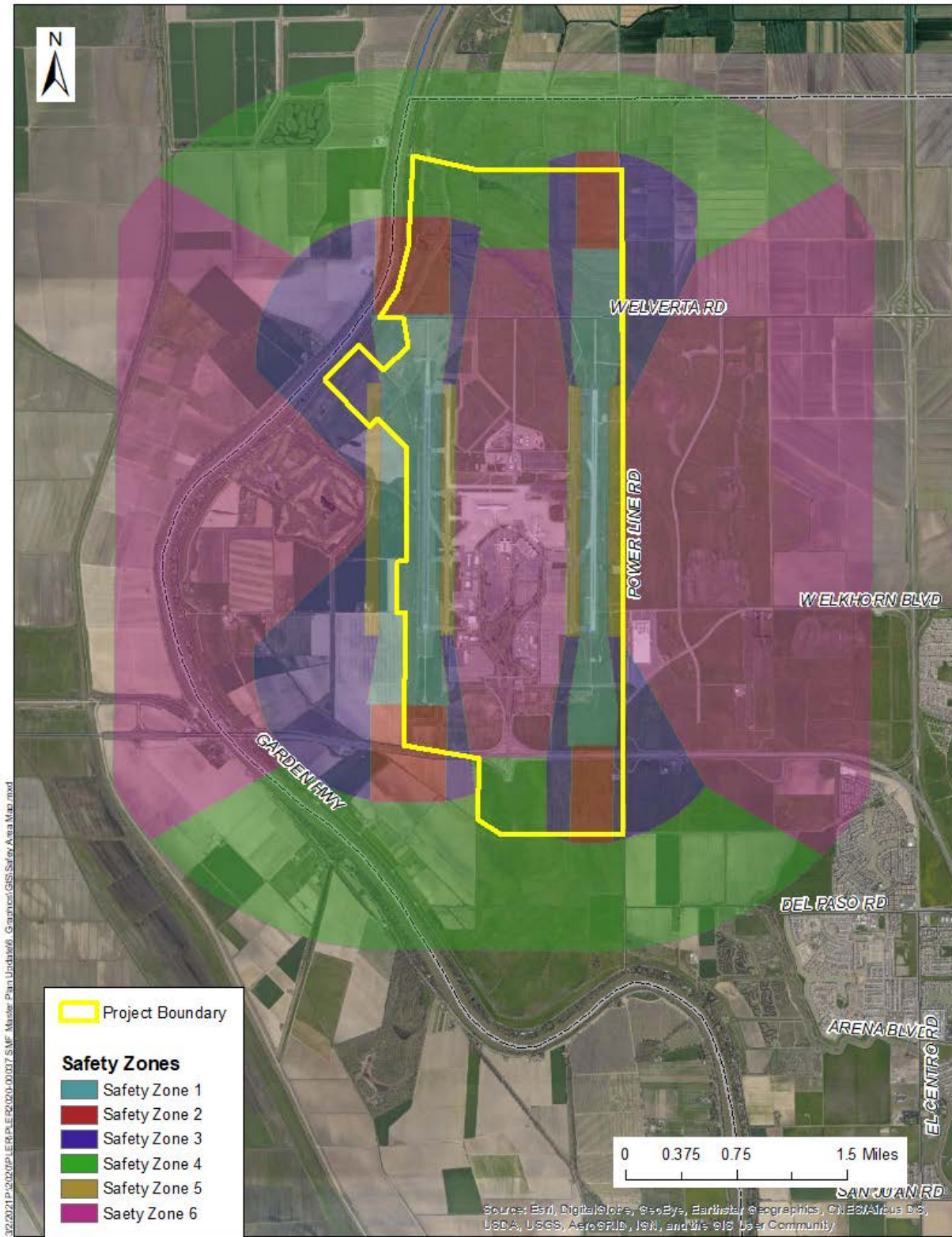
According to Table 1: Noise Compatibility Criteria of the SMF ALUCP, all of the proposed uses are conditionally acceptable in community noise equivalent level (CNEL) 65 -75 for exterior noise levels. This includes the proposed cargo facility, fire station, commercial land uses, and airport terminal. Proposed parking facilities are acceptable in all CNEL noise contours. Interior noise levels must not exceed 50 decibels, which can be accomplished through standard building construction techniques. Land use compatibility impacts associated with noise contours are ***less than significant***.

According to Table 2: Safety Compatibility Criteria of the SMF ALUCP, land use compatibility is determined based on the safety zone in combination with the site intensity (number of person(s) per acre) and floor area ratios. Table LU-1 below identifies the MPU facility and compatibility with safety zone and Plate LU-4 shows the safety zone map.

**Table LU-1: Airport Land Use Compatibility Plan Safety Zone**

MPU Facility	MPU PAL	Safety Zone	Compatible
Cargo Facility	PAL 1	6	Yes; standard intensity rates and F.A.R. 100%
Terminal B Expansion Concourse C	PAL 2	6	Yes; standard intensity rates and F.A.R. 100%
Economy Parking Lot Expansion	PAL 2	3	Yes
Community Fire Station	PAL 1	6	Yes; standard intensity rates and F.A.R. 100%
Commercial Development North of Elverta Road	PAL 3	3, 6	Zone 3 – Conditional Yes; standard intensity rates and restricted F.A.R. based on use type Zone 6 – Yes; standard intensity rates and F.A.R. 100%
Commercial Development North of I-5	PAL 2 & 3	3, 6	Zone 3 – Conditional Yes; standard intensity rates and restricted F.A.R. based on use type Zone 6 – Yes; standard intensity rates and F.A.R. 100%

### Plate LU-4: SMF ALUCP Safety Zones



All of the proposed MPU facilities and land uses are located in safety zones in which the use is normally or conditionally permitted. Since specific uses have not been identified within the proposed commercial development areas, all development is reviewed by SCDA staff for consistency with the SMF ALUCP prior to building permit approval. Land use compatibility impacts associated with airport safety zones are ***less than significant***.

The final compatibility policy of the SMF ALUCP is airspace protection, or the height of nearby structures to ensure that there are no conflicts with low-flying aircraft. Some of the proposed commercial land uses are within the Critical Airspace Area, which have much lower building height restrictions – generally 100 to 177 feet. Outside of the Critical Airspace Area, building height restrictions decrease as you move further away. The proposed cargo facility will have the cargo apron within the Critical Airspace; however, this is not a conflict. The cargo warehouse building is located just outside of the Critical Airspace Area and building height is restricted to 177 feet.

Since specific commercial uses and building design have not been identified, all development is reviewed by SCDA staff for consistency with the SMF ALUCP prior to building permit approval. Land use compatibility impacts associated with airspace protections are ***less than significant***.

#### *NEARBY COMMUNITY OR SPECIFIC PLANS*

Urban development is encroaching towards the airport. Within the City of Sacramento, the North Natomas Community Plan guides urban development in particular with respect to SMF. The most recent approved development is the Greenbriar mixed use plan. Given the distance of SMF and the proposed Master Plan Update project from the North Natomas Community Plan boundary, no conflicts with that Community Plan or the Greenbriar Master Plan are anticipated. Within unincorporated Sacramento County, two Specific Plans - Upper Westside and Grandpark, are going through the planning process and would introduce new homes and businesses within the airport policy planning area. Again, these Specific Plans must adhere to the SMF ALUCP policies, thereby reducing future land use conflicts with airport operations. Land use compatibility impacts with surrounding land use plans are ***less than significant***.

#### MITIGATION MEASURES

None recommended.

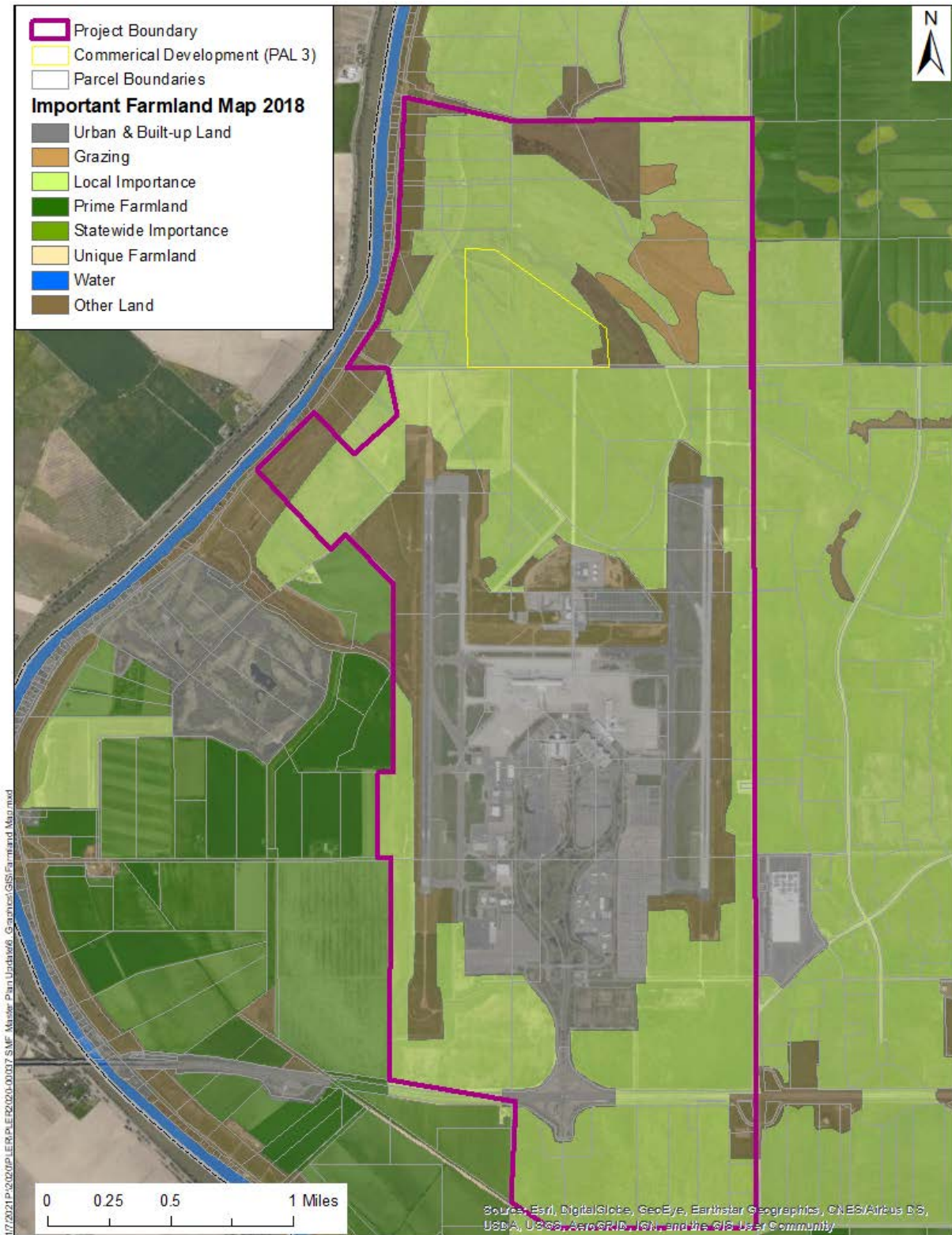
#### IMPACT: CONVERT PRIME, UNIQUE OR FARMLAND OF STATEWIDE IMPORTANCE TO NON-AGRICULTURAL USES

According to the 2018 Department of Conservation Farmland Map for Sacramento County, the lands within and surrounding the airport are classified largely as Farmland of Local Importance (Plate LU-5). This is a change from the 2007 EIR in which the lands were classified as Prime or Statewide Importance. As with the prior EIR analysis, land within the Airport Operation Area (between I-5 and Elverta Road), is considered urban for the purpose of this analysis. The area between the runways, while shown as

Farmland of Local Importance, is heavily managed to reduce wildlife conflicts and will not be used as farmland while the airport is in operation. Thus only the land north of Elverta Road is considered in this analysis.

The 2007 EIR identified significant impacts to farmlands associated with proposed remote economy parking lot and commercial uses south of I-5 (only Phase 1 and 2). Farmland conversions associated with Phase 3 projects were not identified in the 2007 EIR. Mitigation measure LU-2 was adopted to mitigate this significant impact. These [parking and commercial] facilities have not been developed and therefore the mitigation has not been completed. Similar to the prior EIR, this document does not evaluate impacts to farmland for facilities identified in PAL 4 (including all commercial development south of I-5).

### Plate LU-5: 2018 Farmland Map



The proposed project will convert approximately 135 acres of Farmland of Local Importance north of Elverta Road to urban uses during the proposed Master Plan/planning horizon. Farmland conversion is proposed to occur in PAL 3. Pursuant to County General Policy AG-5, conversion of over 50 acres of Farmland of Local Importance within the USB is considered a significant impact and is required to be mitigated at a 1:1 ratio. Mitigation is recommended, which will replace LU-2, to compensate for the loss of approximately 135 acres of farmland north of Elverta Road prior to land development. Impacts to farmlands of local importance are reduced with implementation of recommended mitigation, but not to a level of less than significant. Impacts are ***significant and unavoidable***.

#### MITIGATION MEASURES

LU-1. Prior to conversion of approximately 100 acres of Farmland of Local Importance north of Elverta Road, an equal amount of land must be set aside with permanent farmland conservation easement.

#### IMPACT: CONFLICT WITH EXISTING ZONING FOR AGRICULTURAL USE OR A WILLIAMSON ACT CONTRACT

The SCDA owns approximately 6,000 acres in and around SMF. None of the parcels are under a Williamson Act Contract. As mentioned in the land use setting and farmland impacts discussions above, SMF is currently zoned either Agricultural 80 or Agricultural 20 (AG-80 or AG-20). The project will permanently convert approximately 135 acres of agriculturally zoned lands to urban uses. Agricultural practices on these lands are limited to crops that are not wildlife attractants, generally dry land crops. Further, the County leases the lands to local farmers, so when development is to occur, the leasing contracts will not be renewed. The conversion of the land to urban uses will not conflict with surrounding agricultural uses as most of the land is owned by the County and managed to reduce wildlife attractants. Impacts associated with potential conflicts with existing agricultural uses or Williamson Act contracts are ***less than significant***.

#### MITIGATION MEASURES

None recommended.



# 9 NOISE

## INTRODUCTION

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The prior Sacramento International Airport (SMF) Master Plan EIR Noise chapter evaluated potential noise impacts associated with the Master Plan. The noise analysis evaluated the existing airport noise environment and future noise environment for planning years 2013 and 2020, with and without the project. The proposed project does not substantially increase the number of flight operations used to determine potential noise impacts. The methodologies and some analysis from the prior EIR remain appropriate for this project. Since the certification of the prior EIR, the SMF Airport Land Use Compatibility Plan (ALUCP) was updated, which established new noise contours for the airport based on the theoretic capacity. The theoretic capacity is determined on the assumption that all airport facilities are built. Since the prior EIR, the following planning documents have been updated:

- The SMF Airport Land Use Compatibility Plan (adopted 2013)
- The Sacramento County General Plan (adopted 2011)

This chapter will look at the proposed Master Plan Update and potential noise impacts pursuant to the current ALUCP and the General Plan Noise Element. The methods describing the basic principles of noise are detailed in the prior EIR and are still applicable to this project, but are not repeated in this document and is hereby incorporated by reference.

## ENVIRONMENTAL SETTING

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SMF is the main the generator of noise in this area of the County. Other existing noise in SMF's vicinity is produced by vehicular traffic, agricultural equipment, and aircraft overflights from other airports in the region. Interstate 5 (I-5) is a major highway in close proximity to the airport; additional vehicle traffic exists on Garden Highway, Power Line Road, Bayou Way, and Elverta Road. The main land use in SMF's vicinity is agricultural. However, industrial and residential development is encroaching from the east.

Agricultural land uses produce noise from the use of various types of equipment. Aircraft overflights are under the control of Northern California TRACON. Several published routes result in aircraft flying over SMF. The minimum altitude for these aircraft is 18,000 feet above mean sea level (MSL).

### *EXISTING NOISE ENVIRONMENT*

A noise analysis, *SMF Cargo Facility Project and Master Plan Update*, prepared by Kimley Horn Consultants, identifies the existing noise environment in and around SMF

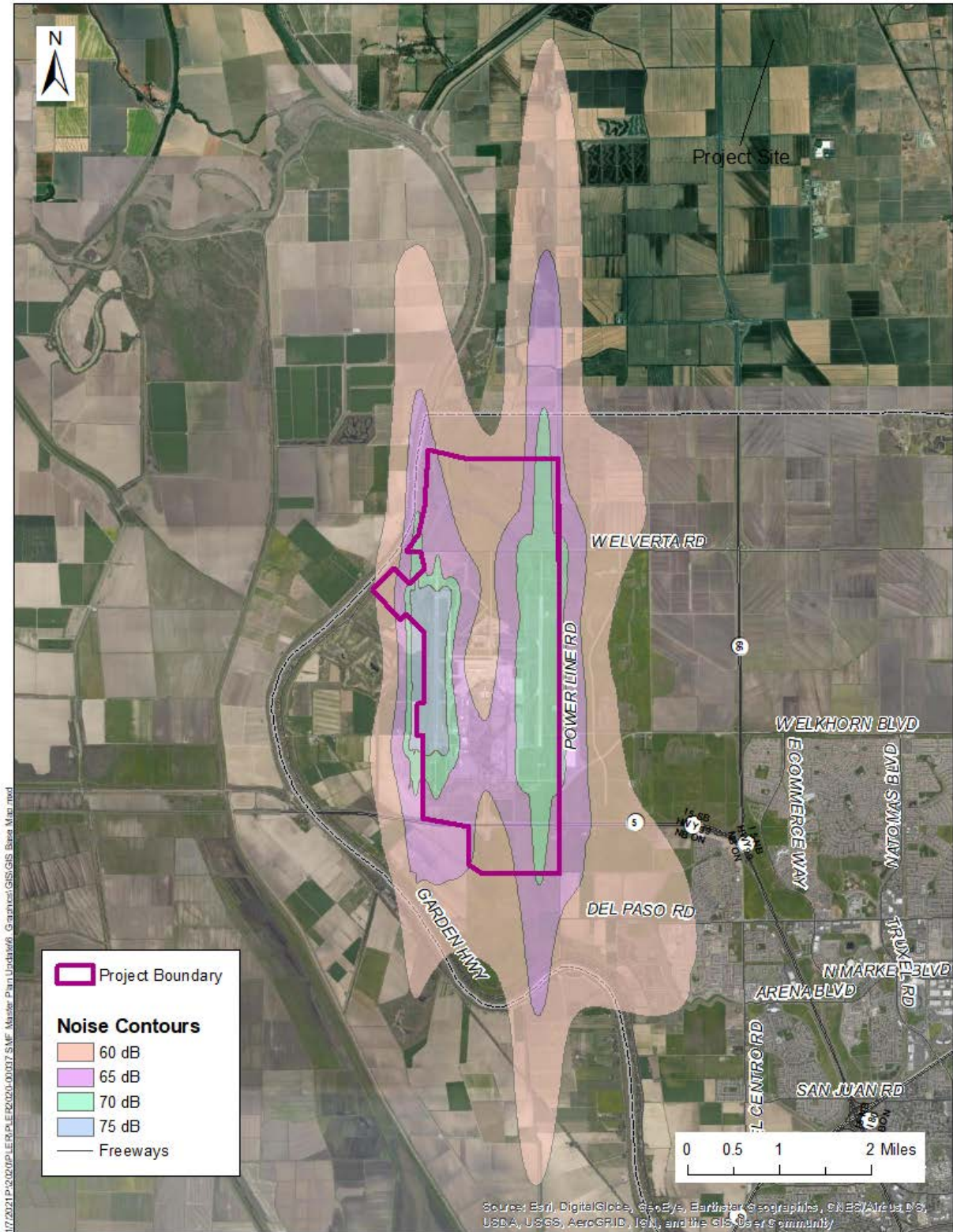
(Appendix NO-1). The existing noise environment consists of aircraft noise, automobile traffic, and agricultural equipment. Table NO-1 below presents the current traffic noise levels along various roadways.

**Table NO-1: Existing Roadway Noise**

<b>Roadway Segment</b>	<b>ADT</b>	<b>dBA CNEL 100 feet from Center line</b>
Elverta Rd., Garden Highway to Earhart Dr.	563	49.6
Elverta Rd., Earhart Dr. to Power Line Rd.	876	51.5
Elverta Rd., Power Line Rd. to Metro Air Pkwy.	1,232	53.0
Elverta Rd., Metro Air Pkwy. to Lone Tree Rd.	1,812	54.7
Elverta Rd., Lone Tree Rd. to SR-99	1,790	54.7
Power Line Rd., Elverta Rd. to Road A	539	49.4
Power Line Rd., Road A to Road D	539	49.3
Power Line Rd., Road D to Skyking Rd.	539	49.2
Power Line Rd., Skyking Rd. to Elkhorn Blvd.	1,023	51.9
Metro Air Pkwy., Elverta Rd. to Road A	602	49.7
Metro Air Pkwy., Road A to Road D	602	49.5
Metro Air Pkwy., Road D to Skyking Rd.	602	49.4
Metro Air Pkwy., Skyking Rd. to Elkhorn Blvd.	1,710	53.8
ADT= average daily trips; dBA= A-weighted decibels; CNEL= community noise equivalent level		
Source: Based on traffic data within the VMT Assessment & Local Access, Safety, and Circulation Study, prepared by Kimley-Horn, 2020.		

The nearest sensitive receptors are residences along the Garden Highway, approximately 0.5 miles to the west and south. The nearest schools are located approximately 2 miles to the southeast as measured from the southern end of the east runway. Airport noise contours are presented in Plate NO-1.

Plate NO-1: SMF Noise Contours



## REGULATORY SETTING

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### FEDERAL AVIATION ADMINISTRATION

FAA Order 1050.1E and FAA Order 5050.4B indicate that a significant noise impact would occur if the analysis shows that a proposed action would cause noise-sensitive areas to experience an increase in noise of 1.5 dB or more at or above CNEL 65 dB noise exposure when compared to the No-Action Alternative (No Project Alternative) for the same time frame (FAA 2004). FAA Order 1050.1E considers that if an increase of 1.5 dB occurs at any noise-sensitive area within the CNEL 65 dB contour, further analysis is warranted. To comply with FAA guidance provided in Order 1050.1E and the recommendations of the 1992 Federal Interagency Committee on Noise, noise-sensitive areas between CNEL 60 and 65 dB should be evaluated for an increase of 3 dB or greater if an increase of 1.5 dB occurs at any noise-sensitive area within the CNEL 65 dB contour. Noise-sensitive areas between CNEL 45 and 60 dB should be evaluated for an increase of 5 dB or greater if an increase of 1.5 dB occurs at any noise-sensitive area within the CNEL 65 dB contour. In compliance with FAA Order 5050.4B, the assessment of aircraft noise levels utilizes flight track data from SMF's flight track monitoring system, while the analysis is primarily based upon the CNEL metric.

### LOCAL

#### *SACRAMENTO COUNTY GENERAL PLAN*

Sacramento County's General Plan (adopted November 2011) includes countywide goals, objectives, policies, and implementation measures to address noise within the County. The Noise Element (amended December 2017) is intended to protect the citizens of the County from the harmful and annoying effects of exposure to excessive noise. Further, the Noise Element must protect the economy of the County by preventing incompatible land uses from encroaching upon existing or planned noise-producing uses. The follow policies are applicable to the proposed project:

NO-2. Proposals for new development within Sacramento County which may be affected by aircraft noise shall be evaluated relative to Table 4: Land Use Compatibility for Aircraft Noise, except in the following case. Development proposals which may be affected by aircraft noise from Sacramento International Airport shall be evaluated relative to the Land Use Compatibility Plan prepared for Sacramento International Airport dated December 12, 2013, adopted herein by reference.

NO-8. Noise associated with construction activities shall adhere to the County Code requirements. Specifically, Section 6.68.090(e) addresses construction noise within the County.

#### *SACRAMENTO INTERNATIONAL AIRPORT LAND USE COMPATIBILITY PLAN*

Airports occupy a special place in the planning process because of their potential impacts on surrounding land uses. The Sacramento County Airport Land Use

Commission (ALUC) is charged with preparing an Airport Land Use Compatibility Plan (ALUCP) for SMF. The Sacramento Area Council of Governments (SACOG) acts as the ALUC for the Sacramento County area. The ALUCP addresses issues of airport noise and safety, with the intent of protecting airport operations from encroachment by non-compatible land uses, as well as protecting the citizens on the ground from the impacts of excessive noise and aircraft accidents. The compatibility plan is based on the long-range master plan prepared by the airport operator and must reflect growth out at least 20 years. Policies included in the ALUCP regulate only the land use surrounding an airport and not the airport policies or the number of takeoffs and landings.

State law requires that certain types of projects be referred to the ALUC for a determination of their consistency with an adopted ALUCP. Such projects include amendments to the general plan, or a community plan, and adoption or amendments to zoning ordinances that affect an area within an airport planning boundary as established by the ALUCP. If the ALUC determines the proposed project to be inconsistent, the County may overrule the ALUC by a two-thirds vote, after a public hearing, and based on specific findings.

## SIGNIFICANCE CRITERIA

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In accordance with Appendix G of the State CEQA Guidelines, a project would be considered to have a significant effect if it would result in:

- Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.
- Generation of excessive groundborne vibration or groundborne noise levels.
- Expose people residing or working in the project area to excessive noise levels.

Excessive noise is defined as a change in noise that exceeds the County's General Plan Policies, Noise Ordinance, or Airport Land Use Compatibility Plan.

## IMPACTS AND ANALYSIS

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The SMF ALUCP is one of the guiding land use planning documents used for new development in or around airports. As stated in the regulatory section, the SMF ALUCP was adopted in 2013 after the Airport Master Plan was adopted in 2007. The ALUCP determined airport noise contours based on estimates derived from the assumption that all foreseeably planned facilities are implemented (theoretic capacity). The assumption includes activity levels at the airport well beyond the planning period of the proposed project. As the project will not meet or exceed the activity levels determined utilizing the ALUCP, the noise contours identified in the ALUCP remain appropriate for noise and land use compatibility planning purposes.

Separate from SCDA airport operations, the FAA designed, environmentally reviewed, and implemented a new flight system, the Next Generation Transportation System (NextGen), to improve flight dependability and efficiency throughout the Country. This system was implemented by the FAA in Sacramento in 2015 and altered the altitude at which planes turned on their destination course. The area navigation (RNAV) departure procedures call for aircraft to climb on heading to 540 feet at which point they turn on course. The previous departure procedures called for aircraft to climb on heading until 600 feet before commencing a turn. The general flight track patterns have not materially changed, but have been concentrated along the primary departure routes.

Since the FAA's implementation of the NextGen flight system, existing residences within the Natomas community have complained about a perceived increase in aircraft noise, aircraft frequency and a decrease in aircraft altitudes. The SCDA has relayed these comments to the FAA and the FAA is reviewing the information. The Noise contours in the SMF ALUCP do not reflect the changes implemented by the FAA NextGen system, as those changes were evaluated under a separate FAA environmental review and determined by the FAA to have no significant impact ([http://www.metroplexenvironmental.com/norcal\\_metroplex/norcal\\_docs.html](http://www.metroplexenvironmental.com/norcal_metroplex/norcal_docs.html)).

IMPACT: GENERATE A SUBSTANTIAL TEMPORARY INCREASE IN AMBIENT NOISE LEVELS IN THE VICINITY OF THE PROJECT IN EXCESS OF STANDARDS ESTABLISHED IN THE LOCAL GENERAL PLAN OR NOISE ORDINANCE, OR APPLICABLE STANDARDS OF OTHER AGENCIES

The Sacramento County General Plan Policy NO-8 and Sacramento County Code 6.68, Noise Ordinance, regulate construction within the unincorporated areas of Sacramento County. According to the Noise Ordinance, construction activities are exempted as long construction takes place during daytime hours (7am to 8pm Monday through Friday and 8am to 6pm Saturday). If construction must take place during nighttime hours, additional measures are required to reduce the impacts to surrounding sensitive receptors. These measure may consist of flashing lights instead of back-up beepers, portable sound barriers, temporary relocation of residences.

Construction associated with the proposed project will occur within SMF properties; there are no sensitive receptors within these properties. Construction will take place during daytime hours and is exempted from the Noise Ordinance and General Plan. Nighttime construction is not known at the Master Plan level; however, it is generally not necessary for typical development projects. Further, the nearest sensitive receptors are located along the Garden Highway approximately 0.5 miles from the proposed commercial developments and would not be impacted by nighttime construction if it was determined necessary. The project will not result in a substantial increase in temporary construction noise, and impacts are ***less than significant***.

#### MITIGATION MEASURES

None required.

IMPACT: GENERATE A SUBSTANTIAL PERMANENT INCREASE IN AMBIENT NOISE LEVELS IN THE VICINITY OF THE PROJECT IN EXCESS OF STANDARDS ESTABLISHED IN THE LOCAL GENERAL PLAN OR NOISE ORDINANCE, OR APPLICABLE STANDARDS OF OTHER AGENCIES

The project consists of multiple developments within the airport, which could result in the permanent increase in noise levels. These projects include:

- New cargo facility east of Runway 16R (PAL 1)
- Improvements to Elverta Road (PAL 1)
- Elkhorn Road Extension (PAL 1)
- Commercial development North of Elverta Road, and north of I-5 (PALs 2 and 3)

With the exception of Metro Airpark (industrial and commercial uses) located immediately east of SMF, land immediately surrounding the airport is agricultural or recreational uses. Ambient noise levels off-airport are defined by aircraft operations as shown in the published noise contours for the airport<sup>1</sup> (Plate NO-1plate) and by traffic generated noise along I-5 and other smaller roadways. As stated in the FAA guidance, a 1.5 dB change in ambient noise above the 65 dB noise contour is considered a significant change for sensitive receptors. There are no sensitive receptors within the 65 dB noise contour. The proposed runway extension (16L/34R) was identified in the prior EIR and the theoretical noise contours included in the ALUCP include the runway extension. According to the ALUCP and County General Plan policies, no residential uses are allowed within the 65/60 dB noise contour respectively.

New uses within the Airport Operation Area (generally between the two runways, Elverta Road and I-5) would not increase the ambient noise for sensitive receptors. This area of the airport contains the highest noise contours and the proposed projects within this area would not substantially increase the ambient noise environment. For instance, as shown in the noise analysis prepared for the cargo facility, the proposed loading dock with 141 truck bays would generate noise upwards of 68 dBA 30 feet from the facility. With standard attenuation rates (4 to 6 dB attenuation per doubling distance), the noise (likely not discernable over aircraft noise) would be well below the General Plan standards for outdoor residential uses 0.5 mile or more away.

The proposed commercial uses north of Elverta Road and north of I-5 would introduce new noise sources associated with loading docks, parking facilities and mechanical equipment. As shown in the noise analysis, noise associated within these uses generally range from 52 dBA for air conditioners and speech, to 61 dBA for slamming doors. Again applying standard attenuation rates, sensitive receptors 0.5 mile or more

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<sup>1</sup> These noise contours account for the theoretic capacity of the airport, which this project does not change. Perceived changes in ambient noise associated with the FAA NextGen System are not reflected in this exhibit.

away from these commercial areas would not experience a significant increase to the ambient noise.

The proposed project will generate new trips on local roadways. The increase in trips corresponds to an increase of traffic generated noise to nearby sensitive receptors. The increase in trips was evaluated for Elverta Road, Metro Air Parkway and Power Line Road. The noise analysis indicates that the largest increase will be on Elverta Road between Earhart Drive and Power Line Road. This is largely due to the trips associated with the new cargo facility. This segment will experience an increase of approximately 9 dBA which would normally be considered a significant impact (change greater than 5 dB); however, this area does not have any receptors and has a higher acceptable outdoor noise level due to the agricultural land use designations.

Permanent increases to ambient noise associated with the construction of the cargo facility, new commercial uses, roadway improvements and realignments, and runway extension, in and surrounding SMF are expected. Since the nearest sensitive receptors are located over 0.5 miles to the west and south along the Garden Highway and 2 miles to the southeast in the Natomas community, the proposed project will not increase the ambient noise and impacts are ***less than significant***.

#### MITIGATION MEASURES

None required.

#### IMPACT: GENERATE EXCESSIVE GROUNDBORNE VIBRATION OR GROUNDBORNE NOISE LEVELS

The proposed project involves the construction of new buildings and infrastructure. Methods of construction are not known at this time in the planning phase, but construction methods involving pile driving or directional tunneling may generate some level of groundborne vibration or noise. There are no sensitive receptors within 0.5 miles of proposed construction areas and therefore, impacts associated with groundborne vibration or noise is ***less than significant***.

#### MITIGATION MEASURES

None required.

#### IMPACT: EXPOSE PEOPLE RESIDING OR WORKING IN THE PROJECT AREA TO EXCESSIVE NOISE LEVELS

The proposed project is updating the size, location or timeframe of some of the facilities and supporting ground uses identified in the SMF Master Plan. The project does not include residential uses other than the hotel (identified for PAL 4 and is not discussed in this document), nor are any of the nearby residential uses located within the 65 noise contour. Standard building construction techniques would reduce interior noise levels to meet General Plan and ALUCP policies of 45 dB for buildings within the Master Plan Area.



Many of the proposed airport facilities are located adjacent to the existing terminals, parking lots/structures, or airport support facilities. The proposed cargo facility adjacent to Runway 16R, and the identified commercial land use areas, would place people working within 60-75 dB noise contours depending on the specific location within the airport. Even though specific development and uses are not known for any of the identified commercial land use areas, application of standard building construction techniques should achieve General Plan and ALUCP policies for interior noise levels (45dB).

Employees working in noise contours above the 70 dB, may be exposed to noise in excess of applicable standards and Occupational Safety and Health Administration (OSHA) safety standards. Employers have to comply with OSHA standards for their personnel generally requiring personal protective equipment (PPE) including hearing protection.

Compliance with General Plan and ALUCP policies for interior noise levels and with OSHA standards and use of PPE ensures persons will not be exposed to excessive noise levels and impacts are ***less than significant***.

#### MITIGATION MEASURES

None required.

# 10 PUBLIC SERVICES/UTILITIES

## INTRODUCTION

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The Sacramento International Airport (SMF) Master Plan EIR certified in 2007, included a discussion of public services which support the airport. This chapter updates the information contained in the prior EIR and analyzes impacts associated with the proposed project; particularly, the proposed cargo facility, new concourse, consolidated car rental facility, and commercial development. Public service providers were given the opportunity to submit comments during the Notice of Preparation and comments were received from Sacramento Municipal Utility District and Sacramento Area Sewer District.

## ENVIRONMENTAL SETTING

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### ENERGY SERVICES

Electrical power is supplied to SMF from the Sacramento Municipal Utility District (SMUD). SMUD generates, transmits, and distributes electric power to a 900-square-mile service area that includes Sacramento County and a small portion of Placer County. SMUD obtains its electricity from diverse resources including hydrogeneration and cogeneration plants, wind, solar, and biomass/landfill gas power, and power purchased on the wholesale market.

SMUD provides power to SMF from its Power Line-Elkhorn Substation, located on the eastern boundary of SMF. The Airport is serviced by the substation from two 69 kilovolt (kV) feeder lines rated to supply 25 megavolt amperes (MVA). Electricity is distributed around SMF primarily by underground cables to avoid aviation safety hazards.

Solar electric panels installed at SMF take advantage of Sacramento's abundant sunshine. The 7.9-Megawatt (MW) solar farm is a photovoltaic system located on two sites with more than 23,000 solar panels mounted on equipment that tracks the sun's path from east to west over the course of the day. The facility consists of a 15-acre site east of Aviation Drive and a 20-acre site west of runway 17L-35R within the north airfield area. Installation of the solar electric panels was a collaborative effort between the Sacramento County Department of Airports (SCDA) and energy company NRG. NRG owns and operates the facility and sells electricity to SMF at a reduced rate under a 25-year Power Purchase Agreement (PPA). Pacific Gas and Electric Company (PG&E) supplies natural gas to SMF. The Airport is connected to a six-inch diameter, 60-psi (pounds per square inch) PG&E distribution pipeline, which supplies a four-inch distribution line. The four-inch gas main that serves the Airport travels from the south along El Centro Boulevard, crosses Elkhorn Boulevard, continues north along Earhart Drive and Airport Boulevard, and crosses to Lindbergh Drive.

## WATER SUPPLY

Until 2006, SMF was supplied by four on-site potable water wells. However, in early 2006, this system was replaced by connection to the City of Sacramento's water supply due to reliability and water quality considerations. This connection was completed with the activation of two potable water storage tanks located south of I-5 at the intersection of Power Line Road and Bayou Way. The facility is monitored collaboratively by SCDA and the Sacramento County Water Resources Department.

The former domestic water wells have been retained to provide landscape irrigation and auxiliary water for backup fire suppression water. During early 2006, an additional water well was installed near the intersection of Power Line Road and North Bayou Way and water well number 2 (located in the Daily B parking lot) was connected to the landscape irrigation system via a 40-foot pipe extension. These well connections replaced the landscape irrigation water provided by Natomas Central Mutual Water Company (NCMWC). An additional well is located near the intersection of Earhart Drive and Delta Road. This well is used for construction water requirements at SMF.

## SEWER SERVICE

Prior to the late 2000s, wastewater at SMF was handled by an on-site treatment system that included four wastewater aeration ponds located north of I-5. However, the intensive industrial, commercial, and office development in the 1,887-acre Metro Air Park Special Planning Area that borders SMF along Power Line Road between I-5 and Elverta Road included various modifications to local infrastructure based on development triggers and level-of-service monitoring. One of those modifications, sewer service, allowed for SMF to transition to off-site wastewater collection service and eliminate use of the existing on-site wastewater ponds.

The off-site sewage infrastructure, accommodates sewage flows from SMF and Metro Air Park, consists of an 8.73 million gallon/day (mgd) lift station and two 16-inch-diameter force mains to sanitary sewer mains (Stantec 2005). SMF receives wastewater collection service from the Sacramento Area Sewer District (SASD). Due to the generally flat slope of the site, the on-site collection system is relatively shallow but provides enough slope to convey sewage primarily by gravity flow. The only area from which wastewater is not transported solely by gravity flow is in the north airfield, where wastewater is transported to a point north of the Biffy Station utilizing force main down to a gravity main. The sewer system gravity mains then converge before connecting into the SASD's 18-inch Meister Way Connection.

## FIRE PROTECTION

Federal regulations (14 Code of Federal Regulations 139) specify fire-fighting and emergency response requirements for commercial airports like SMF. The minimum requirement for Airport Rescue and Fire Fighting (ARFF) stations is based on aircraft size and frequency of aircraft operations. The ARFF station at SMF is designed and operated at ARFF Index C, which is designed for an average of five or more daily departures of aircraft from 126 to 159 feet in length. The ARFF station is located north

of the terminal complex along Earhart Drive. It is staffed 24 hours a day and has fire-fighting vehicles capable of delivering at least 3,000 gallons of foam to fight an aircraft fire. Typical response time to emergencies on the airfield is three to four minutes. Sacramento County Airport Fire currently has 33 staff providing ARFF, structural and wildland fire suppression, and emergency medical services.

SMF also receives service from the City of Sacramento Fire Department. The Sacramento Fire Department station closest to SMF is Station 3, which is located approximately five miles to the west at 7208 West Elkhorn Boulevard. This station is typically staffed with one captain, one apparatus operator, and one firefighter. Normal response time to airport incidents is three to five minutes (Craig 2007).

ARFF is the first responder to all medical, fire, vehicle, and aircraft incidents at SMF. ARFF works closely with the Sacramento Fire Department to efficiently deal with airport incidents. ARFF is typically the lead for all airport incidents and relies on the Sacramento Fire Department for backup support (McCasland 2007).

#### LAW ENFORCEMENT

Law enforcement at SMF and the area surrounding the airport is provided by the Sacramento County Sheriff's Department Airport Division. This division has 45 sworn officers and typically five to six deputies and sheriffs are on duty at any given time. The Division's station is located on the airport at 6900 Airport Boulevard. The normal response time to an incident at SMF is 3 minutes (Graber 2007).

#### SOLID WASTE SERVICE

Commercial (nonresidential) and residential solid waste collection in Sacramento County are handled differently. Commercial solid waste collection is regulated by the Sacramento Regional Solid Waste Authority (SWA). Private waste haulers in the SWA region, which includes the Airport, must obtain a SWA Non-Exclusive Commercial Solid Waste Collection Franchise for any commercial, industrial, restaurant, construction, or apartment/multifamily residential waste collection services. Although the County of Sacramento owns Kiefer Landfill, the current SWA Franchisees are not required to dispose of waste at that landfill. Therefore, commercial solid waste from the SWA region is disposed of in various landfills in California and Nevada.

The Sacramento County Waste Management and Recycling Department (DWMR) owns and operates the County's Kiefer Landfill in Sloughouse and the North Area Recovery Stations, a transfer station in North Highlands that disposes waste at Kiefer Landfill. Kiefer Landfill is classified as a Class III municipal solid waste landfill facility and is permitted to accept general residential, commercial, and industrial refuse for disposal including municipal solid waste, construction and demolition debris, green materials, agricultural debris, dead animals, and other designated debris. Waste is received at DWMR disposal facilities from a variety of users including SWA Franchisees and commercial or residential self-haul customers.

## REGULATORY SETTING

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### STATE OF CALIFORNIA

#### *CALIFORNIA INTEGRATED WASTE MANAGEMENT ACT AND CALRECYCLE*

The Integrated Waste Management Act of 1989 is the result of two pieces of legislation, AB 939 and SB 1322, which created the California Integrated Waste Management Board (which has been renamed CalRecycle). The Integrated Waste Management Act mandated a goal of 25 percent diversion of each city's and county's waste from disposal by 1995 and 50 percent diversion in 2000, with a process to ensure environmentally safe disposal of waste that could not be diverted.

CalRecycle is the State agency designated to oversee, manage, and track California's 92 million tons of waste generated each year. They provide grants and loans to help California cities, counties, businesses and organizations meet the State's waste reduction, reuse and recycling goals.

Senate Bill 1016, signed into law on September 26, 2008, represents a fundamental shift in the way local jurisdictions are measured for compliance with state diversion mandates. Jurisdictions are now evaluated based on the implementation of programs that measure per capita waste disposal, rather than diversion percentage.

### LOCAL

#### *SACRAMENTO REGIONAL SOLID WASTE AUTHORITY*

The Sacramento Regional Solid Waste Authority (SWA) is a joint powers authority of Sacramento County and the City of Sacramento. SWA was formed in December 1992 to assume the responsibility for solid waste, recycling, and disposal needs for businesses and apartment complexes in the Sacramento area. The SWA regulates commercial solid waste collection by franchised haulers and offers recycling services to multi-family dwelling units.

#### **SWA ORDINANCES**

The SWA has adopted three recycling ordinances that target three distinct waste streams: (1) The Business Recycling Ordinance, adopted in 2007 for commercial generators who subscribe to 4 cubic yards or more of refuse service per week; (2) The Certification of Construction and Demolition (C&D) Debris Sorting Facilities Ordinance, adopted in 2008, that creates a program for mixed C&D facilities that dovetails with both City and County C&D Ordinances for builders; and (3) The Multifamily Recycling Ordinance, adopted in 2009, that requires owners of multifamily properties with over 5 units to subscribe to a recycling service for their tenants.

#### *SACRAMENTO COUNTY GENERAL PLAN*

Sacramento County's *General Plan* (adopted November 2011), amended *Public Facilities Element* (amended December 17, 2019) includes countywide goals,

objectives, policies, and implementation measures to address and/or protect community services. The Public Facilities Element is intended to promote the achievement of three general goals: (1) developing environmentally sound, economically efficient, and financially equitable water facilities; (2) implementing safe, efficient, environmentally sound public sewer systems and treatment facilities for the urban environment; and (3) appropriately siting energy facilities that efficiently and safely produce/distribute energy without compromising environmental quality or human health.

## SIGNIFICANCE CRITERIA

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The public services analysis considered existing and future plans from the jurisdictions in the project area along with the various environmental analyses conducted for this SEIR to determine whether implementation of the proposed project will result in impacts to public services.

Impacts to public services or utilities are considered significant if a project would:

1. Result in inefficient, wasteful, and unnecessary consumption of energy.
2. Require the construction of new or the expansion of existing water facilities that could potentially cause significant construction-related environmental effects. Or result in a service demand that cannot be met by existing or reasonably foreseeable future service capacity.
3. Require the construction of new or the expansion of existing wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects. Or result in a service demand that cannot be met by existing or reasonably foreseeable future service capacity.
4. Result in the need for additional landfill capacity for solid waste disposal.
5. Result in substantial adverse physical impacts associated with the provision of emergency services.
6. Result in substantial adverse physical impacts associated with the provision of law enforcement services.
7. Result in substantial adverse physical impacts associated with the provision of schools, park and recreational services, and libraries.

Item number 7 is not applicable to the proposed project as there are no schools, park and recreational services, or libraries within the SMF Master Plan Update area.

## IMPACTS AND ANALYSIS

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### IMPACT: RESULT IN INEFFICIENT, WASTEFUL, AND UNNECESSARY CONSUMPTION OF ENERGY

The proposed project will result in construction of new buildings (i.e., new concourse, consolidated rental car facility, cargo facility and new commercial development). These new facilities will increase consumption of electricity at SMF. For example the proposed cargo facility may require between 4-5 thousand megawatts per year and the other Master Plan Update elements may require 26 thousand megawatts per year<sup>1</sup>. The construction of the proposed cargo facility will require a new conduit from the existing substation at Elverta Road and Power Line Road. Further, expansion of the SMUD Power Line-Elkhorn Substation will likely be required to serve the increase energy demands associated with the Master Plan Update. With the proposed expansions to the existing substations, infrastructure and distribution needs of the proposed project are met. Therefore, the proposed project will have a less than significant impact on electrical supply and distribution.

SMF used about 498,031 therms of natural gas in 2018. Based on existing conditions (existing utility records), the average demand for natural gas is estimated at 0.825 therms per passenger. Therefore, gas consumption at SMF with the Master Plan project is projected to increase to 607,326 therms in 2023. By 2038, SMF is projected to consume 839,438 therms of gas with the project. This increase in gas use will not require expansion of existing infrastructure and will not place a significant demand on PG&E's gas supplies. Furthermore, future buildings (excluding the new concourse) will be required to comply with Tier 1 Best Management Practices for greenhouse gas – no natural gas (reference the Climate Change chapter). As better technologies become available, new construction and renovations will aim to reduce reliance on natural gas to the maximum extent feasible.

Standard practice for the design of SCDA facilities calls for early coordination with utility providers, including PG&E, to ensure that facility siting and construction comply with Public Utilities Commission clearance requirements. These standard practices will be used for the design of Master Plan elements. Impacts associated with energy uses are ***less than significant***.

### MITIGATION MEASURES

None recommended.

### IMPACT: REQUIRE THE CONSTRUCTION OF NEW OR THE EXPANSION OF EXISTING WATER FACILITIES THAT COULD POTENTIALLY CAUSE

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<sup>1</sup> Determined from the results of the CalEEMod analysis in the *GHG Emissions Assessment* prepared by Kimley-Horn and Associates (Appendix CC-1).

SIGNIFICANT CONSTRUCTION-RELATED ENVIRONMENTAL EFFECTS. OR  
RESULT IN A SERVICE DEMAND THAT CANNOT BE MET BY EXISTING OR  
REASONABLY FORESEEABLE FUTURE SERVICE CAPACITY

Potable water is supplied to SMF via a water supply pipeline, two storage tanks, and a booster pump station. A new 16-inch transmission main (T-main) was installed to deliver water to SMF's two new storage tanks south of I-5. The two tanks have a combined storage capacity of 2.8 million gallons to provide required capacity for fire flow demands, peak flow equalization, and emergency backup. The pumping station, with a capacity of 5,780 gallons per minute, is used to boost the pressure to the required 60 pounds per square inch to ensure adequate water supply for fire suppression. Water is delivered to SMF's distribution loop by an underground 24-inch main pipeline.

The water supply system is designed to meet the airport's projected 2038 maximum day demand of 3,708 gallons per minute (Sacramento County Department of Airports, 2019). This projection is based on conversion of the existing central chillers at Terminal B to a cooling tower system that uses substantially less water<sup>2</sup> and separation of the irrigation water system so that irrigation will be supplied from the existing wells at the airport. The Terminal B chiller conversion was completed in June 2006, and the irrigation supply source previously provided by the Natomas Central Mutual Water Company was permanently deactivated in early 2007.

The proposed Master Plan Update will require the construction of new water service lines to serve Master Plan elements; however, as stated above the water supply system is designed to meet the project demand. For these reasons, the Master Plan Update project will have a **less than significant** impact on water supply.

MITIGATION MEASURES

None recommended.

IMPACT: REQUIRE THE CONSTRUCTION OF NEW OR THE EXPANSION OF  
EXISTING WASTEWATER FACILITIES THAT COULD POTENTIALLY CAUSE  
SIGNIFICANT CONSTRUCTION-RELATED ENVIRONMENTAL EFFECTS. OR  
RESULT IN A SERVICE DEMAND THAT CANNOT BE MET BY EXISTING OR  
REASONABLY FORESEEABLE FUTURE SERVICE CAPACITY

The sewer infrastructure on SMF property is categorized as private. The existing agreement between SASD and SCDA allow for discharges up to 1.4 million gallons per day (MGD) into a SASD manhole at the intersection of Meister Way and Powerline Road (Letter from Carl Mosher from SASD's Christoph Dobson, dated 7/3/2013). Based

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<sup>2</sup> When in operation prior to installation of a cooling tower in mid-2006, the chiller plant uses approximately 35 percent of SMF's current potable water supply (HDR 2003).



on information from January 1, 2018 through July 31, 2019, the SMF metered wastewater flow was between 0.18 and 0.27 MGD. The projected peak flow in 2038 is 0.34 MGD. Therefore the capacity will be sufficient to accommodate existing and planned future wastewater flow from the Airport.

Table PS-1 summarizes wastewater generation projections for the airport through 2038. These projections took into consideration the proposed Master Plan project. SRCSD expanded the Sacramento Regional Wastewater Treatment Plant's capacity to treat 218 MGD of wastewater in light of the anticipated future development in Sacramento County, including the SMF Master Plan project. Because of the new off-site sewage infrastructure and expanded capacity of the plant, the proposed project will not have an impact on regional wastewater treatment facilities.

**Table PS-1: SMF Wastewater Generation**

	<b>2018</b>	<b>PAL 4 (2038)</b>
Peak Flow (mgd)	0.20	0.34
Passenger Enplanements per year used for wastewater generation study	6.03 million	10.17 million

**Source:** Sacramento County Department of Airports, 2019.

The airport currently practices water conservation (e.g., water recycling facilities at the rental carwash facilities and groundwater for irrigation) and will continue to do so in the future. Other measures that may be implemented include retrofitting all older fixtures within the terminal with low flow fixtures or installing waterless toilets. Impacts associated with sewer services are ***less than significant***.

#### MITIGATION MEASURES

None recommended.

#### IMPACT: RESULT IN THE NEED FOR ADDITIONAL LANDFILL CAPACITY FOR SOLID WASTE DISPOSAL

The Master Plan project will generate construction debris from the demolition of existing facilities and construction of new facilities. As is the case with all large construction projects in Sacramento County, some of the debris, such as clean soil and possibly concrete, will be recycled by the construction contractors for use at other construction sites needing fill material. The remainder of the debris will be transported to one or more licensed landfills in California and/or Nevada. With the large number of licensed haulers in the County and the availability of many licensed landfills for disposal of construction debris, the quantity of material generated by the Master Plan project is not expected to significantly impact the capacity of any disposal facility.

From January 2018 through December 2018, SMF generated 2,139.6 tons of solid waste from other airport operations. Solid waste collection services at SMF are provided by Atlas Disposal Industries, LLC. (Atlas), under contract to SCDA. The waste collected by Atlas is hauled to Yolo County Central Landfill.

SMF had a total of 6,031,630 passenger enplanements in 2018. Assuming that the amount of solid waste generated at the airport is linear to the number of passengers, the airport generated approximately 0.71 pound of waste per passenger. With the proposed project, base case enplanement forecasts indicate that passenger enplanements will reach 8,196,600 in 2028 and 10,166,400 in 2038. Based on waste generation of 0.71 pound/passenger, the airport will produce about 768 tons more of solid waste in 2028 with the proposed project. By 2038, the airport will produce about 1,467 tons more of solid waste with the project than without the project. It is expected that the increased volume of solid waste created with the project can continue to be disposed of by Atlas, or other contracted provider, without significantly affecting the operating life of their landfills. The projected volume in 2038 may actually be less than this amount because of recycling program implementations.

SMF currently employs several resource conservation and waste minimization programs including:

- Integrated Waste Management Program – used motor oil and fuel filters (from trucks, equipment, aircraft, etc.), diesel flush fluids, and road sealant collected at SMF are stored for appropriate disposal and/or recycling.
- Paper Recycling Program – SMF participates in the County of Sacramento’s program for collecting and recycling office white paper. WMI provides bins for collection of cardboard.
- Terminal and Concourse Mixed Recycling Program – SMF recycling efforts include recycling bins in concourse and terminal areas for use by the public. Separated recycling containers are placed by trashcans for the collection and recycling of beverage containers, cardboard, mixed white/colored paper, newspaper, magazines, etc.
- Grass Recycling Program – beginning in 1989, SMF purchased equipment to collect grass clippings for landscaping/mulch use. The program was later expanded to include wood chipping as well.
- Hazardous Materials Program – in an effort to reduce the costs associated with storing and disposing of used chemical-based solvents, SMF converted to water-based solvents for cleaning vehicle parts.
- Electrified Jet Bridges and Preconditioned Air – SMF installed 400 hertz power and preconditioned air units on all 32 passenger boarding bridges (jetways), thereby eliminating the need for aircraft to use on-board auxiliary power units (APUs) during the passenger loading and unloading process. An APU on a

typical Boeing 737 (the most common aircraft at SMF) can consume up to 34 gallons of jet fuel per hour.

- Light Program – SMF recycles fluorescent bulbs and high intensity discharge lamps. This program also includes proper disposal of used ballasts that contain polychlorinated biphenyls. If the ballasts contain polychlorinated biphenyls, they are stored in a metal container for pickup by a qualified contractor.
- Battery Program – one-time use alkaline batteries and rechargeable batteries (lithium-ion, nickel-cadmium, etc.) from electronic devices are stored in drums and containers for pickup by a qualified contractor for recycling and/or disposal.

With or without the proposed project, SCDA will continue these programs as well as seek other means of recycling solid waste. Impacts associated with solid waste are ***less than significant***.

#### MITIGATION MEASURES

None recommended.

#### IMPACT: RESULT IN SUBSTANTIAL ADVERSE PHYSICAL IMPACTS ASSOCIATED WITH THE PROVISION OF EMERGENCY SERVICES

At present the only fire station in the project area is the ARFF facility at SMF. A community fire station located near the airport entrance is planned to provide fire and paramedic services to recent and ongoing commercial, industrial, and residential development near SMF. Currently, no fire station in this portion of the Natomas Basin can quickly respond to structural fires and emergency medical situations. This facility is also needed to provide similar services in a timely fashion to SMF's current landside facilities (terminals, offices, parking structures, and roadways). For these reasons, the construction of a new community fire station at the northwestern corner of Lindbergh and Crossfield Drives is proposed for PAL 1. The fire station is to be built by the City of Sacramento Fire Department on County-owned land pursuant to a ground lease that will be developed with the City of Sacramento. The land will not be conveyed to the City. A community fire station located near the airport entrance will provide "first responder" fire and paramedic services to the airport landside areas of the airport and surrounding off-airport development, and allow the ARFF facility to be dedicated exclusively to aviation-related incidents. Construction of a new community fire station together with the ARFF facility at SMF will ensure adequate fire protection and emergency response to the airport and existing and planned commercial, industrial, and residential development in SMF's vicinity. Impacts to fire protection are ***less than significant***.

#### MITIGATION MEASURES

None recommended.

IMPACT: RESULT IN SUBSTANTIAL ADVERSE PHYSICAL IMPACTS  
ASSOCIATED WITH THE PROVISION OF LAW ENFORCEMENT SERVICES

Law enforcement demand will increase in proportion to passenger activity and increases in commercial and industrial uses at SMF with the proposed project. The project will require expansion of the existing Sheriff's Department station, as well as additional officers and equipment as travel demand increases at the airport. At present, the space used by the Sheriff's Department is divided among several buildings at the airport. With the proposed terminal modifications, the airport will have sufficient room to provide the Sheriff's Department with contiguous space for law enforcement activities. SCDA will continue to coordinate with the Sacramento County Sheriff's Department to ensure adequate facilities and personnel as the use of the airport increases over time. This impact is ***less than significant***.

MITIGATION MEASURES

None recommended.

# 11 TRANSPORTATION AND CIRCULATION

## INTRODUCTION

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The certified FEIR for the Sacramento International Airport (SMF) Master Plan Transportation and Circulation Chapter evaluated environmental impacts using the Level of Service (LOS) significance threshold. Since the certification of the prior FEIR, State Senate Bill 743 was passed, changing how transportation and circulation impacts are assessed under CEQA. Pursuant to SB 743, impacts are no longer based on LOS and are evaluated using another metric. Although there is no requirement to use a particular metric, the Governor's Office of Planning and Research (OPR) suggests using the metric vehicle miles traveled (VMT).

The proposed project is largely a re-evaluation of the phasing of the proposed Master Plan facilities. Changes which would alter the prior EIR's transportation analysis include:

- The forecasted enplanement (passenger) growth over the 20-year planning horizon and subsequent addition of facilities and employees to support that passenger growth. All other land use modifications identified in the updated Master Plan are assumed to serve the airport itself;
- The development of near-term Air Cargo Facilities; and,
- The development of Commercial Land Uses in/near the study area over the planning horizon.

A technical report, *VMT Assessment, Local Access, Safety, and Circulation Study for the SMF Master Plan Update, Sacramento, CA*. August 3, 2020, prepared by Kimley-Horn and Associates, hereinafter called the Transportation Study, was prepared for the proposed project. Information contained in the Transportation Study has been incorporated into the following analysis and is included as Appendix TC-1.

## TRANSPORTATION SETTING

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SMF is located in Sacramento County, approximately 10 miles northwest of downtown Sacramento. The airport occupies an approximately 6,000 acres that is generally bounded by Power Line Road to the east, Garden Highway to the west, the Sacramento River to the west and south, and West Riego Road to the north.

Primary access to the Airport and terminal facilities is provided from the south via the I-5 interchange with Airport Boulevard, with an alternate route provided by Bayou Way. Access to airport facilities on the north portion of the Airport is provided via [West] Elverta Road and Earhart Drive. Elverta Road connects to State Route 99 (SR-99) several miles east of the Airport.

Currently, the Metro Air Parkway interchange is being constructed approximately one-half mile east of Airport Boulevard interchange.

## REGULATORY SETTING

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### STATE OF CALIFORNIA

#### *SENATE BILL 743*

In accordance with Senate Bill (SB) 743, which reformed the process for California Environmental Quality Act (CEQA) review of transportation impacts to align with greenhouse gas emissions reduction goals, the OPR identified VMT as the key metric to measure transportation impacts of new development under CEQA. SB 743, will “more appropriately balance the needs of congestion management with statewide goals related to infill development, promotion of public health through active transportation, and reduction of greenhouse gas emissions” (Cal. 2013). To support these goals, as of July 1, 2020, automobile delay and LOS performance measures may no longer be used to determine the transportation impacts of land development projects under CEQA. However, this requirement does not modify the discretion lead agencies have to develop their own methodologies or guidelines, or to analyze impacts to other components of the transportation system, such as walking, bicycling, transit, and safety.

### LOCAL

#### *SACRAMENTO COUNTY GENERAL PLAN*

The Sacramento County General Plan Circulation Element focuses on providing roadways for growing automobile demands and alternative modes of transportation. This requires improving those alternatives through regional coordination, improved funding, better land use and design, and fair pricing. The overarching goals of the element seeks a balanced transportation system that moves people and goods in a safe and efficient way that minimizes environmental impacts, supports urban land uses, and serves rural needs. Supporting General Plan policies include conducting planning for roads, parking, clean alternative fuel and low emission vehicles, and other methods consistent with achieving air quality goals; conducting land use and transportation planning with a regional perspective; and mitigating new development traffic impacts.

On October 7, 2020, the Sacramento County Board of Supervisors approved an amendment (Resolution Number 2020-0652) to the Sacramento County General Plan’s Circulation Element to establish VMT significance thresholds as the metric to be utilized in order to analyze traffic impacts.

Goals and policies of the Sacramento County General Plan relating to traffic, circulation and transportation applicable to the project are listed below:

- CI-1. Provide complete streets to provide safe and efficient access to a diversity of travel modes for all urban, suburban and rural land uses within

Sacramento County except within certain established neighborhoods where particular amenities (such as sidewalks) are not desired. Within rural areas of the County, a complete street may be accommodated through roadway shoulders of sufficient width or other means to accommodate all modes of travel.

- CI-3. Travel modes shall be interconnected to form an integrated, coordinated and balanced multi-modal transportation system, planned and developed consistent with the land uses to be served.
- CI-5. Land use and transportation planning and development should be cohesive, mutually supportive, and complement the objective of reducing per capita vehicle miles travelled (VMT). The standards shown in Table CI-1 shall be used as thresholds of significance for all projects subject to CEQA. Where the VMT level standards of Table CI-1 are predicted to be exceeded, all feasible mitigation measures shall be included to reduce projected VMT levels.
- CI-9. Plan and design the roadway system in a manner that meets Level of Service (LOS) D on rural roadways and LOS E on urban roadways, unless it is infeasible to implement project alternatives or improvements that would achieve LOS D on rural roadways or LOS E on urban roadways. The urban areas are those areas within the Urban Service Boundary as shown in the Land Use Element of the Sacramento County General Plan. The areas outside the Urban Service Boundary are considered rural.
- CI-10. Land development projects shall be responsible to provide improvements which address the project's adverse effects on local and regional roadways.
- CI-21. Collaborate with neighboring jurisdictions and other agencies to achieve land use patterns and densities in areas planned for development that support transit services, preserve adequate rights-of-way, and enhance transit services in the designated transit corridors.

## SIGNIFICANCE CRITERIA

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In accordance with Appendix G of the State CEQA Guidelines, a project would be considered to have a significant effect if it would:

1. Conflict with or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b) – measuring transportation impacts individually or cumulatively, using a vehicles miles traveled standard established by the County;
2. Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities;

- 3. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); or,
- 4. Result in inadequate emergency access.

Sacramento County has updated the Transportation Analysis Guidelines (September 10, 2020, herein referred to as ‘Guidelines’), to incorporate the requirements under SB 743. Table TC-1 presents the screening criteria for projects that are expected to result in less than significant VMT impacts based on project description, characteristics, and/or location. If a component of a mixed-use project meets these screening criteria, only the component, not the entire project, would be screened from CEQA transportation analysis.

**Table TC-1: Sacramento County Transportation Analysis Guidelines Screening Criteria for CEQA Transportation Analysis for Development Projects**

Type	Screening Criteria
1. Small Projects	<ul style="list-style-type: none"> <li>• Projects generating less than 237 average daily traffic (ADT)</li> </ul>
2. Local-Serving Retail <sup>1</sup>	<ul style="list-style-type: none"> <li>• 125,000 square feet of total gross floor area or less in an infill setting; <u>OR</u> 200,000 square feet of total gross floor area or less in a greenfield setting; <u>OR</u> if supported by a market study with a capture area of 3 miles or less; <u>AND</u></li> <li>• Local Serving: Project does not have regional-serving uses, as shown in Appendix A.</li> </ul>
3. Local-Serving Public Facilities/Services	<ul style="list-style-type: none"> <li>• Day care center</li> <li>• Public K-12 schools</li> <li>• Neighborhood park (developed or undeveloped)</li> <li>• Community center</li> <li>• Post offices</li> <li>• Police and fire facilities</li> <li>• Libraries</li> <li>• Government offices (primarily serving customers in-person)</li> <li>• Utility, communications, and similar facilities</li> <li>• Water sanitation, waste management, and similar facilities</li> </ul>
4. Projects in VMT-Efficient Areas	<ul style="list-style-type: none"> <li>• Residential Located in a VMT Efficient Area: Based on an approved screening map.</li> <li>• Office/Business Professional Employment Project Located in a VMT Efficient Area: Based on an approved screening map.</li> <li>• Industrial Employment Project Located in a VMT Efficient Area: Based on an approved screening map.</li> </ul>



<p>5. Projects Near Transit Stations</p>	<ul style="list-style-type: none"> <li>• High-Quality Transit: Located within ½ a mile of an existing major transit stop<sup>2</sup> or an existing stop along a high-quality transit corridor<sup>3</sup>; <u>AND</u></li> <li>• Minimum Gross Floor Area Ratio (FAR) of 0.75 for office projects or components; <u>AND</u></li> <li>• Parking: Does not include substantially more parking than required<sup>4</sup>, such that it discourages transit use by making it too convenient to drive; <u>AND</u></li> <li>• Affordable Housing: Does not replace affordable residential units with a smaller number of moderate- or high-income residential units; <u>AND</u></li> <li>• Active Transportation: Project does not negatively impact transit, bike or pedestrian infrastructure.</li> </ul>
<p>6. Affordable Residential Projects</p>	<ul style="list-style-type: none"> <li>• Affordability: Screening criteria only apply to the affordable units; <u>AND</u></li> <li>• Parking: Does not include substantially more parking than required<sup>4</sup>, such that it discourages transit use by making it too convenient to drive; <u>AND</u></li> <li>• Transit Access: Project has access to transit within a ½ mile walking distance; <u>AND</u></li> <li>• Active Transportation: Project does not negatively impact transit, bike or pedestrian infrastructure.</li> </ul>
<p><sup>1</sup> See Appendix A for land use types considered to be retail.  <sup>2</sup> Defined in the Pub. Resources Code § 21064.3 (“Major transit stop’ means a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods”).  <sup>3</sup> Defined in the Pub. Resources Code § 21155 (“For purposes of this section, a high-quality transit corridor means a corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours”).  <sup>4</sup> Sacramento County Zoning Code Chapter 5: Development Standards</p>	

For projects that do not meet the screening criteria outlined in Table TC-1, then the following significant thresholds in Table TC-2 apply:

**Table TC-2: CEQA VMT Thresholds for Development Projects**

Project Type <sup>1</sup>	VMT Significance Criteria <sup>2</sup>	Threshold
Residential	Project VMT per capita exceeds 85 percent of the regional average VMT per capita	>15.0 VMT per capita
Office/Business Professional	Project VMT per employee exceeds 85 percent of the regional average VMT per	>13.9 VMT per employee
Industrial	Project VMT per employee exceeds the regional average VMT per employee	>16.4 VMT per employee
Regional Retail	Net increase in regional VMT	VMT increase
Regional Public Facilities/Services	Net increase in regional VMT	VMT increase
Redevelopment	Projects that result in a decrease to existing regional total VMT are presumed to have a less than significant VMT impact; otherwise, apply the relevant threshold based on the proposed land use (treating existing use as vacant)	Relevant threshold above
Mixed Use	Apply the relevant threshold to each land use component individually	Relevant threshold
Phased	Apply the relevant threshold to each phase independently	Relevant threshold
Land Development with Roadway Component	For locally-serving roadways, the significance determination is based on the land use component. For regional roadways, apply thresholds of significance for transportation projects.	Appropriate thresholds above or per Table 5-2
<sup>1</sup> Refer to Appendix A		
<sup>2</sup> If not presumed to be less than significant per Table 3-1		

The Guidelines still require the preparation of a Level of Service analysis, as this is important information for SacDOT and the community. However, the information and conclusions of the LOS analysis is not included in the CEQA impact analysis. This information can be found in the Transportation Analysis (Appendix TC-1).

**BICYCLE AND PEDESTRIAN FACILITIES**

Bicycle facilities include Class I (off-street facilities), Class II (on-street bicycle lanes identified with signage and markings), and Class III (on-street bicycle routes identified by signage). Pedestrian facilities are composed of paths, sidewalks, and pedestrian crossings. A bicycle or pedestrian impact is considered significant if the proposed Project would:

- Eliminate or adversely affect an existing bikeway or pedestrian facility in a way that would discourage its use;
- Interfere with the implementation of a planned bikeway as shown in the Bicycle Master Plan, or be in conflict with the Pedestrian Master Plan; or
- Result in unsafe conditions for bicyclists or pedestrians, including unsafe bicycle/ pedestrian, bicycle/ motor vehicle or pedestrian / motor vehicle conflict.

## TRANSIT FACILITIES

Transit facilities include shuttle services, bus service, bus rapid transit (BRT), and light-rail facilities. A project is considered to have a significant impact on the public transit system if the project would generate ridership, which when added to existing or future ridership exceeds available or planned system capacity. An impact may also be significant if a project would conflict with or obstruct implementation of a transit plan.

## METHODOLOGY

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Travel Demand Models (TDMs) are broadly considered to be amongst the most accurate of available tools to assess VMT. The SACOG TDM (SACSIM) was determined to be the best fit for this project considering the geographic location of the project and the detailed roadway network in the model for the Sacramento region. The 2016 SACSIM<sup>1</sup> is used in the Transportation Study and the future year was grown from 2036 to 2040 to be consistent with the Master Plan Update.

To determine the VMT related to the Master Plan Update, the Traffic Analysis Zone (TAZ) representing the Airport was split to separate the employment from the passenger trips. This split facilitated the analysis of employment VMT and passenger VMT, as well as making it easier to complete other required analyses including select-zone analyses of the project to understand project distribution. The employment VMT was determined by using SACSIM output data and using a methodology consistent with other adopted methodologies in the region.

In order to determine potential impacts with respect to roadway hazards and circulation, this analysis includes evaluation of the following transportation facilities:

- 23 intersections within Sacramento County
- 15 roadway segments within Sacramento County
- I-5 (within the study area)

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<sup>1</sup> The 2019 SACSIM model was not available when the analysis effort began, and it was determined to remain with the 2016 model.

- SR-99 (within the study area)

Based on the County's requirements, this Transportation Study was conducted for the study facilities for the following scenarios:

- Existing (2020) Conditions
- Existing (2020) plus Proposed Project (Master Plan Update) Conditions
- Existing (2020) plus Proposed Project (Cargo Facility) Conditions
- Existing (2020) plus Proposed Project (Master Plan Update and Cargo Facility) Conditions
- Cumulative Conditions
- Cumulative plus Proposed Project (Master Plan Update) Conditions
- Cumulative plus Proposed Project (Cargo Facility) Conditions
- Cumulative plus Proposed Project (Master Plan Update and Cargo Facility) Conditions

## IMPACTS AND ANALYSIS

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IMPACT: RESULT IN AN INCREASE IN VMT

### **MASTER PLAN UPDATE**

The *SMF Catchment Area Analysis* prepared to guide development of the Master Plan Update, provides information on the existing unmet passenger demand. Specifically, the data shows that more than 2.1 million domestic and 1.6 million international passengers travel to airports outside of the Sacramento region. Primarily, these passengers use airports in the Bay Area. If SMF does not expand or provide additional passenger service, these longer vehicular trips to the Bay Area airports will continue or possibly expand with population growth over time. The provision of additional gates to serve this unmet local demand is the primary reason for the proposed Master Plan Update.

### **PROPOSED CARGO FACILITY**

The proposed cargo facility will add new trips to the region due to the increase in employment. While the trips associated with the heavy-vehicle trucks can be included in the VMT analysis, the 2018 OPR guidance is specific to passenger-vehicle and light-duty trucks. It is generally understood that heavy-duty truck impacts are regulated through other aspects of California's regulatory and statutory framework. Further, due to the operational nature of cargo facilities, the end user generally chooses the best

location to reduce costs, which include less mileage by heavy-duty trucks. Therefore, based on these reasons, and through consultation with County staff, the VMT assessment for the proposed cargo facility (an industrial land use) would be evaluated against the threshold of significance for work VMT per employee (commute trip to work) as compared to the SACOG regional average for the same metric.

**CONCLUSION**

The average VMT per employee for the SACOG Region is 12.58 vehicle miles, and the average VMT per employee for SMF and the cargo facility is 20.52 and 22.59 vehicle miles, respectively. Since the project would increase vehicle miles over the existing SACOG regional average, the impact is considered significant.

**Table TC-3: VMT Calculations**

<b>Location</b>	<b>Total VMT</b>	<b>Total Home-based Work Trips</b>	<b>Average Home-based Work VMT per Employee</b>
SACOG Region	12,366,389	983,193	12.58
Master Plan Update Employees	24,005	1,170	20.52
Cargo Facility Employees	37,899	1,678	22.59

In addition to calculating the VMT per employee, the passenger-related VMT was also calculated. The VMT was calculated for existing (2020) and Future (2040) conditions (Table TC-4). The number of daily passengers is expected to rise from 23,154 to 39,026 and associated total daily VMT is expected to rise from 942,366 vehicle miles to 1,594,123 vehicle miles. However, the per passenger VMT will incrementally rise from 40.70 vehicle miles to 40.85 vehicle miles.

**Table TC-4: Passenger VMT**

<b>Time Period</b>	<b>Passengers</b>	<b>Total VMT</b>	<b>VMT per Passenger</b>
Existing (2020)	23,154	942,366	40.70
Future (2040)	39,026	1,594,123	40.85

As noted above, the Master Plan Update is expected to recapture passengers that would have traveled to the Bay Area. The approximate VMT reduction per passenger is 64.2. When considering the total recaptured passengers (7,936), the result is a reduction of 509,500 vehicle miles over the no project alternative. Totaling the passenger and employee VMT associated with the Master Plan Update (excluding the

proposed cargo facility), the expected VMT will be reduced 486,941 per day. Table TC-5 below portrays this information.

**Table TC-5: Summary of VMT Analysis for the Master Plan Update**

Metric	VMT/ VMT per Passenger/ VMT per Employee
Additional VMT per Passenger	0.15
Additional Passengers	15,872
VMT for Additional Passengers	2,339
Average Bay Area Airport VMT per Passenger	105.00
VMT Reduction for Recaptured Passengers	-64.20
Total VMT Reduction	-509,500
VMT per Employee Increase	10.01
Total Additional Employees	2,020
Total Additional Employee Related VMT	20,220
Net Change in VMT due to Proposed Airport Master Plan Update	-486,941

PAL 1 projects (largely the proposed cargo facility) would happen well before the recapture of passengers. Therefore, as noted above, the VMT associated with the proposed cargo facility would exceed the regional VMT for employees, thus resulting in a significant impact in the short-term. There are various programs aimed to reduce employee VMT. Transportation Demand Management options are the most appropriate and feasible mitigation to reduce VMT. Some Transportation Demand Management measures that could be considered are managed carpool service, emergency ride home, on-site transportation manager/coordinator and marketing materials, and safe, well-lit pedestrian/bicycle facilities. Another program to be considered is establishing or joining a Transportation Management Association (TMA). One consideration may be the Metro Air Park, which has an established TMA in proximity to the proposed cargo facility. Regardless, the TMA would be funded by a non-revocable funding mechanism such as a Community Facilities District or a County Service Area. Recent studies have shown that these programs, on average, have a participation rate of seven percent. Therefore a reduction of 2,243 VMT may be realized; however, this is not enough to reduce the average VMT per employee below the level of significance (SACOG regional average).

Mitigation consistent with the above is recommended to reduce employee VMT impacts associated with the proposed cargo facility. However, even with implementation of

recommended mitigation measures, impacts associated with employee VMT remain ***significant and unavoidable***.

## MITIGATION MEASURES

TC-1 The following measures shall be implemented by the Cargo Facility proponent to reduce employee VMT:

Prior to issuance of occupancy permits, project operator(s) shall prepare and submit to the Environmental Coordinator, a Transportation Demand Management (TDM) program detailing strategies that would reduce the use of single-occupant vehicles by employees by increasing the number of trips by walking, bicycle, carpool, vanpool, and transit. The TDM program shall include, but is not limited to, the following:

- a. Provide transportation information center and on-site TDM coordinator to educate employers, employees, and visitors of surrounding transportation options;
- b. Promote bicycling and walking through design features, such as showers for employees, self-service bicycle repair area, etc. around the project site;
- c. Promote and support carpool/vanpool/rideshare use through parking incentives and administrative support, such as ride-matching service; and
- d. Incorporate incentives for using alternative travel modes, such as preferential load/unload areas or convenient designated parking spaces for carpool/vanpool users.

TC-2 Prior to issuance of Occupancy permits, the Cargo Facility proponent shall establish a new, or join and maintain membership in an existing Transportation Management Association.

## IMPACT: CONFLICT WITH A PROGRAM PLAN OR POLICY ADDRESSING THE CIRCULATION SYSTEM INCLUDING TRANSIT, ROADWAY, BICYCLE AND PEDESTRIAN FACILITIES

The location of SMF and limited nearby urban development is intentional to prevent land use incompatibilities. By design, traveling to SMF is primarily by passenger vehicles; however, there are two bus routes that serve SMF on a 20-30 minute headway. In addition, an extension of Regional Transit Light Rail Train (Green Line) is proposed to serve SMF in the future. The proposed Master Plan Update continues to show the Light Rail Extension and provides right of way in PAL 4. Additionally, internal to airport operations is an on-site shuttle system to carry passengers to various parking facilities and rental car services. The proposed project is consistent with local transit plans.

There are limited pedestrian and bicycle facilities within the airport. Where feasible and safe, new construction associated with Master Plan projects will be designed to

incorporate pedestrian and bicycle facilities and link to the existing facilities in place. The proposed project is consistent with the Sacramento County Pedestrian Master Plan and Bicycle Master Plan.

The prior FEIR analyzed the overall circulation system with respect to Level of Service. The proposed project is consistent with the General Plan Transportation Diagram. The project will be required to comply with applicable access and circulation requirements of the County Improvement Standards and the Uniform Fire Code. The proposed project will not conflict with existing programs or policies addressing transit, pedestrian and bicycle facilities. Impacts are ***less than significant***.

#### MITIGATION MEASURES

None recommended.

#### IMPACT: SUBSTANTIALLY INCREASE ROADWAY HAZARDS

##### **LOCAL ROADWAYS**

Based on the collision data provided by the County, the collision rate on Elverta Road is nearly double that of the State average for similar facilities. While no crashes involved a fatality, there are measures that can be implemented to increase safety on this segment of Elverta Road. These generally involve improving roadway geometry, including paved shoulders, right- and left-turn lanes, and intersection signalization.

Elverta Road is two-lane roadway with narrow shoulders. The roadway is on the boundary of the Urban Services Boundary and meets the characteristics of a substandard rural roadway (less than 12-foot travel lanes and no or narrow shoulders). The increase of vehicles associated with the proposed cargo facility and cumulatively the Master Plan Update (PAL 1 through 3) will add to the volume of traffic on the roadway and increase potential safety concerns and traffic collisions. According to the Sacramento County Guidelines, an impact is assessed if a project increases the average daily traffic over 6,000 or contributes 600 or more to a roadway over 6,000 daily vehicles to a currently substandard rural roadway. The proposed project will increase the average daily traffic for Elverta Road (Earhart Drive to State Route 99) over 6,000 (existing plus project and cumulative conditions) (Table TC-6). Based on the impact analysis, the addition of the cargo facility would result in a significant impact under Existing Plus Project and Cumulative Plus Project conditions. Mitigation consisting of roadway improvements to increase travel lanes to 12 feet and to construct paved 6-foot shoulders, will reduce potential safety concerns along Elverta Road.



**Table TC-6: Rural Roadway Functionality**

ID	Roadway Segment	ADT					
		Existing	Existing Plus Cargo Facility	Existing Plus MPU (includes cargo facility)	Cumulative	Cumulative Plus Cargo Facility	Cumulative Plus MPU (includes cargo facility)
1	Elverta Road, Garden Highway to Earhart Drive	563	600	620	600	600	600
2	Elverta Road, Earhart Drive to Power Line Road	876	<b>6,860</b>	<b>6,940</b>	900	5,260	5,260
3	Elverta Road, Power Line Road to Metro Air Parkway	1,232	<b>6,620</b>	<b>6,620</b>	5,700	<b>9,270</b>	<b>9,270</b>
4	Elverta Road, Metro Air Parkway to Lone Tree Road	1,812	<b>7,200</b>	<b>7,200</b>	N/A due to General Plan widening improvements (4-lane arterial)		
5	Elverta Road, Lone Tree Road to SR-99	1,790	<b>6,890</b>	<b>6,890</b>	N/A due to General Plan widening improvements (4-lane arterial)		
6	Power Line Road, Elverta Road to Road A	539	1,140	1,220	3,000	3,780	3,780
7	Power Line Road, Road A to Road D	539	1,140	1,220	1,100	1,880	1,880
8	Power Line Road, Road D to Skyking Road	539	1,140	1,220	5,200	5,980	5,980
<p><b>Bold</b> indicates a project impact.</p> <p>All roadways in the existing condition are 2-lanes, less than 36 feet in width and are considered substandard.</p>							

In addition to the roadway segment analysis, an intersection analysis completed for Elverta Road indicates that the existing plus project (cargo facility) scenario, will reduce the level of service on Elverta. In general, the existing stop control intersections will experience an increase in delay; however, delay alone is not a CEQA impact. One of these intersections is Elverta Road and Earhart Drive and installation of a new traffic signal at this intersection is included in the project description. Safety impacts were not identified at study intersections.

### **FREEWAY/MAINLINE**

A freeway deficiency analysis was completed for I-5 and State Route 99 for the existing, existing plus project and cumulative conditions. The analysis identified freeway segments that are deficient in the existing and cumulative condition. The addition of passengers and employees associated with Master Plan Update will add to existing deficiencies. Since this is a level of service deficiency, no impacts are identified under CEQA.

Caltrans conducted a safety analysis for I-5 mainline and determined that there are a high rate of collisions associated with Airport Boulevard interchange. In order to remediate this safety concern, Caltrans is installing ramp meters which should be operational in 2021. The addition of ramp metering will likely lead to extensive queues that may extend over the freeway affecting internal airport traffic operations. However, this would not be considered a new safety concern as traffic speeds are lower and drivers are preparing to make turning movements.

Deficiencies were noted in the Transportation Study for the Airport Boulevard northbound off-ramp (left-hand turn movement) during the existing AM and PM peak-hours, existing plus project and cumulative plus project conditions. Deficiencies were noted for the Airport Boulevard southbound off-ramp during the existing AM peak-hour condition, and PM peak-hour existing plus project and cumulative plus project. Suggested improvements to increase the level of service include signaling the intersections or constructing a roundabout. Again, deficiencies associated with level of service are not included in the CEQA analysis, unless the deficiency would lead to a safety impact. In the existing plus project conditions, it is possible that the queue length for the southbound off-ramp could exceed the existing queue capacity. This would result in a potentially significant safety impact. Mitigation is recommended to install intersection improvements (signalization or roundabout) to reduce queue delay and thereby reduce queue length.

The Transportation Study did not identify other areas where the project may substantially increase roadway hazards. Implementation of the recommended mitigation measures will reduce impacts to ***less than significant***.

## MITIGATION MEASURES

TC-3 Elverta Road Improvements (Earhart Road to Power Line Road)

Prior to issuance of occupancy permit for the Cargo Facility, install roadway improvements along this segment of Elverta Road to County standards of 12-foot vehicle lanes with 6-foot paved shoulders.

TC-4 Elverta Road Improvements (Power Line Road to State Route 99)

If required by the County of Sacramento Department of Transportation, prior to issuance of occupancy permit for the Cargo Facility, install roadway improvements along this segment of Elverta Road to County standards of 12-foot vehicle lanes with 6-foot paved shoulders.

OR

Pay fair share, as determined by the County of Sacramento Department of Transportation, for this segment of Elverta Road widening.

TC-5 The southbound Airport Boulevard off-ramp shall be monitored as each PAL is completed (PAL 1- 2024, PAL 2- 2028, PAL 3- 2032). If the queue length begins to impede the mainline, the Department of Airports shall install intersection improvements in consultation with Sacramento County Department of Transportation and Caltrans. Improvements could consist of signalization or roundabout, or other measures deemed appropriate by Sacramento County Department of Transportation and Caltrans.

## IMPACT: RESULT IN INADEQUATE EMERGENCY ACCESS

The proposed project continues to identify a site within the landside development area for a City of Sacramento Fire Station. This is located west of Airport Boulevard, south of Crossfield Drive, and will serve the airport and surrounding areas. Additionally, there is an Aircraft Rescue Firefighting Facility located airside to provide support for aviation emergencies. No impacts have been identified to existing or proposed emergency access.

## MITIGATION MEASURES

None recommended.

## 12 TRIBAL CULTURAL RESOURCES

### INTRODUCTION

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In 2014, CEQA was amended by Assembly Bill 52 (AB 52) to create a separate category of cultural resources, “tribal cultural resources.” Since the FEIR was certified in 2007, the tribal cultural resources analyses were not conducted in accordance with AB 52. Therefore, pursuant to AB 52, this Supplemental EIR will analyze tribal cultural resources and identify mitigation measures to avoid or minimize potentially significant impacts.

### TRIBAL RESOURCES ENVIRONMENTAL SETTING

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The Sacramento International Airport is located in the Natomas Basin of the Central Valley. Situated approximately two miles north of the confluence of the Sacramento and American Rivers, this area of the County historically flooded regularly. It was not until the early part of the 20<sup>th</sup> Century, that local Reclamation Districts were formed to create a network of canals and drainage ditches to control flood waters to allow broad scale agriculture in the basin.

Prior to Spanish and European settlement of the Central Valley, the area was populated by several Native American Tribes. While this area of the County regularly flooded and there were likely high spots that did not flood, it is generally understood that this area was used as hunting and gathering land, not permanent settlements.

### ETHNOGRAPHIC CONTEXT

Ethnography is the written record of a culture. Archaeology can be combined with ethnography to identify groups more specifically. Ethnographic records (from missions and other documents) show that the groups that inhabited Sacramento County are the Nisenan, or Southern Maidu, and the Plains Miwok, a subgroup of the Eastern Miwok. The Plains Miwok traditional territory included the lower reaches of the Cosumnes and Mokelumne Rivers and extended west to the Sacramento River from Rio Vista north to Freeport (Levy 1978). Ethnographers generally agree that Nisenan territory included the drainages of the Bear, American, Yuba, and southern Feather Rivers and extended from the Sacramento River east to the crest of the Sierra Nevada (Beals 1933, Faye 1923, Gifford 1927, Kroeber 1925, Powers 1976, Wilson and Towne 1978). Thus, the proposed Project is located within the territory commonly attributed to the ethnographic Nisenan.

#### *NISENAN*

As shown, ethnographically, the project area is in the southwestern portion of the territory occupied by the Penutian-speaking Nisenan. As a language, Nisenan (meaning “from among us” or “of our side”) has three main dialects – Northern Hill,

Southern Hill, and Valley Nisenan, with three or four subdialects (Kroeber 1976, Shipley 1978, Wilson and Towne, 1978). The Valley Nisenan lived along the Sacramento River, primarily in large villages with populations of several hundred each. Between there and the foothills, the grassy plains were largely unsettled, used mainly as a foraging ground by both valley and hill groups. Individual and extended families “owned” hunting and gathering grounds, and trespassing was discouraged (Kroeber 1976, Wilson and Towne 1978). Residence was generally patrilocal, but couples actually had a choice in the matter (Wilson and Towne 1978).

Politically, the Nisenan were divided into “triblets”, made up of a primary village and a series of outlying hamlets, presided over by a more-or-less hereditary chief (Kroeber 1976, Wilson and Towne 1978). Villages typically included family dwellings, acorn granaries, a sweathouse, and a dance house, owned by the chief. The chief had little authority to act on his own or her own, but with the support of the shaman and the elders, the word of the chief became virtually the law (Wilson and Towne 1978).

Subsistence activities centered on the gathering of acorns (tan bark oak and black oak were preferred), seeds, and other plant resources, the hunting of animals such as deer and rabbits, and fishing. Large predators, such as mountain lions and wildcats were hunted for their meat and skins, and bears were hunted ceremonially. Although acorns were the staple of the Nisenan diet, they also harvested roots like wild onion and “Indian potato”, which were eaten raw, steamed, baked, or dried and processed into flour cakes to be stored for winter use (Wilson and Towne 1978). Wild garlic was used as soap/shampoo, and wild carrots were used medicinally (Littlejohn 1928). Seeds from grasses were parched, steam dried, or ground and made into a mush. Berries were collected, as were other native fruits and nuts. Game was prepared by roasting, baking, or drying. In addition, salt was obtained from a spring near modern-day Rocklin (Wilson and Towne 1978).

Hunting of deer often took the form of communal drives, involving several villages, with killing done by the best marksmen from each village. Snares, deadfalls, and decoys were used as well. Fish were caught by a variety of methods including use of hooks, harpoons, nets, weirs, traps, poisoning, and by hand (Wilson and Towne 1978).

Trade was important with goods traveling from the coast and valleys up into the Sierra Nevada mountains and beyond to the east, and vice versa. Coastal items like shell beads, salmon, salt, and foothills pine nuts were traded for resources from the mountains and farther inland, such as bows and arrows, deer skins, and sugar pine nuts. In addition, obsidian was imported from the north (Wilson and Towne 1978).

The Spanish arrived on the central California coast in 1769 and by 1776 the Miwok territory bordering the Nisenan on the south had been explored by Jose Canizares. In 1808, Gabriel Moraga crossed Nisenan territory, and in 1813, a major battle was fought between the Miwok and the Spaniards near the mouth of the Cosumnes River. Though the Nisenan appear to have escaped being removed to missions by the Spanish, they were not spared the ravages of European diseases. In 1833, an epidemic – probably malaria – raged through the Sacramento valley, killing an estimated 75 percent of the

native population. When John Sutter erected his fort at the future site of Sacramento in 1839, he had no problem getting the few Nisenan survivors to settle nearby. The discovery of gold in 1848 at Sutter's Mill, near the Nisenan village of Colluma (now Coloma) on the south fork of the American River, drew thousands of miners to the area, and led to widespread killing and the virtual destruction of traditional Nisenan culture. By the Great Depression, no Nisenan remained who could remember the days before the arrival of the Euro-Americans (Wilson and Towne 1978).

## REGULATORY SETTING

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### FEDERAL

#### *SECTION 106 OF THE NATIONAL HISTORIC PRESERVATION ACT, 1966*

Federal regulations for cultural resources are governed primarily by Section 106 of the National Historic Preservation Act (NHPA) of 1966 (as amended). Section 106 of the NHPA requires Federal agencies to take into account the effects of their undertakings on historic properties and affords the Advisory Council on Historic Preservation (ACHP) a reasonable opportunity to comment on such undertakings. The ACHP's implementing regulations are the "Protection of Historic Properties" 36 Code of Federal Regulations (CFR) Part 800. The Federal agency first must determine whether it has an undertaking that is a type of activity that could affect historic properties. Historic properties are those that meet the criteria for or are listed in the National Register of Historic Places (NRHP).

### STATE OF CALIFORNIA

#### *DISCOVERY OF HUMAN REMAINS*

California law protects Native American burials, skeletal remains and associated grave goods regardless of their antiquity and provides for the sensitive treatment and disposition of those remains (Section 7050.5 of the Health and Safety Code and Public Resources Code 5097.9).

When human remains are discovered, the protocol to be followed is specified in California Health and Safety Code, which states:

*In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered has determined, in accordance with Chapter 10 (commencing with Section 27460) of Part 3 of Division 2 of Title 3 of the Government Code, that the remains are not subject to the provisions of Section 27492 of the Government Code or any other related provisions of law concerning investigation of the circumstances, manner and cause of death, and the recommendations concerning treatment and disposition of the human remains have been made to*

*the person responsible for the excavation, or to his or her authorized representative, in the manner provided in Section 5097.98 of the Public Resources Code.*

State CEQA Guidelines Section 15064.5, subdivision (e), requires that excavation activities be stopped whenever human remains are uncovered and that the county coroner be called in to assess the remains. If the county coroner determines that the remains are those of Native Americans, the Native American Heritage Commission (NAHC) must be contacted within 24 hours. At that time, the lead agency must consult with the appropriate Native Americans, if any, as timely identified by the NAHC. Section 15064.5 directs the lead agency (or applicant), under certain circumstances, to develop an agreement with the Native Americans for the treatment and disposition of the remains.

In addition to the mitigation provisions pertaining to accidental discovery of human remains, the State CEQA Guidelines also require that a lead agency make provisions for the accidental discovery of historical or archaeological resources, generally. Pursuant to Section 15064.5, subdivision (f), these provisions should include “an immediate evaluation of the find by a qualified archaeologist. If the find is determined to be an historical or unique archaeological resource, contingency funding and a time allotment sufficient to allow for implementation of avoidance measures or appropriate mitigation should be available. Work could continue on other parts of the building site while historical or unique archaeological resource mitigation takes place.”

#### *ASSEMBLY BILL 52*

On September 25, 2014, Governor Brown approved Assembly Bill 52, which requires CEQA lead agencies to begin consultation with California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project. The bill specifies that a project with an effect that may cause substantial adverse change in the significance of a tribal cultural resource may have a significant effect of the environment. The bill became effective July 1, 2015 and is codified in PRC, §21080.3.1.

To help determine whether a project may have such an effect, the Public Resources Code requires a lead agency to consult with any California Native American tribe that requests consultation and is traditionally and culturally affiliated with the geographic area of a proposed project. That consultation must take place prior to the determination of whether a negative declaration, mitigated negative declaration, or environmental impact report is required for a project. (Pub. Resources Code, § 21080.3.1.)

AB 52 adds tribal cultural resources to the categories of cultural resources in CEQA, which had formerly been limited to historic, archaeological, and paleontological resources. “Tribal cultural resources” are defined as either:

- (1) Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:

- a. Included or determined to be eligible for inclusion in the California Register of Historical Resources (CRHR)
  - b. Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.
- (2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

## LOCAL

### *SACRAMENTO COUNTY GENERAL PLAN*

- CO-155. Native American burial sites encountered during preapproved survey or during construction shall, whenever possible, remain in situ. Excavation and reburial shall occur when in situ preservation is not possible or when the archeological significance of the site merits excavation and recording procedure. On-site reinternment shall have priority. The project developer shall provide the burden of proof that off-site reinternment is the only feasible alternative. Reinternment shall be the responsibility of local tribal representatives.
- CO-157. Monitor projects during construction to ensure crews follow proper reporting, safeguards, and procedures.
- CO-159. Request a Native American Statement as part of the environmental review process on development projects with identified cultural resources.

## DISCLOSURE OF CULTURAL RESOURCES INFORMATION

Public disclosure of site specific cultural resources information is expressly exempt from the California Public Records Act, Government Code Sections 6250-6270. Furthermore, information obtained during Native American consultation or through consultation with the local and state agencies, including the North Central Information Center (NCIC), should remain confidential and is exempt from public disclosure under Senate Bill 922. Additionally, Sacramento County staff has signed an "Agreement to Confidentiality" with the NCIC that states that site-specific information will not be distributed or released to the public or unauthorized individuals. An authorized individual is a professional archaeologist or historian that qualifies under the Secretary of Interior's standards to view confidential cultural resources materials.

## SIGNIFICANCE CRITERIA

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In accordance with Appendix G of the State CEQA Guidelines, a project would be considered to have a significant effect if it would cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section



21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with a cultural value to a California Native American tribe, that is:

Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or

A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Under PRC Section 21084.3, public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource. California Native American tribes traditionally and culturally affiliated with a geographic area may have expertise concerning their tribal cultural resources (21080.3.1(a)).

## METHODOLOGY

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The cultural resource studies prepared for the prior EIR covered the portions of the Master Plan facilities identified for Phase 1 and 2. No surveys were completed for areas where development was not anticipated in the 20 year planning horizon. The proposed project identifies new facilities and construction within the previously unsurveyed areas, namely the proposed cargo facility, and commercial development north and south of Elverta Road. Dudek Consultants were retained to prepare a cultural resources report for the northern area of the airport containing the proposed cargo facility; *Draft Cultural Resources Inventory Report for the Sacramento International Airport Cargo Facility Project, Sacramento County, California. October 2020.*

Information contained in the Dudek report pertaining to tribal cultural resources are presented in this chapter along with the information obtained through the Native American consultation process. Archival research and fieldwork were conducted to establish what tribal cultural resources may be present within the project area and, furthermore, may be impacted as a result of implementation of the proposed project.

When prehistoric or historic-era resources were encountered, they were documented on State of California Department of Parks and Recreation (DPR) Series 523 Primary, Archaeological Site, and other DPR forms as necessary. Each site, feature, or isolated artifact was photographed and mapped as a point, line, or polygon as appropriate on appropriate USGS topographic quadrangle maps. Previously recorded resources within the project site were revisited and their current condition was assessed.

## NCIC RECORDS SEARCH

Dudek requested a records search from the North Central Information Center (NCIC) of the California Historical Resources Information System (CSU-Sacramento) for the project site on March 11, 2020. The record search at the NCIC indicated that 44 cultural surveys were conducted within the half-mile search radius of the project site; 24 of which included portions of the current project area. There are two previously recorded or listed cultural resource districts within the project area and 21 other cultural resources within a half-mile of the project area. The two previously recorded cultural districts located within the project area are the: Sacramento River Tribal Cultural Landscape (TCL) (P-34-005225) and RD 1000 (P-34-005251).

## FIELD SURVEY

Dudek staff archaeologists conducted archeological field surveys of the study area. A reconnaissance-level survey was conducted for all areas that were not restricted. Pedestrian transects every 15 meters were completed. During the transects, the ground surface was carefully inspected for evidence of historical use such as fragments of ceramics, metal, and glass, and for indications of prehistoric use such as chipped stone artifacts and debitage, ground stone artifacts, bone fragments, and soil color changes. Exposures of subsurface soil were carefully examined. The ground surface visibility was overall low due to vegetation and paved surfaces at the time of survey. Therefore, special attention was paid to areas of erosion, mechanical cuts, drainage ditches or animal burrows; however, no cultural materials were observed on the ground surface for the areas surveyed. No new resources were discovered during the pedestrian survey.

## NATIVE AMERICAN CONSULTATIONS

Pursuant to AB-52, on September 11, 2020, County staff mailed notification letters to the tribes that have formally requested notification. Further, all tribes were sent a copy of the Notice of Preparation for this document in August 2020. Written responses were received during the AB-52 30-day review period from the United Auburn Indian Community (UAIC) and Wilton Rancheria. Both Tribes requested copies of the cultural reports prepared for the project (provided on November 2020). Initial comments received by UAIC noted that there are tribal cultural resources along the boundary of the project, but it was unclear if they would be impacted by the project. After further review of the information, UAIC provided mitigation language focusing on monitoring future ground disturbance and appropriate treatment of tribal cultural resources if discovered. Wilton Rancheria, in addition to requesting the cultural reports, provided similar mitigation language. All tribes have requested to be notified if there are changes to the project description and to be included in all future CEQA noticing.

Even though not a requirement of CEQA, in April 2020, the Native American Heritage Commission responded to the consultant's request for a sacred lands file search and list of Native American contacts pursuant to Section 106 of federal law. The file search was negative and no Native American cultural resources were identified by commission staff

in the immediate project area. Commission staff recommended contacting other sources for information on known and documented sites, including a list of Native American contacts.

## IMPACTS AND ANALYSIS

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### IMPACT: CAUSE A SUBSTANTIAL ADVERSE CHANGE IN THE SIGNIFICANCE OF A TRIBAL CULTURAL RESOURCE ON-SITE

As indicated the in NCIC records request, there is one cultural resource district within a portion of the project study area. This resource district is associated with Native American culture and is detailed below.

#### **P-34-005225**

The Sacramento River TCL, roughly encompassing the Lower Sacramento River area, is defined by the distribution of important natural resources across the landscape including waterways, tule habitat, fisheries, and other wildlife that were important for the lifeways of local indigenous groups. The TCL is identified as culturally significant by several groups for its association with the cultural practices and beliefs, the maintenance of continuing cultural identity, and its association with traditional stories. The area also contributes significantly to broader patterns of prehistory, with numerous prehistoric sites present within its boundaries. All of the previously recorded prehistoric resources located within a half-mile of the APE are situated along the banks of the Sacramento River, highlighting the importance of the river for indigenous lifeways. Thus, while no identified archaeological sites are known within SMF, the proximity of the Project to the Sacramento River and its location within the Sacramento River TCL suggest that the APE and the surrounding area were used by prehistoric peoples.

As noted above in the AB52 consultation process, two Tribes –United Auburn Indian Communities (UAIC) and Wilton Rancheria responded with requests for consultation. Neither Tribe has identified a known sacred site or tribal cultural resource within the project boundaries; however, due to known tribal cultural resources nearby, there is always the possibility of uncovering buried resources when ground disturbance is proposed. Both Tribes provided recommended mitigation measures including requesting the opportunity to conduct construction monitoring and worker awareness training. Mitigation is included to support this request. Impacts to tribal cultural resources are ***less than significant***.

#### MITIGATION MEASURES:

Implement Mitigation Measure CR-1 and CR-2.

## 13 SUMMARY OF IMPACTS AND THEIR DISPOSITION

### POTENTIALLY SIGNIFICANT EFFECT WHICH CANNOT BE AVOIDED EVEN WITH IMPLEMENTATION OF MITIGATION MEASURES

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#### AIR QUALITY

The project involves the operation of new Master Plan elements that were not previously analyzed in the prior EIR. These projects consist of the proposed cargo facility, new concourse, new consolidated rental car facility, and 330 acres of commercial development. The eventual operation of all Master Plan elements will result in significant emissions for ozone precursors - NO<sub>x</sub> and ROG. Mitigation is recommended and will reduce operational impacts, but not to a less than significant level.

#### BIOLOGICAL RESOURCES

The area north of Elverta Road contains riparian and oak woodland habitat. Construction of road improvements to Elverta Road and identified commercial development areas may require the removal of native trees. Mitigation is recommended consistent with County policies and ordinances to compensate for the loss of habitat. However, since project specific information is not known at this time, impacts remain potentially significant.

#### CLIMATE CHANGE

The project involves the construction and operation of new Master Plan elements which will introduce new greenhouse gas emissions above the baseline condition. The project will be required to comply with Sacramento Metropolitan Air Quality District Emissions Best Management Practices Tier 1 (no natural gas and electric vehicle read spaces). Even with implementation of these measures, the project will exceed significance thresholds of 1,100 MTCO<sub>2</sub>e per year as established by the County for operational emissions. The project will result in 5,827 MTCO<sub>2</sub>e per year. Mitigation measures are recommended to reduce impacts; however, emissions cannot be reduced to a less than significant level and remain significant and unavoidable.

#### LAND USE

There are 135 acres of Farmland of Local Importance to be developed with commercial uses in Planning Activity Level 3 (2033-2038). Pursuant to General Plan Policy AG-5, the loss of over 50 acres of Prime, Important, or Local Importance within the Urban Service Boundary is significant. The preservation of farmland elsewhere does not constitute suitable mitigation, and therefore impacts remain significant and unavoidable.

## TRANSPORTATION AND CIRCULATION

The average VMT per employee for the SACOG Region is 12.58 vehicle miles, and the average VMT per employee for SMF and the cargo facility is 20.52 and 22.59 vehicle miles, respectively. Since the project would increase vehicle miles over the existing SACOG regional average the impact is considered significant. Recommended mitigation will reduce employee VMT, but not to a level of less than significant and remain significant and unavoidable.

## POTENTIALLY SIGNIFICANT EFFECTS WHICH COULD BE AVOIDED WITH IMPLEMENTATION OF MITIGATION MEASURES

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### AIR QUALITY

The proposed project will increase criteria pollutants during construction. Construction activities require the use of various combinations and types of construction equipment. Much of this equipment is likely to be diesel-fueled and would emit NO<sub>x</sub> and particulate matter as part of the fuel combustion process. In addition, the disturbance of paved surfaces and soils produces fugitive dust. Since construction of multiple Master Plan elements may occur at the same time, mitigation is recommended to reduce construction related emissions to a less than significant level.

### BIOLOGICAL RESOURCES

The project site contains several different types of habitat including valley grasslands, agricultural fields, and riparian oak woodlands. The project includes development of the Airport Operations Areas and the area north of Elverta Road, which contains these habitats and provides suitable habitat for several endangered, threatened or special status species.

The project may directly impact up to 9.39 acres of wetlands and/or waters of the U.S. including agricultural and roadside ditches, and seasonal wetlands. The aquatic habitat is suitable habitat for giant garter snakes. Along with aquatic resources, riparian oak woodlands will be removed north of Elverta Road. This habitat contains mature trees which are suitable habitat for nesting raptors and other migratory bird species.

Potentially significant impacts to habitat and special status species can be reduced to less than significant levels through implementation of recommended mitigation measures. Mitigation measures consist of pre-construction surveys for special status species, obtaining federal and State agency permits, and in-kind compensation for loss of foraging habitat.

### CLIMATE CHANGE

The proposed project will increase GHG emissions during construction. Similar to air quality impacts, construction activities require the use of various combinations and

types of construction equipment. Much of this equipment uses combustion engines (not electric) and will emit GHG emissions. Construction of PAL 1 Master Plan elements and PAL 2 and 3 Master Plan elements will generate GHG emissions exceeding the County GHG thresholds for construction, 1,100 MT CO<sub>2</sub>e. Pursuant to SMAQMD guidance, construction emissions can be amortized over the life of the project. Following this guidance, project construction GHG emissions would not exceed thresholds and therefore would be less than significant.

## CULTURAL RESOURCES

The project contains one recorded historical resource within the study area, and several more archeological resources within a one-quarter mile vicinity. The proposed project would not disturb these resources. However, there remains a potential to encounter buried or as yet undiscovered historical resources, archaeological resources, tribal cultural resources, or human remains during land clearing and construction work. Mitigation is included to ensure that such resources are treated appropriately if discovered.

## TRIBAL CULTURAL RESOURCES

No tribal cultural resources were identified within the project study area; however, there are known tribal cultural resources within one-quarter mile of the project site. Due to the proximity of the known tribal resources, mitigation measures were recommended through consultation with local tribes to ensure proper treatment of tribal resources if discovered.

## TRANSPORTATION AND CIRCULATION

The project will increase traffic on local roadways and freeways. Roadway safety hazards were identified along Elverta Road from Earhart Road to State Route 99. This is a substandard rural roadway where recommended mitigation to widen travel lanes and construct paved shoulders will reduce this safety hazard. Other roadway safety hazards were identified for the southbound I-5/Airport Boulevard off-ramp. In the cumulative conditions, traffic may result in queuing extending onto the freeway. Mitigation is recommended to reduce this impact to less than significant levels.

## EFFECTS FOUND NOT TO BE SIGNIFICANT

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Impacts associated with aesthetics, air quality (conformity determination, mobile source CO emissions, substantial pollutant concentrations, and odors), hydrology and water quality, noise, population and housing, public services and utilities, transportation and circulation (circulation patterns, pedestrian, bicycle and transit facilities) are considered less than significant.

## IRREVERSIBLE ENVIRONMENTAL CHANGES

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CEQA Guidelines Section 15126.2 requires the evaluation of significant irreversible environmental changes, stating, “uses of nonrenewable resources during the initial and continued phases of a proposed project may be irreversible since a large commitment of these resources makes removal or nonuse thereafter unlikely.” This section of the EIR evaluates whether the project would result in the irretrievable commitment of resources, or would cause irreversible changes in the environment.

Construction of various project elements will require irretrievable commitments of a variety of finite resources, including aggregate, petrochemicals, and metals. These commitments will occur both as direct and indirect impacts of the project. Direct impacts include the consumption of fuel by the construction fleet and equipment, the consumption of fuel as part of the vehicle and equipment usage during project operation, and the use of metals and aggregates in the construction of the buildings. Indirect impacts include the consumption of fuel and other resources to produce the materials used in construction.

## GROWTH INDUCEMENT

The CEQA Guidelines identify several ways in which a project could have growth-inducing impacts (CEQA Guidelines Section 15126.2(d)). Growth inducement is when a project fosters economic or population growth, either directly or indirectly, in the surrounding environment. For instance, a project may generate significant additional employment opportunities, which in turn generates the construction of additional housing to bring additional residents near this employment center. Indirect growth inducement is also possible, if a project removes obstacles to population growth, or encourages and facilitates other activities that are beyond those proposed as part of the project, for example, altering the availability of developable land and precedent-setting actions related to local government growth policies.

Growth inducement may not be considered necessarily detrimental, beneficial, or of significance under CEQA. Induced growth is considered a significant impact only if it directly or indirectly affects the ability of agencies to provide needed public services or if it can be demonstrated that the potential growth, in some other way, significantly affects the environment. The paragraphs below analyze the project’s potential to induce growth by removing a barrier to growth, by setting a land use precedent, or by fostering additional development.

### *REMOVING BARRIERS TO GROWTH*

The project includes extension of public infrastructure (water or sewer lines) within airport property to serve the new facilities. Electrical service is available in the immediate project vicinity. The project will not cause substantial growth inducement around the site; the project is consistent with the surrounding urban growth.

*LAND USE PRECEDENT AND FOSTERING DEVELOPMENT*

The project is a Master Plan Update of a public airport facility. The airport has been in operation since 1967 in the Natomas community and has grown over the decades as demand for air travel has increased. Additional procurement of land is not necessary. The project will not set a land use precedent as the airport is existing and there is no need for additional land under the Master Plan Update proposal. Approval of the Master Plan Update will accommodate the project growth at the airport over the next 20 years and is not precedent-setting.

## CUMULATIVE IMPACTS AND ANALYSIS

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The CEQA Guidelines section 15355 defines a cumulative impact as “two or more individual effects which, when considered together, are considerable”. An individual effect need not itself be significant to result in significant cumulative effects; the impact is the result of the incremental effects of the Project combined with the effects of “other closely related past, present, and reasonably foreseeable probable future projects.” CEQA does not define “closely related”, but the Code of Federal Regulations (40 CFR 1508.25) indicates that a “closely related” project is one which is automatically triggered by the Project; one which cannot proceed without the Project first proceeding (mutual dependency); one which requires the Project for justification or is an interdependent part of the same action; or one which is a similar action with common timing, geography, and other features.

The requirements for a cumulative analysis are described in CEQA Guidelines Section 15130. A cumulative analysis “need not provide as great detail as is provided for the effects attributable to the project alone.” The analysis should focus on analyzing the effects of the project to which other projects contribute, to the extent practical and reasonable. These other projects may be identified either through the provision of a list of cumulative projects, or via a summary of projections contained in an adopted General Plan or an adopted EIR. This EIR uses a combination of the two methods, using projections contained in adopted General Plans and related planning documents, as well as known major reasonably foreseeable other projects.

The significance criteria used for analysis are the same as those used throughout the topical chapters of the EIR. Section 15130(a)(3) states that a Project’s contribution to an impact is “less than cumulatively considerable if the project is required to implement or fund its fair share of a mitigation measure or measures”.

The cumulative setting is based upon the development forecasts of the adopted Sacramento Area Council of Governments’ 2020 Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS) development forecast. The MTP/SCS included development projections for Sacramento County, and its incorporated cities, as well as for adjacent counties and cities, based on adopted and in-development General Plans, Specific Plans, and Community Plans in each jurisdiction.



In addition to the MTP/SCS, proposed project within Sacramento County in the surrounding region. These are provided in the list below.

Project Number	Project Name	Location	Description	Status
<b>Unincorporated Sacramento County</b>				
1	SMF Master Plan	SMF	Airport Master Plan through 2020	Approved 2007
2	Metro Air Park SPA	Immediately east of SMF	A 1,89-acre commercial/industrial development to support the airport and surrounding community	Approved 1997 Amended 2019
3	Grandpark Specific Plan	East of SMF, east side of Elkhorn Blvd. and Highway 99	A 5,675-acre plan area that will include: residential, commercial, institutional, public and open space.	In planning process NOP released 2017
4	Upper Westside Specific Plan	South of SMF, north of I-80, between the City of Sacramento and the Sacramento River	A 2,066-acre plan area that will include: residential, commercial, public and open space.	In planning process NOP released 2020
<b>City of Sacramento</b>				
5	Greenbriar Mixed Use Project	Approximately one mile east of SMF, north of I-5, west of Highway 99	A land development project including: residential, commercial, school and parks.	Approved 2017
<b>Sutter County</b>				
6	Sutter Point	Approximately one mile north of SMF immediately adjacent to the County line	A 7,528-acre plan area that will include: residential, commercial, schools, public and open space.	Approved 2009 Amended 2014

## AIR QUALITY

Project construction and operation will result in the generation of ozone precursors and particulate matter. Ozone precursors generated by construction and operation are above thresholds. This project, together with all cumulative projects, are subject to the same Sac Metro Air District SMAQMD rules and thresholds related to construction ozone precursors, and if necessary are required to off-set emissions. On a cumulative level, existing compliance with adopted rules and regulations will be sufficient to offset construction-related ozone precursor emissions. The project will not contribute to a cumulatively significant impact for short-term emissions.

The long-term emissions associated with operation of Master Plan elements will exceed thresholds. Cumulative projects that exceed SMAQMD thresholds for operational

emissions, must prepare air quality reduction plans. Even with implementation of air quality reduction plans, the daily emission thresholds will be exceeded. The project will contribute to a cumulatively significant impact for long-term emissions.

## CLIMATE CHANGE

The proposed project currently generates and will continue to generate greenhouse gas (GHG) emissions that would contribute to climate change. The airport has been in operation since 1967, and the emissions from this current operation and adopted Master Plan elements constitute the baseline condition for this analysis. However, the proposed changes to the Master Plan when added to the baseline contributes significantly to the County's GHG emission inventory.

The Master Plan Update includes new projects which will generate GHG emissions to construct and operate and in doing so, can capture more passengers that would have traveled to the Bay Area for flights. The overall reduction in vehicle miles traveled by passengers would reduce cumulative mobile emissions. Even after applying the reduction in mobile emissions, the proposed Master Plan Update will result in 5,827 MT CO<sub>2</sub>e per year. The project would result in significant and unavoidable impacts related to GHG emissions and GHG plan consistency. Therefore, the project's cumulative contribution to GHG impacts would be cumulatively considerable.

## CULTURAL RESOURCES

Cumulative development in Sacramento County could significantly impact historic, archaeological, paleontological, geologic, or human resources. The archeology of prehistoric resources in their original contexts is crucial in developing an understanding of the social, economic, and technological character of the resources. The boundaries of an archeologically important site could extend beyond property boundaries. As a result, a meaningful approach to preserving and managing cultural research should focus on the likely distribution of cultural resources, rather than on project or parcel boundaries. The cultural system is represented archeologically by the total inventory of all sites and other cultural remains. However, proper planning and appropriate mitigation can help to capture and preserve knowledge of such resources and can provide opportunities for increasing understanding of the past environmental conditions and cultures by recoding data about any sites discovered and preserving artifacts found. Based on the finding of the records and literature search and field survey, mitigation has been proposed that attempts to document and preserve cultural resources that have been identified or may be encountered during construction of this project as well as other cumulative projects. This mitigation limits the cumulative contribution of impacts to cultural resources within the County to less than significant.

## HYDROLOGY AND WATER QUALITY

The project will adequately mitigate hydrology and water quality impacts. The project will not impede the completion of planned regional flood control systems. Compliance with existing County ordinances and water quality permits ensures that the project will not contribute to a cumulative impact to downstream hydrology or water quality.

## LAND USE

The proposed Master Plan Update guides the development within the airport based on passenger enplanements trends. All development is within existing airport property and does not affect the Airport Land Use Community Plan which guides land use development surrounding the airport. The proposed project would not be cumulatively considerable. The proposed removal of 135 acres of Farmland of Local Importance north of Elverta Road will add to the loss of farmland within the Natomas Basin, but not to a level that is cumulatively considerable.

## PUBLIC SERVICES

The proposed project updates and modifies the previous Master Plan. The Airport has been in operation since 1967, and public services have increased over the years as the Airport has expanded. The proposed project will increase the need to public services, but not beyond the capability of the service providers and would not contribute to a cumulative considerable impact.

## TRANSPORTATION

The proposed project is consistent with the Sacramento County General Plan Transportation Plan and policies, and therefore will not result in a cumulatively considerable impact.

## TRIBAL CULTURAL RESOURCES

Cumulative development in Sacramento County could significantly impact tribal cultural resources. The archeology of prehistoric resources in their original contexts is crucial in developing an understanding of the social, economic, and technological character of the resources. The boundaries of tribal resources could extend beyond property boundaries. As a result, a meaningful approach to preserving and managing tribal resources should focus on the likely distribution of tribal resources, rather than on project or parcel boundaries. The cultural system is represented archeologically by the total inventory of all sites and other cultural remains. However, proper planning and appropriate mitigation can help to capture and preserve knowledge of such resources and can provide opportunities for increasing understanding of the past environmental conditions and cultures by recoding data about any sites discovered and preserving artifacts found. Based on the finding of the records and literature search and field survey, mitigation has been proposed that attempts to document and preserve tribal cultural resources that have been identified or may be encountered during construction of this project as well as other cumulative projects. This mitigation limits the cumulative contribution of impacts to cultural resources within the County to less than significant.

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## LIST OF ACRONYMS

AAQS	Ambient Air Quality Standards
ALUC	Airport Land Use Commission
ALUCP	Airport Land Use Compatibility Plan
AOA	Airport Operation Area
ARB	California Air Resources Board
ARFF	Airport Rescue and Fire Fighting
BCECP	Basic Construction Emission Control Practices
BMPs	Best Management Practices
CalEEMod	California Emissions Estimator Model
Cal EPA	California Environmental Protection Agency
CAP	Climate Action Plan
CARB	California Air Resources Board
CBC	California Uniform Building Code
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CDHP	California Department of Public Health
CDFW	California Department of Fish and Wildlife
CNDDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CO	Carbon Monoxide
CVFPB	Central Valley Flood Protection Board
CWA	Clean Water Act
dB	Decibel
DOC	California Department of Conservation
DTSC	State Department of Toxic Substances Control
DWMR	Sacramento County Waste Management and Recycling Department
DWR	California Department of Water Resources
EIR	Environmental Impact Report
EMD	Sacramento County Environmental Management Department
EMFAC	Emissions Factor Model
EPA	Environmental Protection Agency
FAA	Federal Aviation Administration
FEIR	Final Environmental Impact Report
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
FMMP	State Farmland Mapping and Monitoring

	Program
GHG	Greenhouse Gas
GSA	Groundwater Sustainability Agency
GSP	Groundwater Sustainability Plan
ICLEI	Local Governments for Sustainability
JFP	Folsom Joint Federal Project
KSF	Thousand Square Feet
LOS	Level of Service
MBTA	Migratory Bird Treaty Act
MGD	Million Gallons per Day
MPO	Metropolitan Planning Organization
NAHC	Native American Heritage Commission
NBHCP	Natomas Basin Habitat Conservation Plan
NOA	Naturally Occurring Asbestos
NPDES	National Pollutant Discharge Elimination System Permit
OPR	Office of Planning and Research
PAL	Planning Activity Level
PER	Office of Planning and Environmental Review
PG&E	Pacific Gas and Electric Company
PM	Particulate Matter
Regional Water Board	Central Valley Regional Water Quality Control Board
RD 1000	Reclamation District 1000
ROG	Reactive Organic Gasses
SACOG	Sacramento Area Council of Governments
SCC	Sacramento County Code
SCDA	Sacramento County Department of Airports
SCWA	Sacramento County Water Agency
SAFCA	Sacramento Area Flood Control Agency
SIP	State Implementation Plan
SMAQMD	Sacramento Metropolitan Air Quality District
SMF	Sacramento International Airport
SMUD	Sacramento Municipal Utility District
SNFA	Sacramento Federal Nonattainment Area
SRCSD	Sacramento Regional County Sanitation District
SWA	Solid Waste Authority
SWRCB	California State Water Resources Control Board
SWPPP	Stormwater Pollution Prevention Plan
TAC	Toxic Air Contaminants

TAZ	Traffic Analysis Zones
TDM	Traffic Demand Model
ULOP	Urban Level of Protection
USB	Urban Services Boundary
USBR	U.S. Bureau of Reclamation
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
VMT	Vehicle Miles Traveled
VOC	Volatile Organic Gasses
WDID	Waste Dischargers Identification Number