ADDENDUM

to the

ENVIRONMENTAL IMPACT REPORT

for the

WATSONVILLE MUNICIPAL AIRPORT MASTER PLAN

SCH #2002062089

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Prepared for

CITY OF WATSONVILLE

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1.0 INTRODUCTION

1.1 PURPOSE OF THE ADDENDUM

The City of Watsonville (City), as the Lead Agency, has prepared this Addendum to the 2003 Final Environmental Impact Report for the Watsonville Municipal Airport Master Plan (2003 EIR) in compliance with the California Environmental Quality Act (CEQA) and the CEQA Guidelines for a proposed amendment to the 2003 Airport Master Plan (Project). The Project would extend the planning horizon year and operational demand forecasts of the Airport Master Plan from 2020 to 2040, incorporate a set of airfield configuration changes, and update the layout and sizing of various airport facilities to adequately serve the projected 2040 demand.

CEQA recognizes that between the date an environmental document is certified and the date the project is fully implemented, one or more of the following changes may occur: 1) the project may change; 2) the environmental setting in which the project is located may change; 3) laws, regulations, or policies may change in ways that impact the environment; and/or 4) previously unknown information can arise. Before proceeding with a project, CEQA requires the Lead Agency or Responsible Agency to evaluate these changes to determine whether or not they affect the conclusions in the environmental document.

CEQA Guidelines Section 15162 states that when an EIR has been certified or a negative declaration adopted for a project, no subsequent EIR shall be prepared for that project unless the Lead Agency or Responsible Agency determined, on the basis of substantial evidence in light of the whole record, one or more of the following:

1. Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or

2. Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or Negative Declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or

3. New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete of the Negative Declaration was adopted, shows any of the following:

    a. The project will have one or more significant effects not discussed in the previous EIR or negative declaration;
    b. Significant effects previously examined will be substantially more severe than shown in the previous EIR;
    c. Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or
    d. Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the

environment, but the project proponents decline to adopt the mitigation measure or alternative.

CEQA Guidelines Section 15164 states that the Lead Agency or Responsible Agency shall prepare an addendum to a previously certified EIR if some changes or additions are necessary, but none of the conditions described in 15162 (see above) calling for preparation of a subsequent EIR have occurred.

2.0 PROJECT BACKGROUND

2.1 PROJECT LOCATION AND CHARACTERISTICS

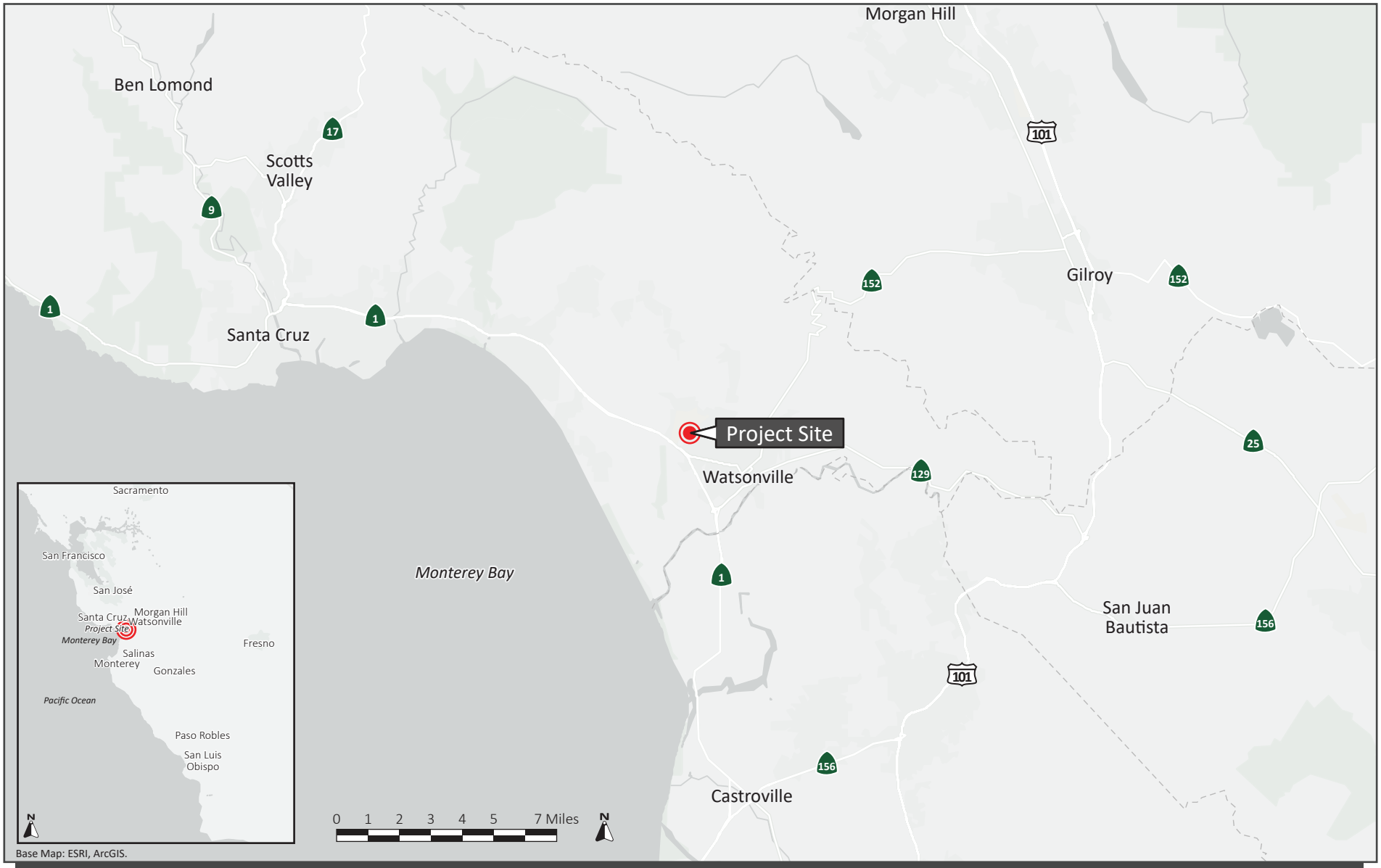
The Watsonville Municipal Airport (Airport) is a non-towered, general aviation (GA) airport located in the City of Watsonville in Santa Cruz County, California. The Airport is owned and operated by the City of Watsonville. The Airport is the only airport in Santa Cruz County and is one of five public-use airports in the Monterey Bay area.

The Airport is bordered by the City of Watsonville on its southern and eastern sides, while the unincorporated community of Freedom, which is under the jurisdiction of Santa Cruz County, surrounds the northern and western edges of the Airport. Residential land uses are present north and east of the Airport around Freedom and in narrow strips along Manfre Road and Buena Vista Drive west and north of the Airport, respectively. A more extensive residential area is located to the east, and light industrial development is located southeast of the Airport. Except for the bands of residential development described above, most of the land uses along the runway approaches to the north, west, and south are agricultural. The airfield, consisting of two runways and associated taxiways, as well as hangars and all landside facilities, are situated on a parcel of land that covers approximately 291 acres. The Airport owns an additional 53 acres of land, off-Airport, within the runway protection zones (RPZs) for Runways 2, 9, and 27. The total acreage of the Airport is approximately 344 acres.

The Airport is served by two intersecting runways, Runway 02-20 and Runway 09-27. Runway 02-20 is 4,501 feet long by 149 feet wide and is constructed with an asphalt surface. Runway 09-27 is 3,998 feet long by 98 feet wide and has an asphalt surface. Both runways were last rehabilitated in 2018 and 2019. Runway 02-20 is instrument approach capable and is considered the primary runway at the Airport.

There is a single-story administration/terminal building located along Aviation Way that pilots and Airport users can access during the Airport's operating hours. There are several hangar configurations at the Airport including T-hangars, conventional box hangars, and mini-hangars, as well as commercial hangars that are reserved for maintenance and corporate aircraft. The hangars are fairly spread out at the Airport across the aircraft operating area, with a cluster of hangars located in the northeast portion and another cluster of hangars located in the southeast portion of the Airport. In addition to covered aircraft storage, the Airport is also equipped with apron parking, also referred to as aircraft tiedowns.

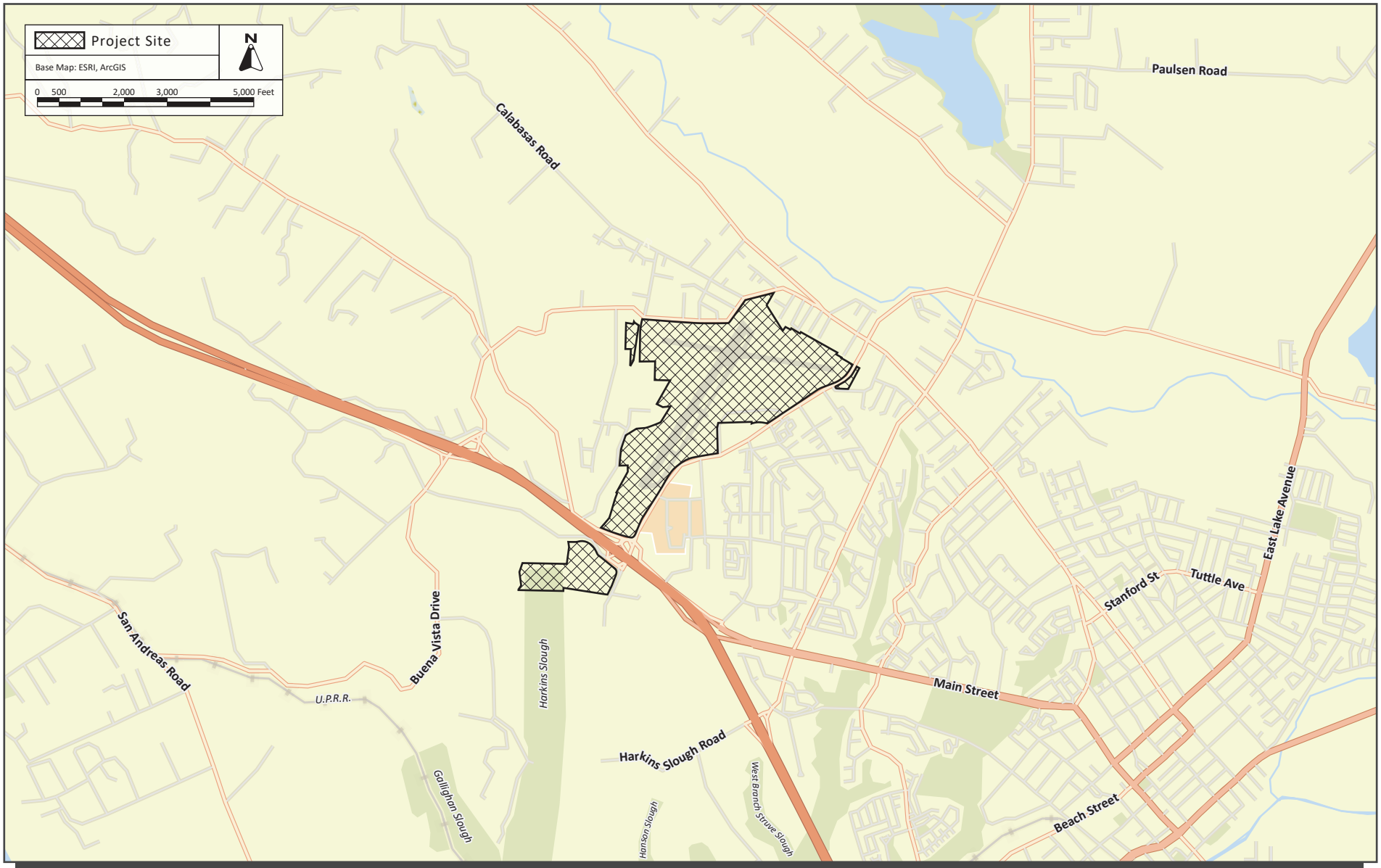
Regional, vicinity, and aerial maps showing the Airport are provided on Figures 2.1-1, 2.1-2, and 2.1-3, respectively.



Base Map: ESRI, ArcGIS.

REGIONAL MAP

FIGURE 2.1-1



VICINITY MAP

FIGURE 2.1-2

AERIAL PHOTO OF THE AIRPORT

FIGURE 2.1-3

2.2 BACKGROUND REGARDING THE AIRPORT MASTER PLAN

2.2.1 Development and Approval of the Airport Master Plan

The first Watsonville Municipal Airport Master Plan and accompanying CEQA Initial Study were prepared and adopted in 1986.

A process to revise the 1986 Airport Master Plan was initiated in 1993, as was preparation of an EIR. During this process, a State-listed endangered plant, the Santa Cruz tarplant (*Holocarpha macradenia*), was found on Airport property.[1] As a result, work on the revised Airport Master Plan and EIR were delayed so that the City could consult with the California Department of Fish and Wildlife (CDFW) regarding mitigation and recovery options. Based on consultation with the CDFW, a Mitigation Plan was completed for the Santa Cruz tarplant and coastal terrace prairie habitat. Subsequently, work on the updated Airport Master Plan and EIR resumed in 1998. This effort culminated with the approval of the Watsonville Municipal Airport Master Plan, 2001-2020, and accompanying EIR in 2003.

2.2.2 Approved 2003 Airport Master Plan

2.2.2.1 *Objectives of the Airport Master Plan*

The objective of the approved 2003 Airport Master Plan is to facilitate the orderly, flexible, and environmentally sensitive expansion and development of the Airport. The following are the planning objectives for the Airport that are addressed in the approved Airport Master Plan:

- Support the development of an efficient public use airport by:
    - Remedying existing operational deficiencies by lengthening and improving the primary runway to more fully accommodate turbine-powered aircraft (75 percent fleet with 60 percent load).
    - Remedying existing operational and safety deficiencies by installing a precision instrument landing system (ILS) to increase the number of hours each day that aircraft may operate in foggy conditions and to increase the overall safety of landings in all conditions.
    - Remedying existing space deficiencies by providing for the expansion and enhancement of the terminal and hangar facilities, plus providing new and improved access to accommodate new facilities.
    - Maintaining and enhancing natural resources on the site.
    - Facilitating the development of complementary light industrial and general commercial uses for affiliates of the Airport.
    - Providing a fiscally responsible financial plan that will provide suitable facilities and generate revenues necessary for proper operation, management, and development of the Airport.
- Provide for the development of the Watsonville Municipal Airport consistent with the Master Plan while minimizing adverse effects on the natural physical setting by:

[1] Santa Cruz tarplant (*Holocarpha macradenia*) was listed as a threatened species in 2000 under the federal Endangered Species Act.

    - Providing for development consistent with the resource protection regulations administered by the United States Army Corps of Engineers, United States Fish and Wildlife Service, the California Coastal Commission, and other agencies.
    - Protecting and enhancing wetlands and sensitive habitat areas.
- Provide for the development of the Watsonville Municipal Airport consistent with the Master Plan while minimizing adverse effects on adjacent land uses, the local community, and the region by:
    - Providing the basis for creation of a noise mitigation plan that ensures neighboring properties are not significantly affected by airport-generated noise.
    - Developing ancillary uses on the site that are designed to be compatible with existing and planned development in the area.

2.2.2.2 *Projects Contained in the Approved Airport Master Plan*

The approved 2003 Airport Master Plan consists of a comprehensive and integrated package of improvements to airside and landside facilities[2] at the Airport, such improved facilities having the design capacity to fully accommodate the forecast demand for general aviation services in a comfortable and efficient manner. Table 2.2-1 lists all projects that are in the approved Airport Master Plan and their implementation status since 2003.

Table 2.2-1: Approved 2003 Airport Master Plan Projects

Project ID No.	Description	Current Status
Phase I (2001-2006)		
1	Complete instrumental landing system (ILS)	Not completed
2	Runway extension 800’ to Runway 2-20 w/ taxiway extensions and lights (RW-1; TW-2) - (to meet recommended rwy length – safety)	Not completed
3	Relocated access road (Aviation Way) and construct main apron for automobile parking lot	Relocation of Aviation Way Completed
4	Construct airport maintenance shelter (east of 2-20 taxiway)	Completed
5	Install underground utilities, top trees, and relocate threshold of Runway 2-20	Topping of trees Completed
7	Security lighting at existing hangars south of Runway 8-26	Completed
8	New airport access road to commercial hangars from Airport Boulevard	Not completed
10	Terminal expansion	Not completed
12	Install traffic light (Aviation Way and Airport Boulevard)	Not completed
14	Construct access road with underground utilities connecting Manfre Rd. on south and Buena Vista/Bradford Road on north	Not completed

[2] Facilities at airports are typically classified as “landside” or “airside.” Airside facilities consist of the airfield and areas that are only accessible by passengers and employees. Landside facilities are accessible to the public.

Table 2.2-1: Approved 2003 Airport Master Plan Projects		
Project ID No.	**Description**	**Current Status**
	to provide access to commercial/industrial area (Industrial Area A; TE-A)	
15A	Construct airport related commercial/industrial development west of Runway 8-26 (Industrial Area A; TE-A)	Partially Completed
15B	Construct airport-related commercial/industrial development south of Aviation Way (Industrial Area B)	Completed
16	Acquire additional clear zone property (west of State Route 1)	---
19	Tarplant mitigation program	Ongoing
Phase II (2007-2011)		
6	New airport access (Burchell Ave. northeast of Runway 8-26)	Not completed
9A	Pave runway blast pads (both ends of Runway 2-20) (SZ-1/ SZ-2)	Not completed
11	Hanger expansion plus taxiways (60 to 70 new hangars and ramp area north of Runway 8-26) (TE-B)	Not completed
13	Construct north parallel taxiway (North of Runway 8-26) (TW-1)	Not completed
19	Tarplant mitigation program	Ongoing
Phase III (2012-2016)		
9B	Pave runway blast pads (both ends of Runway 8-26) (SZ-3/SZ-4)	Not completed
15C	Construct airport-related commercial/industrial development north of Runway 8-26 (Industrial Area C)	---
15D	Construct airport-related commercial/industrial development west of Runway 2-20 (Industrial Area D)	Partially Completed
19	Tarplant mitigation program	Ongoing
Phase IV (2017 – 2020)		
15E	Construct airport-related commercial/industrial development west of Runway 2-20 (Industrial Area E; TE-A1)	Not completed
17	New hangars in Area TE-D	Not completed
18	Construct parallel taxiway west of Runway 2-20 (TW-3)	Not completed
19	Tarplant mitigation program	Ongoing
Source: Kimley-Horn Associates (2023).		

3.0 PROJECT DESCRIPTION

The proposed Project consists of an amendment to the approved 2003 Airport Master Plan. The proposed Project would amend the Airport Master Plan as follows:

- Update the aviation demand forecasts and shift the planning horizon year from 2020 to 2040
- Modify certain components of the airfield to reduce hazards in compliance with current FAA standards
- Modify future facilities requirements at the Airport to reflect updated demand forecasts

As described previously, the approved Airport Master Plan was adopted in 2003. Several of the Master Plan's inputs and conditions have changed since its adoption. Additionally, in the past two decades, the national and regional economy has fluctuated, changes in the aviation industry have occurred, and the FAA has implemented new guidance and standards. The purpose of this Airport Master Plan Update is to address those changes and enhance the long-term operational sustainability of the Airport by establishing an updated framework to guide land use and development decisions on and near the Airport. The Airport Master Plan Update provides the City and its stakeholders with a comprehensive, organized, and rational plan for developing Airport facilities over the next 20 years.

The Master Plan Update is intended to identify solutions for the Airport's facility requirements and to ensure that the Airport remains consistent with FAA guidelines and standards while achieving the short- and long-term goals of the Airport. The Airport Master Plan Update aims to achieve compliance with all current FAA design and safety standards related to airfield facilities, including airfield dimensions, separation distances, protection zones, and obstacle clearance requirements. These design and safety standards work to balance interests at airports including safe operations, increased capacity and efficiency, economic viability, and environmental protection.

The proposed modifications to the Airport Master Plan are described below.

3.1 2021 FORECASTS AND SHIFT OF THE AIRPORT MASTER PLAN HORIZON YEAR TO 2040

The approved Airport Master Plan evaluated in the 2003 EIR relied on forecasted activity levels over a 20-year planning horizon spanning the years 2000 through 2020. The Airport Master Plan includes improvements to airport facilities deemed necessary to accommodate the forecasted activity levels through this planning horizon.

The City updates the demand forecasts for the Airport from time-to-time to account for the latest changes in the aviation industry and in the economy. The updates provide critical information to the Airport regarding planning for the types and sizes of facilities needed to accommodate the demand at a reasonable level of service. The latest update to the aviation demand forecasts for the Airport was completed in 2021 as part of the current Master Plan Update effort. The updated forecasts project activity levels for a 20-year planning horizon, with 2020 as the base year and 2040 as the outmost forecast year. These forecasts are unconstrained, meaning that it is assumed that the requisite facilities

proposed in the Master Plan Update will be developed to accommodate all aviation activity demand over the forecast period.

This forecasting effort identifies aviation demand that is anticipated to occur over the 20-year planning period using acceptable forecasting analysis techniques consistent with FAA guidance including Forecasting Aviation Activity by Airport (July 2001) and Guidance on Review and Approval of Local Aviation Forecasts (June 2008). The techniques or methods used to forecast demand consider a variety of factors that are aviation and non-aviation related, including changes that have occurred in the aviation industry in recent years, both on a broad national level and in the region. Data were collected from various FAA and other sources, including the Airport's operations tracking system and Automated Dependent Surveillance - Broadcast (ADS-B) database, the FAA's Terminal Area Forecast (TAF), the FAA's Traffic Flow Management System Counts (TFMSC) database, the FAA's Form 5010-1 Airport Master Record for WVI (5010 Airport Master Record), and the FAA's National Based Aircraft Inventory Program. Additionally, socioeconomic data for the Santa Cruz-Watsonville Metropolitan Statistical Area (MSA) and the State of California were evaluated to identify conditions and trends that may impact demand at the Airport.

The 2021 aviation demand forecasts, which are shown in Table 3.1-1, below, identify the projected number of aircraft based at the Airport along with counts of overall aircraft operations for categories of aircraft utilizing the Airport.

Table 3.1-1: Existing and Forecasted Activity Levels at Watsonville Airport

	Current Activity Level	**2003 EIR Forecast**	**Current Forecast**
Date of Forecast →	**2020**	**2003**	**2021**
Forecast Horizon Year →	**n/a**	**2020**	**2040**
Based Aircraft	280	381	327
Annual Aircraft Operations			
Single-Engine Prop.	41,410	126,003	71,900
Multi-Engine Prop.	2,525	13,949	4,500
Helicopter	6,060	0	10,800
Turboprop.	n/a	2,971	n/a
Turbine/Jet	505	1,580	2,700
Total	50,500	144,503	89,900

Sources:
- 2003 Airport Master Plan EIR
- Summary of Aviation Demand Forecasts (Kimley-Horn Associates, 2021)

Completion of the revised forecasts was followed by a review of the yet-to-be-constructed projects in the Airport Master Plan. The purpose of the review was to determine if changes (i.e., modifications, deletions, additions) to the projects were needed so that the Airport will be able to accommodate the revised forecast demand in a comfortable and efficient manner. Please see the following section for a list of those proposed changes.

3.2 PROPOSED MODIFICATIONS TO AIRPORT MASTER PLAN PROJECTS

Table 3.2-1 lists the projects to be constructed if the proposed amendment to the 2003 Airport Master Plan (the Project) is approved. The projects fall into one of three categories:

- Project is included in the 2003 Airport Master Plan and no changes to its scope are proposed.
- Project is included in the 2003 Airport Master Plan and revisions to its scope are proposed.
- Project is new (i.e., it was not included in the 2003 Airport Master Plan).

Note that a number of uncompleted projects in the 2003 Airport Master Plan are not listed in Table 3.2-1. Those projects are being dropped and are no longer planned for implementation.

Figure 3.2-1 depicts the location of each project that would be constructed under the proposed amendment. Detailed descriptions of each project are included below the table.

Table 3.2-1: To-Be-Completed Projects in the Airport Master Plan

Project Number On Figure 3.2-1	Description Under Existing 2003 Airport Master Plan	Description Under Proposed Airport Master Plan Amendment
Runway Projects		
1	Extend Runway 2-20 by 800 feet to achieve full length of 5,301 feet	Extend Runway 2-20 by 680 feet to achieve full length of 5,181 feet
2	Not included	Relocate Runway 27 Threshold by 870 feet to meet Runway Visibility Zone (RVZ) standards
3	Extend Runway 9-27 by 255 feet to the west	No change
Taxiway Projects		
4	Not included	Reconfigure fence line along Taxiway A to meet FAA design standards
5	Not included	Widen existing paved shoulders on Taxiway C to meet FAA design standards
6	Not included	Reconfigure Taxiways A and C to address non-standard runway

Table 3.2-1: To-Be-Completed Projects in the Airport Master Plan		
Project Number On Figure 3.2-1	**Description Under Existing 2003 Airport Master Plan**	**Description Under Proposed Airport Master Plan Amendment**
		intersection angles and acute-angle runway entrance taxiways
7	Not included	Reconfigure Taxiway A to modify wide expanse of pavement at Runway 20 entrance
8	Not included	Reconfigure Taxiways B, C, and D to eliminate taxiways with direct access from apron to runways
9	Not included	Reconfigure apron and hangar area taxilanes to meet FAA design and separation standards
10	Not included	Update signage for Taxiways B, D, and E and runway entrance from Taxiways A and C
11	Construct new taxilane to existing hangar development	No change
Parachute Landing Area		
12	Not included	Move parachute landing area approximately 600 feet to the south
Airspace		
13	Not included	Remove obstacles from the Runway 20 Threshold Siting Surface (TSS) in order to remove 590-foot displaced threshold
General Aviation Facilities		
14	Expand GA Terminal Building to meet Airport and user needs	No change
15	Design/Construct East T-hangars in Area 2	No change
16	Construct Apron in Storage Area 1	No change
17	Construct Apron and Hangar in Storage Area 8	No change
18	Construct Apron in Storage Area 3	No change
19	Construct hangars in Storage Area 4	No change
20	Construct hangars west of Runway 2-20	No change
21	Not included	Construct Heliport and connector taxilane

Table 3.2-1: To-Be-Completed Projects in the Airport Master Plan		
Project Number On Figure 3.2-1	**Description Under Existing 2003 Airport Master Plan**	**Description Under Proposed Airport Master Plan Amendment**
Support Facilities		
22	Construct 2,000 square-foot Maintenance Equipment Storage (MES) building	Construct 4,050 square-foot Maintenance Equipment Storage (MES) building
23	Not included	Construct aircraft wash rack based on guidance from Airport Cooperative Research Program (ACRP) Report 113
24	Not included	Construct aircraft wash rack based on guidance from ACRP Report 113
25	Not included	Install aboveground fuel facilities to replace underground tanks
26	Not included	Relocate Compass Rose
Source: WVI Master Plan Update, City of Watsonville, 2022.		

3.2.1 Runway Projects

The following runway improvements are part of the proposed Project:

Project 1 would extend Runway 2-20 by 680 feet to the southwest (i.e., Runway 2 end) with taxiway extensions and lighting, resulting in a runway length of 5,181 feet. The project would include the replacement of the existing Taxiway A entrance to Runway 2-20 with a new entrance configured to meet current FAA design standards.

Project 2 would shorten Runway 9-27 at the east end by 870 feet to meet FAA's runway visibility zone standards. This would be accomplished by remarking the existing pavement on the Runway 27 end of Runway 9-27 for the purpose of relocating the runway threshold 870 feet to the west of the pavement end. The 870 feet of pavement beyond the relocated threshold would be remarked as a blast pad per FAA design standards. The existing Taxiway B and Taxiway C intersections with Runway 9-27 would be demolished and replaced to meet current FAA design standards.

Project 3 would extend Runway 9-27 to the west (i.e., Runway 9 end) by 255 feet. It would also include grading and a retaining wall to create Runway Safety Areas (RSAs) consistent with FAA design standards. The combination of Projects 2 and 3 would change the usable length of Runway 9-27 from 3,998 feet (existing) to 3,383 feet (future).

3.2.2 Taxiway Projects

The following taxiway improvements are part of the Project:

Project 4 would relocate approximately 820 linear feet of existing chain link fence along Airport Boulevard near the Runway 2 end of Runway 2-20. The fence would be shifted horizontally approximately 11 feet east toward Airport Boulevard. Project 4 would require approximately 900 linear feet of new fencing to connect to the existing fence line at the Santa Cruz Animal Shelter. The shift in the fence alignment would bring the separation between the fence and Taxiway A into compliance with FAA criteria.

Project 5 would widen and pave the existing gravel shoulders along Taxiway C west of Runway 2-20.

Project 6 would demolish and reconstruct the existing taxiway entrances at the ends of Runways 2-20 and 9-27 to meet current FAA design standards.

Project 7 would demolish and replace the existing Taxiway A entrance to Runway 20. This project would include a new 3-space run-up area[3] west of Taxiway A with four entrance/exit taxilanes and no-taxi islands.

Project 8 would relocate existing Taxiways B and D to meet current FAA design standards.

Project 9 would remark taxilane and tie-town markings on the north tie-down ramp, transient ramp, and east transient tie-down ramp to ensure compliance with current FAA taxiway object free area and parallel taxiway separation standards.

Project 10 would replace existing airfield signage with updated taxiway designators. The project would include the installation of new electrical signage at the relocated Taxiways C and D entrances.

Project 11 would construct a new 100-feet long by 35-feet wide taxilane between the existing compass rose[4] and apron.

3.2.3 Parachute Landing Area

The following improvement related to the parachute landing area is part of the Project:

Project 12 would relocate the existing parachute landing area (PLA), which is located in the northwest part of the Airport adjacent to Runway 9. The PLA would be moved approximately 600 feet to the south. The diameter of this area would be reduced from 366 feet to 300 feet.

[3] A run-up area is found near the end of a runway and is the location where pilots undertake a final check of engine performance just prior to initiating their takeoff.
[4] A compass rose is a compass painted on an airport's apron. A compass rose points to magnetic north and is used by airport Specialized Aviation Service Operators to verify the accuracy of an aircraft's magnetic compass.

3.2.4 Airspace

The following improvement related to airspace protection is part of the Project:

Project 13 would underground various utilities, remove an on-Airport light pole and two utility poles, and remove two off-Airport palm trees at 21 Miller Avenue, all of which are considered obstacles on the approach to Runway 20. Removal would allow for the deletion of the existing 590-foot displaced threshold on Runway 20.

3.2.5 General Aviation Facilities

The following improvements to general aviation facilities are part of the Project:

Project 14 would expand the existing airport terminal building to a two-story configuration with 100,000 square feet of total internal floorspace. The expansion would extend east and north of the existing terminal building footprint.

Project 15 would construct two T-hangars for approximately 22 aircraft on the existing apron located adjacent to the terminal building.

Project 16 would construct an aircraft tiedown apron of approximately 30,000 square feet on the west side of Aviation Way just north of Airport Boulevard.

Project 17 would construct an approximately 31,000 square foot apron and approximately 2,500 square foot hangar just south of the Taxiway A/Taxiway E intersection. The project would include connector taxilanes to Taxiway A.

Project 18 would construct an approximately 37,000 square foot apron with eight tiedowns in the southeast corner of the Airport near Runway 27.

Project 19 would construct a new 387,500 square foot apron along the north side of Runway 9-27. The apron would accommodate new hangars totaling approximately 77,500 square feet. A new connector taxilane between the relocated Runway 27 and Taxiway A would also be constructed.

Project 20 would construct four conventional hangars of approximately 10,000 square feet each and taxilanes west of Runway 2-20. The project would include the construction a connector taxiway to Taxiway C west of Runway 2-20.

Project 21 would construct a heliport and connector taxilane. The improvement would consist of a small apron adjacent to Taxiway A between Taxiways D and E.

3.2.6 Support Facilities

The following improvements to support facilities are part of the Project:

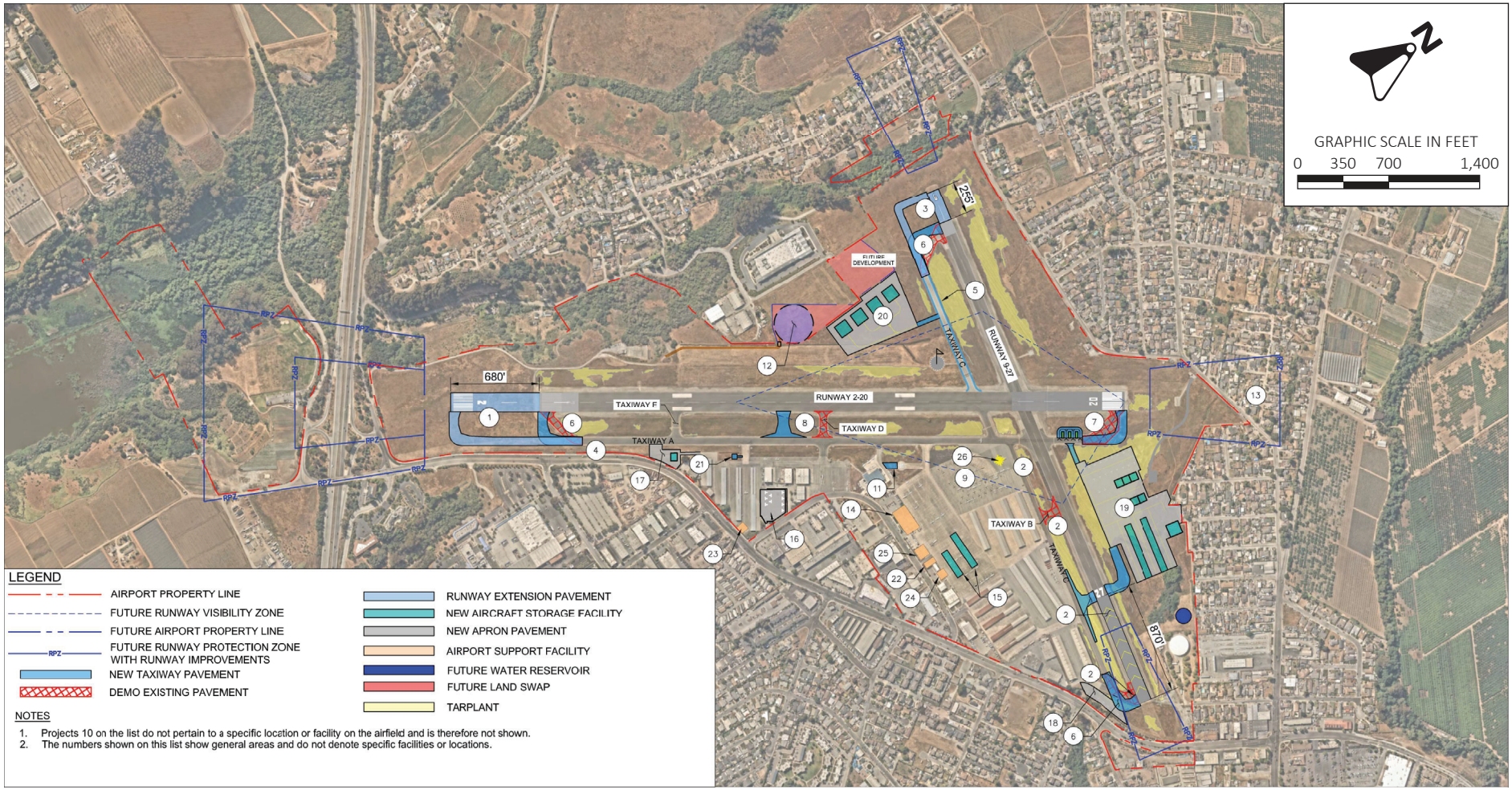
Project 22 would construct a 4,050 square foot airport maintenance equipment shelter building adjacent to the existing Airport Operations Building.

Project 23 would construct a 45’ x 45’ open-air aircraft wash rack in the south T-hangar area near the intersection of Airport Boulevard and Aviation Way. The project includes a wastewater containment system, as well as electrical and water utilities per guidance of Airport Cooperative Research Program (ACRP) Report 113.

Project 24 would construct a 45’ x 45’ open-air aircraft wash rack on the east transient ramp adjacent to the Airport Operations Building. The project includes a wastewater containment system, as well as electrical and water utilities per guidance of ACRP Report 113.

Project 25 would install two aboveground fuel tanks (12,000 gallons each) atop a 40’ x 45’ containment pad to replace the existing underground tanks of the same size. The location of the fuel tanks is on the north side of Aviation Way just east of the terminal building.

Project 26 would relocate the existing compass rose that is located approximately 350 feet northwest of the terminal building. The compass rose would be moved approximately 750 feet to the north and painted on existing pavement.



Source: Kimley-Horn, November 2022.

LOCATIONS OF FUTURE AIRPORT MASTER PLAN PROJECTS

FIGURE 3.2-1

4.0 ENVIRONMENTAL IMPACTS OF THE PROPOSED CHANGES TO THE PROJECT

The discussions in the sections below describe the environmental impacts of the proposed Project as it compares with the impacts of the approved Airport Master Plan for all resource areas addressed in the 2003 EIR. Also noted are any changes that have occurred in the environmental setting that would result in new impacts or impacts of greater severity than those identified in the 2003 EIR.

Summary of Forecasted Activity Levels at the Airport

As described in Section 3.1, the approved Airport Master Plan evaluated in the 2003 EIR relied on forecasted activity levels over a 20-year planning horizon spanning the years 2000 through 2020. The 2003 EIR forecast estimated total annual aircraft operations of 144,503 for the 2020 Master Plan horizon year.

The latest update to the aviation demand forecasts for the Airport was completed in 2021 as part of the current Master Plan Update effort. The updated forecasts project activity levels for a 20-year planning horizon, with 2020 as the base year and 2040 as the outmost forecast year. The 2021 forecast estimated total annual aircraft operations of 89,900 for the 2040 Master Plan horizon year.

The annual aircraft operations associated with the updated Airport Master Plan horizon are forecasted to be approximately 38 percent lower than those analyzed in the 2003 EIR. Annual aircraft operations are closely correlated with the level of operational impacts associated with the Airport, such as air pollutants and noise emitted by aircraft, and vehicular traffic operated by airport patrons. As described in further detail in the impact sections below, the forecasted reduction in activity levels at the Airport, when compared to the 2003 EIR forecasts, would result in a corresponding reduction in operational impacts associated with Airport activity, primarily in the areas of air quality, noise, and transportation.

Summary of New and Modified Airport Master Plan Projects

As described in Section 3.2, many of the projects in the 2003 Airport Master Plan have either already been constructed or are no longer planned for implementation. As a result, the impacts of those projects are not evaluated in this Addendum. Additionally, a number of uncompleted projects would remain unchanged under the proposed amendment to the 2003 Airport Master Plan. The impacts of these projects were already analyzed and disclosed in the 2003 EIR and are not discussed further in this Addendum, except to address whether there have been substantial changes to the circumstances under which the projects would be implemented.

The analysis of environmental impacts in the following sections focuses on projects that are: 1) new, meaning they were not included in the 2003 Airport Master Plan and were not analyzed in the 2003 EIR; or 2) previously proposed projects that would be modified under the proposed amendment, meaning their impacts may be different than those disclosed in the 2003 EIR. As shown in Table 3.2-1, 15 new projects are proposed, and two previously proposed projects would be modified.

The 15 new projects are listed in Table 4.1-1, below. Two of the projects (Projects 10 and 26) involve only repainting paved surfaces and installation of signage, respectively, and are not considered to have

any substantial environmental impacts. New taxiway projects (Projects 4 through 9) would include construction activities such as grading and paving. These activities would result in ground disturbance in areas that are currently undeveloped but are located within the active Airport area adjacent to existing runways and taxiways. Project 12 would relocate the parachute landing area within the same general area of the Airport and with a smaller footprint. Project 13 would consist of the undergrounding of existing utility infrastructure, resulting in temporary impacts associated with trenching and installation. Project 21 would construct a helipad and associated taxiway, resulting in grading and paving in a currently undeveloped area located directly adjacent to existing paved and developed areas. Support facilities projects (Projects 23, 24, and 25) would involve construction of new facilities within existing developed areas at the Airport.

Table 4.1-1: New Projects in the Airport Master Plan Amendment

Project Number	Description Under Proposed Airport Master Plan Amendment
Runway Projects	
2	Relocate Runway 27 Threshold by 870 feet to meet Runway Visibility Zone (RVZ) standards
Taxiway Projects	
4	Reconfigure fence line along Taxiway A to meet FAA design standards
5	Widen existing paved shoulders on Taxiway C to meet FAA design standards
6	Reconfigure Taxiways A and C to address non-standard runway intersection angles and acute-angle runway entrance taxiways
7	Reconfigure Taxiway A to modify wide expanse of pavement at Runway 20 entrance
8	Reconfigure Taxiways B, C, and D to eliminate taxiways with direct access from apron to runways
9	Reconfigure apron and hangar area taxilanes to meet FAA design and separation standards
10	Update signage for Taxiways B, D, and E and runway entrance from Taxiways A and C
Parachute Landing Area	
12	Move parachute landing area approximately 600 feet to the south
Airspace	
13	Remove obstacles from the Runway 20 Threshold Siting Surface (TSS) in order to remove 590-foot displaced threshold
General Aviation Facilities	
21	Construct Helipad and connector taxilane
Support Facilities	
23	Construct aircraft wash rack based on guidance from Airport Cooperative Research Program (ACRP) Report 113
24	Construct aircraft wash rack based on guidance from ACRP Report 113
25	Install aboveground fuel facilities to replace underground tanks
26	Relocate Compass Rose

Source: WVI Master Plan Update, City of Watsonville, 2023.

The two modified projects are shown in Table 4.1-2, below. Project 1 would extend Runway 2-20 into a currently undeveloped area but would do so to a lesser extent than the project included in the 2003 Airport Master Plan, meaning impacts would generally be reduced compared to those disclosed in the 2003 EIR. Project 22 would increase the size of the Maintenance Equipment Storage (MES) building as compared to that proposed in the 2003 Airport Master Plan. The MES building would be constructed in an area of the Airport that is already developed with existing paving and structures.

Table 4.1-2: To-Be-Completed Projects in the Airport Master Plan

Project Number	Description Under Existing 2003 Airport Master Plan	Description Under Proposed Airport Master Plan Amendment
Runway Projects		
1	Extend Runway 2-20 by 800 feet to achieve full length of 5,301 feet	Extend Runway 2-20 by 680 feet to achieve full length of 5,181 feet
Support Facilities		
22	Construct 2,000 square-foot Maintenance Equipment Storage (MES) building	Construct 4,050 square-foot Maintenance Equipment Storage (MES) building

Source: WVI Master Plan Update, City of Watsonville, 2023.

In summary, due to the nature of the proposed new and modified projects, impacts would primarily consist of: 1) temporary impacts associated with construction activities, both in undeveloped and developed areas (all projects except Projects 10 and 26); 2) permanent impacts associated with grading and paving in currently undeveloped areas located adjacent to existing developed areas (Projects 1-2, 4-9, 12-13, and 21); and 3) ongoing operational impacts associated with new facilities (Projects 1, 21, and 23-25).

The impact sections below describe these impacts in greater detail and evaluate whether new or more severe significant impacts would result from the proposed modifications to the Airport Master Plan projects compared to those disclosed in the 2003 EIR.

4.1 GEOLOGY AND SOILS

4.1.1 Background

Section 4.1 of the 2003 EIR disclosed that, except for strong seismic shaking and constraints related to soils with poor drainage and perched water tables, the Airport is not located within areas subject to geological hazards. The 2003 EIR concluded that implementation of mitigation requiring that all future proposed structures be designed in accordance with the requirements of the Uniform Building Code, current edition, and designed in accordance with recommendations of a site-specific geotechnical report to be prepared at the time habitable structures are proposed and designed, would reduce impacts to a less-than-significant level.

4.1.2 Project Impacts in Relation to 2003 EIR

The Airport would continue to be subject to strong seismic shaking and constraints related to soils with poor drainage and perched water tables. Thus, the geologic and seismic conditions at the Airport are the same as described in the 2003 EIR.

The new and modified projects under the proposed amendment to the Airport Master Plan would be located in the same general areas of the Airport as those proposed in the existing Airport Master Plan, and do not include any new architectural features that would make them substantially more susceptible to geological hazards. As required by the mitigation measure identified in the 2003 EIR (Mitigation Measure 4.1-A), structures constructed under the Airport Master Plan will comply with current building and seismic safety codes and would be designed in accordance with recommendations of a site-specific geotechnical report to be prepared at the time they are proposed and designed. This would continue to be the case under the amended Airport Master Plan. Consistent with the 2003 EIR's findings, these measures would reduce the Project's impacts to a less-than-significant level.

4.1.3 Conclusion

The Project would not result in any new significant geologic or seismic impacts and/or geologic or seismic impacts that are substantially different from those described in the 2003 EIR. No new mitigation is required. There is no new information of substantial importance which was not known and could not have been known with the exercise of reasonable diligence. Finally, there are no changes to the circumstances under which the Project is undertaken that would result in more significant geologic or seismic impacts than were previously analyzed.

4.2 DRAINAGE AND WATER QUALITY

4.2.1 Background

Section 4.2 of the 2003 EIR disclosed that the Airport is not within a Federal Emergency Management Agency (FEMA)-designated area subject to inundation by the one-percent annual chance flood. Since the time the 2003 EIR was prepared, FEMA updated the flood map covering the Airport. The updated flood map shows that the Airport is still not located in an area subject to inundation by the one-percent annual chance flood.[5]

The 2003 EIR also disclosed that projects to be constructed under the Airport Master Plan would increase impervious surfaces at the Airport. The additional impervious surfaces would result in an increase in the volume of stormwater runoff, which in turn could impact the capacity of storm drains serving the Airport. The 2003 EIR included Mitigation Measures 4.2-A through 4.2-C requiring future development on the Airport to 1) include drainage infrastructure ensuring that post-project runoff would not exceed storm drain capacities, 2) incorporate drainage design aimed at reducing runoff from paved surfaces and 3) prepare a plan for conducting regular maintenance and cleaning of on-site drainage and detention facilities to ensure ongoing provision of adequate capacity. Implementation of the identified mitigation measures would reduce impacts to less-than-significant levels.

In addition, the 2003 EIR determined that proposed development under the Airport Master Plan could result in significant water quality impacts from erosion or surface water quality degradation. The 2003 EIR identified Mitigation Measures 4.2-D through 4.2-F requiring the City to 1) amend the Airport's Stormwater Pollution Prevention Plan (SWPPP) prior to construction to account for the proposed development, 2) update the Hazardous Materials Management Plan as part of the SWPPP to ensure pollutants would not be discharged in storm water runoff and/or enter the ground water or drainage system, and 3) implement standard erosion control best management practices (BMPs) during future development. Implementation of the identified mitigation measures would reduce impacts to less-than-significant levels.

Since completion of the 2003 EIR, the regulations pertaining to the control of both the volume and content of stormwater runoff have become substantially more stringent in an effort to improve water quality in California streams and bodies of water. The latest National Pollutant Discharge Elimination System (NPDES) permit issued by the Regional Water Quality Control Board (RWQCB) requires the City of Watsonville and other municipalities to reduce stormwater pollution through source control measures and stormwater treatment measures. Currently, projects that create or replace 5,000 square feet or more of impervious surface, which includes the Airport Master Plan, are required to use site design and source control measures and numerically-sized low impact development (LID) stormwater treatment measures. To summarize, the current stormwater pollution control requirements constitute mitigation beyond that identified in the 2003 EIR, so the net effect is that stormwater runoff from new projects is now having less impact than projects that would have complied with the mitigation required in the 2003 EIR. As described in the impact discussion below, the Project will implement the current (and more stringent) stormwater pollution control measures that are part of the latest NPDES permit.

[5] Federal Emergency Management Agency. Flood Insurance Rate Map, Community Panel No. 06087C0391E. Map. Effective Date: May 16, 2012.

4.2.2 Project Impacts in Relation to 2003 EIR

The new and modified projects under the proposed amendment to the Airport Master Plan would include paving in areas that are currently undeveloped, but in most cases would either replace existing paved surfaces elsewhere on the Airport or would result in less paving than was proposed in the 2003 EIR. Project 1 would extend Runway 2-20 into a currently undeveloped area but would do so to a lesser extent than the project included in the 2003 Airport Master Plan. Projects 4 through 9 would reconfigure existing paved taxiways. Project 21 would construct a new helipad and associated taxiway. The new and modified projects would result in a net increase in impervious surfaces and, therefore, would result in additional water quality impacts from erosion or surface water quality degradation. However, as described below, stricter mitigation measures are now in effect, which would negate any increase in water quality impacts.

Impacts related to storm drainage would continue to be reduced with implementation of Mitigation Measures 4.2-A through 4.2-C. Additionally, as described above in Section 4.2.1, current stormwater regulations are more stringent than the mitigation provided in the 2003 EIR. Since the Project would disturb more than one acre of soil, it would be required to comply with the NPDES General Permit for Construction Activities. The Construction General Permit includes requirements for training, inspections, record keeping, and, for projects of certain risk levels, monitoring. The general purpose of the requirements is to minimize the discharge of pollutants and to protect beneficial uses and receiving waters from the adverse effects of construction-related storm water discharges. Post-construction, the Project would be subject to the General Permit for Storm Water Discharges associated with Industrial Activities (Industrial General Permit Order 2014-0057-DWQ as amended in 2015 and 2018). The Industrial General Permit requires the implementation of management measures that will achieve the performance standard of best available technology economically achievable and best conventional pollutant control technology. The Industrial General Permit also requires the development of a SWPPP and a monitoring plan. The site-specific SWPPP would identify site-specific sources of pollutants and describe the measures applied to reduce stormwater pollution.

Compliance with current stormwater permit requirements (construction and post-construction), along with continued implementation of Mitigation Measures 4.2A through 4.2-C, would reduce the Project's impacts to less-than-significant.

4.2.3 Conclusion

The Project would not result in any new significant drainage or water quality impacts that are substantially different from those described in the 2003 EIR. No new mitigation is required. There is no new information of substantial importance which was not known and could not have been known with the exercise of reasonable diligence. Finally, there are no changes to the circumstances under which the Project is undertaken that would result in more significant drainage or water quality impacts than were previously analyzed.

4.3 BIOLOGICAL RESOURCES

The discussion in this section is based in part on Biological Impacts Memorandum completed by Salix Consulting, Inc. in September 2023. This report is included as Appendix A to this Addendum.

4.3.1 Background

Section 4.3 of the 2003 EIR concluded that implementation of the improvement projects contained in the Airport Master Plan would result in the following significant biological effects:

- Impacts to Coastal Terrace Prairie Habitat
- Impacts to Santa Cruz Tarplant Habitat
- Impacts to Willow Riparian Habitat
- Impacts to Seasonal Wetland Habitat

The 2003 EIR described mitigation measures included in the project that would reduce these impacts to a less-than-significant level. Table 4.3-1 summarizes the impacts and mitigation measures.

Table 4.3-1: Significant Biological Impacts of the Approved Airport Master Plan

Impact Category	Impact (acres)	Mitigation (acres)	Mitigation Description
Impacts to Santa Cruz Tarplant Habitat	12.28	12.28	Tarplant Mitigation Plan
Impacts to Coastal Terrace Prairie Habitat	5.54	5.54	
Impacts to Willow Riparian Habitat	1.33	4.00	Wetland Mitigation Plan
Impacts to Seasonal Wetland Habitat	0.14	0.45	

Note: Impacts to Santa Cruz Tarplant and coastal terrace prairie habitats are mitigated at a 1:1 ratio. Impacts to willow riparian and seasonal wetland habitats are mitigated at a 3:1 ratio.

Source: City of Watsonville, *EIR for the Watsonville Municipal Airport Master Plan*, 2003.

The 2003 EIR also disclosed that the commercial/industrial development that was part of the Airport Master Plan would result in significant indirect impacts to the California Red-legged Frog and other sensitive species. That component of the Master Plan is proposed to be dropped and, therefore, this impact will not be discussed further in this Addendum.

The mitigation measures identified in the 2003 EIR are described in further detail below.

Tarplant Mitigation Plan

A Tarplant Mitigation Plan was prepared for the Airport in October 2001 and served as the basis for the mitigation strategy contained in the 2003 EIR's mitigation measures for impacts to Santa Cruz Tarplant and Coastal Terrace Prairie habitat (refer to Mitigation Measure 4.3-A in the 2003 EIR). The Tarplant Mitigation Plan was subsequently updated in 2007. The Tarplant Mitigation Plan consists of the following components:

1. Designate 25.58 acres of Airport lands as permanent conservation easements, wherein existing habitat of Santa Cruz Tarplant and coastal terrace prairie will be protected and managed in perpetuity.
2. Establish and maintain new colonies of Santa Cruz Tarplant in permanent easement areas to achieve at least 1:1 replacement of both Tarplant numbers (allowing for 20% natural variability over time) and acreage to compensate for that lost by development. Avoid contamination of local gene pools of native vegetation. The mitigation target values will be based on data from the 1993 baseline survey.
3. Establish and maintain 5.54 acres of coastal terrace prairie in permanent easement areas to achieve at least 1:1 replacement of habitat lost to development. Avoid contamination of local gene pools of native vegetation by re-planting with seed stock from on-site. The 1998 baseline survey of coastal terrace prairie acreage will provide the basis for determining mitigation target values.
4. Design and implement a program for maintenance and protection of Airport lands, including but not limited to permanent easement areas. The program will describe and formalize grassland management practices (primarily mowing), outline methods to control populations of invasive exotic weeds, and provide protection of sensitive habitat areas.

To date, development associated with the current Airport Master Plan has not resulted in impacts to Santa Cruz Tarplant or Coastal Terrace Prairie habitat. As a result, no mitigation actions have been required.

Wetland Mitigation Plan

A Wetland Mitigation Plan was prepared for the Airport in March 2022 and served as the basis for the mitigation strategy contained in the 2003 EIR's mitigation measures for impacts to wetlands (refer to Mitigation Measures 4.3-B and 4.3-C in the 2003 EIR). The overall goal of the mitigation program is to compensate for the proposed fill of approximately 1.47 acres of wetlands that will result from planned Airport improvements by replacing them at a 3:1 ratio.

The site for the creation of new wetlands has been designated on a 13-acre parcel owned by the Airport. The site is located within Harkins Slough, just south of Highway 1. The creation of the new wetlands will occur in three phases: site preparation, revegetation, and monitoring and maintenance.

The mitigation site lies at a relatively low elevation, and thus will not require extensive grading. Prior to agricultural uses of the property, the area had been part of the Harkins Slough wetland. Some minor soil contouring will occur to create the lower elevation riparian inundation area and the slightly higher elevation seasonal wetland. A portion of the Harkins Slough waterway will be realigned to a more natural sinuous channel, with an outlet structure constructed at the south end. Finally, a berm will be

constructed from the existing farm access road to function as a water control structure to prevent flood waters from entering adjacent parcels.

The re-establishment of wetland vegetation is expected to happen naturally after the site has been restored. However, in order to increase the speed of revegetation, provide substantial plant diversity, and to prevent the establishment of non-native invasive species, active revegetation will take place as part of the Wetland Mitigation Plan. An attempt to restore the site to its historical wetland state will be made by planting some species that have been extirpated in the Watsonville Sloughs.

Monitoring and maintenance will be ongoing for at least a five-year period following revegetation of the new wetlands. If performance standards are not met, the monitoring will continue beyond the five-year period. Maintenance practices will include inspection and repair (if necessary) of hydraulic structures, inspection of vegetation, erosion control, trash and debris removal, and exotic species eradication.

To date, development associated with the current Airport Master Plan has not resulted in impacts to wetlands. As a result, no mitigation actions have been required.

4.3.2 Project Impacts in Relation to 2003 EIR

Table 4.3-2 summarizes the 2003 baseline condition, the impacts disclosed in the 2003 EIR, the updated 2023 baseline conditions, and the impacts associated with the buildout of the updated Airport Master Plan. A detailed discussion of impacts and mitigation is included below.

Table 4.3-2: Summary of Biological Resource Impacts

Habitat Type	2003 Baseline	2003 Impacts (Approved Master Plan)	2023 Baseline	2023 Impacts (Proposed Amendment To Master Plan)
SCT Habitat Acreage	42.70	12.28	24.19	5.90
Coastal Terrace Prairie Acreage	22.10	5.54	22.10	1.88
SCT Individuals (2001 survey)	2,491,465	Not Known	900,480	147,780
Seasonal Wetlands	Not Available	0.14	0.36	0.02
Willow Riparian Habitat	Not Available	1.33	Not included	0
Wetland Swale	Not included	N/A	1.14	0.33
Ephemeral Stream	Not included	N/A	0.12	0.02
Ditch	Not included	N/A	0.56	0.04

SCT = Santa Cruz Tarplant

Source: Salix Consulting, Inc., 2023

Santa Cruz Tarplant and Coastal Terrace Prairie Habitats

Impacts

Based upon the 2023 Santa Cruz Tarplant census, there are 24.19 acres of Santa Cruz Tarplant habitat on the Airport property. At full buildout of the updated Airport Master Plan, there would be 5.90 acres of Santa Cruz Tarplant habitat impacted based upon the habitat acreage identified in the 2023 census. As discussed above, the approved Airport Master Plan would result in impacts to 12.24 acres of Santa Cruz Tarplant habitat. The updated Airport Master Plan would, therefore, result in a reduction in impacts to Santa Cruz Tarplant habitat.

The 2003 EIR identified 22.10 acres of Coastal Terrace Prairie Habitat on the Airport property. The acreage of Coastal Terrace Prairie habitat has not changed since preparation of the 2003 EIR. The updated Master Plan would impact 1.88 acres of Coastal Terrace Prairie habitat. As discussed above, the approved Airport Master Plan would result in impacts to 5.54 acres of Coastal Terrace Prairie habitat. The updated Airport Master Plan would, therefore, result in a reduction in impacts to Coastal Terrace Prairie habitat.

Mitigation

As described above, a Tarplant Mitigation Plan was prepared for the Airport in 2001 and subsequently updated in 2007. Implementation of the Tarplant Mitigation Plan in accordance with EIR Mitigation Measure 4.3-A would continue to adequately mitigate impacts to Santa Cruz Tarplant and Coastal Terrace Prairie habitat. It provides suitable guidance on how to replace the functions and services of impacted Santa Cruz Tarplant habitat, Coastal Terrace Prairie habitat, and individual Santa Cruz Tarplant plants. It also provides success criteria and adaptive management principles for ongoing stewardship. Due to the age of the Tarplant Mitigation Plan, updates and minor revisions to the Plan are recommended to ensure current baseline conditions at the Airport are reflected in the Plan, and to ensure the Plan reflects the current standards and practices of the California Department of Fish and Wildlife (CDFW) and the United States Fish and Wildlife Service (USFWS). With the recommended updates to the Tarplant Mitigation Plan, which are included in Appendix A to this Addendum, the Plan would continue to adequately mitigate impacts to Santa Cruz Tarplant and Coastal Terrace Prairie habitat. No new mitigation is required.

Wetland Habitat

Impacts

The 2003 EIR determined that 1.33 acres of Willow Riparian Wetland and 0.14 acre of Seasonal Wetland habitat would be impacted by buildout of the Airport Master Plan. An updated aquatic resources delineation was prepared by North Fork Associates in 2008 (and verified by the U.S. Army Corps of Engineers in 2009). The results of the 2008 delineation were confirmed to still reflect 2023 baseline conditions by Salix Consulting, Inc (refer to Appendix A to this Addendum). Where the Willow Riparian Habitat is depicted in the Jurisdictional Wetlands Figure in the 2003 EIR (Figure 4.3.3), North Fork Associates did not identify any aquatic resources. The 2008 delineation did identify a single 1.71-acre Willow Scrub Wetland but in an entirely different location on the site. Based upon this most recent aquatic resources delineation, there is no Willow Riparian Wetland Habitat present on the Airport property. The 2008 aquatic resources delineation identified 0.36 acre of seasonal wetlands,

but the location of these wetlands is different than what was shown in the 2003 EIR. The 2003 EIR did not identify wetland swale, ephemeral stream, and ditch as aquatic resources present within the project boundary. The 2008 delineation did identify these resources on the Airport property (refer to Table 4.3-2, above).

Based upon the most recent aquatic resources delineation prepared in 2008 and confirmed in 2023, the updated Airport Master Plan would result in impacts to 0.02 acre of Seasonal Wetland, 0.33 acre of Wetland Swale, 0.02 acre of Ephemeral Stream, and 0.04 acre of Ditch. The updated Master Plan would impact a total of 0.41 acre of wetland habitat, which is less than the 1.47 acres impacted by the approved Airport Master Plan. The updated Airport Master Plan would, therefore, result in a reduction in impacts to wetland habitat.

Mitigation

As described above, a Wetland Mitigation Plan was prepared for the Airport in 2002. Implementation of the Wetland Mitigation Plan in accordance with EIR Mitigation Measures 4.3-B and 4.3-C would continue to adequately mitigate impacts to wetland habitat. It provides suitable guidance on how to replace the functions and services of impacted wetland habitat. Due to the age of the Wetland Mitigation Plan, updates and minor revisions to the Plan are recommended to ensure the Plan reflects the current standards and practices of the U.S. Army Corps of Engineers and the Regional Water Quality Control Board. With the recommended updates to the Wetland Mitigation Plan, which are included in Appendix A to this Addendum, the Plan would continue to adequately mitigate impacts to wetland habitat. No new mitigation is required.

4.3.3 Conclusion

The Project would not result in any new significant impacts to biological resources that are substantially different from those described in the 2003 EIR. No new mitigation is required. There is no new information of substantial importance which was not known and could not have been known with the exercise of reasonable diligence. Finally, there are no changes to the circumstances under which the project is undertaken that would result in more significant biological resources impacts than were previously analyzed.

4.4 CULTURAL RESOURCES

The discussion in this section is based in part on an Archaeological Literature Review completed by PaleoWest in February 2023.[6]

4.4.1 Background

Section 4.4 of the 2003 EIR disclosed that there were no cultural or historical resources recorded in the California Inventory of Historical Resources for the Project area. No archaeological sites were recorded within a 0.6-mile radius of the Project area and no prehistoric archaeological resources were identified during a field survey. The 2003 EIR determined, however, that impacts to previously unknown and unidentified cultural resources could occur during construction associated with buildout of the Airport Master Plan. To address that potential, the 2003 EIR included a recommendation to halt all work within 150 feet (50 meters) of the find until evaluated by a qualified archaeologist, who would then provide appropriate mitigation measures if the find were deemed significant. With this recommendation, the 2003 EIR determined that impacts related to unique archaeological resources would be less-than-significant.

4.4.2 Project Impacts in Relation to 2003 EIR

To ensure that no cultural resources were identified on or near the Airport since preparation of the 2003 EIR, a Literature Review was completed for the Project in February 2023 by PaleoWest. A records search request of the California Historical Resources Information System submitted to the Northwest Information Center identified several documented historic resources within a one-half mile radius of the Airport property boundaries:

- A segment of Old Highway 1 in the vicinity of the current Highway 1 on Airport property was identified in 1999 and thus does not represent new information that was not available at the time the 2003 EIR was prepared. The Project would not affect this resource.
- Artifacts and a fence associated with a former driving range were identified in 2008 subsequent to preparation of the 2003 EIR. The resources were determined not to be eligible for the *National Register of Historic Places* or the *California Register of Historical Resources.* Additionally, the resources are located south of Highway 1 and are separated from the active Airport area by the highway. Since no Airport Master Plan projects are proposed south of Highway 1, these resources would not be impacted by the Project.
- Eleven resources were identified within one-half mile of the Airport boundaries. Of these resources, one is associated with the prehistoric period and 10 are associated with the historic period. These resources were identified between 1986 and 1999, and thus do not represent new information that was not available at the time the 2003 EIR was prepared. Importantly, these resources would not be impacted by the Project.

Based on the results of the records search described above, the Literature Review determined that the Project site is not in an archaeologically sensitive area and that historical resources are not present onsite. As a result, the Project would not impact any known cultural or historical resources, which is

[6] Due to the sensitive nature of the information contained in the Literature Review, the report is not included as an Appendix to this Addendum. A copy of the report is on file at the City of Watsonville Community Development Department, Planning Division, and can be viewed by qualified individuals.

the same conclusion as the 2003 EIR. However, as acknowledged in the 2003 EIR, structures and improvements constructed under the Airport Master Plan may result in the inadvertent discovery of unknown buried cultural resources. This would continue to be the case under the proposed amendment to the Airport Master Plan. The new and modified projects would include shallow ground disturbing activities in the same general areas of the Airport that were analyzed in the 2003 EIR. The Project would be subject to the 2003 EIR recommendation to halt work when a resource is identified and to consult a qualified archaeologist to evaluate the find. Additionally, the Project would be subject to all provisions of California Health and Safety Code Sections 7054 and 7050.5 and Public Resources Code Sections 5097.9 through 5097.99, as amended per Assembly Bill 2641. In accordance with these regulations, if human remains are discovered during construction, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains. With implementation of recommendations in the 2003 EIR and relevant regulatory requirements, potential impacts to unknown buried cultural resources would remain less-than-significant.

4.4.3 Conclusion

The Project would not result in any new significant cultural or historical resource impacts that are substantially different from those described in the 2003 EIR. No new mitigation is required. There is no new information of substantial importance which was not known and could not have been known with the exercise of reasonable diligence. Finally, there are no changes to the circumstances under which the Project is undertaken that would result in more significant cultural or historic resource impacts than were previously analyzed.

4.5 TRAFFIC AND CIRCULATION

4.5.1 Background

Section 4.5 of the 2003 EIR determined that, while the Airport Master Plan would generate new additional traffic, it would not reduce the Level of Service (LOS) at the study intersections in the vicinity of the Airport to an unacceptable level. All study intersections would continue to operate at an acceptable LOS C or higher.

The 2003 EIR determined that industrial/commercial development associated with the Airport Master Plan (i.e., Project 15-C) would increase traffic significantly at the intersection of Buena Vista Drive and Bradford Road. Mitigation was proposed but was not implemented because Project 15-C was not built and has been eliminated from the Airport Master Plan.

For access and circulation impacts, the 2003 EIR disclosed that traffic operations on Airport Boulevard, Aviation Way, Burchell Avenue, and Freedom Boulevard would be degraded due to an increased number of vehicle trips or rerouting of existing traffic. However, such impacts were determined to be less-than-significant.

The 2003 EIR determined that there would be no impacts to bicycle and pedestrian facilities since these facilities would not change due to the Airport Master Plan. The 2003 EIR determined that the Airport Master Plan would have a potentially significant parking impact because the parking supply would remain the same even with the proposed expansions. EIR Mitigation Measure 4.5-A requires the Project to provide parking in accordance with the City of Watsonville parking requirements. It was determined that implementation of EIR Mitigation Measure 4.5-A would reduce parking impacts to a less-than-significant level.

The 2003 EIR concluded that cumulative impacts would be less-than-significant since the traffic associated with the Airport Master Plan would not decrease LOS to unacceptable levels under cumulative conditions.

4.5.2 Project Impacts in Relation to 2003 EIR

As described in Section 4.0, the annual aircraft operations associated with the updated Airport Master Plan horizon are forecasted to be approximately 38 percent lower than those analyzed in the 2003 EIR. Annual aircraft operations are closely correlated with overall activity levels at the Airport, including vehicle trip generation. As a result, the amended Airport Master Plan would generate substantially fewer vehicle trips than the 2003 Airport Master Plan, meaning impacts associated with traffic and parking would be less than those disclosed in the 2003 EIR. Additionally, the new and modified Airport Master Plan projects do not include any changes to the roadway, bicycle, or pedestrian infrastructure surrounding the Airport and, therefore, would not result in new or more severe impacts in those areas.

4.5.3 Conclusion

When compared to the volume of traffic disclosed in the 2003 EIR, the volume of traffic under the Project would be substantially lower. Therefore, the Project would not result in any new significant traffic and circulation impacts that are substantially different from those described in the 2003 EIR. No

new mitigation is required. There is no new information of substantial importance which was not known and could not have been known with the exercise of reasonable diligence. Finally, there are no changes to the circumstances under which the project is undertaken that would result in more significant traffic and circulation impacts than were previously analyzed.

4.6 AIR QUALITY

4.6.1 Background

The analysis in Section 4.6 of the 2003 EIR determined that implementation of the Airport Master Plan would result in an incremental increase of regional operational emissions, but the impacts would be less-than-significant. The 2003 EIR also determined that the Airport Master Plan would not conflict with the Monterey Bay Air Resources District (formerly known as the Monterey Bay Unified Air Pollution Control District in the 2003 EIR) Air Quality Management Plan, nor would it result in significant impacts related to odors.

The 2003 EIR concluded that emissions associated with the construction phase of the projects included in the Airport Master Plan could exceed the Monterey Bay Air Resources District criteria air pollutant thresholds. Implementation of Mitigation Measures 4.6-A through 4.6-C would, however, reduce fugitive dust and construction exhaust emissions, resulting in a less-than-significant impact.

4.6.2 Project Impacts in Relation to 2003 EIR

Operational Emissions

As described in Section 4.0, the annual aircraft operations associated with the updated Airport Master Plan horizon are forecasted to be approximately 38 percent lower than those analyzed in the 2003 EIR. Corresponding to the projected decrease in flight activity under the updated Airport Master Plan, aircraft-related pollutant emissions would be less than what was analyzed in the 2003 EIR. Additionally, with less aircraft activity, the updated Airport Master Plan would generate fewer vehicle trips compared to the 2003 EIR, resulting in lower emissions. Therefore, operational air quality emissions resulting from the Project would be less than those disclosed in the 2003 EIR.

Construction Emissions

Similar to the approved Airport Master Plan, construction of the remaining facilities under the updated Airport Master Plan would generate emissions that could exceed the Monterey Bay Air Resources District's PM_{10} threshold of 82 pounds per day. The new and modified projects under the updated Airport Master Plan would require similar levels of construction activity when compared to the approved projects and would not add a substantial amount of new construction over the life of the Airport Master Plan horizon. Additionally, any new construction activities associated with the new and modified projects would be at least partially offset by the elimination of construction activities associated with those projects contemplated in the 2003 EIR that are proposed to be dropped.

The Project would be required to implement Mitigation Measures 4.6-A through 4.6-C in the 2003 EIR to reduce construction emissions. These measures restrict grading and earthmoving on the site to less than 2.2 acres per day (unless monitoring shows that PM_{10} levels do not exceed 82 pounds per day) and require implementation of dust control measures. With implementation of required mitigation measures, the Project's construction emissions would be less-than-significant.

4.6.3 Conclusion

The Project would not result in any new significant air quality impacts that are substantially different from those described in the 2003 EIR. No new mitigation is required. There is no new information of substantial importance which was not known and could not have been known with the exercise of reasonable diligence. Finally, there are no changes to the circumstances under which the Project is undertaken that would result in more significant air quality impacts than were previously analyzed.

4.7 NOISE

4.7.1 Background

Operational Noise Impacts

Section 4.7 of the 2003 EIR determined that development and increased aircraft operations under the Airport Master Plan would result in unacceptable operational noise levels at surrounding land uses and would expose sensitive receptors to intermittent construction-related noise.

As part of the approved Airport Master Plan, Runway 2-20 would be extended by 800 feet, which the 2003 EIR stated would increase noise exposure to nearby residential units, exposing these residences to noise levels greater than the Community Noise Equivalent Level (CNEL) of 60 decibels (dB). This would violate the City of Watsonville noise standard of 60 dB for residential and noise sensitive areas (e.g., parks, churches, and schools) and represent a significant impact. Implementation of Mitigation Measures 4.7-A through 4.7-C would reduce operational noise impacts related to the Runway 2-20 project to a less-than-significant level. The mitigation measures include an acoustical analysis for residential units located within the CNEL 60 dB noise contour, restriction of noise-sensitive development within the CNEL 60 dB noise contour, and inclusion of Federal Aviation Administration noise abatement (or reduction) arrival and departure procedure for all pilots.

In addition to the Runway 2-20 operational noise impacts, the 2003 EIR stated that the development of corporate T-hangars proposed under the approved Airport Master Plan would result in increased operational noise levels at adjacent residential units. Residential units potentially impacted could be located along Lone Pine Avenue, Memorial Avenue, Coffee Lane, and Emme Street. Mitigation Measure 4.7-D would require either a landscaped earth berm or sound wall be incorporated between the hangars and residential units to dampen the noise levels, reducing the impact to a less-than-significant level.

Construction Noise Impacts

Finally, the 2003 EIR disclosed that noise generated during the construction phase of projects contained in the Airport Master Plan could impact surrounding residences. Mitigation Measures 4.7-E through 4.7-H would minimize construction-related noise impacts by restricting construction hours within 1,000 feet of noise-sensitive receptors to the daytime period from 7:00 AM to 7:00 PM, requiring sound control devices on equipment, and locating construction staging areas as far from residences as feasible. Impacts would be less-than-significant with mitigation incorporated.

4.7.2 Project Impacts in Relation to 2003 EIR

Aircraft-Generated Operational Noise Impacts

As described in Section 4.0, the annual aircraft operations associated with the updated Airport Master Plan 2040 forecast would be approximately 38 percent lower than those analyzed in the 2003 EIR. Corresponding to this projected decrease in annual aircraft operations under the updated Airport Master Plan, aircraft-related noise levels would be lower than what was analyzed in the 2003 EIR. Additionally, when compared to the 2003 Airport Master Plan, Project 1 would reduce the length of

the proposed Runway 2-20 extension from 800 feet to 680 feet, and Project 2 would shorten Runway 9-27 at the east end by 870 feet to meet FAA's runway visibility zone standards.

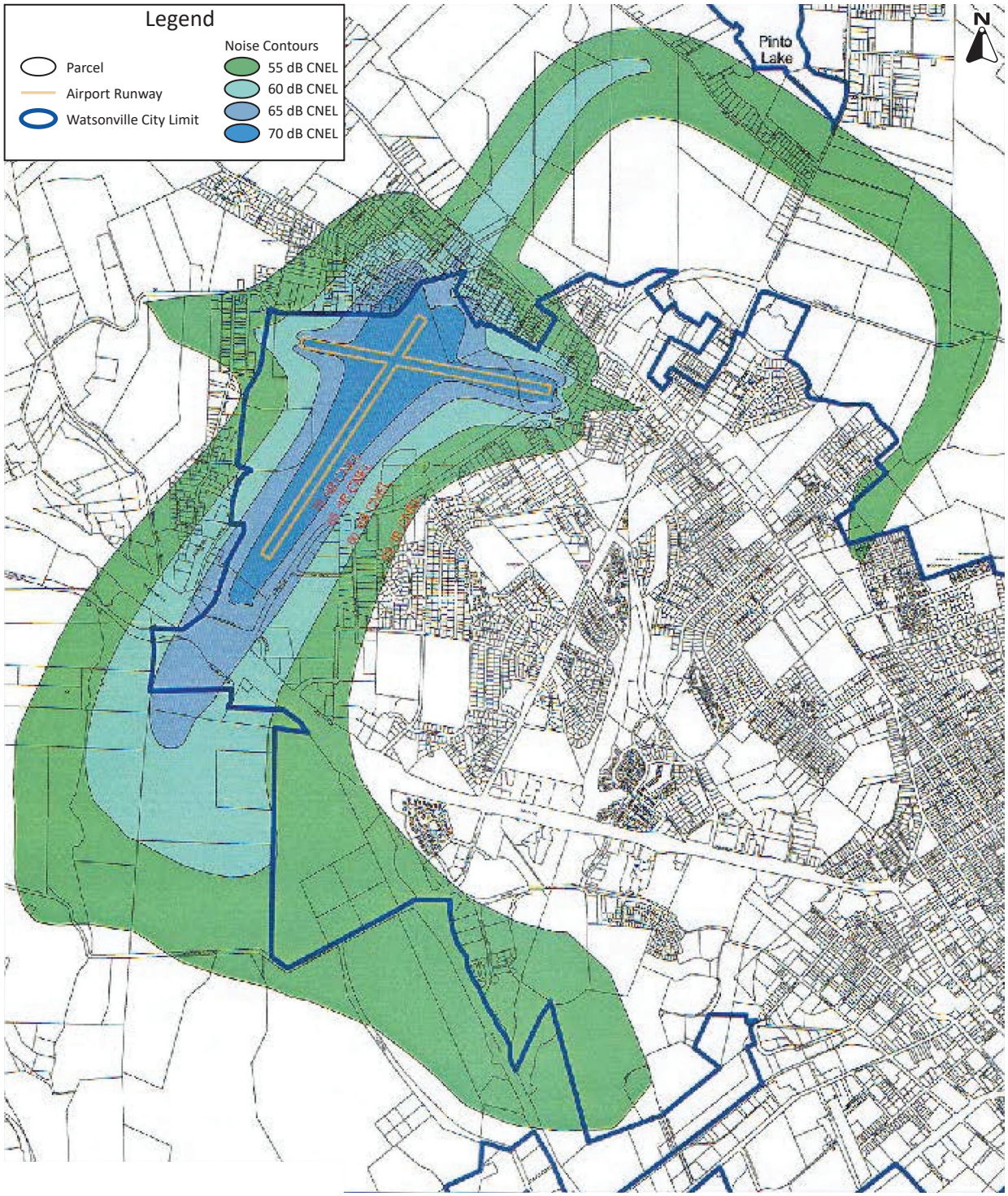
To determine the effect of these changes on aircraft-generated noise levels in the community, the FAA's Integrated Noise Model (INM) was used to develop the Airport's noise footprint. Accounting for the number of aircraft operations, types of aircraft, flight patterns, and time of day the operations occur, the INM quantifies the size of the footprint and the number of sensitive noise receptors (i.e., residences, churches, hospitals, schools) within the footprint. The footprint was quantified for the Project's proposed 2040 horizon year and was compared to the footprint for the 2020 horizon year for the approved Airport Master Plan that is contained in the 2003 EIR. Figures 4.7-1 and 4.7-2 show the 2020 horizon year noise contours from the 2003 EIR and the proposed 2040 horizon year noise contours, respectively. Table 4.7-1 compares data for the same two scenarios. The comparison demonstrates that future year 2040 noise levels under the Project will be less than those disclosed in the 2003 EIR for the approved Airport Master Plan.

Table 4.7-1: Comparison of Aircraft Noise Exposure on Noise-Sensitive Land Uses

Land Use Category	Approved Airport Master Plan Horizon Year 2020				Proposed Amended Airport Master Plan Horizon Year 2040			
	Noise Exposure Range (CNEL, dB)				Noise Exposure Range (CNEL, dB)			
	55 +	60 +	65 +	70 +	55 +	60 +	65 +	70 +
Residential (dwelling units)	1,194	277	74	20	272	39	3	0
Hospitals	1	1	0	0	0	0	0	0
Schools	1	0	0	0	0	0	0	0
Churches	5	0	0	0	1	0	0	0
Population*	4,300	998	267	72	979	140	11	0
Total Land Area (acres)	2,046	725	307	129	554	218	94	29

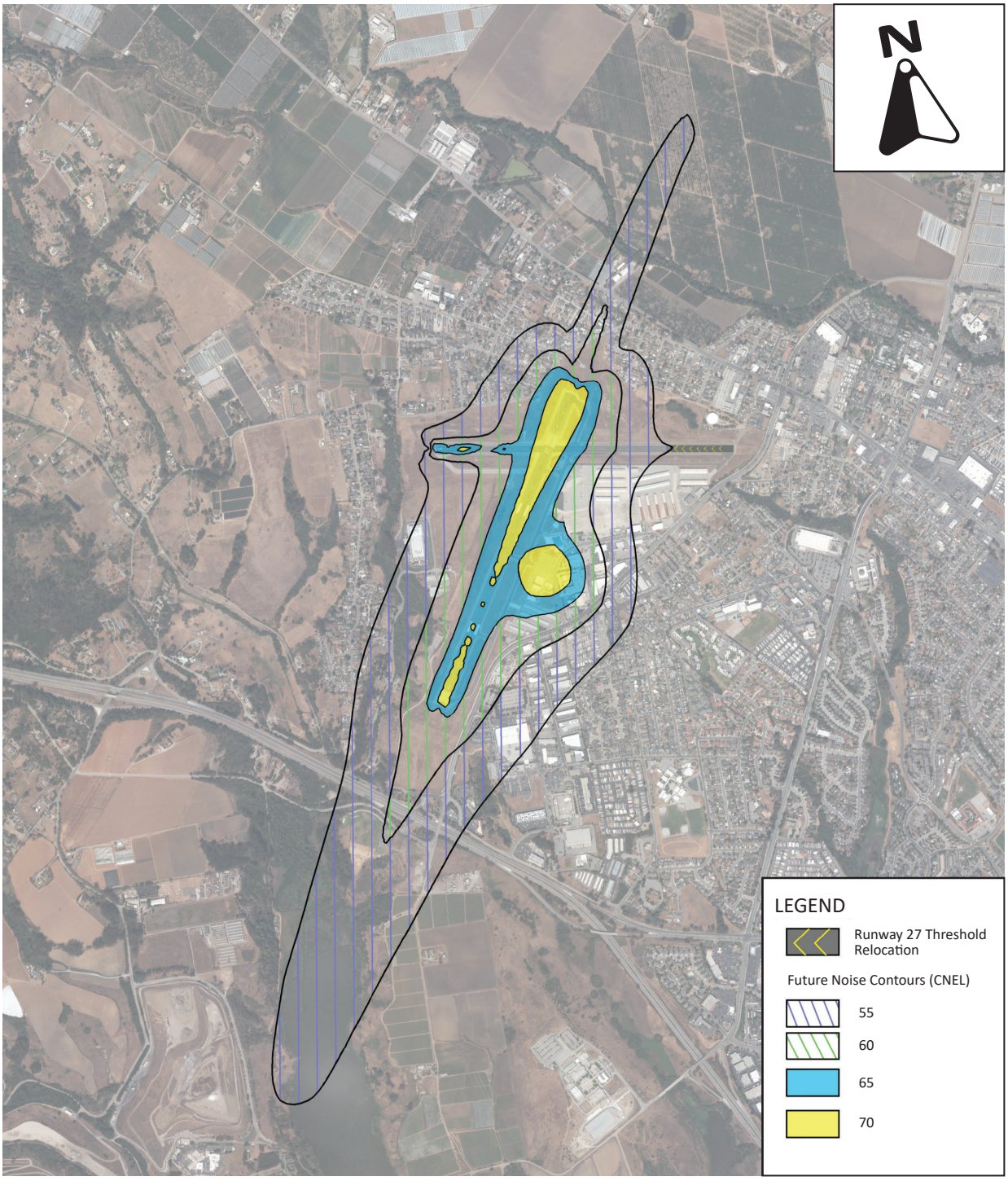
Land uses that are deemed compatible with the Airport are not included in this table.
*Population estimates assume 3.6 people per household as identified in the 2020 US Census for the Watsonville MSA.
Sources: WVI Airport Master Plan EIR (2003); Kimley-Horn Associates (2023).

Based on the updated 2040 Airport Master Plan noise contours, there would be three residential properties within the 65 dB contour. No existing or proposed schools (which includes Pajaro Valley High School) would be within any of the airport noise contours. To reduce operational noise impacts, the Project would be required to implement Mitigation Measures 4.7-A through 4.7-C in the 2003 EIR. Due to the overall reduction in aircraft noise, along with the continued implementation of mitigation measures identified in the 2003 EIR, the Project would not result in new or more severe aircraft-generated operational noise impacts than those disclosed in the 2003 EIR.



Source: WVI Airport Master Plan EIR, 2003.

APPROVED AIRPORT MASTER PLAN HORIZON YEAR 2020 NOISE CONTOURS | FIGURE 4.7-1



Source: Kimley-Horn Associates, 2023.

PROPOSED AMENDED AIRPORT MASTER PLAN HORIZON YEAR 2040 NOISE CONTOURS | FIGURE 4.7-2

T-Hangars Operational Noise Impacts

The 2003 EIR identified noise impacts associated with development of the proposed corporate T-hangars and required implementation of mitigation measures to reduce noise levels. The Project does not propose any changes to this component of the Airport Master Plan and, therefore, no further discussion of this impact is warranted.

Construction Phase Noise impacts

Similar to the approved Airport Master Plan, construction of the remaining facilities under the updated Airport Master Plan could result in noise impacts to surrounding residences. The new and modified projects under the updated Airport Master Plan would require similar levels of construction activity compared to the approved projects and would not add a substantial amount of new construction over the life of the Airport Master Plan horizon. Additionally, any new construction activities associated with the new and modified projects would be at least partially offset by the elimination of construction activities associated with projects contemplated in the 2003 EIR that are no longer proposed for implementation. The Project would be required to implement Mitigation Measures 4.7-E through 4.7-H in the 2003 EIR, which would minimize construction-related noise impacts by restricting construction hours, requiring sound control devices on equipment, and locating construction staging areas as far from residences as feasible. With implementation of required mitigation measures, the Project would not result in new or more severe construction noise impacts than those disclosed in the 2003 EIR.

4.7.3 Conclusion

The Project would not result in any new significant noise impacts that are substantially different from those described in the 2003 EIR. No new mitigation is required. There is no new information of substantial importance which was not known and could not have been known with the exercise of reasonable diligence. Finally, there are no changes to the circumstances under which the Project is undertaken that would result in more significant noise impacts than were previously analyzed.

4.8 WATER SUPPLY

4.8.1 Background

As described in Section 4.8 of the 2003 EIR, the Airport Master Plan projects would be served by the Watsonville Public Works and Utilities Department (WPWUD) and would connect to existing water system infrastructure. The 2003 EIR determined that the increase in aircraft operations and development under the 2003 Airport Master Plan would increase the amount of water consumption to 88.3 acre-feet-per-year (AFY) at full buildout. The increase in water usage would account for less than one percent of the City's water system capacity, which is 22,404 AFY. However, since the City of Watsonville primarily uses groundwater for its water supply, the 2003 EIR determined that water conservation measures would be required to ensure water supply impacts from the Airport Master Plan are less-than-significant. The 2003 EIR identified Mitigation Measures 4.8-A and 4.8-B which would require future developments under the Airport Master Plan to implement water conservation practices and be subject to impact fees assess by the City, resulting in a less-than-significant impact.

4.8.2 Project Impacts in Relation to 2003 EIR

The City of Watsonville's main sources of water supply are groundwater and surface water. In 2020 the City consumed 7,102 acre feet per year (AFY) of water and is projected to consume 8,255 AFY in 2040.[7] The projected water supply in 2040 is estimated to be 21,900 AFY during a normal year with a surplus of 13,676 AFY of water.[8] The City is expected to still have water supply surplus even during a five-year drought with water demand projected to be 7,789 AFY and supplies being 21,000 AFY in 2040 without activation of the City's Water Shortage Contingency Plan.[9] As a result, the circumstances surrounding the available water supply for the Airport have not changed substantially since preparation of the 2003 EIR.

The updated Airport Master Plan would generate water demand in a similar manner to the approved Airport Master Plan. Of the new and modified projects, Projects 22, 23, and 24 would generate additional water demand that was not contemplated in the 2003 EIR. Project 22 would increase the proposed square footage of the MES facility from 2,000 square feet to 4,050 square feet. However, the MES facility would be a structure utilized for the storage of maintenance equipment and would not generate a high level of water demand. Projects 23 and 24 would install aircraft wash racks, which would generate additional water demand for their operation. Conversely, the proposed elimination of the majority of the commercial/industrial projects (Projects 15A through 15E) from the updated Airport Master Plan would substantially reduce water use.

The Project would continue to be subject to Mitigation Measures 4.8-A and 4.8-B in the 2003 EIR, which require implementation of water conservation measures. For these reasons, the Project would not result in new or more severe impacts than those disclosed in the 2003 EIR.

[7] City of Watsonville. *City of Watsonville 2020 Urban Water Management Plan*. July 2021. Page ES-3.
[8] City of Watsonville. *City of Watsonville 2020 Urban Water Management Plan*. July 2021. Page 7-3.
[9] City of Watsonville. *City of Watsonville 2020 Urban Water Management Plan*. July 2021. Page 7-5.

4.8.3 Conclusion

The Project would not result in any new significant water supply impacts that are substantially different from those described in the 2003 EIR. No new mitigation is required. There is no new information of substantial importance which was not known and could not have been known with the exercise of reasonable diligence. Finally, there are no changes to the circumstances under which the Project is undertaken that would result in more significant water supply impacts than were previously analyzed.

4.9 LAND USE

4.9.1 Background

After reviewing existing and planned land uses surrounding the Airport for potential incompatibility with the Airport Master Plan, Section 4.9 of the 2003 EIR focused its analysis on the planned New Millennium High School located at 500 Harkins Slough Road. The 2003 EIR determined that the high school would not be within either the existing or future safety zones for the Airport. Therefore, impacts related to land use incompatibility would be less-than-significant. The 2003 EIR also concluded that all other land use impacts would be less-than-significant.

4.9.2 Project Impacts in Relation to 2003 EIR

The New Millennium High School described in the 2003 EIR was constructed and now is fully operational under the name Pajaro Valley High School. The high school project underwent a separate environmental review, which determined it would not be incompatible with the Airport. Pajaro Valley High School continues to be located outside the existing and proposed runway protection zones. There would be no land use conflict between the existing high school and the updated Airport Master Plan.

The new and modified Airport Master Plan projects would consist of aviation-related developments in areas of the Airport already used for aviation purposes. The City's current General Plan, the *Watsonville 2005 General Plan*, is the same General Plan that was in effect at the time the 2003 EIR was prepared. The Project would not change the nature of land uses at the Airport and would continue to be consistent with the General Plan. As a result, the Project would not result in new or more severe land use impacts than those disclosed in the 2003 EIR.

4.9.3 Conclusion

The Project would not result in any new significant land use impacts that are substantially different from those described in the 2003 EIR. No new mitigation is required. There is no new information of substantial importance which was not known and could not have been known with the exercise of reasonable diligence. Finally, there are no changes to the circumstances under which the Project is undertaken that would result in more significant land use impacts than were previously analyzed.

5.0 CEQA CONSIDERATIONS

5.1 UNAVOIDABLE ADVERSE IMPACTS

The 2003 EIR did not identify any significant unavoidable impacts resulting from improvements contained in the approved Airport Master Plan. As described in the impact sections above, the proposed update to the Airport Master Plan would not result in new or more severe impacts than those disclosed in the 2003 EIR. As a result, the modified Project would not result in any significant unavoidable impacts.

5.2 GROWTH INDUCEMENT

The 2003 EIR determined that projects in the Airport Master Plan represent improvements at the existing Airport and are directly related to Airport operations. The 2003 Airport Master Plan projects do not contain any residential components and, therefore, would not directly contribute to regional population growth. In addition, the 2003 Airport Master Plan would not result in population growth-inducing effects, as it would not create demand for new housing or introduce new public services or infrastructure to an area not serviced.

Similar to the projects in the 2003 Airport Master Plan, the new and modified projects under the updated Airport Master Plan would be aviation-related developments intended to support operations at the Airport and, therefore, would not result in new or more severe growth inducing impacts than those disclosed in the 2003 EIR.

5.3 CUMULATIVE IMPACTS

The 2003 EIR determined that cumulative impacts associated with the Project would be less-than-significant. The City's current General Plan, the *Watsonville 2005 General Plan*, is the same General Plan that was in effect at the time the 2003 EIR was prepared. As a result, cumulative conditions in the area surrounding the Airport are consistent with those contemplated in the 2003 EIR. As described in the impact sections above, the updated Airport Master Plan would not result in new or more severe project-level impacts than those disclosed in the 2003 EIR. The Project, therefore, would not result in new or more severe cumulative impacts than those disclosed in the 2003 EIR.

6.0 PROJECT ALTERNATIVES

As described in Sections 4.1-4.9, the Project would not result in new or more severe project-level impacts than those disclosed in the 2003 EIR. Additionally, as described in Section 5.3, the Project would not result in new or more severe cumulative impacts than those disclosed in the 2003 EIR. As a result, no new analysis of Project Alternatives is required.

Appendix A

Biological Impacts Memorandum

BIOLOGICAL IMPACTS MEMORANDUM
for the
PROPOSED AMENDMENT TO THE 2003 WATSONVILLE MUNICIPAL AIRPORT MASTER PLAN

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SEPTEMBER 2023

INTRODUCTION

The City of Watsonville (City) is the owner and operator of the Watsonville Municipal Airport (WVI). In 2003, the City prepared an Environmental Impact Report for the WVI Master Plan in compliance with the California Environmental Quality Act (CEQA). The City certified the EIR and approved the WVI Master Plan in 2003 and has been subsequently constructing various improvement projects identified in the Master Plan.

The City is proposing to adopt an Amendment to the 2003 WVI Master Plan (the Project). The purposes of this memorandum are 1) to identify any significant biological impacts of the Project, 2) to determine if such impacts will be consistent with those identified in the 2003 EIR, and 3) to determine if the mitigation measures identified in the 2003 EIR are still adequate.

OVERVIEW OF THE PROJECT

Table 1 lists the improvement projects to be constructed if the proposed amendment to the 2003 Airport Master Plan (the Project) is approved. The projects fall into one of three categories:

- Project is included in the 2003 Airport Master Plan and no changes to its scope are proposed.
- Project is included in the 2003 Airport Master Plan and revisions to its scope are proposed.
- Project is new (i.e., it was not included in the 2003 Airport Master Plan).

Note that several uncompleted projects in the 2003 Airport Master Plan are not listed in Table 1. Those projects are being dropped and are no longer planned for implementation. Figure 1 depicts the location of each project that would be constructed under the proposed amendment (NOTE: all figures are located at the end of the document).

Table 1: To-Be-Completed Projects in the Airport Master Plan

Project Number On Figure 1	Description Under Existing 2003 Airport Master Plan	Description Under Proposed Airport Master Plan Amendment
Runway Projects		
1	Extend Runway 2-20 by 800 feet to achieve full length of 5,301 feet	Extend Runway 2-20 by 680 feet to achieve full length of 5,181 feet

Table 1: To-Be-Completed Projects in the Airport Master Plan		
Project Number On Figure 1	**Description Under Existing 2003 Airport Master Plan**	**Description Under Proposed Airport Master Plan Amendment**
2	Not included	Relocate Runway 27 Threshold by 870 feet to meet Runway Visibility Zone (RVZ) standards
3	Extend Runway 9-27 by 255 feet to the west	No change
Taxiway Projects		
4	Not included	Reconfigure fence line along Taxiway A to meet FAA design standards
5	Not included	Widen existing paved shoulders on Taxiway C to meet FAA design standards
6	Not included	Reconfigure Taxiways A and C to address non-standard runway intersection angles and acute-angle runway entrance taxiways
7	Not included	Reconfigure Taxiway A to modify wide expanse of pavement at Runway 20 entrance
8	Not included	Reconfigure Taxiways B, C, and D to eliminate taxiways with direct access from apron to runways
9	Not included	Reconfigure apron and hangar area taxilanes to meet FAA design and separation standards
10	Not included	Update signage for Taxiways B, D, and E and runway entrance from Taxiways A and C
11	Construct new taxilane to existing hangar development	No change
Parachute Landing Area		
12	Not included	Move parachute landing area approximately 600 feet to the south

Table 1: To-Be-Completed Projects in the Airport Master Plan		
Project Number On Figure 1	**Description Under Existing 2003 Airport Master Plan**	**Description Under Proposed Airport Master Plan Amendment**
Airspace		
13	Not included	Remove obstacles from the Runway 20 Threshold Siting Surface (TSS) in order to remove 590-foot displaced threshold
General Aviation Facilities		
14	Expand GA Terminal Building to meet Airport and users' needs	No change
15	Design/Construct East T-hangars in Area 2	No change
16	Construct Apron in Storage Area 1	No change
17	Construct Apron and Hangar in Storage Area 8	No change
18	Construct Apron in Storage Area 3	No change
19	Construct hangars in Storage Area 4	No change
20	Construct hangars west of Runway 2-20	No change
21	Not included	Construct Heliport and connector taxilane
Support Facilities		
22	Construct 2,000 square-foot Maintenance Equipment Storage (MES) building	Construct 4,050 square-foot Maintenance Equipment Storage (MES) building
23	Not included	Construct aircraft wash rack based on guidance from Airport Cooperative Research Program (ACRP) Report 113
24	Not included	Construct aircraft wash rack based on guidance from ACRP Report 113
25	Not included	Install aboveground fuel facilities to replace underground tanks
26	Not included	Relocate Compass Rose

Table 1: To-Be-Completed Projects in the Airport Master Plan		
Project Number On Figure 1	**Description Under Existing 2003 Airport Master Plan**	**Description Under Proposed Airport Master Plan Amendment**
Source: WVI Master Plan Update, City of Watsonville, 2022.		

SUMMARY COMPARISON OF THE SIGNIFICANT BIOLOGICAL IMPACTS OF THE APPROVED AND PROPOSED WVI MASTER PLAN

Overview

The analyses contained in the 2003 EIR that was prepared for the approved WVI Master Plan concluded that implementation of the improvement projects contained in the Master Plan would result in the following significant biological effects:

- Impacts to Coastal Terrace Prairie Habitat
- Impacts to Santa Cruz Tarplant Habitat
- Impacts to Willow Riparian Habitat
- Impacts to Seasonal Wetland Habitat

The 2003 EIR described mitigation measures included in the project that would reduce these impacts to a less-than-significant level.

As described in the previous section, the City is proposing to amend the WVI Master Plan. Table 2 provides a summary comparison of the significant biological impacts and mitigation measures under both the approved and proposed amended WVI Master Plan.

Table 2: Comparison of Significant Biological Impacts [Expressed in Acres]						
	Existing Airport Master Plan		Proposed Amendment to Airport Master Plan			
Category	Impacts	Mitigation	Impacts To Date	Future Impacts	Total Impacts	Mitigation
Santa Cruz Tarplant	12.28	12.28	0	5.90	5.90	5.90
Coastal Terrace Prairie Habitat	5.54	5.54	0	1.88	1.88	1.88
Subtotal	17.82	17.82	0	7.78	7.78	7.78
Willow Riparian Wetland[1]	1.33	3.99	0	0.00	0.00	0.00
Wetland Swale[2]	N/A	N/A	0	0.33	0.33	0.99
Ephemeral Stream[2]	N/A	N/A	0	0.02	0.02	0.06
Ditch[2]	N/A	N/A	0	0.04	0.04	0.12
Seasonal Wetland	0.14	0.42	0	0.02	0.02	0.06

Note: Impacts to Santa Cruz Tarplant and coastal terrace prairie habitats mitigated at a 1:1 ratio. Impacts to aquatic resources mitigated at a 3:1 ratio.

[1]This habitat type was not identified in the 2008 aquatic resource delineation.
[2]This habitat type was not identified in the original 1999 delineation but was included in the 2008 delineation.

Source: City of Watsonville, ***EIR for the Watsonville Municipal Airport Master Plan***, 2003; Kimley-Horn Associates, 2023.

Note: The 2003 EIR also disclosed that the commercial/industrial development that was part of the Airport Master Plan would result in significant indirect impacts to the California Red-legged Frog and other sensitive species. That component of the Master Plan is proposed to be dropped and, therefore, this impact will not be discussed further in this memorandum.

DESCRIPTION OF THE EXISTING SANTA CRUZ TARPLANT MITIGATION PLAN

2001 Santa Cruz Tarplant Mitigation Plan Components

Background

The Watsonville Municipal Airport Draft Master Plan Final Environmental Impact Report (FEIR) – SCH 2002062089 was certified in December of 2002. The FEIR's Appendix B included an October 2001 *Mitigation Plan for Santa Cruz Tarplant and Coastal Terrace Prairie at the Watsonville Airport* (Santa Cruz Tarplant or "SCT" Mitigation Plan) which served as the basis for the mitigation strategy contained in the EIR's mitigation measures for impacts to SCT and Coastal Terrace Prairie habitat. The FEIR provided the following:

> **Impact 4.3-1:** Implementation of the proposed Master Plan would result in a loss of 5.54 acres of sensitive coastal terrace prairie habitat and 12.28 acres of habitat supporting the endangered Santa Cruz tarplant.
>
> **Mitigation 4.3-A** Implement Tarplant Mitigation Plan, as proposed, upon approval by the California Department of Fish and Game as executed with a Memorandum of Understanding.

(**Note:** A copy of the 2001 SCT Mitigation Plan was reviewed for this assessment, but the document was missing numerous elements including tables, 14 figures and 5 appendices. An updated SCT Mitigation Plan was prepared in November of 2007. Consequently, the summary described below is based on the 2001 SCT Mitigation Plan that was included in the certified EIR, as updated in 2007 where necessary and appropriate.)

The Draft EIR (DEIR) described the 2001 SCT Mitigation Plan components as follows:

1. Designate 25.58 acres of Airport lands as permanent conservation easements, wherein existing habitat of Santa Cruz tarplant and coastal terrace prairie will be protected and managed in perpetuity.
2. Establish and maintain new colonies of Santa Cruz tarplant in permanent easement areas to achieve at least 1:1 replacement of both tarplant numbers (allowing for 20% natural variability over time) and acreage to compensate for that lost by development. Avoid contamination of local gene pools of native vegetation. The mitigation target values will be based on data from the 1993 baseline survey.
3. Establish and maintain 5.54 acres of coastal terrace prairie in permanent easement areas to achieve at least 1:1 replacement of habitat lost to development. Avoid contamination

of local gene pools of native vegetation by re-planting with seed stock from on-site. The 1998 baseline survey of coastal terrace prairie acreage will provide the basis for determining mitigation target values.

4. Design and implement a program for maintenance and protection of Airport lands, including but not limited to permanent easement areas. The program will describe and formalize grassland management practices (primarily mowing), outline methods to control populations of invasive exotic weeds, and provide protection of sensitive habitat areas.

Summary

The 2001 SCT Mitigation Plan has four components including: 1) designate areas for compensatory mitigation efforts, 2) replace SCT losses through a 1:1 compensatory mitigation replacement ratio in protected areas, 3) replace Coastal Terrace Prairie habitat through a compensatory mitigation replacement ratio of 1:1 and 4) establish a stewardship program for protected areas. (**Note**: The draft 2007 SCT Mitigation Plan includes additional mitigation requirements that were not a part of the 2001 SCT Mitigation Plan including requirements for research and increasing seed bank density in protected areas.)

Component 1: Designating Protected Areas

Protect 25.58 acres of non-native grasslands as mitigation areas with permanent easements. These areas will be protected for mitigation of SCT acreage, individuals, and Coastal Terrace Prairie habitat. These non-native grasslands have suitable conditions for the compensatory mitigation efforts which includes planting of SCT and Coastal Terrace Prairie species at 1:1.

Component 2: Compensatory Mitigation for Individual SCT and Habitat Acreage

The 2001 SCT Mitigation Plan identifies an impact of 116,394 SCT individuals on 12.28 acres of SCT habitat. The 2001 SCT Mitigation Plan also states that the impact on individuals must be flexible to account for annual fluctuations in the populations over time. The compensatory replacement strategy involves the replanting of SCT so that individual plants are replaced and the area of the habitat that is impacted is replaced.

- The mitigation strategy for SCT impacts requires a 1:1 compensatory replacement for individual SCT plants and acreage.
- The mitigation is to occur on 23 “permanent easement” areas. (The 2007 plan includes 3 additional “contingency areas”.)
- The minimum time required before mitigation can be deemed successful is three years (growing seasons) after planting efforts have been completed.
- A phase of mitigation required for a particular phase of development must be successfully established before a new phase of development proceeds.

- Three areas, known as PE-5, TP-1 and TP-2 are to be used as reference sites for annual adjustments to the number of individual plants to account for fluctuations in population due to annual changes in the environment (e.g., rainfall).

Component 3: Establishing Coastal Terrace Prairie

In addition to replacing SCT individuals and their habitat at a 1:1 ration, the mitigation strategy calls for the replacement of Coastal Terrace Prairie as that habitat was described by Robert F. Holland in 1986 for the California Department of Fish and Game (*Preliminary descriptions of the terrestrial natural communities of California*).

- The mitigation strategy calls for the replacement of Coastal Terrace Prairie at a 1:1 ratio.
- The soils in the protected easement areas area all suitable for SCT and Coastal Terrace Prairie compensatory replacement.
- New areas are to be prepared by removing competitive non-native weeds, spring discing, fall discing to control weeds and ring rolling to prepare the seed bed. Seeding by ring rolling would occur before the end of October. Transplanting of native bunchgrasses and rushes follows the seeding and after sufficient rainfall has occurred to moisten the ground.
- New areas are established by the planting of site-collected seed of SCT, seeds of other Coastal Terrace Prairie component species including:

    - California brome (*Bromus carinatus*)
    - Suncups (*Camissonia ovata*)
    - Monterey centaury (*Centaurium muhlenbergii*)
    - California oatgrass (*Danthonia californica*)
    - Tufted hair grass (*Deschampsia cespitosa*)
    - California poppy (*Eschscholzia californica*)
    - Meadow barley (*Hordium brachyantherum*)
    - Slender rush (*Juncus tenuis*)
    - Sky lupine (*Lupinus nanus*)
    - Blue-eyed grass (*Sisyrinchium bellum*)
    - Johnny-tuck (*Triphysaria eriantha* ssp. *rosea*)
    - Artist's popcorn-flower (*Plagiobothrys chorisianus* ssp. *chorisianus*)

Component 4: Stewardship

The mitigation plan states that the Airport should design and implement a program for maintenance and protection of Airport lands, including but not limited to the permanent easement areas. The program would describe and formalize grassland management practices (primarily mowing), outline methods to control populations of invasive exotic weeds, and provide protection of sensitive habitat areas.

Current Status of the Mitigation Strategy

The official status of the 2001 SCT Mitigation Plan is unchanged. Since the FEIR was certified, it has served as the mitigation strategy for SCT and Coastal Terrace Prairie. Because no impacts have occurred, no mitigation has been required.

In 2003, CDFW provided comments on the 2001 SCT Mitigation Plan. It is likely that the updated 2007 SCT Mitigation Plan was prepared in response to those CDFW comments.

In a review of both documents, it is noted that several areas have not been implemented or changes have occurred including:

- The SCT Mitigation Plan was not finalized with CDFW – applies to the 2001 and 2007 SCT Mitigation Plan.
- Preparation of the CDFW MOU for implementation of the Mitigation Plan was not completed – required by the 2007 SCT Mitigation Plan
- Preparation of a stewardship plan has not commenced – applies to the 2001 and 2007 SCT Mitigation Plan.
- Implementation of a research program on SCT demography has not commenced – applies to the 2007 SCT Mitigation Plan
- CDFW has changed their vegetation classification system in California.
- The USFWS adopted critical habitat for the SCT in 2002 which includes property managed by the Airport.

Section 1 Recommendations

The 2001 SCT Mitigation Plan remains the mitigation strategy that was incorporated in the DEIR in 2002 and was included in the FEIR when it was certified. In April of 2003, CDFW provided comments on the 2001 SCT Mitigation Plan. In 2007 the 2001 SCT Mitigation Plan was updated; presumably in response to the comments provided by CDFW.

In general, implementation of the 2001 SCT Mitigation Plan and the updated 2007 Mitigation Plan would replace the functions and services of the SCT plants and habitat and Coastal Terrace Prairie habitat impacted by the implementation of the Airport Master Plan. The 2001 SCT Mitigation Plan provides suitable guidance on how to replace the functions and services of SCT habitat, Coastal Terrace habitat, and individual SCT plants. It also provides success criteria and adaptive management principles for ongoing stewardship. The document is dated in many respects in that it was prepared 21 years ago, was based upon older baseline data from 1993 and 1998 and was never officially adopted. Most elements of the strategy have not been

implemented largely because impacts have not occurred. The 2007 SCT Mitigation Plan is newer and contains additional requirements but is still based upon older survey data.

In response to the discussion above, Salix has identified 12 areas where we recommend revisions and/or updates to the 2001 SCT Mitigation Plan. These recommendations do not represent a comprehensive update to the SCT Mitigation Plan. Instead, they focus on key areas that need to be revised and/or updated.

1. **Incorporate the 2007 SCT Mitigation Plan into the Addendum EIR** – Even though it is recommended that the 2007 SCT Mitigation Plan be updated (see #12 below), as it currently stands the 2007 SCT Mitigation Plan represents the most recent version of a comprehensive mitigation strategy for SCT and Coastal Terrace Prairie habitat (Attachment A). Consideration should be given to the incorporation of the 2007 Plan in the Addendum EIR for the following reasons:

    a. The 2007 Plan is responsive to comments from CDFW.
    b. The 2007 Plan includes valuable research requirements.
    c. The 2007 Plan includes requirements for increased seed bank production.

2. **1993 Tarplant Habitat Acreage Baseline Survey Update** - The 2001 and 2007 Mitigation Plans are based upon the 1993 SCT baseline survey data for SCT abundance and acreage. The SCT data is now 30 years old and management practices at the Airport are likely different than management practices in 1993. A significant amount of new data is available including annual surveys of the SCT since 2012. The 1993 data can provide anecdotal information for background purposes, but the 2012-2023 surveys should be used for future mitigation actions and decision-making. Any new environmental document should include the original data that supports the 2001/2007 SCT Mitigation Plan but also provide context for 2023 by publishing the more contemporary data that is available (Figure 2).

    Additionally, the 1993 survey data overestimates the amount of SCT present within the Airport property today. The 2023 census identified a total of 24.19 acres of SCT habitat whereas the 2002 DEIR stated that 42.7 acres was present. The 2001 and 2007 SCT Mitigation Plan was developed under the premise that 42.7 acres was onsite.

3. **1993 Tarplant Plant Population Estimate** – Similar to the issue described in #2 above, the 2001 and 2007 Mitigation Plans rely upon 1993 data for SCT population estimates. As capital improvement projects are implemented with impacts to SCT, contemporary census data should be used and not the 1993 data. The most current census data is from 2023 (Figure 3).

4. **Coastal Terrace Prairie Vegetation Classification Update** - The use of the 1998 Robert Holland definition of Coastal Terrace Prairie for CDFW has been replaced by CDFW. CDFW now uses the vegetative classification system described in the California Native Plant Society *Second Edition of A Manual of California Vegetation*. This manual uses habitat alliances as a vegetation classification system. An alliance describes repeating patterns of plants across a landscape. Each alliance is defined by plant species composition, and reflects the effects of local climate, soil, water, disturbance, and other environmental factors. The alliance that most closely resembles the Coastal Terrace Prairie definition is the Coastal tufted hair grass - Meadow barley - California oatgrass meadow (Alliance Number 41.221.00). The mitigation strategy that requires a 1:1 replacement for Coastal Terrace Prairie would remain unchanged. However, with the concurrence of CDFW, the mitigation strategy would be applied to Coastal tufted hair grass - Meadow barley - California oatgrass meadow habitat instead.

5. **New Baseline Survey for the Coastal tufted hair grass - Meadow barley - California oatgrass meadow Alliance** - **After** approval of the Addendum EIR, a new baseline survey of the Coastal tufted hair grass - Meadow barley - California oatgrass meadow Alliance should be prepared to address the change in the vegetation classification system used by CDFW. The new land cover mapping should be prepared in consultation with CDFW staff. More importantly, the current location and amount of this habitat is based upon a September 1998 survey by John Gilchrist and it may overestimate the acreage of this habitat that is present today (Figure 4). Salix is unaware of any new baseline data that would replace the 1998 survey. There are likely changes that have occurred over the past 25 years that could alter the location and amount of this habitat. As projects are implemented that impact this habitat type, the area of impact and the areas that are available for mitigation should be based upon contemporary data.

6. **Prepare a New Baseline Survey of Mitigation Lands** – 2001/2007 SCT Mitigation Plans assume that there are areas of non-native grassland that are suitable to mitigate for SCT acreage losses, SCT individual plant losses and Coastal Terrace Prairie losses. Because the SCT habitat acreage has changed (gotten smaller), the number of plants have changed (fewer present) and the Coastal Terrace Prairie may be replaced by a new vegetative classification, it is likely that more land is currently proposed for permanent conservation than is required to mitigate the impacts.

7. **Prepare a Long-Term Maintenance and Monitoring Program** – As required by the EIR and the 2001 SCT Mitigation Plan, a stewardship program should be developed to address all the requirements for the in-perpetuity stewardship and monitoring

obligations associated with the SCT and the sensitive habitat. A maintenance and monitoring plan should be prepared before impacts occur.

8. **Prepare a Memorandum of Understanding (MOU)** – DEIR mitigation measure 4.3-A requires a MOU with CDFW for the implementation of the 2001 SCT Mitigation Plan. After discussions with CDFW Region 3 staff and if necessary, USFWS staff, a draft MOU should be prepared to comply with mitigation measure 4.3-A. The discussions with CDFW/USFWS should address the changes to the 2001 SCT Mitigation Plan in 2007 and potential future updates to that plan. A MOU or equivalent agreement with CDFW and/or USFWS should be prepared before impacts occur.

9. **Prepare an Updated Baseline Estimate of the Number of SCT Individuals to be Impacted** – The 2001 and 2007 SCT Mitigation Plan both require the replacement of SCT habitat acreage and tarplant individuals. Both of these documents relied upon baseline survey population data from 1993.

   An updated impact estimate was prepared for SCT individual plants. The estimate utilized the 2023 population estimate and the boundaries of the updated Master Plan. The information is presented in Table 3 below. This data provides a present-day impact assessment on the individual plants using census data that is more contemporary than the 1993 survey data. Future projects would compare the project footprint to the census data that was available the year the construction commenced (this methodology is further described in the 2001/2007 SCT Mitigation Plan).

10. **Prepare an Estimate of the Number of Acres of Tarplant Habitat to be Impacted by the Updated Master Plan** - A GIS query was prepared that estimated the number of acres of SCT habitat that will be converted by the implementation of the updated Master Plan and compared the anticipated impact to the original impact estimates of the 2003 FEIR. See Table 3 below.

11. **Prepare an Estimate of the Number of Acres of Coastal tufted hair grass – Meadow barley – California oatgrass meadow Alliance to be Impacted by the Updated Master Plan** – A GIS query was prepared that estimated the number of acres of Coastal Terrace Prairie as a surrogate for this sensitive habitat. The query assessed the number of acres that will be converted by the implementation of the updated Master Plan and compared the anticipated impact to the original impact estimates of the 2003 FEIR. See Table 3 below.

12. **Prepare an Update to the 2007 Tarplant Mitigation Plan** – After an action is taken by the Lead Agency on the EIR Addendum, the 2007 SCT Mitigation Plan should be updated

to reflect present day environmental conditions, changes to the status of the SCT throughout the region, changes to vegetation classification systems, the new RDP, changes in regulatory requirements and the newer data that has been collected over the past 16 years. The updated SCT Mitigation Plan would serve as the basis for coordination with CDFW and/or the USFWS.

DESCRIPTION OF THE EXISTING WETLAND MITIGATION PLAN

Description of the 2003 EIR Wetland Mitigation Plan

Background

The DEIR references the preliminary wetland delineation document that was prepared in 1999 by John Gilchrist & Associates. This delineation identified a total of 1.47 acres of jurisdictional wetlands on the Airport property. The delineation was confirmed by the U.S. Army Corps of Engineers (USACE) on February 10, 1999, and was valid for 5 years.

The DEIR summarizes the Wetland Mitigation Plan as follows:

> A Wetland Mitigation Plan has been prepared for the Airport, which outlines a program to mitigate project impacts on the loss of jurisdictional wetlands, as defined by the COE (JGA, March 2002; Appendix B). The overall goal of the mitigation program is to compensate for the proposed fill of approximately 1.47 acres of wetlands that will result from planned Airport improvements by replacing them at a 3:1 ratio.
>
> The site for the creation of new wetlands has already been designated on a 13-acre parcel owned by the Airport. The site is located within Harkins Slough, just south of Highway 1. The creation of the new wetlands will occur in three phases: site preparation, revegetation, and monitoring and maintenance.
>
> The proposed mitigation site lies at a relatively low elevation, and thus will not require extensive grading. Prior to agricultural uses of the property, the area had been part of the Harkins Slough wetland. Some minor soil contouring will occur to create the lower elevation riparian inundation area and the slightly higher elevation seasonal wetland. A portion of the Harkins Slough waterway will be realigned to a more natural sinuous channel, with an outlet structure constructed at the south end. Finally, a berm will be constructed from the existing farm access road to function as a water control structure to prevent flood waters from entering adjacent parcels.

The re-establishment of wetland vegetation is expected to happen naturally after the site has been restored. However, in order to increase the speed of revegetation, provide substantial plant diversity, and to prevent the establishment of non-native invasive species, active revegetation will take place as part of the mitigation plan. An attempt to restore the site to its historical wetland state will be made by planting some species which have been extirpated in the Watsonville Sloughs. A list of the recommended plant species can be found in the Wetland Mitigation Plan (Appendix B).

Monitoring and maintenance will be ongoing for at least a five-year period following revegetation of the new wetlands. If performance standards are not met, the monitoring will continue beyond the five-year period. Maintenance practices will include inspection and repair (if necessary) of hydraulic structures, inspection of vegetation, erosion control, trash and debris removal, and exotic species eradication. The details of the monitoring and maintenance provisions will not be provided until the final construction plans and specifications are complete.

The DEIR includes the following impact and mitigation requirement:

Impact 4.3-2: The proposed project would result in the loss of approximately 1.47 acres of jurisdictional wetland habitat, including 1.33 acres of willow riparian wetland and 0.14 acre of seasonal wetland.

Mitigation 4.3-B Incorporate the MVCD's [Santa Cruz County Mosquito and Vector Control District] best management practices for mosquito abatement into the Wetlands Mitigation Plan before final approval and implementation.

Mitigation 4.3-C Implement the Wetland Mitigation Plan, as proposed, upon approval by the Army Corps of Engineers, as executed with a Memorandum of Understanding.

<u>Wetland Mitigation Plan Summary</u>

Based upon the 1999 delineation and the 2002 DEIR mitigation measures, the Airport would be responsible for creating 4.41 acres of compensatory wetland to replace lost wetlands at a 3:1 ratio. The permittee-responsible compensatory mitigation project would occur on Harkins Slough on property owned by the Airport. The created wetland habitat would be monitored for five years to ensure performance standards were met. (See the discussion in the recommendation section below for changes to the aquatic resources delineation and the resulting changes to impacts.)

Current Status of the Wetland Mitigation Program
The Wetland Mitigation Plan summarized in the DEIR continues to represent the mitigation strategy for impacts to waters of the U.S. No part of the Plan has been implemented because no impacts have occurred.

Status of the Wetland Delineation - The 2002 DEIR Wetland Mitigation Plan was based upon a 1999 delineation that was verified by the USACE for five years. A new delineation was prepared by Jeff Glazner, at North Fork Associates in 2008 which was verified by the USACE on November 4, 2009. The USACE verification was valid for five years and expired on November 4, 2014.

In September of 2023, Jeff Glazner, now the Principal Biologist at Salix Consulting, Inc., reviewed the 2008 delineation for currency and accuracy and concluded that the 2008 delineation, with the 2023 validation, represents the most current information available to describe the type, amount, and location of aquatic resources within the project boundaries. Because it represents the most accurate data available, the 2008 delineation should be used in the Addendum EIR as a replacement for the 1999 delineation. Table 3 below provides an update to the anticipated impacts to aquatic resources based upon the 2008 delineation.

Implementation of the Wetland Mitigation Plan
Salix is unaware of any impacts to waters of the U.S. or waters of the State that would have required mitigation. Salix is unaware of any compensatory mitigation project having been implemented on Harkins Slough or other locations. Salix is further unaware of any purchase of mitigation bank credits or in lieu fee credits as compensation for impacts to waters of the U.S. The DEIR's Wetland Mitigation Plan remains a requirement of the EIR, but no implementation has occurred because buildout of the Master Plan to date has not resulted in any impacts to wetlands.

If impacts occur, it will be necessary to implement an onsite permittee responsible mitigation plan as described in the EIR.

Section 2 Recommendations

1. Utilize the 2008 USACE verified delineation for the description of aquatic resources. The 2008 aquatic resources delineation is the most up-to-date information available on the distribution of aquatic resources. Based upon 2008 mapping, the updated Master Plan currently has no impacts on aquatic resources – see Table 3 below.

2. Modify the impact statement 4.3-2 as follows: The proposed project would result in the loss of approximately 0.41 acre of aquatic resource habitat, including 0.33 acre of

wetland swale, 0.02 acre of ephemeral stream, 0.04 acre of ditch and 0.02 acre of seasonal wetland.

3. Prior to impacts occurring there should be an updated aquatic resources delineation completed and submitted to the USACE with a request for an approved jurisdictional determination (AJD) to determine if they have jurisdiction over any of the aquatic resources proposed to be impacted. The delineation will also require the USACE to address the recent Supreme Court decision on the limits of federal jurisdiction and where State requirements will apply.

4. Modify the 2002 DEIR Wetland Mitigation Plan to include the use of mitigation banks or USACE-sponsored in lieu fee programs in addition to the original mitigation measure to implement a permittee-responsible mitigation project on Airport property. The use of mitigation banks or an in-lieu fee program is supported by the USACE Final Rule – Compensatory Mitigation for losses of Aquatic Resources published in the Federal Register on April 10, 2008 (33 CFR Part 332). Additionally, the use of a mitigation bank or the purchase of an in-lieu fee credit would allow for offsite mitigation which is supported by the FAA Advisory Circular No. 260/200-33B (Hazardous Wildlife Attractants On or Near Airports). Lastly, the current compensatory mitigation ratio of 3:1 may be higher than the ratios that apply to mitigation banks or in-lieu fee programs. Consequently, it may be appropriate to retain the 3:1 ratio for the permittee-responsible mitigation that was originally proposed in 2002 but to provide for a lower ratio that could come from using a mitigation bank or in-lieu fee program by allowing the USACE to apply a compensatory ratio at the time the permit is issued. The Final Rule at 33 CFR Part 332 provides the following direction (paraphrased)

Section 332.3 General Compensatory Mitigation Requirements.

(b) Type and location of compensatory mitigation

(1) When considering options for successfully providing the required compensatory mitigation, the district engineer shall consider the type and location options in the order presented in paragraphs (b)(2) through (b)(6) of this section.

(b)(2) Mitigation Bank Credits
(b)(3) In-lieu Fee Program Credits
(b)(4) Permittee-responsible mitigation under a watershed approach
(b)(5) Permittee-responsible mitigation through on-site and in-kind mitigation
(b)(6) Permittee-responsible mitigation through off-site and/or out-of-kind mitigation

5. Add a mitigation requirement to comply with the State of California requirements for impacts to waters of the State.

SIGNIFICANT BIOLOGICAL IMPACTS OF THE PROPOSED AMENDMENT TO THE APPROVED AIRPORT MASTER PLAN

SECTION 3: Impacts to Santa Cruz Tarplant and Coastal Terrace Prairie Habitats

Impacts to Santa Cruz Tarplant Habitat

Based upon the 2023 Santa Cruz Tarplant (SCT) census, there are 24.187 acres of SCT habitat with approximately 900,480 individuals on 32 separate habitat areas. At full buildout of the updated Master Plan, there would be 5.90 acres of SCT habitat impacted based upon the habitat acreage identified in the 2023 census (Figure 6).

Impacts to Coastal Terrace Prairie Habitat

A 1998 survey identified 22.10 acres of Coastal Terrace Prairie Habitat throughout the Airport property. The 1998 survey data was used in the 2002 DEIR to assess the impacts associated with the Master Plan. The number of acres that are considered Coastal Terrace Prairie habitat has not been updated since 1998. Based upon a query of the updated Master Plan with the 1998 data, the project will impact 1.88 acres of Coastal Terrace Prairie habitat (Figure 7).

If a landcover update is prepared for the Airport study area at a future date, the location of the Coastal tufted hair grass - Meadow barley - California oatgrass meadow habitat should be identified as a replacement for Coastal Terrace Prairie.

Impact to Individual Santa Cruz Tarplants

The DEIR presents population data for individual plants from 1993, 1998, 1999, 2000 and 2001. Additional census data is available from 2012-2023. The 2023 census identified approximately 900,480 individual plants. The 5.90 acres of impact will result in an estimated loss of 147,780 individual plants based upon the 2023 census data. The majority of the impacts will occur on a single 9.5-acre habitat patch where it is estimated that 145,000 plants could be impacted.

Adequacy of Existing Santa Cruz Tarplant Mitigation Plan

With the recommended updates to the Tarplant Mitigation Plan described in Section 1 above, the Plan would adequately mitigate impacts to Santa Cruz Tarplant habitat and individuals. No new mitigation is required.

SECTION 5: Impacts to Willow Riparian and Seasonal Wetland Habitats

Impacts to Willow Riparian Wetland Habitat

The DEIR Biological Resources chapter describes wetland habitat impacts resulting from the implementation of the 2003 Master Plan. The EIR states that there is a total of 1.47 acres of jurisdictional wetlands on the Airport property in three separate areas. The DEIR does not provide an acreage breakdown of each of these aquatic resources, but it does state that the Willow Riparian Wetland is approximately 1.33 acres in area. (Note: A breakdown of the individual wetlands and information on the delineation is presented in the DEIR's Appendix B which is missing the February 1999 wetland delineation.) The DEIR required a 3:1 compensatory mitigation ratio for wetland impacts habitat resulting in the need to create 3.99 acres of wetland habitat to compensate for impacts to Willow Riparian wetland.

The updated aquatic resources delineation prepared by North Fork Associates in 2008 (and verified by the USACE in 2009) did not include a delineation of Willow Riparian Habitat. Where the Willow Riparian Habitat is depicted in the Jurisdictional Wetlands Figure in the DEIR (Figure 4.3.3), North Fork Associates did not identify any aquatic resources. The 2008 delineation did identify a single 1.71-acre Willow Scrub Wetland but in an entirely different location on the site.

Based upon the most recent aquatic resources delineation, there is no Willow Riparian Wetland Habitat present. The Willow Scrub Wetland that was identified in the 2008 delineation report is not impacted by the updated Master Plan (see Table 3 below).

Impacts to Seasonal Wetland Habitat

The 2002 DEIR identified 0.14-acre of impacted Seasonal Wetland Habitat. The DEIR's 3:1 compensatory mitigation ratio would result in the need to create 0.42 acre of new wetland habitat.

The 2008 aquatic resources delineation identified 0.36 acre of seasonal wetlands, but the location of these wetlands is different than the 1999 delineation (Figure 8). Based upon the most recent aquatic resources delineation the impacts to seasonal wetland habitat are 0.02 acre and the compensatory mitigation requirement would require 0.06 acre of aquatic resource habitat to be created (see Table 3 below).

Impacts to Wetland Swale, Ephemeral Stream, and Ditch

The 1999 delineation and the 2002 DEIR did not identify wetland swale, ephemeral stream, and ditch as aquatic resources present within the project boundary. The 2008 delineation did identify these resources (Figure 8). All three of these aquatic resources have impacts including wetland swale (0.33 acre), ephemeral stream (0.02 acre) and ditch (0.04 acre). The

compensatory mitigation requirement would require 1.17 acre of aquatic resource habitat to be created (see Table 3 below) to replace the functions and services of these aquatic resources.

Comparison of Wetland Data and Mitigation Requirements

Data Comparison

A direct comparison between the 2002 DEIR assumptions and the 2023 baseline condition is difficult for the following reasons:

- The 2002 DEIR used a 1999 delineation to determine the number of acres onsite and the number of acres that are to be impacted. That delineation is out of date and subsequent USACE verified delineation identified different resources in different locations.
- The 1999 delineation is not available for review because it is missing from Appendix B.
- The most recent data for the presence of aquatic resources is a 2008 delineation prepared by Jeff Glazner of North Fork Associates that was verified by the USACE in November of 2009. The 2008 delineation was reviewed by Jeff Glazner of Salix Consulting, Inc. to determine if the 2008 delineation still accurately describes the location, type and amount of aquatic resources present within the project boundaries.
- The 1999 delineation used different terminology to characterize wetland types (e.g., the DEIR's Willow Riparian Wetland type is not described or identified in the 2008 delineation report.)

Mitigation Strategy Comparison to Contemporary Requirements

The 2003 EIR requires a 3:1 mitigation ratio for the replacement of wetlands. It further requires an onsite, permittee responsible mitigation project on property owned by the Airport.

A compensatory mitigation ratio of 3:1 for a permittee responsible mitigation project is anticipated to be sufficient to satisfy contemporary USACE requirements in the San Francisco District. It is not possible to verify this assumption without an actual permit application being presented to the USACE for review. The USACE may apply a lower mitigation ratio if mitigation banks and/or an in-lieu fee program (if one was available in the future) because of the USACE's preference for the use of these programs instead of a permittee responsible project.

The area that is not sufficiently addressed in the DEIR is the possibility that the USACE's jurisdiction is more limited now than in 2003 due to the recent Sackett v. U.S. EPA decision on wetlands. If the USACE jurisdiction over wetlands at the Airport becomes limited, it is likely that the State's requirements under the Porter-Cologne Act will trigger a separate permitting process. The mitigation standards to replace wetland functions and services for waters of the State will be defined by the Regional Water Quality Control Board and not the USACE.

SECTION 6: Adequacy of Existing Wetland Mitigation Plan

With the recommended updates to the Wetland Mitigation Plan described in Section 2 above, the Plan would adequately mitigate impacts to aquatic resources. No new mitigation is required.

CONCLUSION

The following table summarizes the 2003 baseline condition, the impacts that were anticipated for 2003, the updated 2023 Baseline (subject to the limitations of the data) and the impacts associated with the buildout of the updated Master Plan.

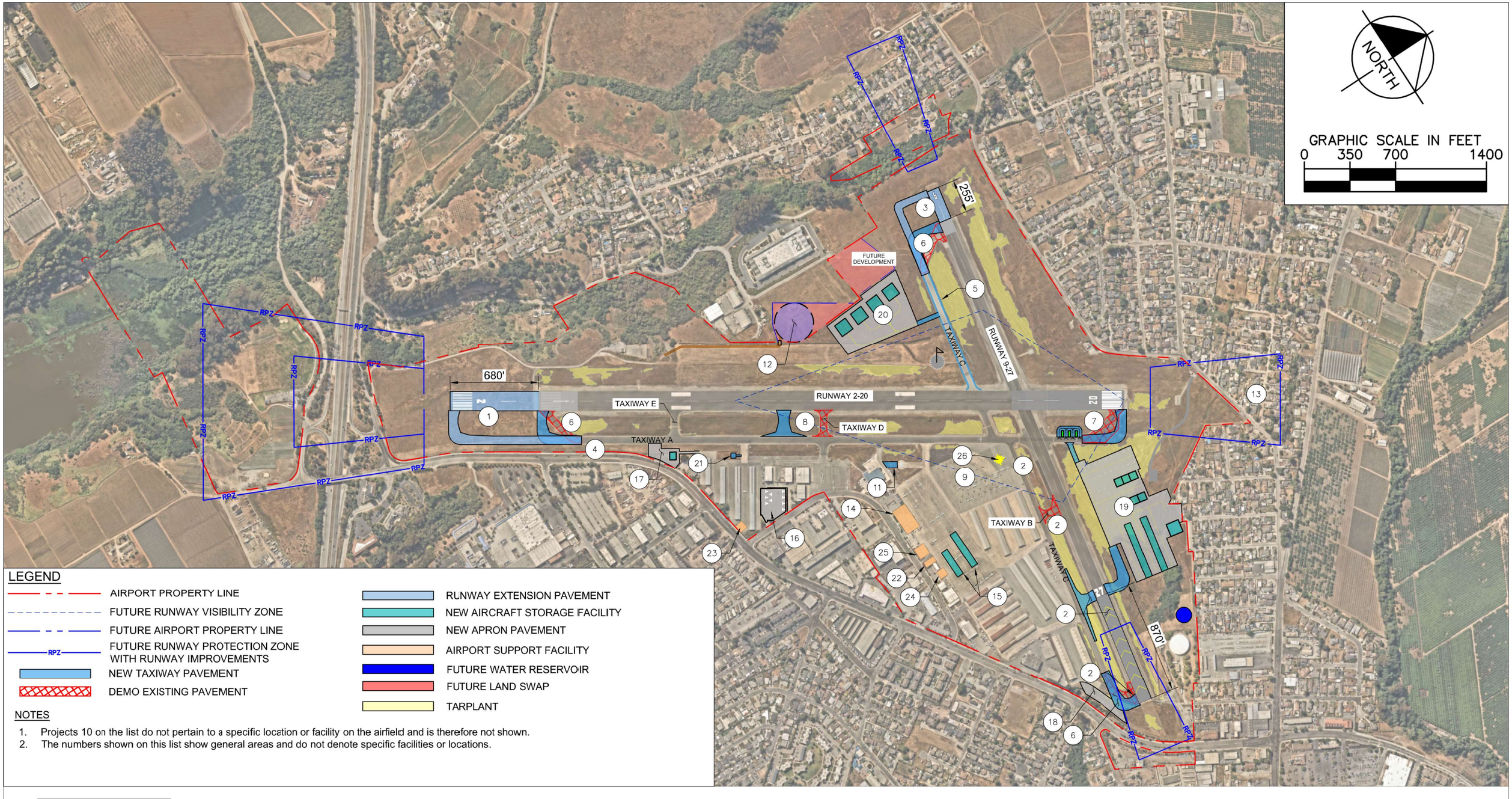
Table 3
Summary of Biological Resource Impacts

Habitat Type	2003 Baseline	2003 Impacts	2023 Baseline[1]	RDP Buildout Impacts
SCT Habitat Acreage	42.7	12.28	24.19	5.90
Coastal Terrace Prairie Acreage[2]	22.10	5.54	22.10	1.88
SCT Individuals (2001 survey)	2,491,465	Not Known	900,480	147,780
Seasonal Wetlands[1]	Not Available	0.14	0.36	0.02
Willow Riparian Habitat[1]	Not Available	1.33	Not included	0
Wetland Swale	Not included	N/A	1.14	0.33
Ephemeral Stream	Not included	N/A	0.12	0.02
Ditch	Not included	N/A	0.56	0.04

[1]The EIR considers willow riparian habitat and the seasonal wetlands as wetland habitat subject to the jurisdiction of the USACE. Because the 1999 wetland delineation is not available for review, it is not possible to review the delineation to know precisely evaluate the baseline condition for the DEIR, the methodology used for the delineation and whether or not the habitat is under state or federal jurisdiction. A December 2008 delineation was prepared by North Fork Associates and verified by the USACE in November of 2009. That delineation identified a total of 16.45 acres of waters of the U.S. The Willow Riparian Habitat that was identified in 1999 was not delineated in 2008. In that the 2009 USACE verified delineation is the most current data available, it is used to describe the 2023 baseline for the assessment of impacts.

[2]The 2023 baseline for Coastal Terrace Prairie is based upon the 1998 data used to prepare the 2002 DEIR. A new delineation of this sensitive habitat has not been prepared. The DEIR states that there was 22.10 acres of Coastal Terrace Prairie. The GIS data for the 1998 baseline shows that there is 22.66 acres of existing habitat; a discrepancy of 0.56 acres.

The Project would not result in any new significant biological impacts that are substantially different from those described in the 2003 EIR. In fact, based on the analysis in this memo, biological impacts will be substantially less than what was disclosed in the 2003 FEIR. No new mitigation is required. There is no new information of substantial importance which was not known and could not have been known with the exercise of reasonable diligence. Finally, there are no changes to the circumstances under which the Project is undertaken that would result in more significant biological impacts than were previously analyzed.



LEGEND

- AIRPORT PROPERTY LINE
- FUTURE RUNWAY VISIBILITY ZONE
- FUTURE AIRPORT PROPERTY LINE
- FUTURE RUNWAY PROTECTION ZONE WITH RUNWAY IMPROVEMENTS
- NEW TAXIWAY PAVEMENT
- DEMO EXISTING PAVEMENT
- RUNWAY EXTENSION PAVEMENT
- NEW AIRCRAFT STORAGE FACILITY
- NEW APRON PAVEMENT
- AIRPORT SUPPORT FACILITY
- FUTURE WATER RESERVOIR
- FUTURE LAND SWAP
- TARPLANT

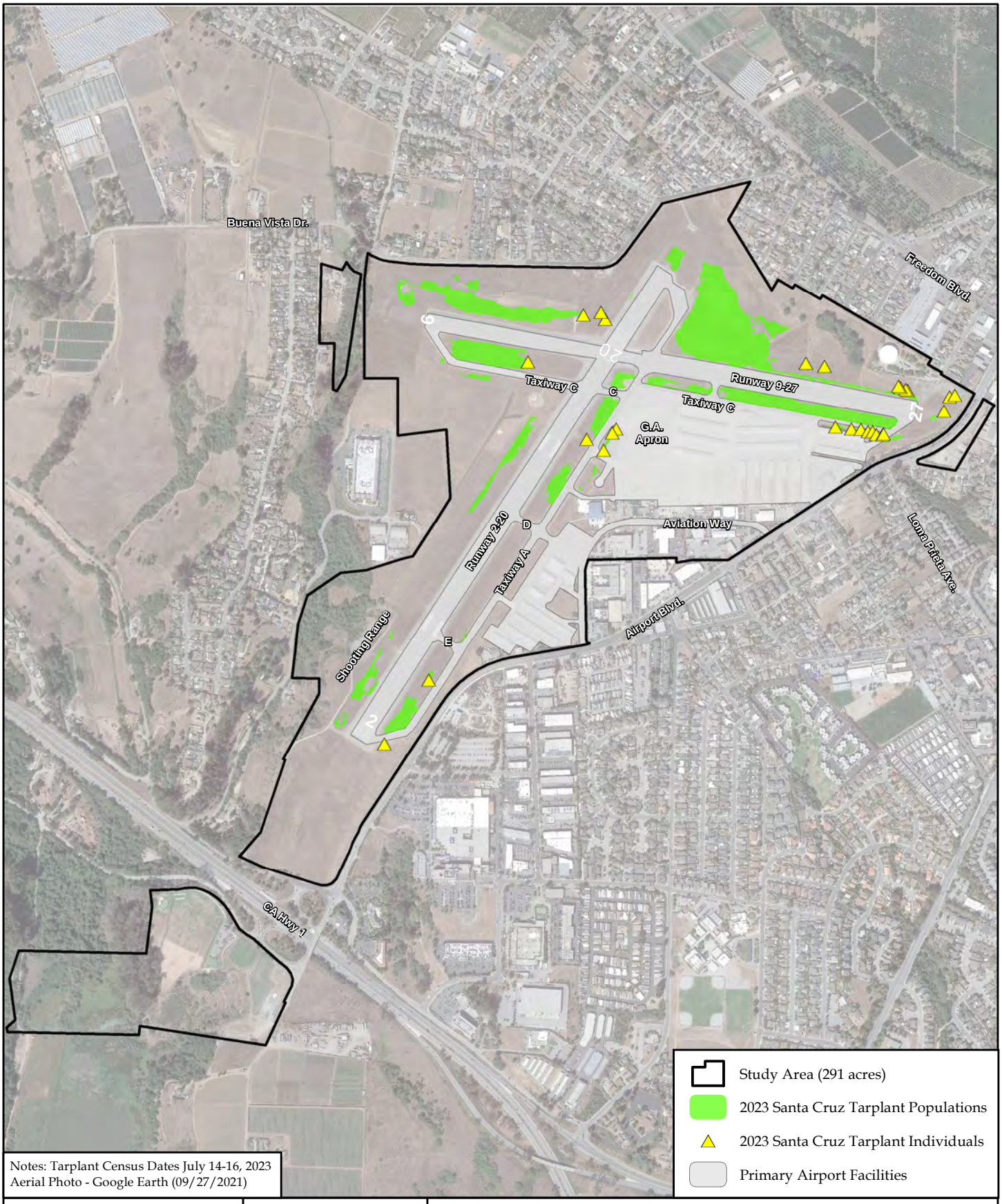
NOTES

1. Projects 10 on the list do not pertain to a specific location or facility on the airfield and is therefore not shown.
2. The numbers shown on this list show general areas and do not denote specific facilities or locations.

TO-BE-COMPLETED PROJECTS IN THE AIRPORT MASTER PLAN

Figure 1

NOVEMBER 2022



Notes: Tarplant Census Dates July 14-16, 2023
Aerial Photo - Google Earth (09/27/2021)

Salix consulting, inc.

N

0 600 1,200

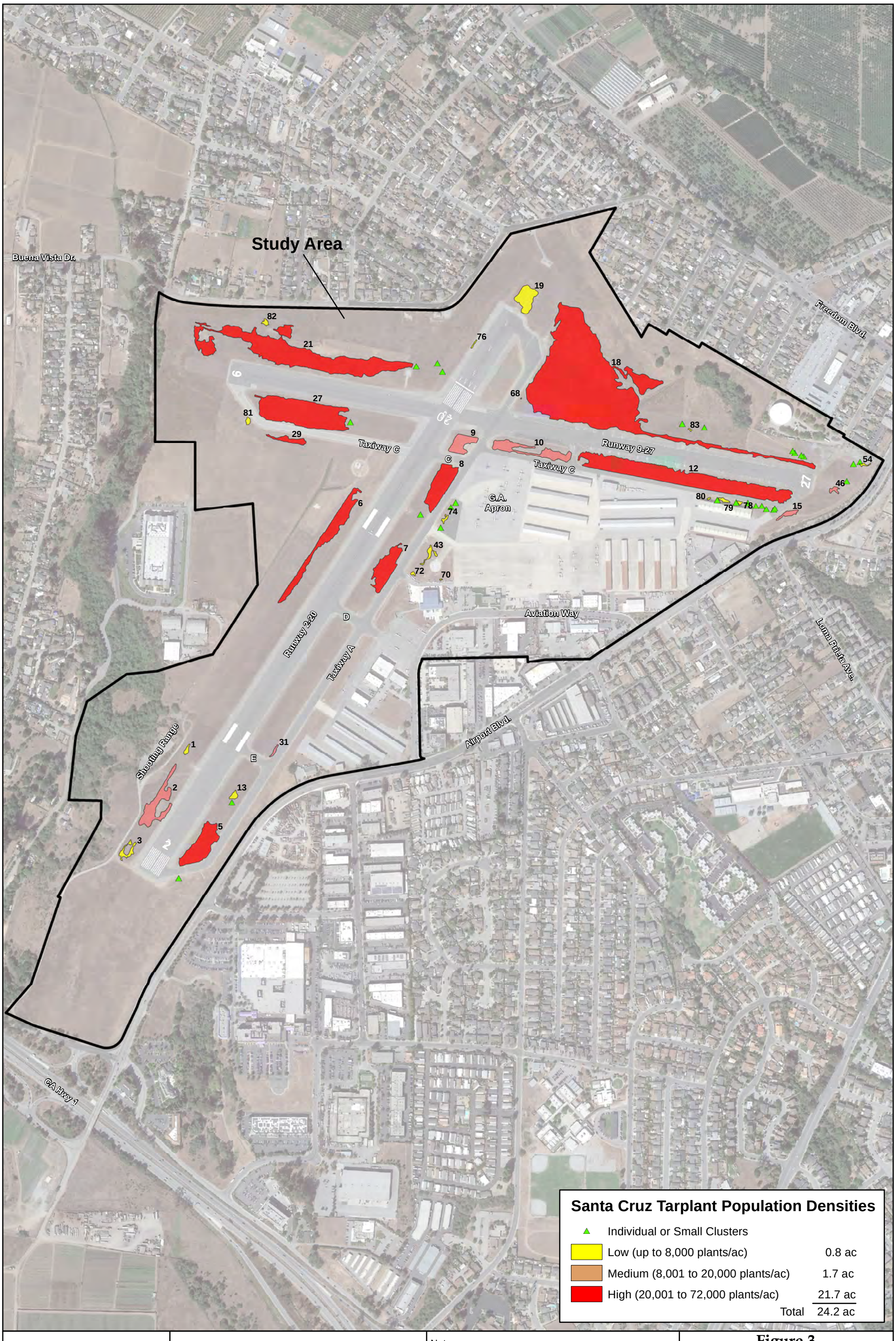
Feet

Figure 2

Baseline Condition - Santa Cruz Tarplant Populations

Watsonville Municipal Airport

City of Watsonville, CA



Notes:
Tarplant Census Dates July 14-16, 2023
Aerial Photo - Google Earth (09/27/2021)
Study Area - 291 acres

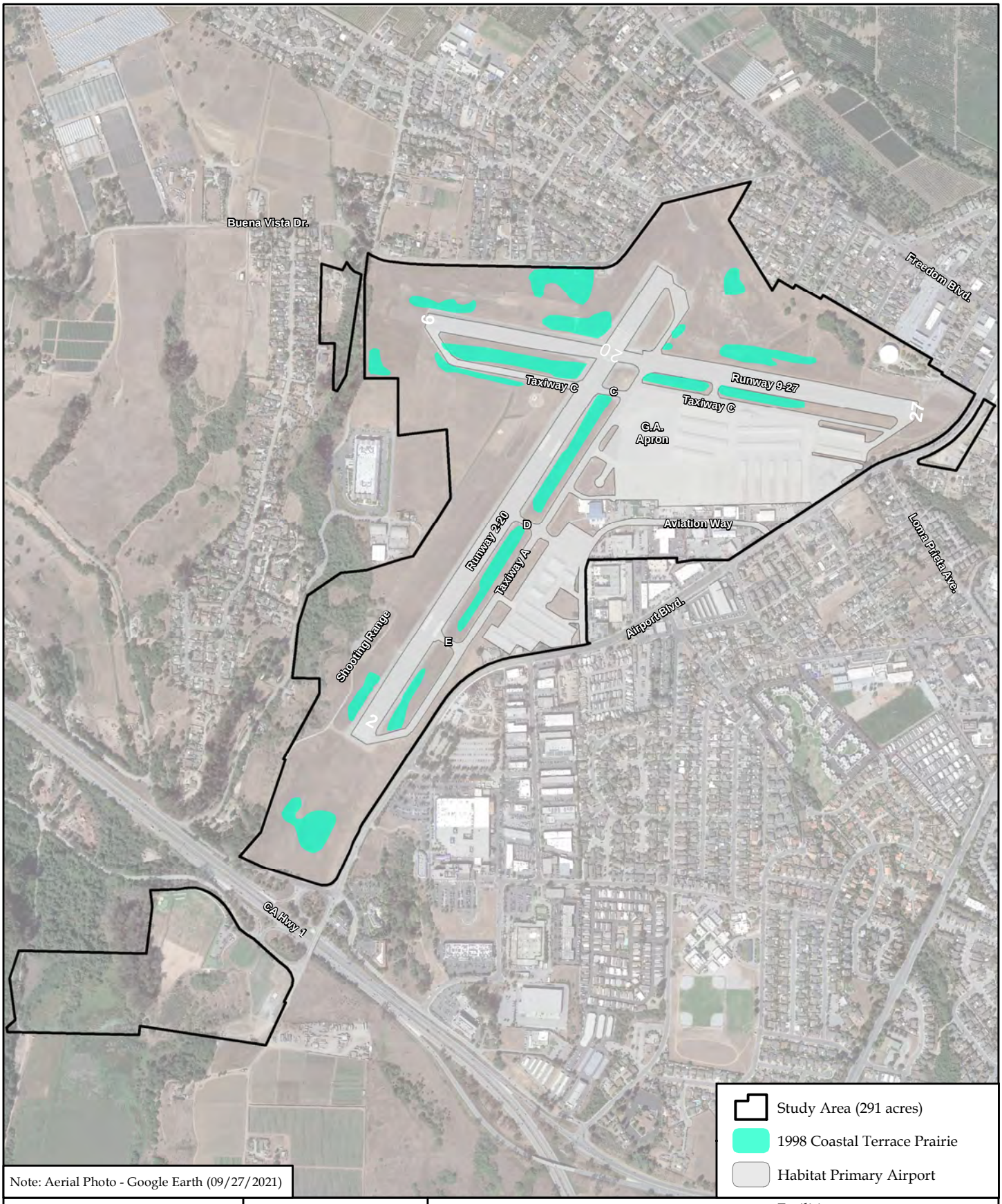
Figure 3

SANTA CRUZ TARPLANT AREAS 2023

Watsonville Municipal Airport

City of Watsonville, CA

7-31-23



Note: Aerial Photo - Google Earth (09/27/2021)

Salix consulting, inc.

N

0 600 1,200

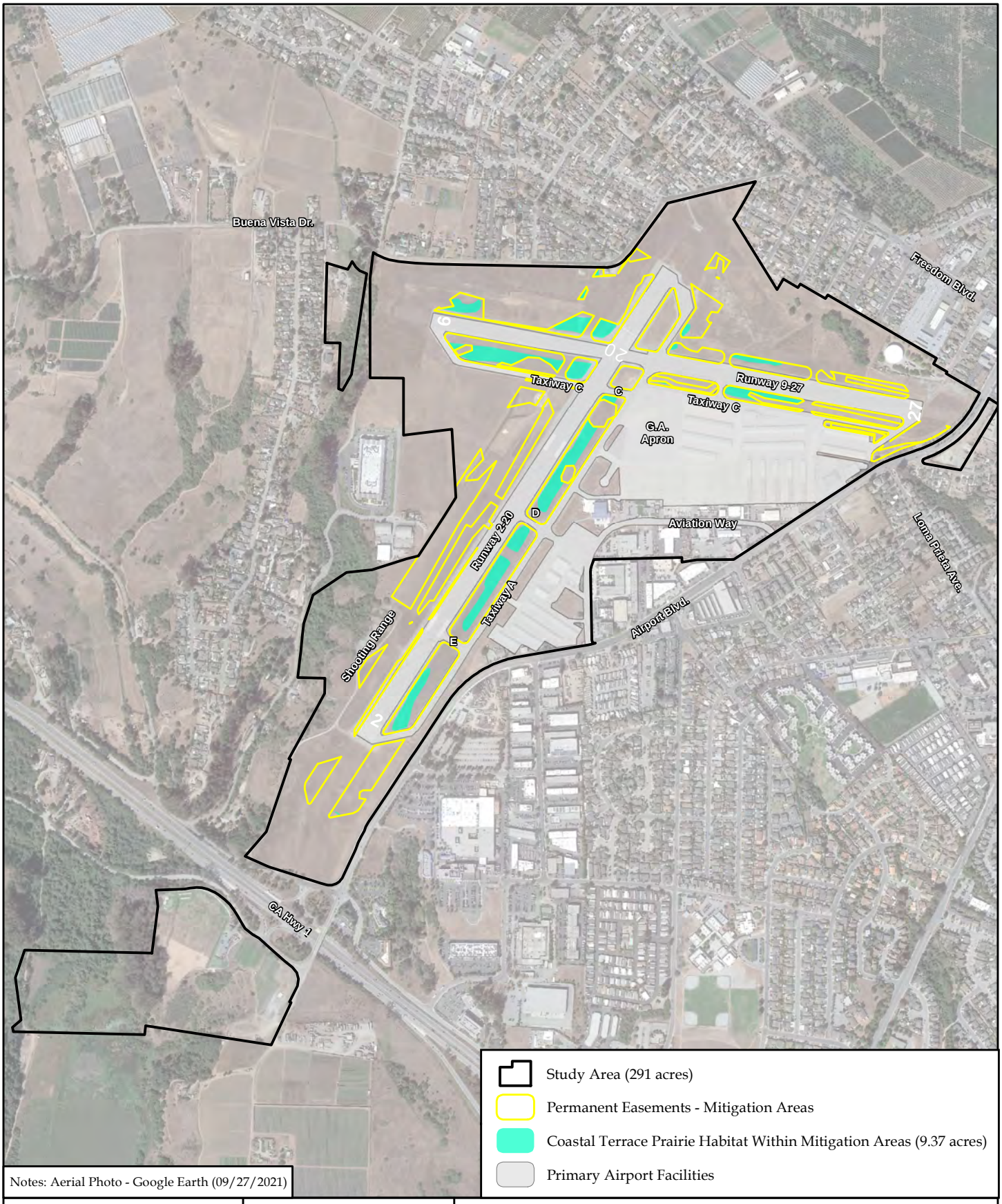
Feet

Figure 4

Baseline Condition - Coastal Terrace Prairie Habitat

Watsonville Municipal Airport

City of Watsonville, CA



Notes: Aerial Photo - Google Earth (09/27/2021)

Salix consulting, inc.

N

0 600 1,200

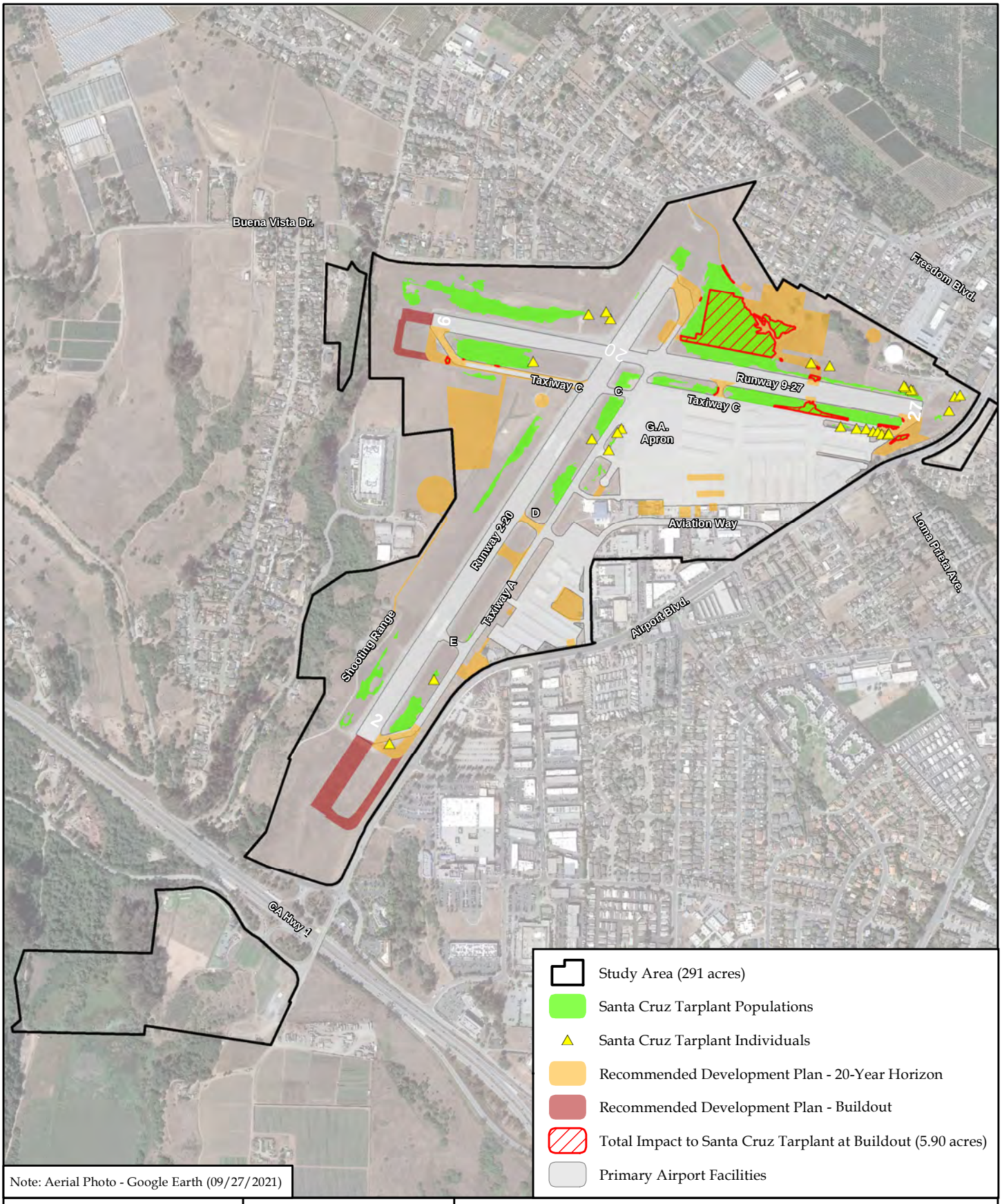
Feet

Figure 5

Coastal Terrace Prairie Habitat - Mitigation Areas

Watsonville Municipal Airport

City of Watsonville, CA



Note: Aerial Photo - Google Earth (09/27/2021)

Salix consulting, inc.

N

0 600 1,200

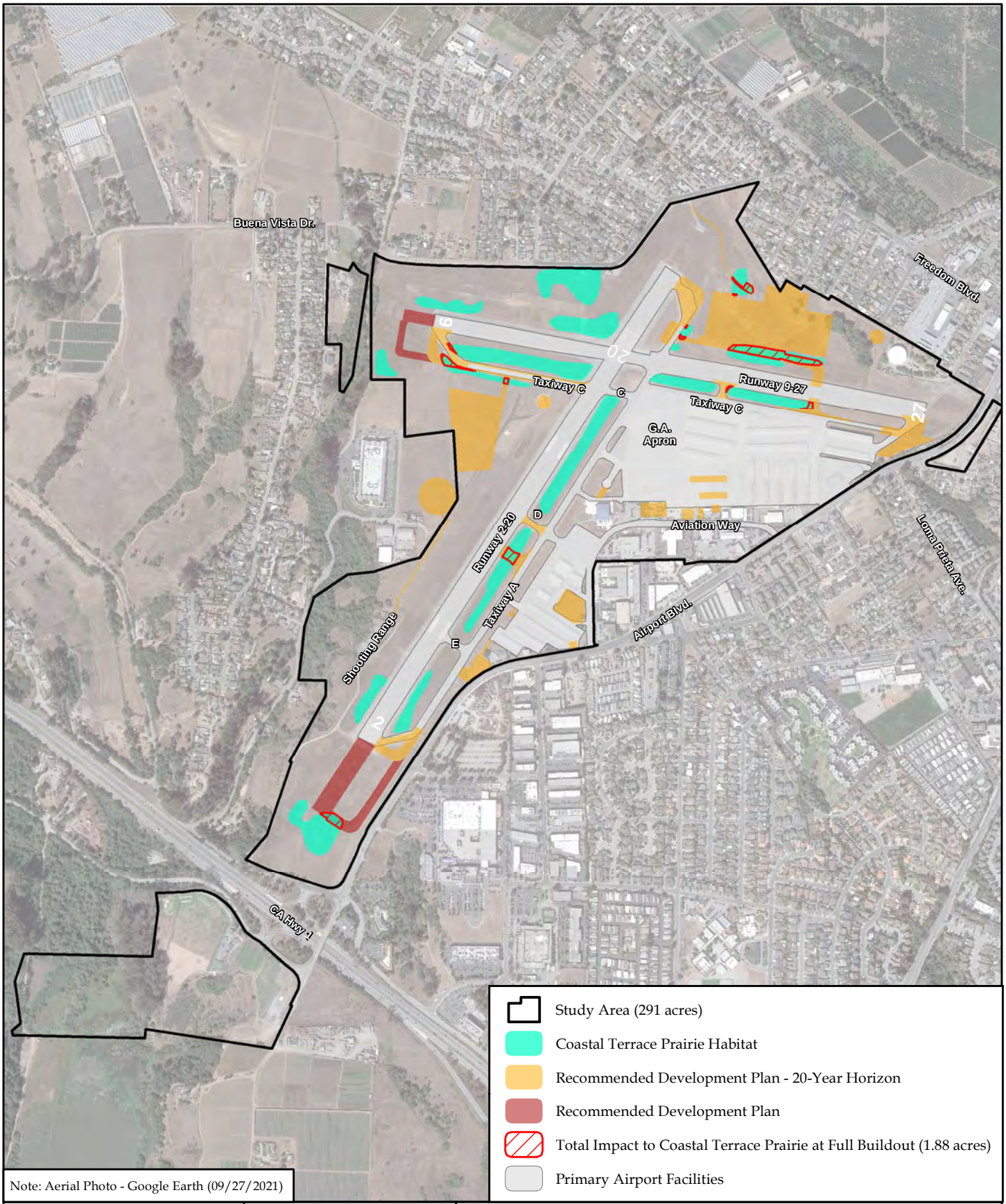
Feet

Figure 6

Potential Impacts - Santa Cruz Tarplant Populations

Watsonville Municipal Airport

City of Watsonville, CA



Note: Aerial Photo - Google Earth (09/27/2021)

Salix consulting, inc.

N

0 600 1,200

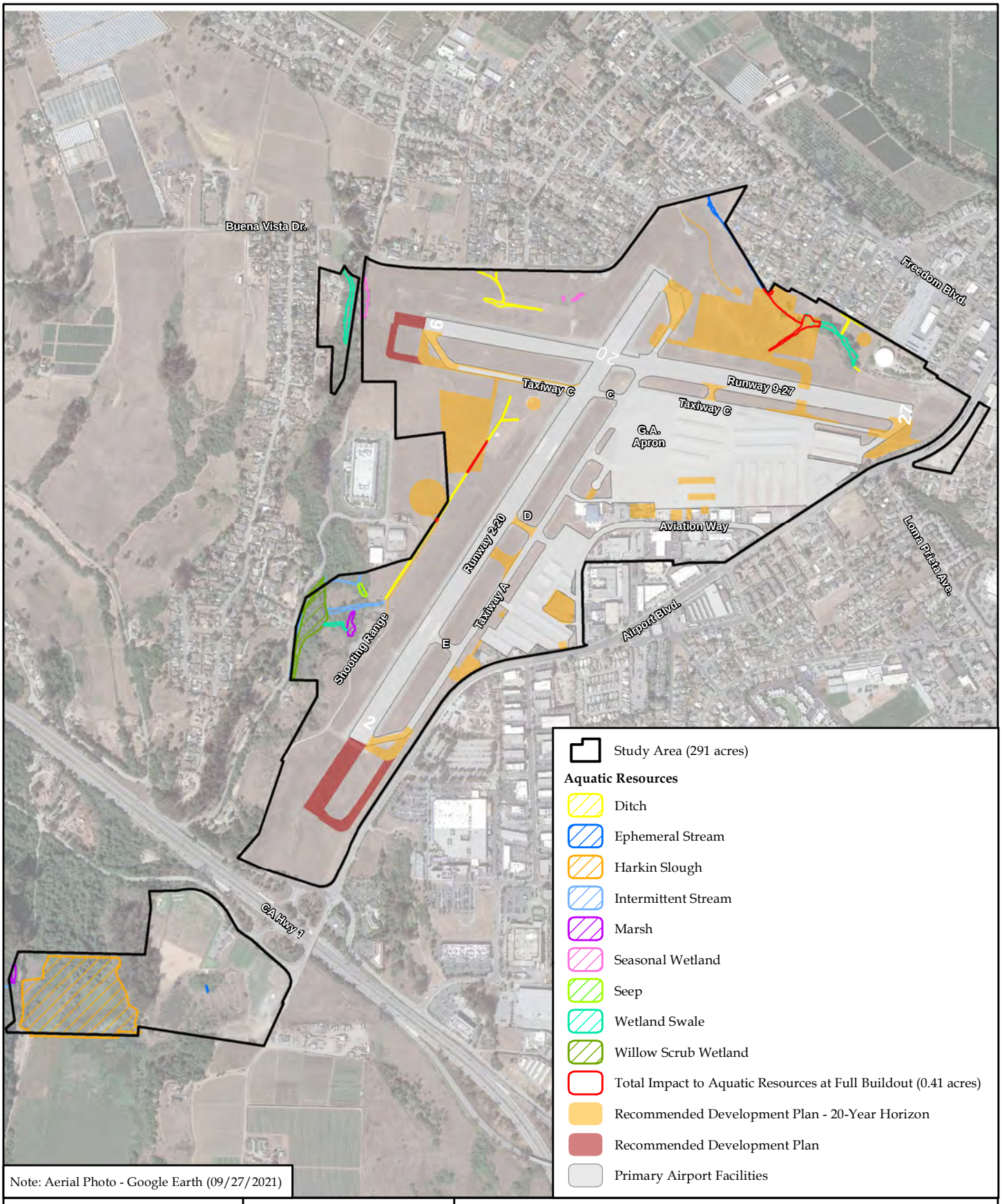
Feet

Figure 7

Potential Impacts - Coastal Terrace Prairie Habitat

Watsonville Municipal Airport

City of Watsonville, CA



Note: Aerial Photo - Google Earth (09/27/2021)

Salix consulting, inc.

N

0 600 1,200

Feet

Figure 8

Potential Impacts - Aquatic Resources

Watsonville Municipal Airport

City of Watsonville, CA