FINAL ENVIRONMENTAL ASSESSMENT

PROPOSED TERMINAL AREA DEVELOPMENT PROJECT

Mammoth Yosemite Airport
Town of Mammoth Lakes
Mono County, California

Prepared for:

Town of Mammoth Lakes, California
437 Old Mammoth Road, Suite 230, Mammoth Lakes, California 93546

and

U.S. Department of Transportation
Federal Aviation Administration
As lead Federal Agency pursuant to the National Environmental Policy Act of 1969

Prepared by
Wallace Environmental Consulting, Inc.

November 2021

This environmental assessment becomes a Federal document when evaluated, signed and dated by the Responsible FAA Official.

CAMILLE A GARIBALDI Digitally signed by CAMILLE A GARIBALDI Date: 2021.11.12 13:41:50 -08'00'

Responsible FAA Official

November 12, 2021
Date

GENERAL INFORMATION ABOUT THIS DOCUMENT

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WHAT IS IN THIS DOCUMENT? This National Environmental Policy Act, Final Environmental Assessment (EA) was prepared for the Town of Mammoth Lakes (Town) to evaluate a proposed Terminal Area Development Project at Mammoth Yosemite Airport (MMH). The Terminal Area Development Project includes a new passenger terminal building; new maintenance facility; terminal aircraft parking apron, infrastructure to support the project and demolition of an existing tensile structure. Additionally, Airport Road would be extended to serve the proposed new passenger terminal area. This Final EA provides information on the Proposed Action; discusses the purpose of and need for the Proposed Action; describes alternatives considered; and discloses the analysis and findings of potential environmental, social, and economic impacts associated with the Proposed Action and reasonable alternatives. Information on how to comment on the Final EA is also included in this document.

BACKGROUND: MMH is a Title 14 Code of Federal Regulations Part 139 certificated Commercial Service Airport located approximately six miles east of the Town of Mammoth Lakes and serves commercial, charter and general aviation aircraft. MMH's existing terminal area includes a terminal building constructed in a converted maintenance building.

WHAT SHOULD YOU DO? Read this Final EA to understand the potential environmental effects of the Proposed Terminal Area Development Project and the actions that the Town of Mammoth Lakes and the FAA may take relative to the proposal. Copies of the document may be viewed on the Town's webpage at https://www.townofmammothlakes.ca.gov/939/Terminal-Area-Development-Project-EAEIR and at the following locations:

Town of Mammoth Lakes
Planning Division
437 Old Mammoth Road,
Suite 230
Mammoth Lakes, CA
(760) 965-3630

Mammoth Yosemite Airport
1300 Airport Road
Mammoth Lakes, CA
By Appointment
(760) 965-3622

Mono County Library
Mammoth Lakes Branch
400 Sierra Park Road
Mammoth Lakes, CA
(760) 934-4777

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

LIST OF ACRONYMS

AEDT	Aviation Environmental Design Tool
AFFF	Aqueous Fight Fighting Foam
AIP	Airport Improvement Program
ALP	Airport Layout Plan
APE	Area of Potential Effect
ARC	Airport Resource Code
ARB	Air Resources Board
ARFF	Aircraft Rescue and Fire Fighting
ASL	Above Sea Level
AWOS	Automated Weather Observing System
BIH	Bishop Airport, Inyo County, California
BLM	U.S. Bureau of Land Management (Department of Interior)
CAA	U.S. Clean Air Act
CalEEMod	California Emissions Estimator Model
CAPCOA	California Air Pollution Control Officers Association
CCAA	California Clean Air Act of 1988
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CH4	Methane
CHRIS	California Historical Resources Information System
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CO	Carbon Monoxide
CO_2	Carbon Dioxide
CO_2e	Carbon Dioxide Equivalent
CRJ-700	Canadair Regional Jet
CWA	U.S. Clean Water Act
dB	decibels
dBA	A-weighted decibel scale
DEA	Draft Environmental Assessment
DNL	Yearly Day-Night Average Sound Levels
District	Great Basin Unified Air Pollution Control District
EA	Environmental Assessment
EIS	Environmental Impact Statement
EO	Executive Order
ESTA	Eastern Sierra Transit Authority
FAA	Federal Aviation Administration – U.S. Department of Transportation
FBO	Fixed Based Operator (Hot Creek Aviation)
FONSI	Finding of No Significant Impact
FR	Federal Register
GHG	Greenhouse Gases
HFCs	Hydrofluorocarbons
ICAO	International Civil Aviation Organization
LADWP	Los Angeles Department of Water and Power
LOS	Level of Service (passenger services)
MMH	Mammoth Yosemite Airport
MTCO2	metric tons of CO2
MTCO2e	metric tons of CO2 equivalent
NAAQS	National Ambient Air Quality Standards

NAHC	California Native American Heritage Commission
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NO_2	Nitrogen dioxide
NPDES	National Pollution Discharge Elimination System
NPIAS	National Plan of Integrated Airport Systems
NRHP	National Register of Historic Places
O_3	Ozone
Pb	Lead
PFAS	perfluoroalkyl and/or polyfluoroalkyl substances
PFC	passenger facility charges
PFCs	Perfluorocarbons
PM	Particulate Matter
RCRA	Resource Conservation Recovery Act
RNO	Reno Tahoe International Airport
RWQCB	Regional Water Quality Control Board (State of California)
SCE	Southern California Edison
SF6	Sulfur hexafluoride
SHPO	State Historic Preservation Officer (California)
SIP	State Implementation Plan
SNARL	Sierra Nevada Aquatic Research Laboratory
SO_2	Sulfur dioxide
sq.ft.	square feet
sq. yds.	square yards
SWPPP	Stormwater Pollution Prevention Plan
TADP	Terminal Area Development Project
TSA	Transportation Security Administration
Town	Town of Mammoth Lakes, California
UAL	United Airlines
U.S.C.	United States Code
U.S. DOT	Department of Transportation
U.S. EPA	Environmental Protection Agency
USFWS	Fish and Wildlife Service (U.S. Department of Interior)
VOC	Volatile Organic Compound

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CHAPTER 1.0: PURPOSE AND NEED

1.1 INTRODUCTION

The Town of Mammoth Lakes is the sponsor for Mammoth Yosemite Airport (MMH). The Town of Mammoth Lakes proposes to construct and operate a new passenger terminal, aircraft parking aprons, new maintenance facility and supporting infrastructure as described in the Mammoth Yosemite Airport Terminal Area Development Plan (2017; Appendix A)[1].

This Environmental Assessment (EA) has been prepared pursuant to the requirements of Section 102(2)(C) of the National Environmental Policy Act of 1969 (NEPA, Title 42 of the United States Code [U.S.C.] §§ 4321-4335), and as codified by the Council on Environmental Quality Regulations (CEQ Regulations, Title 40 of the Code of Federal Regulations [C.F.R.] Parts 1500-1508), FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures* and FAA Order 5050.4B *National Environmental Policy Act Implementing Instructions for Airport Actions*. The FAA is the lead federal NEPA agency. This EA analyzes and documents the potential environmental impacts of implementing the proposed action, and identifies mitigation measures that may be necessary to reduce the magnitude of those impacts.

1.2 AIRPORT BACKGROUND

MMH is a 14 CFR Part 139 certificated (Part 139 certification) Commercial Service Airport located approximately six miles east of the Town of Mammoth Lakes along U.S. Highway 395 (Exhibit 1-1) in the western portion of Long Valley at an elevation of approximately 7,128 feet above mean sea level. MMH is designated as an Airport Reference Code (ARC) B-III facility, with a future plan to achieve ARC C-III standards on its ALP[2]. MMH accommodates scheduled commercial passenger aircraft along with general aviation aircraft.

MMH has a single runway which is 100 feet wide and 7,000 feet long; a full-length parallel taxiway (Exhibit 1-2); an existing terminal building constructed in a converted maintenance building; an office building; aircraft hangars, parking lots and landscaped areas. Due to the lack of space within the passenger terminal, a temporary tensile structure was constructed to provide passengers with indoor shelter (Exhibit 1-3).

Since its acquisition by the Town from Mono County in 1992, MMH has been owned and operated by the Town for the benefit of the Eastern Sierra region. The U.S. Forest Service (Inyo National Forest) has designated the Town of Mammoth Lakes as a “gateway” community for recreational activities on Forest Service lands and for Yosemite National Park. The Airport plays a key role in providing visitor access to the Eastern Sierra region.

[1] This EA was prepared using Council on Environmental Quality Regulations adopted November 28, 1978. On July 16, 2020 the CEQ promulgated revised regulations implanting NEPA (40CFR Parts 1500-1508) that became effective on September 14, 2020. This EA was already in progress before CEQ’s final rule was published in the Federal Register (85 FR 43304). Accordingly, the EA was prepared in compliance with the previous version of regulations, 40 CFR Parts 1500-1508, 1978 as amended in 1986 and 2005.

[2] The TADP was developed to achieve Airport Reference Code C-III standards.

MMH is an important air service element for commercial, charter, military, helicopter, general aviation, life flight and firefighting aircraft. It is one of three airports in Mono County and is the only airport currently providing commercial air service in the Eastern Sierra region. However, the Town is working cooperatively with Inyo County in its pursuit of Part 139 certification for commercial air service and shifting of subsidized air service to the Bishop Airport (BIH)[3]. Regardless of the Inyo County proposal for BIH, the Town remains committed to maintaining its Part 139 certification and providing passenger service at MMH through a combination of scheduled commercial and/or scheduled charter flights.

Initial commercial air passenger service began at MMH in 1973 after the construction of a passenger terminal in 1972 which is currently used by the Fixed Based Operator (FBO). Commercial air passenger service continued intermittently through 1997. After an 11-year hiatus consistent commercial air service began with subsidized service from Alaska Airlines in 2008[4] and in 2011 with United Airlines, Inc. and its partner (SkyWest Airlines operating as United Express) (UAL).

In 2011-2012, the two airlines provided up to seven flights daily; Alaska Airlines ended its service in November 2018; all commercial airline passenger service is now provided by UAL, utilizing a Canadair Regional Jet 700 (CRJ-700), an ARC CII aircraft.

Charter air service is available from various private companies for departure locations in southern California. Typically charter flights operate during the winter ski season, but are also available on a limited basis at all times of the year. In 2018 and 2019, a total of 205 scheduled chartered flights served MMH with an estimated 8,979 passenger enplanements[4].

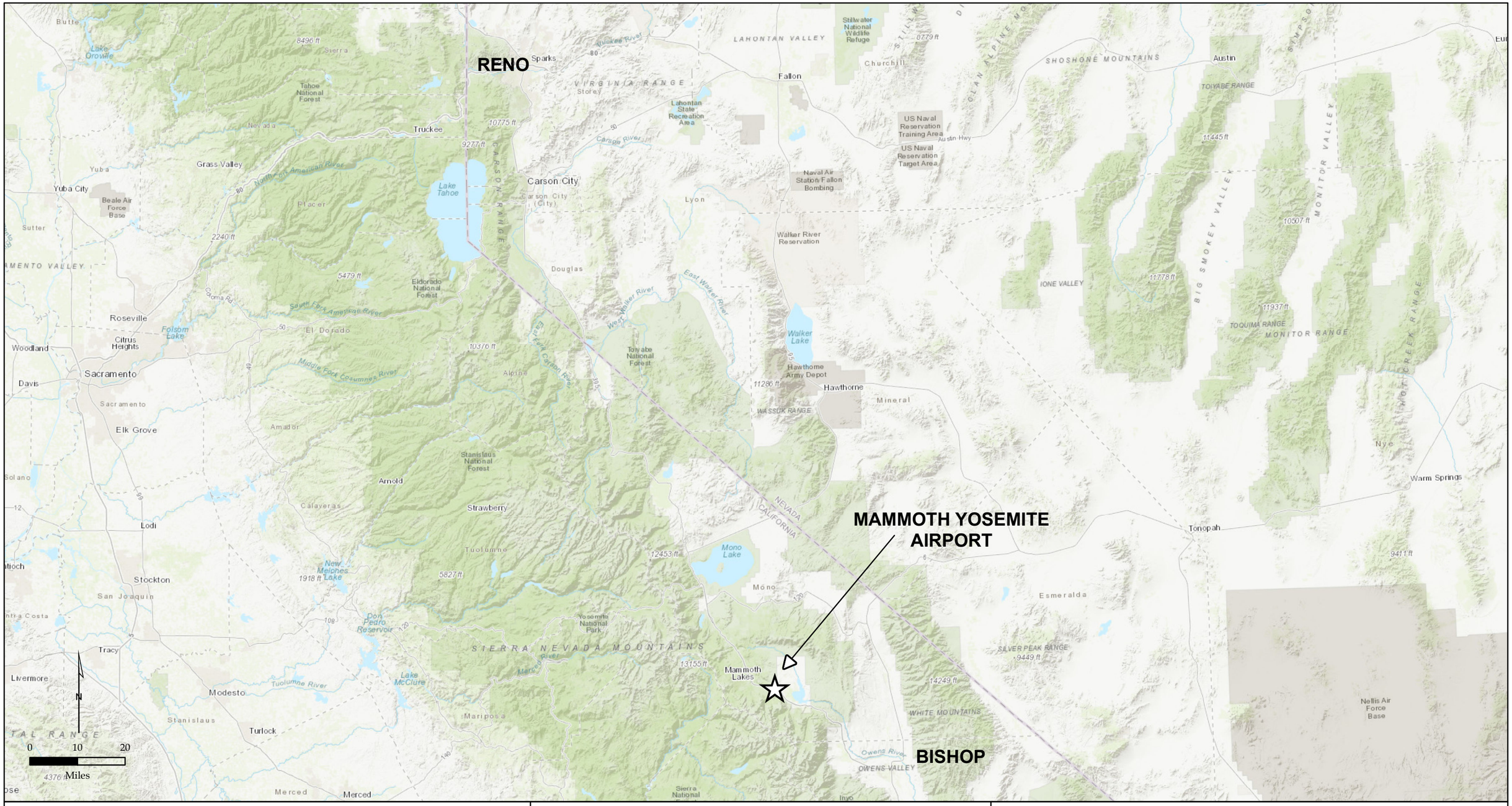
1.2.1 Summary of Existing Passenger Terminal Facilities

In 2008, the Airport's 5,060 square foot equipment maintenance facility was remodeled to serve as an interim passenger terminal. However, during peak activity, commercial flights created overcrowding when as many as 140 arriving and departing passengers simultaneously accessed the terminal. In 2011, to relieve passenger overcrowding, to improve the passenger level of service and provide passengers protection from the inclement weather, the Town constructed a temporary 2,250 square foot "tensile structure" passenger holding facility. The current interim terminal building and tensile structure do not provide adequate levels of service for passenger ticketing, baggage handling, waiting rooms, concessions or security operations.

Based on Federal Aviation Administration (FAA) terminal planning guidance[5] an airport passenger terminal should provide an optimum level of service considering peak passenger volume in all terminal elements including processing time, level of crowding, walking distance, baggage handling and protection from inclement weather. Based on overall terminal planning criteria for existing activity levels (passenger enplanements and

[3] The FAA accepted the Proposed Commercial Airline Service at Bishop Airport (BIH) Final Environmental Assessment on August 11, 2021 and issued a Finding of No Significant Impact – Record of Decision on August 12, 2021.

[4] Initial air service was provided via "Horizon Airlines" which on January 1, 2011, Horizon shifted to a capacity purchase agreement (CPA) business model which included rebranding to the Alaska Airlines.



Prepared by the Town of Mammoth Lakes, CA

Project Layout From:
Mammoth Yosemite Airport Terminal Area Development Plan, January 2015 Image Source: Digital Globe, 2017

Final Environmental Assessment
Terminal Area Development Project

EXHIBIT 1-1

MAMMOTH YOSEMITE AIRPORT
TOWN OF MAMMOTH LAKES
REGIONAL LOCATION

November 2021

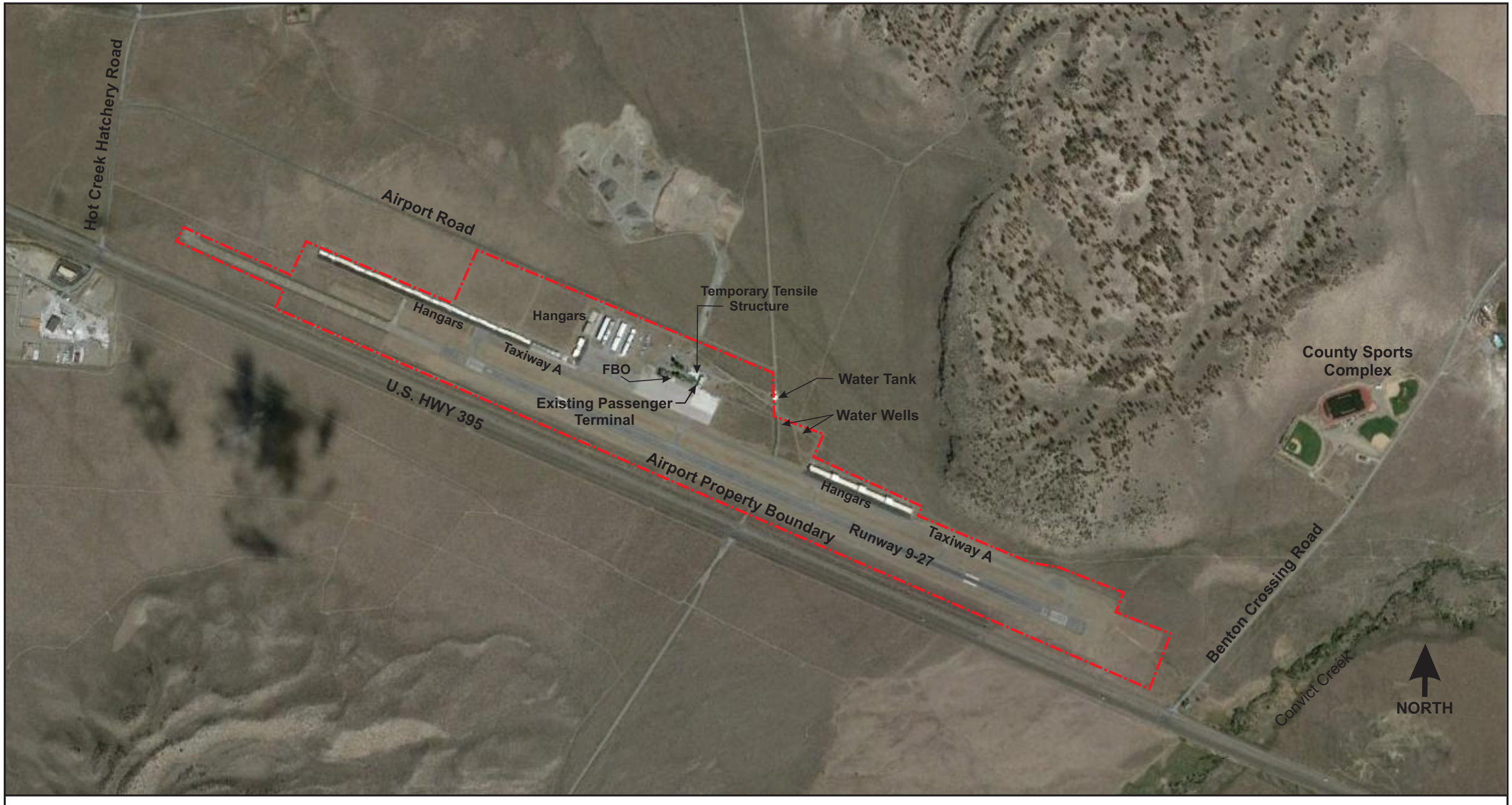


EXHIBIT 1-2

Prepared by the Town of Mammoth Lakes, CA

Project Layout from:
Mammoth Yosemite Airport Terminal Area Development Plan, January 2017
Image Source: GoogleEarth

Final Environmental Assessment
Terminal Area Development Project

November 2021

Mammoth Yosemite Airport
Town of Mammoth Lakes
Existing Airport Layout

Source: Google Earth; Imagery Date 9/13/2019

EXHIBIT 1-3

NORTH

Final Environmental Assessment
Terminal Area Development Project
Existing Conditions

Mammoth Yosemite Airport
Town of Mammoth Lakes
Existing Terminal Area Conditions

November 2021

Prepared by the Town of Mammoth Lakes, CA

deplanements and aviation operations) and to obtain the desired level of passenger service, the current passenger MMH terminal facilities should be a minimum size of between 12,500 to 15,000 square feet (sq.ft.).

1.2.2. Aviation Forecasts

The analysis in this NEPA document uses an aviation forecast prepared before the COVID-19 Pandemic began. This forecast is included to provide a conservative estimate of potential environmental impacts of the proposed action. FAA forecast approval was based on the methodology, data, and conclusions at the time the document was prepared. However, it is necessary to acknowledge the impacts of COVID-19 Pandemic on aviation activity, including reduced confidence in growth projections using currently-available data

Forecasts of aviation demand are used to identify existing and future facility needs and are informed by the number of aviation operations, destinations served, aircraft fleet mix, based aircraft, air cargo volumes and the number of passengers (referred to as “enplanements”).

In 2017, the Town prepared *Mammoth Yosemite Airport Aviation Activity Forecasts* for a ten-year period. In 2018, Alaska Airlines ceased MMH operations, leaving UAL as the only commercial carrier serving MMH with CRJ-700 aircraft. To account for the change in aviation operations, the Town prepared *Mammoth Yosemite Airport Aviation Activity Forecast 2019 Addendum.* On June 19, 2019 the FAA reviewed and approved the updated *Mammoth Yosemite Airport Aviation Activity Forecast* dated May 15, 2019 (Appendix B). The CRJ-700, an ARC CII aircraft, is the critical aircraft for airport planning and design purposes.

Since 2010, the Town has subsidized air passenger services to incentivize consistent air service. The greatest numbers of passengers visiting the Mammoth Lakes area arrive during the winter recreation season: November through April. The peak month for passenger activity can vary annually depending on weather (January, February or March) and typically accounts for over 16 percent to nearly 20 percent of annual enplanements. This high proportion of passengers during the peak months increases the demands on passenger terminal facilities. The aviation forecast assumes that passenger volumes outside of the ski season would remain static. Table 1-1 presents the past, existing and forecast enplanement for the 10-year period 2018 through 2028; the new passenger terminal is projected to open in 2023.

Table 1-1: Passenger Enplanement Forecast

Passenger Enplanement Forecast		
	Year	Passenger Enplanements
Historic Year	2018	22,594
Forecast Years	2019	15,953
	2020	19,734*
	2021	20,020
	2022	20,307
	2023	22,824
	2024	23,138
	2025	23,453
	2026	23,770
	2027	24,067
	2028	24,387

Note: Neither scheduled nor unscheduled charter flights are included in these forecast numbers.

Source: *Mammoth Yosemite Airport, Aviation Activity Forecasts, 2019 Addendum*, May 2019

*Will be lower due to CA restriction re COVID-19 Pandemic.

Based on the 2019 Forecast Addendum, as approved by the FAA, the pattern of incremental growth at the Airport may follow these paths:[5]

- Incremental load factor increases (percentage of aircraft occupied by passengers) from some destinations, including Denver, San Francisco and Los Angeles.

- Increased charter flights from select markets, for example San Diego in 2020.

The analysis in this NEPA document uses an aviation forecast prepared before the COVID-19 public health emergency began. This forecast is included to provide a conservative estimate of potential environmental impacts of the proposed action. FAA forecast approval was based on the methodology, data, and conclusions at the time the document was prepared. However, it is necessary to acknowledge the impacts of COVID-19 public health emergency on aviation activity, including reduced confidence in growth projections using currently-available data.

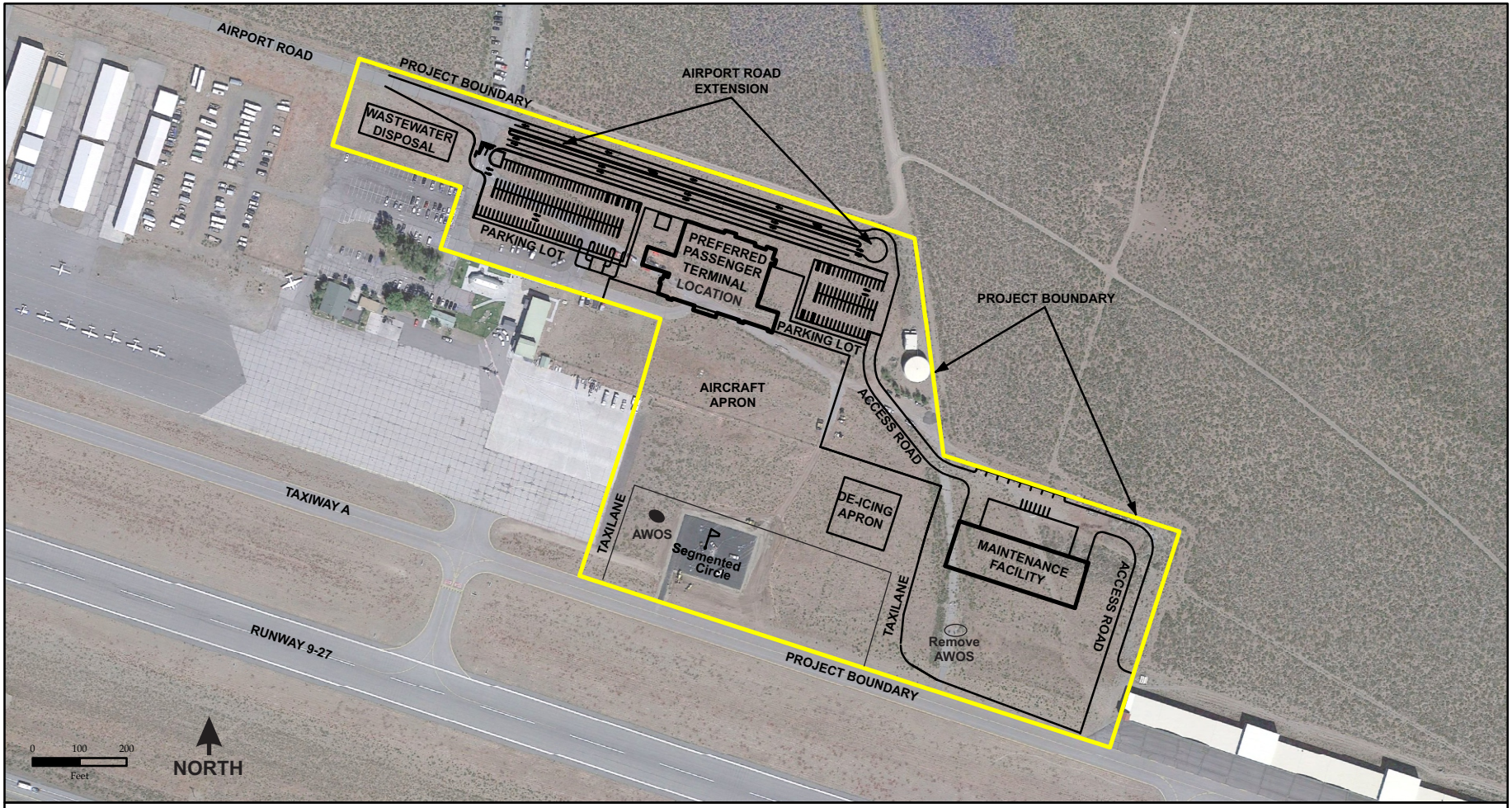
Nationwide, the Coronavirus (COVID-19) pandemic negatively affected airline passengers beginning in the first quarter of 2020 and continuing to the present, including enplanements at MMH. Based on national airline passenger data, passenger airline operating revenues fell 66-67 percent from late 2019 to February 2021 (*Impact of COVID-19: Date Updates*, www.airlines.org). MMH suffered significant passenger declines because of the pandemic and the state's orders to locally restrict the operation of hotels, restaurants and the Mammoth Mountain ski area. Passenger enplanements are expected to rebound as local and state restrictions are modified to allow regional visits

1.3 DESCRIPTION OF PROPOSED ACTION

The Proposed Action, the construction and operation of a TADP, is shown in Exhibit 1-4. Components of the Proposed Action would include:

- New passenger terminal building; maximum size of approximately 38,700 sq. ft.
- Access and service roads, including an extension of Airport Road
- Automobile parking for passenger and rental cars
- Terminal Aircraft Apron
- Aircraft de-icing apron and de-icing fluid holding tank
- Connecting taxilanes to Taxiway A
- Maintenance, Aircraft Rescue and Fire Fighting (ARFF) and Snow Removal equipment building (maintenance facility)
- Supporting infrastructure and utilities
- Demolition of the tensile structure and some paved access roads
- Remove existing Automated Weather Observing System (AWOS) and install a new

[5] Mammoth Yosemite Airport, Aviation Activity Forecasts, 2019 Addendum, prepared for the Town of Mammoth Lakes, prepared by Mead & Hunt, January29, 2019.



Prepared by the Town of Mammoth Lakes, CA

Project Layout From:
Mammoth Yosemite Airport Terminal Area Development Plan, January 2017
Image Source: Google, Sept. 2019

Final Environmental Assessment
Terminal Area Development Project
Proposed Action Alternative

EXHIBIT 1-4

MAMMOTH YOSEMITE AIRPORT
TOWN OF MAMMOTH LAKES

November 2021

AWOS near the Segmented Circle within the TADP

The Proposed Action would take place on Airport property generally east of the existing passenger terminal building and south of the proposed Airport Road extension. The new passenger terminal, two vehicle parking lots with a total of 190 spaces, new aircraft aprons and the maintenance facility would occupy approximately 19-acres of undeveloped land in the northern portion of the airport.

Airport Road would be extended approximately 840-feet east of its existing terminus and be widened to serve the front of the terminal, provide passenger drop-off and pick-up and access to two parking lots. The Airport Road extension would terminate in a cul-de-sac.

A new maintenance facility (8,400 sq.ft.) would be located 600-feet southeast of the proposed passenger terminal as shown on Exhibit 1-4. The maintenance facility would include an 8-bay facility for ARFF and snow removal equipment, vehicle parking apron (32,750 sq.ft.) and new access road (400 feet x 25 feet).

The existing terminal building would remain as a possible charter aircraft terminal building or as a facility for an FBO. The tensile building associated with the existing terminal would be removed.

1.3.1 New Passenger Terminal Building

The proposed passenger terminal building (approximately 38,700 sq. ft. maximum) would include a passenger lobby, ticket counters, departure lounges, three airline gate positions, restrooms, rental car counters, Transportation Security Administration (TSA) security areas, baggage claim and handling areas, mechanical and electrical utility rooms, airport offices and a restaurant.

1.3.2 Access and Service Roads

To provide vehicle access to the new terminal, Airport Road would be extended about 840 feet east of its existing terminus. There would be a 20-foot-wide concrete sidewalk in front of the terminal building and a 9-foot space, 400 feet long for parallel automobile parking used for passenger loading and unloading, two 12-foot eastbound travel lanes, a 10-foot concrete island and two 12-foot westbound travel lanes.

An asphalt-paved access road would be constructed to serve the new maintenance facility located east of the de-icing apron. A second road would be constructed from the maintenance facility to Taxiway ‘A’ to provide direct access to the airfield for snowplows and emergency vehicles.

1.3.3 Automobile Parking

There is available area on the airport property adjacent to the proposed terminal, for two automobile parking areas. The parking area west of the terminal would be used to replace existing rental car company vehicle parking, and would accommodate 130 automobiles.

The parking lot east of the terminal would be used by commercial passengers and other visitors and there would be space for 60 parked automobiles.

1.3.4 Terminal Aircraft Apron

The proposed terminal aircraft apron (130,500 sq.ft.; 14,500 sq. yds.) would be capable of accommodating three ARC CII aircraft in a taxi-in/pushout type operation.

1.3.5 Aircraft De-icing Apron

The de-icing apron would be constructed on a concrete slab and would be graded to a central drain in the middle of the apron. Storm water and/or de-icing fluid from this apron would be collected in the central drop inlet and carried by pipe to a holding tank where de-icing fluid can be temporarily stored, pumped out, and transported to a licensed disposal facility, probably the U.S. Ecology Nevada, facility in Beatty, Nevada.

1.3.6 Connecting Taxilanes

Two connecting taxilanes, 230 and 280 feet long and 50 feet wide, would connect the new aircraft parking apron and de-icing apron to Taxiway “A”.

1.3.7 Maintenance Facility

An eight-bay maintenance facility would be constructed (60 feet x 140 feet; 8,400 sq.ft.) to house ARFF and snow removal equipment and includes a parking apron (32,750 sq. ft.) and a new access road (800 feet x 25 feet) to connect to Taxiway “A”.

1.3.8 Supporting Infrastructure

Utilities to serve the terminal building are included in the TADP:

- Sewer systems including a new packaged waste water treatment plant and disposal field.
- Water to be supplied by existing on-airport wells.
- Electricity would be provided by Southern California Edison.
- Telecommunication facilities.
- Propane tank.

1.3.9 Demolition

To construct the TADP, approximately 2,100 linear feet of existing paved access roads would be demolished; all other permanent airport structures would remain. The temporary tensile structure would be removed.

1.3.10 Automated Weather Observing System

FAA siting criteria (FAA Order 6560.20B) requires that an AWOS be located outside of 500-foot radii from obstructions including buildings. The existing AWOS location would be within the 500-foot radii of the proposed maintenance building and therefore would be relocated outside of that 500-foot radius to a location shown in Exhibit 1-4.

1.4 PURPOSE AND NEED FOR THE PROPOSED ACTION

1.4.1 Sponsor's Purpose and Need

The Sponsor's purpose and need of the Proposed Action is to improve the Town's ability to meet its terminal complex needs to safely and efficiently convey existing and future passengers through Mammoth Yosemite Airport. Adequate space for terminal functions would enhance safe and efficient movement of people through the airport consistent with 49 United States Code (U.S.C.) §47101(a)(7).

The existing passenger terminal is a remodeled maintenance building and is too small to provide acceptable levels of passenger service. Existing terminal conditions result in inconvenience and delays for arriving and departing passengers. Among the issues with the existing terminal, which are exacerbated in the winter, are outdoor baggage handling facilities and inadequate passenger accommodations which limit flight schedules; limited space for TSA; limited indoor hold room seating; no concession facilitates; limited number of gates; undersized restroom facilities; limited passenger drop-off and pick-up areas; undersized general waiting areas and inefficient climate control.

The existing terminal aircraft apron can only accommodate one aircraft at a time which limits flexible airline schedules.

The Town is expending funds to lease an undersized hangar onsite for equipment and ARFF storage. The purpose of a new maintenance facility is to provide protection from the weather for the ARFF, and provide a safe storage and maintenance area for the Airport's snow plows and firefighting equipment and supplies. De-icing fluids are currently stored and managed by individual airlines; the Town could arrange to move de-icing fluid storage to the new maintenance building.

1.4.2 FAA Purpose and Need

The FAA's statutory mission is to ensure the safe and efficient use of navigable airspace in the United States. The FAA must ensure that the proposed action does not derogate the safety of aircraft and airport operations at MMH. Moreover, it is the policy of the FAA under 49 U.S.C. Section 47101(a)(6) and (7) that airport development projects provide for the protection and enhancement of natural resources and the quality of the environment of the United States, and that airport construction and improvement projects that increase the capacity of facilities to accommodate passenger and cargo traffic be undertaken to the maximum feasible extent so that safety and efficiency increase, and delays decrease.

1.5 REQUESTED FEDERAL ACTIONS

Recent changes in federal law have required the FAA to revisit whether FAA approval is needed for certain types of airport projects throughout the nation. Section 163(d) of the FAA Reauthorization Act of 2018 limits the FAA's review and approval authority for ALPs to those

portions of ALPs or ALP revisions that:

- materially impact the safe and efficient operation of aircraft at, to, or from an airport;
- adversely affect the safety of people or property on the ground adjacent to an airport because of aircraft operations;
- or adversely affect the value of prior federal investments to a significant extent.

Therefore, MMH requests the following FAA actions for the proposed action described in Section 1.3 that are subject to FAA approval and funding:

- Unconditional approval of the portion of the ALP that depicts the TADP pursuant to 49 U.S.C. §§ 40103(b) and 47107(a)(16)(B);

- Determinations under 49 U.S.C. §§ 47106 and 47107 that are associated with the eligibility of the Proposed Action for federal funding under the Airport Improvement Program (AIP) and under 49 U.S.C. § 40117, as implemented by 14 CFR Part 158.25 to use passenger facility charges (PFC) collected at the Airport for the Proposed Action to assist with construction of potentially eligible development items from the ALP.

1.6 DOCUMENT ORGANIZATION

This EA is organized in accordance with FAA Order 1050.1F, Chapter 6, Section 6-2 and includes:

- Chapter 1.0 - Purpose and Need
- Chapter 2.0 - Alternatives (Including the Proposed Action)
- Chapter 3.0 - Affected Environment
- Chapter 4.0 - Environmental Consequences
- Chapter 5.0 - Coordination and Public Involvement
- Chapter 6.0 - List of Preparers
- Chapter 7.0 - References

CHAPTER 2.0: ALTERNATIVES

2.1 INTRODUCTION

CEQ regulations (40 Code of Federal Regulations [CFR] Part 1500 Purpose, Policy and Mandate and 40 CFR Sections 1500.2, 1502.14 and 1505.1) implementing NEPA stipulates that alternatives be considered in environmental documents. As part of the alternatives analysis, agencies are to explore and objectively evaluate all reasonable alternatives and briefly discuss why alternatives were eliminated; treat each alternative similarly and compare the results so that reviewers may evaluate the alternatives comparative merits; include reasonable alternatives not within the jurisdiction of the lead agency. If there are no unresolved conflicts concerning alternative uses of available resources, the range of alternatives may be limited to the no action and proposed action alternatives (FAA Orders 1050.1F, paragraph 6-2.1.d. and 5050.4B, paragraph 706d.(5)). The no action alternative is retained for analysis in the EA pursuant to CEQ regulations at 49 CFR § 1502.14(d).

CEQ regulations (40 CFR § 1502.14) require that federal agencies perform the following tasks for alternative analysis:

> (a) Rigorously explore and objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their elimination.
>
> (b) Devote substantial treatment to each alternative considered in detail including the proposed action so that reviewers may evaluate their comparative merits.
>
> (c) Include reasonable alternatives not within the jurisdiction of the lead agency.
>
> (d) Include the alternative of no action.
>
> (e) Identify the agency's preferred alternative or alternatives, if one or more exists, in the draft statement and identify such alternative in the final statement unless another law prohibits the expression of such a preference.
>
> (f) Include appropriate mitigation measures not already included in the proposed action or alternatives.

Alternatives evaluated for the Proposed Action include those alternatives that are responsive to the purpose and need established by the Town. The purpose of the Proposed Action, as identified in Section 1.3 of this EA is to improve the Town’s ability to meet its terminal complex needs to safely and efficiently convey existing and future passengers to and from Mammoth Yosemite Airport and that would provide adequate space for terminal functions that would enhance safe and efficient movement of people through the airport.

This chapter describes alternatives to the airfield modifications and new terminal and associated infrastructure. Landside and ground access improvements at airports are designed around the airfield and terminal needs and, thus, were considered in relation to the terminal alternatives. In addition, this chapter summarizes the alternative screening process, and evaluation criteria used to identify, compare, and evaluate the alternatives.

2.2 IDENTIFICATION OF POTENTIAL ALTERNATIVES

The following alternatives were considered as part of the alternative evaluation process:

- Proposed Action (Exhibit 1-4): Construct new passenger terminal, new aircraft parking apron, new maintenance facility and associated infrastructure.
- No Action Alternative (Exhibit 2-1): Continue to use existing passenger terminal and do not construct maintenance facility and associated infrastructure.
- Alternative A-1 (Exhibit 2-2: Construct new passenger terminal in a location that would be closer to existing active airfield; construct maintenance facility and associated infrastructure.
- Alternative A-2 (Exhibit 2-3): Reconstruct existing passenger terminal; construct maintenance facility and associated infrastructure.

Additionally, three off-site alternatives are evaluated:

- Alternative A-3: Develop TADP facilities at an existing airport other than MMH.
- Alternative A-4: Develop a new airport at another location.
- Alternative A-5: Use alternative modes of surface transportation.

This section includes an evaluation of each alternative and its ability to satisfy the Step-One and Step-Two Screening criteria.

2.2.1 Alternatives Screening Process Overview and Summary of Results

The alternative screening process relies on a two-step process to determine which alternatives would be carried forward for further evaluation. Step-One evaluates the ability of an alternative to satisfy the purpose and need outlined in Chapter 1.0 Purpose and Need. Step-Two evaluates the ability of alternatives to satisfy a list of screening factors.

Source: Google Earth; Imagery Date 9/13/2019

EXHIBIT 2-1

NORTH

Final Environmental Assessment
Terminal Area Development Project
No Action Alternative

Mammoth Yosemite Airport
Town of Mammoth Lakes

November 2021

Prepared by the Town of Mammoth Lakes, CA

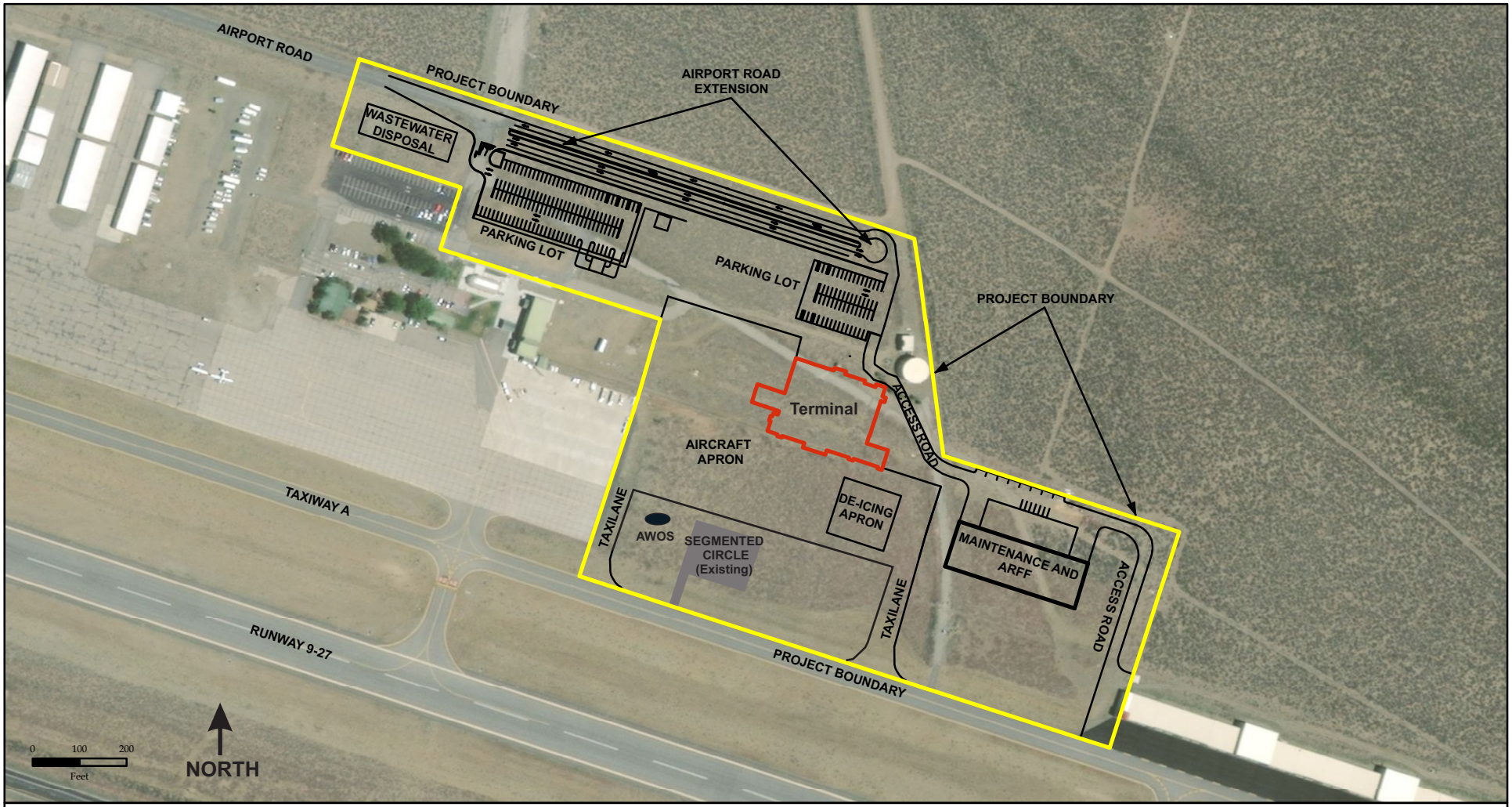


EXHIBIT 2-2

Prepared by the Town of Mammoth Lakes, CA

Project Layout From:
Mammoth Yosemite Airport Terminal Area Development Plan, January 2017
Image Source: Digital Globe, 2015

Final Environmental Assessment
Terminal Area Development Project
Alternative A-1

MAMMOTH YOSEMITE AIRPORT
TOWN OF MAMMOTH LAKES

November 2021

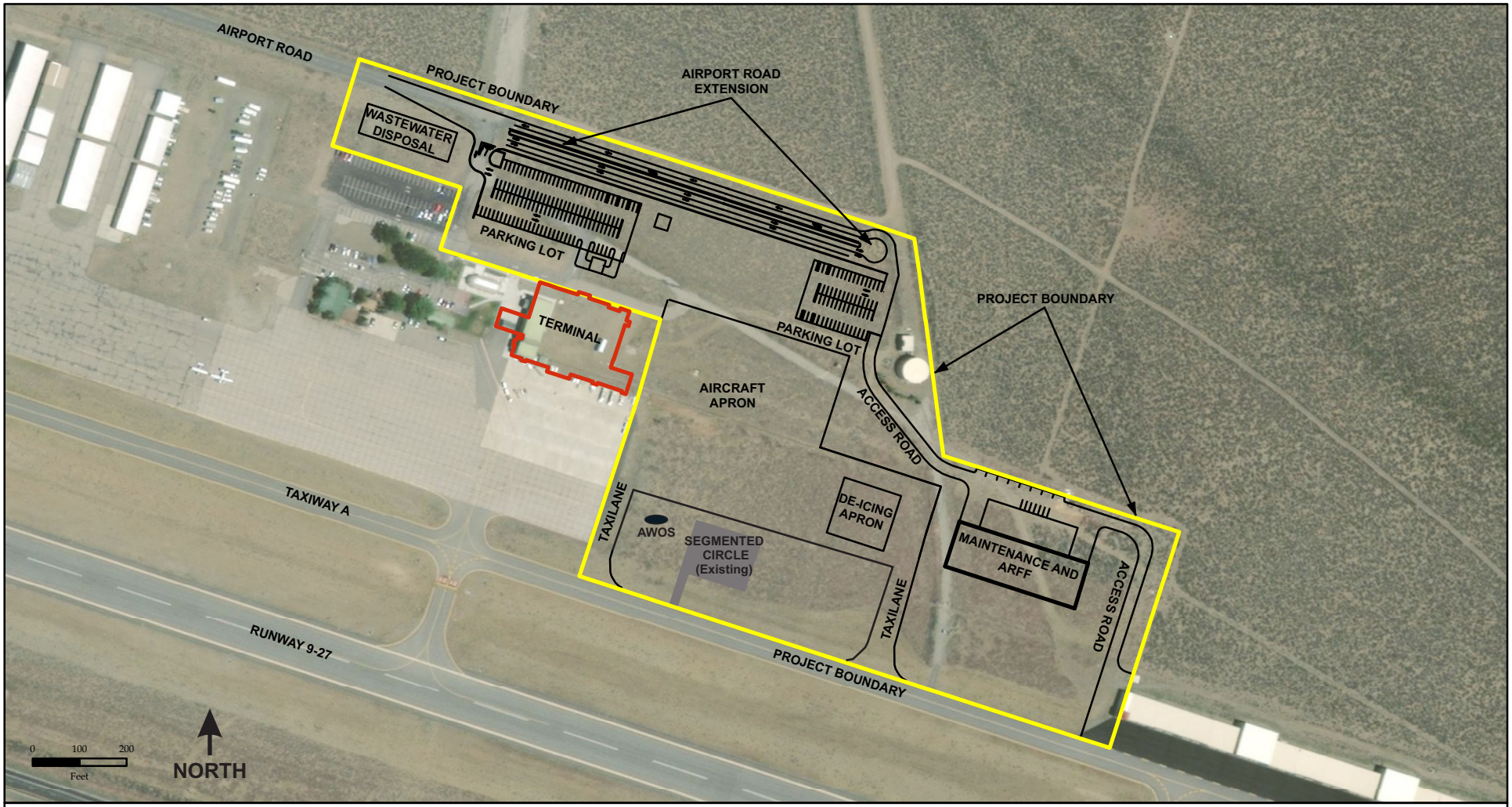


EXHIBIT 2-3

Prepared by the Town of Mammoth Lakes, CA

Project Layout From:
Mammoth Yosemite Airport Terminal Area Development Plan, January 2017
Image Source: Digital Globe, 2015

Final Environmental Assessment
Terminal Area Development Project
Alternative A-2

MAMMOTH YOSEMITE AIRPORT
TOWN OF MAMMOTH LAKES

November 2021

Table 2-1 Alternatives Screening Summary

Step-One Screening and Criteria **The No Action Alternative serves as the current environmental condition against which the environmental, economic and operational performance of other alternatives are compared. It is retained for further analysis pursuant to CEQ guidance.		**Proposed Action**	**No Action Alternative****	**Alternative A-1**	**Alternative A-2**	**Alternative A-3**	**Alternative A-4**	**Alternative A-5**
Step-One: Purpose and Need	Does alternative meet purpose and need?	YES	NO	YES	YES	NO	NO	NO
Proceed to Step-Two Screening		YES	YES	YES	YES	NO	NO	NO
Step-Two: Does Alternative Satisfy Step-Two Screening Factors?	Achieve Airport Reference Code C-III standards for development of the TADP	YES	NO	NO	YES			
	Economically and Technically Feasible	YES	NO	YES	NO			
	Located on the Airport	YES	NO	YES	YES			
	Continue Operations During Construction	YES	NO	YES	NO			
Retained for Detailed Analysis in the EA		**YES**	**YES**	**NO**	**NO**	**NO**	**NO**	**NO**

2.2.2 Step-One Screening: Purpose and Need

The Step-One screening process evaluates each alternative's ability to satisfy the purpose and need discussed in Section 1.4 Purpose and Need. Alternatives are considered to meet this criterion if they satisfy the following:

- Safely and efficiently convey existing and future passengers through the Airport consistent with 49 United States Code (U.S.C.) §47101(a)(7).
- Provide appropriate space for TADP functions for with ARC C-III standards in accordance with design standards set forth in FAA A/C 150/5300-13A, *Airport Design*.
- Provide a facility to safely store and maintain airport firefighting and maintenance equipment including ARFF's and snowplows.

2.2.3 Step-Two Screening: Feasibility

The Step-Two screening analysis is used to determine if an alternative would be feasible. In this case, feasibility was reviewed to ensure that the alternative could be implemented, or be practical, from a technical or economic perspective.

2.2.3.1 Meet FAA Terminal Planning Guidance

This criterion is intended to determine if an alternative would meet FAA design guidelines in accordance with FAA Advisory Circular (A/C) 150/5360-13A, *Airport Terminal Planning* (July 2018). Included in FAA guidance considerations for terminal functionality; safe separation between aircraft aprons; aircraft parking capacity and passenger ingress and egress.

2.2.3.2.Economically and Technically Feasible

This criterion focuses on an alternative's ability to demonstrate economic and technical feasibility and avoidance of unnecessary financial expenditures. This is accomplished by examining the relative infrastructure requirements associated with each alternative.

2.2.3.3 Continued Airport Operation

This criterion is intended to assess the extent an alternative could interrupt normal airport operations. Operational disruptions can include, but may not be limited to, temporary passenger terminal closures, disruption or cancelation of flights.

2.3 ALTERNATIVE EVALUATION

2.3.1 Step-One Screening

The Step-One Screening evaluated each alternative's ability to satisfy the Purpose and Need. The results of this screening are presented in this section.

2.3.1.1 Proposed Action Alternative

The Proposed Action, as described in Chapter 1, Section 1.3, would involve development as shown in Exhibit 1-4:

- **Terminal**: A new approximately 38,700 sq. ft. (maximum) terminal building with three passenger arrival/ departure gates meets planning criteria in Federal Aviation Administration (FAA) A/C 150/5360-13A, *Airport Terminal Planning*. The building is designed to be less than 35-feet in height and includes state-of-art telecommunication systems, an efficient electrical system, fire suppression system, efficient heating and cooling system, and new water and wastewater systems.
- **Terminal Aircraft Apron**: 130,500 sq. ft., (14,500 sq. yd.) capable of simultaneously parking up to three regional jets, ARC CIII, - the design aircraft.
- **De-icing Apron:** New apron for de-icing aircraft during winter months equipped with a de-icing fluid holding tank.
- **Connecting Taxilanes**: Two new taxilanes to connect the Terminal Aircraft Apron to Taxiway 'A'.
- **Automobile Parking**: Two new automobile parking lots with a combined capacity of up to 190 vehicles.
- **Access and Service Roads**: Airport Road would be extended to the new Terminal Building; a new service road will be constructed to the new maintenance facility.
- **Maintenance Facility**: An 8-bay maintenance facility (8,400 sq. ft.), to include storage for ARFF and Snow Removal equipment; new access road to connect to Taxiway 'A'.
- **Utilities**: Utilities within consist of: Wastewater Treatment Facility and Disposal Field, Potable Water System, Electrical Service and Telecommunications.
- **AWOS**: The existing AWOS would be relocated a distance of more than 500-feet from the proposed maintenance facility.

The Proposed Action meets the Step-One Screening criteria because it improves the

Town's ability to meet its terminal complex needs to safely and efficiently convey existing and future passengers through Mammoth Yosemite Airport. Adequate space for terminal functions would enhance safe and efficient movement of people through the airport. The Proposed Action was retained for the Step-Two Screening analysis.

2.3.1.2 No Action Alternative Step-One Evaluation

Although the No Action Alternative does not meet the purpose and need, it was retained for detailed analysis in Step-Two Screening analysis in accordance with CEQ regulations at 40 CFR § 1502.14(d) and FAA Order 1050.1F, Paragraph 6-2.1. d and FAA Order 5050.4B Paragraph 706d.

2.3.1.3 Alternative A- 1 Step-One Evaluation

An alternative terminal location, Site A-1 [1], as shown in Exhibit 2-2, is located approximately 250-feet south of the proposed Airport Road extension cul-de-sac and [1] east of the existing temporary terminal. The Site A-1 alternative location provides the same passenger services, accommodates forecasted activity levels, aircraft apron improvements as the Proposed Action and includes the maintenance facility and relocated AWOS as part of the TADP.

MMH plays a crucial role in providing emergency services such as disaster relief, firefighting and operation staging area, and search and rescue activities for the region and state. Therefore, it is imperative that the Town have adequate storage with easy access to its ARFF and snow removal equipment to meet its Part 139 response time obligations. Alternative A-1 meets the Step-One Screening criteria because it meets the Purpose and Need.

Alternative A-1 was retained for the Step-Two Screening analysis.

2.3.1.4 Alternative A-2 Step One Evaluation

Alternative A-2, shown in Exhibit 2-4, requires renovating the existing terminal building and increasing the size of the building to accommodate the sponsor's need to accommodate forecast activities. The existing terminal building which was constructed within a remodeled maintenance building has a floor area of 5,060 sq. ft. The terminal building would need to be increased in size to a maximum of about 38,700 sq.ft. to meet the sponsor's concept of a new terminal building. The TADP includes improvements to aircraft aprons, infrastructure improvements and the construction of a new maintenance and ARFF facility and moving the AWOS.

Alternative A-2 meets the Step-One Screening criteria because it provides the Airport with a new terminal area development and maintenance facility capable of accommodating forecast activity levels and meets the Purpose and Need.

Alternative A-2 was retained for the Step-Two Screening analysis

[1] Site "A-1" identified in *Mammoth Yosemite Airport Terminal Area Development Plan*, 2017.

2.3.1.5 Alternative A-3 Step One Evaluation

This alternative would develop terminal facilities at another commercial service airport in the region, such as Reno-Tahoe International Airport (RNO) or Bishop Airport (BIH)[2]. RNO is located in Reno, Nevada, approximately 170 miles north of MMH. BIH is located in Bishop, California, approximately 35-miles south of MMH. As a result of Public Law 95-504, the Airline Deregulation Act of 1978, neither the FAA nor the Town, has the authority to direct or limit air carrier or limit Airport operations.

This includes determining the airports at which airlines decide to serve passenger demand. Additionally, the Town is obligated to adhere to its Airport Sponsor Assurances which require that airport revenues be expended by it for the direct capital or operating costs of the airport which it owns and operates, in this case MMH. For the reasons stated above, this alternative does not meet the Town's Purpose and Need for its proposed project, therefore, it did not achieve Step-One Screening criteria and was eliminated from further consideration.

2.3.1.6 Alternative A-4 Step-One Evaluation

This alternative evaluates developing a new airport located on another site as a replacement for MMH. Development of another airport would require infrastructure capable of handling all the existing and forecast operations at MMH and achieving all applicable FAA airport design standards. Constructing a new airport on another site would require sufficient revenue and time to support identification of an adequately sized site, compliance with all applicable federal, state, and local environmental laws, design, and construction to provide the infrastructure required to support an airport similar to MMH.

This alternative does not meet the Town's Purpose and Need because it does not address the inability of the existing passenger terminal and maintenance hangar to accommodate existing or forecast passenger demand, improve the function of MMH, or increase the airport's opportunity for providing quality service within the existing airport property. Therefore, developing a new airport at another site was eliminated from further consideration as it did not meet the Step-One Screening criteria.

2.3.1.7 Alternative A-5 Step-One Evaluation

This alternative would exclude the Proposed Action and focus on non-aviation public transportation services that could include surface modes of transportation such as train or bus. The Eastern Sierra region, which includes MMH, is not served by passenger rail service. Amtrak, passenger rail service, offers Amtrak Thruway bus service to the Town of Mammoth Lakes from Reno, Nevada. Amtrak Thruway does not serve the Airport or any other locations on Highway 395 south of the Town.

[2] Inyo County applied to the FAA for an Operating Certificate under 14 CFR Part 139 and plans to accommodate commercial service operations beginning December 2021.

Eastern Sierra Transit Authority (ESTA) provides intercity bus service to the Town from locations in Nevada and Southern California; but does not serve the Airport. ESTA operates bus routes on Highway 395 from Sparks, Nevada and Lancaster, California which connects the Town and other Eastern Sierra communities. The Lancaster route connects to the Metrolink commuter rail station in Lancaster; Metrolink serves the greater Los Angeles metropolitan area. Regardless of available public transportation, the purpose of the Proposed Action is to provide the Town with the ability to meet the Airport's passenger terminal area needs to safely and efficiently convey existing and future passengers through Mammoth Yosemite Airport. The use of non-aviation surface transportation does not meet the Step-One Screening criteria and was eliminated from further consideration.

2.3.2 Step-Two Screening

The Step-Two Screening evaluated the feasibility of the remaining alternatives considering the criteria identified in Section 2.2.3.

2.3.2.1 Proposed Action Alternative Step-Two Evaluation

The Proposed Action passes the Step-Two Screening process because the project is capable of supporting the dimensional requirements of ARC C-III aircraft; the Proposed Action is located on the airport: is technically and economically feasible and does not disrupt ongoing aircraft operations, thereby allowing continued Airport operations during project construction.

2.3.2.2 No Action Alternative Step-Two Evaluation

The No Action Alternative does not meet the Step-One Screening criteria because it does not meet the Purpose and Need. Despite this, the No Action Alternative is retained for further analysis in this EA pursuant to CEQ regulations at 40 C.F.R. § 1502.14(d).

2.3.2.3 Alternative A-1 Step-Two Evaluation

FAA airport geometric design standards require specific separation distances between terminal facilities and aircraft operational areas based on the ARC (FAA AC 150/5360-13A). The location of Alternative A-1 does not meet Airport Reference Code C-III standards for separation from runways and taxiways. Since Alternative A-1 does not meet the Step-Two Feasibility Screening, it was not retained for further analysis in the EA.

2.3.2.4 Alternative A-2 Step-Two Evaluation

Alternative A-2 includes partially reconstructing the existing temporary terminal to meet the sponsor's proposed terminal improvements to accommodate forecast activities.

If the existing terminal would be partially reconstructed, maintaining passenger service introduces additional costs for temporary facilities and further reduces passenger levels of service. For instance, the need to provide space that can meet the varying capacity requirements of different aircraft is necessary for the success of a terminal facility.

Constructing a new terminal at the site of the existing terminal would require that portions

of the existing terminal building be demolished before a new terminal could be constructed. The layout of the existing terminal building would make it difficult to design, renovate and fit an addition at the current location in a cost-effective manner. This approach would be less economically and technically feasible and efficient than constructing a new building. The Town must be able to maintain MMH operations during terminal construction and/or renovation, which would not be possible given the dimensions and configuration of the existing terminal building. Therefore, Alternative A-2 does not meet the Step-Two Screening, it was not retained for further analysis in the EA.

2.4 ALTERNATIVES RETAINED FOR CONSIDERATION

2.4.1 Proposed Action Alternative

The Proposed Action alternative (Chapter 1.0, Section 1.3), is shown in Exhibit 1-4.

The Proposed Action includes the following components:

- **Terminal**: A new approximately 38,700 sq. ft. (maximum) terminal building with three passenger arrival/ departure gates meets planning criteria in FAA A/C 150-5360-13A, *Airport Terminal Planning*. The building is designed to be less than 35 feet in height and includes state-of-art telecommunication systems, an efficient electrical system, fire suppression system, efficient heating and cooling system, and new water and wastewater systems.
- **Terminal Aircraft Apron**: 130,500 sq.ft., capable of simultaneously parking up to three regional jets, ARC CII, - the design aircraft.
- **De-icing Apron:** New apron for de-icing aircraft during winter months equipped with a de-icing fluid holding tank.
- **Connecting Taxilanes**: Two new taxilanes to connect the Terminal Aircraft Apron to Taxiway ‘A’.
- **Automobile Parking**: Two new automobile parking lots with a combined capacity of up to 190 vehicles.
- **Access and Service Roads**: Airport Road would be extended to the new Terminal Building; a new service road will be constructed to the new maintenance facility.
- **Maintenance Facility**: An 8-bay maintenance facility (8,400 sq.ft.), to include ARFF and Snow Removal equipment; new access road to connect to Taxiway ‘A’.
- **Utilities**: Utilities within consist of: Wastewater Treatment Facility and Disposal Field, Potable Water System, Electrical Service and Telecommunications.
- **AWOS**: The existing AWOS would be moved at a location near the existing segmented circle where there is available electrical power; the location meets FAA design requirements for separation from obstructions which could interfere with equipment performance.

The Proposed Action Alternative met the Step-One and Step-Two screening criteria, therefore was retained for further consideration.

2.4.2. No Action Alternative

Under the No Action Alternative, the existing terminal facility (5,060 sq. ft.) and temporary tensile structure would continue to be used without an increase in capacity.

TSA passenger and baggage screening checkpoints would not be improved. The existing aircraft apron area which limits aircraft ingress and egress and which has limited control of de-icing fluids would continue to be used. The MMH ARRF equipment would remain in a rented aircraft hangar with inefficient access to the taxiways and runway. The No Action Alternative does not achieve the Step-One or Step-Two screening criteria; however, it is retained for further analysis in this EA pursuant to CEQ regulations at 40 CFR § 1502.14(d).

2.4.3 Summary of Impacts and Alternatives

Table 2-2 provides a summary of alternatives carried forward for analysis from Section 2.4 and the environmental impact analysis results from Chapter 4, Environmental Consequences.

Table 2-2 Summary Comparisons of Alternatives

Resource Category	Proposed Action Alternative	No Action Alternative
Air Quality	The project emissions do not exceed the *de minimis* thresholds, therefore it is presumed to conform to the State Implementation Plan and conformity determination requirements do not apply.	Incremental aircraft emission increases independent of the Proposed Action; no new construction impacts.
Biological Resources	The Proposed Action would have *no effect* on federally-listed species or designated critical habitat., Migratory birds protected by the Migratory Bird Treaty Act are unlikely to be attracted to the project area as suitable habitat is limited.	Airport operations would continue under current conditions including keeping ground cover vegetation at height of 6-12 inches: no federally listed species have the potential to occur on the site due to the lack of suitable habitat.
Hazardous Materials/Solid Waste	Hazardous materials, including firefighting chemicals, would be stored in the proposed maintenance facility; de- icing fluids would be captured on a de-icing apron and the waste transported to a licensed facility with sufficient capacity; quantities of solid waste would slightly increase and would be disposed at a licensed facility with sufficient capacity.	Hazardous materials would be stored and utilized on MMH consistent with recommended or permitted techniques. Firefighting chemicals would remain stored in an aircraft hangar; dispensed de-icing fluids would continue to be collected on the commercial aircraft apron and allowed to evaporate.
Cultural/Historical Resources	There are no recorded archaeological resources within the APE.	No ground disturbing activities would occur on the site.

DOT Section 4(f)	Airport Road extension would use an existing right-of-way underlain by land administered by the U.S. Forest Service, Inyo National Forest.	Existing right-of-way on U.S. Forest Service lands would remain undeveloped.

Resource Category	Proposed Action Alternative	No Action Alternative
Natural Resources/Energy Supply	Increase in use of electricity and propane gas; consumption of building materials.	No construction materials would be consumed; no significant increase in the use of electricity or propane gas. Existing buildings are less energy efficient than those in the Proposed Action Alternative.
Socioeconomics/ Environmental Justice	Would not affect low-income or minority residents; because there are no residences or schools on or near MMH, would not be a risk to children's environmental health and safety. May increase Town's tax base from retail sales.	No low-income and minority residents and businesses near the Airport; no existing risk to children's environmental health and; opportunity to expand the Town's tax base through expanded retail space would not be available.
Visual Effects	Increase in lighting, new buildings could be seen from multiple vantage points. No significant impact on sensitive receptors.	Overall visual landscape would not be affected.
Water Resources: Groundwater	Use existing water supply from two wells; new self-contained wastewater treatment and leach field would be constructed in accordance with Mono County environmental health requirements.	Existing groundwater supplies would not be affected; two existing potable water supply wells and the existing waste water disposal fields would continue to be used.

2.5 APPLICIABLE LAWS AND REGULATIONS

Pursuant to FAA Order 1050.1F, the applicable federal statutes, regulations, executive orders, Department of Transportation orders for the alternatives considered in this DEA are listed below.

2.5.1 Federal Statutes

Airport and Airway Improvement Act of 1982 (Public Law 97-248). Airport and Airway Revenue

Act of 1987 (Public Law 100-223, Title IV).Airport Noise and Capacity Act of 1990 (Public Law

101-508; 49 USC App. 2151, et seq.), now recodified as 49 USC, App. 4752, et seq.

Airports and Airway Safety, Capacity, Noise Improvement, and Intermodal Transportation Act of 1992 (Public Law 102-581 and Public Law 103-13; 49 USC Section 47101, et seq.) (recodified from and formerly known as "Airport and Airway Safety and Capacity Expansion Act of 1987" (Public Law 100-223).

Archaeological and Historic Data Preservation Act of 1974 (Public Law 86-253, as amended by Public Law 93291,16 USC 469).

Aviation Programs: Subtitle VII, Title 49 U.S. Code (USC) (Section 40101, et seq.) recodified from, and formerly known as the “Federal Aviation Act of 1958” as amended (Public Law 85-726).

Aviation Safety and Noise Abatement Act of 1979 (Public Law 96-193; 49 USC App. 2101) 49 USC 7501, et seq.

Clean Air Act (As amended by Public Law 91-604; 42 USC 7401, et seq.).
Clean Water Act (Public Law 92-500, 33 USC1251, et seq.).
Coastal Zone Management Act of 1972 (Public Law 92-583; 16 USC 1451-1464).

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended by Community Environmental Resource Facilitation Act (CERFA), October 1992. 42 USC 9601, et seq.

Department of Transportation Act of 1966 (49 USC 303), recodified from and formerly known as Section 4(f) (Public Law 89-670).

Endangered Species Act of 1973 (Public Law 85-624; 16 USC 661, 664, 1008 note).
Farmland Protection Policy Act (Public Law 97-98 and 7 Code of Federal Regulations [CFR] Part 658).

Federal Aviation Administration Reauthorization Act of 2018.

Federal Land Policy and Management Act of 1976 (Public Law 94-579; 43 USC 1701 et seq.), Section 201(a).

Federal Water Pollution Control Act Amendments of 1972, Section 404 (Public Law 92-500; 33 USC 1344), as amended by the Clean Water Act of 1977 (Public Law 95-217; 33 USC 1251).

Land and Water Conservation Fund Act (Public Law 88-578); 16 USC 460l-8(f)(3).

National Environmental Policy Act of 1969 (NEPA, Public Law 91-190; 42 USC 4321, et seq.) as amended by Public Law 94-52, Public Law 94-83, and Public Law 97-258, 4(b).

National Historic Preservation Act of 1966, Section 106 (Public Law 89-665; 16 USC 470(f)).
Noise Control Act of 1972 (Public Law 92-574; 42 USC 4901).

Resource Conservation and Recovery Act of 1976 (Public Law 94-580; 42 USC 6901 et seq.) as amended by the Solid Waste Disposal Act of 1980 (Public Law 96-482); and the 1984 Hazardous and Solid Waste Amendments (Public Law 98-616).

Uniform Relocation and Real Property Acquisition Policies Act (Public Law 91-528; 42 USC 4601).

Water Bank Act (Public Law 91-559; 16 USC 1301 note), Section 2.

Wild and Scenic Rivers Act (16 USC 1274, et seq.).

2.5.2 Federal Regulations

7 CFR Part 657 (43 Federal Register [FR] 4030, January 31, 1978), Prime and Unique Farmlands.

15 CFR Part 930 Federal Consistency with Approved Coastal Management Programs and Subpart D, Consistency for Activities Requiring a Federal License or Permit.

36 CFR Part 59 (July 1, 1996), Land and Water Conservation Fund Program of Assistance to States; Post-Completion Compliance Responsibilities.

36 CFR Part 800 (39 FR 3365, January 25, 1974, and 51 FR 31115, September 2, 1986), Protection of Historic Properties.

49 CFR Part 17, Intergovernmental Review of DOT Programs and Activities.

49 CFR Part 18 (March 11, 1988), Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Government.

49 CFR Part 24 (March 2, 1989), Uniform Relocation Assistance and Real Property Acquisition for Federal and Federally Assisted Programs.

40 CFR Part 51, Subpart 7, Transportation Conformity.

40 CFR Part 93.153, Subpart B (58 FR 63247, November 30, 1993), Determining Conformity of General Federal Action to State or Federal Implementation Plans.

40 CFR Parts 1500-1508, CEQ implementation of NEPA procedural provisions establishes uniform procedures, terminology, and standards for implementing the procedural requirements of NEPA’s Section 102(2).

50 CFR Part 17.11, 17.12 (Subpart B), (May 31, 1997), Endangered and Threatened Wildlife and Endangered and Threatened Plants.

2.5.3 Federal Executive Orders

Promoting Energy Independence and Economic Growth, Executive Order 13783, March 28, 2017

Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, Executive Order 12898.

Federalism, Executive Order 13132, August 4, 1999.

Flood Hazard Evaluation Guidelines, Executive Order 11296. Floodplain Management,

Executive Order 11988 (43 FR 6030), Protection of Wetlands, Executive Order 11990.

Intergovernmental Review of Federal Programs, Executive Order 12372 (dated July 14, 1982).

Invasive Species, Executive Order 13112, February 3, 1999.

Protection and Enhancement of Environmental Quality, Executive Order 11514 (dated March 4, 1970).

Protection and Enhancement of the Cultural Environment, Executive Order 11593 (dated May 13, 1971).

President's 1979 Environmental Message Directive on Wild and Scenic Rivers (dated August 2, 1979).

2.5.4 U.S. Department of Transportation and FAA Orders

FAA Order 1050.1F, Environmental Impacts: Policies and Procedures, July 16, 2015.

FAA Order 1100.154A, Delegation of Authority, June 1990.

FAA Order 1210.20, American Indian and Alaska Native Tribal Consultation Policy and Procedures, January 28, 2004.

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

Order DOT 5660.IA, Preservation of the Nation's Wetlands (dated August 24, 1978).

Order DOT 5301.1, Department of Transportation Programs, Policies and Procedures Affecting American Indian, Alaska Native, and Tribes; November 6, 1999.

Order DOT 5610.2, Environmental Justice in Low-Income Populations and Minority Populations, April 15, 1997.

Order DOT 5650.2, Floodplain Management and Protection (dated April 23, 1979).

Order DOT 5610.1C, Procedures for Considering Environmental Impacts (44 FR 56420, October 1, 1979), and Order DOT 5610.1, Changes 1 and 2 (July 13, 1982 and July 30, 1985).

CHAPTER 3.0: AFFECTED ENVIRONMMENT

3.1 INTRODUCTION

In accordance with FAA Orders 1050.1F and 5050.4B, this chapter describes the existing conditions and resources within the geographic area that could potentially be directly or indirectly affected by the proposed action or reasonable alternatives. This EA was prepared using CEQ Regulations adopted on November 28, 1978. On July 16, 2020 the CEQ promulgated revised regulations implementing NEPA (40 CFR Parts 1500-1508) that became effective on September 14, 2020. This EA was already in progress before CEQ's final rule was published in the Federal Register (85 FR 43304). Accordingly, the EA was prepared in compliance with the previous version of the regulations, 40 CFR Parts 1500-1508) (1978, as amended in 1986 and 2005).

CEQ Regulations, 40 CFR Parts 1500-1508, as referenced in Section 1.1, state that the effects on the human environment shall be interpreted to include the natural and physical environment and the relationship of present and future generations of Americans with that environment. This chapter describes the existing physical and natural environment that the Proposed Action, No Action, and reasonable alternatives may affect. The amount of information provided on a potentially affected resource is proportional to the extent of the potential impact.

All of the proposed improvements would be built within the existing Airport boundaries shown in Exhibit 1-2, which is the study area for the environmental effects of the project unless otherwise noted. The following review of the environmental conditions follows the sequence of resources listed in the FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures*, in paragraph 4-1, as follows:

Air Quality
Biological Resources
Climate
Coastal Resources
Department of Transportation Act, Section 4(f)
Farmlands
Hazardous Materials, Solid Waste, Pollution Prevention
Historical, Architectural, Archaeological, and Cultural Resources
Land Use
Natural Resources and Energy Supply
Noise and Noise-Compatible Land Use
Socioeconomics, Environmental Justice, and Children's Environmental Health and Safety Risks
Visual Effects
Water Resources
Wetlands; Floodplains; Surface Waters; Groundwater; Wild and Scenic Rivers

3.2 Environmental Resources Not Affected

FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures* directs that the amount of information provided on a potentially affected resource is proportional to the extent of the potential impact. In accordance with guidance provided in FAA Order 5050.4B, *National Environmental Policy Act (NEPA) Implementing Instructions for Airport Actions*, the following environmental resources are not present within the study area and, therefore, would not be affected by the Proposed Action Alternative or the No Action Alternative. For these reasons, they are eliminated from further consideration.

Coastal Resources: The Airport is located approximately 175 miles east of the Pacific Ocean and is not located in a coastal zone.

Farmlands: The study area does not contain land designated as prime, unique or statewide and locally important farmland. There are no soil units in Mono County, where the study area is located, that qualify as prime, unique, statewide or locally important, as identified by the State of California's Farmland Mapping and Monitoring Program based on soil survey information by the Natural Resources Conservation Service.

Water Resource – Wild and Scenic Rivers: The Wild and Scenic Rivers Act of 1958, as amended, describes those river segments designated as, or eligible to be included in, the Wild and Scenic Rivers System. The closest Wild and Scenic River is the Owens River Headwaters, which is about 10 miles northwest of the Airport.[1]

Water Resource – Wetlands: The Clean Water Act defines wetlands as "…those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions." Survey identified no presence of wetlands or other waters of the United States in the study area." (Biological Resources Assessment, Appendix C)

Water Resource – Floodplains: The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map published for the vicinity of the Airport, included as Appendix C, indicates that no portion of Airport property is located within a floodplain.

Water Resource – Surface Waters: As defined by FAA Order 1050.1F Desk Reference Section 14.3, surface waters include streams, rivers, lakes, ponds, estuaries, and oceans. The Biological Resources Assessment for the study area, available in Appendix C, did not identify the presence of any surface waters.

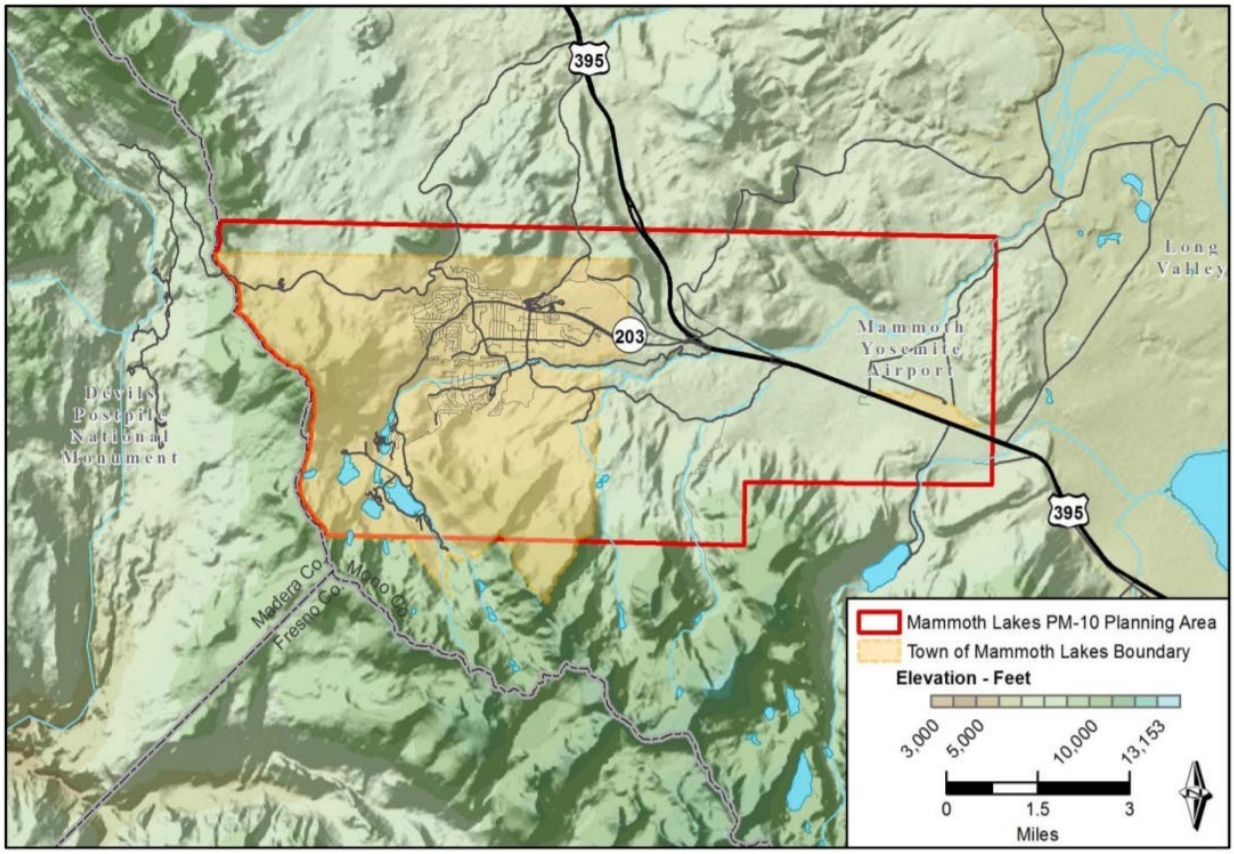
3.3 Affected Environmental Resources

Exhibit 1-1 shows the location of the airport relative to regional features. The impacts of construction and operation of the Proposed Action and any reasonable alternatives may differ for each environmental resource. For that reason, the affected environment for each resource is described individually in the following sections.

3.3.1 Air Quality

The Clean Air Act (CAA) (42 U.S.C. §§ 7401-7671q) is the primary federal statute which addresses air quality. The U.S. Environmental Protection Agency (USEPA) sets National Ambient Air Quality Standards (NAAQS) for pollutants considered harmful to public health and the environment. The potentially affected environment for the air quality analysis consists of the Mammoth Lakes Planning Area, as designated by the Great Basin Unified Air Pollution Control District (District) and as shown in Exhibit 3-1.

Exhibit 3-1 Mammoth Lakes Planning Area and Town of Mammoth Lakes Boundary



Source: Great Basin Unified Air Pollution Control District, 2017

3.3.1.1 National and California Ambient Air Quality Standards

The USEPA has established NAAQS for the following six "criteria" pollutants based on human health-based and/or environmental (science-based) criteria. The USEPA regulates these pollutants by developing guidelines for setting permissible levels:

Carbon monoxide (CO)	Ozone (O_3)
Lead (Pb)	Particulate matter (PM_{10} and $PM_{2.5}$)
Nitrogen dioxide (NO_2)	Sulfur dioxide (SO_2)

Table 3-1 shows federal and California ambient air quality standards. California standards, established by the California Clean Air Act, include four other criteria pollutants besides the six under the federal Clean Air Act. There are no federal standards for these four additional pollutants.

Table 3-1 National and California Ambient Air Quality Standards

US Environmental Protection Agency (January 19, 2017) Criteria Air Pollutants. Retrieved September 2019, from https://www.epa.gov/criteria-air-pollutants.

Air Pollutant	Averaging Time	California Standards	Primary National (NAAQS) Standards[1]	Secondary National Standards[2]
Ozone	1 Hour	0.090 ppm	--	--
	8 Hour	0.070 ppm	0.070 ppm	0.070 ppm
PM_{10}	24 Hour	50 µg/m^3	150 µg/m^3	--
	Annual Mean	20 µg/m^3	--	--
$PM_{2.5}$	24 Hour	--	35 µg/m^3	35 µg/m^3
	Annual Mean	12 µg/m^3	12 µg/m^3	15 µg/m^3
Sulfate	24 Hour	25 µg/m^3	--	--
Carbon Monoxide	1 Hour	20 ppm	35 ppm	--
	8 Hour	9 ppm	9 ppm	--

Air Pollutant	Averaging Time	California Standards	Primary National Standards[1]	Secondary National Standards[2]
Nitrogen Dioxide	1 Hour	0.18 ppm	100 ppb	--
	Annual Mean	0.030 ppm	53 ppb	53 ppb
Sulfur Dioxide	1 Hour	0.25 ppm	75 ppb	--
	3 Hour	--	--	0.5 ppm
	3 Month Average	--	0.15 µg/m^3	0.15 µg/m^3
Lead	30 Day Average	1.5 µg/m^3	--	--
	Calendar Quarter		1.5 µg/m^3	1.5 µg/m^3
	3 Month Average		0.15 µg/m^3	0.15 µg/m^3
Hydrogen Sulfide	1 Hour	0.03 ppm	--	--
Vinyl Chloride	24 Hour	0.01 ppm	--	--
Visibility Reducing Particles	8 Hour	Extinction coefficient of 0.23 per kilometer	--	--

Notes: ppm – parts per million; ppb – parts per billion; µg/m^3– micrograms per cubic meter; N/A – not applicable
[1] National Primary Standards: The levels of air quality necessary, with an adequate margin of safety, to protect the public health.
[2] National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
* For certain areas.

Aircraft, aircraft support equipment, and surface vehicles typically generate the most criteria pollutant emissions at an airport. These are the main pollutant sources at MMH. An airport sponsor does not control these sources, which are operated by corporate entities and private individuals.

3.3.1.2 General Conformity and the State Implementation Plan

Geographic areas found to be in violation of one or more NAAQS are designated as “nonattainment” areas. Nonattainment designations can be marginal, moderate, serious, severe, or extreme, depending on the degree to which they exceed the NAAQS. Areas where concentrations of the criteria pollutants are below the NAAQS are “attainment” areas for those pollutants. Areas with prior nonattainment status that have since transitioned to attainment are designated as maintenance areas.

States having nonattainment areas must develop a State Implementation Plan (SIP) that demonstrates how the area will be brought back into attainment of the NAAQS within designated timeframes. The California Air Resources Board (ARB) develops the SIP for nonattainment areas in the State.

Table 3-2 summarizes the attainment status of the Mammoth Lakes Planning Area for all federal and California criteria pollutants, based on their respective ambient air quality standards. On November 15, 1990, the Mammoth Lakes Planning Area was designated as a moderate nonattainment area for the 24-hour PM_{10} Federal Standard (56 FR 11101). On November 4, 2015, the Mammoth Lakes area received re-designation as a Maintenance area for this standard.[2] The Mammoth Lakes Planning Area is in the state of California Air Quality Attainment designation for all other criteria pollutants, except Ozone, 8-hour.

Table 3-2 Federal and State Attainment Status

Pollutant	Designation	
	Federal	California
Carbon monoxide (CO)	Attainment	Attainment
Lead (Pb)	Attainment	Attainment
Nitrogen dioxide (NO_2)	Attainment	Attainment
Ozone (O_3), 8-Hour (2008)	Attainment	Nonattainment
Particulate Matter (coarse or PM_{10})	Attainment/Maintenance	Nonattainment
Particulate Matter (fine or $PM_{2.5}$)	Attainment	Attainment
Sulfur dioxide (SO_2)	Attainment	Attainment
Hydrogen sulfide (H_2S)	No standard	Attainment
Sulfates	No standard	Attainment
Vinyl chloride	No standard	Attainment
Visibility Reducing Particles	No standard	Unclassified

Note: “Unclassified” means data do not support a designation of attainment or nonattainment.

[2] US Environmental Protection Agency (2019, August 31) Greenbook, California Nonattainment/Maintenance Status for Each County by Year for All Criteria Pollutants. Retrieved September 2019, from https://www3.epa.gov/airquality/greenbook/anayo_ca.html.

3.2.1.3 Air Quality Monitoring

The District maintains a network of air quality cameras and monitoring stations throughout Alpine, Mono, and Inyo Counties. These monitors record concentrations of pollutants in the ambient air to determine compliance with the NAAQS. The closest monitoring station to the Airport is in the Town of Mammoth Lakes, which has monitored PM_{10} since 1979. Air quality monitoring data from this monitoring station show no exceedance of the PM_{10} NAAQS or CAAQS except during July and August 2018, a peak wildfire season.

3.3.2 Biological Resources

Potentially affected environment for biological resources includes the study area as shown in Exhibit 3-2. Field assessments of the study area were conducted by Salix Consulting principal biologist Jeff Glazner on September 16 and 17, 2019. The field study assessed the potential for sensitive plants and wildlife. During field assessments, biological communities were mapped and assessed for the potential to support special status species; plants and animals that were observed were documented and ground photographs taken. An unmanned aerial vehicle was deployed to obtain orthomosaic and oblique aerial photographs of the study area. The results of the field assessment are described in its January 2020 (revised April 2021) report *Biological Resources Assessment for the ±24-Acre Mammoth Yosemite Airport Terminal Area Development Plan Study Area*, (Biological Resources Assessment). Appendix C contains the Biological Resources Assessment.

The primary biological community within the project area is sagebrush scrub. The project area also contains three other distinct areas: pavement, disturbed areas and some minor structures. The unpaved areas of the study area are composed of sagebrush scrub, characterized by low, generally sparse shrubs and native and weedy herbaceous species. Common species include sagebrush (*Artemisia tridentata*), antelope bush (*Purshia tridentata*), rubber rabbitbrush (*Ericameria nauseosa*), Parry's rabbitbrush (*E. parryi*), desert peach (*Prunus andersonii*), tumbleweed (*Salsola tragus*), and cheatgrass (*Bromus techtorum*). There are also a few ornamental trees. Vegetation covers less than 50% of the study area.

Wildlife species occur throughout the area, but they are generally transient foragers that do not linger. Tracks of mule deer were present, although no mule deer were observed during the site visits. Other mammal tracks were observed but not identified. Bird utilization was low during the two-day site visit. Species observed included Brewer's blackbird, northern flicker, spotted towhee, California scrub-jay, common raven, dark-eyed Junco, house sparrow, red-tailed hawk, turkey vulture, house finch, green-tailed towhee, northern mockingbird, and mourning dove. Rodent burrows were observed, but other than golden mantled ground squirrel, few live animals were observed.

An official list of threatened and endangered species for the project area was obtained from the U.S. Fish and Wildlife Service's (USFWS) Information for Planning and Conservation (IPaC) database (April 2021). Table 3-3 lists federally threatened or endangered species known or with potential to occur within a five-mile radius of the Airport and the likelihood of their occurrence within the study area.

During the database queries and field study, it was determined that none of the identified thirteen

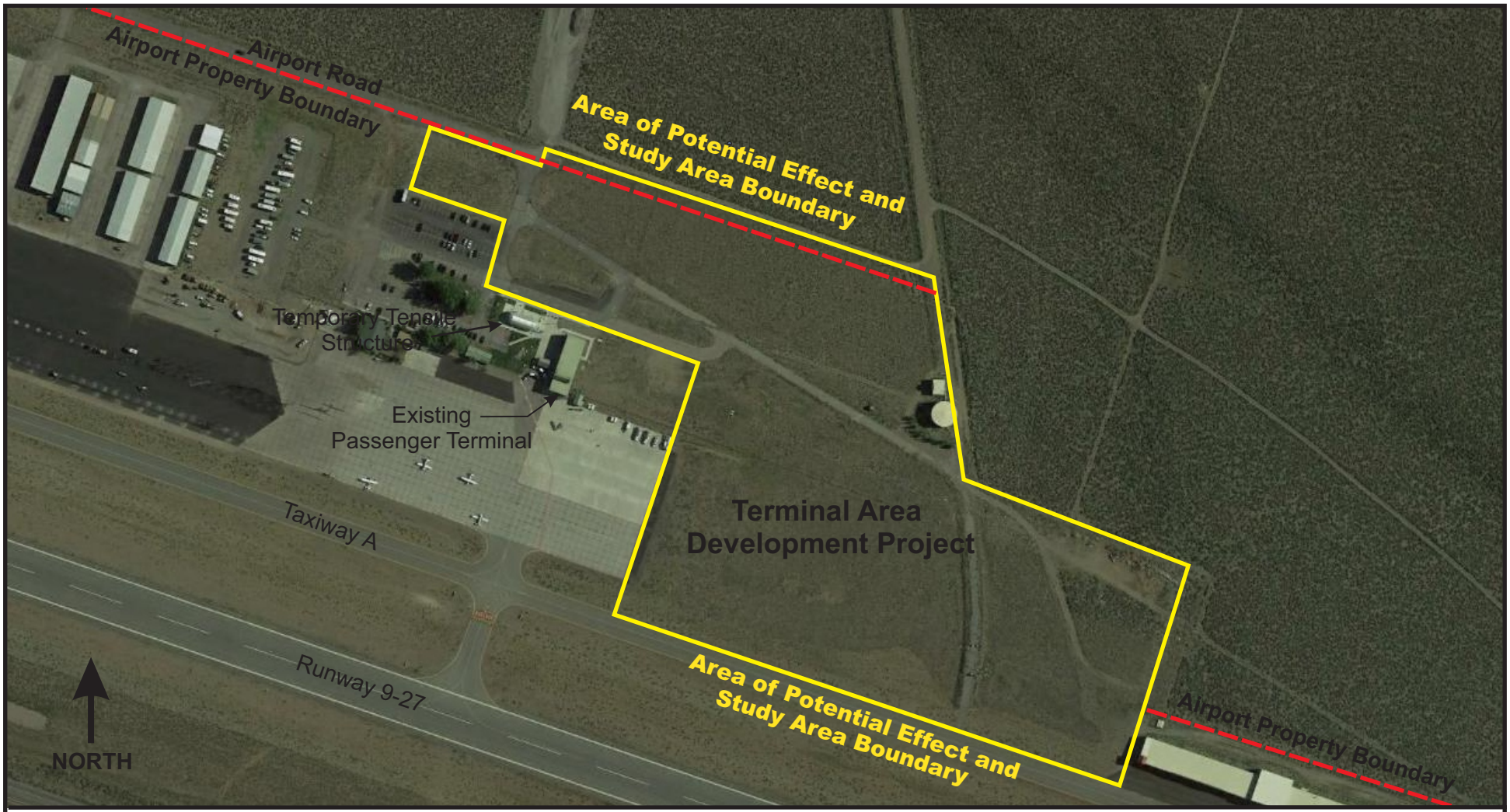


EXHIBIT 3-2

Final Environmental Assessment
Terminal Area Development Project
Area of Potential Effect and Study Area

Mammoth Yosemite Airport
Town of Mammoth Lakes

November 2021

Project Layout from:
Mammoth Yosemite Airport Terminal Area Development Plan, January 2017
Image Source: GoogleEarth

federally listed sensitive plant or animal species identified in Table 3-3 were present in the areas examined. It was also determined that no federally listed species have potential to occur within or adjacent to the study area due to the absence of suitable habitat needed for their survival.

Table 3-3 Federally Threatened, Endangered and Proposed Threatened/Endangered Species and Designated Critical Habitat within Five Miles of the Mammoth Yosemite Airport

Species	Federal Status*	Preferred Habitat	Critical Habitat Present?	Potential for Occurrence
Plants				
Whitebark pine (*Pinus albicaulis*)	C	Upper coniferous forest; subalpine forest	None	None. No forest occurs within the Action Area, or immediately adjacent to the airport property. Study Area occurs below the local elevational range of the species.
Fish				
Lahontan cutthroat trout (*Oncorhynchus clarkii henshawi*)	T	Historically found in all cold waters of the Lahontan Basin, including Independence Lake.	None	None. No suitable aquatic habitat occurs within the Study Area.
Owens tui chub (*Siphateles bicolor snyderi*)	E	Three existing natural populations: at the Owens River Gorge, at source springs of CDFW Hot Creek Hatchery, and a pond and ditches at Cabin Bar Ranch near Owens Dry Lake. Other populations have been established with landowners in the region.	±1-mile NW of Study Area (Hot Creek).	None. No suitable aquatic habitat occurs within the Study Area. Critical Habitat in Hot Creek more than one mile northwest of the Study Area.
Owens pupfish (*Cyprinodon radiosus*)	E	Spring pools, sloughs, irrigation ditches, swamps, and flooded pastures in the Owens Valley from Fish Slough in Mono County to Lone Pine in Inyo County. Currently confined to five populations in the Owens Valley.	None	None. No suitable aquatic habitat occurs within the Study Area.

Species	Federal Status*	Preferred Habitat	Critical Habitat Present?	Potential for Occurrence
Amphibians and Reptiles				
Sierra Nevada yellow-legged frog (*Rana sierrae*)	E	Associated with streams, lakes, and ponds in montane riparian, lodgepole pine, subalpine conifer and wet meadow habitats. Occurs in the northern and central portions of the Sierra Nevada at elevations above 4,500 feet. Always near water.	None	None. No suitable habitat occurs within the Study Area
Yosemite toad (*Anaxyrus canorus*)	T	Endemic to California. Alpine County south to Fresno County at high elevations in the Sierra Nevada mountains. Inhabits wet mountain meadows and the borders of forests. 4,800 -12,000 ft.	None	None. No suitable habitat occurs within the Study Area
Mammals				
Sierra Nevada bighorn sheep (*Ovis canadensis sierrae*)	E	Typical terrain is rough, rocky and steep; also encompasses alpine meadows, summit plateaus, and hanging meadows fed by springs within escape terrain. Summer range is 10,000-14,000 ft. Winter range typically 5,000-9,000 ft.	NE boundary of Critical Habitat is ±2.5 miles south of Action Area	None. No suitable habitat within or near Study Area
North American wolverine (*Gulo gulo luscus*)	PT	Habitat generally consists of open terrain above the timberline but has been observed at 1500 feet. Prefers areas with low human disturbance. Uses caves, hollows in cliffs, logs, rock outcrops, and burrows for cover, generally in denser forest stages.	None	None. No suitable habitat within or near Study Area. Proximity to human activity also precluded occurrence.
Fisher (*Pekania pennanti*)	E	Occurs in coniferous forests; riparian woodlands with a high percent level of canopy closure.	None	None. No suitable habitat within or near Study Area.

Species	Federal Status*	Preferred Habitat	Critical Habitat Present?	Potential for Occurrence
Birds				
Southwestern willow flycatcher (*Empidonax traillii extimus*)	E	Occurs in dense riparian thickets and riparian woodlands usually within the first 10 13 feet above the ground. Typical range is southwestern United States and northwestern Mexico.	None	None. No suitable habitat within or near Study Area.
Yellow-billed cuckoo (*Coccyzus americanus*)	T	Occurs in riparian woodlands and thickets and in willow groves around marshes. In the western US, mostly in streamside trees, including cottonwood-willow groves in arid environments.	None	None. No suitable habitat within or near Study Area.
Insects				
Monarch butterfly (*Danaus plexippus*)	C	Occurs only with milkweed *(Asclepias)*, the host plant. Milkweed occurs as a widespread weedy species found along fence rows and pastures.	None	None. No suitable habitat within or near Study Area.
***STATUS:** E- Endangered; T – Threatened; C – Candidate; PE – Proposed Endangered; PT- Proposed Threatened				

3.3.3 Climate

Research has shown there is a direct correlation between hydrocarbon fuel combustion and Greenhouse gas (GHG) emissions that trap heat in the earth's atmosphere. Climate change is a global phenomenon; therefore, the potentially affected environment for climate is the entire world. As noted in FAA 1050.1F Desk Reference Section 3.2, for FAA project-level actions, the affected environment for climate is highly dependent on the project itself and is defined as the entire geographic area that could be either directly or indirectly affected by the Proposed Action. For this project, this would be the study area defined in Exhibit 3-1. Analysis of GHG emissions is quantitatively assessed in certain circumstances, but otherwise may be qualitatively assessed.

The scientific community's understanding of the fundamental processes responsible for global climate change has improved over the past decade, and its predictive capabilities are advancing. Greenhouse gases (GHGs) include carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF6). Increasing concentrations of GHGs in the atmosphere affect global climate. Anthropogenic (i.e., man-made) sources of GHG emissions are primarily associated with the combustion of fossil fuels, including aircraft fuel. GHGs result primarily from combustion of fuels, and there is a direct relationship

between fuel combustion and metric tons of CO2(MTCO2). Consistent with FAA 1050.1F Desk Reference guidance, emissions are reported in metric tons of CO2 equivalent (MTCO2e).

The scientific community is continuing efforts to understand the impact of aviation emissions on the global atmosphere more fully. The FAA is leading and participating in a number of initiatives intended to clarify the role that commercial aviation plays in GHG emissions and climate. The FAA, with support from the U.S. Global Change Research Program and its participating federal agencies (the National Aeronautics and Space Administration, National Oceanic and Atmospheric Administration, USEPA, and U.S. Department of Energy) has developed the Aviation Climate Change Research Initiative to advance scientific understanding of regional and global climate impacts from aircraft emissions. The FAA also funds the Partnership for Air Transportation Noise & Emissions Reduction Center of Excellence research initiative to quantify the effects of aircraft exhaust and contrails on global and U.S. climate and atmospheric composition. The ICAO is examining similar research topics at the international level.[3]

For FAA project-level actions, the affected environment for climate is highly dependent on the project itself and is defined as the entire geographic area that could be either directly or indirectly affected by the Proposed Action. For airport actions, the study area is defined by the extent of the project changes (*i.e.*, immediate vicinity of the airport) and should reflect the full extent of aircraft movements as part of the project changes. Analysis of GHG emissions are quantitatively assessed in certain circumstances, but otherwise may be qualitatively assessed.

3.3.4 U.S. Department of Transportation Act, Section 4(f) and Section 6(f) of the Land and Water Conservation Fund

U.S. Department of Transportation Act of 1966 (now codified as 49 U.S.C. § 303), Section 4(f) provides protection for special properties, including publicly owned parks, recreation areas, wildlife and waterfowl refuges, multi-land use properties such as National Forests or any historic and archaeological sites. Section 6(f) of the Land and Water Conservation Fund, 16 U.S.C. § 4601-8(f) applies if property was acquired or developed with financial assistance under the Land and Water Conservation Fund State Assistance Program.

In 1984, when Mono County (County) owned and operated the Airport, the County executed a permanent easement with the Forest Service (U.S. Department of Agriculture, Inyo National Forest) for a road/highway right-of-way for what is now Airport Road, from Hatchery Creek Road to the old Convict Lake Road. The purpose of the easement on Section 4(f) property was for public access to a public use airport. Therefore, the County acquired a permanent interest for the use and maintenance of some portion of National Forest property that disrupted a portion (10.5- acres) of the Forest Service's Section 4(f) function. However, an 860-foot section of Airport Road within the right-of-way, as shown in Exhibit 3-3, was not paved but continued to function as part of National Forest land in the same manner as it did before the easement was executed. The 860-foot easement is underlain by land administered by the Inyo National Forest and is proposed to be paved as an extension of Airport Road as part of the TADP.

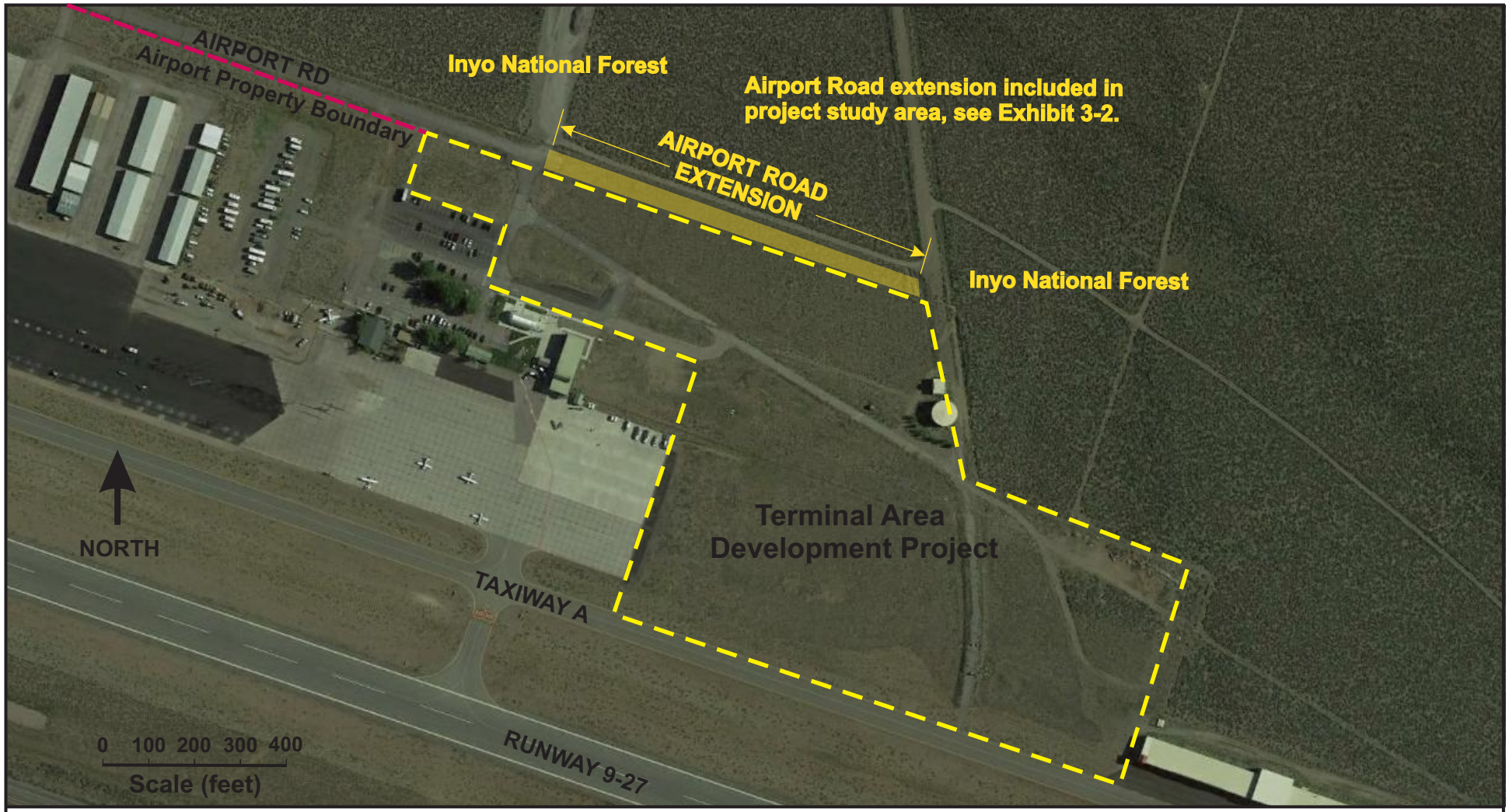


EXHIBIT 3-3

Final Environmental Assessment
Terminal Area Development Project
U.S. DOT Section 4(f)
Airport Road Extension

Mammoth Yosemite Airport
Town of Mammoth Lakes

November 2021

Project Layout from:
Mammoth Yosemite Airport Terminal Area Development Plan, January 2017
Image Source: GoogleEarth

[3] Maurice, L. Q., & Lee, D. S. (2007). Aviation Impacts on Climate. In Interactional Civil Aviation Organization, Final Report of the Interactional Civil Aviation Organization Committee on Aviation and Environmental Protection Workshop (pp. 25-32). Washington, DC and Manchester: U.S. Federal Aviation Administration and Manchester Metropolitan University. Retrieved March 2018.

Other potential Section 4(f) properties near the study area include the Whitmore Recreation Area, managed by the Town, Hot Creek Ranch (fly fishing recreation area), Hot Creek Trout Fish Hatchery, Convict Lake Campground and other campgrounds near Lake Crowley, as shown on Exhibit 3-4. None of these recreation properties are directly or indirectly affected by the proposed action.

3.3.5 Hazardous Materials, Solid Waste, and Pollution Prevention

The use, transport, storage and disposal of hazardous materials and solid waste are heavily regulated. In a regulatory context, the terms “hazardous wastes,” “hazardous substances,” and “hazardous materials” have very specific meanings, as described below.

- **Hazardous Wastes.** Subpart C of the Resource Conservation and Recovery Act (RCRA) defines hazardous wastes (sometimes called characteristic wastes) as solid wastes that are ignitable, corrosive, reactive, or toxic. Examples include waste oil, mercury, lead, or battery acid. In addition, the USEPA has determined specific types of solid wastes to be hazardous. Examples include degreasing solvents, petroleum refining waste, or pharmaceutical waste.
- **Hazardous Substances.** Section 101(14) of Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) defines this term broadly to include hazardous wastes, hazardous air pollutants, or hazardous substances designated under the Clean Water Act (CWA) and the Toxic Substances Control Act (TSCA). These substances include elements, compounds, mixtures, or solutions, or substances that pose substantial harm to human health or environmental resources. Hazardous substances do not include petroleum or natural gas or materials such as ammonia, bromine, chlorine, or sodium cyanide.
- **Hazardous Materials.** According to 49 CFR Part 172, hazardous materials are any substances commercially transported that pose unreasonable risk to public health, safety, and property. These substances include hazardous wastes and hazardous substances, petroleum and natural gas substances, and materials such as household batteries, gasoline, and fertilizers.

As noted previously, the potentially affected environment is limited to the study area shown in Exhibit 3-2. There are no RCRA, CERCLA, or hazardous material sites within the study area. The closest site listed in the USEPA’s RCRA database is Hot Creek Aviation LLC, located on Airport property at 1334 Airport Road west of the study area.[4] In 1998 fuel leaks were identified from buried underground storage tanks; the tanks contained aviation fuel. The soil contamination was cleaned up and the site closed in 2006[5]. The underground storage tanks were replaced with above ground fuel storage tanks. Hot Creek Aviation LLC is the Airport’s fixed-base operator (FBO); they are listed as a handler for aviation fuel.

[4] US Environmental Protection Agency (2019) https://enviro.epa.gov/enviro/rcrainfoquery, retrieved December 2019.
[5] State Water Resources Control Board, GeoTracker, Regional Board Case Number 6B2600915T.

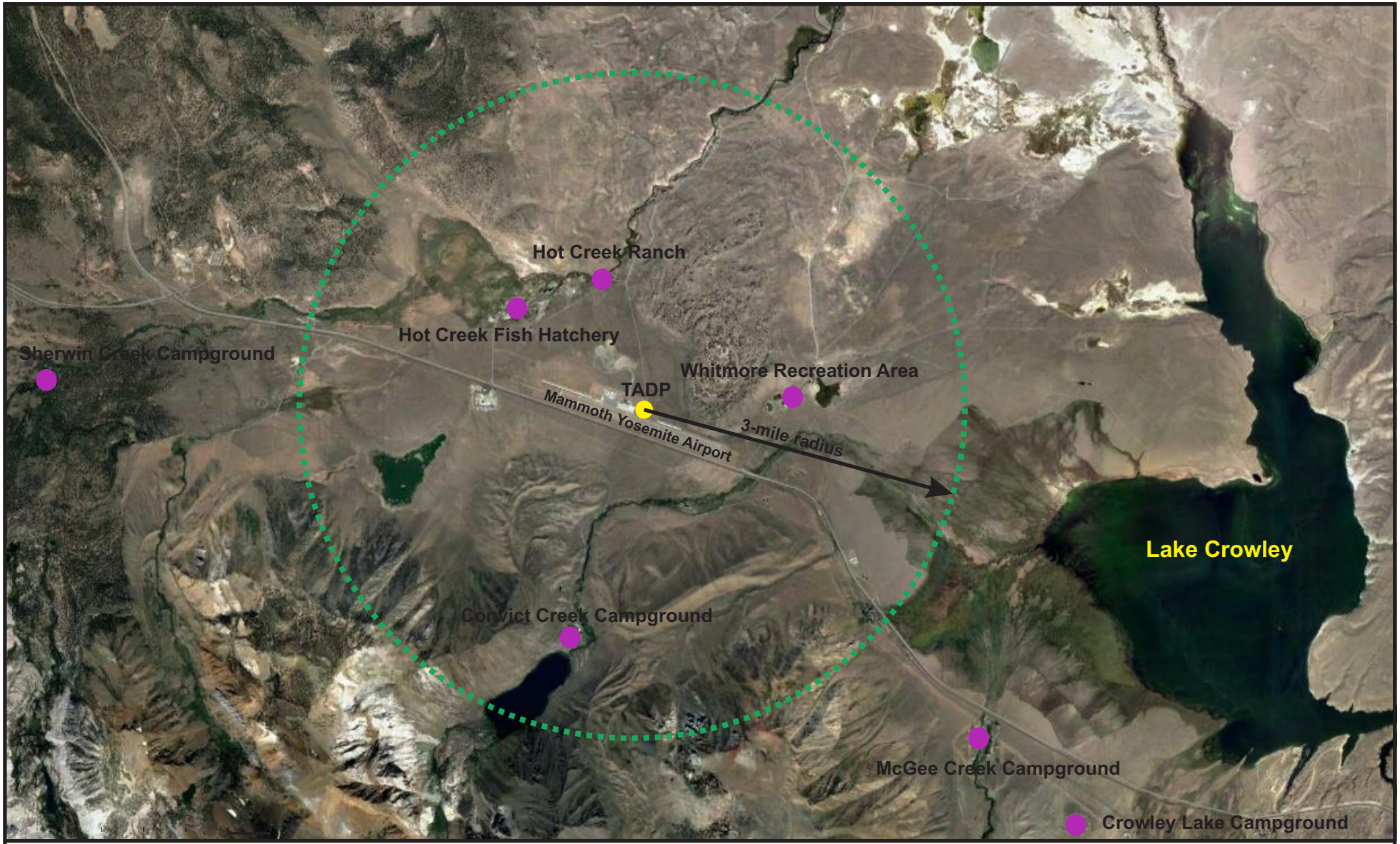


Image Source: GoogleEarth

Final Environmental Assessment
Terminal Area Development Project
U.S. DOT Section 4(f)
Recreation Properties
Within Vicinity of the TADP

EXHIBIT 3-4

Mammoth Yosemite Airport
Town of Mammoth Lakes

November 2021

In accordance with FAA guidance, all Title 14, CFR, Part 139-certified airports are required to provide aircraft rescue and firefighting services. The FAA approved the MMH Airport Certification Manual that includes use of an ARFF vehicle that uses aqueous film-forming foam.

AFFF compounds contain Per- and polyfluoroalkyl substances (PFAS). The Lahontan Regional Water Quality Control Board (RWQCB), in consultation with the State Water Board, has made the determination that the release of PFAS into the environment constitutes a discharge of waste as defined in Water Code Section 13050(d) and is therefore a hazardous material. MMH houses and maintains one ARFF unit which is equipped with dispersal capabilities. MMH stores a maximum of 165 gallons of AFFF compounds in three 55-gallon drums in the ARFF hangar bay.

De-icing fluids are specifically formulated to assist in removing ice, snow or frost from the exterior of aircraft. The main component of de-icing fluid is a freezing point depressant, usually propylene glycol or ethylene glycol, a toxic substance. These fluids are stored and managed by the FBO and used by commercial airlines and general aviation aircraft. De-icing operations are required to obtain an industrial stormwater permit under the National Pollutant Discharge Elimination System (NPDES) program as administered by the EPA through state agencies.

Common requirements for coverage under an industrial stormwater permit include development of a written SWPPP and implementation of control measures such as the Airport Deicing Effluent Guidelines

Solid waste generated by the Airport is collected by Mammoth Disposal, Inc. and is transferred to the Benton Crossing Landfill (operated by Mono County) located approximately five miles east of the Airport. The amount of solid waste generated at the Airport varies seasonally, with the greatest amounts generated during the winter season when about 1.5 tons are disposed weekly. However, the Benton Crossing Landfill is scheduled to permanently close as of January 1, 2023. The Town and Mammoth Disposal Company renewed a Solid Waste Services Agreement (franchise agreement) on September 2, 2020, and as part of that agreement Mammoth Disposal Company is seeking a use permit for the Mammoth Disposal Transfer Station Expansion Project located at an existing transfer station facility in the eastern portion of the Town at 59 Commerce Drive. The Town anticipates that a use permit will be granted and the new transfer station building will be constructed before Benton Crossing Landfill is permanently closed.

3.3.6 Historical, Architectural, Archaeological, and Cultural Resources

The National Historic Preservation Act (NHPA) is the primary federal statute governing historic architectural, archaeological, and cultural resources. In accordance with 36 CFR § 800.16(d) the FAA established an Area of Potential Effect (APE) for the proposed undertaking. The APE is the geographic area in which direct or indirect influence could occur based upon the scale and nature of the undertaking. The APE is shown in Exhibit 3-2.

Natural Investigations Company prepared the *Cultural Resources Inventory and Effects Assessment for The Mammoth-Yosemite Airport Terminal Area Development Plan, Town of Mammoth Lakes, Mono County, California* (cultural resource inventory) in September 2019. The cultural resource

inventory assessed the potential resources to be present within the APE by conducting an archival review, physical transect survey and assessing the results. Information for one potential road resource was updated during the conduct of the cultural resource inventory. No architectural or cultural resources are located within the APE.

Native American Heritage Commission search of the Sacred Lands File did not identify any known resources within the APE. On November 22, 2019, the FAA initiated consultation with the Big Pine Paiute Tribe of Owens Valley, Bishop Paiute Tribe, Bridgeport Paiute Indian Colony, Fort Independence Indian Community of Paiutes, Lone Pine Paiute-Shoshones, Mono Lake Indian Community, Southern Sierra Miwuk Nation, and the Utu Utu Gwaitu Tribe of the Benton Paiute Reservation; no responses were received.

Based upon the information contained within the cultural resource inventory report and the results of the Native American consultations the FAA determined that there are no historic properties listed or eligible for listing on the National Register of Historic Places (NRHP) within the APE. The FAA initiated consultation with the California State Historic Preservation Officer (SHPO) requesting concurrence with the APE and the FAA determination and finding of "*No Historic Properties Affected*" on February 11, 2020. On February 19, 2020, the California SHPO had no concerns with the APE and concurred with the "*No Historic Properties Affected*" finding. Copies of the consultation documents are included in Appendix E.

3.3.7 Land Use

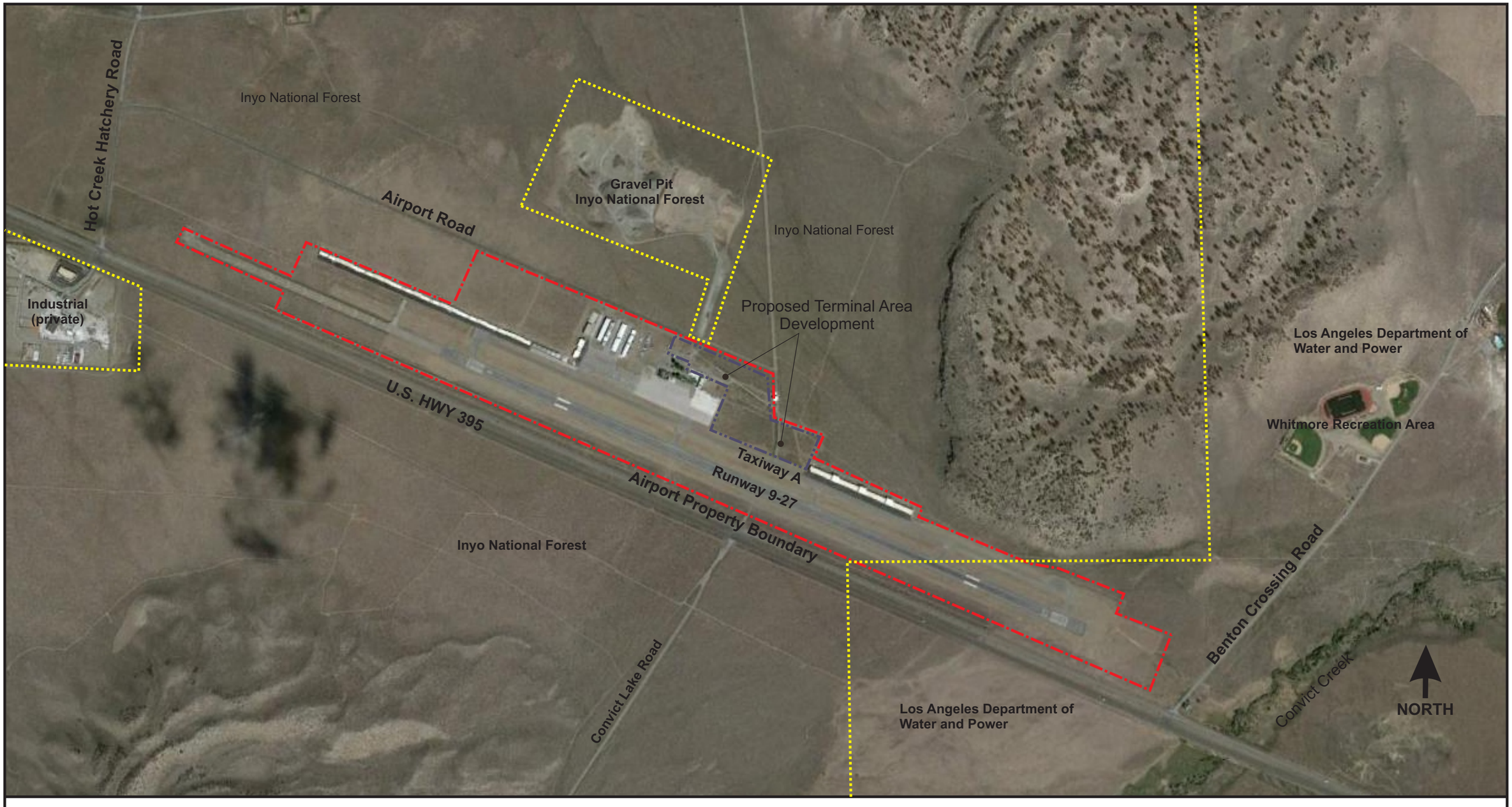
FAA Order 1050.1F Desk Reference, Section 9.2 states that:

> For land use, the study area should include any areas that may be affected by the proposed action or alternative(s), including construction- related activities.

For this project, the study area is shown in Exhibit 3-5.

Affected land uses are generally related to consistency with zoning ordinances, land use plans, and land use policies for the Airport and the surrounding areas. MMH has been developed for activities associated with airport operations, such as the existing terminal building, aircraft hangars, and miscellaneous structures. This development is consistent with the Town of Mammoth Lakes General Plan land use designation of Airport and Town zoning of Airport (Exhibit 3-6). Existing development within the study area is consistent with these designations.

Land use in the immediate vicinity of the Airport, between Hot Creek and Convict Creek, includes agricultural open space (grazing) and areas zoned Resource Management by Mono County. Land north, northwest, and south of MMH is within the Inyo National Forest, managed by the U.S. Forest Service. The Airport occupies 196.23-acres owned by the Town; 33-acres leased from Los Angeles Department of Water and Power (LADWP), and 20.36-acres on the Inyo National Forest which the Airport uses under a Special Use Permit (Exhibit 3-6). The lands northeast of MMH are undeveloped and are managed by the U.S. Bureau of Land Management (BLM) or owned by the Los Angeles Department of Water and Power (LADWP). Eastern portions of MMH, including lands under a portion



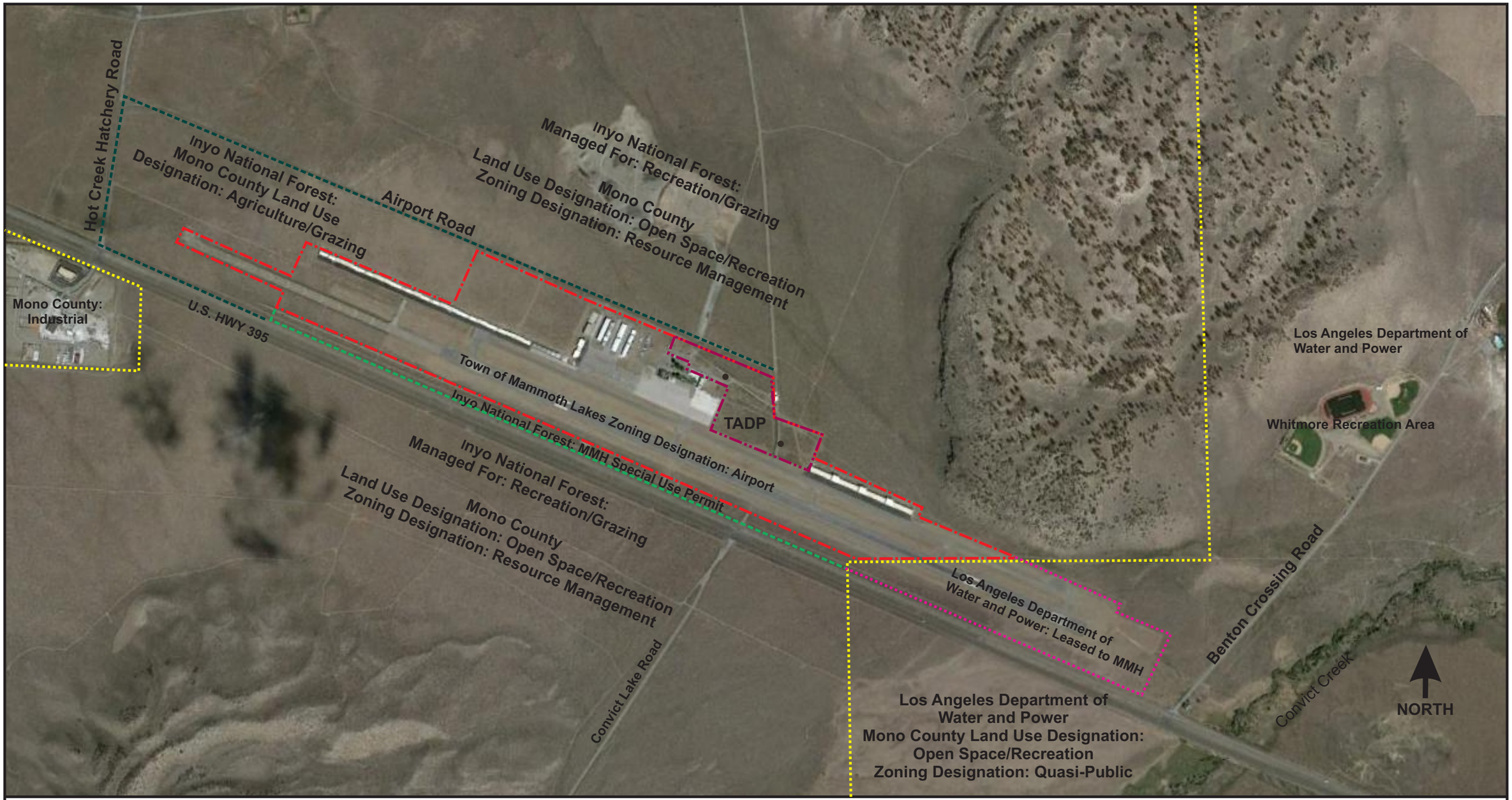
Project Layout from:
Mammoth Yosemite Airport Terminal Area Development Plan, January 2017
Image Source: GoogleEarth

Final Environmental Assessment
Terminal Area Development Project
Land Uses in the Vicinity of the Project Area

EXHIBIT 3-5

Mammoth Yosemite Airport
Town of Mammoth Lakes

November 2021



Project Layout from:
Mammoth Yosemite Airport Terminal Area Development Plan, January 2017
Image Source: GoogleEarth

Final Environmental Assessment
Terminal Area Development Project
Land Use Zoning Designations in the Vicinity of the Project Area

EXHIBIT 3-6

Mammoth Yosemite Airport
Town of Mammoth Lakes

November 2021

of Runway 9-27, are owned by LADWP; the Town of Mammoth Lakes currently leases this land.

Several small parcel lots within 1.4 miles of the study area to the west are used for public agency and industrial purposes. Hot Creek Ranch, a privately-owned fly-fishing campground, and Hot Creek Fish Hatchery are approximately one-mile northwest of the Airport. An abandoned gravel borrow pit is located north of the Airport on U.S. Forest Service land. The High Sierra Community Church, or "Green Church", building is located on the north side of U.S. Route 395 near the intersection with Benton Crossing Road. It is no longer used for any activity.

The Sierra Nevada Aquatic Research Laboratory (SNARL) headquarters are located approximately one mile southeast of the Airport, south of U.S. Route 395 along Convict Creek. Convict Lake Recreation Area, including Inyo National Forest campgrounds and additional facilities, is approximately two miles south of the Airport. None of these land uses are within the study area or on property used by the Airport.

There are no residential areas within or in the immediate vicinity of the study area. The closest residences are approximately 1.5 miles northwest of the Airport on the Hot Creek Fish Hatchery property. The Town of Mammoth Lakes is located about 7 miles west of the Airport. No off- airport land uses would be affected by the Proposed Action or any reasonable alternatives.

3.3.8 Natural Resources and Energy Supply

The Federal government encourages airport development that minimizes the use of consumable natural resources and minimizes demands on energy supplies. FAA policy (FAA Order 1053.1C *Energy and Water Management Program for FAA Buildings and Facilities*, October 26, 2017) encourages developing facilities that use the highest design standards and that incorporate sustainable designs. Airport personnel and tenants regularly use consumable materials to maintain various airside and landside facilities and services. Those materials may include asphalt, concrete, aggregate for sub-base materials, and various materials associated with such maintenance.

Electrical power is necessary to keep the Airport operational and safe. Airport lighting within the project area consists of airfield navigational aids, runway taxiway edge lighting, landside lighting for buildings, apron areas, and automobile parking areas. Within the study area, electrical use is limited to lighting for buildings and automobile parking areas. Southern California Edison (SCE) provides electrical power to Mammoth Lakes and surrounding areas, including the Airport.

AmeriGas and Eastern Sierra Propane provide propane to the Mammoth Lakes area, which is commonly used to fuel furnaces, water heaters, and stoves.

Potable water and water used for firefighting is supplied to the Airport by two groundwater wells located east of the study area and within the airport property boundaries. Each well is 143 feet deep and is designed to pump up to 500 gallons per minute. A 428,000-gallon storage tank is used for fire and operational storage.

3.3.9 Noise and Noise Compatible Land Use

The existing noise environment in the area surrounding the Airport was evaluated based on the approximately 6,745 aircraft operations at the Airport in 2018. The airport currently serves aircraft in FAA Design Groups I and II; the Proposed Action does not change the aircraft types operating at the airport. Based on these operational figures, fleet mix data and use of a pre-approved list of aircraft substitutions, noise contours were developed using the Aviation Environmental Design Tool (AEDT) version 2d, which was the most recent version when the environmental analysis was prepared in July 2020 (Appendix F).

FAA Order 1050.1F, Appendix B, paragraph B-1, *Environmental Impacts: Policies and Procedures,* recognizes the use of the Community Noise Equivalent Level (CNEL) as an alternative metric to the Day/Night Average Sound Level (DNL) in California. The CNEL contours developed as part of the noise analysis were superimposed onto satellite imagery. Exhibit 3-7 shows the CNEL 65, 70, and 75-decibel (dB) noise contours for the year 2018, all of which are confined to Airport property.

The compatibility of existing and planned land uses with proposed aviation actions is usually determined in relation to the level of aircraft noise. Based on existing operational aircraft noise contours, there is no impact on land uses surrounding the airport. Land uses surrounding the Airport consist of primarily open space and an industrial park to the west.

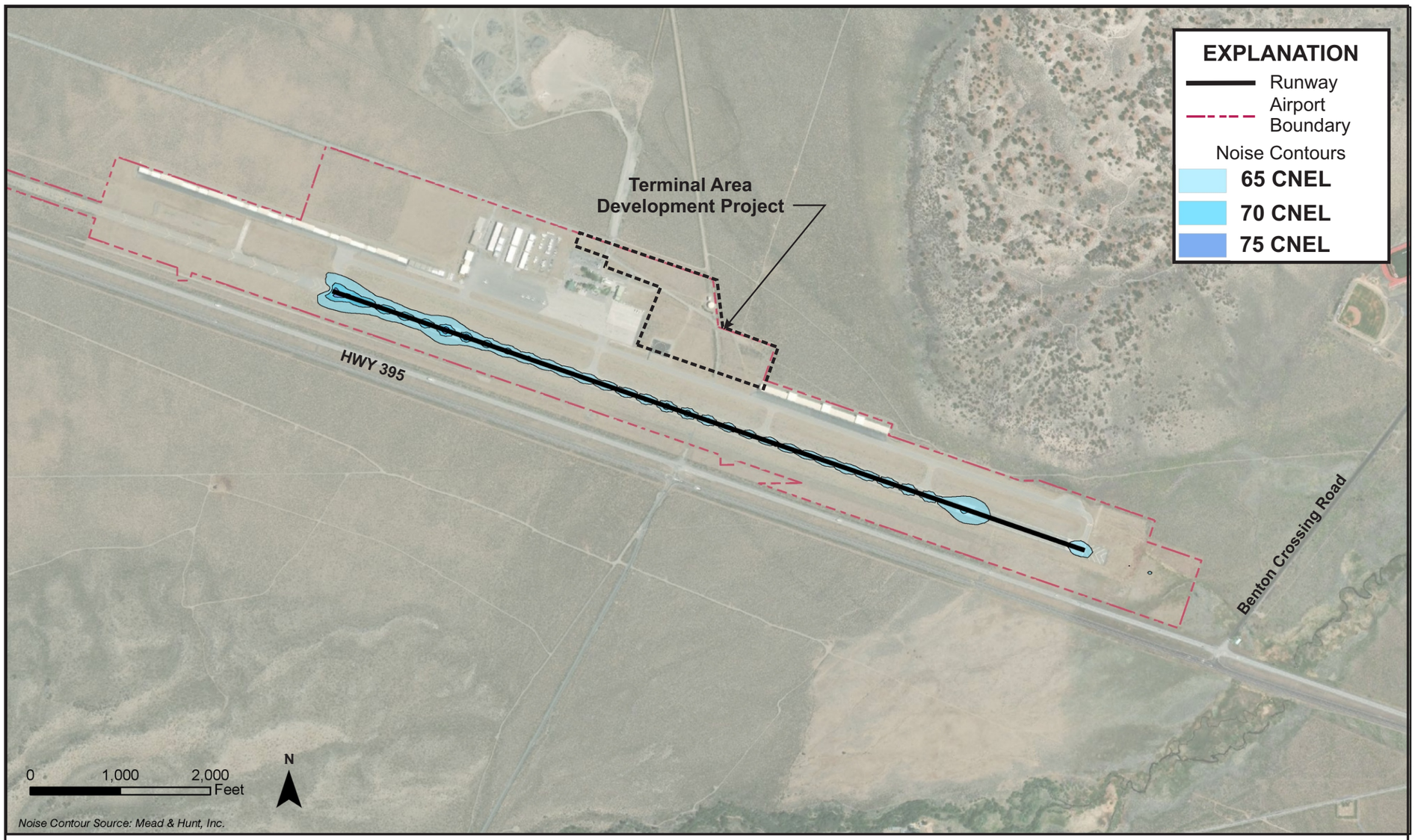
Neither of these types of land uses are sensitive to noise, and noise contours do not extend to the industrial park. There are no land uses on or near the study area that are sensitive to noise or are incompatible with existing Airport activities.

The closest permanent residences to the Airport are approximately 1.5 miles west of the study area. Located about 0.6 miles southwest of Runway 27, the Sierra Nevada Aquatic Research Laboratory (SNARL) provides temporary housing for up to 45-people in five buildings. All of the residences are beyond the Airport property and outside of the noise contours as shown in Exhibit 3-7. Land use in the areas surrounding the Airport is managed by the Inyo National Forest, BLM, LADWP, and Mono County Airport Land Use Commission. Current land uses are shown graphically in Exhibit 3-6.

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

The Airport and surrounding area are located in Mono County Census Tract 1.01[6] (Exhibit 3-8) which represents all of southern Mono County except for the Town of Mammoth Lakes, but includes the communities of June Lake, Crowley Lake, Aspen Springs, Tom's Place and Swall Meadows. The affected environment area is designated Census Tract 1.01 which includes the Airport. Information for the Town of Mammoth Lakes and for Mono County is also provided for comparison purposes where it is deemed appropriate.

[6]https://censusreporter.org/profiles/14000US06051000101-census-tract-101-mono-ca/



Project Layout from:
Mammoth Yosemite Airport Terminal Area Development Plan, January 2017
Image Source: GoogleEarth

Noise Model: AEDT Version 2d

Final Environmental Assessment
Terminal Area Development Project

Existing Conditions
Noise Contours 2018

Mammoth Yosemite Airport
Town of Mammoth Lakes

November 2021

EXHIBIT 3-7

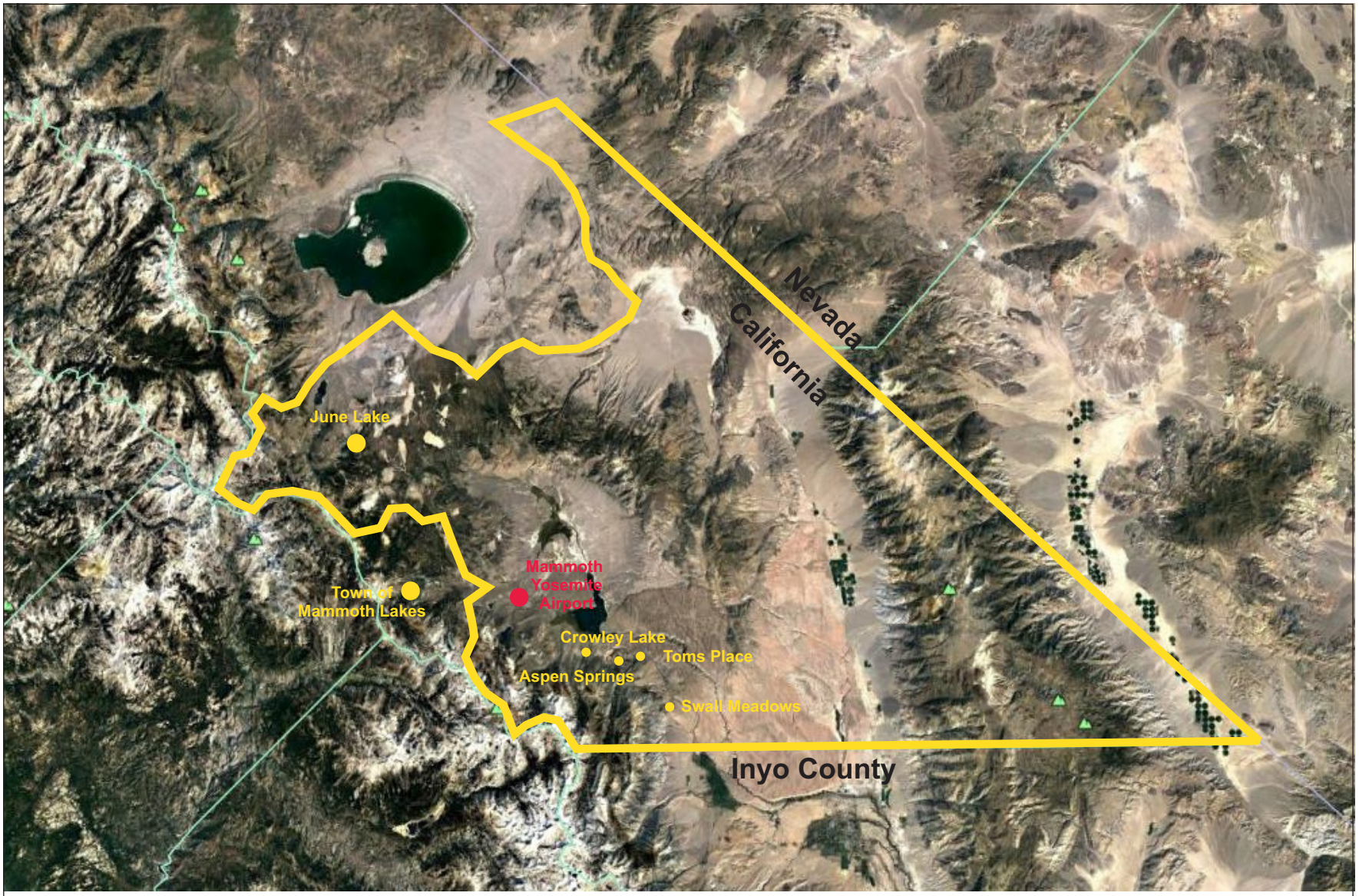


Image Source: GoogleEarth

EXHIBIT 3-8

Final Environmental Assessment
Terminal Area Development Project
Mono County Census Tract 1.01

Mammoth Yosemite Airport
Town of Mammoth Lakes
November 2021

Note: Photograph (September 2019) taken near the shoulder of south bound U.S. Highway 395 looking north. Existing temporary terminal is on far left; water supply tank is on far right.

Final Environmental Assessment
Terminal Area Development Project
Existing Conditions View Looking North Towards Proposed Terminal Location from U.S. HWY 395

EXHIBIT 3-9

Mammoth Yosemite Airport
Town of Mammoth Lakes

November 2021

3.3.10.1 Socioeconomics

3.3.10.1.1 Population

Table 3-4 lists the population growth from 2013 to 2017 in the Census Tract in which the Airport is located. The Census Tract includes about 1,600 square miles with a total population (2017) estimated at 3,497. Data for the Town of Mammoth Lakes, Mono County, and the State of California are included for comparison purposes. Between 2013 and 2017, the population in

Census Tract 1.01 increased by an average of 9.01%, with most of the growth occurring in the Crowley Lake area. Comparatively, the populations in the Town of Mammoth Lakes and Mono County have both decreased. Population shifts have been attributed to increased housing costs in the Town of Mammoth Lakes and more affordable housing in rural areas and northern Inyo County. The overall population of the State of California has increased at a lesser rate than Census Tract 1.01.

Table 3-4 Population Change Between 2013 and 2017

Area	2013 Population	2017 Population	Percent Change
Census Tract 1.01 (MMH)	3,208	3,497	+9.01%
Town of Mammoth Lakes	8,180	8,092	-1.08%
Mono County	14,217	14,058	-1.12%
California	37,659,181	38,982,847	+1.04%

Source: U.S. Census Bureau. (2013). B01003 Total Population, 2009-2013 American Community Survey 5-Year Estimates. Retrieved October 2019, from American Fact Finder: https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml; U.S. Census Bureau. (2017). B01003 Total Population, 2013-2017 American Community Survey 5-Year Estimates. Retrieved October 2019, from American Fact Finder: https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml.

3.3.10.1.2 Housing

Table 3-5 (data from July 1, 2019) lists the total and vacant housing units in Census Tract 1.01, Town of Mammoth Lakes, Mono County, and the State of California for comparison. Averages of 51.49% of housing units are vacant in Census Tract 1.01, with even greater vacant unit percentages in the Town of Mammoth Lakes and Mono County.

Table 3-5 Housing Units
(July 1, 2019)

Area	Total Units	Vacant Units (percentage)
Census Tract 1.01	2,379	51.49%
Town of Mammoth Lakes	9,895	71.29%
Mono County	14,041	65.11%
California	13,996,299	7.92%

Note: The U.S. Census Bureau considers vacant housing units those for rent; rented but not occupied; for sale; sold but not occupied; for seasonal, recreational, or occasional use; for migrant workers; and other vacant units.

Source: U.S. Census Bureau. (2017). DP04 Selected Housing Characteristics, 2013-2017 American Community Survey 5-Year Estimates. Retrieved October 2019, from American Fact Finder: https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml.

3.3.10.1.3 Labor Force and Employment

Table 3-6 summarizes the employed population in Census Tract 1.01, the Town of Mammoth Lakes, Mono County, and the State of California. According to the U.S. Census Bureau, there are 1,465 employed civilians in Census Tract 1.01. Pre-COVID-19 pandemic unemployment rates were about five percent in Census Tract 1.01; no updated, 2020 or 2021, unemployment data are available. Comparatively, the unemployment rate in Mono County is about four percent. As Table 3-6 indicates, the largest employment sectors in Census Tract 1.01 are management, business, and financial occupations and personal care and service occupations. For the Town of Mammoth Lakes, the largest employment sectors are management, business, and financial occupations, food preparation and serving related occupations, and sales and related occupations.

Table 3-6 Overview of Employed Population

Subject	Census Tract 1.01	Town of Mammoth Lakes	Mono County	California
Civilian employed population 16 years and over	1,465	5,292	7,864	17,993,915
Management, business, and financial occupations	17.88%	19.94%	19.54%	15.54%
Computer, engineering, and science occupations	6.96%	4.06%	4.70%	6.52%
Education, legal, community service, arts, and media occupations	9.69%	3.97%	7.90%	11.05%
Healthcare practitioner and technical occupations	9.28%	4.65%	4.86%	4.98%
Healthcare support occupations	3.21%	0.00%	0.71%	1.89%
Protective service occupations	1.02%	0.85%	1.08%	2.05%
Food preparation and serving related occupations	6.21%	17.76%	13.48%	5.77%
Building and grounds cleaning and maintenance operations	5.67%	11.58%	9.03%	4.23%
Personal care and service occupations	14.74%	4.88%	6.03%	4.73%
Sales and related occupations	1.91%	11.98%	9.56%	10.63%
Office and administrative support occupations	9.90%	6.22%	8.47%	12.48%
Natural resources, construction, and maintenance occupations	7.39%	6.25%	7.32%	9.08%
Production, transportation, and material moving occupations	6.14%	7.86%	7.32%	11.05%

Source: U.S. Census Bureau. (2017). S2401 Occupation by Sex for the Civilian Employed Population 16 Years and Over, 2017 American Community Survey 5-Year Estimates. Retrieved October 2019, from American Fact Finder: https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml.

3.3.10.1.4 Surface Transportation

The main road in proximity to the project area is U.S. Highway 395, directly southwest of the Airport. Data from the California Department of Transportation indicate the average traffic volume on U.S. Highway 395 in the vicinity of the Airport ranges from 6,900 to 9,400 vehicles per day (Caltrans Census Program, Average Annual Daily Traffic, Mono County, 2019). Hot Creek Hatchery Road connects to U.S. Highway 395 and runs west and north of the Airport. Airport Road is directly north of the project area and intersects Hot Creek Hatchery Road, providing access to the Airport and Terminal Development Area. Data on traffic conditions on these roadways, such as Level of Service, are not available.

3.3.10.1.5 Environmental Justice

In accordance with Presidential Executive Order (EO) 12898, the Council on Environmental Quality issued guidance for each federal agency to “make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority and low-income populations.”[7] FAA Order 1050.1F, which is consistent with U.S. Department of Transportation

Order 56.10, establishes the requirements for assessing environmental justice impacts.

Table 3-7 illustrates the share of the population in poverty within Census Tract 1.01, the Town of Mammoth, Mono County, and the State of California. About 12.1% of the population in Census Tract 1.01 is below the poverty level. This is above the average of Mono County. The median household income in Census Tract 1.01, at $62,536, is higher than the Town of Mammoth Lakes and Mono County; the State of California has a higher average median household income of $67,169.

Based on proximity to the Airport and to the study area, no statistical minority populations, or population living below the poverty level have been identified. Within Census Tract 1.01, the closest residential populations, west of the Airport along Hot Creek (1.4 miles northwest of the study area), have not been identified by economic status or ethnicity.

Table 3-7 Population Below the Poverty Line

Area	Population for Whom Poverty Status is Determined	Percent of Population Living Below the Poverty Line
Census Tract 1.01	3,476	12.1%
Town of Mammoth Lakes	8,083	7.6%
Mono County	13,943	9.9%
California	38,242,946	15.1%

Source: U.S. Census Bureau (2017). S1701 Poverty Status in the Past 12 Months, 2013-2017 American Community Survey 5-Year Estimates. Retrieved October 2019, from American Fact Finder.

Table 3-8 shows the total minority presence in Census Tract 1.01, the Town of Mammoth Lakes, Mono County and the State of California. According to the U.S. Census Bureau, about 12.12% of the population in Census Tract 1.01 are minorities, which is less than that of Mono County.

Table 3-8 Minority Population

Area	Total Population	Percent Minority
Census Tract 1.01	3,497	12.12%
Town of Mammoth Lakes	8,092	14.90%
Mono County	14,058	14.73%
California	38,982,847	39.44%

Source: U.S. Census Bureau (2017). B02001: Race 2013-2017 American Community Survey 5-Year Estimates. Retrieved October 2019, from American Fact Finder.

[7] CEQ. (1997, December 10). *Environmental Justice – Guidance Under the National Environmental Policy Act*. Retrieved October 2019, from Agency Guidance Related to Environmental Justice and NEPA: https://www.epa.gov/sites/production/files/2015-02/documents/ej_guidance_nepa_ceq1297.pdf

It should be noted that there are only scattered residences in the vicinity of the Airport; most of the surrounding area is open space with development limited to the Airport and an industrial park to the west. There are no populations concentrated in the Airport vicinity, including those of lower-income and/or minority populations.

3.3.10.1.6 Children's Environmental Health and Safety Risks

EO 13045, *Protection of Children from Environmental Health and Safety Risks* (62 FR 19885) is the primary EO related to Children's Environmental Health and Safety Risks. The order directs federal agencies to identify and assess environmental health risks and safety risks that may disproportionately affect children. For the purpose of this EA, children are considered to be persons less than 18 years of age.

Table 3-8 shows the percentage of children in Census Tract 1.01, the Town of Mammoth, Mono County, and the State of California. About 20.88% of the population in Census Tract 1.01 is under the age of 18, which is slightly higher than the percentage of children in Mono County. However, as previously noted, there are no concentrations of population in the vicinity of the Airport, including those of children. Based on proximity to the Airport and to the study area, no children (statistical populations) have been identified within Census Tract 1.01. The closest residential populations, west of the Airport along Hot Creek (1.4 miles northwest of the study area), have not been identified by age distribution.

Areas of particular concern for children's environmental health and safety risks are schools and recreational facilities. The closest school to the airport is the Mammoth Lakes Elementary School, approximately five miles west of the Airport. The seasonal Whitmore Recreation Area and Ball Fields are located one-mile northeast of the study area and is the closest recreational facility in proximity to the Airport. Neither facility is located within the affected environment identified for this issue.

Table 3-9 Percent of Children (Under 18 Years of Age)

Area	Total Population	Percent of Population Under 18 Years of Age
Census Tract 1.01	3,497	20.88%
Town of Mammoth Lakes	8,092	19.90%
Mono County	14,058	19.48%
California	38,982,847	23.38%

Source: U.S. Census Bureau. (2017), B09001 Population Under 18 Years by Age 2013-2017 American Community Survey 5-Year Estimates. Retrieved October 2019, from American Fact Finder: https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml.

3.3.11 Visual Effects

MMH is located along the north side of U.S. Highway 395, a State and County designated scenic highway (Caltrans designated November 9, 1971; official designation number 28; length 8.9-miles; Mono County designated from the junction with State Route 120 to the Inyo County Line, 51.0-miles). Scenic highway designations include the visible area outside the highway's right of way, generally described as "the view from the road" (2019 Regional Transportation Plan, amended December 9, 2019); elements of the Airport are visible from the highway.

Buildings and aircraft hangars can be seen from several locations within the vicinity of the airport. The most common view is looking north from U.S. Highway 395, as shown in Exhibit 3-9. Airport hangars are about 925-feet from the centerline of the westbound lanes; the existing terminal building is about 1,200-feet from the same centerline. Aircraft hangars are the most prominent manmade visual feature; runways and taxiways are not visible. Landing, departing and taxiing aircraft can be seen from the highway.

Current Airport facilities are illuminated for safety and security by various types of landside lighting for buildings, access roadways, apron areas, and automobile parking areas, and airside lighting for runways, taxiways, and apron areas. The closest light-sensitive land uses are the SNARL residences located about 1.0-miles southeast of the project area and a few residences, located approximately 1.4 miles north west of the study area along Hot Creek (see Section 3.2.7, Land Use).

3.3.12 Water Resources: Groundwater

Mammoth Yosemite Airport: Groundwater Technical Memorandum, prepared by GeoImagery in December 2019 and available in Appendix G, describes groundwater conditions at Mammoth Yosemite Airport. The Airport is located in the southwestern portion of the Long Valley Caldera and is within the Long Valley Groundwater Basin. Although probably isolated from the primary Long Valley Groundwater Basin by a series of volcanic flows, the Airport is underlain by a thin deposit of morainal outwash form the Convict Creek Moraine, and by a series of lacustrine and stream deposits to depths of about 140 feet below the existing ground surface.

Based on lithologic well log data from wells within about 1.5 miles of the Airport, there is a 150-foot-thick clay deposit which acts as a confining layer at a depth of about 140 feet beneath the Airport.

The depth to unconfined shallow groundwater varies between approximately 28 and 46 feet below ground surface. Groundwater gradient maps indicate that shallow groundwater flows are generally west to east and that buried volcanic flows west of the airport create a barrier to westerly groundwater flows towards Hot Creek. Geologic and groundwater maps are presented in the groundwater technical memorandum in Appendix G. The aquifer underlying the Airport is not included in a U.S EPA's sole source drinking water study area (www.epa.gov/dwssa/map-sole-source-aquifer-locations).

As noted in Section 3.2.8, Natural Resources and Energy Supply, two groundwater wells are located east of the study area. Both wells provide potable and firefighting water to the Airport; each well is 143 feet deep and has the capacity to pump up to 500 gallons of water per minute.

3.3.13 Projects with the Potential to Contribute to Cumulative Impacts

This section identifies past, present, or reasonably foreseeable projects on or near the Mammoth Yosemite Airport that could contribute to cumulative environmental impacts when considered in combination with the TADP. Cumulative impact's spatial and temporal boundaries may vary depending on the resource. For this EA, the spatial distribution is limited to a radius of one-mile around the project area and the Bishop Airport. The spatial boundaries are shown in Exhibit 3-10. For the purposes of this EA, the temporal boundaries are five years into the past (2016), and five years into the future (2026).

3.2.13.1 Present Projects

- Bishop Airport (BIH) proposed commercial service (2022); (Exhibit 3-10)

3.2.13.2 Past Projects

- Segmented Circle Relocation (2019)
- Reconstruction of General Aviation apron (2018)

3.2.13.3 Reasonably Foreseeable Projects

- Perimeter Wildlife Exclusion Security Fence (2023)
- Land Acquisition (2024)
- Runway and Taxiway Shoulder Improvements (2023)

Final Environmental Assessment
Terminal Area Development Project
Bishop Airport Location

EXHIBIT 3-10

Mammoth Yosemite Airport
Town of Mammoth Lakes
Novembetr 2021

CHAPTER 4.0: ENVIRONMENTAL CONSEQUENCES

4.1 Introduction

This chapter evaluates the potential environmental impacts associated with implementation of the Proposed Action compared to the No Action Alternative. The focus of this analysis is on resources that could be directly or indirectly affected and whether the impact would be considered significant utilizing criteria and procedures established in FAA Orders 1050.1F and 5050.4B. Potential environmental consequences are evaluated for the No Action Alternative and the Proposed Action.

- The No Action Alternative involves operating the Airport in its current condition, with no new construction or other improvements.
- The Proposed Action involves the construction and operation of a Terminal Area Development Project as described in Chapter 1.0 Section 1.3.

As outlined FAA Order 5050.4B, in paragraph 706.f concise analysis is undertaken only for the no action, proposed action, and each reasonable alternative. Some resources, listed below, will not be impacted by implementing the Proposed Action or the No Action Alternative and therefore are not discussed in detail. As described in Chapter 3, Section 3.2, the following resources are not impacted by the Proposed Action or No Action Alternatives:

- Coastal Resources
- Farmlands
- Wetlands (Waters of the U.S.)
- Floodplains
- Surface Waters
- Wild and Scenic Rivers

The environmental consequences analysis involves the following potentially affected environmental resources as set forth in Chapter 3. The impacts of construction and operation of the Proposed Action and the No-Action Alternative may differ for each environmental resource. For that reason, areas of consideration vary in accordance with descriptions in Chapter 3, Section 3.3:

- Air Quality
- Biological Resources
- Climate
- DOT Section 4(f) and Land and Water Conservation Fund Action Section 6(f)
- Hazardous Materials, Solid Waste, Pollution Prevention
- Historical, Architectural, Archaeological, and Cultural Resources
- Land Use
- Natural Resources and Energy Supply

- Noise and Noise-Compatible Land Use
- Socioeconomics, Environmental Justice, and Children's Environmental Health and Safety Risks
- Visual Effects
- Water Resources: Groundwater
- Cumulative Effects

4.2 Potentially Affected Resource Categories

4.2.1 Air Quality

Exhibit 4-1 of FAA Order 1050.1F provides the FAA's significance determinations for air quality, which states, "The action would cause pollutant concentrations to exceed one or more of the National Ambient Air Quality Standards (NAAQS), as established by the U.S. Environmental Protection Agency (USEPA) under the Clean Air Act (CAA), for any of the time periods analyzed, or to increase the frequency or severity of any such existing violations."

Section 176(c) of the CAA and associated regulations requires the conformity of general Federal actions to the applicable State Implementation Plan. A Federal agency must make a conformity determination that a Federal action conforms to the applicable implementation plan where the total of direct and indirect emissions in a nonattainment or maintenance area caused by a Federal action would equal or exceed specified rates. For the Mammoth Lakes area, which is designated a maintenance area for PM_{10}, the following emission factors apply as the EPA's General Conformity *De MInimis* thresholds:

Ozone (NO_x, SO_2, or NO_2): 100 tons per year

Ozone (VOC), within ozone transport region: 50 tons per year

CO and PM_{10}: 100 tons per year

Lead: 25 tons per year

Project emissions from the Proposed Action, both construction and operational, were estimated using the California Emissions Estimator Model (CalEEMod), a computer modeling program used for projects in most air districts in California. CalEEMod calculates its results based upon the land uses involved with a project. CalEEMod does not have emission factors specifically related to airport land use. Therefore, for the Proposed Action, it was assumed that approximately 16% of the square footage was represented by light industrial space and the remaining square footage by office park space.

4.2.1.1 No Action Alternative

Under the No Action Alternative, no construction would occur, so no construction emissions would be generated. Operational emissions, as noted in Section 3.2.1.1, are typically generated by aircraft, aircraft support equipment, and surface vehicles. These sources are not controlled by an airport.

4.2.1.2 Proposed Action

The results of the CalEEMod run are summarized in Table 4-1. In accordance with FAA Order 1050.1F Desk Reference Section 1.3.5, the net emissions (Proposed Action emissions minus No Action emissions) are compared to the general conformity *de minimis* thresholds. As indicated in Table 4-1, net emissions would not exceed the general conformity *de minimis* thresholds applicable to the Mammoth Lakes area. As such, the Proposed Action would conform to the State Implementation Plan, would not exceed any of the NAAQS, and the General Conformity requirements have been met.

Table 4-1
General Conformity *De Minimis* Thresholds and Air Pollutant Emissions

	VOC[1]	NO_x	CO	SO_x	PM_{10}	Lead
Conformity Thresholds (tons per year)	**50**	**100**	**100**	**100**	**100**	**25**
Proposed Action Emissions	0.34	0.77	1.45	<0.01	0.36	0.00
No Action Emissions	0.04	0.11	0.20	<0.01	0.05	0.00
Net Emissions	**0.30**	**0.66**	**1.25**	**<0.01**	**0.31**	**0.00**
Above Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Notes: VOC – volatile organic compounds; NOx – nitrogen oxide; CO – carbon monoxide; SOx – sulfur oxide; PM10 – particulate matter 10 microns in diameter; PM2.5 – particulate matter 2.5 microns in diameter.
[1] In CalEEMod, emissions are calculated for reactive organic gases (ROG), which are equivalent to VOC. Both are ingredients of ozone, along with NOx. Sources: CalEEMod Version 2016.3.2, Great Basin Unified Air Pollution Control District.

Site preparation and construction activities such as clearing, grading, digging, trenching, roadwork, and temporary soil stockpiling would generate fugitive dust emissions (particulate matter). Exhaust from construction equipment and construction vehicles accessing the site would also contain criteria pollutant emissions. Short-term emissions would last only during construction activities and Best Management Practices (BMPs) will be utilized to minimize any temporary effects.

4.2.1.3 Avoidance and Conservation Measures

BMPs would be utilized to minimize, to the extent practicable, emission of criteria pollutants. The Town will require construction activities to occur in accordance with FAA AC 150/5370-10G, *Standards for Specifying Construction of Airports,* including BMPs such as: reducing equipment idling time; and use of dust control measures during construction activities.

4.2.2 Biological Resources

Exhibit 4-1 of FAA Order 1050.1F provides the FAA's significance determinations for biological resources. A significant impact to biological resources would occur when the U.S. Fish and Wildlife Service or the National Marine Fisheries Service determines that the action would be likely to jeopardize the continued existence of a federally-listed threatened or endangered species, or would result in the destruction or adverse modification of federally designated critical habitat.

In addition to the determination above, Exhibit 4-1 of FAA Order 1050.1F provides additional factors to consider in evaluating the context and intensity of potential environmental impacts for biological resources:

- A long-term or permanent loss of unlisted plant or wildlife species, i.e., extirpation of the species from a large project area (e.g., a new commercial service airport);
- Adverse impacts to special status species (e.g., state species of concern, species proposed for listing, migratory birds, bald and golden eagles) or their habitats;
- Substantial loss, reduction, degradation, disturbance, or fragmentation of native species' habitats or their populations; or
- Adverse impacts on a species' reproductive success rates, natural mortality rates, non-natural mortality (e.g., road kills and hunting), or ability to sustain the minimum population levels required for population maintenance.

4.2.2.2 No Action Alternative

Under the No Action Alternative, no construction activities would occur; therefore, no construction related ground- disturbing activities would alter existing habitats. Airport operations would continue under current conditions. The Airport would need to maintain its facilities to Part 139 standards, which includes keeping ground cover vegetation at height of 6 to12 inches. This would limit the extent to which the existing sagebrush habitat may expand. As noted in Chapter 3, Section 3.2.2, no federally listed species have the potential to occur on the site due to the lack of suitable habitat.

4.2.2.3 Proposed Action

As noted in Chapter 3, Section 3.2.2, the analysis of the Proposed Action in the Biological Resource Assessment (Appendix C) did not identify any potential effects on federally-listed threatened or endangered species or designated critical habitat within the study area or Airport property. The FAA considered the information in the Biological Resources Assessment and determined that the Proposed Action would have *no effect* on federally-listed species or designated critical habitat. Migratory birds protected by the Migratory Bird Treaty Act are unlikely to be attracted to the project area as suitable habitat is limited. The Biological Resources Assessment concluded that the study area does not provide suitable nesting habitat for any common raptors known from the region, nor for other birds protected by the Migratory Bird Treaty Act.

4.2.2.4 Avoidance and Conservation Measures

No avoidance or conservation measures are required or proposed.

4.2.3 Climate

The FAA has not identified significance thresholds for aviation GHG emissions, nor has the FAA identified specific factors to consider in making a significance determination for GHG emissions (1050.1F Desk Reference, paragraph 3.3.4). There are currently no accepted methods of determining significance applicable to aviation projects given the small percentage of emissions they contribute. CEQ has noted that "it is not currently useful for the NEPA analysis to attempt to

link specific climatological changes, or the environmental impacts thereof, to the particular project or emissions, as such direct linkage is difficult to isolate and to understand."[1] Accordingly, it is not useful to attempt to determine the significance of such impacts. There is a considerable amount of ongoing scientific research to improve understanding of global climate change and FAA guidance will evolve as the science matures or if new Federal requirements are established. Notwithstanding, GHG emission estimates for construction and operation of the Proposed Action and the No Action Alternative are disclosed for general information purposes.

4.2.3.2 No Action Alternative

Under the No Action Alternative, the terminal facilities would remain unchanged and aviation forecasts would occur as described in Chapter 1, Section 1.2.2. Table 4-2 below provides an estimate of GHG operational condition emissions under this alternative, which is approximately 128.0 metric tons (MT) Carbon Dioxide equivalent (CO_2e) annually. However, as discussed in Section 3.2.3, the Airport does not control these GHG sources, which are operated by corporate entities and private individuals.

4.2.3.3 Proposed Action

The CalEEMod model as described in section 4.2.1 was used to estimate the total GHG operational emissions of the Proposed Action to be 377.7 MT CO_2e annually, while short-term construction emissions are estimated to be 299.1 MT CO_2e. Table 4-2 presents the results of the CalEEMod GHG emissions estimates. .

Table 4-2 GHG Emissions

GHG Emissions Conditions	Annual Emissions (MT CO_2e)	Short-Term Construction (MT CO2e)
No Action Alternative: Operational	128.0	NA
No Action Alternative: Construction	NA	0
Proposed Action: Operational	377.7*	NA
Proposed Action: Construction	NA	299.1

Source: California Emissions Estimator Model v. 2016.3.1, CAPCOA.
*Based on maximum TADP buildout

4.2.3.4 Avoidance and Conservation Measures

No avoidance or conservation measures are required.

[1] CEQ (2010). Draft Guidance, Consideration of the Effects of Climate Change and Greenhouse Gas Emissions, 75 Federal Register 8046 (February 23, 2010).

4.2.4 Department of Transportation Act, Section 4(f)

FAA 1050.1F Desk Reference identifies the procedural requirements for complying with Section 4(f) as set forth in DOT Order 5610.1D. This DOT Order, *Procedures for Considering Environmental Impacts* provides the DOT's procedures for the National Environmental Policy Act (NEPA). The FAA also uses Federal Highway Administration/Federal Transit Administration regulations in 23 CFR part 774 (73 *Federal Register* 31609 [June 3, 2008]) and FHWA guidance (e.g., Section 4(f) Policy Paper, 77 *Federal Register* 42802 [July 20, 2012]). These requirements are not binding on the FAA; however, the FAA may use them as guidance to the extent relevant to aviation projects. Ultimately, the FAA evaluates the potential for a proposed DOT action to impact a Section 4(f) property. As described in Chapter 3, Section 3.2.4., DOT 4(f) properties can include publicly owned parks, recreational areas, or wildlife and waterfowl refuges such as National Forests.

Section 4(f) refers to the original section within the U.S. Department of Transportation Act of 1966 which provided for consideration of park and recreation lands, wildlife and waterfowl refuges, and historic sites during transportation project development. The law, now codified in 49 U.S.C. §303 and 23 U.S.C. §138, applies only to the U.S. Department of Transportation (U.S. DOT) and is implemented through the regulation 23 CFR 774.

A significant impact would occur if the proposed action involves more than a minimal physical use of a Section 4(f) resource or constitutes a "constructive use" based on an FAA determination that the aviation project would substantially impair the Section 4(f) resource. FAA 1050.1F Desk Reference, Section 5.3.7., further indicates that "a significant impact under NEPA would not occur if mitigation measures eliminate or reduce the effects of the use below the threshold of significance. If a project would physically use Section 4(f) property, the FAA is responsible for complying with Section 4(f) even if the impacts are less than significant for NEPA purposes."

As described in Chapter 3, Section 3.2.4, in 1984 Mono County executed a permanent easement with the Forest Service (U.S. Department of Agriculture) for a road/highway right-of-way for what is now Airport Road. The purpose of the easement on Section 4(f)[1] property is for public access to a public-use airport.

The FAA determined, that the paved extension of Airport Road within the existing easement which had been reserved for transportation infrastructure would not be subject to DOT Section 4(f) in accordance with 23 CFR § 774.11(h), because the property was *formally* reserved for a future transportation facility (United States Department of Agriculture, Forest Service, Easement granted to County of Mono on August 1, 1984 with" before "Mono County Resolution 84-108, located in Appendix H of this EA), even though it temporarily functioned as a park, recreation, or wildlife and waterfowl refuge in the interim.

On November 3, 2020, the FAA sought the concurrence of the U. S. Department of Agriculture (USDA), Forest Service (FS), as the official with jurisdiction, with its assessment that DOT Section 4(f) would not apply to the proposed extension of Airport Road. The FAA evaluation considered the existing transportation easement and the mixed land use of the subject area within Inyo National Forest.

On December 15, 2020 the USDA-FS, responded with its concurrence that DOT Section 4(f) does not apply to the proposed extension of Airport Road within the existing easement located on National Forest System lands. On February 18, 2021, Mono County submitted an acknowledgement to the FAA of its intent to participate in the coordination of proposed Airport Road extension with the Town of Mammoth Lakes and USDA-FS. (Copies of the consultation are located in this EA Appendix H).

4.2.4.3 No Action Alternative

Under the No Action Alternative, Airport Road would not be extended within the existing easement over land managed by the Inyo National Forest. The easement would remain dedicated to a transportation use, but would not be developed. No DOT Section 4(f) impact would occur under the No Action Alternative.

4.2.4.2 Proposed Action

The Proposed Action includes extension of Airport Road within the USDA-FS easement to Mono County approved in 1984. As discussed in Section 4.2.4, USDA-FS concurred with the FAA assessment that DOT Section 4(f) protections do not apply to the proposed road extension within an existing transportation easement. No impact to DOT Section 4(f) resources would occur with implementation of the Proposed Action.

4.2.4.3 Avoidance and Conservation Measures

No Section DOT 4(f) avoidance or conservation measures are recommended.

4.2.5 Hazardous Materials, Solid Waste, and Pollution Prevention

Hazardous materials, solid waste, and pollution prevention includes the evaluation of potential waste streams; potential hazardous material use; potential to encounter sites contaminated with hazardous waste; and the potential to interfere with ongoing remediation of a previously contaminated site. This EA analyzes the potential change in hazardous materials and waste storage and consumption between the No Action and Proposed Action alternatives. The FAA has not established a significance threshold for hazardous materials, solid waste, and pollution prevention. However, it does provide a number of factors to consider in evaluating the context and intensity of potential environmental impacts. These include when the Proposed Action or No Action Alternative would have the potential to:

- Violate applicable federal, state, or local laws or regulations regarding hazardous materials and/or solid waste management;
- Involve a contaminated site (including but not limited to a site listed on the National Priorities List);
- Produce an appreciably different quantity or type of hazardous waste;
- Generate an appreciably different quantity or type of solid waste or use a different method of collection or disposal and/or would exceed local capacity; or
- Adversely affect human health and the environment.

4.2.5.2 No Action Alternative

Under the No Action Alternative, the site would remain undeveloped and no hazardous materials would be transported or stored on the site. The FBO would remain the only listed RCRA site near the study area. The quantity of fuel used would increase slightly under the No Action Alternative consistent with the forecast for general aviation operations discussed in Chapter 1, Section 1.2.2. Since commercial air carrier aircraft do not refuel at MMH, air carrier flights would not affect the quantity of fuel dispensed at MMH. Existing above ground fuel storage tanks are surrounded by a secondary containment system that reduces the possibility of any fuel spills going beyond Airport property.

Under the No Action Alternative, the PFAS containing AFFF would remain securely stored in the aircraft hangar that houses the ARFF equipment. Use of AFFF would remain consistent with the MMH Airport Certification Manual.

Under the No Action Alternative, de-icing operations would continue to occur in accordance with the industrial stormwater permit issued for these operations. The FBO would continue to store and utilize the fluids, as required for the aviation operations occurring at MMH.

Solid waste generated by the Airport would continue to be collected. After the closure of the Benton Road Landfill on January 1, 2023, solid waste will be collected by Mammoth Disposal Company and processed at its expanded transfer station located in the Town of Mammoth Lakes.

4.2.5.3 Proposed Action

The Proposed Action would involve the storage, transport, use, and disposal of hazardous materials. In particular, the proposed maintenance facility as described in Chapter 1.0, Section 1.3, would store materials that may be considered hazardous to human health, such as AFFF, petroleum products, de-icing liquids, and solvents. FBO and Airport personnel would continue use of these substances consistent with operational needs. While the new terminal would have activities that do not require large amounts of hazardous materials, the building would require increased use of propane for heating purposes, which in turn would require larger onsite storage tanks. In addition, use of de-icing fluid would be extended at the proposed de-icing apron.

Activities that transport or store hazardous materials would be required to do so in compliance with applicable local, state, and federal regulations. In addition, MMH has a Spill Prevention, Control, and Countermeasures (SPCC) Plan that addresses spill prevention and response requirements, and a Hazardous Materials Business Plan (HMBP) that outlines emergency response procedures for hazardous material releases. The SPCC and HMBP would be updated to account for additional storage of hazardous materials such as propane.

De-icing fluid used on the proposed de-icing apron would drain to a central inlet and holding tank. A valve-controlled dual-pipe discharge would send the collected de-icing fluid to a holding tank for storage until it is removed and transported to the licensed disposal facility at the Buttonwillow Landfill approximately 290- miles southwest of the Airport in Kern County. De-icing operations are

required to obtain an industrial stormwater permit from the State Water Resources Control Board. This permit is designed to implement federally required stormwater regulations and would be issued as a General Stormwater Permit prior to final design and operation of the de-icing apron. Compliance with the industrial stormwater permit and its conditions would ensure that fluids from de-icing operations are properly collected and treated.

Minor changes in solid waste generation and disposal would occur when compared to the No Action Alternative. Because the landfill currently used for solid waste disposal is closing by January 1, 2023, solid waste would be hauled to the Mammoth Disposal Company's transfer station in the Town of Mammoth Lakes from where waste would be transferred to the Mono County landfill south of Lee Vining.

4.2.5.4 Avoidance and Conservation Measures

Since neither the Proposed Action nor the No Action Alternative would result in significant impacts on hazardous materials, solid waste, and pollution prevention, no avoidance or conservation measures are required or proposed.

4.2.6 Historical, Architectural, Archaeological, and Cultural Resources

The methodology for determining potential historic, architectural, archeological, and cultural resource impacts was to apply the guidance provided by the National Historic Preservation Act (NHPA), Section 106 (36 CFR Part 800). NHPA, § 800.16(l)(1) protects historic properties and properties eligible for listing on the National Register of Historic Places. The general steps in the process include: 1) establishing the APE; 2) identifying any resources in the area; and 3) determining whether the resources, if any, are included or eligible for inclusion on the National Register of Historic Places (NRHP) or are protected by other related statutes (e.g., the Native American Graves Protection and Repatriation Act (NAGPRA).

The FAA Order 1050.1F, Exhibit 4-1, provides a factor to consider in evaluating the context and intensity of potential environmental impacts. This factor occurs when the proposed action would result in a finding of adverse effect through the process outlined in Section 106 of the NHPA. However, an adverse effect finding does not automatically trigger a significant impact determination. An undertaking has an effect on an historic property when the undertaking may alter the characteristics of the property that qualify the property for inclusion in the NRHP. For the purpose of determining effect, alteration to features of the property's location, setting, or use may be relevant depending on a property's significant characteristics and should be considered.

A cultural resources inventory was conducted in compliance with Section 106 of the NHPA. The assessment included literature review by the Eastern Information Center of the California Historical Resources Information System, a Sacred Lands File search by the NAHC, and an intensive pedestrian-level survey of the APE.

The FAA established an APE, evaluated the cultural resource inventory, completed consultation with eight Native American Tribes, and determined that there are no historic properties listed or eligible for listing on the NRHP within the APE. The FAA submitted its determination of eligibility and finding "*No Historic Properties Affected*" to the California SHPO for review. On February 11,

2020, the California SHPO concurred with the FAA's APE, and findings. The SHPO concurrence letter in Appendix E.

4.2.6.2 No Action Alternative

Under the No Action Alternative, the continued operation and maintenance of MMH would not affect any historic, architectural, archaeological, or cultural resources. No construction activities would occur within the APE.

4.2.6.3 Proposed Action

As described in Section 3.2.6 and 4.2.6, the Proposed Action would have no impact on historic, architectural, archaeological, or cultural resources. The cultural resource inventory identified a very low potential for discovery previously unidentified archaeological deposits in the APE.

4.2.6.4 Avoidance and Conservation Measures

In the event previously unidentified resources are discovered during construction activities related to the Proposed Action, work in the immediate area will be halted and 36 CFR § 800.13 procedures will be implemented. A qualified archaeologist (36 CFR Part 61) will be notified, who will then evaluate the resource and consult with the Town, and the FAA.

If unanticipated human remains are discovered during Proposed Action construction, work shall stop at the discovery location and any nearby area the Mono County coroner shall be contacted to determine if the cause of death must be investigated. The FAA will be notified within 24 hours of the discovery.

If the coroner determines that the remains are of Native American origin, the NAHC will be contacted by the Town. The NAHC is to locate the most likely descendant to make recommendations regarding the treatment of the remains with appropriate dignity. If NAHC is unable to identify a descendant, or a descendant fails to make a recommendation, the remains shall be removed at the direction of the coroner and work may resume.

4.2.7 Land Use

The compatibility of existing and planned land uses with an aviation or aerospace proposal is typically associated with noise impacts, which are evaluated in this EA. In addition to the impacts of noise on land use compatibility, other potential actions may also affect land use compatibility such as the disruption of communities, relocation, induced socioeconomic impacts, and land uses protected under Section 4(f) of the USDOT Act.

The Town accepts federal Airport Improvement Program (AIP) grant funds to construct and maintain airport facilities. Therefore, as part of its grant assurances, the Town is obligated to comply with local land use plans and zoning laws. The Town's Grant Assurance letter committing to consistency with local plans is located in Appendix I. Land uses and zoning designations for

the study area and the Airport were obtained for the land use analysis conducted in this section. The land use analysis considered existing and future land use plans within and adjacent to the study area.

The FAA has not established a significance threshold for land use. It is noted that the determination that significant impacts exist in the land use impact category is normally dependent on the significance of other impact categories.

4.7.2.1 No Action Alternative

Under the No Action Alternative, the project would not be implemented. Existing land use within the study area would be unchanged.

4.2.7.2 Proposed Action

Under the Proposed Action, some changes would occur to existing conditions on land in the study area through the construction and operation of the Proposed Action components identified in Chapter 1, Section 1.3. However, the proposed development would be consistent with the existing development on the Airport property and with the Town's General Plan designations and zoning. The Proposed Action would not affect any lands beyond the boundaries of the study area (Exhibit 3-2). The study area is owned by the Town; however, a small portion of the Airport along Highway 395 is owned by the U.S. Forest Service and is used by the Airport under a Special Use Permit. Likewise, the eastern end of the Airport is located on land leased from the Los Angeles Department of Water and Power (Exhibit 3-6). The Proposed Action would not conflict with the management of lands owned by the U.S. Forest Service or the LADWP.

4.7.2.3 Avoidance and Conservation Measures

Neither the Proposed Action nor the No Action Alternative would result in significant impacts on land use; no measures are required or proposed.

4.2.8 Natural Resources and Energy Supply

This EA evaluates project-related potential effects on natural resources and energy supplies in the study area. This is primarily done by examining how alternatives considered would influence natural resource consumption and the relative availability of resources such as:

- Water resources
- Electricity consumption
- Fuel consumption

Potentially significant effects could occur if the action would have the potential to cause demand to exceed available or future supplies of these resources, which include aviation and surface vehicle fuel, construction material, and electrical power. The FAA has not established a significance threshold for Natural Resources and Energy Supply.

4.2.8.1 No Action Alternative

Under the No Action Alternative, no new buildings or improvements would be constructed. No construction materials or energy to operate construction equipment would be consumed. There would be no anticipated increase in the use of electricity or propane gas that is associated with the Proposed Action. However, it is possible that this alternative would lead to less-efficient energy use, as the existing terminal structures and buildings that house the ARFF equipment and other activities would continue to be used. The existing terminal building and tensile structure were not constructed to be consistent with the requirements for energy use and conservation set forth in FAA Order 1053.1C, *Energy and Water Management Program for FAA Buildings and Facilities* (September 26, 2017).

4.2.8.2 Proposed Action

The Proposed Action would lead to an increase in the consumption of electricity and propane gas, as the terminal building would be larger than the existing terminal structures. An increase in energy consumption is also anticipated with the new maintenance facility. While Airport activities that would use this building would mostly relocate from an existing leased hangar, this would leave the vacated leased hangar available for aircraft storage.

The Proposed Action would be developed consistent with the requirements found in FAA Order 1053.1 *Energy and Water Management Program for FAA Buildings and Facilities.* The Order includes requirements for reductions in energy and water consumption and for greater use of clean energy sources such as, but not limited to, solar, wind and geothermal. It should be noted that the Proposed Action would also comply with State of California codes that would reduce electricity and water consumption.

The Proposed Action would involve the use of asphalt, concrete, aggregate for sub-base materials, and various metals for the proposed improvements. The construction materials would not be used in unusual quantities when compared to similar projects. All materials would be obtained from existing commercial sources.

4.2.8.3 Avoidance and Conservation Measures

Since neither the Proposed Action nor the No Action Alternative would result in significant impacts on natural resources or energy supplies, no measures are required or proposed.

4.2.9 Noise and Noise-Compatible Land Use

Methods to describe existing noise conditions and estimating the future noise environment rely extensively on the FAA's required model for noise analysis, the AEDT, Version 2d. Noise exposure is depicted as lines delineating noise levels, or noise contours. Four noise modeling results are described in Sections 4.2.9.1 and 4.2.9.2 and illustrated in Exhibit numbers 4-1 through 4-4 for the No Action and Proposed Action Alternatives for the years 2023 and 2028.

FAA Order 1050.1F, Chapter 4, Section 4-3, Exhibit 4-1, provides the FAA's significance determinations for noise and noise-compatible land use, which states, "The action would increase noise by CNEL 1.5 dB or more for a noise-sensitive area that is exposed to noise at or above the CNEL 65 dB noise exposure level, or that will be exposed at or above the CNEL 65 dB level due to a CNEL 1.5 dB or greater increase, when compared to the no action alternative for the same timeframe. For example, an increase from CNEL 65.5 dB to 67 dB is considered a significant impact, as is an increase from CNEL 63.5 dB to 65 dB".

4.2.9.1 No Action Alternative

Under the No Action Alternative, no construction work would occur, therefore, no noise impacts would be generated from construction activities. Existing conditions regarding noise related to Airport operations would remain as shown in Exhibit 4-1 for the year 2023. There are no noise-sensitive land uses at the Airport, and projected noise contours would not extend beyond Airport property.

Aviation forecasts, the estimated total number of aircraft operations, under the No Action Alternative for the year 2023 is 7,611 and for the future No Action Alternative (2028) is 7,755; an increase of about one percent. The noise model contours are shown in Exhibit 4-1 (2023) and Exhibit 4-2 (2028).

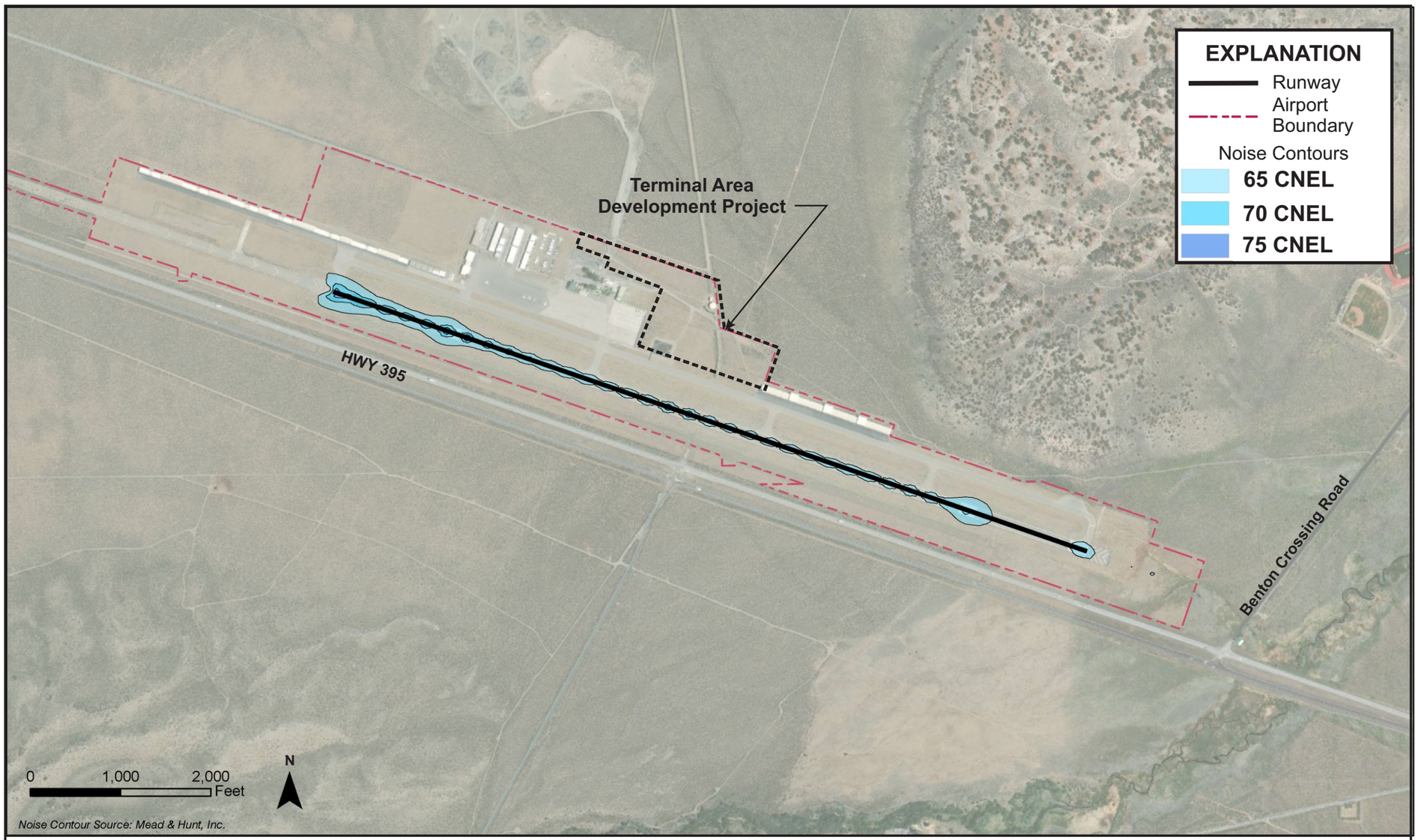
4.2.9.2 Proposed Action

Under the Proposed Action, noise would be generated by construction activities. Construction noise would be generally confined to the study area and immediate vicinity. Immediate land uses include Airport activities and open space. Neither of these land uses are sensitive to construction noise, which would cease once construction work is completed. As noted, the nearest residences to the Airport are approximately 1.0 miles to the southeast of the project area and 0.6-miles southwest of Runway 27 at the SNARL.

Operational noise associated with the Proposed Action would be identical to the No Action Alternative as no change in aviation operations would occur. Exhibit 4-3, depicts noise contours for the year 2023 and Exhibit 4-4 for the year 2028. The estimated total number of aircraft operations for the year 2028 is 7,755. The main source of operational noise would be from aircraft takeoffs and landings, over the Airport. The proposed terminal and maintenance facility would not contribute substantial levels of operational noise on their own, mainly from vehicle traffic to and from these buildings. As with construction noise, operational project noise would not affect noise-sensitive land uses.

4.2.9.2 Avoidance and Conservation Measures

Neither the Proposed Action nor the No Action Alternative would result in significant impacts on noise and noise-compatible -land use; no measures are required or proposed.



Project Layout from:
Mammoth Yosemite Airport Terminal Area Development Plan, January 2017
Image Source: GoogleEarth

Noise Model: AEDT Version 2d

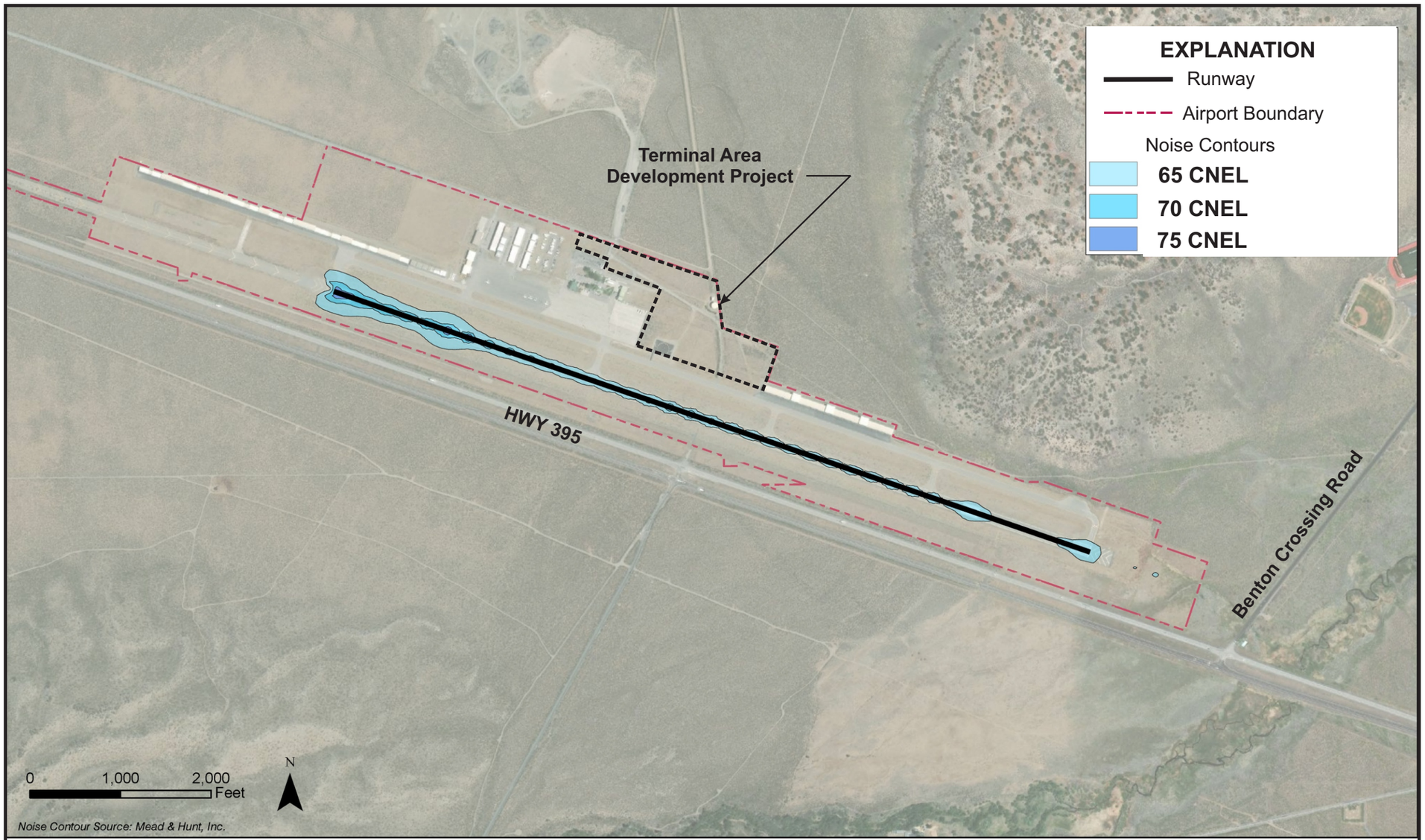
Final Environmental Assessment
Terminal Area Development Project

No Action Alternative:
2023 Noise Contours

Mammoth Yosemite Airport
Town of Mammoth Lakes

November 2021

EXHIBIT 4-1



Project Layout from:
Mammoth Yosemite Airport Terminal Area Development Plan, January 2017
Image Source: GoogleEarth

Noise Model: AEDT Version 2d

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Terminal Area Development Project

No Action Alternative:
2028 Noise Contours

Mammoth Yosemite Airport
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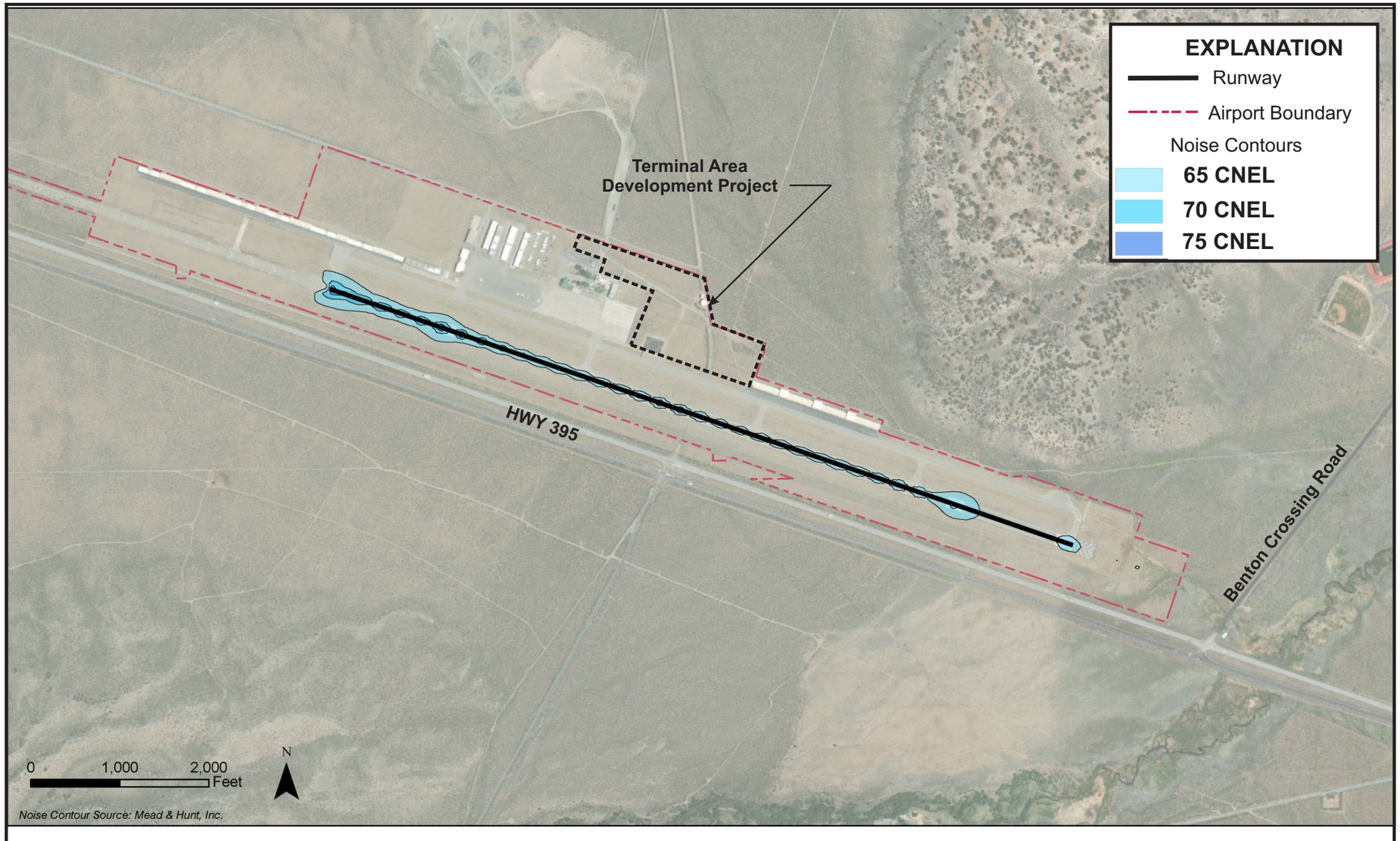
EXHIBIT 4-2



Project Layout from:
Mammoth Yosemite Airport Terminal Area Development Plan, January 2017
Image Source: GoogleEarth

Noise Model: AEDT Version 2d

Final Environmental Assessment
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Proposed Action Alternative:
2023 Noise Contours

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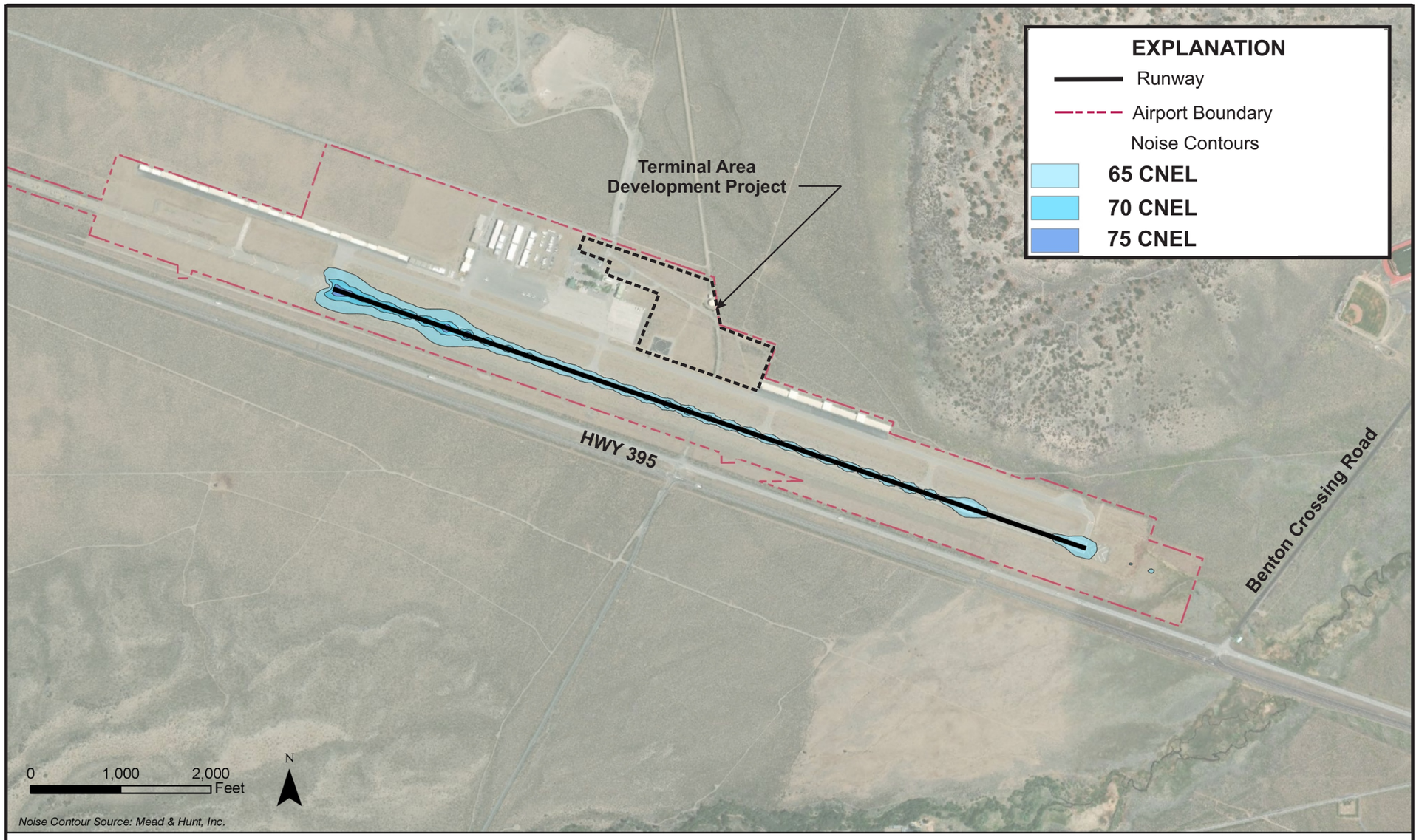
EXHIBIT 4-3



Project Layout from:
Mammoth Yosemite Airport Terminal Area Development Plan, January 2017
Image Source: GoogleEarth

Noise Model: AEDT Version 2d

Final Environmental Assessment
Terminal Area Development Project

Proposed Action Alternative:
2028 Noise Contours

Mammoth Yosemite Airport
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EXHIBIT 4-4

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

The FAA has not established significance determinations for socioeconomics, environmental justice, or children's environmental health and safety risks. However, the FAA Order 1050.1F, Exhibit 4-1, has identified several factors to consider in evaluating the context and intensity of potential socioeconomic impacts. Those factors to consider include the potential of the action to:

- Induce substantial economic growth in an area, either directly or indirectly (e.g., through establishing projects in an undeveloped area);
- Disrupt or divide the physical arrangement of an established community;
- Cause extensive relocation when sufficient replacement housing is unavailable;
- Cause extensive relocation of community businesses that would cause severe economic hardship for affected communities;
- Disrupt local traffic patterns and substantially reduce the levels of service of roads serving an airport and its surrounding communities; or
- Produce a substantial change in the community tax base.

The FAA also provides factors to consider in evaluating environmental justice impacts, including the potential of the action to have a disproportionately high and adverse impact to low-income or minority populations (environmental justice population), due to:

- Significant impacts in other environmental impact categories; or
- Impacts on the physical or natural environment that affect an environmental justice population in a way that the FAA determines are unique to the environmental justice population and significant to that population.

For children's environmental health and safety risks, the FAA recommends considering if the action would have the potential to lead to a disproportionate health or safety risk to children.

4.2.10.1 No Action Alternative

Under the No Action Alternative, no construction work would occur and aviation operations would continue at current conditions. Low-income and minority residents and businesses would be unaffected, as they would be under the Proposed Action. The risk to children's environmental health and safety would be unchanged from existing conditions, as there are no concentrations of children near the Airport. However, the potential opportunity to expand the Town's tax base through expanded concession space would not be available; otherwise, there would be no impact on the Town's tax base.

4.2.10.2 Proposed Action

The Airport is located approximately six miles east of the Town in an area that is mostly undeveloped except for the Sierra Business Park industrial tract located west of the Airport and south of U.S. Highway 395. The Proposed Action would be implemented on Airport property; the Sierra Business Park would not be affected. No residents would be relocated; there are no

residences on Airport property. There are no community businesses that would be affected by the Proposed Action. The Town would terminate its lease of a privately owned hangar for ARFF and snow removal equipment storage – all other businesses are Airport-related. The only other affected structures are the existing terminal building and temporary tensile structure. The Proposed Action would extend Airport Road and improve parking and passenger pickup/drop-off areas, which would improve traffic flow at the Airport. The expanded terminal would make available concession space, thereby potentially expanding the revenue generated from the Airport-based businesses.

As noted, the nearest residential area to the project area is approximately 1.0 miles to the southeast. The Proposed Action would not affect low-income or minority residents (environmental justice population), because there are no residences or schools on or near the Airport. For the same reason, the Proposed Action would not be a risk to children's environmental health and safety, especially since Proposed Action activities would be confined to the study area and there are no services specific to children present. The Proposed Action would result in no Socioeconomic, Environmental Justice, or Children's Environmental Health and Safety Risk impacts.

4.2.10.3 Avoidance and Conservation Measures

Since neither the Proposed Action nor the No Action Alternative would result in significant impacts to socioeconomics, environmental justice, or children's environmental health and safety risks, therefore no avoidance or conservation measures are required or proposed.

4.2.11 Visual Effects

There is no federal special purpose laws or requirements specific to light emissions or visual effects. However, FAA Order 1050.1F Desk Reference describes factors to consider within light emissions and visual resources/visual character. Potential impacts of light emissions include the annoyance or interference with normal activities and impacts to the visual character of the area due to light emissions, including the importance, uniqueness, and aesthetic value of the affected visual resources.

4.2.11.1 No Action Alternative

Under the No Action Alternative, the Airport's existing lighting and visual character as described in Chapter 3.0, Section 3.3.11 would remain. Views from public roads, including those from U.S. Highway 395, a designated scenic highway, would not change There would be no increased lighting that would occur from Proposed Action improvements. The passenger terminal area would continue to be in a converted building and a temporary tensile structure; the ARFF equipment would continue to be located in an existing hangar. The overall visual landscape would not be affected.

4.2.11.2 Proposed Action

As noted in Chapter 3, Section 3.3.11, the most common view of the Airport is looking north from U.S. Highway 395 (Exhibit 3-9). Buildings and aircraft hangars can be seen from several

locations within the vicinity of the Airport. Airport hangars can be seen from the interchange of U.S Highway 395 and State Route 203, about six miles west of MMH. The proposed maintenance building would be designed to be similar in architectural character and physical appearance to the proposed terminal.

The proposed terminal building would be more distinctive in its appearance and therefore potentially more visible, particularly from U.S. Highway 395, a designated scenic highway. However, the visual character of the proposed terminal building is considered an improvement from the character of the existing terminal area, which consists of an older building and a temporary tensile structure as shown in a simulated image (Exhibit 4-5). Both the terminal building and the maintenance building are designed to not stand out vertically – the terminal building would be no greater than 35 feet in height. The terminal would use materials such as wood, stone, and stucco, and the exterior colors would be subdued in tone. As such, the new terminal building would not detract from the visual landscape.

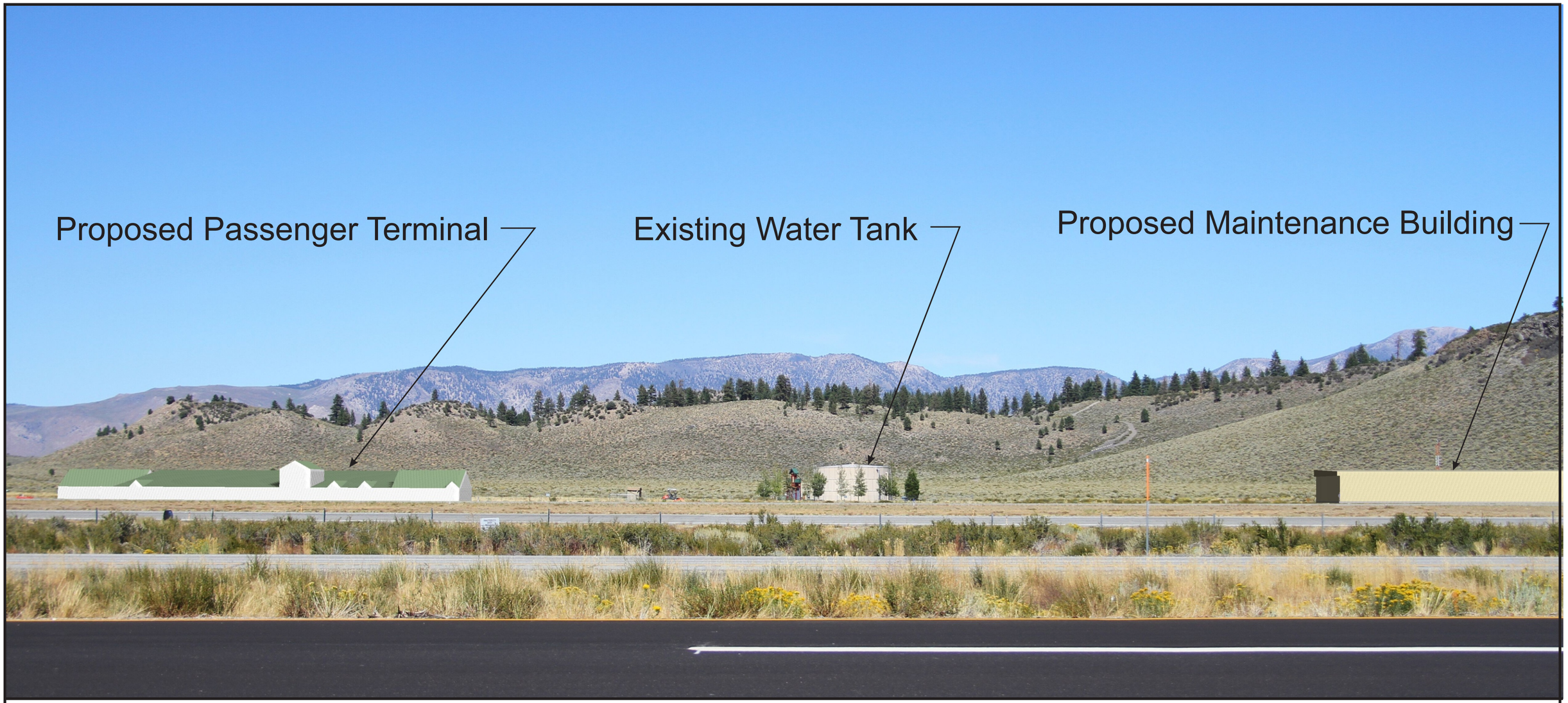
Current MMH facilities are illuminated with shielded lighting fixtures for safety and security by various types of landside lighting for buildings, access roadways, apron areas, and automobile parking areas; and by airside lighting for runways, taxiways, and apron areas. The Proposed Action would expand on the safety and security lighting through the construction of a new and larger terminal building and a new maintenance building, along with new parking areas associated with these buildings. Outdoor lighting that is not associated with aircraft operations will be designed to meet the requirements of Mammoth Lakes Municipal Code Section 17.36.030. This section requires all outdoor lighting fixtures to be designed, located, installed, aimed downward or toward structures, and maintained in order to prevent glare, light trespass, and light pollution. All new outdoor lighting shall use full cut-off luminaries with the light source downcast and fully shielded with no light emitted above a horizontal plane.

The closest light-sensitive land use is located approximately 1.0 miles southeast of the project area at the SNARL along Mount Morrison Road. At that distance, lighting from the Airport would not indirectly illuminate the residential area at a noticeable enough level to disturb sleep, the main concern with lighting.

The Proposed Action structures, visible from U.S. Highway 395 and from other vantage points, will be designed and constructed to reflect the character of the Eastern Sierra. The natural materials and color palette for all proposed structures will be chosen to reduce, as much as possible, any intrusive visual effects.

4.2.11.3 Avoidance and Conservation Measures

Since neither the Proposed Action nor the No Action Alternative would result in significant visual impacts, no avoidance or conservation measures are required or proposed.



Note: Photograph (September 2019) taken near the shoulder of south bound U.S. Highway 395 looking north. Simulated terminal is on far left; simulated maintenance building is on far right.

Exhibit 4-5

Final Environmental Assessment Terminal Area Development Project Simulated View to North from U.S. HWY 395

Mammoth Yosemite Airport
Town of Mammoth Lakes

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4.2.12 Water Resources: Groundwater

The consequences of the Proposed Action and the No Action Alternative on groundwater within the study area are analyzed by characterizing any impervious surfaces, excavation, or construction of structures that would have the potential to affect groundwater. Different types of impacts to groundwater, including any direct or indirect impacts that result from construction and operation, are considered. The extent to which operation activities may affect groundwater, such as potential drawdown, are also considered.

Exhibit 4-1 of FAA Order 1050.1F provides the FAA's significance determinations for groundwater. A significant impact exists if the action would:

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

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

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

4.2.12.1 No Action Alternative

Under the No Action Alternative, no new buildings would be constructed. No additional demands would be placed on the Airport's water system, which would not need to be extended. The existing wastewater septic tank and gravity-fed leach field would not be replaced. Existing groundwater supplies would not be affected.

4.2.12.2 Proposed Action

As noted in Chapter 3.0, two groundwater wells provide potable and firefighting water and are located east of the proposed terminal location. Each well is 143-feet deep and has the capacity to pump up to 500 gallons per minute.

Under the Proposed Action, the proposed terminal building and maintenance building would be connected to the existing Airport water supply system, with the extension of water lines to each building. Water consumption would increase incrementally in response to the forecast levels of passenger enplanements and associated levels of Airport staff.

The TADP determined that the existing water supply wells and 300,000-gallon storage tank system were adequate to supply the potable water and firefighting needs at MMH generated by the projected enplanements.

A proposed multi-staged underground self-contained wastewater treatment plant would be installed west of the proposed terminal building within the TADP footprint. Wastewater would be disposed in a new leach field about 1,000-feet in an up gradient (groundwater) location from the water wells. To protect groundwater resources, the new wastewater system would be subject to Mono County Health Department *Construction Guide for Residential and Commercial On-Site Sewage Treatment & Disposal System* and the Mono County Code of Ordinances Title 14 – Water and Sewage (Appendix G).

The depth to unconfined shallow groundwater varies between approximately 28 and 46 feet below ground surface. Construction activities associated with the Proposed Action would disturb the ground at shallow depths and are not expected to reach the groundwater table. The Proposed Action would not affect local groundwater quality.

4.2.12.3 Avoidance and Conservation Measures

Since neither the Proposed Action nor the No Action Alternative would result in significant impacts on groundwater resources, no measures are required or proposed.

4.3 Cumulative Impacts

4.3.1 Cumulative Impact Evaluation

Potential cumulative impacts of the Proposed Action and the No Action alternative on environmental resource categories are analyzed in Section 4.3.2. Cumulative impacts result from the incremental environmental impacts of the Proposed Action added to other past, present, and reasonably foreseeable future actions. For some environmental issues, the area for which cumulative impacts are evaluated may be expanded beyond the Airport, which has been noted in Chapter 3.0.

CEQ guidance requires an analysis of changes to the human environment from the Proposed Action or alternatives that are reasonably foreseeable and have a reasonably close causal relationship to the Proposed Action or alternatives, including those effects that occur at the same time and place as the Proposed Action or alternatives and may include effects that are later in time or farther removed in distance from the Proposed Action or alternatives (40 CFR § 1508.7)[2]. Table 4.1 presents a summary of past, present and reasonably foreseeable future action which could involve potential cumulative impacts associated with the Proposed Actions revised by the updated CEQ definition. Neither Mono County nor the Town of Mammoth Lakes has identified

[2] This EA was prepared using Council on Environmental Quality Regulations adopted November 28,1978. On July 16, 2020 the CEQ promulgated revised regulations implementing NEPA (40 CFR Parts 1500-1508) that became effective on September 14, 2020. This EA was already in progress before CEQ's final rule was published in the Federal Register (85 FR 43304). Accordingly, the EA was prepared in compliance with the previous version of the regulations, 40 CFR Parts 1500-1508) (1978, as amended in 1986 and 2005).

projects that would contribute to potential cumulative environmental impacts associated with the Proposed Action. The only off-airport project which may contribute to cumulative impacts is a proposed 14 CFR Part 139 certification at Bishop Airport in Inyo County for commercial air service, which could result in reduced commercial air service at MMH.

Table 4.1 Summary of Past, Present and Reasonably Foreseeable Future Action

Location/Distance From MMH	Project Name	Project Description
Past Actions		
On MMH/NA	Reconstruct a portion of the General Aviation (GA) apron (2018)	An Airport Pavement Maintenance Management Plan indicated aircraft traffic had significantly deteriorated the GA apron; reconstruction was necessary to avoid pavement failure caused by deep-seated distress. The project did not involve extraordinary environmental circumstances and no cumulative impact with the proposed TADP would occur.
On MMH/NA	Relocate segmented circle (2019)	Segmented circle relocated to a new location within the ALP in the vicinity of the Proposed Action; no impact since the project involved replacing like- with-like; former location reclaimed. The project did not involve extraordinary environmental circumstances and no cumulative impact with the Proposed Action would occur.
Present Actions		
Bishop Airport (BIH) Bishop/Inyo County: 26 nautical miles; 35 miles via U.S. Hwy. 395 . (Notice of Scoping Workshop/Meeting, Environmental Assessment/Initial Study for the Proposed Airline Service at the Bishop Airport, January 2020)	Proposed Project: Amendment of the Operations Specifications for SkyWest Airlines (Operating as United Express) to allow scheduled commercial air service to BIH, and the issuance of an Airport Operating Certificate (Class I) pursuant to 14 CFR, Part 139.[2] January 2020	Inyo County proposes to initiate commercial air service at BIH after obtaining a Part 139 Certification. United Airlines through agreement with SkyWest Airlines operating as United Express) proposes to relocate the air service that currently flies into MMH to BIH as a subsidy is shifted to operations at BIH. There will likely be reduced scheduled commercial aviation operations at MMH as a consequence.

Location/Distance From MMH	Project Name	Project Description
Reasonably Foreseeable Future Actions		
On MMH/NA	Perimeter Wildlife Exclusion Security Fence	A perimeter wildlife exclusion security fence would be constructed near the airport's property boundary in those areas not already secured by a fence to prevent wildlife from entering the operations area and other unauthorized incursions. The project would increase the safety of airport operations. No extraordinary environmental circumstances are anticipated, and no cumulative impact with the Proposed Action would occur.
On MMH/NA	Various Maintenance Projects: Reconstruct a portion of the GA apron. Rehabilitate taxiways. Reconstruct 550 linear feet of the "Hometown" taxilane. Grade taxiway shoulders.	Each project would be evaluated under FAA NEPA guidelines and would be constructed upon approval of AIP grant funding. Maintenance projects are needed to maintain safe conditions and airport operations for aircraft. The projects do not increase paved footprints, are short-term and do not involve extraordinary environmental circumstances. The maintenance projects would not result in a cumulative impact with the Proposed Action.
On MMH/NA	Land Acquisition	Potential land acquisition, approximately 20-acres from the LADWP and 97-acres from the U.S. Forest Service in accordance with the Townsite Act.

4.3.2 Cumulative Impacts of Proposed Action and No Action Alternative

4.3.2.1 Air Quality

Cumulative air quality impacts are both local and regional. Regional impacts typically occur within an air basin. However, as noted in Chapter 3.0, the potentially affected environment for the air quality analysis consists of the Mammoth Lakes Planning Area shown in Exhibit 3-1. As shown in Table 3-2, Mammoth Lakes area is in Attainment of all NAAQS criteria pollutants with the exception of PM_{10} for which it is designated as a Maintenance area.

As described in Section 4.2.1.2, criteria air pollutant emissions from both Proposed Action and No Action construction and operations would not exceed the general conformity *de minimis* thresholds. Given this, Proposed Action and No Action operational emissions would not have a cumulative impact on air quality.

Should commercial air service transition to BIH, increased vehicle traffic between Bishop and Mammoth Lakes could occur and a potential impact on regional air quality may result. However, it is not possible to determine the extent of the potential impacts, since no transportation plan to move people to and from Bishop and the Town has been released. Implementation of the Proposed Action at MMH is *de minimis,* therefore no contribution to potential regional air quality impacts would occur.

4.3.2.2 Biological Resources

The loss of 19 acres of sagebrush scrub habitat is not considered a significant cumulative impact, since other projects on the Airport have generally been limited to existing paved surfaces. There are no other planned projects which involve the loss of Sagebrush scrub habitat within the Airport vicinity. Neither the Proposed Action nor the No Action Alternative would have a significant cumulative impact on biological resources.

4.3.2.3 Climate

GHG emissions are related to global climate change. As discussed in Section 4.2.3, the FAA has not identified significance thresholds for aviation GHG emissions, nor has the FAA identified specific factors to consider in making a significance determination for GHG emissions. There are currently no accepted methods of determining significance applicable to aviation projects given the small percentage of emissions they contribute. As such, the cumulative impacts of the Proposed Action and the No Action Alternative are not analyzed in this EA.

4.3.2.4 Department of Transportation Act, Section 4(f)

The extension of Airport Road over land administered by the Inyo National Forest, but within an existing transportation easement, would remove about 1.0-acre of land for recreation and grazing uses. However, the USDA-FS concurred with the FAA that DOT Act Section 4(f) did not apply to the Proposed Action. Neither the Proposed Action nor the No Action Alternative would have a significant cumulative impact on DOT Section 4(f) properties.

4.3.2.5 Hazardous Materials, Solid Waste, and Pollution Prevention

MMH is surrounded by publicly owned land with limited development opportunities and no development is planned that would contribute to hazardous waste conditions. Past and reasonably foreseeable projects shown in Table 4-1 would not contribute to hazardous waste conditions since they would conform to applicable water quality permits and conditions. Although PFAS containing AFFF would continue to be stored, AFFF would not be used to demonstrate the readiness of firefighting equipment, a process which could lead to soil and groundwater contamination. As such, there would be no increase in the use or storage of hazardous materials in the vicinity, nor significant increased solid waste generation.

The application of de-icing fluids could decrease if commercial air passenger service transitions to BIH, since fewer aircraft would use MMH during the winter. Neither the Proposed Action nor the No Action Alternative would have a significant cumulative impact on hazardous materials, solid waste, and pollution prevention.

4.3.2.6 Historical, Architectural, Archaeological, and Cultural Resources

As described in Section 4.2.4.2, there are no resources on Airport property that are eligible for listing on the National Register of Historic Places. The Airport is in an area of limited development, and no development is planned to occur in the Airport vicinity, other than on the Airport property. The Proposed Action would not have a significant cumulative impact on historical, architectural, archaeological, and cultural resources.

4.3.2.7 Land Use

The Airport is in an area of limited development, and no development is planned to occur in the Airport vicinity, other than on the Airport property. Existing General Plan and zoning designations on the Airport property and vicinity would remain, which would limit future development to existing developed sites and leave most of the area in rural or open space conditions. Neither the Proposed Action nor the No Action Alternative would have a significant cumulative impact on land use.

4.3.2.8 Natural Resources and Energy Supply

Since no development is planned to occur in the Airport vicinity, other than on the Airport property (see Section 4.3.2.7). As such, there would be no significant increase in the use of natural resources other than potential future improvements of the Airport. As described in Section 4.5.2.2, California has developed an Energy Code that requires new construction to implement energy efficiency measures, and it has adopted a Renewables Portfolio Standard that would substantially reduce the production of electricity from fossil fuel sources. Neither the Proposed Action nor the No Action Alternative would have a significant cumulative impact on natural resources and energy supply.

4.3.2.9 Noise and Noise-Compatible Land Use

Aircraft activity and associated aircraft-related noise would occur independent of the Proposed Action and the No Action Alternative. The 65 dB contour remains on the Airport. Most of the

anticipated future projects involving the Airport are not expected to increase noise levels, as they would not affect projected aircraft activity. However, if commercial air service transitions to BIH, fewer scheduled commercial aircraft operations would occur at MMH, which would decrease noise generated by aircraft activity.

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

As described in Section 4.2.10.2, there are no residences or other land uses in the Airport vicinity that are occupied by environmental justice communities or offer services that could disproportionately affect children; most such land uses are in the Town proper approximately six miles away. The Proposed Action may contribute to the expansion of the revenue generated from Airport-based businesses. The Proposed Action would not result in a cumulative impact on socioeconomics, environmental justice, and children's environmental health and safety risks. Should air service transition to BIH, revenues generated at MMH would decrease, impacting sales tax and airport operating funds.

4.3.2.11 Visual Effects

The Airport is in an area of limited development and no development is planned to occur, other than on the Airport property. Development is limited by the proximity of U.S. Forest Service land. The visual conditions in the area, particularly from U.S. Highway 395, a designated scenic highway, would not substantially change from existing conditions. Neither the Proposed Action nor the No Action Alternative would have a significant cumulative impact on visual effects.

4.3.2.12 Water Resources: Groundwater

Since no development is planned to occur in the Airport vicinity, other than on the Airport property (see Section 4.3.2.7), there would be no substantial increase in water use and no additional wastewater disposal systems. As noted in Section 3.2.8, there is adequate water supply for any future increases in passenger volumes. Neither the Proposed Action nor the No Action Alternative would have a substantial cumulative impact on groundwater resources.

CHAPTER 5.0 COORDINATION AND PUBLIC INVOLVEMENT

5.1 Agency Coordination and Public Involvement

Agency coordination and public involvement is required to meet federal review requirements under NEPA and applicable special purpose laws. For purposes of project scoping, a Notice of Intent to prepare an Environmental Assessment was sent to federal, state, and local agencies, regional Tribes and to interested individuals.

Federal Agencies Consulted:

- U.S. Fish and Wildlife Service
- U.S. Forest Service, Inyo National Forest (See Appendix H for supporting materials for the U.S. DOT Section 4(f) coordination process with the U.S. Forest Service, Inyo National Forest)

State of California Agencies Consulted:

- State Historic Preservation Officer (SHPO) (See Appendix E) for supporting materials for NHPA Section 106 and FAA consultation correspondence with California SHPO)
- California Department of Fish and Wildlife
- Regional Water Quality Control Board
- California Department of Transportation, Division of Aeronautics

Local Agencies Consulted:

- Mono County Planning Department
- Mono County Department of Environmental Health
- Mammoth Community Water District

5.2 Public Scoping

On October 19, 2019 the Town published a Notice of Public Scoping to Prepare an Environmental Assessment, Mammoth Yosemite Airport, Terminal Area Development Plan in *The Sheet*. The notice was also posted on the Town website. The public scoping comment period extended for 30 days and ended at 5 pm on November 18, 2019. Additionally, on October 24, 2019, the Town held a public scoping meeting in Town offices to present the project and accept public scoping comments. No scoping comments were received from the public.

Appendix J, Public Involvement provides the scoping letters, Scoping Information Package, and any scoping comments received.

5.3 Public Review

The Draft Environmental Assessment (DEA) was made available for review and comment by the general public and agencies for a period of 35 days from June 19, 2021 through July 23, 2021. On June 19, 2021 a Notice of Availability (NOA) for the DEA was published in the "legal notice"

section of *The Sheet*, a newspaper of general circulation. The proof of publication is provided in Appendix J.

The DEA was available electronically for public review on the Town of Mammoth Lakes' website at https://www.townofmammothlakes.ca.gov; printed copies of the Draft EA were available for public review at the following locations:

Town of Mammoth Lakes
Community and Economic Development Department
Planning Division
437 Old Mammoth Road, Suite 230
Mammoth Lakes, CA 93546
Monday – Thursday, 8 a.m. to Noon and 1 p.m. to 5 p.m.
Friday, by appointment
(760) 965-3630

Mammoth Yosemite Airport
1300 Airport Road
Mammoth Lakes, CA 93546
By appointment
(760) 965-3622

Mono County Library
Mammoth Lakes Branch
400 Sierra Park Road
Mammoth Lakes, CA 93546
Open with limited services
Monday through Friday, 10 a.m. to 7 p.m.
Saturday, 10 a.m. to 5:30 p.m.
(760) 934-4777

The Town did not receive any written or verbal public comments.

5.4 Virtual Public Workshop and Virtual Public Hearing

On July 19, 2021, 30-days after the publication of the NOA, the Town conducted a virtual Public Workshop to present details pertaining to the TADP and explain the EA process. The Town invited questions from attendees; there were no written or verbal public questions and no public comments during the virtual workshop. At the close of the virtual Public Workshop, the Town conducted a virtual Public Hearing to take public comments on the Draft Environmental Assessment. There were no public comments; a transcript of the hearing is included in Appendix J. The Town closed the public review period on July 23, 2021, five days after the virtual Public Hearing.

CHAPTER 6.0: LIST OF PREPARERS

The professionals primarily responsible for preparing, or the review of this EA are listed in Table 6.0.

Table 6.0 List of Preparers and Reviewers

Name	Title and Role	Contribution	Relevant Experience
Reviewer: Federal Aviation Administration			
Camille Garibaldi	Environmental Protection Specialist, Project Manager. San Francisco Airports District Office.	Detailed FAA evaluation of the NEPA document and regulatory agency consultations.	25 years of environmental experience
Reviewer: Town of Mammoth Lakes			
Grady Dutton	Town of Mammoth Lakes, Director of Public Works, Airport Manager	EA Review; FAA coordination	32 years of experience in civil and aviation infrastructure
Sandra Moberly	Town of Mammoth Lakes, Community & Economic Development Director	EA Review	18 years of experience in environmental compliance documentation
Kim Cooke	Town of Mammoth Lakes, Associate Planner	EA Review	7 years of experience in environmental compliance documentation
Prepared By:			
Jim Wallace	Project Manager: Wallace Environmental Consulting, Inc.	Primary Author	25 years of experience as a NEPA consultant on airport projects.
Donald Moore	Senior Advisor: Wallace Environmental Consulting, Inc.	Groundwater	30 years of experience in groundwater and water development.
Hunter Gallant	Salix Consulting GIS Specialist	Visual and Photo Simulations	10 years of experience in GIS and photo simulations.
Jeff Glazner	Salix Consulting Senior Biologist	Biological Resources	25 years of experience in biological resources and wetland mapping
Cindy Arrington	Senior Cultural Resources Consultant: Natural Investigations Company	Cultural Resources	25 years of experience in cultural resources and archeology
Nancy Sikes	Senior Cultural Resources Consultant: Natural Investigations Company	Cultural Resources	30 years of experience in cultural resources and archeology
Corbett Smith	Senior Planner, Aviation Services Mead & Hunt	Noise Modeling	15 years of experience in aviation consulting and acoustical modeling

CHAPTER 7.0: REFERENCES

Biological Assessment for the Mammoth Yosemite Airport Wildlife Hazard Management Plan, 2015, prepared by Wallace Environmental Consulting

Biological Resources Assessment for the 24-Acre Mammoth Yosemite Terminal Area Development Plan Study Area, Mono County, California, prepared by Salix Consulting, Inc, January 2020, Revised April 2021

Eastern Sierra Housing Needs Assessment, March 2005, prepared by The Eastern Sierra Council of Governments

Federal Aviation Administration, Advisory Circular No. 150/5360-13A, Airport Terminal Planning, July 13, 2018

Federal Aviation Administration, Order 1050.1F, Environmental Impacts: Policies and Procedures, July 16, 2015

Federal Aviation Administration, Office of Environment and Energy, Order 1050.1F Desk Reference, (February 2020)

Federal Aviation Administration, Order 5050.4B, National environmental Policy Act (NEPA) Implementing Instructions for Airport Actions, April 28, 2006

Mammoth Yosemite Airport, Aviation Activity Forecast, 2019 Addendum, prepared by Mead and Hunt, May 15, 2019

Mono County Community Development Department, 2014, *Biological Assessment: Unincorporated Communities of Mono County*

Mono County General Plan Draft Environmental Impact Report, 2015

Mono County General Plan, Land Use Element, 2018

Mono County Health Department, Construction Guide for Residential and Commercial On-Site Sewage Treatment and Disposal System

Mono County Master Environmental Assessment, 2010

National Academies of Sciences, Engineering, and Medicine 2010, *Airport Passenger Terminal Planning and Design, Volume 1: Guidebook*. Washington, DC: The National Academies Press. https://doi.org/10.17226/22964.

National Academies of Sciences, Engineering, and Medicine 2011, *Passenger Level of Service and Spatial Planning for Airport Terminals*, Washington, DC: The National Academies Press. https://doi.org/10.17226/14589

Notice of Scoping Workshop/Meeting, Environmental Assessment/Initial Study for the Proposed Airline Service at the Bishop Airport, January 11, 2020

Semi-Annual Groundwater Monitoring Report, First Quarter 2011, Mammoth Yosemite Airport – UST Site, Mammoth Lakes, California, August 11, 2011

Town of Mammoth Lakes, Addendum to the Final Supplemental to the Subsequent Environmental Impact Report for the Mammoth Yosemite Airport Expansion Project, July 11, 2011

Town of Mammoth Lakes, Air Quality Maintenance Plan and PM-10 Redesignation Request for the Town of Mammoth Lakes, November 6, 2013

Town of Mammoth Lakes, *Mammoth Yosemite Airport Terminal Area Development Plan*, January 2015, prepared by Reinard W. Brandley and the Van Sant Group

U.S. Fish and Wildlife Service, *Owens Basin Wetland and Aquatic Species Recovery Plan, Inyo and Mono Counties, California*, 1998

U.S. Forest Service, *Final Environmental Impact Statement for Revision of the Inyo National Forest Land Management Plan,* August 2018

U.S. Forest Service*, Land Management Plan for the Inyo National Forest*, September 2019

APPENDIX A: TERMINAL AREA DEVELOPMENT PLAN

U.S. Department
of Transportation
Federal Aviation Administration

Western-Pacific Region
Airports Division

San Francisco Airports District Office
1000 Marina Boulevard, Suite 220
Brisbane, CA 94005-1835

May 24, 2017

Mr. Brian Picken
Airport Manager
Town of Mammoth Lakes
1300 Airport Road
Mammoth Lakes, CA 93546

Dear Mr. Picken, Brian

RE: FAA Acceptance of Terminal Area Development Plan; Mammoth Yosemite Airport, Airport Improvement Program (AIP) Project No. 3-06-0146-023-2010

The Federal Aviation Administration (FAA) has completed its evaluation and accepts the updated *Mammoth Yosemite Airport Terminal Airport Development Plan* document for the Mammoth Yosemite Airport (MMH) dated April 2017.

Please note, not all square footage and areas in the proposed terminal project may be eligible for federal funding under the Airport Improvement Program (AIP).

If you have any questions, please contact Katherine Kennedy at 650-827-7611.

Kind Regards,

James W. Lomen
Manager, San Francisco Airports District Office

MAMMOTH YOSEMITE AIRPORT
TERMINAL AREA DEVELOPMENT PLAN

Prepared for
Town of Mammoth Lakes, California

Prepared by:
Reinard W. Brandley
Consulting Airport Engineer

Van Sant Group
Architects

April 2017

MAMMOTH YOSEMITE AIRPORT
TERMINAL AIRPORT DEVELOPMENT PLAN
TOWN OF MAMMOTH LAKES, MONO COUNTY, CALIFORNIA

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CHAPTER 1. INTRODUCTION

1-1 General

Mammoth Yosemite Airport (MMH) is located in the Sierra Nevada mountain range east of the divide in a moderately broad valley. It is located 7 miles east of the Town of Mammoth Lakes (Town) adjacent to U.S. Highway 395. Up until 2008 the airport served the general aviation fleet with mostly itinerant operations bringing in visitors to enjoy the recreation facilities in and around Mammoth Lakes including the Mammoth Mountain Ski Area (MMSA), Devils Postpile National Monument, fishing, boating, hiking, biking, mountain recreation, festivals, and other arts and cultural events. It is near the east entrance to Yosemite National Park, the Inyo National Forest, and several wilderness areas. Some modest commercial airline service was provided prior to 2008. Beginning in December of 2008, scheduled commercial airline service has been provided to MMH.

1-2 History

World War II through 1965: MMH was originally constructed by the United States (U.S.) Army for use as an auxiliary landing strip during World War II. The original dimensions of the landing strip were less than 4,000 feet in length by 30 feet in width. Mono County acquired part of the airfield from the U.S. Army after the war and renamed it Long Valley Field. The runway was an unpaved dirt strip and the airport was a seasonal facility closed by winter snows until it was paved in 1959. The airport was operated as an unattended landing strip until the early 1960s.

1965 to 1978: In 1965 the runway was relocated 300 feet to the north on USFS land to accommodate the future widening of U.S. Highway 395, which runs adjacent to the airport. Also at this time the runway was extended to 5,000 feet and widened to 100 feet. The airport was renamed Mammoth Lakes Airport and private interests operated the airfield. Mammoth Sky Lodge Corporation, then the airport operator, extended the runway to 6,500 feet in 1971. A terminal building and an airport office, currently used as an FBO office and pilots' lounge, were constructed in 1972. During this time the airport became formally known as Mammoth-June Lakes Airport. In 1973 Sierra Pacific Airlines initiated service using Convair 440 aircraft and served Mammoth Lakes until 1980.

1978 to 1992: Mono County entered into an agreement with Mammoth Sky Lodge Corporation to acquire all airport property in 1978 from the USFS; however, the acquisition of the airport was not consummated until 1980. Mono County reestablished public operation of the airport in 1980. Mono County began an airfield improvement program in 1983. Using funds received under the Airport Improvement Program (AIP) a new runway, 7,000 feet by 100 feet, was constructed.

1992 to 1995: The Town of Mammoth Lakes acquired the airport from Mono County in September 1992. United Express operated flights from Mammoth Lakes to Fresno, using 19-seat Jetstream 31 turboprop aircraft for the winter seasons of 1993 and 1994. Service reliability problems associated with overbooking and the 19-seat Jetstream aircraft led to passenger dissatisfaction, causing United Express to discontinue service. Additionally, Trans World Express terminated flight operations in 1995 due to reorganization of its major code share partner, Trans World Airlines. This reorganization of Trans World Airlines was required under Chapter 11 of the Federal Bankruptcy Code.

1997 to 2008: In 1997 new airport development was proposed for the airfield. Previous plans for the crosswind runway and supporting taxiways and golf course were abandoned. An extension of the current Runway 9-27 from 7,000 to 9,000 feet was proposed, as was the construction of a hotel/condominium complex.

The new airport development, reviewed in the 1997 EIR, included both airside and landside developments by a private developer. Airside improvements included the proposed building of up to 94 private and public use hangars, an aviation fuel storage complex, and facilities for the operation of a fixed base operator (FBO). Landside development consisted of a hotel and residential condominium complex, retail development, a restaurant complex, and a recreational vehicle park. Eventually 94 hangars and the airport water system were constructed but, for a variety of reasons, the bulk of the development was never constructed. Eventually, the developer sued the Town for breach of contract and prevailed. A settlement was reached in September of 2012, which dissolved the development agreement and returned development rights back to the airport.

In the late 1990's the Town and American Airlines proposed a large development project for MMH. The project included a longer and wider runway, a new terminal building, and related infrastructure to support Boeing 757 service from Dallas and Chicago and was based on a forecast of 330,000 annual passenger enplanements after 20 years. This project was enjoined in Federal Court in 2003. This project was abandoned, and the injunction was lifted in May of 2016 which will allow new development at the airport.

In the years prior to the lifting of the injunction the Town worked to initiate commercial service at the airport. In 2005 an Environmental Impact Statement (EIS) was prepared to accommodate the Town's scaled-back vision for the airport. The EIS provided for regional commercial air service using aircraft of 80 seats or less, 8 flights daily in the winter, and summer service, all to regional markets. The EIS also approved the remodel of an existing airport structure, which is now the interim terminal building.

In 2000 the Town changed the name of the airport to Mammoth Yosemite Airport.

2008 – Present: In 2008 the entire runway/taxiway complex at the airport was reconstructed.

Air service began in December of 2008 with one flight from Los Angeles International Airport (LAX) flown by Alaska Airlines using the 76 seat Bombardier Q400 (Q400). In 2010 United Airlines using the 70 seat Bombardier CRJ700 began service from San Francisco International Airport (SFO). Summer air service started in 2010 with Alaska Airlines from LAX. In the winter of 2016-17 the airport had up to four flights a day from LAX, SFO, and San Diego International Airport (SAN) with Alaska Airlines and United Airlines serving the airport. In 2016 the airport had 22,253 enplanements. The existing terminal is inadequate to meet current demand. The terminal experiences weekly and daily peaking of operations, which the existing terminal is not capable of adequately serving.

Air service at MMH would not be possible without a revenue guarantee program (RGP). The RGP at MMH is funded with a Tourism Business Improvement District (TBID) in which business are assessed a small fee for the purpose of marketing the Town and providing the revenue guarantee to the airlines.. The TBID is managed by Mammoth Lakes Tourism (MLT) which is part of the local Air Alliance. The Town and MMSA are the other two members of the Air Alliance and together provide airport: operational funding (Town), revenue guarantee funding (MLT), airline contracts, and financial backing (MMSA). The Air Alliance is discussed in greater detail in the Aviation Activity Forecasts (Appendix A).

With daily flights and peaking, passenger overcrowding in the existing interim terminal building is a major problem. Issues include passengers waiting at the security boarding gate and outside the building with minimal waiting areas away from inclement weather. Flight delays at other airports can exacerbate the capacity problems both in the terminal area and the commercial ramp area. Issues include crowding of the ticket counters, TSA security checkpoints, hold rooms, rest rooms, baggage handling facilities, and space on the ramp for aircraft parking.

With six flights daily and the peaking of commercial operations required to attract the skiers, daily passenger overcrowding in the existing interim terminal building is a major problem, particularly during the winter ski season. All sections of the existing terminal are overcrowded. The hold room size was such a major problem that the Airport erected a temporary sprung structure as a temporary hold room, and the hold room capacity is still inadequate.

1-3 Need for Study

MMH is used by itinerant general aviation aircraft ranging in size from the small single-engine and twin-engine aircraft to large turbojet aircraft such as the Gulfstream GV. These aircraft are used to bring visitors to the Town to enjoy the recreation facilities and venues available in the area. This general aviation activity

is expected to continue and increase over time. Airline service began in December of 2008 and immediately outgrew the temporary terminal building.

1-4 Existing Facilities

When the recent commercial operations began in 2008, there were no appropriate terminal facilities at the airport to handle these operations. At that time various constraints would not allow the construction of a new terminal and it was required that the terminal be constructed inside an existing building such that there would be no increase in the footprint of the building. The only suitable building available was the existing maintenance garage which had a floor area of 5,060 square feet. In 2008 the temporary commercial airline terminal was constructed within the walls of this building.

Because the temporary terminal was of insufficient size to accommodate passengers for more than one flight at a time a temporary terminal annex (sprung structure) of 2,250 square feet was added in 2011. This facility is not connected to the terminal and is outside of the secure passenger holding area. Passengers of flights not ready for boarding are held here and when called for boarding must still pass through the TSA screening area.

1-5 Required Action

To accommodate existing and forecast traffic it is necessary to construct a larger commercial terminal facility at the airport. It is not economically or operationally feasible to expand the existing temporary terminal. It is recommended that an entirely new terminal facility be constructed at an appropriate site on the airport. The new terminal facilities will include a new terminal building, commercial aircraft parking apron, a deicing apron, access roads, automobile parking facilities, maintenance facilities, and airport offices. The facilities need to be sized to accommodate forecast traffic for the next 10 years and have the capability of expanding to accommodate possible growth outside the planning period with minimal interference with airport operations.

A detailed Terminal Area Development study and plan has been developed and the results of this study are included in this report. This study and report was conducted by the Mammoth Yosemite Airport Terminal Design Team consisting of Reinard W. Brandley, Consulting Airport Engineer, and the Van Sant Group, Architects. Terry Van Sant is the principal for the Van Sant Group working on this project and Reinard W. Brandley is the principal for Brandley Engineering. The Aviation Activity Forecasts (Appendix A) was prepared by Mead & Hunt.

CHAPTER 2. AVIATION FORECASTS

Detailed Aviation Activity Forecasts were prepared by Mead and Hunt and have been approved by FAA for forecast aviation activity at Mammoth Yosemite Airport. These forecasts are important to establish and justify the proposed development. The detailed Aviation Activity Forecasts are included as Appendix A to this report.

A Summary of Forecasts included in the Mead and Hunt report are reproduced as Tables 2-1, 2-2, 2-3, and 2-4. Based on these forecasts, Mead and Hunt recommended that the initial terminal development include three hardstand positions and three holding rooms (see Appendix A). The proposed development includes three hardstands and three holding rooms.

Table 2-1
Peak Month Enplanements (Mead & Hunt Table 5)

Month	2015	2014	2013	2012	2011
January	4,299	4,540	5,766	4,336	4,211
February	3,841	4,017	5,657	4,865	3,653
March	4,622	4,735	5,652	4,897	4,161
April	1,663	2,741	3,025	3,821	3,379
May	749	1,031	1,149	1,061	1,051
June	975	1,022	1,117	931	1,165
July	1,226	1,330	1,259	1,277	1,189
August	1,228	1,294	1,378	1,478	1,419
September	1,015	1,002	1,171	851	1,004
October	712	717	579	566	807
November	773	827	799	562	882
December	2,401	2,636	3,306	2,601	3,275
TOTAL	23,504	25,892	30,858	27,246	26,196
Peak Month % Annual	**19.7%**	**18.3%**	**18.7%**	**18.0%**	**16.1%**
5-year Average	**18.7%**				

Table 2-2
Winter-Spring 2015-2016 Peak Day Flight Schedule (Mead & Hunt Table 6)

	Time*	Origin / Destination	Aircraft Type	Seats
Arrival	924	LAX	Bombardier Q-400	76
Departure	1050	LAX	Bombardier Q-400	76
Arrival	1638	SFO	Bombardier CRJ700	70
Arrival	1710	LAX	Bombardier Q-400	76
Departure	1715	SFO	Bombardier CRJ700	70
Departure	1745	LAX	Bombardier Q-400	76
Arrival	1811	SAN	Bombardier Q-400	76
Departure	1845	SAN	Bombardier Q-400	76

* Time is expressed as a 24-hour clock

Source: Schedule - Airport

Table 2-3
Forecast Peak Hour Passengers (Mead & Hunt Table 7)

Year	Peak Month Enplanements + Deplanements	Average Day Peak Month Enplanements + Deplanements	Peak Hour Passengers		
			Enplanements	Deplanements	Total
2021	8,833	285	89	81	171
2026	9,284	299	94	131	204

Source: Mead & Hunt

Table 2-4
Summary of Forecasts (Mead & Hunt Table 9)

	2016	2021	2026
Passenger Enplanements			
Air Carrier	22,253	23,388	24,581
Commuter	0	0	0
TOTAL	22,253	23,388	24,581
Operations			
Itinerant			
Air Carrier	990	1,040	1,094
Commuter/Air taxi	1,634	1,753	1,814
Total Commercial Operations	2,624	2,793	2,908
General Aviation	4,017	4,309	4,460
Military	32	35	35
Local			
General Aviation	143	155	161
Military	0	0	0
TOTAL OPERATIONS	6,816	7,292	7,564
Instrument Operations	3,699	4,594	4,765
Peak Hour Operations	8	8	9
Cargo (enplaned+deplaned pounds)	0	0	0
Based Aircraft			
Single Engine (Nonjet)	4	4	4
Multi Engine (Nonjet)	3	3	3
Jet Engine	0	0	0
Helicopter	0	0	0
Other	0	0	0
TOTAL	**7**	**7**	**7**

CHAPTER 3. PURPOSE AND NEED

The purpose of this study is to evaluate and prepare recommendations for the required new commercial terminal development at Mammoth Yosemite Airport. The following factors were included in the study:

- Terminal Area Location
- Terminal Area Size and Configuration
- Terminal Building Configuration and Size
- Aircraft Parking Apron
- Aircraft Deicing Facilities
- Automobile Parking
- Access and Service Roads
- Terminal Area Support Facilities, Baggage Handling, Delivery and Maintenance Access
- Maintenance Facilities

CHAPTER 4. SITE SELECTION

There are many constraints to the location available for terminal area development on the airport without major disruption to existing facilities. The airport is further constrained from growth for development of terminal facilities by the location of U.S. Highway 395 on the entire south side of the airport, the location of Doe Ridge on the northeast side of the airport, and the existence of U.S. Forest Service land surrounding the airport. As a result, it was determined that the only area available for a major terminal development would be that area between the existing temporary terminal building and Doe Ridge to the east. This location would accommodate the new facility and keep all development on airport property.

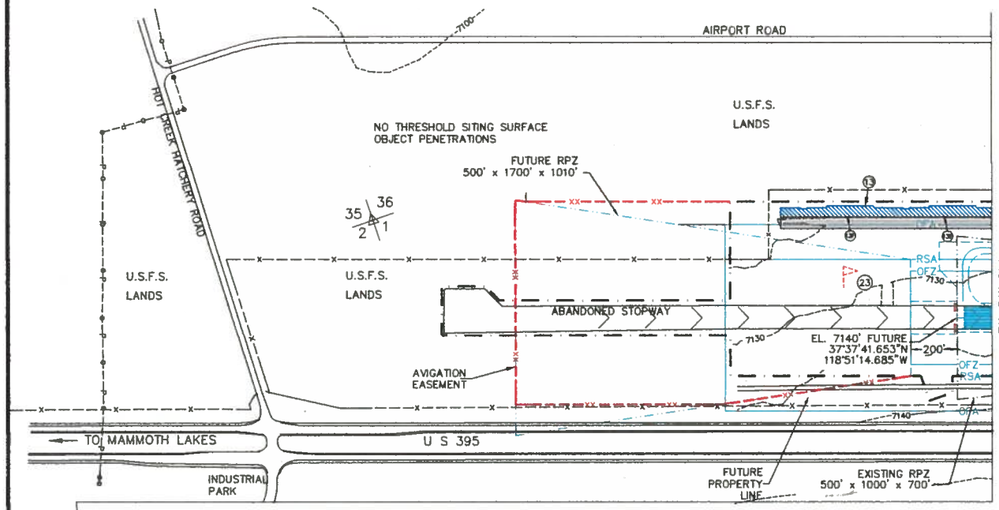
Two terminal area sites on the existing airport site were considered as shown on Plate No. 4-1. These sites are designated Terminal Area Site "A" and Terminal Area Site "B". Terminal Area Site "A" proposes locating the outer edge of the commercial terminal apron parallel with the south edge of the existing tie down apron, which is at the building restriction line and OFA of the runway. This location provides good access to the taxiways and runway. If at some time in the future it is required to modify the runway/taxiway configuration to conform to all ARC C III standards, then the proposed location of Terminal Area Site "A" would conflict with those changes and the terminal would, therefore, need to be relocated.

Terminal Area Site "B" moves the terminal to the northwest of Site "A", which provides room for any airfield modification as necessary, and the terminal building itself is located adjacent to the current and future access roads. This location also provides good access to the taxiway and runways. Automobile parking facilities on the airport

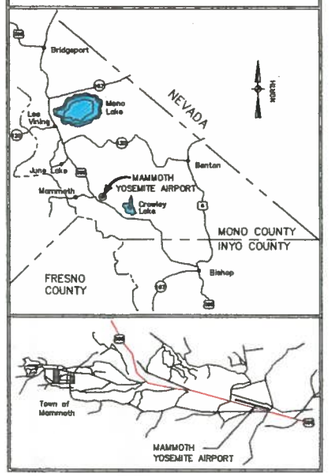
property would be limited to parking on both sides of the terminal, as well as the existing airport parking lots. The access road only serves the airport and, therefore, it is appropriate to have the terminal building facing the access road. If necessary, there is significant land north of the Terminal Area on U.S. Forest Service land that could be acquired and used for future expanded automobile parking facilities.

The selected preferred site is Terminal Site "B". All additional studies were conducted using the Site "B" development area.

A detailed layout showing the proposed Terminal Area Site "B" development is presented on Plate 4-2. On this drawing the proposed terminal building is shown located so as not to preclude future expansion, except for future automobile parking north of the access road if necessary. The sizing and location of these facilities were developed from the detailed terminal area studies presented in the following chapters of this report. In this plan, space is available to double the length of the concourse and the capacity of the aircraft parking apron. Area is also available to double the size of the terminal. With the acquisition of USFS land located north of the proposed Terminal Building, provision can be made for major increases in the size of the automobile parking lot.



LOCATION MAP



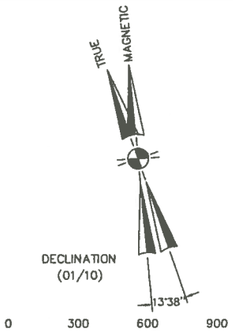
BUILDING INVENTORY

No.	FACILITY	TOP ELEV.	No.	FACILITY	TOP ELEV.
1	EXISTING TEMPORARY TERMINAL BUILDING & BEACON FUTURE ADMINISTRATION BUILDING	7144.4	18	WATER STORAGE PUMP HOUSE	7119.4
2	AIRPORT OFFICE	7122.2	19	EXISTING STREET LIGHT	7086.3
3	ELECTRICAL & TELEPHONE VAULT	7120.3	20	EXISTING CHURCH STEEPLE	7074.8
4	EXISTING PILOTS LOUNGE	7121.9	21	P.A.P.I.	
5	EXISTING FBO OFFICE	7125.8	22	WIND CONE AND SEGMENTED CIRCLE	
6	AIRCRAFT HANGARS A1 THRU A6	7138.9	23	SUPPLEMENTAL WIND CONES	
7	AIRCRAFT HANGARS B1 THRU B6	7136.8	24	DOE RIDGE OBSTRUCTION LIGHT	
8	AIRCRAFT HANGARS C1 THRU C6	7140.0	25	REIL	
9	AIRCRAFT HANGARS D1 THRU D5	7142.3	26	TERMINAL APRON	
10	AIRCRAFT HANGARS E1 THRU E4	7141.6	27	TIEDOWN APRON	
11	AIRCRAFT HANGARS F1 THRU F4	7158.1	28	AWOS TOWER	
12	AIRCRAFT HANGARS G1 THRU G6	7145.7	29	FUEL STORAGE TANKS	
13	WEST EXECUTIVE HANGARS		30	AV. GAS STORAGE. SELF SERVICE	
13A	HANGAR 3 THRU 6	7153.4	31	WELL #99-1 GRND. ELEV. 7095.4'	
13B	HANGAR 15 THRU 16	7154.4	32	WELL #99-2 GRND. ELEV. 7094'	
13C	HANGAR 25 THRU 28	7154.0	33	AIRPORT WELL	
13D	HANGAR 38 THRU 39	7153.8	34	FUTURE TERMINAL BUILDING SITE	
13E	HANGAR 50 THRU 53	7153.7	35	FUTURE TERMINAL APRON	
13F	HANGAR 62 THRU 65	7151.5	36	FUTURE DEICING RAMP	
14	EAST CORPORATE HANGARS		37	FUTURE AUTOMOBILE PARKING	
14A	CORPORATE HANGAR 1	7134.9	38	FUTURE RENTAL CAR PARKING LOT	
14B	CORPORATE HANGAR 5	7131.1	39	FUTURE SEWAGE TREATMENT PLANT AND LEACHING FIELD	
14C	CORPORATE HANGAR 10	7128.0	40	FUTURE APRON & PARKING LOT STORM WATER LEACHING FIELD	
14D	CORPORATE HANGAR 15	7123.2	41	FUTURE ARFF / SNOW EQUIPMENT BUILDING	
15	EXISTING POWER POLE WITH OBSTRUCTION LIGHT	7157.0	42	FUTURE AIRCRAFT HANGARS	
16	EXISTING TELEPHONE POLE WITH OBSTRUCTION LIGHT	7096.0	43	FUTURE AWOS	
17	WATER STORAGE TANK	7123.6	44	AVIATION DEVELOPMENT AREA (HANGARS & FBO BUILDINGS)	

DECLARED DISTANCES

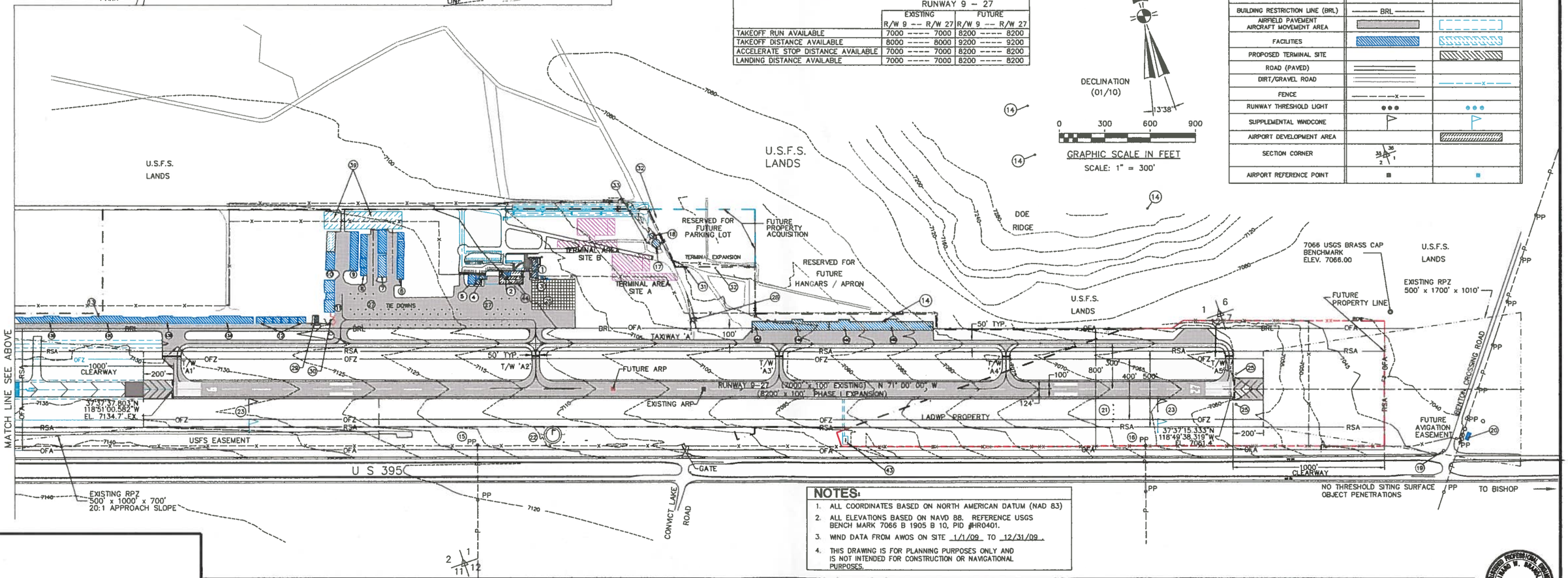
RUNWAY 9 – 27

	EXISTING R/W 9 — R/W 27	FUTURE R/W 9 — R/W 27
TAKEOFF RUN AVAILABLE	7000 — 7000	8200 — 8200
TAKEOFF DISTANCE AVAILABLE	8000 — 8000	9200 — 9200
ACCELERATE STOP DISTANCE AVAILABLE	7000 — 7000	8200 — 8200
LANDING DISTANCE AVAILABLE	7000 — 7000	8200 — 8200



LEGEND

	EXISTING	FUTURE (0–5 YRS)
GROUND CONTOUR	7078	
AIRPORT PROPERTY LINE		XX
RUNWAY SAFETY AREA (RSA)	RSA	RSA
RUNWAY OBJECT FREE AREA (OFA)	OFA	OFA
RUNWAY OBJECT FREE ZONE (OFZ)	OFZ	OFZ
BUILDING RESTRICTION LINE (BRL)	BRL	
AIRFIELD PAVEMENT AIRCRAFT MOVEMENT AREA		
FACILITIES		
PROPOSED TERMINAL SITE		
ROAD (PAVED)		
DIRT/GRAVEL ROAD		
FENCE		
RUNWAY THRESHOLD LIGHT		
SUPPLEMENTAL WINDCONE		
AIRPORT DEVELOPMENT AREA		
SECTION CORNER		
AIRPORT REFERENCE POINT		



NOTES:

1. ALL COORDINATES BASED ON NORTH AMERICAN DATUM (NAD 83)
2. ALL ELEVATIONS BASED ON NAVD 88. REFERENCE USGS BENCH MARK 7066 B 1905 B 10, PID #HR0401.
3. WIND DATA FROM AWOS ON SITE 1/1/09 TO 12/31/09.
4. THIS DRAWING IS FOR PLANNING PURPOSES ONLY AND IS NOT INTENDED FOR CONSTRUCTION OR NAVIGATIONAL PURPOSES.

DATE

FAA DISCLAIMER

THE CONTENTS DO NOT NECESSARILY REFLECT THE OFFICIAL VIEWS OR POLICY OF THE FAA. ACCEPTANCE OF THIS PLAN BY THE FAA DOES NOT IN ANY WAY CONSTITUTES A COMMITMENT ON THE PART OF THE UNITED STATES TO PARTICIPATE IN ANY DEVELOPMENT DEPICTED THEREIN NOR DOES IT INDICATE THAT THE PROPOSED DEVELOPMENT IS ENVIRONMENTALLY ACCEPTABLE IN ACCORDANCE WITH APPROPRIATE PUBLIC LAWS.

APPROVED DATE

AIRPORT MANAGER – WILLIAM B. MANNING

Reinard W. Brandley
CONSULTING AIRPORT ENGINEER
8125 King Road, Suite 201 • Loomis, California 95650 • (916) 652-4725

COUNTY OF MONO
STATE OF CALIFORNIA

MAMMOTH YOSEMITE AIRPORT

MAMMOTH LAKES, CALIFORNIA

TERMINAL SITE LOCATION PLAN

NO.	REVISIONS	BY	APR	DATE

REGISTERED PROFESSIONAL ENGINEER REINARD W. BRANDLEY No. C 8044 Exp. 9-30-2016 CIVIL STATE OF CALIFORNIA

DATE JAN. 29, 2015

SHEET NUMBER

PLATE No. 4–1

TRUE
MAGNETIC
DECLINATION
(5/97)
14°58.7'

AUTO PARKING
130 SPACES
RENTAL CAR PARKING
TERMINAL BUILDING
RENTAL CAR PARKING
60 SPACES
PUBLIC PARKING
CONCOURSE
1
2
3
4
FUTURE ACCESS ROAD
FUTURE PARKING LOT
STORM WATER
LEACHING FIELD
RESERVED FOR
FUTURE
PARKING LOT
STORAGE
TANK (E)
RESERVED FOR
FUTURE
TERMINAL EXPANSION
& RENTAL CARS
TERMINAL APRON
PCC
30'
30'
FUTURE
SANITARY SEWER
LEACHING FIELD
FUTURE APRON
STORM WATER
LEACHING FIELD
TERMINAL APRON EXPANSION
PCC
VAULT
FUEL
MAINTENANCE BUILDING (F)
DE-ICING APRON
RESERVED FOR
FUTURE
TIEDOWN APRON
AWOS
TAXIWAY 'A'
RSA
T/W 'A2'

LEGEND

	EXISTING	FUTURE (0–5) YEARS	FUTURE (10–15) YEARS
AIRFIELD PAVEMENT			
FACILITIES			
ROAD (PAVED)			
DIRT/GRAVEL ROAD			
FENCE			

WINGTIP CLEARANCE FOR PARKED AIRCRAFT IS 30 FT.

DATE

FAA DISCLAIMER

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APPROVED DATE
AIRPORT MANAGER – WILLIAM B. MANNING

Reinard W. Brandley
CONSULTING AIRPORT ENGINEER
6125 King Road, Suite 201 * Loomis, California 95650 * (916) 652-4725

STATE OF CALIFORNIA

MAMMOTH YOSEMITE AIRPORT

MAMMOTH LAKES, CALIFORNIA

TERMINAL AREA SITE PLAN

NO.	REVISIONS	BY	APR	DATE

REGISTERED PROFESSIONAL ENGINEER
REINARD W. BRANDLEY
No. C 8044
Exp. 12-31-2018
CIVIL
STATE OF CALIFORNIA

DATE APRIL 18, 2017
SHEET NUMBER
PLATE No. 4–2

CHAPTER 5. TERMINAL BUILDING

The terminal building studies and requirements were prepared by the Architectural firm of the Van Sant Group. The results of their studies are included in this chapter. Also included in this chapter is Table No. 5-1, which shows the probable architectural design and construction costs for the terminal building. Table No. 5-2 shows terminal facility requirements. Plate 5-1 shows the proposed terminal building floor plan. Plate 5-2 shows typical elevations of the proposed terminal building.

5-1 Terminal Building Requirements

The commercial passenger terminal at Mammoth Yosemite Airport represents a starting point for terminal planning. This minimum facility program is needed to support the current and anticipated levels of passenger activity. This program, in conjunction with specific terminal configurations, will need to be adjusted to accommodate actual building footprints. The gross terminal area derived herein may vary as a result of actual configuration. For example, the amount of secure and non-secure circulation may vary from the program due to the terminal configuration, whereas the amount of commercial space is relatively independent of the concepts. Certain configuration assumptions have been included and are discussed in the appropriate sections.

Based on the Peak Hour Passengers and Design Aircraft, the Terminal has been sized to meet the MMH required level of service, which includes the relative comfort, convenience and ease of use of the Terminal Building at Mammoth Yosemite Airport.

The current design aircraft is the Q400, which is operated by Alaska Airlines. This aircraft has 76 seats and a crew of 3. The total passenger and crew of 79, rounded to 80, will be used as peak hour passengers for this terminal design study.

In addition to the FAA guidelines for Terminal Building Facilities design (AC 150/5360-9), the terminal spaces need to meet the airline industry accepted standards, local and federal governing building codes for occupant load and life safety local fire code requirements.

The current building codes establish the Occupancy Classification for the type of use in the Terminal Building as A-3, Assembly use. In addition specific spaces within the terminal have different occupant loads that are related to life safety concerns and associated issues, such as emergency egress from the building in an emergency situation, based on the occupant load.

The minimum floor area allowable by the governing codes per occupant in Airport Terminals is the following:

Space	***SF per occupant***
Baggage Claim	20
Concourse	100
Waiting Areas	15

The Terminal Facility Requirements designed and listed in Table 5-2 reflect the utilization of the FAA AC, and governing building code requirements in conjunction with the peak hour passengers.

5-1.1 Aircraft Gates/Hold Rooms

The Airport will need to accommodate the ever-changing airline industry, and the differing aircraft serving markets such as Mammoth Yosemite Airport. The need to provide space that can meet the varying capacity requirements of different aircraft is paramount to the success of the terminal facility. The design aircraft for terminal planning of the new facility is the bombardier Q400, an Airport Reference Code (ARC) C III aircraft (approach speed 121-140 Knots, wing span 70' – 117"), which can accommodate 70 - 76 passengers. This aircraft will meet the needs of the terminal for maximum efficiency and utilization of the space.

Departure Lounges (Holdrooms) are based on the mix of aircraft and the average seating capacity of the ARC CIII aircraft. Hold room sizing for the Terminal Building was determined by the following in accordance with the International Building Code, 2015 Edition:

80 passengers per Hold Room x 15 sf/occupant = 1,200 sf
1200 sf x 3 Hold Rooms = 3,600 sf

The egress area at the end of the circulation corridor for emergency exit for the occupants in the Concourse (shown on the plan as double doors and the number **1**), is 314 square feet of the total and is shown in Table 5-2.

Based on the 80 passengers per hold room, it is anticipated that 60 seats will be provided for each of the three hold rooms. The airlines will be asked for their Airport Ticket Office (ATO), Hold Room and Baggage Claim requirements at the appropriate time throughout the process.

The initial enplaning holdrooms should provide for the accommodation of three aircraft at the terminal at the same time. This would require a minimum square footage of 3,600 square feet, (3,914 sf if the egress area at the end of the circulation corridor is included). The configuration should reflect this area.

5-1.2 Commercial Airline Space

Commercial airline space includes both exclusive leased areas (for example, offices, operations and miscellaneous support), and joint use space (such as baggage claim).

Commercial Airline Ticket Counter (ATO Counter) length is typically based on the number of enplaning passengers to be processed in a peak hour. It is therefore incumbent in the space program to provide ample space for the proposed two airlines, and expansion capability for future entrants to the market. This would provide two positions (5' wide each) for each airline, which includes two ticketing positions and a bag well in each 5-foot counter position. The depth for each position is approximately 8 feet to the back wall. This space will accommodate the location of TDS baggage screening equipment behind the ticket counters. A queue space of 10-foot minimum should be included in front of each ticket counter position.

Airline Offices include the ATO offices and other airline administrative spaces. The ATO offices are usually located directly behind or adjacent to the ATO counter and provide support to the ticket agents. These spaces are normally 25' deep along the length of the counter. In a commuter terminal airline operations support spaces are generally located in the same ATO space, and usually include parts storage, break room, and crew support.

Baggage Make-up includes either manual or automated make-up units, the cart container staging areas and maneuvering space for the carts. Normal cart make-up containers include a minimum of two containers and the tug. All space should be covered at a minimum and provide weather related protection, if possible. The space should be at close proximity to the ATO operations space to maximize utilization of airline personnel. All baggage related elements should include accommodations for ski equipment and over-sized elements.

Baggage Service Offices are typically required at major commercial hub operations, therefore are not included in the terminal. Airlines serving MMH will provide this service at their ticket counters.

Baggage Claim requirements are based on the peak demand of deplaning passengers and checked baggage per passenger ratios. The requirements of this facility will be accommodated with approximately 120 lineal feet of claim device. Two units should be adequate, with the capability to add an additional unit as the number of passengers increases. Ski equipment should include a separate slide area.

Baggage Claim sizing was determined by the following:

Total passengers/aircraft = 80
80 passengers x 20 sf/person =1600 sf

This represents 1,600 square feet of the area listed in Table 5-2. The baggage conveyors comprise 511 square feet, after the reduction of 105 square feet due to circulation space adjacent to the baggage claim area.

Baggage Claim Off-load Areas includes the lanes and maneuvering areas, which are required to accommodate the baggage train of two carts. Circulation area is also included in this area, like the baggage make-up area and should provide cover and minimum weather protection from the elements.

5-1.3 Concessions

Rental Car Counters provide an important service to the passengers and revenue to the Airport. Adequate space should be provided for all companies serving the terminal. These include counter space and office area. A common standard of 10 lineal feet of counter would be adequate, with ancillary office space of 75-80 square feet.

Ground Transportation Services also provide needed service to the terminal passengers. Adequate counter and office space should be included for their use. These areas can serve as extra space for charters, special events accommodation and other uses, if required.

Food and Beverage Services should accommodate a restaurant and should be located on the secure side of the terminal. Seating should be adequate for approximately 50 patrons. Kitchen space should be derived as a result of the desired menu service and include adequate storage space as well as delivery access from the non-secured side of the terminal roadway system.

News/Gifts/Lease Space category includes newsstands, gift, retail and specialty shops, business services and other miscellaneous services. There should be adequate locations on the secured side for these functions. A minimum area of 200-300 square feet should be provided, preferably adjacent to the food service to maximize the potential for cross-utilization of personnel.

Other Services consist of miscellaneous revenue producing areas, including automated teller machines, insurance and related customer services. Advertising should be included as an area and location specific space. Freestanding and those utilizing walls are desirable. Telephones should be included on both the secure and non-secure sides of the facility.

Concession Support consists of storage areas, preparation areas, employee lockers, loading and delivery areas, and administrative offices. Most support

spaces should be integrated into the back of the office area adjacent to the customer serving spaces, rather than in remote locations.

5-1.4 Public Spaces

Public spaces, include most of the non-revenue producing areas of the terminal including queuing areas, seating and waiting area, and circulation corridors. Some of the areas are functions of passenger volumes, whereas others are functions of specific facility requirements.

Ticket Lobby includes ticket queuing area, cross circulation, entrance vestibules and general circulation at the main entrance to the building. The minimum distance from the face of the ticket counter to any obstruction should be 40'- 45' for a terminal of the required size. This includes queuing depth of 20'- 25' and the remainder in cross circulation.

Public Seating areas include general (non-secure) waiting areas near the ticket lobby, baggage claim areas and concessions. Programmed square footage should include seating for approximately 15% of the peak hour passengers, in these areas. This represents approximately 40 seats and 600 square feet.

Rental Car Counter Queuing should be 10' deep in area facing the counters. Additional area should accommodate cross-circulation adjacent to the queuing space.

Restrooms should have an adequate number of fixtures to accommodate the peak hour passengers utilizing the facility. Restrooms will be required on both the non-secure and secure side areas of the terminal. The number of fixtures should be designed to meet the local codes and ordinances. The American with Disabilities Act (ADA) requires that restroom facilities be provided.

Secure Circulation will accommodate the processing of passengers through the TSA Security Checkpoint. The present terminal provides one lane of security, however it would be wise to provide room for two lanes in the new facility initially, and expansion for an additional lane, to accommodate expansion. Exit corridor from the holdrooms for deplaning passengers should be 16’ wide, and prohibit wrong way access from the non-secure side.

Based on the peak hour Passengers, the Security Screening Checkpoint was derived in conjunction with TSA input and includes two lanes for passenger screening baggage and the long neck wanding station for secondary screening. Queuing space, document checking, private screening and post screening seating area are included.

The future of screening is very dynamic and rapidly changing and TSA recommends as much flexibility and potential expansion as possible. The initial design includes:

Queuing	412 SF
Screening area	1,168 SF
Post Screening	264 SF
Secure Circulation	450 SF

Other Public Circulation includes all corridors and architectural spaces that tie the functional elements of the terminal together. The terminal configuration will accommodate the inclusion of necessary additional space based on the layout.

5-1.5 Other Areas

An Information Counter, including skier information, should be located near the main entrance(s).

Mechanical/Electrical/Utility areas should be provided throughout the facility, as required and should comprise approximately 8-10 % of the terminal gross area. All systems, mechanical, electrical, plumbing and communication should be designed for expansion.

Janitorial/Storage areas should be included in the facility and located adjacent to mechanical/electrical areas, and be supplemented with additional spaces outside the main terminal area.

Airport Administration/Operations is presently located in another building and is assumed to be similar in size to existing administration space in the present location. This will probably be located on the second floor of the new terminal.

5-1.6 Expansion

It is important to note the environmental documentation anticipated as the next step in implementation of the ten year Airport Capital Improvement Program will be based on projects included in the approved ALP. While it is certainly prudent to consider the possibility of future expansion so as to not preclude the possibility without undue hardship, those projects proposed are to be designed solely for the ten-year projection. No significant design is to be included toward the possibility of future expansion. Only consideration of that possibility may be included.

The new terminal building should be designed to meet the program needs of the Airport for at least ten years after it is opened, and also provide the opportunity to be expanded, should the market dictate. The fluid nature of the commercial airline industry and the need to respond to the inherent changes it creates require the Airport to be responsive to the market potential of the terminal. The new facility should be able to be expanded with minimal interruption to the existing operations of the terminal. Critical areas of the building, which may require expansion should be located away from critical built-in program areas. Sensitivity to the placement of expandable areas should be a major criterion of the actual layout.

5-2 Design Narrative

5-2.1 Architectural Design

The architectural plan and space design layout of the New Terminal Building reflects the clear concise symmetry of the linear terminal configuration. The layout of the Landside functions of Ticketing and Bag Claim allow the building users to experience each function separate from the other, thereby permitting a smaller scale building use for both enplaning and deplaning passengers.

The center spine of the building is the Security Checkpoint and deplaning passenger exit way, which connect the landside and airside functions, for the passengers. This central connection is expressed in the aesthetic design of the building as the Main Entry Façade element. The expression includes a gable element, with large expanse of glass, which illuminates the entryway. In addition, the façade includes vertical polished black granite, with stained wood columns, accenting the entry on both sides. The entryways to Bag Claim and Ticketing, are also emphasized in the façade, in a slightly smaller fashion. In addition to the stone and wood columns, the façade has a native stone base, with stucco above, and accent panels of stained horizontal wood siding, further recalling the horizontal expression of the building design. Windows are provided at all appropriate locations to accent the views from all sides of the building. Interior finishes include colors and finishes similar to the exterior palette, and utilize maintenance free materials, where appropriate. The overall palette presents warm colors, in various materials and finishes.

The overall aesthetic expression is one of a horizontal expression, which reflects the site, and presents a building, which is less than 35 feet in height, at the highest point. The overall horizontal expression in both form and proportion reflects this harmony with the site.

The fenestration of the linear concourse, which comprises the Holdrooms, repeats the same use of materials, and also continues the horizontal expression of the building. The function associated with the Food Service/Lounge areas is emphasized with a gable roof element, similar to the landside main entry, with stone and wood accents, highlighted with vaulted glass. This element further dramatizes the expansive view of the Mammoth mountain range, and will be a featured area for passengers.

The entire building design and layout will not preclude future expansion of all major areas of the building, as the need arises, with minimal interruption to the operations. In that regard, the building core, including restrooms, mechanical, electrical have been designed so as to not preclude possible expansion of holdroom and lobby spaces. This will be invaluable as the need arises to expand the building, when increases in air service warrant additional space, and allow for that to occur, without interruption. Also, TSA checkpoint and associated office space is expandable without interruption of any adjoining spaces. The need to

provide expansion space for the security checkpoint is important at all increasing service terminals, as the need to process the passengers remains very fluid, with new machinery and protocols changing constantly.

The materials and colors utilized afford low maintenance and express the simplicity and detail necessary to convey a positive public image of the building to the users and an overall pride for the residents in the Mammoth Lakes region.

5-2.2 Structural Design

The selected structural system will be designed to utilize the most economical, durable and functional type of construction and compliment the architectural design. Structural steel frame with wood sub framing will probably be utilized. The exposed columns at the facades will be heavy timber members, with appropriate anchors. Primary consideration will be given to the bay spacing (spans) and the bearing properties of the supporting soil strata to efficiently size the structural system members. Where required, structural design will not preclude future expansion.

All lateral forces on the structure, such as seismic and wind forces, will be analyzed in accordance with local governing building codes. It is important to note that Mammoth is an active seismic and volcanic area, and structural design will accommodate these forces. Lateral bracing, where required, will be integrated into the design, to compliment the aesthetic. Moment frames will also be studied in future phases of the design, to provide lateral stability.

The roof trusses will be designed to reflect the desired open effect, and will be scissor type. They will reflect the desired spacing and have minimal impact on the space utilization of the building.

The construction of the exterior walls will be designed for maximum economy and ease of construction, and match the aesthetic value. Wood framing for the walls will be utilized, where possible, with concrete masonry used to ease maintenance and where desired to reduce wear.

Foundations will be designed to reflect the existing soils, and be based on recommendations made during subsurface soils investigations and laboratory testing, which will be done in future phases. Preliminary discussions indicate that either spread footings on compacted sub-fill or drilled piers will be the two preferred alternatives for the foundation system

5-2.3 Utilities Design

Utilities Design required for the Building will be designed by the Building Engineers in conjunction with the Site Utilities design for the New Terminal Site. Building load data will be derived in future phases of design, and given to Site Engineer for inclusion in master site utility design. A defined utility corridor, established away

from possible future expansion(s), will be the point where the Building design engineers will bring the various utilities into the building. It is desirable to have the utility corridor completely encompass the terminal site; to accommodate the double feed of desired utilities. The Airport Engineer will obtain water for the building, from on-site wells, located east of the terminal site, adequately sized to provide the required domestic and fire protection pressure of the facility. Also, the sewer system will be accommodated by the Airport, with the construction of a new on-site package sewage disposal plant, to serve the needs of the terminal, other airport facilities and the fixed base operators' commercial development. The package plant would treat the sewage, with effluent disposed of by underground leach lines.

5-2.4 Building Systems

Electrical Design – The building should be fed underground with power from a nearby substation. The preferred enclosure would be an underground vault, with conduit encased in concrete, within 600 to 1,000 feet apart. From there, loop feeds to pad mounted transformers, near the building, would be utilized, for secondary service. There will be at least two transformers; one each for the main terminal and concourse, with power supplied of 277/480V, three-phase, four-wire from the main supply to the building. Final total load will be determined in the next design phase and submitted to the providing utility (Southern California Edison). Transformers will be located on concrete pads, and secured from the public. The building will provide a secure (non-public) electric room for step down panels and other appropriate distribution to all areas within the facility. The room should be designed for expansion of service needs, which may arise. A provision for emergency power for critical components of the building would be desirable.

The airlines will require 400 Hz power at each gate for aircraft service needs, and need to have tenant panels for their own power needs, associated with their operations.

Lighting for the building will be provided based on NEC standards, and include the use of energy-efficient fixtures throughout the facility. Light levels will meet the required foot-candles for the areas and their associated tasks. Public area light fixtures will be designed to compliment the aesthetic values of the spaces. It is essential to limit the replacement lamps, wherever possible, to assist in the replacement of bulbs, while still meeting the required light levels. Lighting for the apron area will be included in the site work, designed by the Airfield Engineer.

Mechanical Design – The primary energy source for the heating of the building will be propane gas. Cooling energy will be provided by electricity. Mechanical equipment will be included in the central mechanical room, including the major air handling units and central control system. All distribution will include concealed ductwork, with multiple zones throughout the facility. Energy conserving variable air volume systems with independent perimeter heating will be

used where architectural and functional conditions permit. Supplementary mechanical units will be used where necessary.

All equipment will include the state-of-the-art filtration to assist in the removal of dust and odors generated by the high occupancy rate of the building. In addition, fresh air will be obtained away from the airfield side, so as not to include the fumes associated with the airside. The desired effect of an energy conserving and pollution-free air circulation system is paramount in the design.

A control system with full energy management and preventative maintenance capabilities will be included in the main mechanical room. This computer-based system will allow for monitoring the system in remote areas, for load analysis and optimum utilization of the heating and cooling systems.

Plumbing Design – A conventional soil/waste and vent system will be designed to serve the needs of all plumbing fixtures throughout the facility. All public toilet room fixtures will be provided with automatic infrared sensors for control and use.

Domestic water supply to all concessionaires will be sub-metered to control and monitor usage. Tempered water supply to public lavatories will be provided at 95 degrees F. The main distribution system will be recirculated to minimize temperature loss. A central hot water heater (gas) for each of the two restroom cores (terminal and concourse) will supply the required hot water for each. The system will include shutoff capabilities to groups of fixtures to prevent water supply interruptions to public toilet rooms and concessionaires, for ease of maintenance. Where advantageous, individual hot water heaters of the electric instantaneous type may be utilized for remote locations.

Tenants requiring hot water will be required to provide their own domestic hot water heating equipment.

All tenants utilizing water and gas can be separately sub-metered. Fixtures throughout the building will be low water usage type, with lavatories of the timed, regulated-flow type.

Backflow preventers will be installed on all service and fire lines entering the building. Metering of all domestic service lines will be required. All sewer and waste shall conform to those standards in place at the Airport, and in conformance with the Town of Mammoth Lakes.

Fire Protection – A fire alarm and detection system will be provided, including all detectors and manual pull stations. The individual specific requirements of respective areas, in conjunction with local governing codes, will determine the location of sprinkler flow alarms and valve monitoring. Alarm systems will be directly transmitted to the local fire department, in addition to the local fire annunciator panel.

The fire protection will consist of wet- and dry-pipe, automatic closed head sprinkler systems, for all required areas. Sprinkler systems will be hydraulically designed with maximum square feet of sprinkler area as required by codes. Automatic sprinkler risers will include a fire alarm flow switch.

Communications – All communication systems required for terminals will be included in the Project. Telephone service for the building users and tenants will be included, with the main service panel located in the electric/communication room on the secured side of the building. Private lines will be provided for the airlines and other tenants. Public phones will be provided in the main terminal and concourse, including ADA required volume control, text-type, and assertive listening telephones. Telephone service will be brought into the terminal from the closest available source.

A wireless local area network (wlan) will be provided throughout the terminal, with protection services available for users. The individual tenants will be responsible for their own wi-fi.

A public address system, utilizing the telephone system, with secure controlled access for all parties, will be provided. Speakers for the system will be included in the building and located strategically throughout the facility. In addition, a joint use flight information display system (FIDS) will be provided at strategic locations.

The flight information provided will include arrivals and departures for all carriers at Mammoth Yosemite Airport.

A security monitoring camera system, implemented by the Airport, will provide monitoring of gate holdrooms, bag claim, access points, security, and other secured areas of the terminal and other site related areas. Monitors for the system will be located in the Airport Administration security offices. The system will also be expandable.

5-2.5 Estimate of Probable Design and Construction Costs

An estimate of the costs of design and construction of the proposed terminal building initial development, and long-range development has been prepared and is included in Table No. 5-1. All costs shown are based on 2017 prices and must be adjusted for inflation.

TABLE NO. 5-1

MAMMOTH YOSEMITE AIRPORT
ESTIMATE OF PROBABLE DESIGN AND CONSTRUCTION COSTS
TERMINAL BUILDING

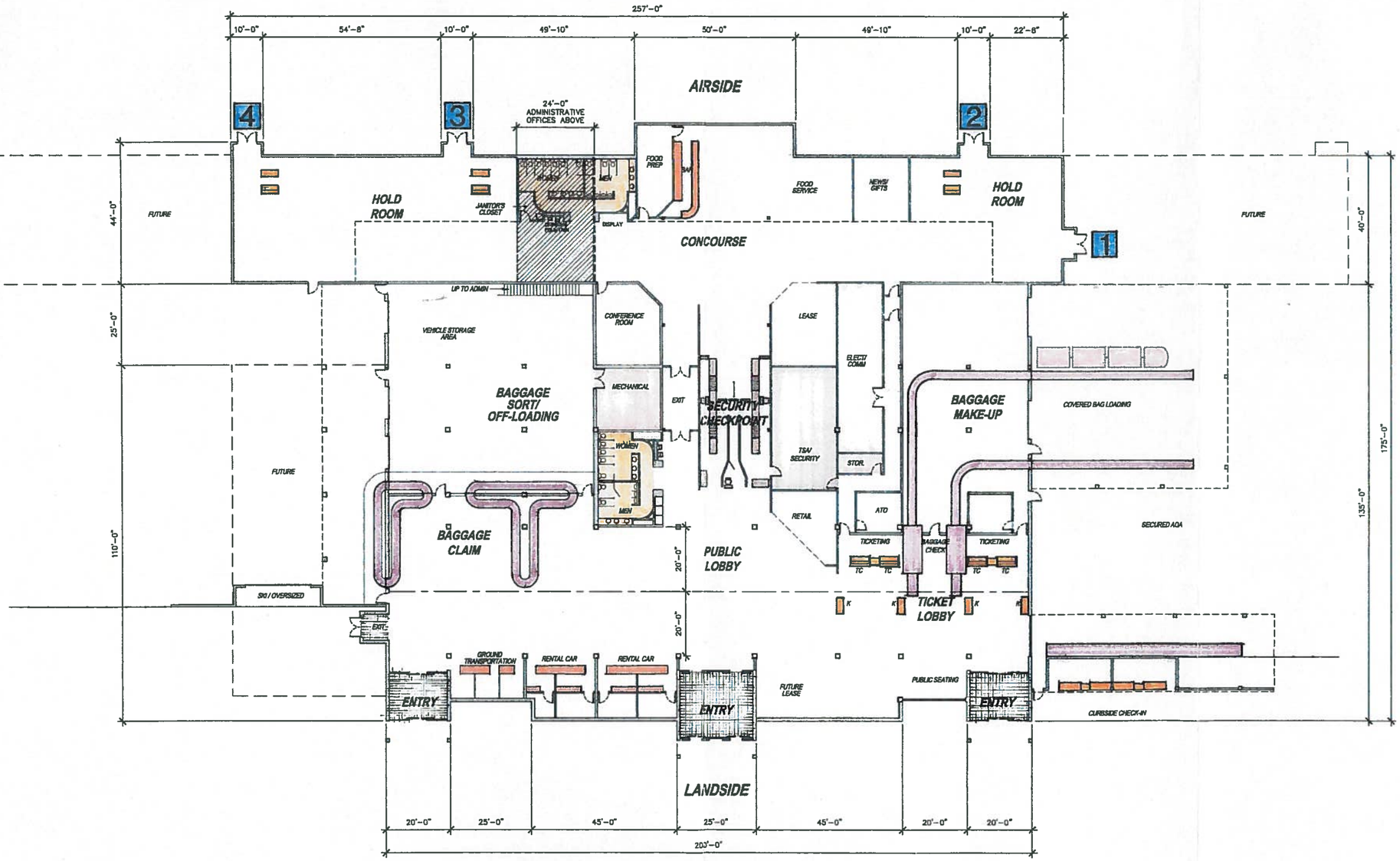
A.	INITIAL DEVELOPMENT (within 5 years)	
	1. Design New Terminal Building	$1,750,000
	2. Construct New Terminal Building	$17,525,000
	3. Design Terminal Apron & Related Infrastructure	$1,120,000
	4. Airline Terminal Apron & Related Infrastructure	$13,114,000
B.	LONG-RANGE PLANNING (approximately 11-20 years)	
	1. Design Expanded Terminal	$514,685
	2. Construct Expanded Terminal	$4,117,500

Note: For long-range planning (10 to 20 years) it may be necessary to expand the terminal area apron, terminal access road, and automobile parking somewhat. Because of the type service forecast for this airport it is not possible at this time to forecast if, when, or how much expansion may be necessary. It is anticipated that the required expansion of these facilities will be minimal. No estimated cost for long-range development has been included in this table.

TABLE NO. 5-2

MAMMOTH YOSEMITE AIRPORT
TERMINAL BUILDING REQUIREMENTS

		EXISTING TERMINAL	NEW TERMINAL	NEW TERMINAL
Year		2016	2021	2026
Enplanements		22,253	23,618	24,581
Peak Hour Passengers		163	171	204
Lease Space				
Airlines				
	Holdrooms	940	3,600	3,600
	Emergency Exit Concourse		314	314
	Ticket Counter	18 LF	30 LF	30 LF
	Ticket Kiosk		20 LF	20 LF
	Ticket Counter Area	420	872	872
	ATO	120	332	332
	Baggage Make-up	285	3,185	3,185
	Curbside Baggage		1,563	1,563
	Baggage Sort/Off-Loading		3,874	3,874
	Baggage Claim	120	1,600	1,600
	Baggage Conveyors		511	511
	Ski/Oversized Baggage		182	182
	SUB-TOTAL	**1,885**	**16,033**	**16,033**
Car Rental				
	Lease Space	150	1,202	1,202
	Counter Length	25 LF		
	Front		34 LF	34 LF
	Back		27 LF	27 LF
Restaurant			1,822	1,822
Retail		22	324	324
Vending			23	23
News/Gifts			340	340
Lease/Display			315	315
	SUB-TOTAL	**172**	**4,026**	**4,026**
Gates		1	3	3
Public Space				
	Ticket Lobby	504	1,360	1,360
	Public Seating Areas		600	600
	Restrooms - Non Secure	285	429	429
	Restrooms - Secure	76	539	539
	Security Checkpoint	835	2,294	2,294
	Circulation	1,215	11,112	11,112
	SUB-TOTAL	**2,915**	**16,334**	**16,334**
Other Areas				
	Ground Transportation		344	344
	Airport Administration		897	897
	Multi-purpose/Support (Conf.)		473	473
Support				
	Mechanical/Elec/Utility	24	1,098	1,098
	Support/Storage	64	83	83
	SUB-TOTAL	**88**	**2,895**	**2,895**
Total Terminal Area (SF)		**5,060**	**39,288**	**39,288**



TERMINAL BUILDING – FLOOR PLAN

MAMMOTH YOSEMITE AIRPORT
MAMMOTH, CALIFORNIA

PLAN NORTH

SCALE: 1/16" = 1'-0" FULL SHEET 24" x 36"

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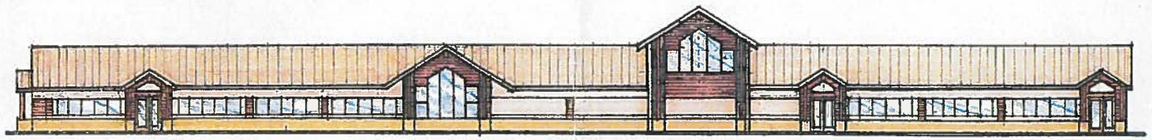
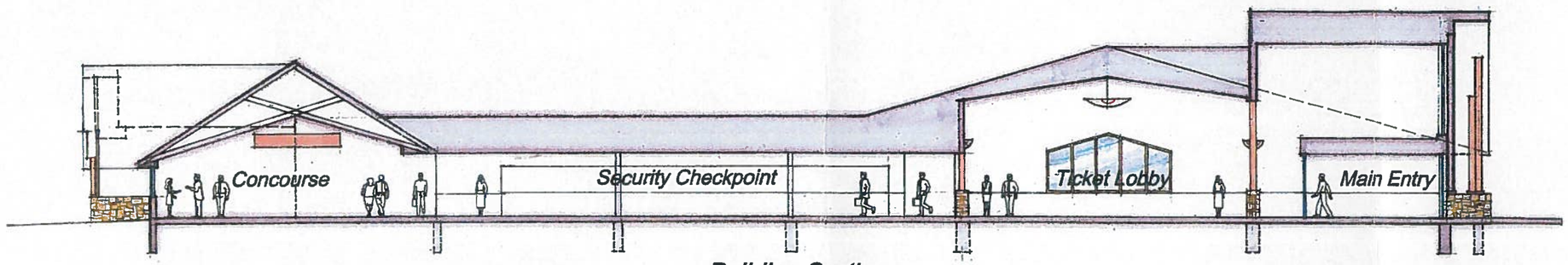
PLATE NO. 5-1

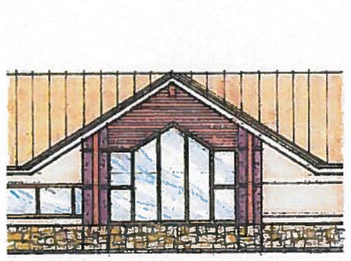


AIRSIDE ELEVATION
(South)

Scale 1/16" = 1'-0"

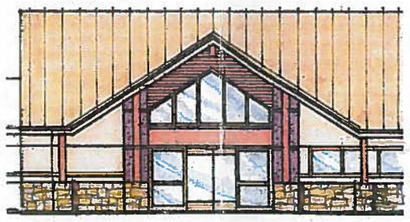


Building Section

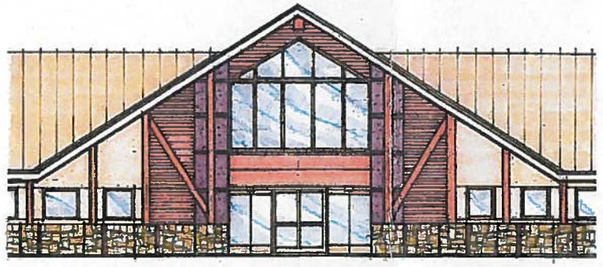


Concourse Food Service

Hold Room Entrance

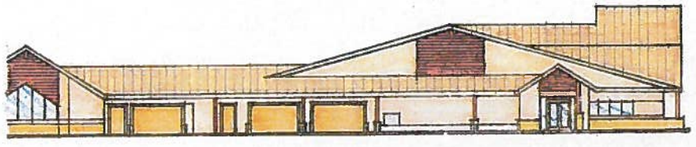


Ticket Lobby/ Bag Claim Entry

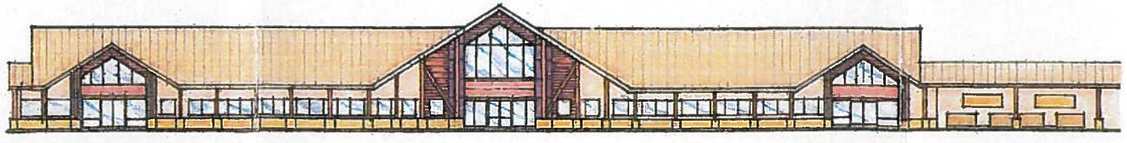


Main Entry

Scale: 1/8"= 1'-0"



EAST ELEVATION



LANDSIDE ELEVATION
(North)

Scale: 1/16"= 1'-0"

TERMINAL BUILDING – ELEVATIONS

MAMMOTH YOSEMITE AIRPORT
MAMMOTH, CALIFORNIA

SCALE: 1/8" = 1'-0" (FULL SIZE 24" x36")
SCALE: 1/16" = 1'-0"

Van Sant Group

PLATE NO. 5-2

CHAPTER 6. TERMINAL SUPPORT FACILITIES – CIVIL WORKS

The terminal support facilities include all areas and facilities required to support the airline operations and passengers. These facilities include aircraft parking aprons, deicing facilities, access roads, automobile parking areas, maintenance facilities, utilities, and other facilities required to provide a complete and functional commercial terminal facility. These facilities are civil engineering design features commonly known as Civil Works and are shown on Plates 6-1 and 6-2.

6-1 Terminal Apron

The commercial terminal building has three main gate positions. The proposed apron will be capable of accommodating three Q400 aircraft or three CRJ700 aircraft in a taxi-in/taxi-out type operation. This should adequately serve the proposed commercial services for the first 10 years after opening of the terminal. The terminal apron will be 20,444 square yards and will be a rigid pavement design using a 16-inch Portland cement concrete surfacing material. Space should be reserved to enlarge the concourse and apron so as not to preclude accommodation of a total of six Q400 aircraft positions.

The existing grades require that the terminal apron drain toward the terminal building. A continuous grated slot drain will be installed at the north edge of the apron and immediately behind the aircraft parking position to accommodate all drainage from the apron and terminal. The preliminary grading and drainage plan has been prepared and is included in Plate 6-1. The terminal apron at the north edge will slope from west to east at 1 percent grade to accommodate the drainage and minimize embankments. This will require that the adjoining concourse on the terminal have level areas for the hold rooms and shallow ramps between the hold room areas to accommodate the change in grade.

Apron lighting will be provided by floodlights located along the north edge of the apron.

6-2 Deicing Apron

The majority of the commercial aircraft forecast to use Mammoth Yosemite Airport will operate during the winter months, and in the winter many of these aircraft require deicing immediately prior to takeoff. From an environmental and operational standpoint it is not appropriate to deice the aircraft in their parking positions at the gates. A separate deicing apron is proposed adjacent to the apron.

This deicing apron will also serve the business jets that frequent the airport in the winter.

The deicing apron will also be constructed of a rigid pavement section with a 16-inch Portland cement concrete slab. It will be graded to a central drain in the middle of the apron. Storm water and/or deicing fluid from this apron will be picked up in the central drop inlet and carried by pipe to an area immediately southeast of the deicing apron where a holding tank will be installed to hold the deicing fluid that washes off the aircraft until it can be pumped out and transported to a suitable disposal area. The pipe discharge from the drop inlet in the center of the deicing pad will have a dual discharge controlled by valves. One discharge will be into the deicing fluid holding tank and a second will be in a storm water leaching field in the same area as the holding tank. The valves will be controlled so that at all times when deicing operations are taking place the valve to the storm water leaching field will be closed and the valve to the holding tank will be open. During storms, only when deicing is not occurring, the valve to the holding tank will be closed and the valve to the storm water leaching field will be open.

6-3 Connecting Taxiways

Two connecting taxiways, 230 and 280 feet long, will connect the new aircraft parking apron and deicing apron to Taxiway A. These taxiways will be flexible pavement sections using asphalt concrete for the surfacing.

6-4 Automobile Parking

There is enough space on the existing airport property adjacent to the terminal for two automobile parking areas. The parking area to the west of the terminal will be used for rental car company vehicles and will accommodate 130 automobiles. The parking lot to the east of the terminal will be used by commercial passengers and other visitors and there is space for 60 parked automobiles. Additional existing parking lots can also be used for rental cars. If it becomes necessary to expand the rental car and/or the visitor parking facilities, provision has been made in the Airport Layout Plan for this supplemental parking facility to be located in front of the terminal across the access road on U.S. Forest Service land. Security lighting will be provided for each parking lot.

6-5 Access Road and Service Roads

An access road will be constructed as an extension to Airport Road. This road will have a cul-de-sac at the east end of the east automobile parking lot as shown on Plate 6-1. There will be a 20-foot concrete sidewalk in front of the terminal building, then a 9-foot space for parallel automobile parking used for loading and unloading, two 12-foot eastbound travel lanes, a 10-foot concrete island and two 12-foot westbound travel lanes.

During the design and construction of the access road to the terminal building, care should be taken not to preclude the potential of providing a secondary access road in the future.

An asphalt-paved access road, service area, and automobile parking will also be constructed to the proposed new maintenance building to be located immediately east of the deicing apron.

6-6 Maintenance Building

The Airport currently has need of a new maintenance building to store and maintain snow plows, snow blowers, and other maintenance gear since the maintenance building they original had was converted to the temporary terminal facility. It is proposed to construct a 10,000-square foot maintenance building to the east of the deicing facility. Automobile parking will be provided in front of the building to the north and a paved operations area will be provided to the south of the building.

6-7 Utilities

Utilities within the terminal building and for a distance of 10 feet outside the building are included in the terminal building plan. Utilities serving the building and other facilities on the airport are included in the civil engineering design section of the project and consist of:

- Sewer
- Water
- Electrical
- Telephone

These utilities of the size and type required for the existing and potentially expanded terminal building will be installed both in front of the terminal building and on the airside portion of the concourse.

There is no natural gas available. Propane will be provided for each facility developed at the airport.

A preliminary Utility Plan showing the location and routing of the proposed utilities in the terminal area is presented in Plate 6-2.

6-7.1 Electricity

Electricity is provided to the airport by Southern California Edison from a primary power line located to the south of U.S. Highway 395 and is carried to the existing airport electrical vault building for distribution to the airport users. It will, no doubt, be necessary to enlarge the service to the electrical vault building or directly to the commercial terminal facility, which can be readily handled by

Southern California Edison. Power cables will be carried from the vault to the terminal building by underground duct.

6-7.2 Telephone

Telephone service is provided by Verizon or Voice Over Internet by a variety of carriers via the airports connection to the local broad band network. Both networks terminate in the existing electrical vault building. A significant capacity is available, to be added as needed. Service to the terminal building will be provided from the electrical vault.

6-7.3 Gas

There are no gas lines in the area of the airport and all facilities that require gas are served by propane from local suppliers. The terminal facilities can also be served by propane as necessary.

6-7.4 Water

Potable water is obtained from wells on the airport. There are two wells and a 450,000 gallon storage tank located immediately east of the terminal facilities. An emergency generator is available at the pump house to provide power for the pumps in an emergency. There is adequate water supply to accommodate both domestic and fire use for the new terminal facilities.

6-7.5 Sewer

The soils at Mammoth Yosemite Airport are very porous clean sand and gravel soils with some small cobbles embedded. The ground water table is deep and these soils provide good leaching characteristics. Currently all facilities at the airport are served by septic tanks and underground leaching fields. With the development of the new terminal facility and the potential development of additional commercial facilities on the airport, it is proposed to construct a package sewage treatment plant and to discharge the effluent from this plant into an underground leaching field adjacent to the plant. The plant will be located west of the commercial apron. New sewer lines will be installed to carry the sewage from the new terminal facility and existing facilities on the airport to this new package plant.

6-8 Security

Security will be provided in the terminal building as necessary, including alarmed doors and security cameras. In the new terminal area the security fencing will be installed and/or relocated such as to separate the airport operations area from the non-secure civilian use area. The existing barbed wire fence around the entire airport will be replaced with a new 8-foot chain link fence with coded gates as

required. There will be security cameras at all entrance gates and at critical points on the aircraft parking apron.

The commercial apron, automobile parking lots, and access roads will be lighted with floodlights that will be provided with cut-off features such that full light is available on the apron and parking lots but the light is not visible from the runway, Highway 395, or other surrounding areas.

TRUE
MAGNETIC
DECLINATION
(5/97)
14°58.7'

AUTO PARKING
130 SPACES
RENTAL CAR PARKING
TERMINAL BUILDING
CONCOURSE
RENTAL CAR PARKING
50 SPACES
PUBLIC PARKING
FLUSH GUTTER
TERMINAL APRON
PCC
TERMINAL APRON EXPANSION
PCC
VAULT
FUEL
FUTURE ACCESS ROAD
FUTURE PARKING LOT
STORM WATER
LEACHING FIELD
RESERVED FOR
FUTURE
PARKING LOT
STORAGE
TANK (E)
RESERVED FOR
FUTURE
TERMINAL EXPANSION
& RENTAL CARS
FUTURE
SANITARY SEWER
LEACHING FIELD
FUTURE APRON
STORM WATER
LEACHING FIELD
MAINTENANCE BUILDING (F)
DE-ICING APRON
RESERVED FOR
FUTURE
TIEDOWN APRON
AWOS
TAXIWAY 'A'
T/W 'A2'
RSA

LEGEND

	EXISTING	FUTURE (0–5) YEARS	FUTURE (10–15) YEARS
AIRFIELD PAVEMENT			
FACILITIES			
ROAD (PAVED)			
DIRT/GRAVEL ROAD			
FENCE			

WINGTIP CLEARANCE FOR PARKED AIRCRAFT IS 30 FT.

DATE

FAA DISCLAIMER

THE CONTENTS DO NOT NECESSARILY REFLECT THE OFFICIAL VIEWS OR POLICY OF THE FAA. ACCEPTANCE OF THIS PLAN BY THE FAA DOES NOT IN ANY WAY CONSTITUTES A COMMITMENT ON THE PART OF THE UNITED STATES TO PARTICIPATE IN ANY DEVELOPMENT DEPICTED THEREIN NOR DOES IT INDICATE THAT THE PROPOSED DEVELOPMENT IS ENVIRONMENTALLY ACCEPTABLE IN ACCORDANCE WITH APPROPRIATE PUBLIC LAWS.

APPROVED
AIRPORT MANAGER – WILLIAM B. MANNING
DATE

Reinard W. Brandley
CONSULTING AIRPORT ENGINEER
6125 King Road, Suite 201 • Loomis, California 95650 • (916) 652-4725

STATE OF CALIFORNIA

MAMMOTH YOSEMITE AIRPORT

MAMMOTH LAKES, CALIFORNIA

TERMINAL AREA GRADING AND DRAINAGE PLAN

NO.	REVISIONS	BY	APR	DATE

REGISTERED PROFESSIONAL ENGINEER
REINARD W. BRANDLEY
No. C 8044
Exp. 12-31-2018
CIVIL
STATE OF CALIFORNIA

DATE APRIL 18, 2017

SHEET **NUMBER**

PLATE No. 6–1

TRUE
MAGNETIC
DECLINATION
(5/97)
14°58.7'

AUTO PARKING
130 SPACES
RENTAL CAR PARKING
TERMINAL BUILDING
CONCOURSE
RENTAL CAR PARKING
60 SPACES
PUBLIC PARKING
FUTURE ACCESS ROAD
FUTURE PARKING LOT
STORM WATER
LEACHING FIELD
RESERVED FOR
FUTURE
PARKING LOT
STORAGE
TANK (E)
RESERVED FOR
FUTURE
TERMINAL EXPANSION
& RENTAL CARS
TERMINAL APRON
PCC
TERMINAL APRON EXPANSION
PCC
VAULT
FUEL
30'
30'
FUTURE
SANITARY SEWER
LEACHING FIELD
FUTURE APRON
STORM WATER
LEACHING FIELD
MAINTENANCE BUILDING (F)
DE-ICING APRON
RESERVED FOR
FUTURE
TIEDOWN APRON
AWOS
TAXIWAY 'A'
RSA
T/W 'A2'

LEGEND

	EXISTING	FUTURE (0–5) YEARS	FUTURE (10–15) YEARS
AIRFIELD PAVEMENT			
FACILITIES			
ROAD (PAVED)			
DIRT/GRAVEL ROAD			
FENCE	—— x ——	—— x ——	
SEWER		SS	
WATER		W	
DRAINAGE		SD	
ELECTRICAL		E	

WINGTIP CLEARANCE FOR PARKED AIRCRAFT IS 30 FT.

DATE

FAA DISCLAIMER

THE CONTENTS DO NOT NECESSARILY REFLECT THE OFFICIAL VIEWS OR POLICY OF THE FAA. ACCEPTANCE OF THIS PLAN BY THE FAA DOES NOT IN ANY WAY CONSTITUTES A COMMITMENT ON THE PART OF THE UNITED STATES TO PARTICIPATE IN ANY DEVELOPMENT DEPICTED THEREIN NOR DOES IT INDICATE THAT THE PROPOSED DEVELOPMENT IS ENVIRONMENTALLY ACCEPTABLE IN ACCORDANCE WITH APPROPRIATE PUBLIC LAWS.

APPROVED DATE
AIRPORT MANAGER – WILLIAM B. MANNING

Reinard W. Brandley
CONSULTING AIRPORT ENGINEER
6125 King Road, Suite 201 * Loomis, California 95650 * (916) 652-4725

STATE OF CALIFORNIA

MAMMOTH YOSEMITE AIRPORT

MAMMOTH LAKES, CALIFORNIA

UTILITY PLAN

NO.	REVISIONS	BY	APR	DATE

REGISTERED PROFESSIONAL ENGINEER
REINARD W. BRANDLEY
No. C 8044
Exp. 12-31-2018
CIVIL
STATE OF CALIFORNIA

DATE APRIL 18, 2017
SHEET NUMBER
PLATE No. 6–2

CHAPTER 7. ESTIMATE OF PROBABLE DEVELOPMENT COSTS

Van Sant Group Architects have prepared an estimate of probable construction costs for the terminal building. These costs are included in Table No. 7-1. The probable construction costs of all civil works required to support the new terminal building have been prepared by Reinard W. Brandley and are included in Table No. 7-2. A summary of estimated total costs for the terminal area development including design fees, construction inspection fees, and 10 percent allowance for administrative costs has been prepared and is included in Table No. 7-3.

Funding sources to cover the cost of the proposed development include:

- F.A.A. Airport Improvement Program (AIP) Grants
- Passenger Facility Charges (PFC)
- Fees and Rents
- Tourist Improvement District Funds
- Municipal Bonds

All cost estimates are based on 2017 prices and must be adjusted for inflation if construction is scheduled beyond that timeframe.

TABLE NO. 7-1

MAMMOTH YOSEMITE AIRPORT
ESTIMATE OF PROBABLE CONSTRUCTION COST – TERMINAL BUILDING

	ELEMENT	COST/SF	COST
A.	**Terminal – Shell Space**		
1.	Ticketing and Queuing Ticket Lobby Bag Make-up Bag Claim Holdroom Airlines Lease Space Non-Airline Lease Spaces Restrooms Security Checkpoint Restaurant Circulation Support Spaces **Total Area = 40,010 SF**	$360/sf	Includes: Structural system Mechanical system Electrical system Plumbing system Finishes Public seating
	Subtotal – Terminal – Shell Space		**$ 14,403,600**
B.	**Airline Lease Spaces / TSA – Tenant Improvements**		
1.	Airline Offices - 332 sf	$80/sf	$ 26,560
2.	TSA Offices - 950 sf	80/sf	76,000
3.	Lease/ Display - 515 sf	95/sf	48,925
4.	Ground Transportation / Rent Cars-1,546 sf	95/sf	146,870
5.	Airport Administration / Conference-1,370 sf	95/sf	130,150
6.	Restaurant / Lounge - 1,822 sf	100/sf	182,200
	Subtotal – Airline Lease Spaces/TSA		**$ 610,705**
C.	**Other**		
1.	Generator		$ 242,200
2.	Baggage System – Inbound & Outbound		818,300
3.	Curbside Check-in		299,000
4.	Ski-Oversized Bag Claim		231,200
5.	Covered Bag Claim Area		245,100
6.	Covered Outbound Bag Make-Up		675,200
	Subtotal – Other		**$ 2,511,000**
	TOTAL		**$ 17,525,305***

*There is an estimated engineering and administration cost of $3,150,000, for a total estimated cost of $20,675,000. This excludes terminal design costs of $1,750,000.

VS GROUP
June 2011
Revised April 2017

TABLE NO. 7-2
MAMMOTH YOSEMITE AIRPORT
ESTIMATE OF PROBABLE CONSTRUCTION COSTS - CIVIL ENGINEERING FACILITIES

Item No.	Description	Unit	Unit Price	Quantity	Cost
A. Airline Apron - 184,000 Sq. Ft., Taxiways - 35,600 Sq. Ft. & Delcing Apron - 65,000 Sq. Ft.					
A1	Mark & Light Closed Airport Facilities	L.S.	L.S.	L.S.	$ 20,000
A2	Mobilization	L.S.	L.S.	L.S.	50,000
A3	Clearing and Grubbing	Acre	$ 3,000.00	5.7	17,161
A4	Excavation	Cu. Yd.	18.00	14,000.0	252,000
A5	Imported Embankment	Cu. Yd.	30.00	6,200.0	186,000
A6	Recompact 12" of Native Subgrade	Sq. Yd.	3.00	33,000.0	99,000
A7	10" of Aggregate Subbase	Ton	45.00	2,200.0	99,000
A8	6" or 8" of Crushed Aggregate Base	Ton	60.00	16,600.0	996,000
A9	3" Bituminous Surface Course	Ton	120.00	700.0	84,000
A10	1 1/2" Bituminous Surface Course	Ton	120.00	2,400.0	288,000
A11	16" Portland Cement Concrete	Sq. Yd.	150.00	27,800.0	4,170,000
A12	Bituminous Prime Coat	Ton	1,400.00	16.0	22,400
A13	Bituminous Tack Coat	Ton	1,400.00	1.0	1,400
A14	Marking	Sq. Ft.	3.00	2,200.0	6,600
A15	Drainage Allowance	L.S.	L.S.	L.S.	100,000
A16	Floodlighting Allowance	Each	35,000.00	3.0	105,000
A17	Utilities Relocation	L.S.	L.S.	130,000.0	130,000.0
A18	Fencing	Ln. Ft.	25.00	1,350.0	33,750
	Total Airline Apron				$ 6,660,311
	Total Airline Apron - USE				$ 6,660,000

Item No.	Description	Unit	Unit Price	Quantity	Cost
B. Access Road - 26' x 1,000' & 22' x 1500'					
B1	Mark & Light Closed Airport Facilities	L.S.	L.S.	L.S.	$ 7,000
B2	Mobilization	L.S.	L.S.	L.S.	10,000
B3	Clearing and Grubbing	Acre	$ 3,000.00	2.7	8,100
B4	Excavation	Cu. Yd.	18.00	1,600.0	28,800
B5	Imported Embankment	Cu. Yd.	30.00	5,000.0	150,000
B6	Recompact 12" of Native Subgrade	Sq. Yd.	3.00	8,500.0	25,500
B7	10" of Aggregate Subbase	Ton	45.00	4,500.0	202,500
B8	6" Crushed Aggregate Base	Ton	60.00	3,000.0	180,000
B9	3" Bituminous Surface Course	Ton	120.00	1,300.0	156,000
B10	Bituminous Prime Coat	Ton	1,400.00	5.0	7,000
B11	Bituminous Tack Coat	Ton	1,400.00	2.0	2,800
B12	Marking	Sq. Ft.	3.00	5,000.0	15,000
B13	Drainage Allowance	L.S.	L.S.	L.S.	100,000
B14	Concrete Curb	Ln. Ft.	25.00	4,000.0	100,000
B15	Landscape Allowance	L.S.	L.S.	L.S.	80,000
B16	Floodlighting Allowance	L.S.	L.S.	L.S.	80,000
	Total Access Road				$ 1,152,700
	Total Access Road - USE				$ 1,153,000

TABLE NO. 7-2 (Continued)

Item No.	Description	Unit	Unit Price	Quantity	Cost
C. Automobile Parking Lot - 70,000 Sq. Ft.& Sidewalks - 24,000 Sq. Ft.					
C1	Mark & Light Closed Airport Facilities	L.S.	L.S.	L.S.	$ 2,000
C2	Mobilization	L.S.	L.S.	L.S.	5,000
C3	Clearing and Grubbing	Acre	$ 3,000.00	2.7	8,100
C4	Excavation	Cu. Yd.	18.00	2,000.0	36,000
C5	Imported Embankment	Cu. Yd.	30.00	10,700.0	321,000
C6	Recompact 12" of Native Subgrade	Sq. Yd.	3.00	10,500.0	31,500
C7	10" of Aggregate Subbase	Ton	45.00	5,000.0	225,000
C8	6" Crushed Aggregate Base	Ton	60.00	5,500.0	330,000
C9	3" Bituminous Surface Course	Ton	120.00	1,650.0	198,000
C10	Bituminous Prime Coat	Ton	1,400.00	6.0	8,400
C11	Bituminous Tack Coat	Ton	1,400.00	2.0	2,800
C12	Marking	Sq. Ft.	3.00	1,900.0	5,700
C13	Drainage Allowance	L.S.	L.S.	L.S.	50,000
C14	4" Portland Cement Concrete Sidewalk	Sq. Yd.	30.00	2,700.0	81,000
C15	Concrete Curb	Ln. Ft.	25.00	1,300.0	32,500
C16	Landscape Allowance	L.S.	L.S.	L.S.	40,000
C17	Floodlighting Allowance	L.S.	L.S.	L.S.	120,000
	Total Automobile Parking Lot				$ 1,497,000
	Total Automobile Parking Lot - USE				$ 1,497,000
D. Utilities					
D1	10" Water Line	Ln. Ft.	$ 60.00	2,285.0	$ 137,100
D2	10" Gate Valve	Each	2,000.00	5.0	10,000
D3	Fire Hydrant Assembly	Each	5,000.00	5.0	25,000
D4	Backflow Preventer	Each	3,000.00	1.0	3,000
D5	8" Sewer Main	Ln. Ft.	60.00	3,596.0	215,760
D6	36" Sewer Manhole	Each	5,000.00	10.0	50,000
D7	Package Sewer Station	Each	290,000.00	1.0	290,000
D8	2W-4" Electrical Duct	Ln. Ft.	50.00	2,374.0	118,700
D9	Electrical Pull Box	Each	5,000.00	12.0	60,000
D10	Apron, Parking, and Road Floodlights (45')	Each	25,000.00	18.0	450,000
D11	Electrical Service Allowance	L.S.	L.S.	L.S.	150,000
D12	Telephone Service Allowance	L.S.	L.S.	L.S.	200,000
	Total Utilities				$ 1,709,560
	Total Utilities - USE				$ 1,710,000
	Total Construction Cost				$ 11,019,571
	TOTAL CONSTRUCTION COST - USE				$ 11,020,000
	Engineering and Administration				2,094,000
	TOTAL PROJECT COST*				$ 13,114,000

*Excludes terminal area apron, access road, automobile parking lot, and utilities design costs of $1,120,000.

TABLE NO. 7-3
MAMMOTH YOSEMITE AIRPORT
SUMMARY OF ESTIMATED PROBABLE TOTAL DEVELOPMENT COSTS (x 1,000)
(Based on 2017 Costs)

Project	Construction Costs	Design Fees	Construction Management Fees	Administration Cost	Total Cost
1. Terminal Building - First Stage	$ 17,525	$ 1,750	$ 1,400	$ 1,750	$ 22,425
2. Airline Apron, Taxiways & Deicing Apron	6,660	670	530	670	8,530
3. Access Road	1,153	120	90	120	1,483
4. Automobile Parking Lots	1,497	150	120	150	1,917
5. Utilities					
a. Sewer	556	60	50	60	726
b. Water	175	20	20	20	235
c. Electrical	779	80	60	80	999
d. Telephone	200	20	20	20	260
TOTALS	$ 28,545	$ 2,870	$ 2,290	$ 2,870	$ 36,575

CHAPTER 8. RECOMMENDATIONS

The Town is located in one of the most scenic areas of California as well as the United States. It has one-of-a-kind access to many venues of outdoor adventure popular amongst outdoor enthusiasts today. Mammoth Mountain Ski Area is recognized both nationally and internationally as one of the preeminent ski areas in the world. Skiing and other mountain recreation actives are the driving forces for economic development of the area. Flying is a convenient way to access the area and considerably reduces the required travel time; for example one can fly from Los Angeles in 1 hour while driving required 5 hours.

The Town of Mammoth Lakes, Mammoth Lakes Tourism, and Mammoth Mountain Ski Area are dedicated to continuing and improving commercial airline service to Mammoth Yosemite Airport. Over the last eight years the Town has demonstrated that there is a demand for air service, despite the limitations placed on the existing service by the sub-standard temporary terminal building. The temporary terminal building was inadequate for existing demand immediately after it was put into service.

It is, therefore, considered appropriate to construct the new terminal facilities to accommodate the traffic forecast for the 10-year period but to design the facilities and provide room to expand the terminal building, the air operations area, and the support facilities to accommodate possible future growth. The design of the facility should be such that any expansions required can be performed with minimal interference to the operation of the existing facility. It is recommended that the size, location, and configuration of the terminal development presented in this report be developed. This

development needs to occur as early as possible since the existing facilities are currently overloaded and major growth is expected within the next five years.

Economic feasibility studies have been performed for the terminal development project. This study included preparing estimates for the following:

- Construction costs for required terminal facilities.
- Anticipated contributions in aid, including Federal grants and Passenger Facility Charges.
- Annual operating costs.
- Annual revenue.

The results of this study are summarized in Table No. 8-1. It will be noted that a $36,575,000 development project can be constructed in a three-year period and the net amount financed is only $1,719,000.

This study shows that over the next 10 years enplaned passengers will remain approximately the same. Therefore, annual support required from the Town of Mammoth Lakes General Fund will remain approximately the same ($530,000).

TABLE NO. 8-1
MAMMOTH YOSEMITE AIRPORT
AIRLINE TERMINAL FACILITY DEVELOPMENT
ECONOMIC FEASIBILTY DATA

Cost of Construction:	Terminal Building	$22,425,000
	Aprons, Roads, Parking, Utilities	14,150,000
	Total	$36,575,000
Less Contribution in Aid	Terminal Building - AIP	$20,330,505
	Aprons, Roads, Parking, Utilities - AIP	12,828,390
	Tourist Business Improvement District / Passenger Facility Charge / Finance costs of $1,718,963	3,416,105
	Total	$36,575,000

Date of Initial Operations: December 2021			
	Year 1 2016	Year 5 2021	Year 10 2026
Annual Revenue			
Airline Rents	$ 121,600	$ 140,000	$ 147,000
Facility Rents	5,500	6,100	6,800
Hangar Rents	90,000	95,000	103,000
Car Rental	106,000	115,000	141,000
Food/Beverage	4,000	6,000	35,000
Overnight Parking	6,000	6,900	23,000
Miscellaneous Income	18,000	19,500	25,500
Total Revenue	$ 351,100	$ 388,500	$ 481,300
Annual Expenses			
Airport Operations	$ 221,828	$ 183,000	$ 193,000
Maintenance	137,482	143,100	182,500
Personnel	584,770	608,500	639,500
Total Expenses	$ 944,080	$ 934,600	$1,015,000
Excess Revenues	$ -	$ -	$ -
Annual Support Required from TML General Fund	$ 592,980	$ 546,100	$ 533,700

Source of Data:

Construction Costs - Terminal Area Development Plan

Annual Revenue - Town of Mammoth Lakes

Annual Costs - Town of Mammoth Lakes

APPENDIX A

MAMMOTH YOSEMITE AIRPORT
AVIATION ACTIVITY FORECASTS

PREPARED BY
MEAD & HUNT

MARCH 31, 2017

Mammoth Yosemite Airport
Aviation Activity Forecasts

Prepared for the Town of Mammoth Lakes

Prepared by

March 31, 2017

1. INTRODUCTION

Forecasts of aviation demand are used to identify future facility needs. In planning for the future growth of any airport, it is important to understand the context within which potential increases in aviation activity are likely to occur. Aviation forecasting is not an "exact science," so professional judgment and practical considerations will influence the level of detail and effort required to establish reasonable forecasts and subsequent airport development decisions.

This chapter includes forecasts of the following aviation activities: scheduled passenger enplanements, peak passenger activity, aircraft operations and fleet mix, based aircraft, and air cargo volumes. Because this forecast will be principally used in the assessment of facility requirements for a proposed replacement passenger terminal, it focuses on the next 10 years (i.e., through 2026). The aviation forecasts must be approved by the Federal Aviation Administration (FAA) in order to provide justification for FAA funding participation in eligible airport improvement projects.

Several indicators of aviation activity including regional and local trends for both commercial and general aviation were used to develop an aviation activity forecast for Mammoth Yosemite Airport (MMH or "the Airport"). These trends provide one element that shapes the projections of aviation activity developed for the Airport. However, the unique characteristics of an airport serving a resort destination that is remote from metropolitan areas have a profound effect on forecasting. Particularly important are the revenue guarantees provided to the scheduled passenger airlines.

This chapter is organized into the following sections:

- 1. Introduction
- 2. Airport Role
- 3. Historical Activity at MMH
- 4. National Aviation Industry Trends
- 5. Forecasting Methodologies
- 6. Forecasts
- 7. Design Aircraft
- 8. Summary

2. AIRPORT ROLE

An airport's role is defined by the mix of aviation uses that exist, or are anticipated to exist, at the facility. Each use is defined by the type of aircraft involved and its mission. Aircraft can be used for multiple missions. A medium-sized turboprop may be used by an airline for scheduled passenger service, an air charter operator for on-demand air taxi service, an air cargo airline for transporting express packages, and the military for transport. It is critical to know both the aircraft type and mission in order to identify the necessary airport support facilities. A key part of the forecasting effort is to identify how the current mix of aircraft types and missions will evolve over the 10-year forecast period. This information will be used to identify needed modifications to the airfield and airport facilities.

2.1 CURRENT ROLES

Mammoth Yosemite Airport is classified by the FAA as a primary, non-hub commercial airport which provides scheduled passenger service to the Mammoth Lakes area and surrounding areas. As of January 2016, the Airport is served by two airlines with non-stop service to three destinations. As of 2016, the aviation activities at the Airport are:

- Passenger Service.
- Recreational Aviation.
- Business Aviation.
- Medical Transport.
- Military Aviation.

The Airport also has limited flight training activity and air cargo has been delivered via scheduled airline aircraft in past years. Information about these uses is presented in the paragraphs that follow.

The Airport is home to one fixed-base operator (FBO) that serves general aviation aircraft. The FBO operates from the general aviation terminal located west of the commercial passenger terminal. The FBO provides:

- Aviation fuels: Jet A and 100LL.
- Aircraft parking and hangar storage.
- Oxygen service and pilot supplies.
- A crew car available for pilots.

The Airport's role can also be defined in operational terms. The mission-related roles defined above can also be grouped into three operational groups:

- Commercial service – scheduled and charter passenger service.
- General aviation – aviation activities other than scheduled service and military.
- Military – transient military aircraft.

2.2 FUTURE ROLES

The Airport is anticipated to maintain existing roles throughout the 10-year planning period. No significant changes to the mix of aircraft types or uses is anticipated.

3. HISTORICAL ACTIVITY AT MMH

This section provides background on historical aviation activity at MMH. The many uncommon aspects of aviation uses at the Airport make familiarity with this background information necessary to understand the approaches used in forecasting. **Table 1** presents historical activity data for the years 2009-2016. Data was taken from several sources to provide the most accurate data for forecasting. Enplanement data was obtained from the Airport from records provided by United and Alaska Airlines. Operations counts were obtained from Hot Creek Aviation, the fixed base operator at the Airport. Based aircraft counts were taken from the FAA's 2016 Terminal Area Forecast, except that the 2016 is an estimate provided by Airport staff.

It should be noted that the FAA defines *air carrier* differently for passenger enplanements and aircraft operations. For enplanements, the FAA divides the passenger airline industry into two categories of airlines: *air carrier* and *commuter* (also called *regional airlines*). The primary difference between the two is the role that the airline plays relative to the other. Regional airlines carry passengers to the hub cities of the air carrier airlines, and may feed passengers onto air carrier service at the hub cities. Regional airlines may operate aircraft painted like air carrier airlines, and may have their tickets sold by the air carrier operator. Air carrier airlines typically fly aircraft with more passenger seats than regional airlines and serve larger markets. However, the difference between air carrier and regional airlines is generally indistinguishable to a passenger with the exception of aircraft size. All of the enplanements at MMH are counted in the *commuter* category.

Airline operations are categorized based on aircraft seating capacity. Aircraft with 60 or more seats are *air carrier*, and aircraft with fewer than 60 seats that are operated by airlines are included in *air taxi/commuter*. All of the airline operations at MMH are counted as *air carrier* operations. The only *air taxi/commuter* operations at the Airport are charter operations that are classified as air taxi. One example of charter activity at MMH is the service recently started by JetSuiteX under contract with the Air Partners group (see page 5 for a discussion of the Air Partners group). JetSuiteX started providing service between Burbank and Mammoth in mid-December 2016. Service was offered four times weekly through the end of 2016 and is scheduled to continue until early April 2017. However, charter activity has always been a significant component of general aviation operations. The Airport's FBO, Hot Creek Aviation, estimates that charter operations account for more than half of all general aviation operations by turbine aircraft.

Table 1. Historical Aviation Activity

Passenger Enplanements				Itinerant Operations					Local Operations			Total Operations	Based Aircraft
Fiscal Year	Air Carrier	Commuter	Total	Air Carrier	Air Taxi & Commuter	General Aviation	Military	Total	Civil	Military	Total		
2009	0	5,021	5,021	314	1,570	4,568	106	6,558	214	0	214	**6,772**	**4**
2010	0	19,798	19,798	1,228	1,840	4,296	62	7,426	200	0	200	**7,626**	**4**
2011	0	26,196	26,196	1,394	1,824	4,133	38	7,389	202	0	202	**7,591**	**3**
2012	0	27,246	27,246	1,564	1,688	3,568	40	6,860	173	0	173	**7,033**	**3**
2013	0	30,858	30,858	1,530	1,784	4,108	56	7,478	199	0	199	**7,677**	**7**
2014	0	25,892	25,892	1,404	1,514	3,200	24	6,142	148	0	148	**6,290**	**7**
2015	0	23,504	23,504	1,234	1,472	3,325	22	6,053	144	0	144	**6,197**	**7**
2016	0	22,253	22,253	990	1,634	4,017	32	6,673	143	0	143	**6,816**	**7**

Source: Passenger enplanements and air carrier operations: Airport records; all other operations: Hot Creek Aviation; based aircraft FAA 2016 Terminal Area Forecast.

Notes:
1. 2009 air carrier operations data not available. Operations estimated by assuming same number of passengers per aircraft as 2010.
2. Airline passenger service started in 2009 and was only for part of the year.

3.1 PASSENGER ENPLANEMENTS

After an 11 year hiatus, scheduled passenger service resumed at MMH in December 2008 with the introduction of service by Alaska Airlines. Service by United Airlines was added in December 2010. Initially service was only provided during winter months. In 2010, year-round service began and continues as of 2017.

Passengers at MMH are predominantly associated with leisure travel which is concentrated during the ski season. Skiing typically starts by mid-November and some years skiing will continue until July. However, the prime ski season lasts from mid-December through mid-April (usually Easter) and accounts for over 70% of annual passengers. For this reason there are distinct winter-spring (i.e. ski season) and summer-fall airline schedules. Winter-spring schedules commonly include service from Los Angeles (LAX), San Diego (SAN), and San Francisco International Airports (SFO). The summer-fall schedule typically includes only flights from LAX. **Figure 1** shows the average monthly distribution of enplanements from 2010 to 2016.

The passenger service offered at MMH is arranged through Minimum Revenue Guarantee Contracts (MRGCs) with airlines. A local partnership (the Air Partners) was established to implement the MRGC program for service to MMH. The Air Partners consist of the Town of Mammoth Lakes, Mammoth Lakes Tourism, and Mammoth Mountain Ski Area (MMSA). An important change occurred in 2014 with the creation of a new revenue guarantee funding mechanism, the Mammoth Lakes Tourism Business Improvement District (MLTBID). MLTBID was formed by public referendum in which local businesses agreed to a special tax on themselves for the purpose of marketing the town as a resort destination with a unique brand. The MLTBID tax raises between $4.7 and $5 million annually. Up to about $2.3 million is available annually, if needed, to support commercial air service by funding MRGCs. About $2.4 million from the MLTBID fund is available for marketing programs to support tourism.

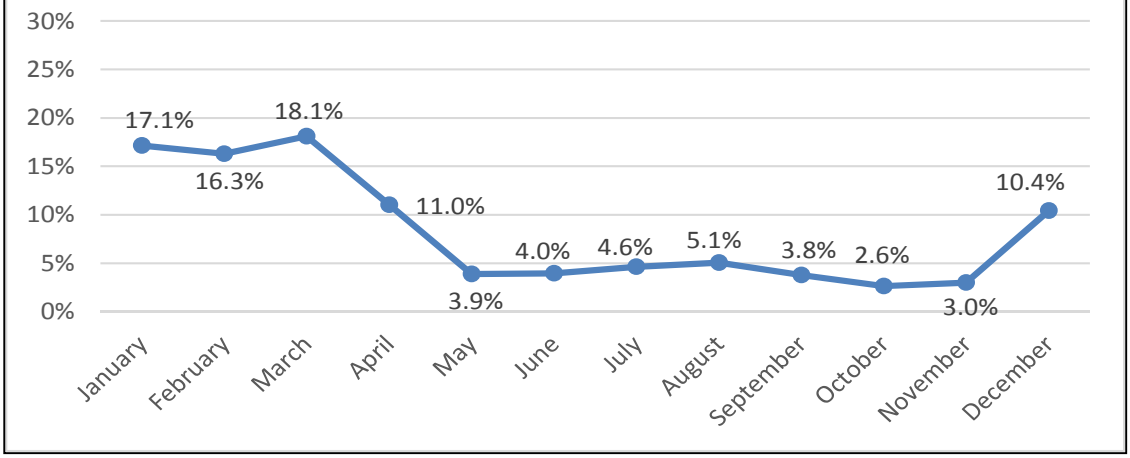
The Air Partners' air service strategy is designed to attract visitors from four markets: southern California, western states, east coast and international. Since the beginning of the program the Air Partners have tried and discontinued flights from five markets. The rationale for initiating and ultimately cancelling service from each destination is summarized below:

- **Reno** – Intent was to pull skiers from the Tahoe-area market. Load factors remained low because the driving distance was too short to make a flight to MMH attractive to many visitors.
- **Denver** – Purpose was to gain access to east coast market by using United Airlines flights from its hub in Denver. The ski clubs on the east coast were specifically targeted. Four drought winters and ski seasons with poor snow resulted in low load factors.
- **San Jose** – Purpose was to attract skiers from the San Francisco Bay Area, particularly the eastern portion. The only available departure time slot was mid-morning with an early afternoon return flight. This proved unattractive to skiers because the mid-morning departure did not allow skiers to begin skiing on the first day and the early afternoon return flight did not permit time for skiing on the last day, while also not allowing for a full work day on either end.

- **Orange County** – This departure location was intended to serve this geographic region within the southern California market. As with the San Jose flights, this service was unsuccessful because of a mid-morning departure and early afternoon return flight.
- **Las Vegas** – Service was started from this location to gain access to the southern Nevada market. Flights were scheduled for a Thursday departure from Las Vegas with a Monday return flight. After the first season it appeared that the choice of days of the week were not appropriate for this market. When it appeared that the aircraft used for this flight was going to be reallocated by the airline, the flight was cancelled by Alaska Airlines.

Over the last three seasons, including the partially completed 2016-2017 ski season, the Air Partners have fine-tuned the schedules for service from Los Angeles, San Diego and San Francisco to increase load factors. This involved reduction or cancellation of service during the shoulder season and reduction in the frequency of service on some routes during the prime winter season. The purpose was to increase load factors to the point where little or no subsidies were required for service from these locations. The load factor is the percentage of filled passenger seats. These schedule modifications were intended to eliminate flights where load factors were in the 20% and 30% ranges. During the 2015-2016 ski season this new strategy reduced flights by 19% while only reducing enplanements by about 6%. This strategy frees-up funds for use in marketing and testing service from new cities.

Figure 1.
Average Monthly Percentage of Annual Enplanements



Source: Airport

Annual enplanements grew from 19,798 in 2010 to 30,858 in 2013 and decreased to 22,253 in 2016 (see **Table 1**). Enplanements declined in between 2013 and 2016. Initially the decline was due to the "right sizing" strategy noted above which eliminated flights with low load factors. Based upon ticket sales, calendar year 2016 would have had higher enplanements than 2015 except for the severe weather in December 2016. The blizzard conditions resulted in flight cancellations that exceeded 50% in some weeks of this peak holiday season.

As a resort destination, visitors come to Mammoth Lakes and the surrounding area for recreation. According to Mammoth Lakes Tourism staff, most travelers are coming in for three- to five-day stays. Flights into Mammoth Lakes during later afternoon hours allow visitors to work half a day, arrive around dinner time and plan on beginning skiing, hiking, biking, fishing and sightseeing the following morning. This also allows them to ski for half a day before their departure (ski lifts close at 4:00 p.m.). The Air Partners have found through experience that flights at other times during the day have not been successful. A late-morning or mid-afternoon flight is often considered a "wasted" day travelling. This flight schedule also allows visitors time during the day to make flight connections from East Coast cities and other locations more conveniently. Early morning flights are not as desirable as late afternoon and early evening flights. An early morning flight would also poorly serve visitors connecting from other cities. The year-round mid-morning flight from LAX exists only because it was the only year-round time slot that Alaska was willing to make available.

The preference for later afternoon or early evening flights is the key factor driving demand for terminal gates at MMH. Currently the terminal has only one gate. During the ski season weather delays occur regularly. This can result in three commercial aircraft being parked at the Airport concurrently approximately 20 times per ski season (about 18%), with rarer occurrences when four aircraft are parked at the Airport concurrently. In 2013, when the Airport had seven flights on five days each week during the ski season, airline scheduling pushed peak hour passengers well past the terminal's capacity. This resulted in three or more planes on the ground more frequently. Some flights had to be scheduled earlier in the day, which reduced their load factor as people chose not to fly due to the inconvenient timing of the flights. By requiring some origination markets to fly during the middle of the day their viability was reduced as enplanements fell and subsidy money was increased. This ultimately led to the cancellation of some of these routes, due to low load factors.

3.2 BASED AIRCRAFT

Based aircraft are defined as those stored at an airport on a long term basis. These aircraft owners buy or lease hangar and parking space from the Airport or a third-party developer. The forecast of based aircraft will be used to determine whether additional hangar spaces are needed. MMH is unusual in that most hangars are used by transient aircraft, that is, aircraft based at another airport. The dominance of hangars used for transient aircraft is due to two factors: aircraft owners who have second homes in the Mammoth Lakes area, and the desire to shield aircraft from the weather (particularly snow) when parked at the Airport. This information will also be used to assess the need for new or expanded supporting facilities or services. The counts of based aircraft from 2009-2016 are shown in **Table 1**.

3.3 AIRCRAFT OPERATIONS

An aircraft operation is either a landing or a take-off. A touch-and-go is a common training activity where the pilot lands and then takes off without leaving the runway. A touch-and-go is counted as two operations.

3.3.1 General Aviation Operations

The Airport does not have an airport traffic control tower, so there is no official count of aircraft operations. However, the Airport's sole FBO is required by contract to keep a record of all landings. The FBO's staff monitors the Airport's Unicom radio frequency and records the aircraft numbers of arriving aircraft. FBO

counts include landings that occur during business hours: Saturday-Thursday 8:00 a.m. to 6:00 p.m. and Friday 8:00 a.m. to 8:00 p.m. The counts also include aircraft that arrive at night and are still parked on the transient apron in the morning. Local operations, such as touch and goes, are not included in the count. FBO staff estimate that local operations are about 5% of total piston operations. Based upon a two-month sample of their aircraft logs, the FBO estimates that about 54% of turbine operations are charters (i.e., air taxi). The counts of operations by general aviation aircraft from 2009-2016 are shown in **Table 1.** Aircraft operations include both landings and take-offs. Therefore, the FBO's counts of landings have been doubled.

3.3.2 Military Operations

The FBO's operation counts include military operations. **Table 1** presents the annual counts of operations from 2009-2016. All military operations are transient operations. Most are by helicopters.

3.3.3 Airline Operations

Alaska and United Airlines provide Airport staff with documentation of both their scheduled and actual operations. Records available from the Airport extend back to 2010. The operations estimate for 2009 was calculated from available records of passenger enplanements. It was assumed that the ratio of enplanements to operations was the same as in 2010.

3.4 AIR CARGO

Air cargo activity at MMH does not include any type of scheduled cargo service. According to DOT T100 data, in the first few years following reintroduction of scheduled passenger service small quantities of cargo were carried by the scheduled airlines as belly-haul (i.e., included with passenger baggage). However, in recent years no significant amounts of cargo have been shipped through MMH.

4. NATIONAL AVIATION INDUSTRY TRENDS

Aviation industry trends are based upon data available through April 2016. Separate sections will discuss: passenger enplanements, the general aviation fleet, aircraft operations, and air cargo. Most forecast material is extracted from the FAA's *Aerospace Forecast Fiscal Years 2016-2036* (hereafter *Aerospace Forecast*). The *Aerospace Forecast* presents FAA expectation for the aviation industry at a national level for the next 20 years and is updated annually. This information will provide a context for review of historical activity levels at MMH and development of forecasts. However, as is explained in the individual sections that follow, broad national trends have limited applicability to forecasting for the Airport.

4.1 PASSENGER ENPLANEMENTS

The foremost challenges facing the airline industry are the volatility of fuel prices and global economic uncertainty. Nationally, passenger enplanements have returned to levels achieved prior to the recession that began in 2008. Economic recovery, airline consolidation, and capacity constraints have restored airline profitability. Airlines have increased load factors, the percentage of seats occupied, by reducing flight frequencies. This practice has reduced consumer choice, effectively consolidating a growing number of

passengers on to fewer flights. Airlines are also adding aircraft with more seats, which has further necessitated the need to cut frequencies in order to operate the flights profitably.

The *Aerospace Forecast* projects that national passenger enplanements (domestic plus international) will increase an average of 1.9% per year through 2035. Air carrier airlines, called "mainline carriers" in the *Aerospace Forecast*, are expected to grow at 2% a year. This is higher than regional airlines, which are projected to grow at 1.6% a year. This section of the *Aerospace Forecast* is summarized in **Table 2**.

Because commercial carrier capacity is expected to grow at a slightly slower rate than enplanements, most airliners will remain crowded. Domestic commercial carrier capacity (i.e., total number of passenger seats) is expected to grow slowly at an average of 1.8% per year, with mainline carriers growing slower than regional carriers, 1.8% versus 2.0%. Because of subsidies and revenue guarantees, load factors (i.e., percent of seats occupied) for airlines serving ski resorts are commonly lower than for other destinations. Nationally, load factors for domestic mainline airlines are currently around 85% and 80% for domestic regional airlines. It is common to have average load factors on airlines serving ski resorts in the 60% to 70% range and lower on specific routes. It is these low load factors that necessitate having subsidies to make the flights economically viable.

Table 2.
Comparison of Forecast Passenger Enplanement Growth Rates

	Domestic + International Flights 2016-2035	Domestic Flights		
		2016-2025	2026-2035	2016-2035
Mainline Carriers	2.0%	1.5%	1.8%	1.7%
Regional Carriers	1.6%	1.5%	1.8%	1.7%
All Carriers	1.9%	1.5%	1.8%	1.7%

Source: FAA Aerospace Forecast Fiscal Years 2015-2035

Forecasts of national trends in enplanements have limited applicability to the Airport. The airline revenue guarantee program (discussed in Section 1.4) allows scheduled passenger service to be offered that is largely independent of national trends. As long as forecast national economic trends are broadly positive (which they are), it can be assumed that the disposable income necessary for the recreational pursuits (mainly skiing) that are the principal purpose of the Airport's passengers will be available.

4.2 GENERAL AVIATION AIRCRAFT FLEET

The total number of aircraft in a given area or organization is referred to as a *fleet*. The *Aerospace Forecast* indicates that the national general aviation fleet decreased by 3.2% annually from 2010 to 2013. This decline is partially due to aging aircraft requiring expensive repairs to remain airworthy, the aging pilot community struggling to meet medical requirements, the rising cost associated with aircraft ownership, and fewer new pilots overall. Fewer pilots results in reduced demand for new aircraft, particularly those purchased by individuals who would fly for recreation. The *Aerospace Forecast* expects the number of private pilots in the US to decrease at 0.35% per year through 2035.

The *Aerospace Forecast* projects that the number of piston fixed wing aircraft will continue to decline through 2035. Multi-engine piston aircraft are projected to decline by 0.4% per year and single-engine

aircraft are forecast to decline at a rate of 0.6% per year. However, within the single-engine group, the light sport aircraft segment is forecast to experience 4.3% annual growth, although this user class makes up less than 2% of the national fleet.

Although the general trend has been one of decline, there are areas of growth for certain segments of the national fleet. Continued concerns about safety, security, and flight delays keep business aviation attractive relative to commercial air travel. For these reasons, the turbine aircraft fleet (jets, turboprops and turbine-powered helicopters) is forecast to grow from 14.3% of the general aviation fleet to 21.5% by 2035. **Table 3** shows that it is the growth of turbine aircraft that supports the projection that the total general aviation fleet will grow at an average annual rate of 0.4% through 2035.

Table 3.
Comparison of Forecast Growth Rates by Aircraft Type

	Total Fleet	Rotorcraft	Fixed Wing					
			Turbine	Multi-Engine Piston	Single-Engine Piston	Light Sport	Experimental	Other
2015*	198,780	10,440	21,305	13,175	122,435	2,355	24,880	4,190
2035	214,260	17,110	33,785	12,135	108,810	5,360	33.040	4,020
CAGR	0.4%	2.5%	2.2%	-0.4%	-0.6%	4.3%	1.4%	-0.2%

Source: FAA Aerospace Forecast Fiscal Years 2015-2035 *Estimate from *Aerospace Forecast*
CAGR = Compound Annual Growth Rate

National trends have limited applicability in forecasting based aircraft at the Airport. With only seven based aircraft, the unique factors shaping decisions by individual aircraft owners will more profoundly affect changes in based aircraft than broad national trends.

4.3 AIRCRAFT OPERATIONS

The number of annual aircraft operations at towered airports in the United States has declined steadily from 2001-2015 (from 66.2 million to 49.6 million). The sharpest drop in all segments of the aviation industry occurred in 2009, the year following the beginning of the recession. From 2013 to 2014, the number of operations by commercial aircraft (air carrier and regional) grew, reflecting improvement in the national economy. Unlike passenger enplanements, which are categorized as air carrier or regional based on the airlines role, operations are categorized based on aircraft seating capacity. Aircraft with more than 60 seats are *air carrier*, and aircraft with 60 seats or fewer are operated by airlines are *air taxi/commuter*. Charter operations, such as the scheduled charter by JetSuiteX introduced in the December 2016, are included in the air taxi category.

General aviation operations grew from 2011 to 2012, before declining again in subsequent years. Segments of the general aviation market, namely aircraft used for business purposes, are operating more frequently while flight training and leisure and hobby flying are contracting. Business general aviation is growing in response to airline consolidation – it is simply less convenient to fly commercially than it used to be. Flight training is growing among students interested in the airline career track, but fewer are learning to fly as a hobby. This has led to the decline in leisure pilots. Reasons for this decline include the increased cost of

aircraft ownership, the expense associated with learning to fly, and competing financial needs. Younger generations are saving for a home and repaying student loans, which limits discretionary income.

The *Aerospace Forecast* projects total operations by all segments of the aviation industry to increase at an average rate of 0.9% per year through 2035 at towered airports. Most of the growth is expected to be from increased commercial aircraft activity (up 1.5% annually). The air carrier component is projected to increase an average of 2.7% per year. The increase in air carrier activity is expected to occur due to a combination of air carrier airlines increasing frequencies on select routes, and a switch by regional airlines from 50 seat aircraft to 70-90 seat aircraft, which are counted in the air carrier category by the Terminal Area Forecast (TAF). Air taxi/commuter operations were forecast to fall 4.9% in 2015 and decrease 1% a year through 2035. This reduction in the air taxi/commuter component will be driven by the retirement of passenger jets with fewer than 60 seats. Nationally, at small and non-hub airports such as MMH, total operations are projected to increase at an average annual rate of 0.5% a year. The *Aerospace Forecast* projects that general aviation activity at towered airports will increase an average of 0.4% annually through 2035.

The national trends forecast for aircraft operations have broad applicability to forecasts for the Airport. Although the forecast percentage changes in operations at the national level are not directly used in the Airport's forecasts, several trends support assumptions used in the Airport's forecasts:

- Increase in operations by air carrier aircraft.
- Growth in use of general aviation aircraft for transportation in lieu of using scheduled commercial flights.
- Decline in flight training for individuals interested in flying as a hobby.

4.4 AIR CARGO VOLUMES

The *Aerospace Forecast* concludes that the national volume of air cargo follows trends in the gross domestic product, with secondary influencers of airline fuel costs and the need for just-in-time logistics chains. Air cargo volumes have grown since the post-recession low point in 2009, although there has been some year-to-year variability. Significant structural changes in the air cargo industry have occurred over the last decade and have affected air cargo volumes, including: FAA and TSA air cargo screening requirements, maturation of the domestic express package market, a shift from air to other transportation modes (especially truck), use of all-cargo carriers by the US Postal Service, and the increased use of internet-based mail substitutes. Another key change is the continuing reduction in the amount of air cargo carried on passenger airliners.

The *Aerospace Forecast* projects that air cargo volumes will increase at an average annual rate of 0.5%. The all-cargo carriers' share of the air cargo market are forecast to grow to 90.2% by 2035 as airlines take less and less cargo.

The national trends forecast for air cargo have limited applicability to forecasts for the Airport. Although the forecast percentage changes in air cargo at the national level are not used in the Airport's forecast, the forecasts do reflect the national trend in reduction in cargo carried by airlines.

5. FORECASTING METHODOLOGIES

A variety of forecasting techniques may be used to project aviation activity range from subjective judgment to sophisticated mathematical modeling. These techniques may utilize local or national industry trends in assessing current and future demand. Socioeconomic factors such as local population, retail sales, employment, and per capita income can be analyzed for the relationship they have had, and may have, with activity levels. This section presents a range of methodologies that were considered for use in forecasting aviation activity at MMH. The applicability of these methodologies to each activity forecast (e.g., enplanements, operations) is addressed in the forecast section (Section 6).

5.1 MARKET SHARE METHODOLOGIES

The market share methodology compares local levels of activity with those of a larger market (e.g. state, nation, or world). This methodology implies that the proportion of activity that can be assigned to the local level is a fixed percentage of the larger entity. Most commonly this involves assuming a ratio between activities at an airport with FAA national forecasts.

5.2 TIME-SERIES METHODOLOGIES

Trend lines and regression analyses are widely used methods of forecasting based on historical activity levels at an airport. Trend line analyses can be linearly or nonlinearly extrapolated and are commonly created using the least squares method. Regression analyses can be linear or nonlinear. In time-series methodologies it is common to have only one variable.

Time-series methodologies are only appropriate when the activity being forecast has a sufficiently long history for trends to be established. At least 10 years is normally required although longer periods are desirable. These methodologies are most robust when the underlying factors that establish the activity levels have not fundamentally changed.

5.3 SOCIOECONOMIC METHODOLOGIES

Though trend line extrapolation and regression analyses may provide mathematical and formulaic justification for demand projections, there are many factors beyond historical levels of activity that may identify trends in aviation and its impact on local aviation demand. Socioeconomic and correlation analyses examine the direct relationship between two or more sets of historical data. Socioeconomic data can include: total employment, total earnings, net earnings, total personal income, and gross regional product. Historical and forecasted socioeconomic statistics are commonly obtained from Federal Agencies, such as the Census Bureau, or private firms, such as Woods & Poole Economics.

In these types of analyses the correlation coefficient, denoted as r, is used to measure the strength of the relationship between two variables. An r can range from -1.00 (one variable increases, the other decreases proportionally) to +1.00 (both variables grow or decline proportionally at the same time). A score close to +/-1.00 suggests a stronger correlation, and a score closer to zero suggests that the two variables are not correlated. Typically an r of at least +/-0.70 is needed to conclude that there is a substantial correlation between the two factors. It is important to understand that correlation does not necessarily imply causality. It could be possible that the two factors are jointly being influenced by another factor. Additionally, it is not

sufficient that there is a high correlation between the variables. There must be a logical basis to believe that there is relationship between the two variables.

5.4 COMPARISON WITH OTHER AIRPORTS

Using comparisons with other airports can be valuable when there is a lack of historical data or when a major change has occurred. The airports selected should be of the same relative size and possess relevant characteristics. Activity data from the comparison airports can be used as a source of trends. For example, growth rates when a low-cost carrier is first introduced to an airport. Activity data from comparison airports can also be used as benchmarks to assess the reasonableness of forecasts. These comparison airports are often referred to as peer airports.

5.5 JUDGMENTAL FORECASTING

Judgmental forecasting is used when there is a lack of historical data or where circumstances have changed so significantly that historical trends no longer apply. Judgmental forecasts must be formulated based upon a clear understanding of the factors that shape the activity being forecast. Forecasts prepared with this methodology are strongest when growth rates can be related to the experiences of similar airports or regional or national trends.

6. FORECASTS

6.1 PASSENGER ENPLANEMENTS

Forecasts of passenger enplanements are used to anticipate facility needs, such as expansion of the passenger terminal or modification of gates to accommodate different classes of aircraft. A passenger enplanement is defined as the act of one passenger boarding a commercial service aircraft. Passenger enplanements include scheduled and non-scheduled flights of over nine passenger seats, and do not include airline crew.

6.1.1 Factors Affecting Forecasts

Several factors made forecasting enplanements at MMH particularly challenging:

- Limited historical data (eight years) after 11 years without service.
- Variability in the amount of snowfall in Mammoth Lakes and the timing of storm/snowfall events.
- Minimum revenue guarantee contracts support scheduled service with load factors lower than is common on flights without revenue guarantees.
- The strategy of the Air Partners group in managing the revenue guarantee program and its associated marketing campaign continues to evolve. Section 3.1 provides a history of refinements to the strategy. Although refinement of the strategy has succeeded in increasing load factors, it has contributed to the decline in annual enplanements for the last three years.
- Flight cancellations due to weather are a seasonal issue, although the percentage varies year to year. Both low visibility and crosswinds have resulted in cancelled flights at MMH. Recent improvements to

instrument departure procedures (available to all aircraft) and instrument approach procedures (currently only available to Alaska Airlines) are expected to reduce cancellations due to low visibility. Future improvements to instrument procedures may further reduce cancellations. However, weather-related cancellations are expected to remain an issue.

- Passengers have shown a strong preference for flights that arrive in the late afternoon or early evening. Because the passenger terminal has only one gate, the ability to serve multiple flights during the preferred time period is constrained.

6.1.2 Methodologies Considered and Rejected

Three common forecasting methodologies were considered and rejected based upon the specific circumstances of MMH. These methodologies are identified in two common forecasting reference documents: *Forecasting Aviation Activity by Airport (July 2001)* which was prepared for the FAA and *ACRP Report 25, Airport Passenger Terminal Planning and Design, Volume 1: Guidebook*.

- **Historical trend lines and regression analyses** are widely used methods of forecasting based on historical performance. With only six years of year-round enplanement data, the legitimacy of forecasts based upon this brief period is questionable. Additionally, the evolving strategy of the Air Partners added another dimension of volatility to normal year-to-year variation.
- **Socioeconomic and correlation analyses** examine the direct relationship between two or more sets of historical data. Because enplanements are predominantly generated by passengers from outside the Mammoth Lakes Area, the socioeconomic variables would need to come from another geographic area. While the strongest economic link is to Southern California, it appears unlikely that socioeconomic factors in that region drive passenger volumes to MMH. Rather it is more likely that the relative attractiveness of Mammoth Lakes as a tourist destination compared to other destinations is driving demand; thus, this methodology is judged to be inappropriate.
- **Market share analysis** assumes a relationship between activities at an individual airport with activity forecast for a larger geographic area. Most commonly this involves assuming a ratio between activities at an airport with FAA national forecasts. This is judged not to be an appropriate methodology for MMH because enplanements at MMH are tied to its competitive position relative to other ski resorts rather than general national trends in passenger volumes.
- **Comparison with other airports** would be a potentially viable methodology if it were possible to identify airports with sufficiently similar characteristics. Given that aviation activities at MMH are strongly linked to skiing, it is appropriate to consider whether there are airports serving ski resorts that have characteristics similar to Mammoth Mountain Ski Resort. While there are ski resorts with comparable facilities, the nature of the ski market makes it infeasible to draw links between facilities and passenger enplanements. Skiing in the United States is a mature market; the number of skier days is not growing. Growth in the number of skier days at one resort comes at the expense of a competing resort. This competitive situation makes it infeasible to draw comparisons between MMH and other airports.

6.1.3 Selected Forecasting Methodologies

MMH's circumstances make using the common statistical methodologies described above inappropriate. Therefore, judgmental forecasts have been prepared. The judgmental forecasts include consideration of:

- Seven years of enplanement data.
- The history of successful and unsuccessful introduction of service to MMH.
- An emphasis in growing the service to fully serve the Southern California market and passengers using Southern California airports as a connection to reach MMH.
- The availability of $2.4 to $3 million to spend on marketing and revenue guarantees annually.
- The growth in airline ticket sales from 2015 to 2016 that did not result in an increase in enplanements due to weather-related flight cancellations.

6.1.4 Forecasting Assumptions

In these forecasts, the pattern of incremental growth will follow three paths:

- Expansion of service from LAX and SAN during the ski season when sufficient demand exists.
- Addition of service from one additional Southern California airport during the ski season and then gradual expansion of the number of weekly flights.
- Addition of limited service from an out-of-state airport.

The specifics of the forecasting assumptions are presented in the paragraphs that follow.

Forecasting Assumption No. 1

The undersized passenger terminal will continue to constrain passenger volumes until a replacement terminal with additional gates is added. The replacement terminal is assumed to become operational in 2021. Until that time, incremental growth in enplanements will be principally due to increasing load factors of existing flights and expansion of the number of flights per week with the existing daily schedule. There may be one or more new flights added to the schedule outside of the peak hour.

Forecasting Assumption No. 2

The Airport had 19,798 enplanements in 2010 and since that time has had over 22,000 annual enplanements each year, despite variations in snow conditions and reduction in flights due to refinements in the Air Partner's marketing strategy. It is forecast that enplanement volumes will continue to be at least this high through the 10-year forecast period.

Forecasting Assumption No. 3

When the replacement terminal becomes operational some existing flights will be rescheduled to occur during the peak early evening period due to strong passenger preference. The addition of terminal peak capacity will increase the ability to successfully add service from southern California and an out-of-state airport by enabling this service to meet passenger schedule preferences.

Forecasting Assumption No. 4

Beginning in mid-December daily service from LAX and SAN is offered in the late afternoon or early evening. There is also a daily mid-morning flight from LAX. After the three-week Christmas-New Year's holiday season is over, the late afternoon/early evening service is cut back to four days per week. The forecasts assume that the marketing campaign will increase awareness of the Mammoth Lakes region and MMSA and expand demand for passenger service. That will permit the four times weekly service to be incrementally expanded until the afternoon flight would be made daily throughout the ski season.

Forecasting Assumption No. 5

By its very nature, the passenger service program managed by the Air Partners will involve investigating the viability of service from additional airports. These forecasts assume that the Air Service Partners will follow their plan to test air service from various airports in the Southern California market over the next three years. This may include scheduled charters originating at general aviation airports to test some markets. However, ultimately the vast majority of scheduled service will originate at commercial (i.e., Part 139 certified) airports. Candidate airports include Burbank Bob Hope Airport (BUR), John Wayne Airport (SNA), and Santa Barbara Airport (SBA).

Forecasting Assumption No. 6

It is expected that initially, the service from a new Southern California airport would start with daily service during the first three weeks of the ski season and four times weekly service the balance of the ski season. If demand increased, this service would be incrementally increased by one additional day per week. When demand was sufficient service would be offered daily throughout the ski season.

Forecasting Assumption No. 7

Both the Seattle and Phoenix areas are being considered for service. Residents from these two areas currently purchase season passes to MMSA and/or own a second home in the Mammoth Lakes area. For forecasting purposes it is assumed that it will take five years of experimentation to establish service from an out-of-state airport. Due to competition, it is assumed that service will be limited to three flights per week during the ski season.

Forecasting Assumption No. 8

Service to the San Francisco Bay Area will continue indefinitely. These flights have historically had lower load factors than flights from Los Angeles and San Diego. However, about 50% of the passengers on these flights originate from outside of California. These connecting passengers are a market segment that the Air Partners strongly desires to grow. Additionally, without these flights Mammoth Lakes would receive very few visitors from the San Francisco Bay Area during the ski season due to the long drive time.

6.1.5 Other Forecast Assumptions

Actual Departures

The forecasts assume that the current average of 12% cancellations due to weather will be reduced to at least 10% due to new instrument approaches. In 2015, instrument departures were established for both runways that are available both day and night. New Required Navigation Performance (RNP) instrument approaches were also established that lowered ceiling minimums from 1,300 feet for both runways to 250 feet for Runway 27 and 265 feet for Runway 9. The forecasts assume a three-year phase of use of new departure and approach procedures. Currently the RNP approaches are available only to Alaska; however, Alaska is responsible for 77% of flights at MMH. The instrument departure procedures are available to all aircraft. The RNP approaches will allow Alaska to make approaches with the cloud ceiling about 1,000 feet lower than possible today. This will reduce the number of flights cancelled due to low ceilings. The instrument departure procedures will allow departures under instrument weather conditions

Total Seats

It is assumed that the CRJ700 with 70 seats remains in service through 2021 and then is replaced with a regional jet with 76 seats. Similarly it is assumed that the 76-seat Q-400 is eventually replaced by a 76-seat regional jet.

Load Factor

The right-sizing of the schedule has resulted in ski season load factors of over 70%. The load factor is forecast to grow over 10 years to provide year-round load factors over 60%.

Summer-Fall Season

These forecasts assume that passenger volumes outside of the ski season will remain static. There are ongoing efforts to increase visitors (including airline passengers) during this summer-fall season through the development of cultural events. Examples include the Mammoth Lakes Film Festival held annually in May and the Half Marathon held in June. However, the introduction of these cultural events is too recent to form the basis of a forecast for a change in summer-fall passenger volumes.

6.1.6 Enplanement Forecasts

Based upon the preceding assumptions, annual enplanement forecasts were prepared for MMH (see **Table 4**). A compounded average growth rate of 1% has been used in this forecast. This relatively low growth rate reflects the variability associated with weather/snow conditions and uncertainty associated with introduction of service from new locations. These forecasts project that enplanements will reach 23,388 in 5 years (2021) and 24,581 in 10 years (2026).

Table 4. Passenger Enplanement Forecast		
	Year	Enplanements
Base Year	2016	22,253
77Forecast Years	2017	22,476
	2018	22,700
	2019	22,927
	2020	23,157
	2021	23,388
	2022	23,622
	2023	23,858
	2024	24,097
	2025	24,338
	2026	24,581
Source: Mead & Hunt		

6.2 PEAK PASSENGER ACTIVITY

Some elements of terminal planning are based upon peak passenger activity. To support these analyses, the peak monthly, daily, and hourly activity levels for passengers for the most recent five calendar years (2011-2015) are first calculated. This data is then used to project these activity levels for the 10-year forecast period.

6.2.1 Peak Month Passenger Activity Forecasts

Monthly passenger enplanement data for the period 2011-2015 is presented in **Table 5**. The peak month has an average of 18.7% of total annual enplanements. In three of the five years, the peak month was March, in two of the five years it was January. The variation is likely due to snow conditions. In forecasting peak passenger activity, it will be assumed that peak month enplanements for this month will remain at 18.7% of the annual total. Applying this percentage to the preferred annual enplanement forecast above yields a peak month enplanement forecast for 2021 of 4,417 and for 2026 of 4,642.

Table 5. Peak Month Enplanements					
Month	**2015**	**2014**	**2013**	**2012**	**2011**
January	4,299	4,540	5,766	4,336	4,211
February	3,841	4,017	5,657	4,865	3,653
March	4,622	4,735	5,652	4,897	4,161
April	1,663	2,741	3,025	3,821	3,379
May	749	1,031	1,149	1,061	1,051
June	975	1,022	1,117	931	1,165
July	1,226	1,330	1,259	1,277	1,189
August	1,228	1,294	1,378	1,478	1,419
September	1,015	1,002	1,171	851	1,004
October	712	717	579	566	807
November	773	827	799	562	882
December	2,401	2,636	3,306	2,601	3,275
TOTAL	23,504	25,892	30,858	27,246	26,196
Peak Month % Annual	**19.7%**	**18.3%**	**18.7%**	**18.0%**	**16.1%**
5-year Average	**18.7%**				

MMH has distinct winter-spring and summer-fall flight schedules with winter-spring being the busier. This prime ski season typically starts on December 15 and runs through Easter. This schedule can vary by a few weeks depending upon snow depths and other factors. **Table 6** shows the schedule for the peak days of the 2015-2016 winter-spring season. Scheduled service from SFO is by United Airlines, while service from LAX and SAN is by Alaska Airlines.

The schedule shows that flights are concentrated in the early evening hours (4:35 p.m. to 6:45 p.m.). Arriving in the evening allows skiers to conduct travel during non-skiing hours to maximize the time available to spend skiing during a vacation. The peak hour is between 5:10 p.m. and 6:11 p.m. (1710 and 1811 in international time). This is graphically shown in **Figure 4**. The peak hour passenger volume was calculated using average enplanement and deplanement load factors for each airline. The average is calculated from flights that occurred from 2010-2015. The peak hour for the most recent (2015-2016) winter-spring season is 163 passengers. This includes passengers associated with an additional arrival that occurs one minute after the calculated peak hour. It should be understood that the Airport has had to negotiate with airlines to ensure that flight schedules will not lead to more than two aircraft on the ground at the same time whenever possible. This constraint has an impact on scheduling which reduces peak hour passengers below that which would otherwise occur. The right-sizing strategy has increased load factors over the last two years (2015-2016). Higher load factors increase the number of peak hour passengers.

6.2.2 Peak Month Average Day Passenger Activity Forecasts

Daily peak activity figures are based on a regularly occurring level of daily activity during the peak, or busiest, month. A review of airline activity schedules for the peak months of March and December indicates that activity is concentrated in the Thursday-Monday block of days. Although some scheduled service

changes from daily to four times weekly service during these peak months, the schedule on peak days remains constant. Therefore, the seat total shown in **Table 6** (596) will be used as the peak day seats. The average passengers on the average day in the peak month equals 3.2% of the peak month's passengers.

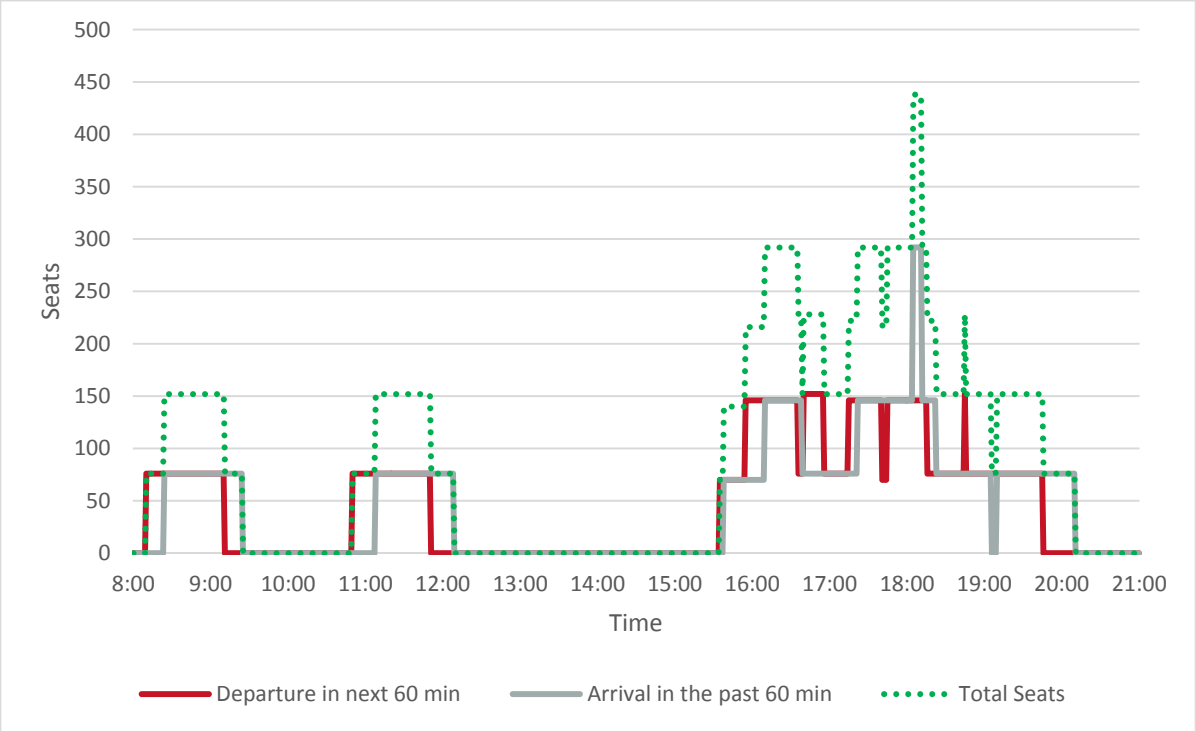
Table 6.
Winter-Spring 2015-2016 Peak Day Flight Schedule

	Time*	Origin / Destination	Aircraft Type	Seats
Arrival	924	LAX	Bombardier Q-400	76
Departure	1050	LAX	Bombardier Q-400	76
Arrival	1638	SFO	Bombardier CRJ700	70
Arrival	1710	LAX	Bombardier Q-400	76
Departure	1715	SFO	Bombardier CRJ700	70
Departure	1745	LAX	Bombardier Q-400	76
Arrival	1811	SAN	Bombardier Q-400	76
Departure	1845	SAN	Bombardier Q-400	76

* Time is expressed as a 24-hour clock

Source: Schedule - Airport

Figure 2.
2015-2016 Ski Season Peak Hour Seats



Source: DEO data base

Peak Hour Passenger Forecast

The number of hourly arriving and departing seats during a typical day in the latter half of the peak month (December) is shown in **Table 5**. Peak hour departing seats currently occur between 5:45 p.m. to 6:45 p.m. (1745 to 1845). Peak hour arriving seats occur between 5:10 p.m. to 6:11 p.m. (1710 to 1811). The peak total arriving and departing seats occurs between 5:10 p.m. to 6:11 p.m. (1710 to 1811).

Peak hour passenger volumes through 2026 were calculated by applying the current peak hour percentages (described above) to the annual passenger volumes previously projected. It is presumed that one additional departure will occur by 2026. These projected peak hour passenger volumes are presented in **Table 7**.

Table 7.
Forecast Peak Hour Passengers

Year	Peak Month Enplanements + Deplanements	Average Day Peak Month Enplanements + Deplanements	Peak Hour Passengers		
			Enplanements	Deplanements	Total
2021	8,833	285	89	81	171
2026	9,284	299	94	131	204

Source: Mead & Hunt

6.3 TERMINAL GATE REQUIREMENTS

An airport's gate requirements are typically examined in terms of the ability of both the airside and terminal building facilities to meet current and projected aviation demand. Commercial airline operations are quantified in peaking characteristics which comprise the "design hour" demand for passengers and aircraft. This approach provides sufficient facility capacity for most days of the year but recognizes that facilities should be neither underbuilt nor overbuilt. Aircraft gate capacity is determined using a design day flight schedule (DDFS), the peak hour of which is the "design hour." For most airports, an average day of the peak month's operations is used to develop a DDFS. The design hour is typically not the absolute peak level activity scheduled throughout a year, nor does it usually represent the total number of people occupying the terminal at a given time. It is a level of activity that is driven by flight schedule and quantified in terms of scheduled aircraft size. For MMH, historical data show the peak hour to be consistent at late afternoon for arrivals and departures during peak winter season travel.

For the peak winter season, Alaska has scheduled a morning arrival and departure at the Airport (see **Table 6**). Alaska and United's next arrivals into the Airport are scheduled between 4:30 p.m. and 5:30 p.m., with corresponding departures between 5:00 p.m. and 6:00 p.m., which constitute the Airport's peak hour for departures. These operations overlap one other with Alaska's Los Angeles flight arriving five minutes before United's San Francisco departure. This requires two gates to accommodate these current operations.

The winter schedule has been developed over time to reflect passenger preferences, which show mid-to-late afternoon departures from originating cities with arrivals at Mammoth Yosemite occurring about 5:00 p.m. to 6:00 p.m. generally. The airlines have attempted to schedule arrivals away from this late afternoon period with little success, noting that passengers generally prefer a mid-afternoon departure from the major

cities. This allows them sufficient time to work in the morning, travel to the airport to catch their flight and still arrive at Mammoth Yosemite with time to enjoy the evening and be ready for a full day of recreation the following day. It also allows time for recreation prior to their departure, it should be noted that the ski lifts at MMSA close at 4:00 p.m. It also allows time for weather events in Mammoth Lakes to clear if their flight is delayed.

Given current passenger preferences for travel from destinations within the state, service to a new market will most likely be scheduled into the peak hour. In order to allow for this as well as provide flexibility for operations generally, an additional aircraft gate will be required (for a total of three). MMH currently has one terminal gate and two aircraft parking positions. To accommodate current and future peak hour enplanements forecast in **Table 7**, two gates will not be adequate. Three gates will allow the Airport and carriers to provide a high level of service to their customers. While on a smaller scale at MMH, air carrier service is generally in line with other resort airports in the west, such as Eagle/Vail in Colorado and Friedman Memorial/Sun Valley in Utah.

Three gates would be in addition to hardstand positions provided to accommodate irregular operations. At MMH the most common irregular operations are associated with weather delays. During the winter-spring season weather delays occur regularly. This results in three airline aircraft being parked at the Airport about 20 times per winter-spring season (about 18%) with rarer occurrences when four aircraft are parked at the Airport. In 2013, when the Airport had seven flights on five days a week, it proved difficult to schedule flights to reduce peak hour passengers to the terminal's capacity and had three or more planes on the ground more frequently.

Advisory Circular 5360-9, *Planning and Design of Airport Terminal Building Facilities at Nonhub Locations,* contains the FAA's general guidance on terminal planning. Paragraph 25.a. states:

> *The initial stage of construction of airport terminal facilities should be designed to accommodate, comfortably, the forecast demands 5 years from the proposed date for occupancy.*

The currently adopted Airport Layout Plan includes development of a replacement passenger terminal. It is anticipated that it would take about five years to complete the process leading to occupancy of the replacement terminal (2021). This time would be needed to complete state and federal environmental review, design, and then build the replacement terminal and associated facilities. Therefore, the likely date of occupancy plus five years is approximately nine years from now (2026). As noted in the paragraph above, three gates are needed to accommodate peak hour departures in 2026**.**

6.4 BASED AIRCRAFT FORECASTING METHODOLOGY

All of the aircraft based at the Airport are piston-driven. Nationally this segment of the general aviation fleet is expected to decline in numbers. The *Aerospace Forecasts* states that "the largest segment of the fleet, fixed wing piston aircraft is predicted to shrink over the forecast period at an average annual rate of 0.6 percent." As noted in Section 3, records of based aircraft at MMH are not sufficiently complete to be used to establish a trend. The most that can be said with confidence is that the number of based aircraft appears to have been stable for the last three years.

With only seven based aircraft, the decisions by individual aircraft owners profoundly effects the number of aircraft that will actually be based at the Airport in the future. Decisions by aircraft owners will be based upon economic factors, such as disposable income and changes in aircraft operating costs, as well the mobility value of owning an aircraft to access a somewhat remote location. Small populations are inherently less stable than larger ones and, therefore, likely to have higher variation.

No local factors have been identified that would suggest that growth in the number of based aircraft will occur. Neither Airport nor FBO staff anticipate turboprop or jet aircraft will be based at the Airport. These aircraft have historically been associated with visitors and owners of vacation homes in the Mammoth Lakes area. Neither group is likely to base an aircraft at the Airport.

6.4.1 Methodologies Considered and Rejected

Four of methodologies presented earlier in this document have been rejected as inappropriate for forecasting based aircraft.

- **Historical trend lines and regression analyses** has been rejected due to the lack of reliable historical data.
- **Socioeconomic and correlation analyses** is rejected because no clear link between the number of based aircraft and available socioeconomic data.
- **Market share analysis** is rejected because poor historical data makes it infeasible to evaluate the relationship between the number of based aircraft at MMH and state or national trends.
- **Judgmental forecasting** is rejected because the comparison with other airports provides a less subjective methodology.

6.4.2 Methodology Selected

Comparison with other airports is the methodology that was used to forecast based aircraft at MMH. Three airports were selected: Bishop Airport, Lone Pine/Death Valley Airport and Independence Airport. As with MMH all of these airports are located in valleys east of the Sierra Nevada Mountains along Highway 395. Bishop Airport is located 35 miles from MMH, Independence 66 miles and Lone Pine 83 miles. In 2015 Bishop had 45 based aircraft, Lone Pine had five and Independence had two. The 2016 TAF forecasts anticipates no change in the number of based aircraft at these airports. Therefore, the forecast of based aircraft for MMH is for the number of aircraft to remain at its current level of seven aircraft. Based upon this forecast, no new hangars are needed to accommodate based aircraft.

6.5 AIRCRAFT OPERATIONS

The forecast of operations will be used to determine whether the airfield will need capacity improvements during the next 10 years to accommodate expected demand. Forecasts for total operations are a composite of individual forecasts by operation type. Individual forecasts were prepared for: scheduled passenger airlines, general aviation aircraft, and military aircraft. General aviation operations forecasts include air taxi. The results are then totaled to produce a forecast of annual operations. Operations are also classified as either itinerant, meaning they originate and depart from different airports; and local, meaning that the flight

remains near the Airport. Local operations are normally only conducted by general aviation and military aircraft for purposes of flight training.

6.5.1 Methodologies Considered and Rejected

Four of methodologies presented earlier in this document have been rejected as inappropriate for forecasting aircraft operations.

- **Historical trend lines and regression analyses** has been rejected for commercial and general aviation operations due to limited available historical data.
- **Socioeconomic and correlation analyses** is rejected for use in forecasting all operations because no clear link exists between the number of commercial or military operations and socioeconomic factors.
- **Market share analysis** is rejected because, as an airport serving a resort/recreational destination, there is not a strong link between operations at MMH and state or national trends.
- **Comparison with other airports** is rejected for general aviation operations because MMH is an isolated airport that cannot be expected to follow operations trends at other airports. It is rejected for commercial and military operations because there is a stronger link between forecast enplanements and operations than operations at other airports.

6.5.2 Methodology Selected

- **Judgmental forecasting** has been used for commercial and military operations. Previously forecast enplanements have been used to forecast commercial operations using assumptions on aircraft seating capacity and load factors. The low number of military operations have been forecast to remain constant due to a lack of data suggesting and change in past activity levels.
- **Socioeconomic analysis** has been used for general aviation operations. Population growth in the Mammoth Lakes area is believed to be the best available indicator of future general aviation operations.

6.5.3 Scheduled Passenger Airlines

Operations by scheduled passenger airlines was calculated by applying assumed load factors and average seats per departure to the enplanement forecast. The current (2016) load factor is 60.9%. The Air Partners group has indicated that the right-sizing strategy is fully in place and no changes are currently planned to boost load factors. For forecasting purposes it was assumed that this percentage will continue through the 10-year forecast period. Similarly the current (2016) number of average seats per departure, 74.5 seats, is presumed to remain unchanged. This reflects the assumption that the current mix of Q-400 aircraft with 76 seats and the CRJ700 aircraft with 70 seats, will remain unchanged through the forecasting period.

Applying the load factor and average seats per departure to the previously presented enplanement forecast would yield the following forecasts of operations:

- 1,040 air carrier operations in 2021.
- 1,094 air carrier operations in 2026.

6.5.4 General Aviation Operations

With only seven based aircraft and no flight school based at the Airport, the majority of general aviation operations are by transient aircraft. The FBO estimates that about 20% of the transient operations are by aircraft owners who own hangars at the Airport because they also own second homes in the Mammoth Lakes area. Because of this link between second home ownership and transient use, the forecast of general aviation operations has been developed by utilizing the rate of population growth projected for Mono County. Mono County includes the Mammoth Lakes area.

Population forecasts for Mono County were taken from the California Department of Finance, Demographic Research Unit Report P-1, *State and County Population Projections: July 1, 2010-2060*. These projections anticipate that Mono County will grow from 14,525 residents in 2015 to 16,671 residents in 2035. The increase represents a compound annual growth rate of 0.69%. Applying this growth rate to the preceding estimate of 2016 noncommercial operations (minus military operations) yields:

- 6,215 operations in 2021.
- 6,432 operations in 2026.

Air taxi operations are forecast to continue to account for 28.2% of total general aviation operations. Itinerant general aviation operations are assumed to remain 69.3% of general aviation operations. Local operation will remain 2.5% of operations

6.5.5 Military Operations

Military operations have averaged about 35 operations annually over the last 5 years. Therefore, for forecasting purposes, annual military activity has been assumed to remain at 35 operations.

6.5.6 Operations Forecasts

A summary of operations forecasts is presented in **Table 8** below.

Table 8.
Operations Forecast

	Itinerant Operations					Local Operations			Total Operations
Year	Air Carrier	Air Taxi & Commuter	General Aviation	Military	Total	Civil	Military	Total	
2016	990	1,634	4,017	32	6,673	143	0	143	6,816
2021	1,040	1,186	1,753	35	7,137	155	0	155	7,292
2026	1,094	1,314	1,814	35	7,403	161	0	161	7,564

6.5.7 Peak Hour Operations Forecasts

There are no sources that directly provide peak hour operations information for the Airport. However, available data for both scheduled airlines and general aviation activity both indicate that March is the peak month. The attraction is the high quality of snow and good weather for skiing that commonly exists in this month. Airport data on actual airline operations indicate that March has accounted for about 20% of total annual operations in 2013-2015. Counts of noncommercial operations (i.e., all nonairline operations) by the FBO show that March 2013-2015 also accounted for about 20% of annual operations for these aircraft. Where peak day counts are not directly available industry practice is to assume equal division of operations during the peak month. The peak day in March would then equal the monthly total divided by 31. Therefore,

the peak day at Mammoth Yosemite Airport would be 20% / 31 = 0.65% of total annual operations. The peak day's percentage of annual operations (0.65%) equated to 44 operations in 2016.

No generic distribution of operations during a peak day is available. Every airport is unique. During the ski season at Mammoth Lakes visitors arriving by air commonly seek to arrive by civil twilight (i.e., sundown). During March this occurs between 6:15 p.m. and 7:45 p.m. During the 2015-2016 ski season three of the four scheduled daily arrivals occur between 4:35 p.m. and 6:45 p.m. General aviation arrivals follow a similar pattern. Based upon FBO landing records, an average peak day in March would see five arrivals by general aviation aircraft during the peak hour. The peak hour is typically 4:30 p.m. to 5:30 p.m. As noted earlier in this report the 2016 peak hour saw three operations by scheduled passenger aircraft. Adding commercial and general aviation peak hour data yields a total peak hour in 2016 of eight operations. In 2016, eight operations would equal 0.12% of total annual operations. Applying this percentage (0.12%) to the 2026 operations forecast yields 9 operations.

6.5.8 IFR Operations Forecasts

Instrument Flight Rule (IFR) operations are recorded in the FAA Traffic Flow Management System Counts (TFMSC). TFMSC operations data for the last four years (2013-2015) ranged from a high of 4,409 in 2013 to a low of 3,699 in 2016. Air carrier operations accounted for about 33% of IFR operations during this four-year period. Total IFR operations accounted for 62% of total operations. Introduction of the RNP instrument approach in the fall of 2016 is expected to increase the total number of air carrier IFR operations by about at least 2%. If air carrier IFR operations increase as projected, the percentage of total IFR operations would increase to 63%. At this rate in 2026 the number of IFR operations will total 4,765.

6.5.9 Cargo Forecasts

Nationally the trend has been a decline in cargo carried as belly-haul in scheduled passenger airline aircraft. The trend at the Airport has followed a declining trend since it started in 2010. Based upon these two trends it is forecast that no air cargo will be handled at the Airport in the future.

7. DESIGN AIRCRAFT

Plans for airport facilities must conform to FAA design standards. Design standards accommodate the physical and operational characteristics of the most demanding 'design aircraft.' The design aircraft must have or reasonably be forecast to conduct 500 annual operations at the Airport. In some cases the design aircraft will actually be a composite of the characteristics of the most demanding aircraft. According to the adopted Airport Layout Plan the current design aircraft for MMH is the Bombardier Q-400 turboprop. The operations counts for the Q-400 for the last four calendar years were:

- 882 operations in 2013
- 1,014 operations in 2014
- 952 operations in 2015
- 796 operations in 2016

The key characteristics of the Q-400 are:

- Aircraft Approach Category: C.

- Airplane Design Group: III.
- Taxiway Design Group: 5.

The Aircraft Approach Category (AAC) relates to aircraft approach speed and is classified by a letter (from A – E). The Airplane Design Group (ADG) component, depicted by a Roman numeral (from I – VI), relates to the aircraft's wingspan and tail height. The Taxiway Design Group (TDG) is based upon the undercarriage (i.e., wheel) spacing of the design aircraft.

The Q-400 is expected to remain the critical aircraft throughout the 10-year forecast period. It should be used as the design aircraft for facility planning.

8. SUMMARY

A summary of the forecasts are shown below in **Table 9**.

Table 9.
Summary of Forecasts

	2016	2021	2026
Passenger Enplanements			
Air Carrier	22,253	23,388	24,581
Commuter	0	0	0
TOTAL	22,253	23,388	24,581
Operations			
Itinerant			
Air Carrier	990	1,040	1,094
Commuter/Air taxi	1,634	1,753	1,814
Total Commercial Operations	2,624	2,793	2,908
General Aviation	4,017	4,309	4,460
Military	32	35	35
Local			
General Aviation	143	155	161
Military	0	0	0
TOTAL OPERATIONS	6,816	7,292	7,564
Instrument Operations	3,699	4,594	4,765
Peak Hour Operations	8	8	9
Cargo (enplaned+deplaned pounds)	0	0	0
Based Aircraft			
Single Engine (Nonjet)	4	4	4
Multi Engine (Nonjet)	3	3	3
Jet Engine	0	0	0
Helicopter	0	0	0
Other	0	0	0
TOTAL	**7**	**7**	**7**

APPENDIX B: AVIATION FORECAST

U.S. Department
of Transportation
Federal Aviation Administration

Western-Pacific Region
Airports Division

San Francisco Airports District Office
1000 Marina Boulevard, Suite 220
Brisbane, CA 94005-1835

June 19, 2019

Mr. Brian Picken
Airport Manager
Town of Mammoth Lakes
1300 Airport Road
Mammoth Lakes, CA 93546

Dear Mr. Picken,

RE: Mammoth Yosemite Airport Aviation Activity Forecasts, 2019 Addendum

The Federal Aviation Administration (FAA) has completed its evaluation and approves the updated *Mammoth Yosemite Airport Aviation Activity Forecasts Addendum 2019* document for the Mammoth Yosemite Airport (MMH), dated May 15, 2019. This forecast is an update to the forecast approved on April 13, 2017. The San Francisco Airports District Office (SFO ADO) has the following comments about the forecast:

- Concurs with the new design aircraft of a Bombardier CRJ-700, a change from the Bombardier Q400.
- The aviation activity forecast provides adequate justification for near-term and mid-term airport planned development at MMH.
- Concur with the aviation activity forecast methodology. The forecast assumptions presented are considered reasonable. The slight variation reported in the FAA Terminal Area Forecasts (TAF) are acknowledged.

If you have any questions, please contact Katherine Kennedy at 650-827-7611.

Kind Regards,

Laurie Suttmeier
Acting Manager, San Francisco Airports District Office

Mammoth Yosemite Airport

Aviation Activity Forecasts

2019 Addendum

Prepared for the Town of Mammoth Lakes

Prepared by

May 15, 2019

INTRODUCTION TO ADDENDUM

This update of the forecasts retains the structure of the previous forecasts. Section numbers and headings have been retained. One new section has been added on scheduled charter. Instead of a section number, this section is labeled *New Section 1*. Similarly, a table comparing the design standards for the old and new critical aircraft is titled *New Table A*.

Much of the information in the previous forecasts remains valid. Therefore, this Addendum provides brief notes in each section to identify any changes to that section. All tables in the prior forecasts have been updated and are imbedded in the sections where they were presented previously.

The Town of Mammoth Lakes is aware that Inyo County is actively pursuing Part 139 certification for the Bishop Airport. Regardless of whether Inyo County is successful, the Town remains committed to providing passenger service at its airport through a combination of scheduled airline and scheduled charter flights. These updated forecasts reflect this commitment.

1. INTRODUCTION

The 10-year forecast period now extends to 2028.

2. AIRPORT ROLE

2.1 CURRENT ROLES

The Airport's current roles remain unchanged.

2.2 FUTURE ROLES

The Airport is expected to retain its current roles though the 10-year planning period.

3. HISTORICAL ACTIVITY AT MMH

The general information in the text in this section remains accurate.

Table 1 has been updated through 2018.

3.1 PASSENGER ENPLANEMENTS

Alaska Airlines ended its service to Mammoth in November 2018. All service is now by United Airlines.

Due to the limited amount of lead time, the Air Partners were not able to fully recreate the service previously provided by Alaska Airlines. During the 2018-2019 ski season, United Airlines is providing service from San Francisco (SFO), Los Angles (LAX), and Denver (DEN). DEN and SFO service are once daily during the peak ski season, which is December 18 – March 30 this year, but in the future will typically extend until mid-April (Easter holiday). LAX service is one daily flight year-round. The Air Partners were not able to reestablish the second LAX flight that had served the Airport during the ski season.

As noted in the prior forecast, service from DEN had been tried before; however, that service was once weekly. This limited service was a major constraint for potential visitors and resulted in low load factors. The current service is daily through the ski season. The average load factor for the initial 10 days of service in December 2018 was 43%.

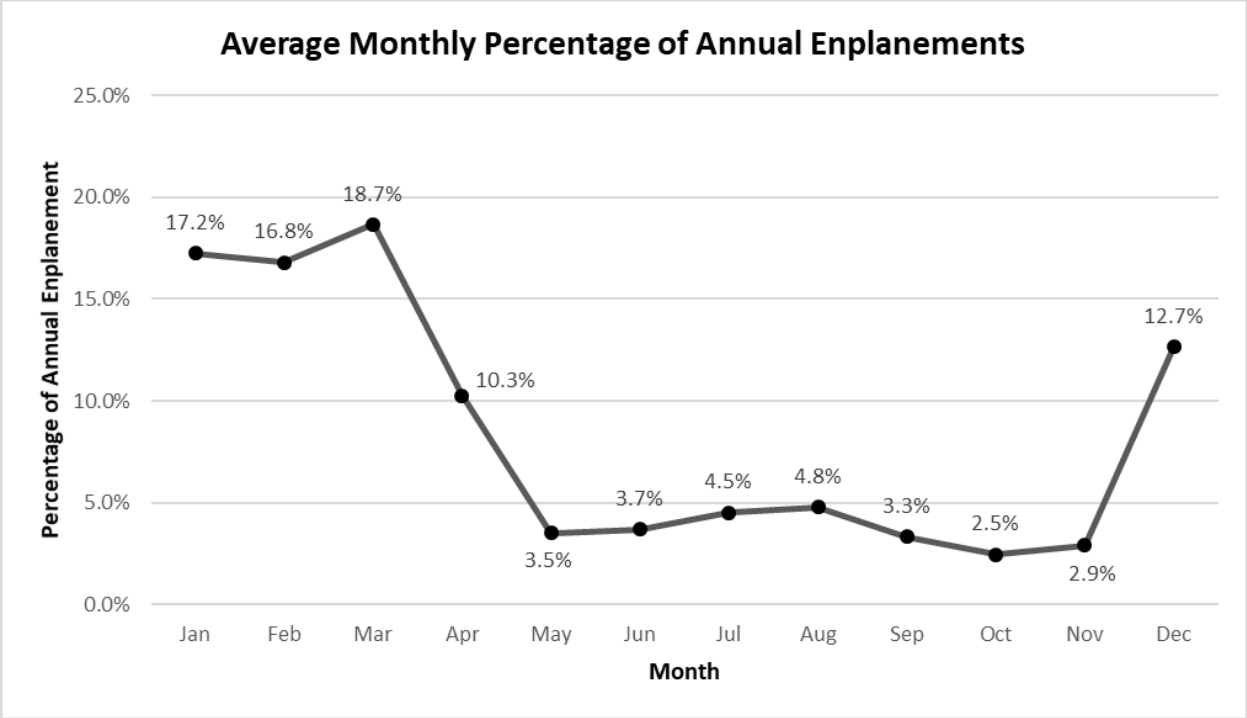
Table 1. Historical Aviation Activity

Passenger Enplanements[3]				Itinerant Operations					Local Operations			Total Operations	Based Aircraft
Fiscal Year	Air Carrier	Commuter	Total	Air Carrier	Air Taxi & Commuter	General Aviation	Military	Total	Civil	Military	Total		
2009	0	6,157	6,157	312	1,628	3,730	31	5,509	1,896	0	1,896	7,599	4
2010	0	19,798	19,798	1,228	1,840	4,296	62	7,426	200	0	200	7,626	4
2011	0	26,196	26,196	1,394	1,824	4,133	38	7,389	202	0	202	7,591	3
2012	0	27,246	27,246	1,564	1,688	3,568	40	6,860	173	0	173	7,033	3
2013	0	30,858	30,858	1,530	1,784	4,108	56	7,478	199	0	199	7,677	7
2014	0	25,892	25,892	1,404	1,514	3,200	24	6,142	148	0	148	6,290	7
2015	0	23,504	23,504	1,234	1,472	3,325	22	6,053	144	0	144	6,197	7
2016	0	22,253	22,253	990	1,634	4,017	32	6,673	143	0	143	6,816	7
2017	0	21,278	21,278	970	2,976	1,514	312	5,772	1,184	0	1,184	6,956	7
2018	0	22,594	22,594	1,050	2,926	1,308	400	5,684	1,060	0	1,060	6,744	7

Source: Passenger enplanements and air carrier operations: Airport records; 2017 Itinerant and local operations: Hot Creek Aviation; all other operations and based aircraft FAA 2018 Terminal Area Forecast.

Notes:
1. 2009 air carrier operations data not available. Operations estimated by assuming same number of passengers per aircraft as 2010.
2. Airline passenger service started in 2009 and was only for part of the year.
3. Enplanement numbers do not include passengers carried on either scheduled or unscheduled charter flights.

Passenger Enplanements



Source: Data provided by the Airport. December 2018 data not included in average. Alaska Airlines ended service to MMH on 11/30.

NEW SECTION 1: SCHEDULED PASSENGER CHARTERS

Scheduled passenger charter flights were inaugurated at the Airport during the 2017-2018 ski season. Service was provided from Bob Hope Airport (BUR) four days per week. This service continued for the 2018-2019 ski season and service from John Wayne-Orange County Airport (SNA) was added. The average load factor for scheduled charter flights in the 2017-2018 ski season was 54.7%. The first four weeks of the 2018-2019 ski season are seeing average load factors of 65%. The Air Partners have indicated that they intend to evaluate the strength of passenger demand by introducing service from other airports in both southern and northern California, such as McClellan-Palomar Airport and Buchanan Field Airport.

The scheduled charter aircraft utilize the general aviation parking apron west of the commercial apron used by scheduled airlines. Special constraints have been placed upon this apron because the airfield does not provide standard clearances for larger aircraft. It would be useful if the configuration of the general aviation apron was considered during design of the proposed commercial apron serving the new passenger terminal.

One means of resolving constraints on larger charter aircraft would be to design the new commercial apron and terminal to accommodate larger charter aircraft. The new commercial apron will be located further from the runway; this will reduce congestion and increase wingtip clearances for taxiing and parked aircraft. This design would require the charter aircraft and their passengers to be segregated from the scheduled airline aircraft and their passengers. Although uncommon, this arrangement has been used at other airports, including Hector International Airport (Fargo, North Dakota) and Grand Junction Regional Airport (Grand Junction, Colorado).

3.2 BASED AIRCRAFT

The current number of based aircraft (7) remains unchanged.

3.3 AIRCRAFT OPERATIONS

3.3.1 General Aviation Operations

The general pattern of general aviation operations has not changed. Table 1 has been updated with data provided by the Airport's fixed base operator and the Airport Manager.

3.3.2 Military Operations

Military operations include helicopters, C-130 operations, and other turbine aircraft. C-130 operations are conducted at the airport for the purpose of pilots obtaining their high-altitude airport operations certificates. C-130 operations are the most frequent at the airport, with helicopters being the second most frequent to use the airport. Airport staff estimate operations to be about 400 annually.

3.3.3 Airline Operations

United Airlines is currently (January 2019) the only airline providing scheduled passenger service. Operations data for 2018 was taken from Airport records.

3.4 AIR CARGO

Text in prior forecast remains correct: no cargo is shipped through the Airport.

4. NATIONAL AVIATION INDUSTRY TRENDS

4.1 PASSENGER ENPLANEMENTS

The 2018 Aerospace Forecast projects that domestic passenger enplanements for all carriers will grow 1.7 percent annually through 2038. This is the same as projected in the 2016 Aerospace Forecast; however, the short-term, 10-year domestic passenger enplanement is projected to grow at 1.6 percent in the 2018 Aerospace Forecast compared to 1.5 percent projected in the 2016 Aerospace Forecast. The combined domestic and international passenger enplanements for all carriers are projected to grow 1.9 percent in the 2018 Aerospace Forecast, the same growth rate projected in the 2016 Aerospace Forecast.

Table 2.
Comparison of Forecast Passenger Enplanement Growth Rates

	Domestic + International Flights	Domestic Flights		
	2018-2038	2018-2028	2028-2038	2018-2038
Mainline Carriers	2.0%	1.6%	1.8%	1.7%
Regional Carriers	1.6%	1.5%	1.8%	1.6%
All Carriers	1.9%	1.6%	1.8%	1.7%

Source: FAA Aerospace Forecast Fiscal Years 2018-2038

4.2 GENERAL AVIATION AIRCRAFT FLEET

The total number of aircraft has increased from the 2016 to 2018 Aerospace Forecasts except for multi-engine piston aircraft. However, the compound annual growth rate (CAGR) for the total fleet has decreased due to the lower CAGR for all aircraft types except Other. The greatest differences in the 20-year CAGR

from 2016 to 2018 Aerospace Forecasts are that of Light Sport (difference of -0.74 percent), Rotorcraft (difference of -0.69 percent), and Experimental (difference of -0.58 percent).

Table 3.
Comparison of Forecast Growth Rates by Aircraft Type

	Total Fleet	Rotorcraft	Fixed Wing					
			Turbine	Multi-Engine Piston	Single-Engine Piston	Light Sport	Experimental	Other
2018*	213,905	11,030	23,585	12,895	130,500	2,705	28,140	5,050
2038	214,090	15,785	35,050	11,845	107,800	5,440	33,105	5,065
CAGR	0.0%	1.8%	2.0%	-0.4%	-1.0%	3.6%	0.8%	0.0%

Source: FAA Aerospace Forecast Fiscal Years 2018-2038 *Estimate from *Aerospace Forecast*
CAGR = Compound Annual Growth Rate

4.3 AIRCRAFT OPERATIONS

The 2018 Aerospace Forecast projects total aircraft operations to increase an average 0.9 percent annually from 2018 to 2038. This is the same growth rate projected in the 2016 Aerospace Forecast. There is a 0.4 percent decrease for Air Carrier operations and a 0.5 percent decrease for Air Taxi/Commuter operations for the 20-year CAGR when comparing the 2018 Aerospace Forecast to the 2016 Aerospace Forecast.

4.4 AIR CARGO VOLUMES

The 2018 Aerospace Forecast projects air cargo revenue ton miles (RTMS) to increase an average 3.8 percent annually from 2018 to 2038. This is 0.2 percent higher than the 3.6 percent 20-year CAGR projected in the 2016 Aerospace Forecast. Overall, both all-cargo and passenger carrier air cargo RTMS 20-year CAGRs have increased in the 2018 Aerospace Forecast compared to the 2016 Aerospace Forecast.

5. FORECASTING METHODOLOGIES

5.1 MARKET SHARE METHODOLOGIES

Description remains correct.

5.2 TIME-SERIES METHODOLOGIES

Description remains correct.

5.3 SOCIOECONOMIC METHODOLOGIES

Description remains correct.

5.4 COMPARISON WITH OTHER AIRPORTS

Description remains correct.

5.5 JUDGEMENTAL FORECASTING

Description remains correct.

6. FORECASTS

6.1 PASSENGER ENPLANEMENTS

6.1.1 Factors Affecting Forecasts

The Airport has now had 10 years of scheduled passenger service. The end of service by Alaska Airlines eliminates the availability of the Required Navigational Performance (RNP) instrument procedures. These procedures were privately developed for Alaska Airlines; they enabled that airline to operate with lower visibility minimums than other airlines or general aviation aircraft. The RNP approaches allowed landings with ceilings as low as 250 feet to both runways. The CRJ-700 aircraft are not equipped to utilize an RNP approach; however, the RNP approaches developed by Alaska Airlines provide a proof of concept in that future air carriers could expect to duplicate.

6.1.2 Methodologies Considered and Rejected

Text remains correct as written.

6.1.3 Selected Forecasting Methodologies

Ten years of enplanement data is now available. Judgmental forecasting includes consideration of the effects of the loss of service by Alaska Airlines and the expansion of service by United Airlines. The effects of introduction of scheduled charter service were considered in enplanement forecasts.

6.1.4 Forecasting Assumptions

Three important changes occurred in 2018 that have resulted in changes to the forecasting assumptions:

- Loss of scheduled service by Alaska Airlines
- Expansion of service by United Airlines, including introduction of daily service from Denver during the ski season
- Scheduled charter service will continue and expand over the next 10 years. For the 2018-2019 ski season, service continues for the second year from Bob Hope Airport (BUR) four days per week. Four weekly flights from John Wayne-Orange County Airport (SNA) were added for the 2018-2019 ski season. Passengers on charter flights are processed through the fixed base operator's facility, not the passenger terminal. Therefore, charter passenger enplanements are not included in the forecast of enplanements.

Because of these changes in the circumstances at the Airport, the pattern of incremental growth will follow three paths:

- Expansion of service from LAX during the ski season.
- Incremental increases in load factors.
- Servicing of the San Diego market solely with scheduled charter flights for four years and then reintroduction of scheduled airline service.

Forecasting assumptions in the prior forecasts are modified as follows:

- **Forecasting Assumption No. 1** – The statements about the existing terminal constraining when flights can be scheduled continues to be correct; however, incremental growth in passenger volumes will be due to both incremental growth in load factors of existing flights, expansion of flights from existing airports, and addition of service from San Diego.
- **Forecasting Assumption No. 2** – This assumption is modified to indicate that there will be a drop in passenger volumes in the first year following loss of service by Alaska Airlines (i.e. 2019). Enplanements will begin growing in 2020 and follow a pattern of slow growth through 2028. The growth will be due to incremental increases in load factors and the addition of scheduled airline service from San Diego in 2023.
- **Forecasting Assumption No**. **3** – This assumption states that when the replacement terminal becomes operational, flights are expected to shift to the early evening period due to strong passenger preference. This remains valid.
- **Forecasting Assumption No. 4** – With the elimination of service by Alaska Airlines, this assumption is no longer valid. United Airlines has indicated that it will only provide daily service and will not consider providing flights only four days per week.
- **Forecasting Assumption No**. **5** – The general statement that the Air Partners will continue to investigate service from additional airports remains valid. It will use scheduled charter flights to test markets. As anticipated in the prior forecasts, scheduled charter flights from Bob Hope Airport and John Wayne Airport have been introduced for this ski season.
- **Forecasting Assumption No**. **6** – This assumption is no longer valid. United Airlines has indicated that it will not provide less than daily service. The strategy of starting with four flights per week and incrementally expanding to daily service cannot be used.
- **Forecasting Assumption No**. **7** – This assumption has been modified to state that the only out-of-state service that will occur will be the daily service to Denver during the ski season.
- **Forecasting Assumption No**. **8** – The assumption regarding continuation of seasonal service from San Francisco remains valid.

Additional forecasting assumptions have been added:

- **Forecasting Assumption No. 9** – Passenger enplanements for LAX will decrease by one-third in 2019 due to the loss of the second flight during the ski season. This seasonal, second daily flight will be resumed in 2020. The addition of this second flight will result in LAX enplanements returning to 90% of 2018 levels. They will then grow at 1% compounded annual growth rate (CAGR) through the end of the 10-year forecast period.
- **Forecasting Assumption No. 10** – In the first two weeks of service, the DEN flight had an average load factor of 33%. It is expected that this rate will decrease after the peak holiday ski weeks in December and January; therefore, for 2019, an average load factor of 25% has been selected. This is forecast to grow incrementally, reaching 40% in 2028.

- **Forecasting Assumption No**. **11** – The ski season flight from SFO has been served by United since its inception. This is a mature market that will see load factors increase slowly over time. A 1% CAGR has been selected for use in this forecast.
- **Forecasting Assumption No**. **12** – Although SAN had historically been a good ski season market for the Airport, it is not clear that United Airlines will be willing to provide service from this airport in the near term. In this forecast, it is assumed that passengers from the San Diego area will be served by scheduled charter aircraft until 2023. In 2023, scheduled airline service will be reestablished. In the initial year, enplanements will be 60% of the volume in 2018. This is equivalent to a 54% load factor in a 70-passenger CRJ-700. Passenger volumes will then grow by 1% CAGR through the balance of the 10-year forecast period.

6.1.5 Other Forecast Assumptions

Actual Departures – In this forecast it is assumed that the current average of 12% cancellations will continue. It is assumed that the Required Navigation Performance instrument approaches developed by Alaska Airlines will not be reintroduced by United Airlines or another airline serving the Airport in the near future.

Total Seats – It is assumed that all scheduled airline passenger service will be in 70-seat CRJ 700's or similarly sized aircraft throughout the 10-year forecast period.

Load Factor – Although ski season load factors have climbed into the 70% range, year-round average load factors are expected to remain below 50%. This will be lower than in the previous forecast. Several factors will affect the average:

- Load factors for the DEN service are expected to remain lower than for other routes.
- United Airlines will only provide daily service. Alaska Airlines was willing to provide service four times per week. This allowed the Airport to capture the peak demand days. Daily service will result in higher total enplanements but will have a lower average load factors due to the inclusion of low-demand days.
- A portion of the passengers using scheduled charter flights would have used scheduled airline flights.

Summer-Fall Season – This forecast retains the assumption that passenger volumes outside of the ski season will remain static. There are ongoing efforts to develop and market cultural events outside of the ski season; however, the impacts of these efforts are too recent to be used in forecasting trends.

6.1.6 Enplanement Forecasts

The updated enplanement forecasts shifts the base year to fiscal year 2018 and assumes all future service to be flown in 70-passenger CRJ-700 aircraft. Ski-seasons are also assumed to be a consistent 102 days per fiscal year.

The following assumptions were used for each airport when calculating the forecasted enplanements:

- Flights to DEN will have a 25% load factor in 2019.This load factor increases to 40% by 2028.
- There will be one daily flight through the ski season to SFO during the forecast period. Enplanements will grow at 1% CAGR.
- Service to LAX will decrease in 2019 with loss of service by Alaska Airlines. This will reduce, enplanements in 2019 by one-third. The daily year-round service will remain throughout the forecast period. A second daily flight during the ski season will be added in 2020. This will increase LAX enplanements to 90% of the 2019 load factor. Enplanements will grow at 1% CAGR from 2021 to 2028.
- Flights from SAN will not resume until 2023. In this first year of service, passenger volumes will be 60% of 2018 volumes. They will then increase 1% CAGR through the balance of the forecast period.

Table 4.
Passenger Enplanement Forecast

	Year	Enplanements
Base Year	2018	22,594
Forecast Years	2019	15,953
	2020	19,734
	2021	20,020
	2022	20,307
	2023	22,824
	2024	23,138
	2025	23,453
	2026	23,770
	2027	24,067
	2028	24,387

Note: neither scheduled nor unscheduled charter are included in these figures.
Source: Mead & Hunt

6.2 PEAK PASSENGER ACTIVITY

The description of how peak passenger activity is calculated remains correct. The time period has shifted to include 2018 data.

6.2.1 Peak Month Passenger Activity Forecasts

Monthly passenger enplanement data in Table 5 has been updated to extend through 2018. The average percentage of the peak month over the last 5 years (204-2018) is 19.1%. In four of the last eight years, the peak month was March. In three of the last eight years, it was January. The variation is likely due to snow conditions.

In forecasting peak passenger activity, it has been assumed that the peak month will remain at 19.1% of the total. Applying this percentage to the forecasts in Table 4 above yields a peak month enplanement for 2023 of 4,359 and for 2028 of 4,658.

Table 5. Peak Month Enplanements								
Month	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
January	**4,211**	4,336	**5,766**	4,540	4,299	3,928	2,458	**4,144**
February	3,653	4,865	5,657	4,017	3,841	**4,569**	2,738	3,869
March	4,161	**4,897**	5,652	**4,735**	**4,622**	3,659	**4,059**	3,907
April	3,379	3,821	3,025	2,741	1,663	1,341	1,935	2,395
May	1,051	1,061	1,149	1,031	749	629	1,089	810
June	1,165	931	1,117	1,022	975	991	834	920
July	1,189	1,277	1,259	1,330	1,226	1,278	1,223	1,192
August	1,419	1,478	1,378	1,294	1,228	1,306	1,225	1,166
September	1,004	851	1,171	1,002	1,015	718	700	846
October	807	566	579	717	712	538	595	661
November	882	562	799	827	773	810	645	819
December	3,275	2,601	3,306	2,636	2,401	2,486	3,777	1,865
TOTAL	**26,196**	**27,246**	**30,858**	**25,892**	**23,504**	**22,253**	**21,278**	**2,594**
Peak Month % Annual	16.1%	18.0%	18.7%	18.3%	19.7%	20.5%	19.1%	17.8%

6.2.2 Peak Month Average Day Passenger Activity Forecasts

As in the prior forecast, the average day number of passengers on the average day of the peak month will equal 3.2% of the peak month's passengers.

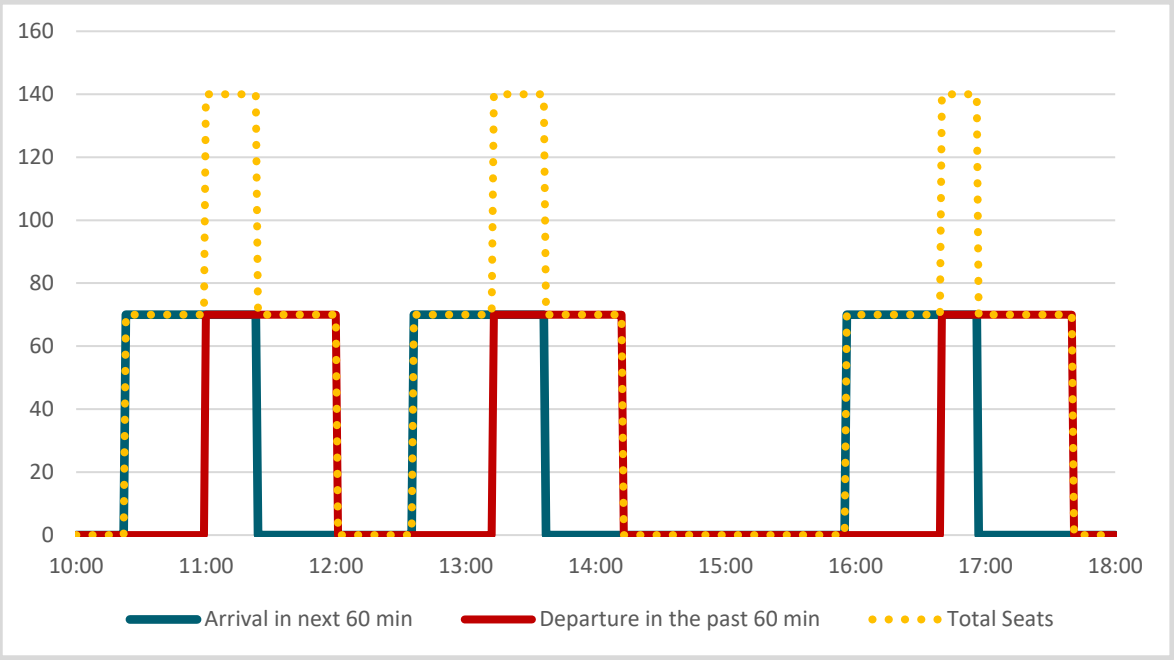
Table 6. Winter-Spring 2018-2019 Peak Day Flight Schedule				
	Time*	**Origin / Destination**	**Aircraft Type**	**Seats**
Arrival	1023	SFO	CRJ 700	70
Departure	1100	SFO	CRJ 700	70
Arrival	1236	DEN	CRJ 700	70
Departure	1312	DEN	CRJ 700	70
Arrival	1556	LAX	CRJ 700	70
Departure	1640	LAX	CRJ 700	70
* Time is expressed as a 24-hour clock. LAX flight times will change between January 7 to February 13, 2019.				
Source: Schedule - Airport				

6.2.3 Peak Hour Passenger Forecast

Figure 2 presents the peak hour seats during the 2018-2019 ski season peak. The peak hour consisted of one arrival and one departure in the 70-seat CRJ 700, or 140 seats. The peak hour is between 3:55 p.m. and 4:55 p.m. (1555 to 1655); however, the current pattern of flights is atypical of the historical pattern. The current schedule lacks a second LAX flight and one from SAN. This is due to the inability to replace Alaska Airline's flights with comparable United Airline flights in the limited lead time available following Alaska Airline's announced elimination of service.

A more typical pattern would be two arrivals and two departures. This was the pattern of flights presented in the prior forecasts. With the CRJ 700 providing service, this would total 280 seats during the peak hour. This volume will be used in forecasting peak hour passengers

Figure 2.
2018-2019 Ski Season Peak Hour Seats



Source: DEO data base

Table 7.
Forecast Peak Hour Passengers

Year	Peak Month Enplanements + Deplanements	Average Day Peak Month Enplanements + Deplanements	Peak Hour Passengers		
			Enplanements	Deplanements	Total
2023	8,833	285	86	81	167
2028	9,284	299	105	98	203

Source: Mead & Hunt

6.3 TERMINAL GATE REQUIREMENTS

The prior forecasts stated:

> The winter schedule has been developed over time to reflect passenger preferences, which show mid-to-late afternoon departures from originating cities with arrivals at Mammoth Yosemite occurring about 5:00 p.m. to 6:00 p.m. generally. The airlines have attempted to schedule arrivals away from this late afternoon period with little success, noting that passengers generally prefer a mid-afternoon departure from the major [California] cities.

This general situation has not changed. The current schedule varies from this pattern due to the necessity of the Air Partners negotiating new routes with United Airlines on short notice. If a second seasonal LAX flight is added for 2019-2020 as anticipated, it is expected to be scheduled for the late afternoon-early evening slot preferred by passengers. Within five years (2023) market forces are expected to shape the flight schedule so that it resembles the historical pattern. The expected reintroduction of the SAN flight by 2023 reinforces the likelihood of the historical pattern of peak use being replicated. Discussions with Airport staff suggest that the desired window for arrivals should be more broadly defined as between 4:00 p.m. and 6:00 p.m.

Two gates are the minimum needed to accommodate short-term (five year) demand. By the end of the 10-year forecast period, three gates will be needed to fully accommodate forecast demand. These gates are in addition to hardstand positions provided to accommodate irregular operations. As noted in the prior forecasts:

> At MMH the most common irregular operations are associated with weather delays. During the winter-spring season weather delays occur regularly. This results in three airline aircraft being parked at the Airport about 20 times per winter-spring season (about 18%) with rarer occurrences when four aircraft are parked at the Airport. In 2013, when the Airport had seven flights on five days a week, it proved difficult to schedule flights to reduce peak hour passengers to the terminal's capacity and there were three or more planes on the ground more frequently.

It is anticipated that by the end of the forecast period the Airport will again have at least three aircraft on the ground at the same time. Due to constraints on the ramp, noted earlier, this would result in inadequate clearance between parked aircraft and movement areas. It would increase the potential of conflicts between aircraft moving on the ramp. Without new facilities, it is anticipated that special markings and airport/aircraft specific operating procedures will be required to maintain Part 139 certification at the Airport.

6.4 BASED AIRCRAFT FORECASTING METHODOLOGY

No increase in the number of based aircraft has occurred. Only piston-powered aircraft continue to be based at the Airport.

6.4.1 Methodologies Considered and Rejected

This text remains relevant; no changes are required.

6.4.2 Methodology Selected

Comparisons with area airports remains the appropriate forecasting method. No additional aircraft are forecast to be based at the Airport during the forecast period.

6.5 AIRCRAFT OPERATIONS

6.5.1 Methodologies Considered and Rejected

The four methodologies considered and rejected in the prior forecasts continue to be inappropriate.

6.5.2 Methodology Selected

Judgmental forecasting remains appropriate for commercial and military operations. Socioeconomic analysis continues to be appropriate for general aviation operations.

6.5.3 Scheduled Passenger Airlines

- Operations by scheduled passenger airlines were based upon the number of annual flights for each route serving the Airport.
- Service from LAX was assumed to grow from the current daily service with the addition of a second flight during the ski season. This would increase the number of flights from 365 to 467 annually.
- SFO flights are forecast to remain constant at 102 flights annually.
- Flights from DEN are assumed to remain constant at 102 flights annually.
- When flights from SAN resume in 2023, they are assumed to remain constant at 58 flights annually (four times a week).
- Each flight consists of one arrival and one departure; this counts as two operations. Therefore, airline operations will total 1,458 in 2023 and remain at that level through 2028.

6.5.4 General Aviation Operations

As in the prior forecast, general aviation operations in this update were developed by utilizing the projected population growth rate for Mono County. The January 2018 projection prepared by the California Department of Finance's Demographic Research Unit provides updated population numbers and growth rate. The previous projection estimated a compound annual growth rate of 0.69% between 2015 to 2035; the updated forecast estimates a 0.37% compound annual growth rate for the same period. Therefore, 0.37% has been used to forecast general aviation operations. Applying this growth rate to the 2018 estimated noncommercial operations (minus military operations) yields:

- 5,753 operations in 2029
- 5,897 operations in 2039

Air taxi operations are forecast to continue to account for 52.4% of total general aviation operations. Itinerant general aviation operations are projected to remain at 26.7% of general aviation operations. Local operations are expected to remain at 20.9% of general aviation operations.

6.5.5 Military Operations

Airport staff estimates that military operations are averaging about 400 per year. The average number of operations is expected to remain at this level though the 10-year forecast period.

6.5.6 Operations Forecasts

Table 8.
Operations Forecast

	Itinerant Operations					Local Operations			Total Operations
Year	Air Carrier	Air Taxi & Commuter	General Aviation	Military	Total	Civil	Military	Total	
2018	1,050	2,926	1,308	400	5,684	1,060	0	1,060	6,744
2023	1,458	3,017	1,535	400	6,410	1,200	0	1,200	7,611
2028	1,458	3,093	1,574	400	6,525	1,231	0	1,231	7,755

6.5.7 Peak Hour Operations Forecasts

The methodology presented in the prior forecasts remains valid. The peak hour will be in the late afternoon or early evening during the ski season. Based on historical patterns, March is likely to see the highest number of operations.

As noted in Section 6.2.2, peak hour airline operations are forecast to reach four by 2023 and remain at that level through 2028.

Based upon information from the Airport's fixed base operator, peak hour general aviation operations have remained at five for the last several years. As shown in Section 6.5.4, total general aviation operations are expected to grow 5% over the next 10 years. This growth is judged to be too small to result in an increase in peak hour general aviation operations by itself; however, scheduled charter flights are expected to grow to from two to five daily during the ski season. Currently two scheduled charter operations occur during the desirable 5:00 p.m. to 6:00 p.m. time slot. These are forecast to overlap with the peak hour airline and other general aviation operations in 2023. The growth in scheduled charter operations is forecast to result in an additional peak hour operation by 2028. Therefore, total peak operations will be 11 in 2023 and 12 in 2028.

6.5.8 IFR Operations Forecasts

Based upon the FAA Traffic Flow Management System Counts (TFMSC) Instrument Flight Rule (IFR) operations averaged 52% of total operation for the last four years (2015-2018). Applying this percentage to the previous forecasts of total operations yields:

- 3,958 IFR operations in 2023
- 4.033 IFR operations in 2028

6.5.9 Cargo Forecasts

The update retains the conclusion that no air cargo will be shipped through the Airport.

7. DESIGN AIRCRAFT

The approved Airport Layout Plan for the Airport designates the Bombardier Q400 as the design aircraft. Alaska Airlines is the principal user of this aircraft. With the loss of service an alternate aircraft needs to be selected.

United Airlines is utilizing the Bombardier CRJ-700 to provide service to the Airport. Based upon the current schedule, there will be about 1,138 operations by this aircraft in 2019. This is well over the 500 annual operations threshold to be designated the design aircraft. Therefore, the CRJ-700 will be designated as the new design aircraft for the Airport.

New Table A below compares the FAA's airfield design standards for the Q400 to those of the CRJ-700. It also shows how the Airport's current facilities compare to these standards.

New Table A **Changes in Airfield Design Standards**				
	Prior Standard B-III*	**New Standard C-II**	**Existing Condition**	**Notes**
Runway Design				
Runway Width	100'	100'	100'	
Shoulder Width	20'	10'	12'	
Blast Pad Width	140'	120'	144'	
Blast Pad Length	200'	150'	200'	
Runway Protection				
Runway Safety Area				
Length beyond departure end	600'	1,000'	1,000'	
Length prior to threshold	600'	600'	600'	
Width	300'	500'	475'	1
Runway Object Free Area				
Length beyond runway end	600'	1,000'	1,000'	
Length prior to threshold	600'	600'	600'	
Width	800'	800'	764	2
Runway Obstacle Free Zone				
Length	200'	200'	200'	
Width	400'	400'	400'	
Precision Obstacle Free Zone				
Length	n/a	n/a	n/a	
Width	n/a	n/a	n/a	
Approach Runway Protection Zone				
Length	1,000	1,700	1,700	3
Inner Width	500'	500'	500'	
Outer Width	700'	1,010'	1,010'	
Departure Runway Protection Zone				
Length	1,000'	1,700	1,700	4
Inner Width	500'	500'	500'	
Outer Width	700'	1,010'	1,010'	
Runway Separation				
Runway centerline to:				
Parallel runway centerline	n/a	n/a	n/a	
Holding position	220'	250'	220'	5
Parallel Taxiway/Taxilane centerline	300'	300'	300'	
Aircraft parking area	400'	400'	400	
	TDG-5	TDG-2		
Taxiway Standards				
Taxiway Width	75'	35'	50'	
Shoulder Width	30'	10'	0'	
Taxiway safety area width	118'	79'	118'	
Taxiway object free area width from centerline	93'	65.5	90.5	6

* For historical reasons the Airport is classified B-III. However, the Q400 aircraft is classified by the FAA as C-III.

Notes

1. Grading needed on south side of runway
2. Fence south of runway and hangars north of runway intrude
3. Portions located off airport
4. Portions located off airport
5. Could be relocated
6. Easterly row of hangars are the critical objects

Source: Mead & Hunt

8. SUMMARY

Table 9.
Summary of Forecasts

	2018	2023	2028
Passenger Enplanements *			
Air Carrier	22,594	22,824	24,387
Commuter	0	0	0
TOTAL	23,289	22,824	24,387
Operations			
Itinerant			
Air Carrier	1,050	1,458	1,458
Commuter/Air taxi	2,926	3,017	3,093
Total Commercial Operations	3,993	4,565	4,551
General Aviation	5,684	5,753	5,897
Military	400	400	400
Local			
General Aviation	1,184	1,200	1,231
Military	0	0	0
TOTAL OPERATIONS	7,062	7,611	7,755
Instrument Operations	3,672	3,958	4,033
Peak Hour Operations	6	11	12
Cargo (enplaned + deplaned pounds)	0	0	0
Based Aircraft			
Single Engine (Non-jet)	4	4	4
Multi Engine (Non-jet)	3	3	3
Jet Engine	0	0	0
Helicopter	0	0	0
Other	0	0	0
TOTAL	**7**	**7**	**7**

*Note: enplanement numbers do not include either scheduled or nonscheduled charter.

APPENDIX C: BIOLOGICAL RESOURCES ASSESSMENT

BIOLOGICAL ASSESSMENT
FOR THE
MAMMOTH YOSEMITE AIRPORT TERMINAL AREA DEVELOPMENT PROJECT
TOWN OF MAMMOTH LAKES, MONO COUNTY, CALIFORNIA

Prepared for:

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Prepared by:

Salix consulting, inc.

11601 Blocker Drive, Ste. 100
Auburn, California 95603

Revised August 2020

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BIOLOGICAL ASSESSMENT FOR THE MAMMOTH YOSEMITE AIRPORT TERMINAL AREA DEVELOPMENT PROJECT TOWN OF MAMMOTH LAKES, MONO COUNTY, CALIFORNIA

1.0 INTRODUCTION

The Proposed Action subject to the Endangered Species Act (ESA) consultation consists of the implementation of the Terminal Area Development Project (TADP) within Mammoth Yosemite Airport property (airport property), located seven miles east of the Town of Mammoth Lakes in Mono County, California (Figure 1). The purpose of the action is to construct the various terminal area improvements recommended in the TADP.

The Action Area for the purposes of this BA consists of areas to be affected directly or indirectly by the proposed Terminal Area Development Project at Mammoth Yosemite Airport (Figure 2).

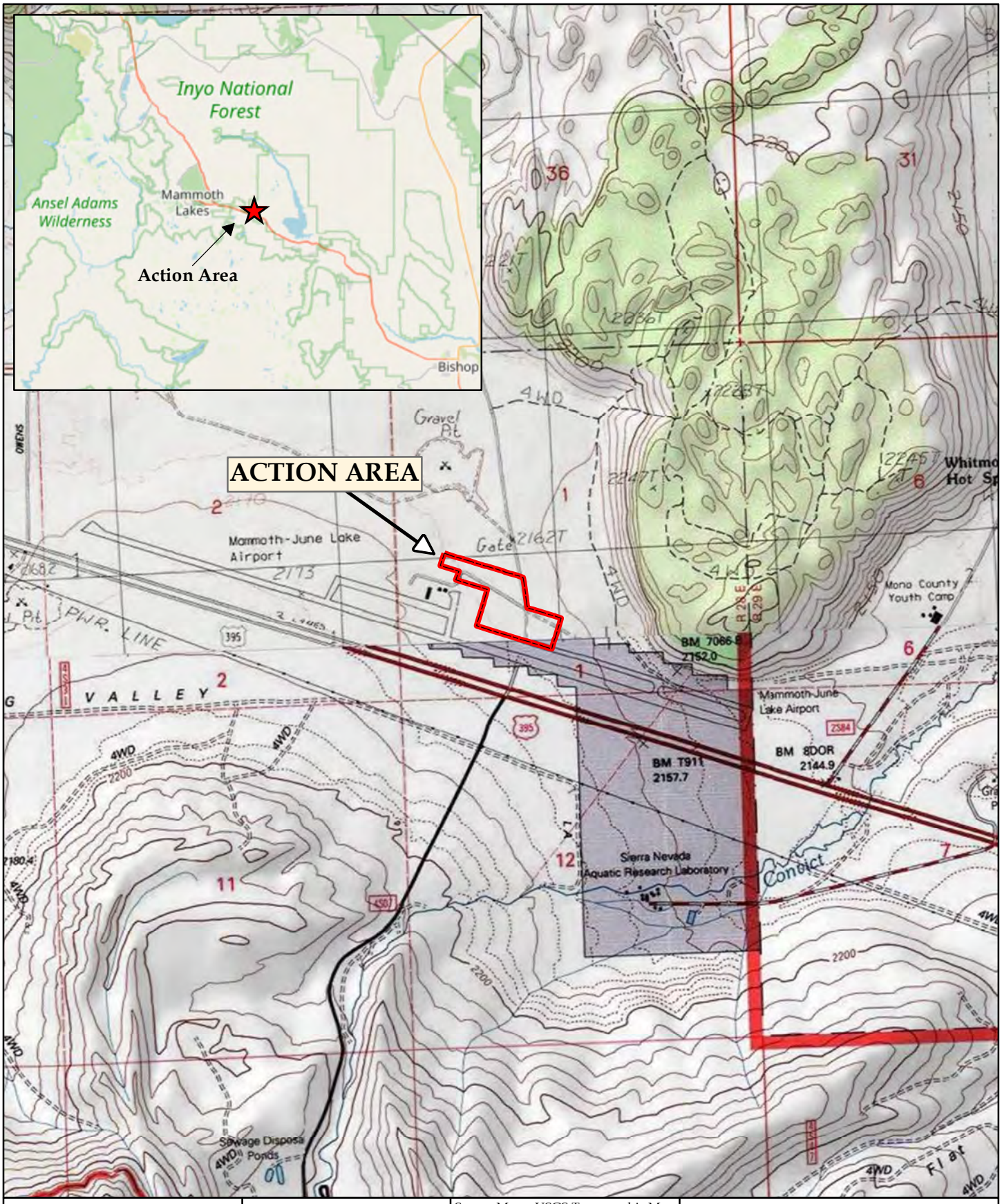
The purpose of this Biological Assessment (BA) is to review the proposed Terminal Area Development project at the Mammoth Yosemite Airport in sufficient detail to determine whether and, if so, to what extent, the Proposed Action (refer to Section 3.0) may affect federally listed threatened or endangered species, or species proposed for federal listing. This document is prepared in accordance with legal requirements set forth under Section 7 of the federal Endangered Species Act (ESA; 16 U.S.C. 1536(c)) and follows standards established by the National Environmental Policy Act (NEPA) and ESA guidance.

2.0 DESCRIPTION OF THE PROPOSED PROJECT

2.1 Description of Proposed Project

The proposed project involves construction of the various terminal area improvements recommended in the TADP. The relative location of the proposed facilities is shown on Figure 3. Specifically, the project proposes construction of:

- New passenger terminal building,
- Aircraft parking apron,
- Aircraft de-icing facilities,
- Connecting taxi lanes,
- Automobile parking lots,
- Eight-bay maintenance building, and
- Supporting infrastructure, including access and service roads, and utilities including wastewater treatment facility and disposal field, potable water system, electrical service, and telecommunications.



Salix consulting, inc.

N

0 1,000 2,000

Feet

Source Maps: USGS Topographic Map
Whitmore Hot Springs Quad 1:24,000
S1 T4S R28E

Figure 1

SITE AND VICINITY MAP

Mammoth Yosemite Airport

Town of Mammoth Lakes, Mono County, CA

Salix consulting, inc.

N

0 125 250

Feet

Action Area
(±23.6 acres)

Imagery: 9-17-19 Salix Consulting
Overlaid on DigitalGlobe 6/19/2015 Basemap

Figure 2

AERIAL MAP

Mammoth Yosemite Airport

Town of Mammoth Lakes, Mono County, CA

The approximately 38,688 square foot passenger terminal would devote most of its area to commercial airline services. Other services to be provided include car rental services, restaurants and retail uses, ground transportation, and airport administration, maintenance, mechanical and other support facilities. Three passenger arrival/ departure gates will meet planning criteria in Federal Aviation Administration (FAA) Advisory Circular 150-5360-13A, *Airport Terminal Planning*. The building is designed to be less than 35 feet in height and will include telecommunication, electrical, fire suppression, heating and cooling, and water and wastewater systems.

The proposed 130,500 square foot, 16-inch thick concrete aircraft parking apron will accommodate three Q400 aircraft or three CRJ700 aircraft in a taxi-in/taxi-out type operation, or three B 737 aircraft in a taxi-in/pushout type operation.

A new, separate 16-inch thick concrete de-icing apron would be located adjacent to the aircraft parking apron. Storm water and deicing fluid from the apron would be captured at a central drain inlet; storm water would be routed to an on-site disposal area, while de-icing fluid would be directed to a central holding tank for disposal to a licensed disposal facility.

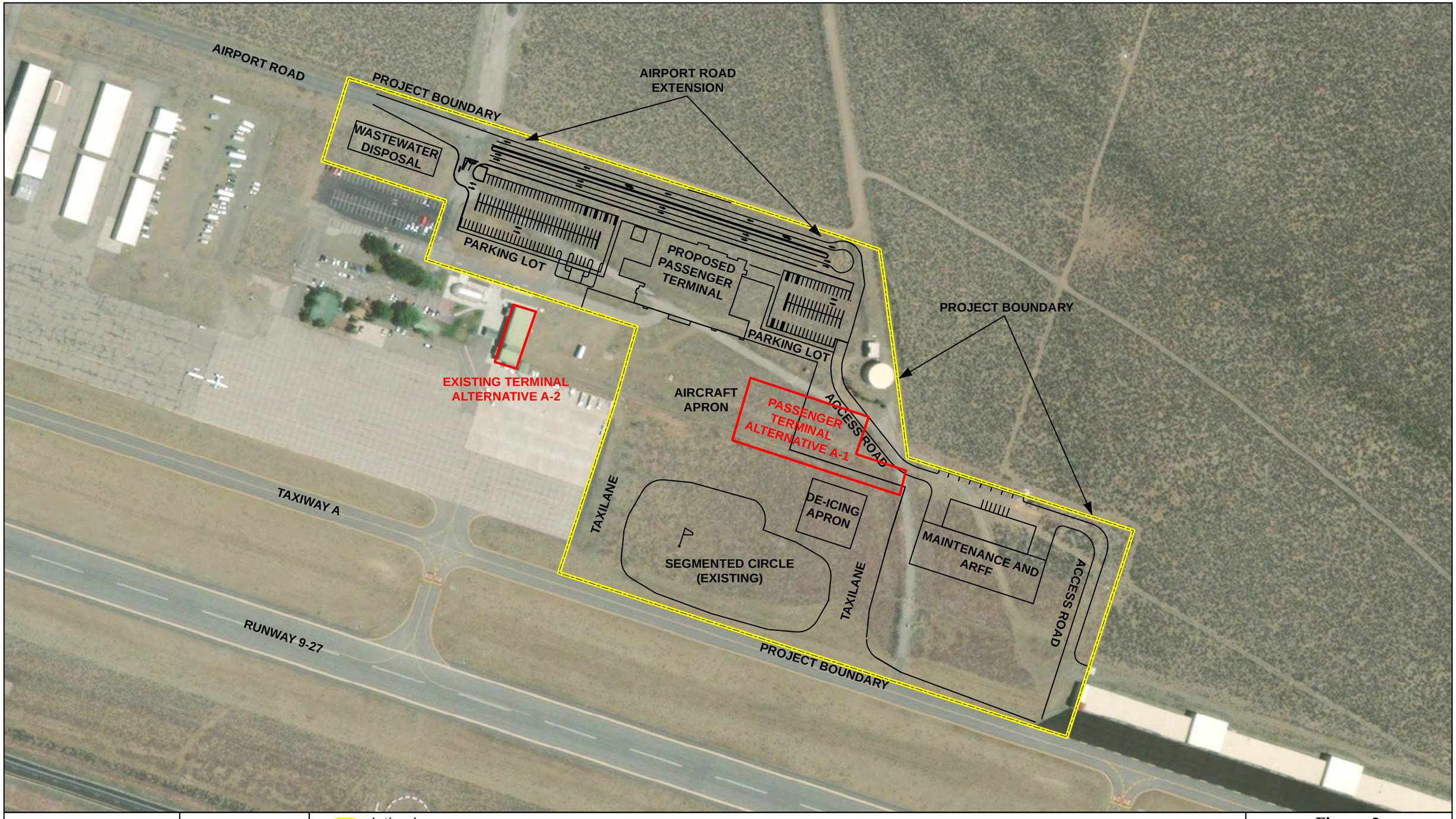
Two new asphalt concrete connecting taxilanes will connect the terminal aircraft apron and de-icing aprons to existing Taxiway A.

The project includes two new automobile parking areas with a combined capacity of 130 spaces, located south of the new terminal.

The project will include a four-lane, median-divided extension of Airport Road from its existing terminus to a cul-de-sac at the new terminal. A 20-foot concrete sidewalk would line the road along the terminal frontage, and parallel parking would be provided for passenger loading and unloading. A new service road will be constructed to the new maintenance facility.

A new 8,600 square foot, 8-bay maintenance building would be constructed to the east of the de-icing facility, which would include provide housing for Aircraft Rescue and Fire Fighting (ARFF)/snow removal equipment. The building would include a new access road connecting it with Taxiway A.

Project-related infrastructure improvements would include a package sewage treatment plant, associated sanitary sewer lines and a treated effluent disposal field. Potable water would be supplied by existing on-site wells and storage, distributed to proposed facilities by new water lines. Electricity would be provided by Southern California Edison from existing facilities at the Airport as would telecommunication services, which would be provided by Verizon. Security will be provided in the terminal building as necessary, including alarmed doors and security cameras. In the new terminal area, security fencing will be installed and/or relocated to separate the airport operations area from the non-secure civilian use area.



Salix consulting, inc.

N

0 100 200

Feet

Action Area
(±23.6 acres)

Imagery: 6/19/2015 DigitalGlobe

Figure 3

PROPOSED PROJECT COMPONENTS

Mammoth Yosemite Airport

Town of Mammoth Lakes, Mono County, CA

2.2 Location of Project

The ±24 -acre Mammoth Yosemite Airport Terminal Area Development Project Action Area is located within Airport property, which located seven miles east of the Town of Mammoth Lakes in Mono County, California. The airport is owned by the Town of Mammoth Lakes and is located within the city limits. It is bounded on the south and southwest by U.S. Highway 395, on the west by Hot Creek Hatchery Road, on the north by Airport Road, and on the east by Benton Crossing Road. The approximate coordinates for the center of the study area are: 37° 37′ 35.13″ N and 118° 50′ 23.59″ W. The Action Area is situated within Section 1 Township 4S Range 28E of the Whitmore Hot Springs, California 7.5-minute USGS topographic quadrangle (Figure 1).

Mammoth Yosemite Airport consists of approximately 246 acres located in the Long Valley caldera along the eastern edge of the central Sierra Nevada mountain range. The airport, which is surrounded by the Inyo National forest to the west, north and south, is situated approximately 3.5 miles west of Crowley Lake and approximately two miles north of Convict Lake near the Whitmore Hot Springs. U.S. Highway 395 is located along the entire south side of the airport, and Doe Ridge is located on the northeast side of the airport (Figure 2). The site is relatively flat, with elevations ranging from approximately 7119 feet along the northwestern edge to approximately 7093 along the southeastern edge.

The Proposed Action will occur entirely within an Action Area of approximately 24 acres, located in the eastern portion of the airport property (Figure 2).

2.3 Activities and methods that comprise the whole Project

It is anticipated that the project will involve several stages, including demolition, grading, drainage, utility relocation, and eventual construction of new facilities.

Demolition of about 600 linear feet of asphaltic pavement will occur in the terminal area and may involve the use of an excavator and grinder equipment to pulverize the existing pavement material.

Earthwork in the entirety of the Action Area will involve the use of excavators, dozers, scrapers, graders, rollers, water trucks, haul trucks, and other similar equipment to grade the site, slope aprons for proper drainage, install underground utilities, install pavement, and construct new facilities.

The proposed project will increase the overall impervious drainage area, driven by new buildings and aprons, parking, and access roads. Surface drainage will occur away from the hangar/terminal area to the northeast, exit the site, and continue in a southeasterly direction.

Figure 3 shows the locations of the various components of the Proposed Action. It is estimated that approximately 23.8 acres will be disturbed in association with the project.

2.4 Timeframe and Duration of Proposed project

No date has been set for initiation of project construction. It is anticipated that construction will proceed as funding becomes available.

2.5 Conservation Measures

The following general conservation measures will be implemented as part of the Proposed Action:

- Prior to implementation of the proposed project, the Town of Mammoth Lakes will prepare and implement a detailed erosion control plan that incorporates Best Management Practices (BMPs) including dust-control measures, erosion reduction and sediment control, and restricted equipment fueling and maintenance practices. The plan will also require revegetation of any disturbed areas, as necessary, and provisions for erosion control in the event of non-seasonal or early seasonal rainfall during construction.
- Construction activities shall comply with state National Pollutant Discharge Elimination System permit requirements. Erosion will be avoided by use of best management practices during construction and by directing surface water runoff from paved surfaces into the Airport drainage system.
- All grading activities will occur during the non-rainy season (May to October).
- Rainy season erosion control measures shall be in place before October 1 of each year.
- To prevent erosion and sedimentation in drainage areas, silt fence, fiber rolls, or a combination of both, will be placed along the edge of the grading limits immediately adjacent to those areas to contain sediment runoff.
- Bright orange construction fencing will be installed along the perimeter (outer edge) of the construction area, to clearly delineate the limits of contractor access.
- During construction associated with the proposed action, the contractor will ensure that construction equipment and vehicles operated in the action area are checked and maintained daily to prevent leaks of fuels, lubricants or other fluids. The biological monitor will make periodic checks to ensure that adequate vehicle and equipment maintenance is being implemented as required.
- Contractors will access the site from the existing Airport Road.
- All spoils will be removed to the nearest landfill accepting construction waste. When not in use, contractor equipment will be staged within the work limits, or in the established staging area.
- Following completion of construction, all disturbed areas will be smooth-graded and reseeded. Standard erosion control measures will remain in place until reseeded areas are successfully revegetated. An appropriate seed mixture using only native species will be used for all reseeding activities onsite.
- The Town of Mammoth Lakes will provide the U.S. Fish and Wildlife Service with a report prepared by the resident engineer and biological monitor at the completion of the project to describe the success of implementation of all the commitments in the Proposed Conservation Measures. The summary report would at a minimum include dates that

construction occurred and completion dates, known effects on any sensitive habitats, if any, and a summary of conservation measures implemented over the course of the project.

3.0 ACTION AREA

The Action Area for the purposes of this BA consists of areas to be affected directly or indirectly by the proposed Terminal Area Development Project at Mammoth Yosemite Airport (Figure 2). Areas to be directly affected by the proposed project are shown in Figure 3.

3.1 Environmental Baseline

This section discusses the environmental setting of the Action Area and is based on previous surveys and information contained in the *Biological Resources Assessment for the* ±*24-acre Mammoth Yosemite Airport Terminal Area Development Plan Study Area (*Salix 2020*),* the *Mammoth Yosemite Airport United Air Service Final EA* (URS 2010), the *Biological Assessment: Unincorporated Communities of Mono County DRAFT* (Paulus 2014), the *Mono County Master Biological Assessment* (Mono County CDD Planning Department Staff 2010), the *Biological Assessment for the Mammoth Yosemite Airport Wildlife Hazard Management Plan* (Wallace Environmental Consulting, 2015), and *the Feasibility Study Report for Wildlife Vehicle Collision Reduction in Caltrans District 9* (CalTrans 2016). Also incorporated into the following discussions, where appropriate, are observations from site assessments and general wildlife surveys conducted in association with a Wildlife Hazard Assessment (WHA) prepared for Town of Mammoth Lakes in December 2015 (Advantage Consulting, LLC 2015).

Salix Consulting, Inc. conducted a field evaluation in September 2019 to assess existing conditions and determine if the site could support any special status species.

3.1.1 Soils

One soil unit has been mapped within the study area: Watterson family-Torriorthentic Haploxerolls complex, 5 to 15 percent slopes. The components of the complex are described below.

Torriorthentic Haploxerolls (40%)

The Torriorthentic Haploxerolls component makes up 40 percent of the map unit. Slopes are 15 to 30 percent. This component is on alluvial fans, alluvial plains. The parent material consists of alluvium and/or colluvium. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat excessively drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 7e. This soil does not meet hydric criteria.

Watterson family (40%)

The Watterson family component makes up 40 percent of the map unit. Slopes are 15 to 30 percent. This component is on alluvial fans, alluvial plains. The parent material consists of alluvium. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 2 percent.

3.1.2 Hydrology

The Action Area is in the Convict Creek HUC12 watershed (180901020207), which is part of the greater Crowley Lake HUC8 watershed (18090102). Surface water, which is minimal to non-discernable, trends toward the northeast corner of the study area before exiting the site. Although there is no significant surface drainage apparent, water appears to continue in a southeasterly direction along the base of Doe Ridge for approximately 1 mile before joining a drainage southeast of the runway. From there, water continues to flow southeast in the drainage for approximately 0.5 miles before draining into Convict Creek. Convict Creek flows southeasterly for approximately 4.5 miles before draining into Crowley Lake.

3.1.3 Waters of the U.S.

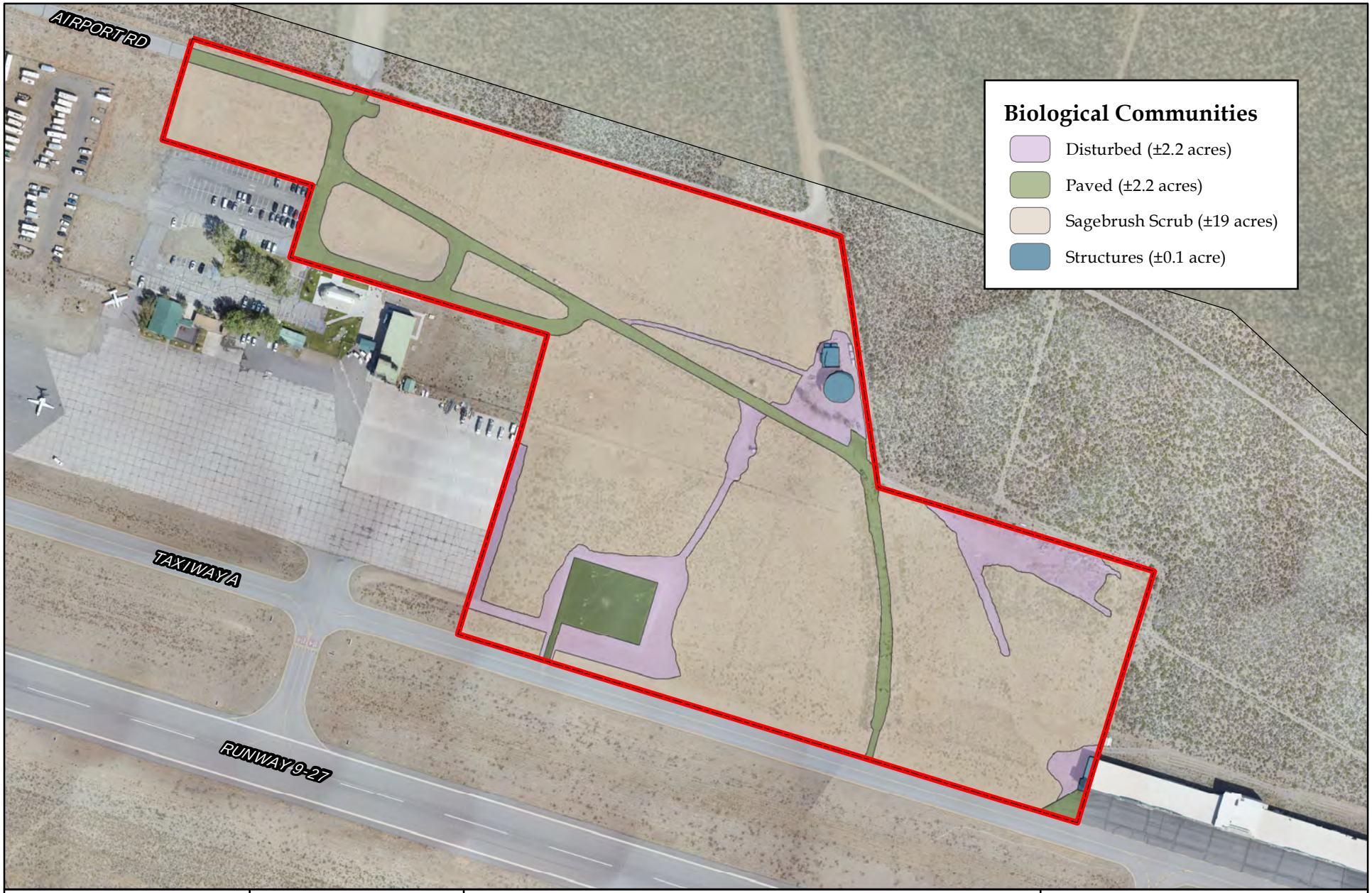
The study area was assessed for waters of the U.S. by reviewing aerial photography and through a thorough ground assessment. The study area contains no depressions that hold water for an extended period, groundwater discharge areas, or surface drainages. There are no waters of the U.S. in the study area.

3.1.4 Biological Communities

One primary biological community is present within the study area– sagebrush scrub, and the site also contains three other distinct areas: pavement, disturbed areas, and structures, as illustrated in Figure 4 and summarized in Table 1. Four aerial site photos are presented in Figures 5a and 5b, and four representative ground photos are presented in Figures 5c and 5d.

Table 1.
Biological Communities Present within the
Mammoth Yosemite Airport Terminal Area Development Project Action Area

Biological Community	Approximate Acreage
Sagebrush scrub	19
Paved	2.5
Disturbed	2.5
Structures	<0.1
Total	**24**



Salix consulting, inc.

N

0 125 250

Feet

Action Area
(±23.6 acres)

Imagery: 9-17-19 Salix Consulting
Overlaid on DigitalGlobe 6/19/2015 Basemap

Figure 4

BIOLOGICAL COMMUNITIES MAP

Mammoth Yosemite Airport

Town of Mammoth Lakes, Mono County, CA

Sagebrush Scrub

The unpaved areas of the study area are composed of sagebrush scrub, characterized by low, generally sparse shrubs and native and weedy herbaceous species. Common species include sagebrush (*Artemisia tridentata*), antelope bush (*Purshia tridentata*), rubber rabbitbrush(*Ericameria nauseosa*), Parry's rabbitbrush (*E. parryi*), desert peach (*Prunus andersonii*), tumbleweed (*Salsola tragus*), and cheatgrass (*Bromus techtorum*). Vegetative cover over most of this habitat type is less than 50%.

Paved

Approximately 2.5 acres of the study area is paved and lacks vegetation.

Disturbed

Approximately 2.5 acres of the study area is dirt roads and ruderal surfaces with little or no vegetation.

Structures

A small portion of the study area has existing structures, including a water tank, a maintenance shed and the edge of a hanger. There are planted trees on the runway side of the water tank (mostly aspen- the only trees in the study area).

3.1.5 Wildlife Associations

The Action Area occurs adjacent to the existing airport facility, and most of the ground is influenced by airport operations, including infrastructure and vegetation management. Wildlife species occur throughout the area but are generally transient foragers that do not linger. Sign of mule deer (*Odocoileus hemionus*) (tracks) was present, although none were observed during the site visits. Other mammal tracks were observed but not identified. Bird utilization was low during the two-day site visit. Species observed included Brewer's blackbird (*Euphagus cyanocephalus)*, northern flicker (*Colaptes auratus)*, spotted towhee (*Pipilo maculatus)*, western scrub-jay (*Aphelocoma californica)*, common raven (*Corvus corax)*, dark-eyed Junco (*Junco hyemalis)*, house sparrow (*Passer domesticus)*, red-tailed hawk (*Buteo jamaicensis)*, turkey vulture (*Cathartes aura)*, house finch (*Haemorhous mexicanus)*, green-tailed towhee (*Pipilo chlorurus)*, northern mockingbird (*Mimus polyglottos*, and mourning dove (*Zenaida macroura)*. Rodent burrows were observed, but other than golden-mantled ground squirrel (*Spermophilus lateralis*), few live animals were observed.

Great Basin mixed scrub and big sagebrush scrub habitat in the area surrounding the airport provide forage for populations of mule deer belonging to the Round Valley herd. The migration route of this herd passes through an area south of the airport and U.S. Route 395, and the airport is part of a "holding area" where deer may linger for up to 6-10 weeks (Caltrans 2016). The Round Valley herd has experienced decline and fluctuation in population numbers (Town of Mammoth Lakes 2002) and the biggest "hot-spot" for deer/vehicle "conditions" along US 395 is located between Benton Crossing Road and Mt. Morrison Rd, just east of the airport (Caltrans 2016).

Looking west over action area. *Photo Date 9-16-19.*

Looking east over action area. *Photo Date 9-16-19.*

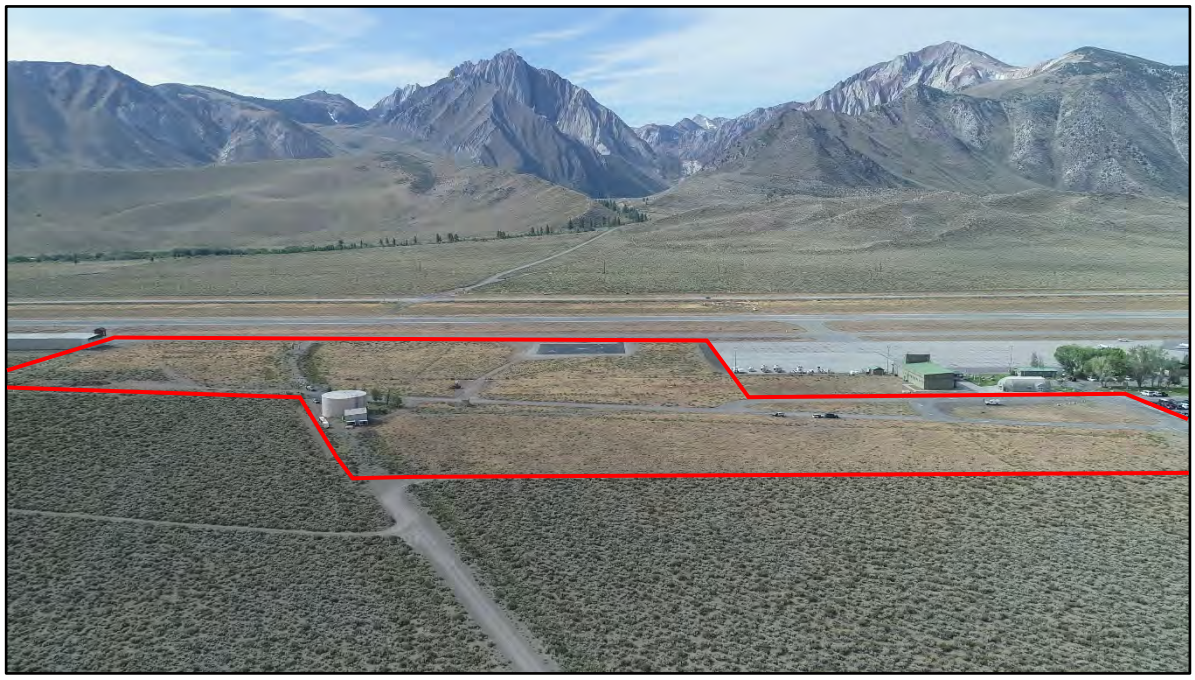
Salix consulting, inc.

Figure 5a

SITE PHOTOS

Mammoth Yosemite Airport

Town of Mammoth Lakes, Mono County, CA



Looking south over action area. *Photo Date 9-16-19.*

Looking north over action area. *Photo Date 9-16-19.*

Salix consulting, inc.

Figure 5b

SITE PHOTOS

Mammoth Yosemite Airport

Town of Mammoth Lakes, Mono County, CA

Looking east over action area. *Photo Date 9-17-19.*

Looking southeast over eastern portion of action area and proposed AARF building. *Photo Date 9-17-19.*

Salix consulting, inc.

Figure 5c

SITE PHOTOS

Mammoth Yosemite Airport

Town of Mammoth Lakes, Mono County, CA

Looking west over action area toward existing terminal.
Photo Date 9-17-19.

Looking southeast over southern half of action area.
Photo Date 9-17-19.

Salix consulting, inc.

Figure 5d

SITE PHOTOS

Mammoth Yosemite Airport

Town of Mammoth Lakes, Mono County, CA

The Wildlife Hazard Assessment (WHA) prepared for Town of Mammoth Lakes in December 2015 recommended that an 8-foot chain link fence be constructed along the airport boundary to prevent deer and other wildlife from entering the airfield (Advantage Consulting, LLC 2015). The fence has not yet been constructed.

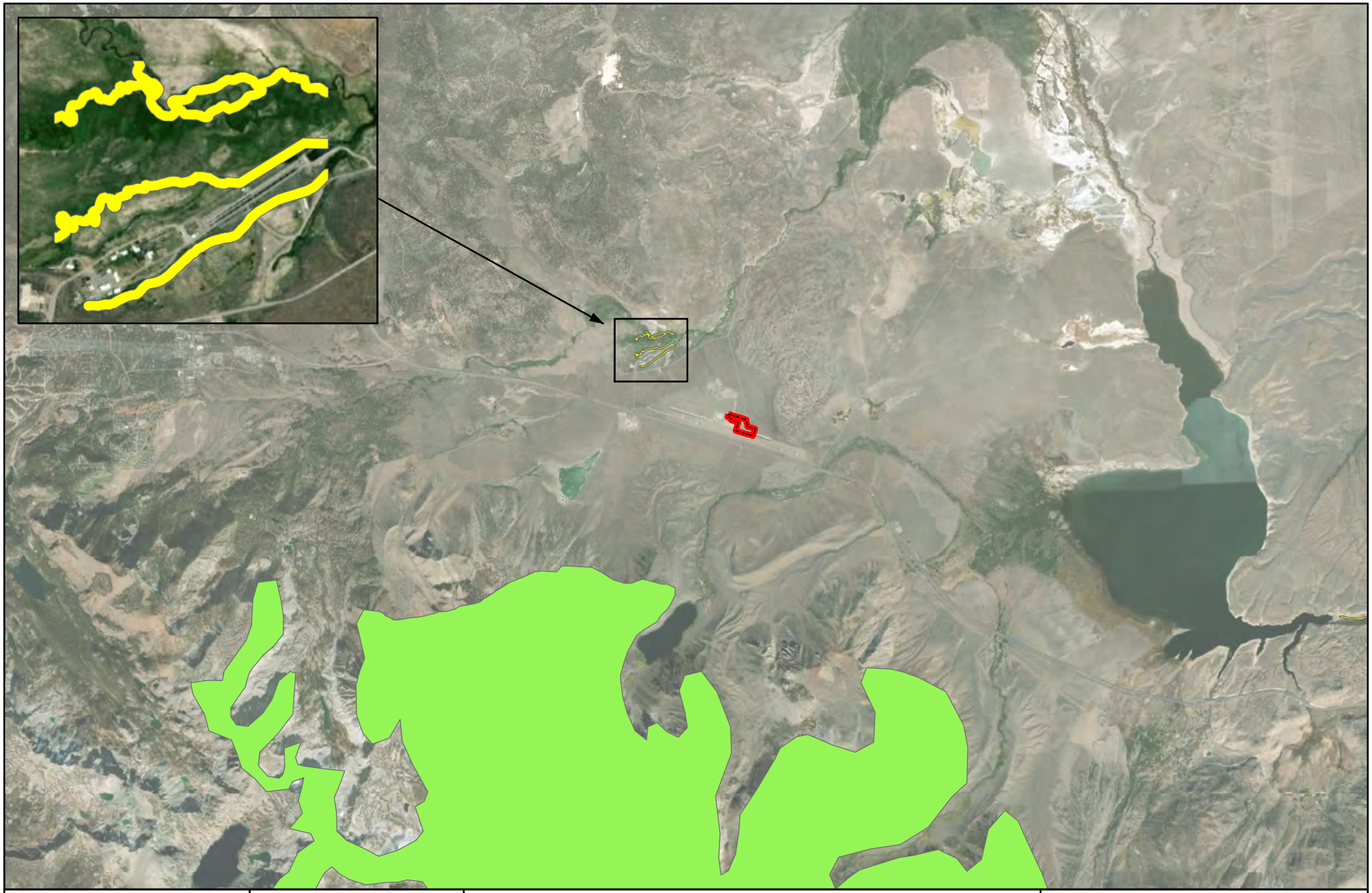
4.0 FEDERAL ENDANGERED, THREATENED, CANDIDATE, AND PROPOSED THREATENED OR PROPOSED ENDANGERED SPECIES

Lists of federally endangered (E), threatened (T), candidate (C), and proposed endangered or threatened (PE/PT) species known to occur (and their critical habitat) in the broader region surrounding the Action Area were obtained from the U.S. Fish and Wildlife Service (USFWS or Service) Information for Planning & Consultation (IPaC) query (USFWS 2020) (Appendix A). The California Natural Diversity Data Base (CNDDB 2020) was also queried for occurrence information on federally listed species within five US Geographic Survey (USGS) quadrangles surrounding the Action Area including the Whitmore Hot Springs, Old Mammoth, Convict Lake, Watterson Canyon, and Toms Place USGS quadrangles (Appendices B1 and B2). The following 10 federally listed species that may be present were included on these lists:

- Fisher (*Pekania pennanti*) (E)
- North American Wolverine (*Gulo gulo luscus*) (PT)
- Sierra Nevada bighorn sheep (*Ovis canadensis sierrae*) (E)
- Sierra Nevada red fox (*Vulpes vulpes necator*) (PE)
- Yosemite toad (*Anaxyrus canorus*) (T)
- Sierra Nevada yellow-legged frog (*Rana sierrae*) (E)
- Lahontan cutthroat trout (*Oncorhynchus clarkii henshawi*) (T)
- Owens tui chub (*Siphateles bicolor snyderi*) (E)
- Owens pupfish (*Cyprinodon radiosus*) (E)
- Whitebark pine *(Pinus albicaulis*) (C)

4.1 Critical Habitat

Critical habitat is defined by the USFWS as "a specific geographic area (s) that contains features essential for the conservation of a threatened or endangered species and that may require specific management and protection." The Action Area occurs approximately one (1) mile southeast of Critical Habitat in Hot Creek for the federally listed Owens tui chub, and approximately 2.5 miles northeast of the northeastern boundary of Critical Habitat for the federally listed Sierra Nevada bighorn sheep. The Action Area does not occur within the boundaries of either of these Critical Habitats (Figure 6), and the Action Area does not occur within the boundaries of Critical Habitat for the federally listed Sierra Nevada yellow-legged frog or the Yosemite toad.



Salix consulting, inc.

Figure 6

CRITICAL HABITATS MAP

Mammoth Yosemite Airport

Town of Mammoth Lakes, Mono County, CA

5.0 EVALUATION OF SPECIES AND CRITICAL HABITAT

5.1 Status of Species in Action Area

Records from the USFWS along with previous field surveys were used to inform whether endangered, threatened, or candidate species are present on the site or have suitable habitat that could be utilized by the species within the Action Area.

Field assessments of the study area were conducted on September 16 and 17, 2019, that focused on the proposed terminal development area. The purpose of the survey was to review the findings of previous surveys, to ascertain if conditions had changed since the last field surveys in the area, to determine if habitat was present that could support any of the special-status species, and to determine if any of the species listed above were present.

It was determined that none of the identified 10 federally listed sensitive plant or animal species were present in the areas examined. In addition, As illustrated in Table 2 below, it was also determined that no federally listed species have potential to occur within or adjacent to the Action Area due to the absence of suitable habitat needed for their survival. Species were eliminated from further consideration based on review of appropriate species life history and occurrence literature, state and federal databases, prior studies, and recent site conditions.

Figure 7 following the table shows all the recorded occurrences of federally listed and candidate species (wildlife and plants respectively) within a five (5)- mile radius of the Action Area.

Table 2
Federally Listed Species Known from the Region of the
Mammoth Yosemite Airport Terminal Area Development Project Action Area

Species	Federal Status*	Preferred Habitat	Critical Habitat Present?	Potential for Occurrence
Plants				
Whitebark pine *(Pinus albicaulis)*	C	Upper coniferous forest; subalpine forest	None	None. No forest occurs within the Action Area, or immediately adjacent to the airport property. Action Area occurs below the local elevational range of the species.
Fish				
Lahontan cutthroat trout (*Oncorhynchus clarkii henshawi*)	T	Historically found in all cold waters of the Lahontan Basin, including Independence Lake.	None	None. No suitable aquatic habitat occurs within the Action Area.

Table 2
Federally Listed Species Known from the Region of the
Mammoth Yosemite Airport Terminal Area Development Project Action Area

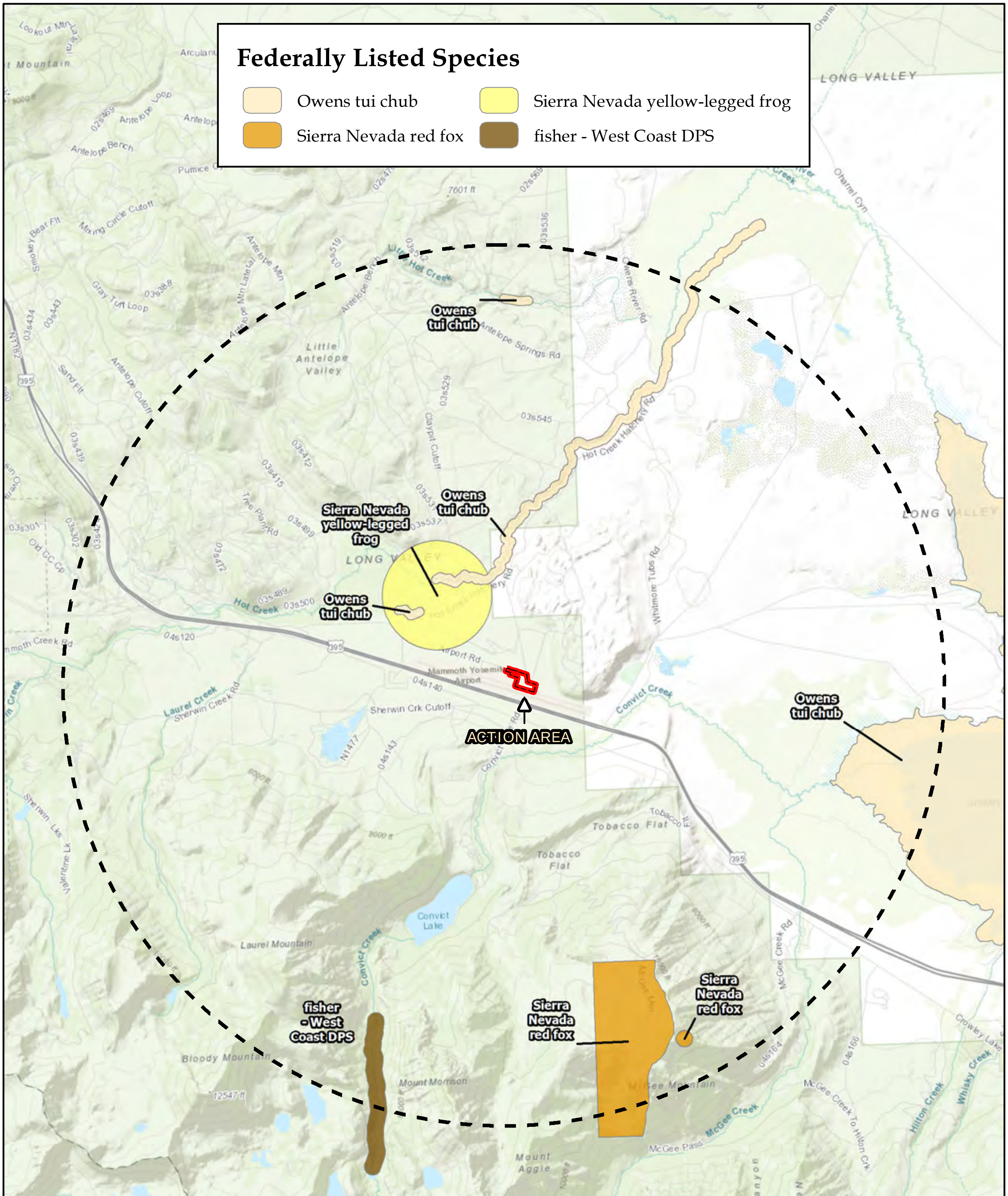
Species	Federal Status*	Preferred Habitat	Critical Habitat Present?	Potential for Occurrence
Owens tui chub (*Siphateles bicolor snyderi*)	E	Three existing natural populations: at the Owens River Gorge, at source springs of CDFW Hot Creek Hatchery, and a pond and ditches at Cabin Bar Ranch near Owens Dry Lake. Other populations have been established with landowners in the region.	±1-mile NW of Action Area (Hot Creek).	None. No suitable aquatic habitat occurs within the Action Area. Critical Habitat in Hot Creek more than one mile northwest of the Action Area.
Owens pupfish (*Cyprinodon radiosus*)	E	Spring pools, sloughs, irrigation ditches, swamps, and flooded pastures in the Owens Valley from Fish Slough in Mono County to Lone Pine in Inyo County. Currently confined to five populations in the Owens Valley.	None	None. No suitable aquatic habitat occurs within the Action Area.
Amphibians and Reptiles				
Sierra Nevada yellow-legged frog (*Rana sierrae*)	E	Associated with streams, lakes, and ponds in montane riparian, lodgepole pine, subalpine conifer and wet meadow habitats. Occurs in the northern and central portions of the Sierra Nevada at elevations above 4,500 feet. Always near water.	None	None. No suitable habitat occurs within the Action Area.
Yosemite toad (*Anaxyrus canorus*)	T	Endemic to California. Alpine County south to Fresno County at high elevations in the Sierra Nevada mountains. Inhabits wet mountain meadows and the borders of forests. 4,800 - 12,000 ft.	None	None. No suitable habitat occurs within the Action Area.

Table 2
Federally Listed Species Known from the Region of the
Mammoth Yosemite Airport Terminal Area Development Project Action Area

Species	Federal Status*	Preferred Habitat	Critical Habitat Present?	Potential for Occurrence
Mammals				
Sierra Nevada red fox (*Vulpes vulpes necator*)	PE	Occurs in conifer forests and rugged alpine landscape of the Sierra Nevada and Cascade ranges between 4,000 feet and 12,000 feet, most often above 7,000 feet.	None	None. No suitable habitat within or near Action Area.
Sierra Nevada bighorn sheep (*Ovis canadensis sierrae*)	E	Typical terrain is rough, rocky and steep; also encompasses alpine meadows, summit plateaus, and hanging meadows fed by springs within escape terrain. Summer range is 10,000-14,000 ft. Winter range typically 5,000-9,000 ft	NE boundary of Critical Habitat is ±2.5 miles south of Action Area	None. No suitable habitat within or near Action Area.
North American Wolverine (*Gulo gulo luscus*)	PT	Habitat generally consists of open terrain above the timberline but has been observed at 1500 feet. Prefers areas with low human disturbance. Uses caves, hollows in cliffs, logs, rock outcrops, and burrows for cover, generally in denser forest stages	None	None. No suitable habitat within or near Action Area. Proximity to human activity also precluded occurrence
Fisher (*Pekania pennanti*)	E	Occurs in intermediate to large-tree stage coniferous forests and riparian woodlands with a high percent level of canopy closure. .	None	None. No suitable habitat present within or near Action Area.

*Status Codes:

E Federal Endangered
T Federal Threatened
C Federal Candidate Species
PE Federal Proposed Endangered
PT Federal Proposed Threatened



Salix consulting, inc.

N

0 4,000 8,000

Feet

Action Area

5-Mile Radius

Figure 7

CNDDB OCCURRENCES MAP

Mammoth Yosemite Airport

Town of Mammoth Lakes, Mono County, CA

5.1.1 Species Discussion

Plants

Whitebark pine *(Pinus albicaulis)* is an important tree species in high-elevation ecosystems of western North America but has suffered widespread mortality throughout its range from the combined effects of mountain pine beetle outbreaks and white pine blister rust infection. Whitebark pine is a small to large evergreen conifer. Tree height typically ranges from 40 to 60 feet at maturity. Whitebark pine is most common on rocky, well-drained sites. Best development occurs on sheltered, north-facing slopes and basins. In the southern Sierra Nevada, whitebark pine is confined to moist north slopes at elevations of 10,000 to 12,100 feet. It is a Candidate species. The Action Area is located below the range of the species in the southern Sierra Nevada, and no suitable habitat is present within the Action Area to support the species.

Fish and Amphibians

Two of the fish or amphibian species in Table 2 above are reported to occur within a 5-mile radius (* below) of the Action Area. Neither of these nor any other of the identified species were determined to have any potential for occurring onsite due to the total absence of suitable aquatic habitat within the Action Area. These species include:

- Owens pupfish (*Cyprinodon radiosus)*
- Lahontan cutthroat trout (*Oncorhynchus clarki henshawi)*
- Owens tui chub (*Siphateles bicolor snyderi)**
- Yosemite toad (*Anaxyrus canorus)*
- Sierra Nevada yellow-legged frog (*Rana sierrae)**

Mammals

Two of the four identified mammalian species in Table 2 above are reported to occur within a 5-mile radius (* below), and all were determined to have no potential for occurring within the Action Area due to the absence of suitable habitats (streams, riparian, forests, rocky terrain). In one case (California wolverine), the Action Area's proximity to human activity also precluded occurrence. These mammals include:

- Sierra Nevada red fox (*Vulpes vulpes necator)**
- Fisher - West Coast DPS (*Pekania pennanti)**
- California wolverine (*Gulo gulo)*
- Sierra Nevada bighorn sheep (*Ovis canadensis sierrae)*

5.1.2 Species That May Be Affected

No identified species were determined to have potential to be present within the Action Area. No species may be affected by the Proposed Action.

6.0 EFFECTS OF THE PROPOSED ACTION

This section describes the effects of the Proposed Action on federally listed species within the Action Area. Activities associated with the Proposed Action could directly or indirectly affect federally listed species and their habitat. These effects are described below.

6.1 Direct Effects

As defined under the federal ESA, direct effects are caused by the Proposed Action and occur at the time of the action. Based on previous studies and review of pertinent literature, all other species identified in the research and listed in Table 2 were determined to have no potential to occur within the Action Area. The Action Area does not include any aquatic habitat or forests to sustain any of the identified species. Thus, no direct effects are anticipated to any of the species listed above within the Action Area.

In addition, no direct disturbance of neighboring critical habitat for either Owens tui chub (to the northeast) or Sierra Nevada big horn sheep (to the south) will occur as a result of the Proposed Action.

6.2 Indirect Effects

As defined under the federal ESA, indirect effects are caused by the Proposed Action and occur later in time and are reasonably certain to occur. Indirect effects may occur outside the area directly affected by the action.

No indirect disturbance of neighboring critical habitat for either Owens tui chub (to the northeast) or Sierra Nevada big horn sheep (to the south) will occur as a result of the Proposed Action, and it is unlikely that critical habitat for either species which is located well beyond the boundaries of the Action Area will be indirectly affected by proposed construction and grading activities that occur within the Action Area

The Proposed Action has been designed to avoid inadvertent alteration of the hydrology of the airport property.

6.3 Critical Habitat

The Action Area occurs approximately one (1) mile southeast of Critical Habitat in Hot Creek for the federally listed Owens tui chub, and approximately 2.5 miles northeast of the northeastern boundary of Critical Habitat for the federally listed Sierra Nevada bighorn sheep. The Action Area does not occur within the boundaries of either of these Critical Habitats (Figure 6), and the Action Area does not occur within the boundaries of Critical Habitat for the federally listed Sierra Nevada yellow-legged frog or the Yosemite toad.

No direct or indirect effects on critical habitat are anticipated as a result of the Proposed Action.

6.4 Cumulative Effects

Cumulative effects are those effects resulting from future state, Tribal, local, or private activities not involving federal activities, that are reasonably certain to occur within the Action Area of a Proposed Action (USFWS and NMFS 1998). Future federal actions that are unrelated to the

Proposed Action are not considered cumulative impacts because they require a separate consultation pursuant to Section 7 of the federal ESA.

No other state, Tribal, local, or private activities are anticipated to occur within the Action Area. Further airport improvements may be proposed in the future.

7.0 CONCLUSION AND DETERMINATION

Based on the Effects of the Proposed Action identified in Section 2.0, along with the implementation of conservation measures identified in Section 2.5, this document concludes that the expected outcome of the Proposed Action includes the following:

- Because habitat is not present to support any of the 10 identified species within the Action Area, the Proposed Action will result in no direct or indirect effects to those species, and the Action will result in *no effect* to the following federally species.
    - Fisher (*Pekania pennanti*) (E)
    - North American Wolverine (*Gulo gulo luscus*) (PT)
    - Sierra Nevada bighorn sheep (*Ovis canadensis sierrae*) (E)
    - Sierra Nevada red fox (*Vulpes vulpes necator*) (PE)
    - Yosemite toad (*Anaxyrus canorus*) (T)
    - Sierra Nevada yellow-legged frog (*Rana sierrae*) (E)
    - Lahontan cutthroat trout (*Oncorhynchus clarkii henshawi*) (T)
    - Owens tui chub (*Siphateles bicolor snyderi*) (E)
    - Owens pupfish (*Cyprinodon radiosus*) (E)
    - Whitebark pine *(Pinus albicaulis*) (C)
- The Proposed Action will result in no disturbance to either neighboring Critical Habitats for federally listed Owens tui chub and for the federally listed Sierra Nevada bighorn sheep (as discussed in Section 6.3). Additionally, Conservation Measures specified in Section 2.5 will be implemented to further ensure no direct or indirect impacts. Therefore, the Proposed Action will result in *no effect* to the Critical Habitat for either species.

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Appendix A
Potentially Occurring Special-Status Species
USFWS IPaC Query Results

APPENDIX A

IPaC Information for Planning and Consultation **U.S. Fish & Wildlife Service**

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

Mono County, California

Local office

Reno Fish And Wildlife Office

(775) 861-6300
(775) 861-6301

1340 Financial Boulevard, Suite 234
Reno, NV 89502-7147

http://www.fws.gov/nevada/

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species

[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

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1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information.
2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Mammals

NAME	STATUS
Fisher Pekania pennanti No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/3651	Endangered
North American Wolverine Gulo gulo luscus No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/5123	Proposed Threatened
Sierra Nevada Bighorn Sheep Ovis canadensis sierrae There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/3646	Endangered

Amphibians

NAME	STATUS
Sierra Nevada Yellow-legged Frog Rana sierrae There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/9529	Endangered
Yosemite Toad Anaxyrus canorus There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/7255	Threatened

Fishes

NAME	STATUS
Lahontan Cutthroat Trout Oncorhynchus clarkii henshawi No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/3964	Threatened
Owens Pupfish Cyprinodon radiosus No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/4982	Endangered
Owens Tui Chub Gila bicolor ssp. snyderi There is **final** critical habitat for this species. Your location overlaps the critical habitat. https://ecos.fws.gov/ecp/species/7289	Endangered

Conifers and Cycads

NAME	STATUS
Whitebark Pine Pinus albicaulis No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/1748	Candidate

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

This location overlaps the critical habitat for the following species:

NAME	TYPE
Owens Tui Chub Gila bicolor ssp. snyderi https://ecos.fws.gov/ecp/species/7289#crithab	Final

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act [1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php
- Measures for avoiding and minimizing impacts to birds http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php
- Nationwide conservation measures for birds http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional

maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)
Bald Eagle Haliaeetus leucocephalus This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Dec 1 to Aug 31
Brewer's Sparrow Spizella breweri This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9291	Breeds May 15 to Aug 10
Golden Eagle Aquila chrysaetos This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/1680	Breeds Dec 1 to Aug 31
Green-tailed Towhee Pipilo chlorurus This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9444	Breeds May 1 to Aug 10
Lesser Yellowlegs Tringa flavipes This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9679	Breeds elsewhere

Olive-sided Flycatcher Contopus cooperi — Breeds May 20 to Aug 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/3914

Pinyon Jay Gymnorhinus cyanocephalus — Breeds Feb 15 to Jul 15
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9420

Sage Thrasher Oreoscoptes montanus — Breeds Apr 15 to Aug 10
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/9433

White Headed Woodpecker Picoides albolarvatus — Breeds May 1 to Aug 15
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/9411

Willow Flycatcher Empidonax traillii — Breeds May 20 to Aug 31
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/3482

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence

across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.

3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

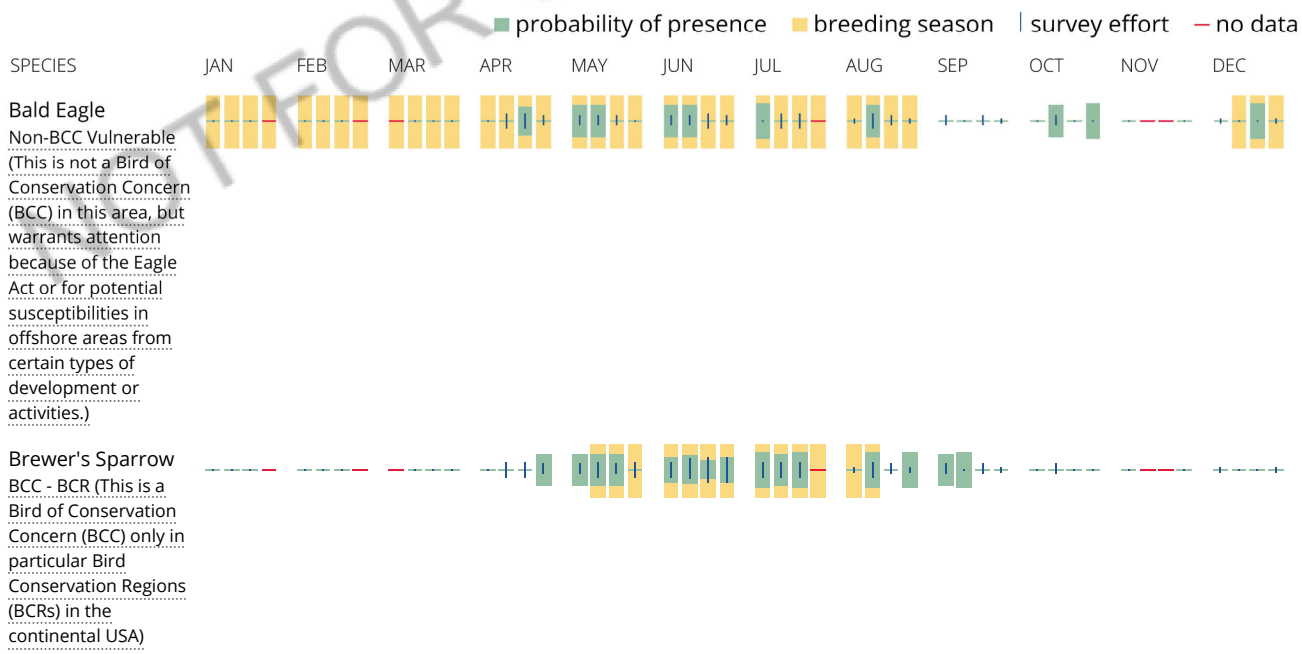
Breeding Season (▪)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

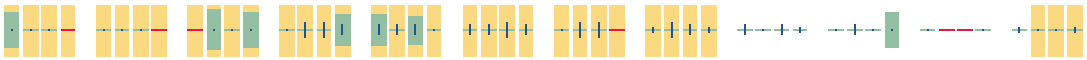
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

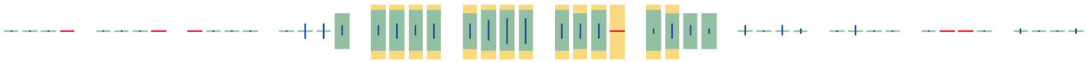
Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



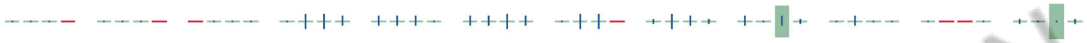
Golden Eagle
BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)



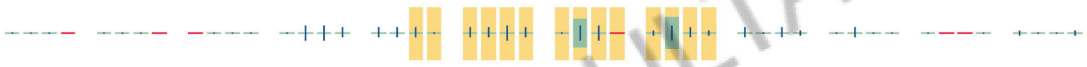
Green-tailed Towhee
BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)



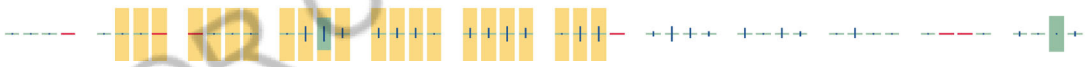
Lesser Yellowlegs
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



Olive-sided Flycatcher
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



Pinyon Jay
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



Sage Thrasher
BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)

White Headed Woodpecker
BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)

Willow Flycatcher
BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures and/or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the AKN Phenology Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets .

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: The Cornell Lab of Ornithology All About Birds Bird Guide, or (if you are unsuccessful in locating the bird of interest there), the Cornell Lab of Ornithology Neotropical Birds guide. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

FRESHWATER EMERGENT WETLAND

- PEM1C
- PEM1A
- PEM1F
- PEM1B
- PEM1Cx

FRESHWATER FORESTED/SHRUB WETLAND

- PSSC
- PSSA
- PSSCx

FRESHWATER POND

- PUBHh
- PUSKx
- PABKx

RIVERINE

- R2UBH
- R5UBF

A full description for each wetland code can be found at the National Wetlands Inventory website

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

Appendices B1 and B2
Potentially Occurring Special-Status Species
CNDDB Query Result

Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Old Mammoth (3711868) OR Whitmore Hot Springs (3711867) OR Convict Lake (3711857) OR Watterson Canyon (3711866) OR Toms Place (3711856))
 AND Taxonomic Group IS (Fish OR Amphibians OR Reptiles OR Birds OR Mammals OR Mollusks OR Arachnids OR Crustaceans OR Insects)

Mammoth airport animals -5-quad

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Accipiter gentilis northern goshawk	ABNKC12060	None	None	G5	S3	SSC
Anaxyrus canorus Yosemite toad	AAABB01040	Threatened	None	G2G3	S2S3	SSC
Aplodontia rufa californica Sierra Nevada mountain beaver	AMAFA01013	None	None	G5T3T4	S2S3	SSC
Bombus morrisoni Morrison bumble bee	IIHYM24460	None	None	G4G5	S1S2	
Buteo swainsoni Swainson's hawk	ABNKC19070	None	Threatened	G5	S3	
Catostomus fumeiventris Owens sucker	AFCJC02090	None	None	G3G4	S3	SSC
Centrocercus urophasianus greater sage-grouse	ABNLC12010	None	None	G3G4	S2S3	SSC
Coturnicops noveboracensis yellow rail	ABNME01010	None	None	G4	S1S2	SSC
Empidonax traillii willow flycatcher	ABPAE33040	None	Endangered	G5	S1S2	
Erethizon dorsatum North American porcupine	AMAFJ01010	None	None	G5	S3	
Falco mexicanus prairie falcon	ABNKD06090	None	None	G5	S4	WL
Gulo gulo California wolverine	AMAJF03010	Proposed Threatened	Threatened	G4	S1	FP
Hygrotus fontinalis travertine band-thigh diving beetle	IICOL38050	None	None	G1	S1	
Lepus townsendii townsendii western white-tailed jackrabbit	AMAEB03041	None	None	G5T5	S3?	SSC
Martes caurina sierrae Sierra marten	AMAJF01014	None	None	G5T3	S3	
Ochotona princeps schisticeps gray-headed pika	AMAEA0102L	None	None	G5T2T4	S2S4	
Oncorhynchus clarkii henshawi Lahontan cutthroat trout	AFCHA02081	Threatened	None	G4T3	S2	
Pekania pennanti fisher - West Coast DPS	AMAJF01021	Endangered	Threatened	G5T2T3Q	S2S3	SSC

Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Picoides arcticus black-backed woodpecker	ABNYF07090	None	None	G5	S2	
Pyrgulopsis wongi Wong's springsnail	IMGASJ0360	None	None	G2	S2	
Rana sierrae Sierra Nevada yellow-legged frog	AAABH01340	Endangered	Threatened	G1	S1	WL
Rhinichthys osculus ssp. 2 Owens speckled dace	AFCJB3705F	None	None	G5T1T2Q	S1S2	SSC
Rhinichthys osculus ssp. 5 Long Valley speckled dace	AFCJB3705E	None	None	G5T1	S1	SSC
Riparia riparia bank swallow	ABPAU08010	None	Threatened	G5	S2	
Siphateles bicolor snyderi Owens tui chub	AFCJB1303J	Endangered	Endangered	G4T1	S1	
Sorex lyelli Mount Lyell shrew	AMABA01020	None	None	G3G4	S3S4	SSC
Strix nebulosa great gray owl	ABNSB12040	None	Endangered	G5	S1	
Vulpes vulpes necator Sierra Nevada red fox	AMAJA03012	Proposed Endangered	Threatened	G5T1T2	S1	

Record Count: 28

Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Old Mammoth (3711868) OR Whitmore Hot Springs (3711867) OR Convict Lake (3711857) OR Watterson Canyon (3711866) OR Toms Place (3711856))
 AND Taxonomic Group IS (Ferns OR Gymnosperms OR Monocots OR Dicots OR Lichens OR Bryophytes)

Mammoth Air Plants - 5-quad

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Astragalus johannis-howellii Long Valley milk-vetch	PDFAB0F4H0	None	Rare	G2	S1	1B.2
Astragalus lemmonii Lemmon's milk-vetch	PDFAB0F4N0	None	None	G2	S2	1B.2
Astragalus monoensis Mono milk-vetch	PDFAB0F5N0	None	Rare	G2	S2	1B.2
Atriplex pusilla smooth saltbush	PDCHE041P0	None	None	G4	SH	2B.1
Boechera bodiensis Bodie Hills rockcress	PDBRA06240	None	None	G3	S3	1B.3
Boechera cobrensis Masonic rockcress	PDBRA06080	None	None	G5	S3	2B.3
Boechera dispar pinyon rockcress	PDBRA060F0	None	None	G3	S3	2B.3
Botrychium ascendens upswept moonwort	PPOPH010S0	None	None	G3G4	S2	2B.3
Botrychium crenulatum scalloped moonwort	PPOPH010L0	None	None	G4	S3	2B.2
Botrychium minganense Mingan moonwort	PPOPH010R0	None	None	G4G5	S3	2B.2
Calochortus excavatus Inyo County star-tulip	PMLIL0D0F0	None	None	G2	S2	1B.1
Carex scirpoidea ssp. pseudoscirpoidea western single-spiked sedge	PMCYP03C85	None	None	G5T4	S2	2B.2
Claytonia megarhiza fell-fields claytonia	PDPOR030A0	None	None	G5	S2	2B.3
Crepis runcinata fiddleleaf hawksbeard	PDAST2R0K0	None	None	G5	S3	2B.2
Draba cana canescent draba	PDBRA110M0	None	None	G5	S2	2B.3
Draba lonchocarpa spear-fruited draba	PDBRA111F0	None	None	G5	S1	2B.3
Draba praealta tall draba	PDBRA11210	None	None	G5	S3	2B.3
Elymus scribneri Scribner's wheat grass	PMPOA2H170	None	None	G5	S3	2B.3

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Eremothera boothii ssp. boothii Booth's evening-primrose	PDONA03052	None	None	G5T4	S3	2B.3
Eremothera boothii ssp. intermedia Booth's hairy evening-primrose	PDONA03056	None	None	G5T3T4	S3	2B.3
Helodium blandowii Blandow's bog moss	NBMUS3C010	None	None	G4	S2	2B.3
Hulsea vestita ssp. inyoensis Inyo hulsea	PDAST4Z073	None	None	G5T2T3	S1S2	2B.2
Ivesia kingii var. kingii alkali ivesia	PDROS0X092	None	None	G4T3Q	S2	2B.2
Kobresia myosuroides seep kobresia	PMCYP0F010	None	None	G5	S2	2B.2
Lupinus duranii Mono Lake lupine	PDFAB2B1E0	None	None	G2	S2	1B.2
Mentzelia torreyi Torrey's blazing star	PDLOA031S0	None	None	G4	S2	2B.2
Micromonolepis pusilla dwarf monolepis	PDCHE0F020	None	None	G5	S3?	2B.3
Orobanche ludoviciana var. arenosa Suksdorf's broom-rape	PDORO04073	None	None	G5T5	S2	2B.3
Parnassia parviflora small-flowered grass-of-Parnassus	PDSAX0P0A0	None	None	G5?	S2	2B.2
Pedicularis crenulata scalloped-leaved lousewort	PDSCR1K0A0	None	None	G4	S1	2B.2
Phacelia gymnoclada naked-stemmed phacelia	PDHYD0C1X0	None	None	G4	S2	2B.3
Phacelia inyoensis Inyo phacelia	PDHYD0C2F0	None	None	G2	S2	1B.2
Sabulina stricta bog sandwort	PDCAR0G0U0	None	None	G5	S3	2B.3
Salix brachycarpa var. brachycarpa short-fruited willow	PDSAL02531	None	None	G5T5	S2	2B.3
Salix nivalis snow willow	PDSAL024K0	None	None	G5	S2	2B.3
Sphaeromeria potentilloides var. nitrophila alkali tansy-sage	PDAST8S061	None	None	G5T4?	S2	2B.2
Stuckenia filiformis ssp. alpina slender-leaved pondweed	PMPOT03091	None	None	G5T5	S2S3	2B.2
Thelypodium integrifolium ssp. complanatum foxtail thelypodium	PDBRA2N062	None	None	G5T4T5	S2	2B.2
Trichophorum pumilum little bulrush	PMCYP0Q250	None	None	G5	S3	2B.2

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Triglochin palustris marsh arrow-grass	PMJCG02040	None	None	G5	S2	2B.3
Viola purpurea ssp. aurea golden violet	PDVIO04420	None	None	G5T2	S2	2B.2

Record Count: 41

APPENDIX D: FEMA FLOOD MAP

NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The **community map repository** should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations** (BFEs) and/or **floodways** have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Coastal Base Flood Elevations shown on this map apply only landward of 0.0' North American Vertical Datum of 1988 (NAVD 88). Users of this FIRM should be aware that coastal flood elevations are also provided in the Summary of Stillwater Elevations tables in the Flood Insurance Study report for this jurisdiction. Elevations shown in the Summary of Stillwater Elevations tables should be used for construction and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures**. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study report for information on flood control structures for this jurisdiction.

The **projection** used in the preparation of this map was Universal Transverse Mercator (UTM) zone 11. The **horizontal datum** was NAD 83, GRS80 spheroid. Differences in datum, spheroid, projection or UTM zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same **vertical datum**. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at http://www.ngs.noaa.gov or contact the National Geodetic Survey at the following address:

NGS Information Services
NOAA, N/NGS12
National Geodetic Survey
SSMC-3, #9202
1315 East-West Highway
Silver Spring, Maryland 20910-3282
(301) 713-3242

To obtain current elevation, description, and/or location information for **bench marks** shown on this map, please contact the Information Services Branch of the National Geodetic Survey at **(301) 713-3242**, or visit its website at http://www.ngs.noaa.gov.

Base map information shown on this FIRM was derived from multiple sources. Base map files were provided in digital format from the National Atlas of the United States and the California Spatial Information Library (CASIL) dated 2000 or later. Additional information was photogrammetrically compiled at a scale of 1:12,000 from the National Agriculture Imagery Program (NAIP) orthophotography dated 2005.

This map reflects more detailed and up-to-date **stream channel configurations** than those shown on the previous FIRM for this jurisdiction. The floodplains and floodways that were transferred from the previous FIRM may have been adjusted to confirm to these new stream channel configurations. As a result, the Flood Profiles and Floodway Data in the Flood Insurance Study Report (which contains authoritative hydraulic data) may reflect stream channel distances that differ from what is shown on this map.

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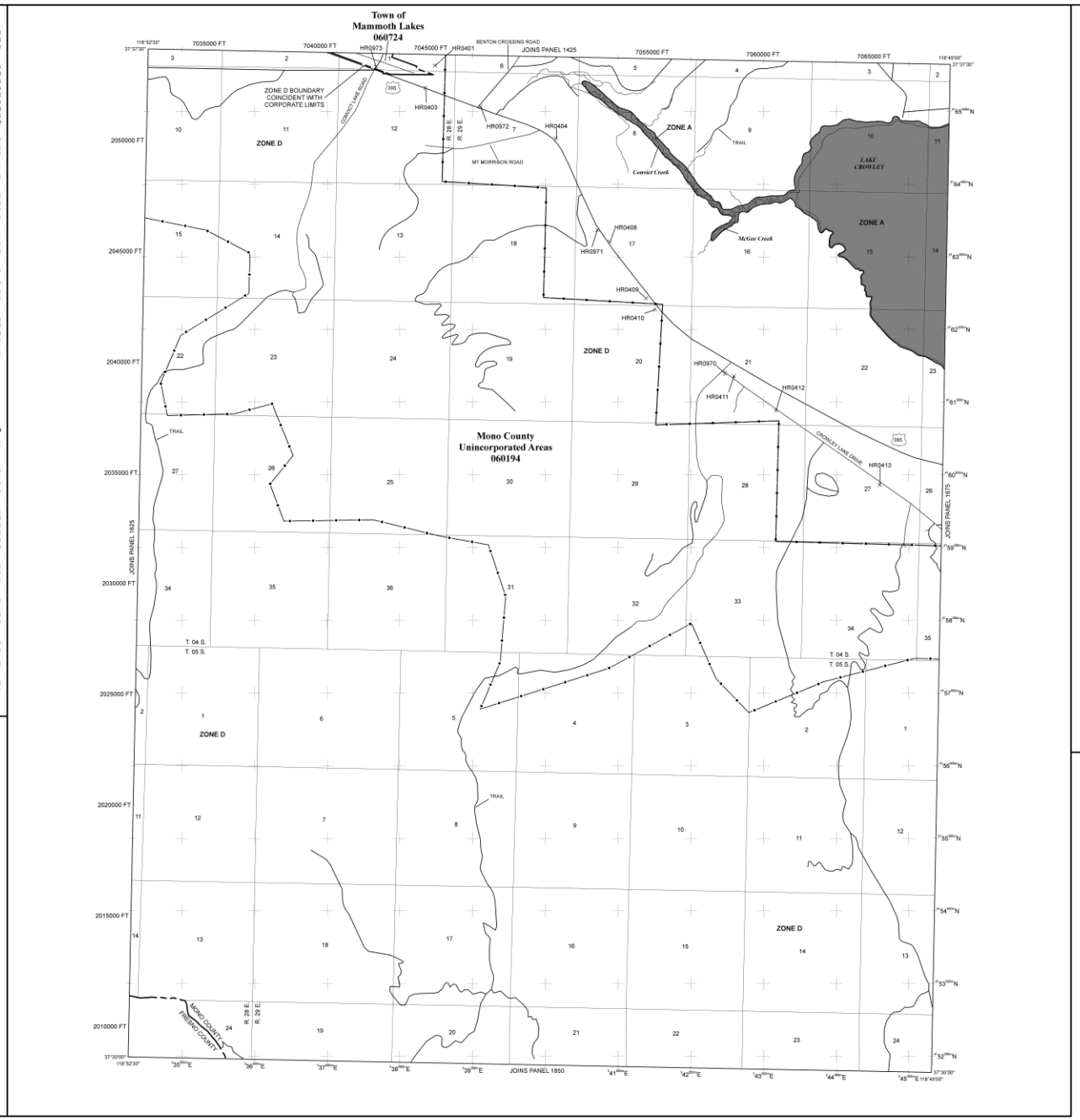

LEGEND

SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

- **ZONE A** — No Base Flood Elevations determined.
- **ZONE AE** — Base Flood Elevations determined.
- **ZONE AH** — Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.
- **ZONE AO** — Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
- **ZONE AR** — Special Flood Hazard Area formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
- **ZONE A99** — Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.
- **ZONE V** — Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.
- **ZONE VE** — Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

- **ZONE X** — Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

- **ZONE X** — Areas determined to be outside the 0.2% annual chance floodplain.
- **ZONE D** — Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

- Floodplain boundary
- Floodway boundary
- Zone D boundary
- CBRS and OPA boundary
- Boundary dividing Special Flood Hazard Area zones and boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or flood velocities.
- 513 — Base Flood Elevation line and value; elevation in feet*
- (EL 987) — Base Flood Elevation value where uniform within zone; elevation in feet*

* Referenced to the North American Vertical Datum of 1988

- A — A — Cross section Line
- 23 — 23 — Transect line
- 87°07'45", 32°22'30" — Geographic coordinates referenced to the North American Datum of 1983 (NAD 83), Western Hemisphere
- 4276000 mN — 1000-meter Universal Transverse Mercator grid values, zone 11N
- 600000 FT — 5000-foot grid values: California State Plane coordinate system, zone III (FIPSZONE 0403), Lambert Conformal Conic projection
- DX5510 — Bench mark (see explanation in Notes to Users section of this FIRM panel)
- M1.5 — River Mile

MAP REPOSITORY
Refer to listing of Map Repositories on Map Index

EFFECTIVE DATE OF COUNTYWIDE
FLOOD INSURANCE RATE MAP
February 18, 2011

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your Insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

MAP SCALE 1" = 2000'
1000 0 2000 4000 FEET
300 0 600 1200 METERS

NFIP
NATIONAL FLOOD INSURANCE PROGRAM

PANEL 1650D

FIRM
FLOOD INSURANCE RATE MAP

MONO COUNTY, CALIFORNIA
AND INCORPORATED AREAS

PANEL 1650 OF 2050

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS

COMMUNITY	NUMBER	PANEL	SUFFIX
MAMMOTH LAKES, TOWN OF	060724	1650	D
MONO COUNTY	060194	1650	D

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
06051C1650D

EFFECTIVE DATE
FEBRUARY 18, 2011

Federal Emergency Management Agency

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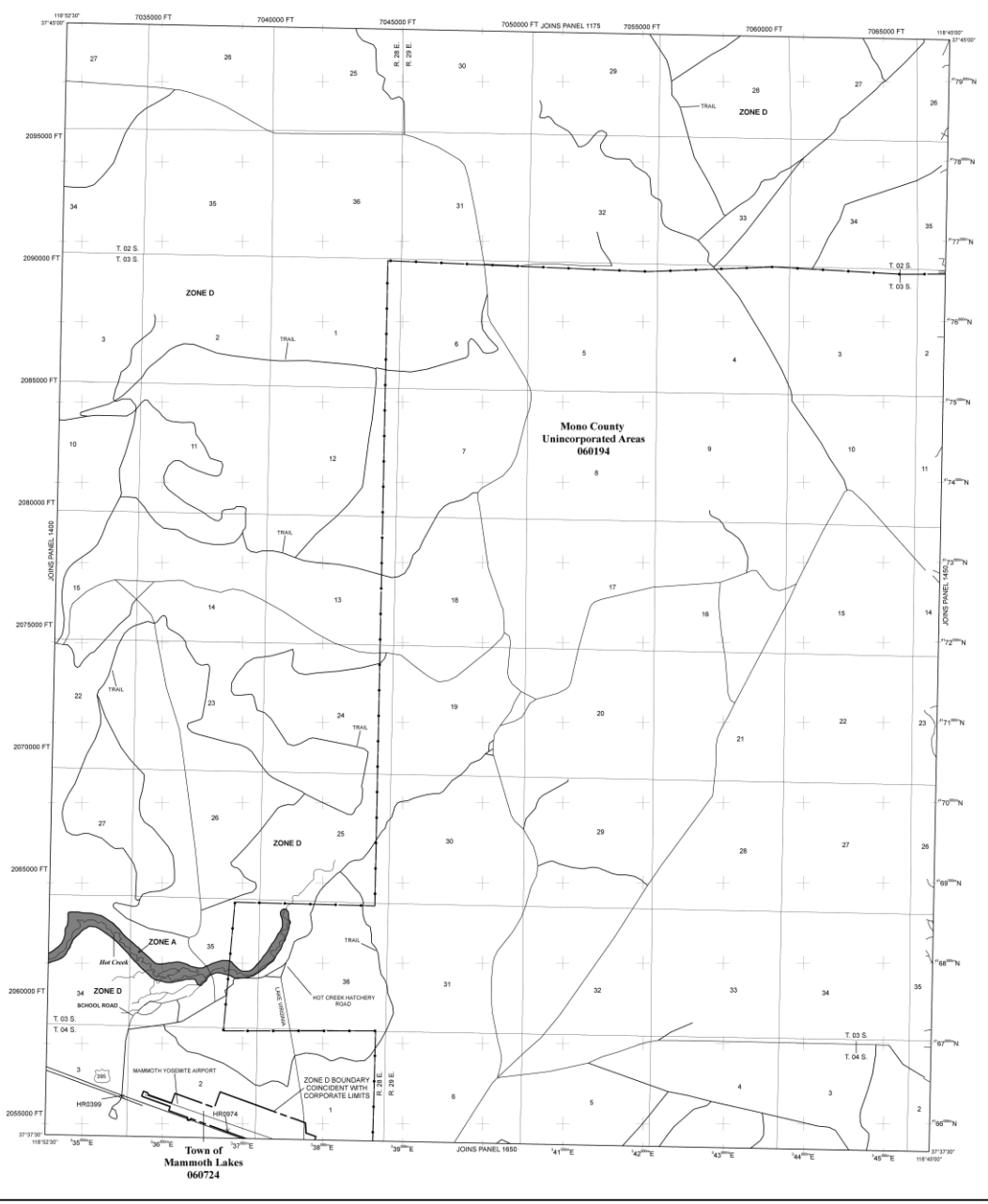

LEGEND

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OTHER FLOOD AREAS

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OTHER AREAS

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- 513 — Base Flood Elevation line and value; elevation in feet*
- (EL 987) — Base Flood Elevation value where uniform within zone; elevation in feet*

* Referenced to the North American Vertical Datum of 1988

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- (B) — (B) — Transect line
- 87°07'45", 32°22'30" — Geographic coordinates referenced to the North American Datum of 1983 (NAD 83), Western Hemisphere
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- 600000 FT — 5000-foot grid values: California State Plane coordinate system, zone III (FIPSZONE 0403), Lambert Conformal Conic projection
- DX5510 — Bench mark (see explanation in Notes to Users section of this FIRM panel)
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MAP REPOSITORY
Refer to listing of Map Repositories on Map Index

EFFECTIVE DATE OF COUNTYWIDE
FLOOD INSURANCE RATE MAP
February 18, 2011

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your Insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

MAP SCALE 1" = 2000'
1000 0 2000 4000 FEET
300 0 600 1200 METERS

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 1425D

FIRM
FLOOD INSURANCE RATE MAP

MONO COUNTY, CALIFORNIA
AND INCORPORATED AREAS

PANEL 1425 OF 2050

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS

COMMUNITY	NUMBER	PANEL	SUFFIX
MAMMOTH LAKES, TOWN OF	060724	1425	D
MONO COUNTY	060194	1425	D

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
06051C1425D

EFFECTIVE DATE
FEBRUARY 18, 2011

Federal Emergency Management Agency

APPENDIX E: AGENCY COORDINATION: SHPO

U.S. Department
of Transportation
Federal Aviation Administration

Western-Pacific Region
Airports Division

San Francisco Airports District Office
1000 Marina Blvd, Suite 220
Brisbane, CA 94005-1835

February 11, 2020

Julianne Polanco
State Historic Preservation Officer
California State Department of Parks and Recreation
1725 23rd Street, Suite 100
Sacramento, CA 95816

Subject: National Historic Preservation Act, Section 106 Consultation – Proposed Terminal Area Development at Mammoth Yosemite Airport, Mammoth Lakes, California

Dear Ms. Polanco:

The Federal Aviation Administration (FAA) is seeking to complete National Historic Preservation Act, Section 106 consultation with you regarding the Town of Mammoth Lakes' (Town) proposed Terminal Area Development at Mammoth Yosemite Airport, Mammoth Lakes, California. The Town, as the owner and operator of Mammoth Yosemite Airport, is seeking FAA approval of an Airport Layout Plan (ALP) update and federal funding support for eligible portions of the proposed project.

The FAA is the lead agency for an environmental determination in accordance with the National Environmental Policy Act and National Historic Preservation Act, Section 106 compliance. The ALP approval for the proposed improvements are a federal undertaking as defined in 36 Code of Federal Regulations (CFR) § 800.16(y).

This letter is submitted to request your concurrence with the Area of Potential Effect (APE), expedited consultation pursuant to 36 CFR § 800.3(g), and concurrence with the FAA's determination of No Historic Properties Affected. The FAA determination is supported by the enclosed *Cultural Resources Inventory and Effects Assessment for the Mammoth-Yosemite Airport Terminal Area Development Plan, Town of Mammoth Lakes, Mono County, California,* (Cultural Inventory) revised October 28, 2019.

Proposed Project Description

The Town of Mammoth Lakes is proposing to upgrade its terminal area with the construction of a new up to 40,000 square feet (sqft) Terminal and associated 130,500 sqft aircraft parking apron. The proposal also includes other terminal area improvements, such as a new aircraft de-icing apron, new taxiways, service road realignment, access road extension, automobile parking lots, an Aircraft Rescue and Fight Fighting – Snowplow storage building with access road and vehicle parking apron, and utilities such as a package wastewater treatment plant with disposal field and electrical connections.

Area of Potential Effect

Figure 1 on page 2 of the Cultural Inventory depicts the proposed project location and Area of Potential Effect (APE) for the proposed Terminal Area Development. The direct and indirect APE total approximately 17.91 acres. The vertical extent of the APE is 5 feet below ground surface (bgs) for the waste disposal lines, with most of the ground disturbance occurring at 2 feet bgs or less.

Cultural Resources Inventory

The Cultural Inventory, Table 2, page 14, provides a list of prior studies conducted within a 1.5-mile radius of the APE. Table 3, page 15, lists cultural resources previously recorded within the 1.5-mile search radius. A pedestrian survey within the 17.91 acre APE was conducted on August 13, 2019. Survey transects, outside the paved access roads, were spaced at 15 meter intervals. During the conduct of the survey, a California Department of Parks and Recreation (DPR) series 523 form was updated for one previously recorded resource. The DPR form is provided in Appendix C of the Cultural Inventory. The resource lacks integrity and did not qualify as a historic property. No historic properties are present within the APE.

Native American Consultation

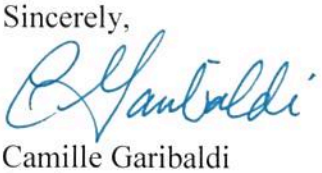
A Native American Heritage Commission (NAHC) for search of the Sacred Lands File did not identify any known resources. The FAA initiated consultation with the Big Pine Paiute Tribe of the Owens Valley, Bishop Paiute Tribe, Bridgeport Paiute Indian Colony, Fort Independence Indian Community of Paiutes, Lone Pine Paiute-Shoshones, Mono Lake Indian Community, Southern Sierra Miwuk Nation, and the Utu Utu Gwaitu Tribe of the Benton Paiute Reservation. Copies of the consultation letters are enclosed. No responses were received.

Determination of Effect and Concurrence Request

Based upon prior consultations regarding Mammoth Yosemite Airport, such as FAA070122A, and the results of the enclosed Cultural Inventory, the FAA finds that no historic properties are present in the APE. Accordingly, the FAA's determination is that this proposed undertaking would result in no historic properties affected. The FAA is requesting your concurrence with the APE established for the proposed project as well as its determination. We would appreciate your response within 30 days of receipt of this letter.

Your attention to this matter is appreciated. If you have any questions or concerns that you would like to discuss, I am available at (650) 827-7613 or by e-mail at Camille.Garibaldi@faa.gov.

Sincerely,



Camille Garibaldi
Environmental Protection Specialist

Enclosures

cc (w/o encl):
Kim Cooke, Town of Mammoth Lakes
Jim Wallace, Wallace Environmental Consulting

CULTURAL RESOURCES INVENTORY AND EFFECTS ASSESSMENT FOR THE MAMMOTH-YOSEMITE AIRPORT TERMINAL AREA DEVELOPMENT PLAN, TOWN OF MAMMOTH LAKES, MONO COUNTY, CALIFORNIA

Prepared For:

Wallace Environmental Consulting, Inc.
P.O. Box 266
Courtland, CA 95615

Prepared By:

Nancy E. Sikes, Ph.D., RPA
Dylan Stapleton, M.A.
Cindy J. Arrington, M.S., RPA

NATURAL INVESTIGATIONS COMPANY

3104 O Street, #221
Sacramento, CA 95816

USGS 7.5-Minute Quadrangle: Whitmore Hot Springs 1994

Positive Cultural Resources Survey; P-26-007973 (CA-MNO-5763);
Town of Mammoth Lakes, Mono County

September 20, 2019
Revised October 28, 2019

State of California • Natural Resources Agency
Gavin Newsom, *Governor*

DEPARTMENT OF PARKS AND RECREATION
OFFICE OF HISTORIC PRESERVATION
Lisa Ann L. Mangat, *Director*

Julianne Polanco, State Historic Preservation Officer
1725 23rd Street, Suite 100, Sacramento, CA 95816-7100
Telephone: (916) 445-7000 FAX: (916) 445-7053
calshpo.ohp@parks.ca.gov www.ohp.parks.ca.gov

February 19, 2020 Reply in Reference To: FAA_2020_0213_001

Camille Garibaldi
Environmental Protection Specialist
Federal Aviation Administration
San Francisco Airports District Office
1000 Marina Blvd, Suite 220
Brisbane, CA 94005-1835

Re: Proposed Terminal Area Development at Mammoth Yosemite Airport, Mammoth Lakes, California

Dear Ms. Garibaldi:

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

The Town of Mammoth Lakes (Town) is seeking FAA approval of an Airport Layout Plan (ALP) update and federal funding for projects at the airport. The ALP will institute a variety of construction projects, including construction of a 40,000 square foot terminal and associated 130,500 square foot aircraft parking area. Additional project components include a de-icing apron, new taxiways, service road realignment, access road extension, automobile parking lots, installation of a package wastewater treatment plant, construction of a snowplow storage building, and utilities upgrades.

The FAA define the undertaking's Area of Potential Effects (APE) as the approximately 17.91 acres to be developed. The vertical APE is five feet below ground level for the wastewater treatment component and two feet below ground level for the remaining work.

In order to identify historic properties that might be located in the APE, the Town employed cultural resources consultants to conduct a cultural resources inventory. Records and a pedestrian survey of the APE indicate that no historic properties are located in the APE. The FAA did not receive comments or concerns from Native American tribes.

Having reviewed your submittal, SHPO has the following comments:

1) SHPO concurs with the FAA's No Historic Properties Affected finding;

2) SHPO has no concerns with the FAA's delineation of the APE;

3) Please be reminded that in the event of an unanticipated discovery or a change in the scale or scope of the project, the FAA may have additional consultation responsibilities under 36 CFR Part 800.

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

Sincerely,

Julianne Polanco
State Historic Preservation Officer

APPENDIX F: NOISE MODEL

Noise Modeling: Mammoth Yosemite Airport, prepared January 2020

The Proposed Action would not increase operations, nor affect the number or type of aircraft using MMH. The improvements are limited to the Terminal Area of MMH, near the airfield, and completely within MMH property. Modeling indicates that minor noise levels of 55 dB (CNEL) may extend beyond MMH property boundaries, but do not impact sensitive receptors.

Two Aviation Environmental Design Tool v.2d (AEDT) noise models are presented: Year 2018 as baseline and Year 2028 as projected noise contours. Flight path assumptions have been included.

Community noise is often described in terms of ambient noise levels. A statistical tool frequently used to measure the ambient noise level is the average or equivalent sound level (L_{eq}) The L_{eq} is the foundation of composite noise descriptors such as day-night average (L_{dn}) and community noise equivalent level (CNEL). The L_{dn} is based on the average hourly L_{eq} during a 24-hour day, with 10dB added to the hours between 10:00 p.m. and 7:00 a.m. This weighting is based on the assumption that people react to nighttime noise as though it were twice as loud as daytime noise. The CNEL, like L_{dn}, is based on the weighted average hourly L_{eq} during a 24-hour period, with an additional weighting of 5 dB for the hours from 7:00 p.m. to 10:00 a.m. Sound exposure level (SEL) is the energy sum of the noise produced during a single sound event. SEL takes into account both sound intensity and duration.

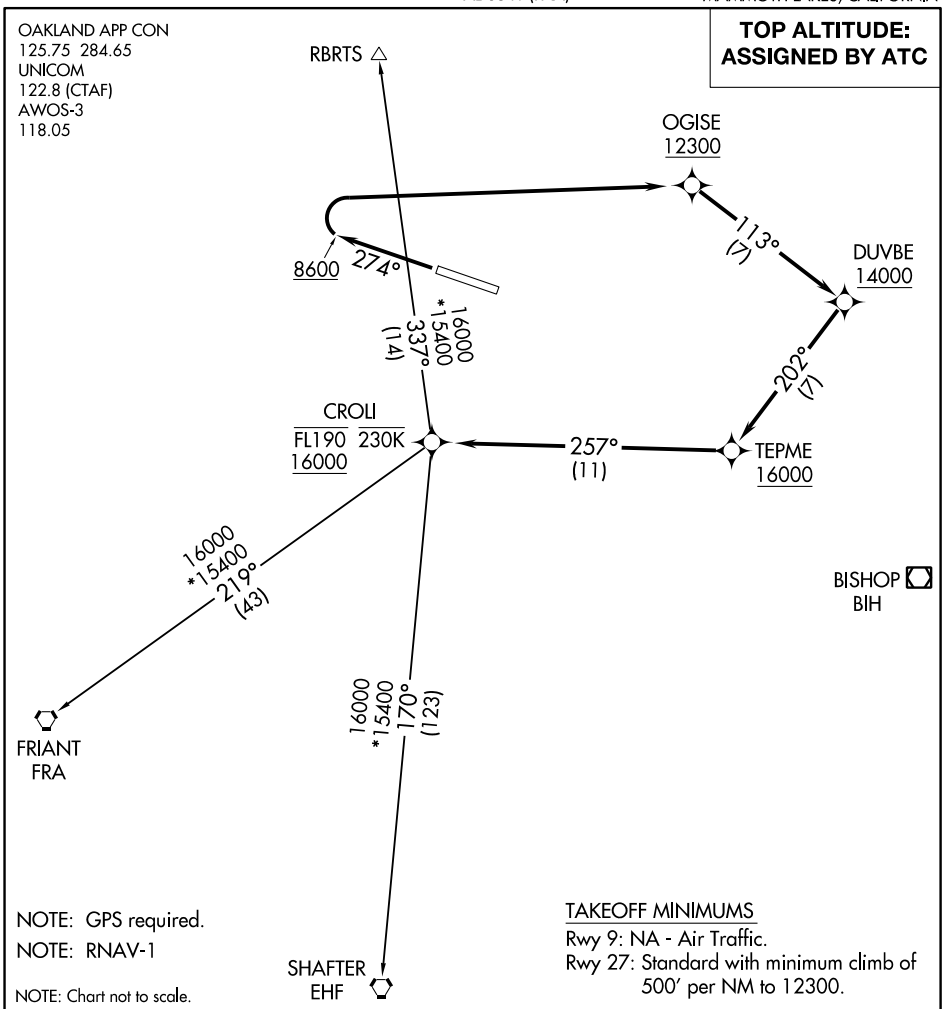
Various agencies at the federal, state and local levels establish noise standards. Federal and state guidelines are binding only with respect to their respective programs and projects. Local governments are responsible for determining acceptable noise levels and permissible land uses in noise-affected areas.

Federal Guidelines

FAA noise guidelines for land uses within airport environs indicate that L_{dn} levels below 65 dB are acceptable for all sensitive land uses including residential development. The FAA recognizes the Community Noise Equivalent Level (CNEL) as an alternative metric for California. The United States Department of Housing and Urban Development (HUD) also establishes the 65 dB L_{dn} as acceptable for outdoors noise in residential areas; higher levels are normally acceptable but require special approval.

State Guidelines and Regulations

The State of California has established noise standards (Title 21, California Code of Regulations [CCR] Section 6) that govern the operation of aircraft and aircraft engines for all airports operating under a valid permit issued by Caltrans. These regulations are based on CNEL levels and suggest a maximum of 60 dB as the suitable standard for urban residential land uses and 55 dB for rural residential land uses. Department of Housing and Community Development interior noise standards are 45 dB CNEL with windows closed. State law requires noise insulation of new multi-family dwellings constructed within the 60 dB CNEL noise exposure contours of airports.



SW-2, 02 JAN 2020 to 30 JAN 2020

SW-2, 02 JAN 2020 to 30 JAN 2020

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 27: Climb heading 274° to 8600, then right turn direct to cross OGISE at or above 12300, then on track 113° to cross DUVBE at or above 14000, then on track 202° to cross TEPME at or above 16000, then on track 257° to cross CROLI at or above 16000 and at or below FL190, thence. . . .

. . . .on (transition) maintain 16000, expect filed altitude 10 minutes after departure.

SHAFTER TRANSITION (CROLI1.EHF)

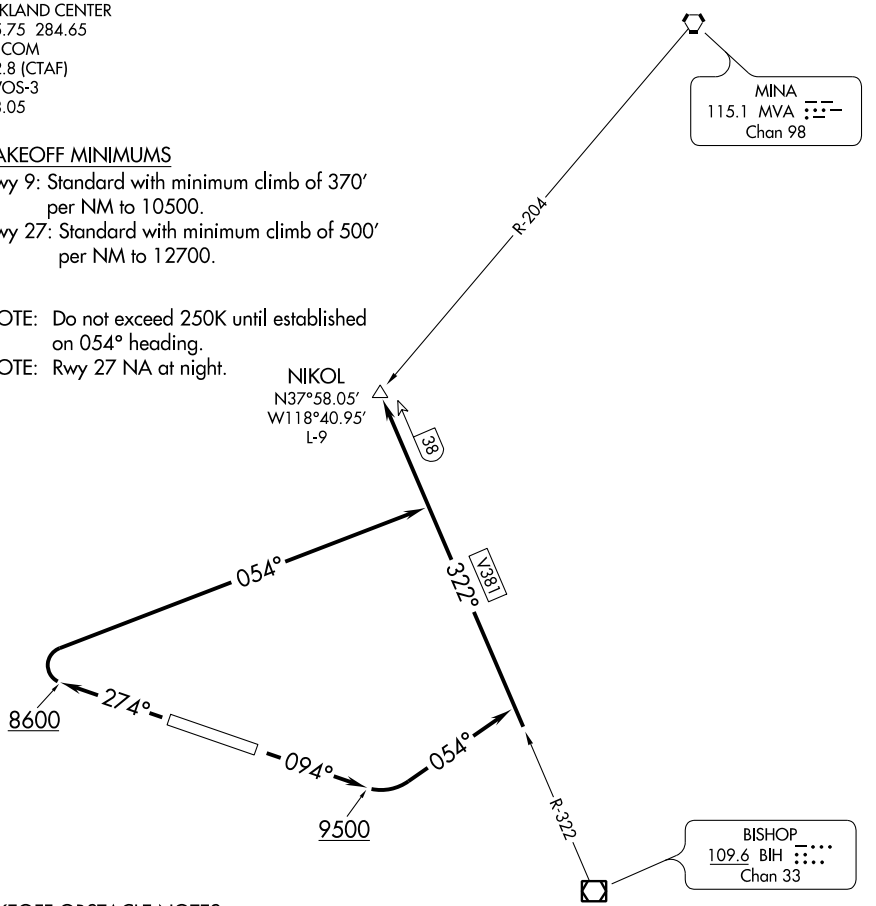
FRIANT TRANSITION (CROLI1.FRA)

RBRTS TRANSITION (CROLI1.RBRTS)

OAKLAND CENTER
125.75 284.65
UNICOM
122.8 (CTAF)
AWOS-3
118.05

TAKEOFF MINIMUMS
Rwy 9: Standard with minimum climb of 370' per NM to 10500.
Rwy 27: Standard with minimum climb of 500' per NM to 12700.

NOTE: Do not exceed 250K until established on 054° heading.
NOTE: Rwy 27 NA at night.



TAKEOFF OBSTACLE NOTES
Rwy 9: Vehicles on roadway beginning 11' from DER, 460' right of centerline, up to 17' AGL/7078' MSL. Trees beginning 1956' from DER, 554' left of centerline, up to 100' AGL/7186' MSL. Trees beginning 3994' from DER, 963' right of centerline, up to 100' AGL/7252' MSL.
Rwy 27: Vehicles on roadway and bushes beginning 178' from DER, 269' left of centerline, up to 17' AGL/7160' MSL. Building 386' from DER, 434' right of centerline, 21' AGL/7155' MSL. Terrain and trees beginning 1.9 NM from DER, 334' right of centerline, up to 68' AGL/7970' MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 9: Climb heading 094° to 9500, then climbing left turn heading 054° to intercept BIH R-322 to NIKOL INT.

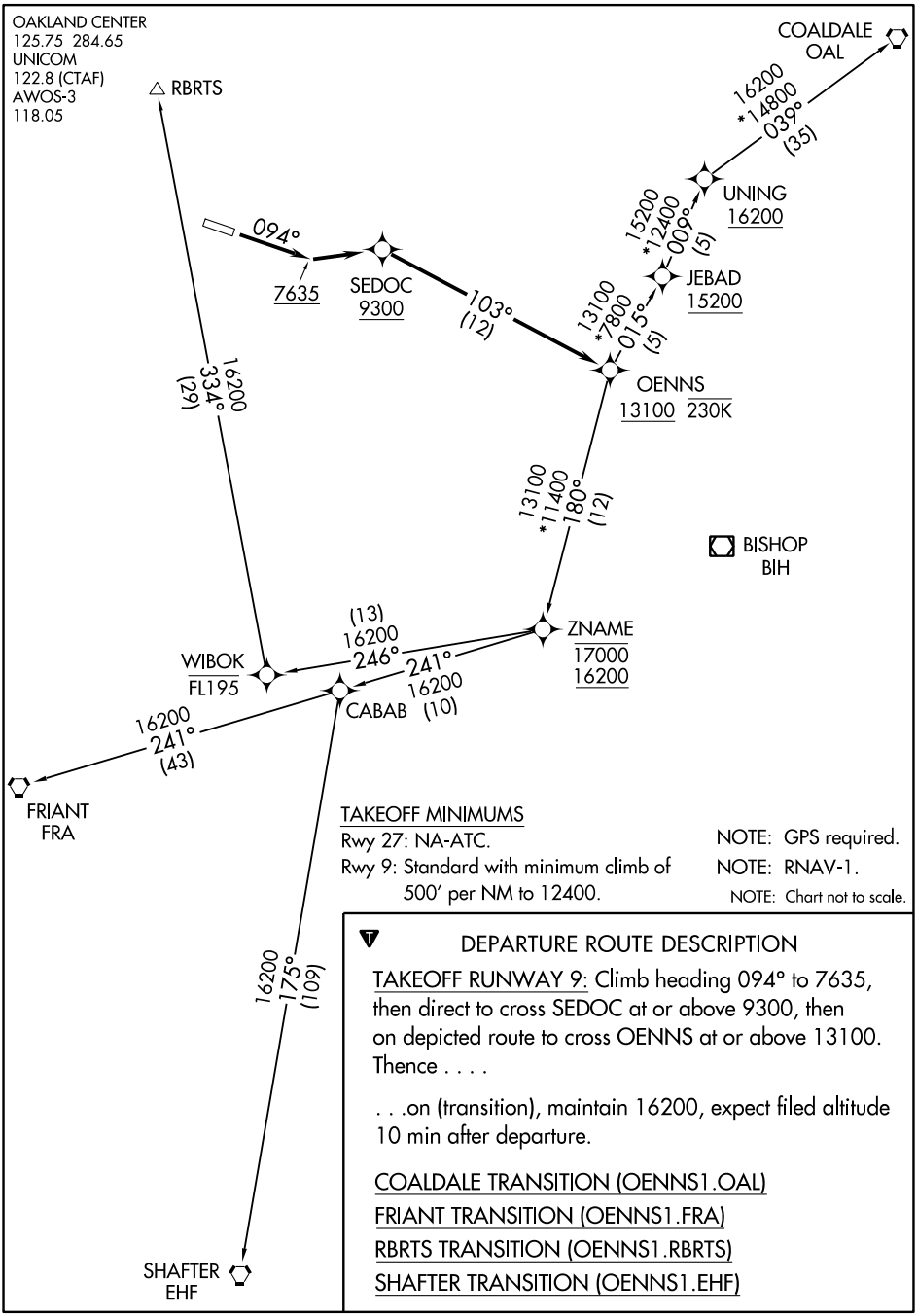
TAKEOFF RUNWAY 27: Climb heading 274° to 8600, then climbing right turn heading 054° to intercept BIH R-322 to NIKOL INT.

SW-2, 02 JAN 2020 to 30 JAN 2020
SW-2, 02 JAN 2020 to 30 JAN 2020

OENNS ONE DEPARTURE (RNAV)

AL-6841 (FAA)

MAMMOTH YOSEMITE (MMH)
MAMMOTH LAKES, CALIFORNIA



SW-2, 02 JAN 2020 to 30 JAN 2020

SW-2, 02 JAN 2020 to 30 JAN 2020

TAKEOFF MINIMUMS

Rwy 27: NA-ATC.

Rwy 9: Standard with minimum climb of 500′ per NM to 12400.

NOTE: GPS required.

NOTE: RNAV-1.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 9: Climb heading 094° to 7635, then direct to cross SEDOC at or above 9300, then on depicted route to cross OENNS at or above 13100. Thence . . . .

. . .on (transition), maintain 16200, expect filed altitude 10 min after departure.

COALDALE TRANSITION (OENNS1.OAL)

FRIANT TRANSITION (OENNS1.FRA)

RBRTS TRANSITION (OENNS1.RBRTS)

SHAFTER TRANSITION (OENNS1.EHF)

MAMMOTH LAKES, CALIFORNIA
MAMMOTH YOSEMITE (MMH)

APPENDIX G: GROUNDWATER

Mammoth Yosemite Airport: Groundwater Technical Memorandum

Prepared By GeoImagery
and
Wallace Environmental Consulting, Inc.
December 2019

Mammoth Yosemite Airport is located in the southwestern portion of the Long Valley Caldera in Mono County, California. Airport property overlies middle Pleistocene age alluvium deposits composed of unconsolidated stream deposits, glacial outwash, terrace gravels, low-relief alluvial-fan deposits and possible lacustrine deposits. The airport is bounded on the west and north by a basalt flow, on the east by the rhyolite flow of Doe Ridge, and on the south by the Convict Creek glacial deposit. The eastern Sierra front is located about 2.5 miles south of the airport.

The surface outcrop of the basalt flow is located approximately 1,200 feet west of the runway and is likely buried under the western portion of the airport. This basalt flow, which is exposed along Hot Creek, continues north and east to contact the rhyolite of the Hot Creek flow named Doe Ridge, approximately 2,600 feet north of the airport. The Doe Ridge, Hot Creek Rhyolite flow is a north trending flow with the present day toe of the ridge 200 to 300 feet north of the east end of the runway (Figure 1).

U.S. Geologic Survey Professional Paper 1812 provides an accurate location of the basalt flow and the glacial moraine trending north from Convict Lake. The basalt flow is important as it acts as a leaky barrier preventing most groundwater westward flow from the airport reaching the Hot Creek canyon. The glacial moraine is important; it provides much of the shallow permeable material that resulted in the topographic high in the central portion of the airport and contributes to the eastwardly flow of shallow unconfined groundwater.

The dominating feature south of the runway is the Convict Creek undivided glacial deposit. The northerly surface outcrop of this flow is approximately 1,600 feet south of the runway. Exposures of late Pleistocene age glacial outwash from Convict Creek are reported as thick as 33 feet in quarries north and west of the airport; thus confirming their presence under the airport.

The Hilton Creek Fault trace runs from the east end of the runway northwest through the quarry north of the airport as shown in Figure 1. The fault, and its splays which cross eastern portions of the airport property, are normal faults with maximum surface displacement of about 3-feet.

Well Logs and Subsurface Lithologic Conditions

For the purposes of this technical memorandum, useful subsurface lithologic data were derived from the following well logs; the location of each well is shown on Figure 1: Two wells serve as the airport's potable water supply

- Monitoring Wells: Eight shallow (Maximum 60-feet deep) monitoring wells; all the monitoring wells are abandoned.
- Sierra Materials Well: Located southwest of airport property near the intersection of Hot Creek Hatcher Road and U.S. Highway 395.
- California Division of Mines Geology Well # 1: Located west of the airport

409-Well: A 409-foot deep well (409-Well) was drilled on the airport near a topographic high which acts as the surface divide between Hot Creek on the west and Convict Creek on the east. The 409-Well lithologic log indicates that from the existing ground surface to a depth of 150- feet the stratigraphic profile is composed of gravel and thin clay layers. No cobbles or large gravel indicating permeable glacial material is noted; no groundwater was noted above the 150-foot depth. 409-Well was never used for water supply; it is abandoned.

A 120-foot thick clay deposit is recorded in the 409-Well's lithologic log from depths of 150-feet to 270–feet. Groundwater is first encountered at 270 feet where the well encountered "soft broken grayish rock". After completing the well, the static water level rose to 63-feet below the existing ground surface indicating artesian conditions where the 120-foot thick clay layer acts as a confining layer. The lack of cobbles and larger gravel, the presence of clay, no shallow water encountered, and the relative proximity to the basalt flow indicates a low potential for shallow groundwater west of the runway. No other subsurface lithologic information is available between the 409-Well and the basalt formation where the buried contact is likely less than 1,000 feet west of the 409-Well.

Drinking Water Wells: Two water supply wells were drilled in the eastern portion of the airport. The wells are about 200-feet apart; each was drilled to a depth of about 143-feet. Based on lithologic logs the two water wells are completed in sand and cobbles deposits with minor clay to depths of about 135 feet. The wells penetrated a clay layer at 135-feet and were completed at a depth of 143, having drilled ten-feet into the clay unit. The depth of the clay unit correlates with the clay in the 409-Well and indicates that a clay layer probably underlies the airport and creates a confining layer for groundwater bearing units below a depth of 270-feet.

Monitoring Wells: The GAMA Groundwater Information System provided data for a 2004 groundwater investigation report that included well logs for eight abandoned shallow monitoring wells near the airport terminal. The GAMA report and logs were useful to confirm an eastwardly groundwater gradient in the eastern portion of the

airport. Additionally, the logs report of sand and large cobbles to depths of 65-feet provided additional evidence of the presence of glacial moraine deposits.

Sierra Materials Well: The lithologic well log from the Sierra Materials quarry approximately 1,500 feet south of the west end of the airport encountered hard rock, logged as Andesite, at 10–feet below the existing ground surface. Hard basalt is logged from depths of 35 to 125-feet but varying from hard to broken. Because this well location is approximately 1,200 feet east of the mapped basalt contact the possibility of a shallow to moderate dip angle to the east is indicated. A similar dip angle would place the basalt under the airport property and near the 409-Well.

California Department of Mines and Geology Well: CDMG Well #1 of the Mines and Geology, Open File Report 82-5 report indicated basalt was encountered at 29-feet below the existing ground surface. The first few feet were highly fractured and perched groundwater was encountered at a depth of 38-feet. This well is approximately 400 feet west of the basalt contact, in alluvial material. The first 28-feet (depth below ground surface) were mostly sand and gravel; the basalt continued to 99-feet below the ground surface. The basalt varied from very hard to broken. Below depths of 99-feet the well went back into an “unstable sand and gravel formation with minor clay”. The lithologic log notes the “basalt seems to be composed of three or more separate flows”. The drilling rates increased through these units, indicating fractured and broken rock. This well confirmed that the basalt flows were deposited on alluvial deposits west of the airport and east of Hot Creek.

CONCULSION

Available lithologic data from on-site and off-site wells indicates that the eastern two-thirds of the Mammoth Yosemite airport is underlain by permeable sand and gravel of terrace deposits, stream gravels, and large 3-4 inch cobbles deposited by the Convict Creek Glacial Moraine. There is likely a continuous clay layer at between 135 and 150-feet below the existing ground surface. This 120-foot thick clay layer act as a confining layer for water bearing units below depths of about 270-feet. When the clay layer is penetrated, the underling units exhibit artesian characteristics, as seen in 409-Well.

Throughout the airport, groundwater in the unconfined upper water bearing unit, was encountered from 35 to 50 feet below existing ground surface. Currently, only the drinking water wells are available for groundwater measurements. The static water levels in these wells have not been monitored. The two wells are in close proximity thus making any determinations of accurate groundwater gradients or flow directions questionable. The only accurate determination of water levels and flow directions were performed on the monitoring wells in 2004. Based on the potentiometer surface

measured in the eight monitoring wells, and an interpretation of the lithology from well logs, the local groundwater gradient is west to east – towards Convict Creek.

The monitoring wells are clustered near the terminal building (Figure 1), the tops of the well casings were surveyed and water levels accurately measured. The eastwardly flow direction can be considered accurate and conforms to the topography and geology used previously to also determine the easterly flow. These monitoring wells and the 409-Well have been abandoned. The topography and geology of the airport indicate there is a small potential for low flows of groundwater to the west. The basalt semi-confining barrier underlies the west end of the runway and extends over 3,000 feet to near Hot Creek. Any flow that might reach Hot Creek would be a very low yield having migrated through over 3,000 feet of fractured rock between multiple basalt flows.

References

Bailey, Roy A., *Geologic Map of Long Valley Caldera, Mono-Inyo Craters Volcanic Chain, and Vicinity, Eastern California*, USGS, Map I-1933.

California Division of Mines and Geology, 1967, Geologic Map of California, Mariposa Sheet

California Division of Mines and Geology Open File Report 82-5, *Drill-Hole Logs and Logging Procedures for the Mammoth Lakes-Long Valley Microearthquake Project, Mono County, California,* 1981

California State Water Resources Control Board, GeoTracker, Mammoth Yosemite Airport (T0605100046), Monitoring Well Logs and Water Survey by Team Engineering, Mammoth Lakes (accessed December 2019)

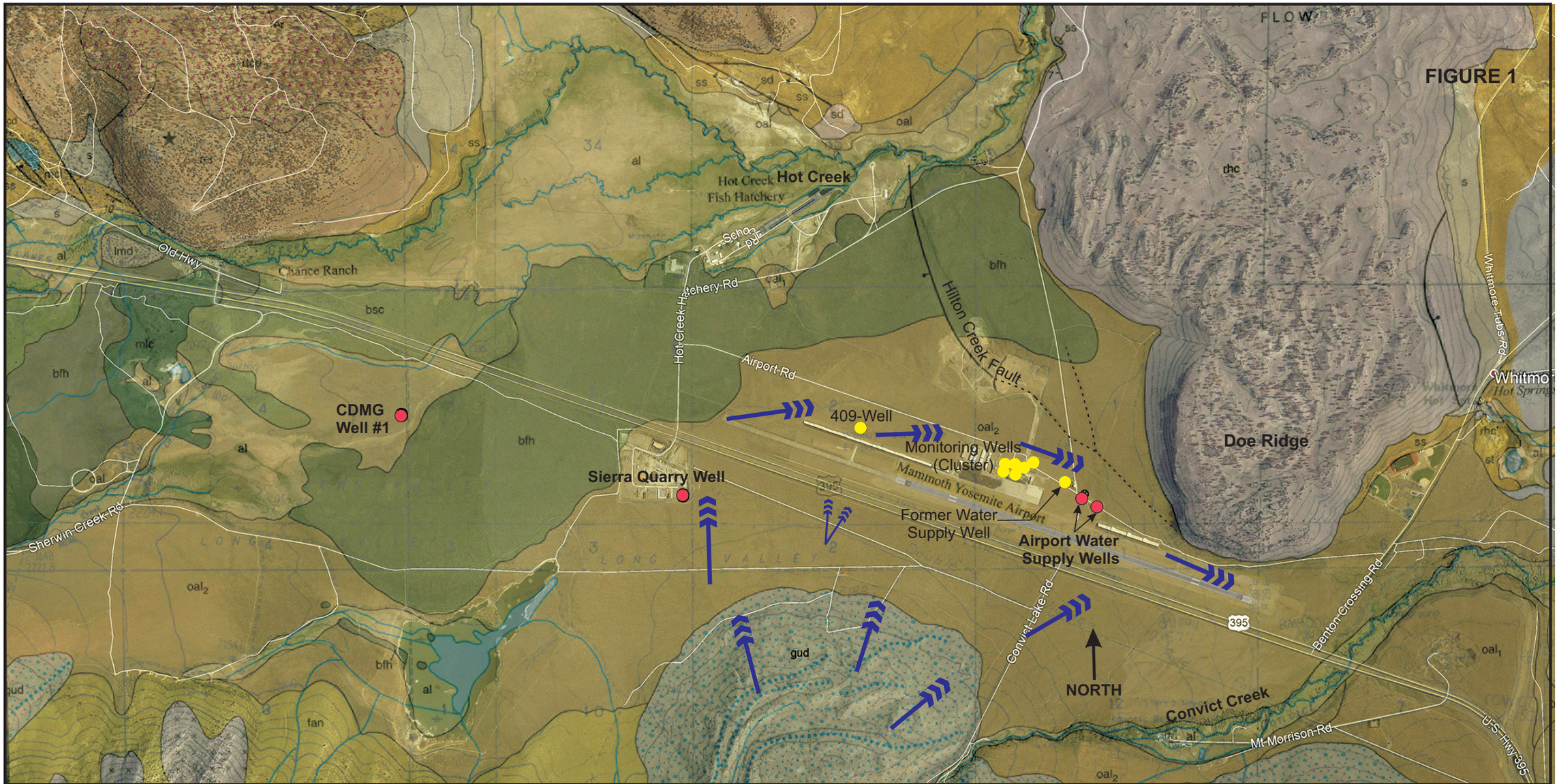
Hildreth, Wes and Fierstein, *Eruptive History of Mammoth Mountain and its Mafic Periphery, California*, USGS Professional Paper 1812, 2016.

Kile's Well Drilling, lithologic well log for Sierra Materials Quarry, 1979

Semi-Annual Groundwater Monitoring Report, First Quarter 2011, Mammoth Yosemite Airport – UST Site, Mammoth Lakes, California (LUSTIS No. 6B2600915T), Team Engineering, Bishop and Mammoth Lakes, California, April 11, 2011.

Town of Mammoth Lakes, lithologic well logs for the two drinking water wells and the "409-Well".

FIGURE 1



Selected List of Map Units

al: Alluvium, undivided
fan: Alluvial fan deposits
oal: Older alluvium
oal_2: late to mid-Pleistocene age unconsolidated alluvium
ss: Sandstone of Long Valley Lake
sd: Spring deposits
gud: Undivided glacial deposits; moraine
bsc: Trachyandesite of Sherwin Creek Road
bfh: Basalt of Fish Hatchery
mic: Mafic pyroclastic deposit
rhc: Rhyolite of Hot Creek Flow

Mammoth Yosemite Airport: Groundwater Technical Memorandum

Groundwater flow directions in unconfined aquifer

Abandoned wells; abandoned monitoring wells

Existing wells with lithologic logs

Geologic Map: USGS Professional Paper 1812, *Eruptive History of Mammoth Mountain and Its Mafic Periphery,* 2016.
Topography: GoogleEarth

APPENDIX H: U.S. DEPARTMENT OF TRANSPORTATION, SECTION 4(f)

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

Western-Pacific Region
San Francisco Airports District Office

1000 Marina Boulevard, Suite 220
Brisbane, CA 94005-1835

November 3, 2020

Lesley Yen
Forest Supervisor
Inyo National Forest
U.S. Department of Agriculture
Forest Service
351 Pacu Lane
Suite 200
Bishop, CA 93514

Dear Ms. Yen:

First of all, welcome back to the Eastern Sierra. We understand you are set to assume your new position as Forest Supervisor for the Inyo National Forest on October 25.

The Federal Aviation Administration (FAA), is the lead federal environmental agency, responsible to assure compliance with the National Environmental Policy Act (NEPA) and associated special purpose laws in support of a future request for federal Airport Improvement Program (AIP) grant funding support for the Mammoth Yosemite Airport (Airport). In this case, the Town of Mammoth Lakes, the airport sponsor, proposes to complete a Terminal Area Development Project within the Airport. A component of the Terminal Area Development Project would extend the paved portion of Airport Road within an existing 60-foot wide existing road and highway easement over Inyo National Forest land administered by the U. S Department of Agriculture, Forest Service (U.S. Forest Service). The proposed road extension in shown on the enclosed Exhibits 1 and 2. Therefore, consideration of special purpose law, Section 4(f) of the Department of Transportation Act of 1996 (as amended), 49 United States Code (U.S.C.) §303(c) [Section 4(f)] is required.

Section 4(f) refers to the original section within the U.S. Department of Transportation Act of 1966 (DOT) which provides for protection of significant publicly owned, parks, recreational area wildlife and waterfowl refuges, and historic sites from proposed transportation project use. When lands are administered for multiple uses, such as a National Forest, the Federal official with jurisdiction over the lands determines whether the subject lands are being used for park, recreation, wildlife, waterfowl, or historic purposes. However, Section 4(f) regulations indicate that when a property is formally reserved for a future transportation use, interim use as a park, recreation area or wildlife and waterfowl refuge would not be considered a Section 4(f) use.

In consideration of the existing transportation easement and the underlying and adjacent land use, the FAA requests U.S. Forest Service concurrence with its assessment that DOT Section 4(f) does not apply to the proposed Terminal Area Development Project paved

extension of Airport Road (860 feet x 25 feet) adjacent to the Airport. The FAA's evaluation is supported by the following:

Proposed Terminal Area Development Project – Road Extension:

> In order to provide public access to the proposed new passenger terminal area, Airport Road would be extended 860-feet from the end of its existing pavement to the terminus of the right-of-way. The proposed road extension would be paved to match Airport Road's existing width of 25-feet. The proposed Airport Road extension would terminate in a cul-de-sac adjacent to the proposed terminal area development and near the Airport's northeastern boundary. The road extension would be located in the existing right-of-way and all other proposed Airport facility improvements would be located within existing airport property boundary.

Existing Transportation Easement:

> In 1984, the U. S. Forest Service granted to Mono County, the then Airport sponsor and its successors, a permanent transportation easement (right-of way) for the construction, operation, and maintenance of Airport Road from Hot Creek Hatchery Road[1], to the northeast corner of the Mammoth Yosemite Airport, terminating near old Convict Creek Road.[2] (Enclosure 3) The total right-of way length is about 7,410-feet (1.4 miles) and 60-feet in width. In 1985, the County constructed 6,550-feet of Airport Road from Hot Creek Hatchery Road to its current terminus at the Airport's entrance road. The unpaved portion of the right-of-way continues approximately 860-feet eastward where it terminates near the centerline of old Convict Lake Road.

Land Use:

> The Airport Road right-of-way is underlain by land administered by the Inyo National Forest. In its *Land Management Plan for the Inyo National Forest* (September 2019) and the *Final Record of Decision for the Inyo National Forest Land Management Plan* (October 2019), the Inyo National Forest identified land management goals adjacent to, and in the right-of-way as a grazing allotment (#201: Hot Creek) Enclosure 4; and a mixed to moderate use general recreational area, Enclosure 5. Additionally, there are unimproved roads in vicinity of the proposed Airport Road extension including some maintained by Mono County, one road serves a site of a former quarry shown in Exhibit 2.

The FAA considered the proposed Terminal Area Development Project including Airport Road extension, the existing transportation easement, and the underlying and adjacent Inyo

[1] In 1984, what is now designated as Hot Creek Hatchery Road was called either "Forest Service (FS) Road 3S45", "Owens River Road" or known locally as "Fish Hatchery Road"; the road is now maintained by Mono County.
[2] In 1984, what is now designated as Convict Lake Road, was known as "Convict Creek Road". A portion of the road was abandoned through the Airport, creating two road segments; one south of the airport provides access to Convict Lake, and the other north of the Airport connects with Hot Creek Hatchery Road; both roads are maintained by Mono County.

National Forest land use when assessing the applicability of DOT, Section 4(f). Based upon these factors, the FAA concludes that the portion of the Inyo National Forest included in the proposed Terminal Area Development Project is not eligible for DOT, Section 4(f) because it is subject to the 1985 transportation easement providing for establishment of a 7,410-feet long and 60-feet wide Airport Road, of which 860-feet remains to be constructed. In providing the transportation easement, U.S. Forest Service did not designate this portion of the National Forest as an eligible park, recreation area, refuge, or historic site such that Section 4(f) would apply. Use of the portion of the property, included in the easement, will not adversely affect the activities, features, and attributes of areas within Inyo National Forest that qualify for protection under Section 4(f) because U.S. Forest Service has set aside this portion of the National Forest as a transportation easement.

As stated previously, we are seeking your concurrence with this assessment and would appreciate a response within 30 days of receipt of letter. If you have any questions or concerns regarding this matter, please contact Camille Garibaldi at Camille.Garibaldi@faa.gov or by phone at (650) 827-7613. I am also available at Laurie.Suttmeier@faa.gov or by phone at (650) 827-7601.

Sincerely,

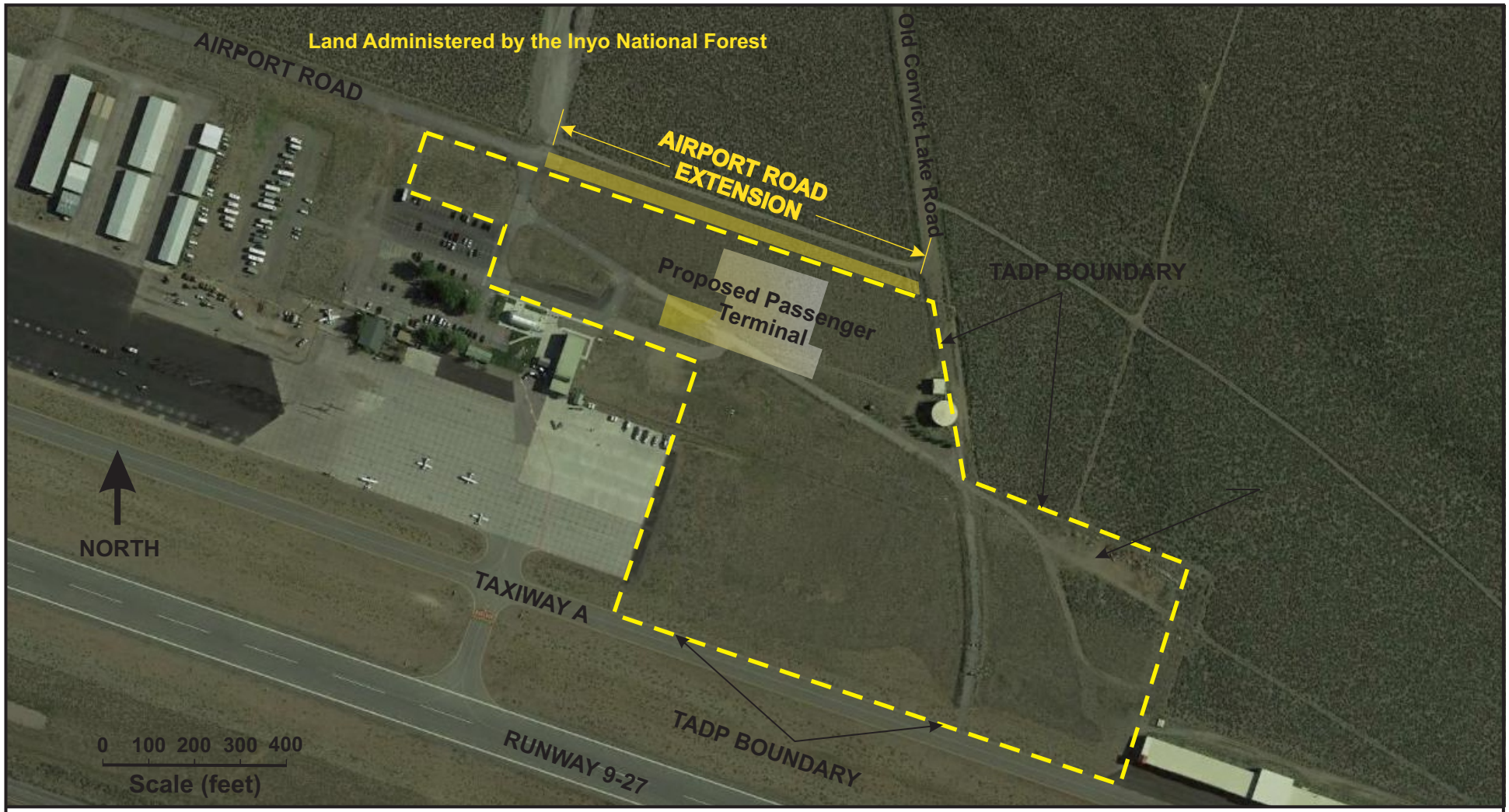
X Laurie J. Suttmeier

Laurie J. Suttmeier
Manager, San Francisco Airports District Office
Signed by: LAURIE J SUTTMEIER

Western-Pacific Region

Enclosures

cc:
Vicki Christiansen, Chief, U. S. Department of Agriculture, Forest Service



U.S. DOT Section 4(f) Evaluation for the Extension of Airport Road Within an Existing Easement

Exhibit 1

Project Layout from:
Mammoth Yosemite Airport Terminal Area Development Plan, January 2015
Image Source: GoogleEarth

Mammoth Yosemite Airport
Town of Mammoth Lakes

October 2020

Enclosure

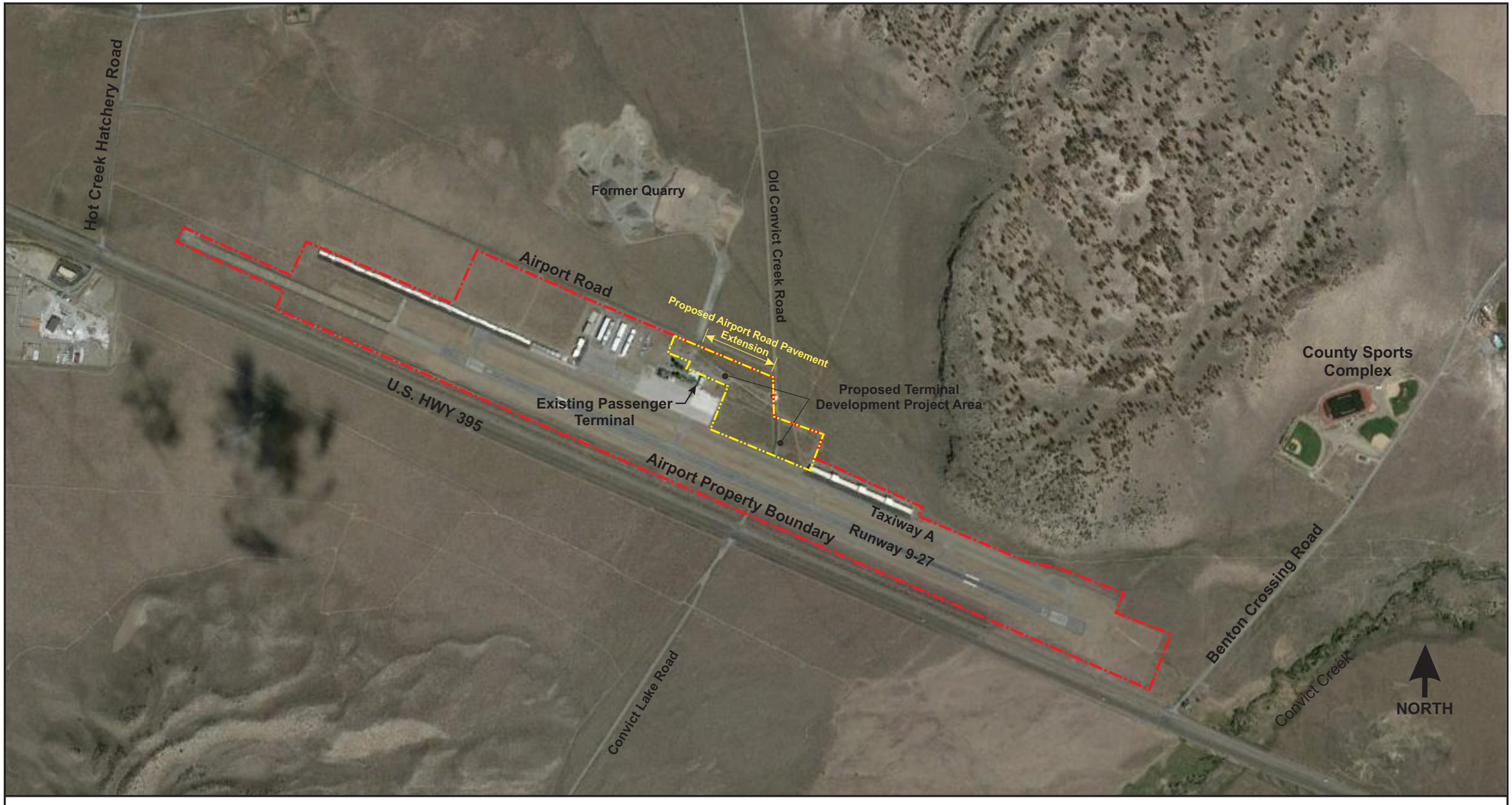


Exhibit 2

U.S. DOT Section 4(f) Evaluation for the Extension of Airport Road Within an Existing Easement

Mammoth Yosemite Airport
Town of Mammoth Lakes

October 2020

Enclosure

Project Layout from:
Mammoth Yosemite Airport Terminal Area Development Plan, January 2015
Image Source: GoogleEarth

JIM WARD
DEPUTY DIRECTOR

RICHARD BOARDMAN
DEPUTY COUNTY SURVEYOR

COUNTY OF MONO
DEPARTMENT OF PUBLIC WORKS

P.O. Box 457
BRIDGEPORT, CALIFORNIA 93517

EXT 252

FILE COPY

TO Dave Marlow
USFS
Mammoth Ranger District

ATTENTION

DATE October 29, 1984

PROJECT Airport Road

SENT BY

____ REGULAR MAIL

____ CERTIFIED MAIL

____ HAND DELIVERED TO

____ OTHER

NUMBER OF COPIES	DESCRIPTION
1	Resolution accepting grant of easement for Airport Road

THE ENCLOSED IS

____ FOR YOUR INFORMATION

____ FOR YOUR APPROVAL AND RETURN

X ____ FOR YOUR FILES

____ FOR SIGNATURE AND RETURN

____ READ AND COMMENT

____ OTHER

REMARKS

CC: Dan Morse-FAA

BY Richard Boardman
Deputy County Surveyor

Enclosure 3

VOL [illegible] PAGE 12

RECORDED IN MONO COUNTY CALIFORNIA 2522

'84 OCT 1 AM 9 43

RENN NOLAN NO FEE
COUNTY RECORDER

RESOLUTION NO. 84-108
BOARD OF SUPERVISORS, COUNTY OF MONO

A RESOLUTION OF THE BOARD OF SUPERVISORS OF THE COUNTY OF MONO, STATE OF CALIFORNIA, ACCEPTING A GRANT OF EASEMENT FROM THE UNITED STATES FOREST SERVICE FOR AIRPORT ROAD

WHEREAS, it has been found appropriate for Department of Agriculture by and through the U.S. Forest Service to convey to the County of Mono an easement for public road and highway purposes over and across that particular strip of land presently known and identified as Airport Road (G.R. #1027); and,

WHEREAS, said road has been improved to County standards and is presently serving as access to the Mammoth/June Lakes Airport; and,

WHEREAS, to consummate such a conveyance and record the same and thereby impose constructive notice to the world, a person, or entity must accept the interest in real property so conveyed; and,

WHEREAS, the County of Mono is the proper entity to accept the interest so conveyed.

NOW, THEREFORE, BE IT RESOLVED that the Board of Supervisors on behalf of the County of Mono does hereby accept the grant of easement for public road and highway purposes from the U.S. Forest Service dated August 1, 1984, all as set forth in said instrument of conveyance; and

FURTHER BE IT RESOLVED that the Mono County Clerk/Recorder is herewith notified of the acceptance of the Grant of Easement heretofore described and is authorized to record the same on behalf of the County of Mono.

///

The foregoing instrument is a full, true and correct copy of the original on file in this office.

Attest Sept. 28, 1984
MARJORIE E. PEIGNE, Clerk of the Board of Supervisors in and for the County of Mono, State of California.

Marjorie E Peigné
Signature

VOL 0110 PAGE 73

PASSED AND ADOPTED this 25th day of September, 1984, by the following vote of the Board of Supervisors, County of Mono:

AYES: Supervisors Alpers, Johnson, Lawrence, Stanford.

NOES: None

ABSENT: Vacancy, District #4

ABSTAIN: None

ROBERT J. STANFORD, CHAIRMAN
BOARD OF SUPERVISORS
COUNTY OF MONO

ATTEST:
MARJORIE E. PEIGNE
Clerk to the Board

BY: Nancy Wells
Nancy Wells
Deputy Board Clerk

APPROVED AS TO FORM:
OFFICE OF COUNTY COUNSEL

RON BRADEN
County Counsel

Dated: 9-24-84

ORIGINAL

EASEMENT

THIS EASEMENT, dated this 1st day of August, 1984, from the UNITED STATES OF AMERICA, acting by and through the Forest Service, Department of Agriculture, hereinafter called Grantor, to the County of Mono, State of California hereinafter called Grantee.

WITNESSETH:

WHEREAS, the Grantee has applied for a grant of an easement under the Act of October 13, 1964 (78 Stat. 1089, 16 U.S.C. 532-538), for a road over certain lands or assignable easements owned by the United States in the County of Mono, State of California, and administered by the Forest Service, Department of Agriculture.

NOW THEREFORE, Grantor does hereby grant to Grantee an easement for a public road and highway along and across a strip of land, hereinafter defined as the right-of-way over and across the lands in the County of Mono, State of California, as described on Exhibit A attached hereto.

The word "right-of-way" when used herein means said strip of land whether or not there is an existing road or highway located thereon. Except where it is defined more specifically, the word "highway" shall mean roads or highways now existing or hereafter constructed on the right-of-way or any segment of such roads or highways.

The right-of-way is shown on Exhibit B on the plat, attached hereto and made a part hereof.

This grant is made subject to the following terms, provisions, and conditions:

1. Outstanding valid claims, if any, existing on the date of this grant.

2. The easement herein granted is limited to use of the described right-of-way for the purpose of construction, operation, and maintenance of a highway in accordance with approved plans, specifications, and stipulations described in the following conditions numbered 3 and 4 and does not include the grant of any rights for nonhighway purposes or facilities; Provided, That the right of the Grantor to use or authorize the use of any portion of the right-of-way for nonhighway purposes shall not be exercised when such use would interfere with the free flow of traffic or impair the full use and safety of the highway; and Provided further, that nothing herein shall preclude the Grantor from locating National Forest and other Department of Agriculture information signs on the portions of the right-of-way outside of construction limits.

3. The design and construction of the highway project situated on this right-of-way will be in accordance with plans, specifications, and written stipulations approved by the Grantor and on file in his office.

4. Any reconstruction of the highway situated on this right-of-way will be in accordance with plans, specifications, and written stipulations approved by the Grantor prior to beginning such reconstruction.

5. Consistent with highway safety standards, the Grantee shall:

   (a) Protect and preserve soil and vegetative cover and scenic and esthetic values on the right-of-way outside of construction limits.

   (b) Provide for the prevention and control of soil erosion within the right-of-way and adjacent lands that might be affected by the construction, operation, or maintenance of the highway, and shall vegetate and keep vegetated with suitable species all earth cut or fill slopes feasible for revegetation or other areas on which ground cover is destroyed where it is deemed necessary during a joint review between the Grantor and Grantee prior to completion of the highway and the Grantee shall maintain all terracing, water bars, leadoff ditches, or other preventive works that may be required to accomplish this objective. This provision shall also apply to slopes that are reshaped following slides which occur during or after construction.

6. The Grantee shall:

   Establish no borrow, sand, or gravel pits; stone quarry; permanent storage areas; sites for highway-operation and maintenance facilities; camps, supply depots; or disposal areas within the right-of-way, unless shown on approved construction plans, without first obtaining approval of the Grantor.

7. The Grantee shall not use pesticides to control undesirable woody and herbaceous vegetation, aquatic plants, insects, rodents, trash fish, etc., without the prior written approval of the Forest Service. A request for approval of planned uses of pesticides will be submitted annually by the Grantee on the due date established by the Forest Supervisor. The report will cover a 12-month period of planned use beginning 3 months after the reporting date. Information essential for review will be provided in the form specified. Exceptions to this schedule may be allowed only when unexpected outbreaks of pests require control measures which were not anticipated at the time the annual report was submitted, at which time an emergency request and approval may be made.

Only those materials registered by the U.S. Environmental Protection Agency for the specific purpose planned will be considered for use on National Forest Systems lands. Label instructions will be strictly followed in the application of pesticides and disposal of excess materials and containers.

8. The Grantee does by the acceptance of this document covenant and agree for itself, its assigns, and its successors in interest to the property herein granted or any part thereof, that the covenants set forth below shall attach to and run with the land:

   (a) That the described property, and its appurtenant areas and its building and facilities, whether or not on the land herein granted, will be operated as a public road, in full compliance with Title VI of the Civil Rights Act of 1964 and all requirements imposed by or pursuant to the regulations issued thereunder by the Department of Agriculture and in effect on the date of this document to the end that no person, in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any programs or activities provided thereon; and

   (b) That the United States shall have the right to judicial enforcement of these covenants not only as to the Grantee, its successors and assigns, but also as to lessees and licensees doing business or extending services under contractural or other arrangements on the land therein conveyed.

In the event of a breach of any of the conditions set forth above, all right, title, and interest in and to the above described property shall, at the option of the Grantor, revert to and become the property of the United States of America, which shall have an immediate right of entry thereon, and the Grantee, its successors or assigns, shall forfeit all right, title, and interest in and to the above described property and in any and all of the tenements, hereditaments, and appurtenances thereunto belonging; Provided, however, that the failure of the Grantor to insist in any of the said conditions shall not be construed as a waiver or a relinquishment of the future performance of any such conditions, but the obligations of the Grantee with respect to such future performance shall continue in full force and effect.

The Chief, Forest Service, may terminate this easement, or any segment thereof, (1) by consent of the Grantee, (2) by condemnation, or (3) after a five (5) year period of nonuse, by a determination to cancel after notification and opportunity for hearing as prescribed by law.

IN WITNESS WHEREOF, the Grantor, by its Director of Lands, Pacific Southwest Region, Forest Service, has executed this easement pursuant to the delegation of authority to the Chief, Forest Service, 7 CFR 2.60, and the delegation of authority by the Chief, Forest Service, dated December 14, 1979 (44 FR 75690), on the day and year first above written.

UNITED STATES OF AMERICA

By _____
Director, Lands
Pacific Southwest Region
Forest Service
Department of Agriculture

ACKNOWLEDGEMENT

STATE OF CALIFORNIA)
) SS
CITY AND COUNTY OF SAN FRANCISCO)

On this 1st day of August, 1984, before me Rae Jean Taylor, a Notary Public in and for said State with principal office in the City and County of San Francisco, personally appeared Norwood F. Robertshaw, Region 5, Forest Service, United States Department of Agriculture, known to me to be the person whose name is subscribed to the within instrument, and acknowledged to me that he executed the same as the free act and deed of the United States of America, for the uses and purposes therein mentioned.

IN WITNESS WHEREOF, I have hereunto set my hand and official seal the day and year first above written.

SEAL

OFFICIAL SEAL
RAE JEAN TAYLOR
NOTARY PUBLIC - CALIFORNIA
SAN FRANCISCO COUNTY
My comm. expires NOV 27, 1985

_____
Notary Public

My Commission Expires:

Exhibit A

Legal Description

USDA Easement for the Airport Road

Parcels Crossed:
Mount Diablo Meridian
T.4S., R.28E.
Sec. 1 S½NW¼, N½SW¼
Sec. 2 N½SE¼

Beginning at a spike in the center of the Owens River Road, also known locally as the Fish Hatchery Road and Forest Road 3S45, being distant from the northwest corner of Section 2, Township 4 South, Range 28 East, MDB&M, N8°09'12"E., a distance of 1060.90 feet. Thence S89°59'01"E., a distance of 319.88 feet to the beginning of a tangent curve concave southerly and having a radius of 1000.00 feet; thence easterly along said curve 312.87 feet through a central angle of 18°00'00"; thence S71°51'01"E, a distance of 7095.77 feet to a point in the center of an existing roadway, known locally as the Hot Creek Road, said point being distant to the north quarter corner of Section 1, T.4S., R.28E., MDB&M, N11°30'33"E., 3511.98 feet.

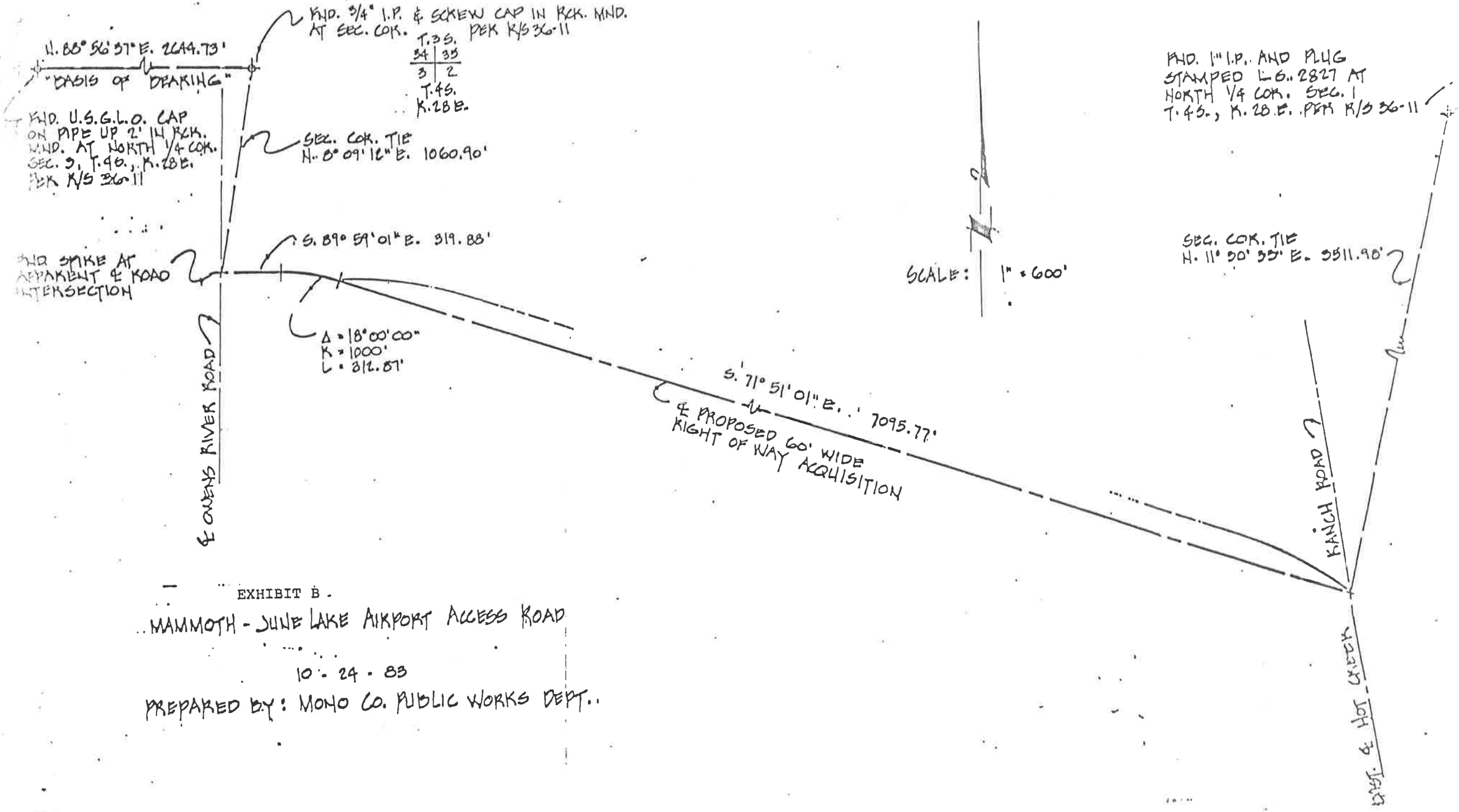


EXHIBIT B

MAMMOTH - JUNE LAKE AIRPORT ACCESS ROAD

10 - 24 - 83

PREPARED BY: MONO CO. PUBLIC WORKS DEPT.

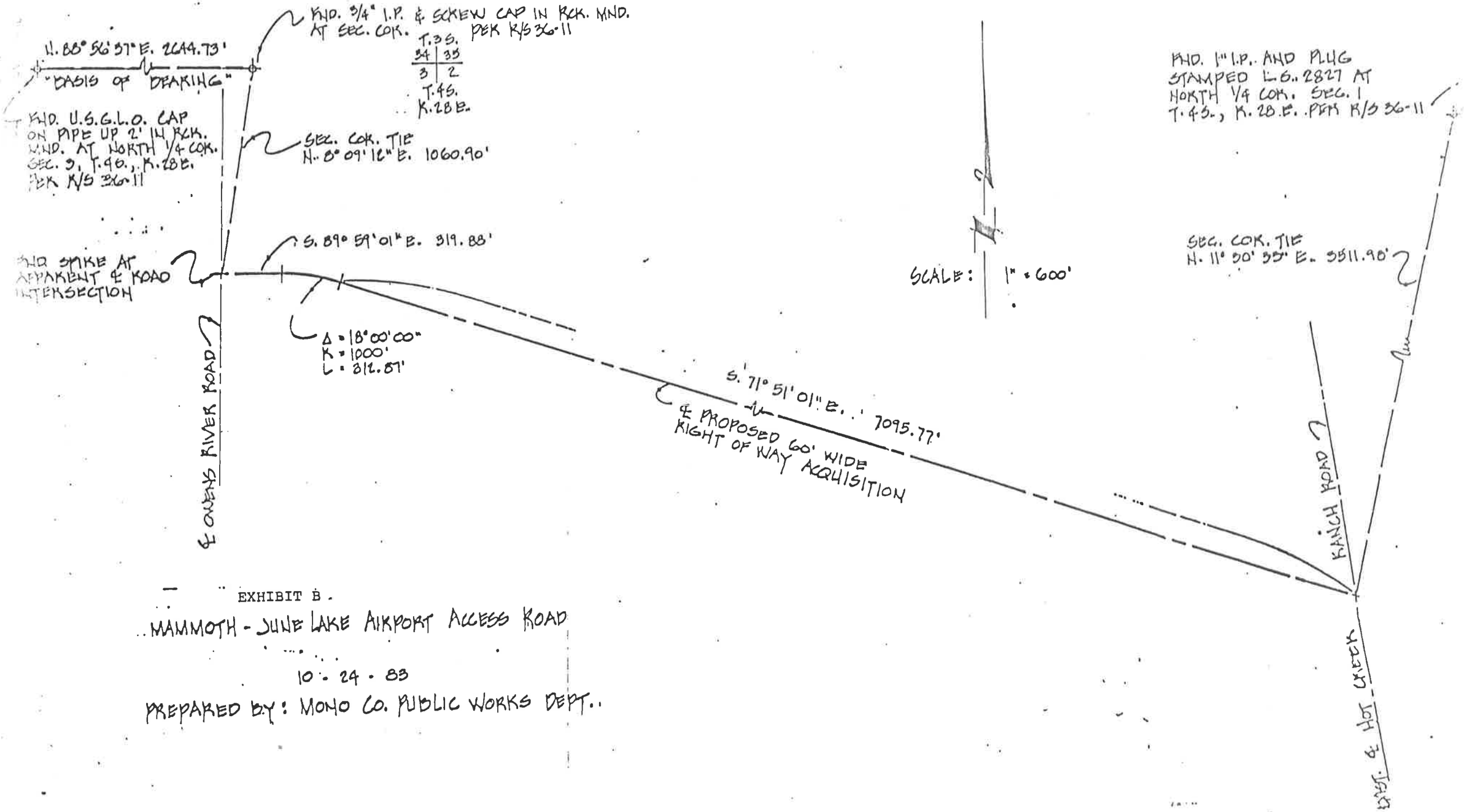


EXHIBIT B

MAMMOTH - JUNE LAKE AIRPORT ACCESS ROAD

10 - 24 - 83

PREPARED BY: MONO CO. PUBLIC WORKS DEPT.

Appendix E: Rangeland Management

Status of Livestock Production Rangelands

As of 2018, 852,200 acres were available for livestock grazing on the Inyo National Forest. Of these, 12 allotments (275,740 acres) were either vacant or in nonuse for resource protection. The remaining acres (576,460 acres) were being grazed by cattle or sheep (table 31 and figure 22).

Determinations of the status of livestock grazing allotments, changes in livestock class, season of use, timing of use, and established utilization standards, are all determined during project-level environmental analysis. The plan components found in the forest plan are used as a baseline for determining utilization standards at the project-level. Vacant allotments would need project-level environmental analysis prior to reactivation.

Table 31 Summary data of current grazing allotments, Inyo National Forest

ID	Allotment	Kind/Class	Status	Acres
100	Montgomery Pass	Wild Horse	active	69,265
123	Mcbride Flat	Cattle	closed	69,265
300	White Mountain	Wild Horse	active	181,820
400	Saline Valley	Wild Burro	active	27,764
102	Alger Lake	Sheep	vacant	2,947
103	Alper's Canyon	Cattle	active	317
104	Black Canyon	Cattle	vacant	34,274
105	Bloody Canyon	Sheep	vacant	5,364
107	Dexter Creek	Sheep	active	18,557
108	Horse Meadow	Sheep	vacant	1,531
109	June Lake	Sheep	active	14,855
111	Long Valley	Cattle	active	15,539
112	Mono Mills	Sheep	active	29,101
114	Turner	Cattle	active	13,257
115	Clark Canyon	Cattle	active	3,252
120	Mono Sand Flat	Cattle	active	7,461
121	Mono Lake	Cattle	closed	1,553
201	Hot Creek	Cattle	active	10,072
202	Antelope	Cattle	active	9,085
203	McGee	Sheep	closed	4,214
204	Sherwin/Deadman	Sheep	active	29,757
205	Tobacco Flat	Cattle	active	1,603
303	Buttermilk	Cattle	active	18,910
304	Casa Diablo	Sheep	active	49,613
306	Clover Patch	Cattle	active	9,214
307	Cottonwood	Cattle	vacant	23,405
308	Crooked Creek	Cattle	active	40,961

Enclosure 4

ID	Allotment	Kind/Class	Status	Acres
309	Davis Creek	Cattle	active	10,820
310	Deep Springs	Cattle	active	24,438
311	Glass Mountain	Cattle	active	987
312	Indian Creek	Cattle	vacant	16,781
314	McMurry Meadows	Cattle	active	9,753
315	Perry Aiken	Cattle	vacant	29,386
316	Coyote	Cattle	active	49,758
317	Rock Creek	Sheep	active	13,131
319	Shannon Canyon	Cattle	active	10,152
320	Taboose Creek	Cattle	active	4,199
321	Trail Canyon	Cattle	active	27,033
322	Tres Plumas	Cattle	vacant	40,216
323	Watterson Meadow	Sheep	active	15,956
325	Wilfred Creek	Cattle	active	5,229
328	Queen Valley	Cattle	vacant	15,943
350	Fish Creek	Sheep	closed	25,765
401	Alabama Hills	Cattle	active	1,837
402	Ash Creek	Cattle	active	10,850
403	George Creek	Cattle	active	1,869
404	Independence	Cattle	active	15,916
405	Mazourka	Cattle	active	16,794
406	Monache	Cattle	active	48,573
407	Mulkey	Cattle	active	18,622
408	Olancha	Cattle	active	14,734
409	Templeton	Cattle	vacant	43,641
410	Tunawee	Cattle	active	4,250
412	Whitney	Cattle	vacant	44,972

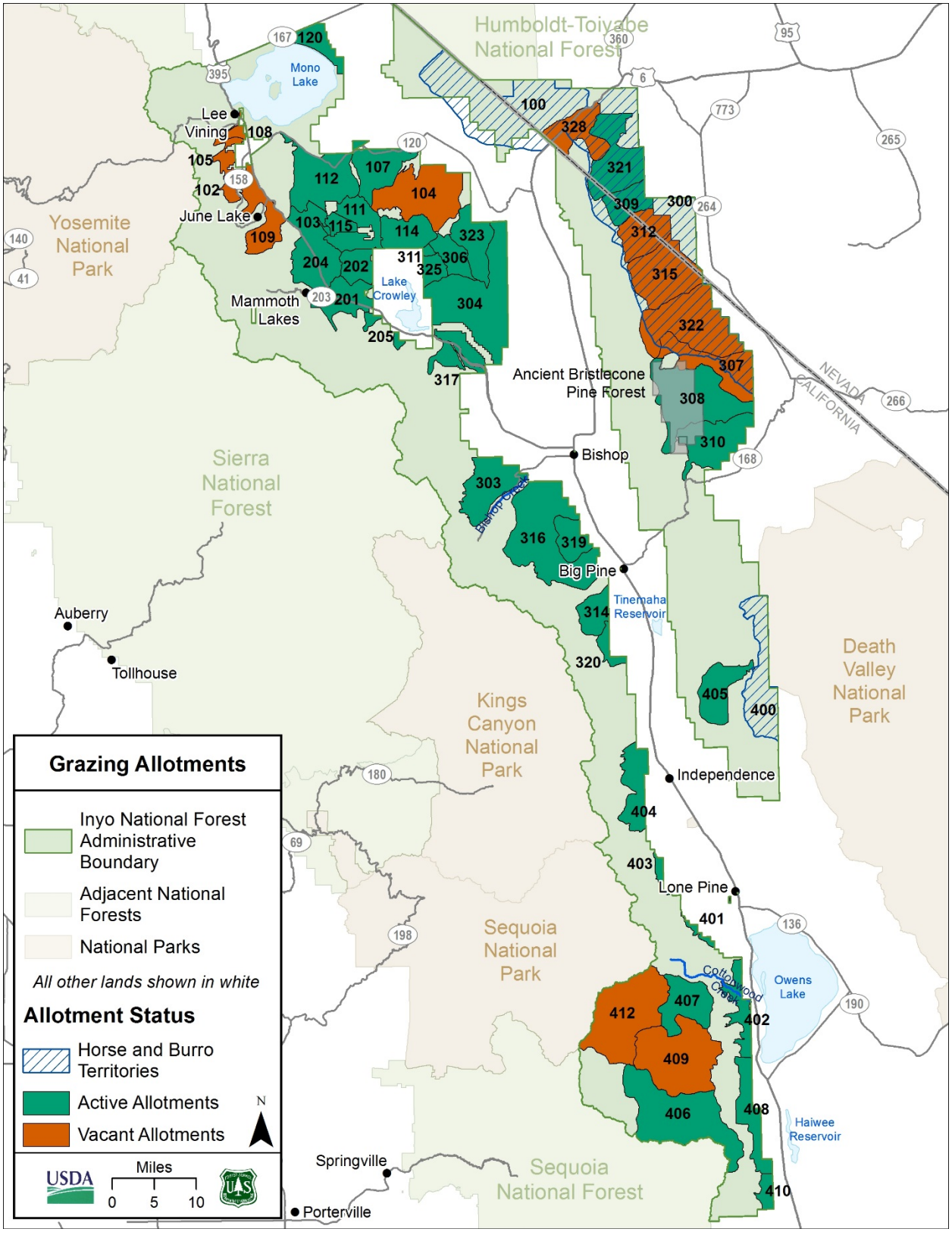


Figure 22. Livestock grazing allotments and wild horse and burro territories on the Inyo National Forest 2017

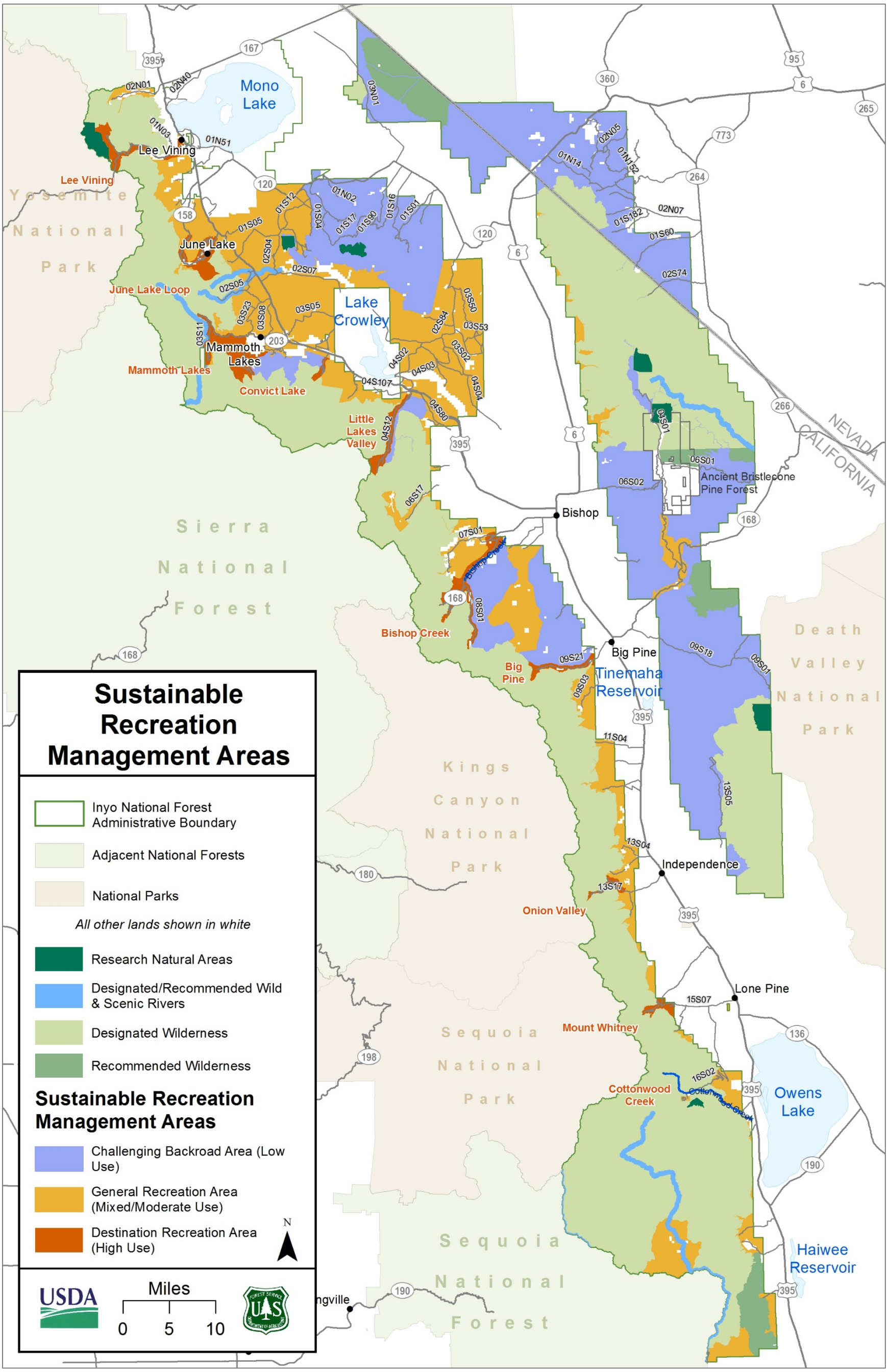


Figure 15. Recreation Management Areas on the Inyo National Forest

Enclosure 5

USDA United States Department of Agriculture | Forest Service | Pacific Southwest Region

Inyo National Forest
351 Pacu Lane, Suite 200
Bishop, CA 93514
(760) 873-2400 Voice
(760) 873-2538 Text (TDD)

File Code: 2730

Date: 12/15/2020

Laurie J. Suttmeier
Federal Aviation Administration
Manager, San Francisco Airports District Office
1000 Marina Blvd., Suite 200
Brisbane, CA 94005-1835

Proposed Mammoth-Yosemite Airport Terminal Development, 4(f) concurrence

Dear Ms. Suttmeier:

I understand the Federal Aviation Administration (FAA), is the lead federal environmental agency responsible to assure compliance with the National Environmental Policy Act (NEPA), and associated special purpose laws in support of a future request for federal Airport Improvement Program (AIP) grant funding for the Mammoth Yosemite Airport (Airport).

The Town of Mammoth Lakes, the airport sponsor, proposes to complete a Terminal Area Development Project within the Airport. A component of this project would extend a paved portion of the existing 60-foot-wide easement, held by Mono County, and located on National Forest System lands adjacent to the area to be developed on airport lands. The existing easement to Mono County was issued by the Forest Service in 1984 under the Forest Roads and Trails Act (FRTA).

Because the proposed road extension is located on National Forest System lands, consideration of special purpose law, Section 4(f) of the Department of Transportation Act of 1996 (as amended), 49 United States Code (U.S.C.) §303(c) [Section 4(f)] is required.

Section 4(f) Statement

The proposed extension would involve paving 860 feet of an existing native surface road. I have reviewed this proposal against the 4 (f) criteria listed above, as well as the 2019 Inyo National Forest Land Management Plan, and concur with FAA's assessment that Section 4(f) does not apply to the extension of the road located on National Forest System lands.

Any questions can be directed the Sheila Irons, Lands Specialist, at Sheila.irons@usda.gov or 760-965-9609.

Sincerely,

LESLEY YEN
Forest Supervisor

Cc: Gordon Martin, District Ranger
Camille Garibaldi, FAA

MONO COUNTY
DEPARTMENT OF PUBLIC WORKS

POST OFFICE BOX 457 • 74 NORTH SCHOOL STREET • BRIDGEPORT, CALIFORNIA 93517
760.932.5440 • Fax 760.932.5441 • monopw@mono.ca.gov • www.monocounty.ca.gov

February 18, 2021

Laurie J. Suttmeier
Federal Aviation Administration
Manager, San Francisco Airports District Office
1000 Marina Blvd., Suite 200
Brisbane, CA 94005-1835

RE: Proposed Mammoth-Yosemite Airport Terminal Development; Extension of Easement on Airport Road

Dear Ms. Suttmeier:

The County of Mono holds an easement from the USFS for Airport Road, which provides access to the Mammoth-Yosemite Airport. Airport Road is part of the County's Maintained Road Mileage and the County recently awarded a contract for the rehabilitation of Airport Road to occur in summer of 2021.

The County is aware of the Town of Mammoth Lake's Terminal Area Development Project and understands the proposed development will require an extension of Airport Road and the associated easement with the USFS, of approximately 860 feet.

This letter should serve as confirmation that the County is prepared to coordinate however necessary to effectuate the extension of the easement and of Airport Road in support of the Town's proposed project.

Regards,

Tony Dublino
Director of Public Works
County of Mono

APPENDIX I: LAND USE ASSURANCE

Community & Economic Development
P.O. Box 1609, Mammoth Lakes, CA, 93546
(760) 965-3630
www.townofmammothlakes.ca.gov

May 3, 2021

Ms. Laurie Suttmeier, Manager
Federal Aviation Administration
San Francisco Airports District Office
1000 Marina Boulevard, Suite 220
Brisbane, CA 94005-1863

Re: Federal Grant Assurances and Compatible Land Use
For Mammoth Yosemite Airport (MMH)

Dear Ms. Suttmeier:

The Town of Mammoth Lake's – Mammoth Yosemite Airport (MMH) is part of the federal National Plan of integrated Airport Systems (NPIAS), and the Town of Mammoth Lakes accepts federal Airport Improvement Program (AIP) grant funds to construct and maintain airport facilities. As a condition of federal funding, the Town is obligated to maintain, operate, and improve its facilities to comply with grant assurances and to be as self-sustaining as possible.

Grant Assurance 6, Consistency with Local Plans, (49 U.S.C. 47107) requires proposed projects to be reasonably consistent with local plans of public agencies responsible for planning development of the area surrounding the airport. As the owner and operator of the Mammoth Yosemite Airport (MMH), the Town complies with and provides the necessary Airport Sponsor's compatible land use assurance for existing and proposed land uses in accordance with 49 U.S.C. Section 47101 (a)(10). The Town provides assurance that appropriate action, including the adoption and enforcement of zoning laws, as well as coordination with the Inyo National Forest and City of Los Angeles Department of Water and Power, to the extent reasonable, to restrict the use of land adjacent to or in the vicinity of MMH to activities and purposes that are compatible with normal airport operations including the takeoff and landing of aircraft.

Please let me know if you have any questions or require additional information about MMH and the Town's commitment to complying with federal grant assurances.

Sincerely,

Grady Dutton,
Designated Sponsor Representative

APPENDIX J: PUBLIC INVOLVEMENT

SCOPING

The following documents include:

- Notice of Intent (Published in *The Sheet*, a local newspaper)
- Town of Mammoth Lakes, Public Scoping Meeting handouts
- Comments from California State Agencies

PUBLIC NOTICES

Notice Inviting Bids

NOTICE INVITING BIDS
SNW 19-4009

The Town of Mammoth Lakes will receive sealed bids for the work shown on the plans entitled:

OPERATION OF THE TOWN'S SNOW STORAGE
In the Town of Mammoth Lakes for The Town of Mammoth Lakes, California

Bids will be received at the Office of the Town Clerk of the Town of Mammoth Lakes located at:
437 Old Mammoth Road, Suite 230,
Mammoth Lakes, California 93546 until 4:00 PM on November 5, 2019 at which time they will be publicly opened and read.

Proposal forms and Contract Documents for this work are included in the specifications.

GENERAL DESCRIPTION: The project consists of the operation of the Town's snow storage lot including onsite monitoring for access to and from the lot and maintain dumping records, moving or blowing dumped snow in an orderly manner to provide for ongoing snow dumping throughout the winter season, removal and disposal of all garbage and trash, incidental repair of fence, gates, or signs as necessary, and furnishing all labor, materials, tool, equipment, and incidental, except as specified, to complete the contract in a satisfactory and workmanlike manner as described in the Specifications. The work includes full compliance with all applicable laws, rules and regulations. The work shall be completed within the time set forth in the Contract.

Plans and specifications may be obtained for a NONREFUNDABLE FEE as listed below:
Plans & Specifications
(incl. bid forms)
Picked up at the Town Offices $25.00
Shipped UPS, FedEx, or US Mail $75.00

To order the plans and specifications by telephone call Sierra Shultz at (760) 934-3654 or email sshultz@townofmammothlakes.ca.gov .
Project info is also available on the Town of Mammoth Lakes website at https://www.townofmammothlakes.ca.gov/bids.aspx. When requesting plans and specifications, the Contractor should provide all bidder information including project name, name, affiliation, phone number, address, and email address for the Bidder's List.

As stated below, the pre-bid is not mandatory, however a meeting with Town Staff is mandatory prior to the bid opening. Contact Sierra Shultz to coordinate the meeting by either phone or in person.
A non-mandatory pre-bid meeting will be held at the conference room at the Town Offices on October 31 at 1:00 PM, located at 437 Old Mammoth Road, Suite 230, Mammoth Lakes, California.

The contractor shall have a valid Class A or C-12 Contractor license and a current Business Tax Certificate and shall maintain all required licenses throughout the duration of the Contract. The Contractor shall demonstrate their qualifications by having adequate equipment in good working order, experience, and ability to perform the required work. The Town will be the sole judge as to the qualifications of each bidder. Each bid must be accompanied by a certified or cashier's check payable to the order of the Town of Mammoth Lakes, or by a bid bond in the sum of no less than 10% of the total amount of the bid, as a guarantee that the bidder will enter into the proposed contract if it be awarded him/her. A payment bond and faithful performance bond are not required. All bonds shall be executed by an admitted surety insurer meeting the requirements of California Code of Civil Procedure Section 995.120.

The Director of Industrial Relations has determined the general prevailing rate of per diem wages in the locality in which this work is to be performed for each craft or type of worker needed to execute the Contract which will be awarded to the successful bidder, copies of which are on file and will be made available to any interested party upon request at Town Hall or online at http://www.dir.ca.gov/dlsr. A copy of these rates shall be posted by the successful bidder at the job site. The successful bidder and all subcontractor(s) under them, shall comply with all applicable Labor Code provisions, which include, but are not limited to the payment of no less than the required prevailing rates to all workers employed by them in the execution of the Contract, the employment of apprentices, the hours of labor and the debarment of contractors and subcontractors.

Pursuant to Labor Code sections 1725.5 and 1771.1, all contractors and subcontractors that wish to bid on, be listed in a bid proposal, or enter into a contract to perform public work must be registered with the Department of Industrial Relations. No bids will be accepted, nor any contract entered into without proof of the contractor's and subcontractors' current registration with the Department of Industrial Relations to perform public work. If awarded a Contract, the Bidder and its subcontractors, of any tier, shall maintain active registration with the Department of Industrial Relations for the duration of the Project.

This Project is subject to compliance monitoring and enforcement by the Department of Industrial Relations. In bidding on this project, it shall be the Bidder's sole responsibility to evaluate and include the cost of complying with all labor compliance requirements under this contract and applicable law in its bid. Pursuant to Public Contract Code section 22300, the successful bidder may substitute certain securities for funds withheld by the Town to ensure performance under the Contract.

The Contract will be awarded to the responsible bidder submitting the lowest responsive bid on the base bid alone. The Town reserves the right to waive any informality or irregularity in a bid. The Town of Mammoth Lakes reserves the right to reject any and/or all bids, or to utilize any alternative procedures authorized by the Public Contract Code Sections 20166 and 20167.

Submission of a bid shall be deemed conclusive evidence that the bidder has thoroughly examined the plans, specifications and the site of all work and the bid takes all costs into account. Each bid shall remain good for a minimum of sixty (60) days after bid opening. Technical questions should be directed to Sierra Shultz at the Office of the Director of Public Works, Town of Mammoth Lakes, California, telephone (760) 965-3654. Oral clarifications are non-binding and any changes shall be issued by written addenda only.
TOWN OF MAMMOTH LAKES, CALIFORNIA
Jamie Gray, TOWN CLERK
DATED: October 18, 2019

TS #2019-0197

Notice of Sale of Surplus Property

NOTICE IS HEREBY GIVEN of the availability of the following surplus property, to be sold to the highest bidder meeting the minimum bid requirements. All equipment is sold as is, where is, with no warranty or guarantee as to its serviceability or fitness for any purpose.

Item No.	Description No Minimum Bid
A004	2004 Ford Expedition (Not Running)
A011	1994 Jeep Cherokee (Body Damage)
A014	1994 Jeep Cherokee (Body Damage)
A019	1997 Ford Expedition
J002	1999 Ford Expedition (Not Running)
PD02	1999 Ford Expedition
UV02	2000 John Deere Gator (Not running)

Bidder will be responsible for registration and smog certification.

Sealed bids must be submitted to the attention of the Town Clerk, Town of Mammoth Lakes, P.O. Box 1609, 437 Old Mammoth Road, Suite 230, Mammoth Lakes, CA 93546 in envelopes marked "Sealed Bid, Surplus Equipment" and must identify the item being bid upon. Bids will be accepted until 3:30 p.m. on Wednesday November 6,2019, at which time they will be publicly opened and read. Payment must be in cash, money order, or cashiers check only and must be received by the Town within two (2) working days of notification of successful bid. Ownership and registration certificates will be issued at time of sale. Purchased items must be removed from the Town Corporation Yard within five (5) working days. Bidders are advised that "overnight mail" may take more than one day to be delivered to Mammoth Lakes. For an appointment to view the equipment at the Town Corporation Yard (299 Commerce Drive), call the Town Vehicles and Equipment Maintenance Division, (760) 965-3682.

The Town of Mammoth Lakes reserves the right to waive irregularities and the right to reject any and all bids.

Dated: October 15, 2019
Jamie Gray, Town Clerk

TS #2018-0195

Fictitious Business Name Statement
The Following Person
Is Doing Business As:

Highland Property Management & Consulting Services

Elizabeth Rodriguez
803 Canyon Blvd., P.O. Box 3596
Mammoth Lakes, Ca, 93546

This business is conducted by a individual.
The registrant commenced to transact business under the fictitious business name listed above on, September 23,2019.
This statement was filed with the County Clerk of Mono County on September 23, 2019. File Number 19-178
2019-0200 (10/19, 10/26, 11/2, 11/9)

Notice of Intent (NOI)

To Prepare An Environmental Assessment
And Conduct a Public Scoping Meeting

The Town of Mammoth Lakes (Town) proposes to implement a Terminal Area Development Plan (TADP) to replace the existing passenger terminal and associated facilities at the Mammoth Yosemite Airport (Airport). The TADP (the Project) will occur within Airport property boundaries and includes a new passenger terminal building, aircraft parking and de-icing aprons, automobile parking lots, a twelve-bay Airport Rescue/Firefighting and maintenance building, an extension of Airport Road and associated infrastructure.

The proposed TADP will allow the airport to function more efficiently and effectively to meet existing and projected demand. Additional terminal capacity is required to accommodate the peak travel demands of arriving and departing passengers at acceptable levels of service.

Based on the 2017 aviation forecast and the 2019 aviation forecast addendum, the Airport will see incremental increases in commercial passenger enplanements and charter flights from destinations throughout the western United States. The greatest demand will be in the winter (January through March), when visitors take advantage of the regional winter sports recreational opportunities.

The Town anticipates applying for federal grant funding for a portion of the TADP construction costs, and that construction has the potential to affect the environment, the Town is preparing an Environmental Assessment (EA) on the project for review and approval by the Federal Aviation Administration (FAA) to meet the requirements of the National Environmental Policy Act (NEPA) of 1969 as amended.

The purpose of this notice is to solicit comments from government agencies and the general public regarding the scope of environmental analysis to be included in the EA. The EA will be prepared in accordance with the procedures described in Title 40, Code of Federal Regulations Parts 1500-1508; FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures*; and FAA Order 5050.4B, *National Environmental Policy Act (NEPA) Implementing Instructions for Airport Actions*.

PLEASE SUBMIT PUBLIC SCOPING COMMENTS TO: Kim Cooke, Associate Planner, Town of Mammoth Lakes P.O. Box 1609, Mammoth Lakes, CA 93546 or e-mail: kcooke@townofmammothlakes.ca.gov. Telephone 760-965-3638. Public scoping comments will be accepted until 5:00 PM on November 18, 2019 (30 days after notice of scoping).

PUBLIC SCOPING MEETING/OPEN HOUSE: October 24, 2019; From 4 pm to 6:30 pm, at the Mammoth Lakes Town Council Chambers, Suite Z within the Minaret Village Shopping Center, 437 Old Mammoth Road, Mammoth Lakes, California.

PLEASE NOTE: Before including your name, address, and telephone number, email or other personal identifying information in your comment, be advised that your entire comment – including your personal identifying information - may be made publicly available at any time.

TS #2019-0198

Notice of Preparation (NOP)

Of An Environmental Impact Report
And Public Scoping Meeting

The Town of Mammoth Lakes, California (Town) is the Lead Agency for preparation of an Environmental Impact Report (EIR) for the Town's proposed Terminal Area Development Plan Project at the Mammoth Yosemite Airport, 1300 Airport Road, Mammoth Lakes, CA 93546 (proposed Project) in compliance with the California Environmental Quality Act (CEQA). Written comments are invited from agencies and the public regarding environmental issues that should be covered in the EIR, the scope of the environmental analysis and potential alternatives to the proposed Project.

The EIR will evaluate potentially significant environmental impacts of the proposed Project on a direct, indirect and cumulative basis. The EIR will identify feasible mitigation measures that have the potential to lessen or avoid such impacts and identify any feasible alternatives that may lessen one or more potentially significant environmental effects of the project.

The purpose of the Project is to provide adequate passenger terminal facilities for existing and projected commercial airline operations. The Project includes construction of a new terminal building, aircraft parking and de-icing aprons and taxiways, maintenance facilities and associated infrastructure.

As required by CEQA, the Town as Lead Agency has issued a Notice of Preparation (NOP) to inform responsible agencies, trustee agencies and the public of the decision to prepare an EIR and to request input as to the scope and content of the EIR. The NOP describes the proposed Project and provides an initial indication of its potential environmental effects. The full NOP is available for review at the Town Offices, 437 Old Mammoth Road, Suite 230, and the Town's webpage URL: https://www.townofmammothlakes.ca.gov/939/2019-Terminal-Area-Development-Plan-EAEI

Written comments or questions regarding the EIR should be directed to the Town's Community and Economic Development Department at the following address by 5:00 p.m. on November 18, 2019.

PLEASE SUBMIT PUBLIC SCOPING COMMENTS TO: Kim Cooke, Associate Planner, Town of Mammoth Lakes P.O. Box 1609, Mammoth Lakes, CA 93546 or e-mail: kcooke@townofmammothlakes.ca.gov. Telephone 760-965-3638. Public scoping comments will be accepted until 5:00 PM on November 18, 2019 (30 days after notice of scoping).

PUBLIC SCOPING MEETING/OPEN HOUSE: October 24, 2019; From 4 pm to 6:00 pm, at the Mammoth Lakes Town Council Chambers, Suite Z within the Minaret Village Shopping Center, 437 Old Mammoth Road, Mammoth Lakes, California.

PLEASE NOTE: Before including your name, address, and telephone number, email or other personal identifying information in your comment, be advised that your entire comment – including your personal identifying information - may be made publicly available at any time.

TS #2019-0199

Notice of Intent (NOI)

To Prepare An Environmental Assessment And Conduct a Public Scoping Meeting

The Town of Mammoth Lakes (Town) proposes to implement a Terminal Area Development Plan (TADP) to replace the existing passenger terminal and associated facilities at the Mammoth Yosemite Airport (Airport) 1300 Airport Road, Mammoth Lakes, CA 93546. The TADP (the Project) will occur within Airport property boundaries and includes a new passenger terminal building, aircraft parking and de-icing aprons, automobile parking lots, a twelve-bay Airport Rescue/Firefighting and maintenance building, an extension of Airport Road and associated infrastructure.

The proposed TADP will allow the airport to function more efficiently and effectively to meet existing and projected demand. Additional terminal capacity is required to accommodate the peak travel demands of arriving and departing passengers at acceptable levels of service. Based on the 2017 aviation forecast and the 2019 aviation forecast addendum, the Airport will see incremental increases in commercial passenger enplanements and charter flights from destinations throughout the western United States.

The Town anticipates applying for federal grant funding for a portion of the TADP construction costs, and that construction has the potential to affect the environment, so the Town is preparing an Environmental Assessment (EA) on the project for review and approval by the Federal Aviation Administration (FAA) to meet the requirements of the National Environmental Policy Act (NEPA) of 1969 as amended.

The purpose of this notice is to solicit comments from government agencies and the general public regarding the scope of environmental analysis to be included in the EA. The EA will be prepared in accordance with the procedures described in Title 40, Code of Federal Regulations Parts 1500-1508; FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures*; and FAA Order 5050.4B, *National Environmental Policy Act (NEPA) Implementing Instructions for Airport Actions*. The full NOI is available for review at the Town Offices, 437 Old Mammoth Road, Suite 230, and the Town's webpage URL: https://www.townofmammothlakes.ca.gov/939/2019-Terminal-Area-Development-Plan-EAEI

PLEASE SUBMIT PUBLIC SCOPING COMMENTS TO: Kim Cooke, Associate Planner, Town of Mammoth Lakes P.O. Box 1609, Mammoth Lakes, CA 93546 or e-mail: kcooke@townofmammothlakes.ca.gov. Telephone 760-965-3638. Public scoping comments will be accepted until 5:00 PM on November 18, 2019 (30 days after notice of scoping).

PUBLIC SCOPING MEETING/OPEN HOUSE: October 24, 2019; From 4 pm to 6:00 pm, at the Mammoth Lakes Town Council Chambers, Suite Z within the Minaret Village Shopping Center, 437 Old Mammoth Road, Mammoth Lakes, California.

PLEASE NOTE: Before including your name, address, and telephone number, email or other personal identifying information in your comment, be advised that your entire comment – including your personal identifying information - may be made publicly available at any time.

WELCOME TO THE MAMMOTH YOSEMITE AIRPORT TERMINAL AREA DEVELOPMENT PLAN ENVIRONMENTAL ASSESSMENT AND ENVIRONMENTAL IMPACT REPORT SCOPING MEETING

October 24, 2019

Mammoth Lakes
CALIFORNIA

October 24, 2019

Town of Mammoth Lakes
Public Scoping Meeting
Mammoth Yosemite Airport
Terminal Area Development Plan
National Environmental Policy Act - Environmental Assessment
And
California Environmental Quality Act - Environmental Impact Report

INTRODUCTION

The Town of Mammoth Lakes (Town) proposes to construct a Terminal Area Development Plan (TADP) to replace the existing passenger terminal and associated facilities at the Mammoth Yosemite Airport (Airport). The TADP will be constructed within Airport property boundaries and includes a new passenger terminal building, aircraft parking and de-icing aprons, automobile parking lots, a twelve-bay Airport Rescue/Firefighting and maintenance building, an extension of Airport Road and associated infrastructure.

The proposed TADP allows the airport to function more efficiently and effectively to meet existing and projected demand. Additional terminal capacity is required to assure acceptable levels of service during the peak travel demand hours for arriving and departing passengers.

The Federal Aviation Administration (FAA) is the lead federal agency responsible for the National Environmental Policy Act (NEPA) Environmental Assessment (EA). The EA will be prepared by the Town for FAA concurrence in accordance with the procedures described in Title 40, Code of Federal Regulations Parts 1500-1508; FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures*; and FAA Order 5050.4B*, National Environmental Policy Act (NEPA) Implementing Instructions for Airport Actions*.

The Town is the lead agency under the California Environmental Quality Act (CEQA) and will prepare an Environmental Impact (EIR) for the proposed TADP at Mammoth Yosemite Airport (pursuant to CEQA Guidelines). The purpose of this Public Scoping meeting is to provide information related to the TADP and to solicit public comments and suggestions regarding (1) the scope and content of the EA and EIR and (2) the environmental issues and alternatives to be addressed in the both documents.

Your comments will be used to ensure that public concerns and areas of interest are considered during the preparation of the EA and EIR. You may submit written comments tonight or submit comments to Kim Cooke, Associate Planner, Town of Mammoth Lakes P.O. Box 1609, Mammoth Lakes, CA 93546 or e-mail: kcooke@townofmammothlakes.ca.gov. Telephone 760-965-3638. Public scoping comments will be accepted until 5:00 PM on November 18th, 2019.

PLEASE NOTE: Before including your name, address, and telephone number, email or other personal identifying information in your comment, be advised that your entire comment – including your personal identifying information - may be made publicly available at any time. While you can ask us in your comment to withhold from public review your personal identifying information, we cannot guarantee that we will be able to do so. If you prefer, you may submit your comments anonymously.

SCOPING: COMMENTS

DEPARTMENT OF TRANSPORTATION
DISTRICT 9
500 SOUTH MAIN STREET
BISHOP, CA 93514
PHONE (760) 872-0785
FAX (760) 872-0678
TTY 711
www.dot.ca.gov

Making Conservation a California Way of Life.

November 7, 2019

Ms. Kim Cooke
Town of Mammoth Lakes
P.O. Box 609
Mammoth Lakes, CA 93546

File: Mno-395- 22.74
NOP DEIR
SCH #: 2019100384

Mammoth Airport Terminal Area Development Plan - Notice of Preparation of a draft Environmental Impact Report (NOP DEIR)

Dear Ms. Cooke:

The California Department of Transportation (Caltrans) District 9 appreciates the opportunity to review the proposed development at the airport, which abuts US 395 and accesses it via Hot Creek Road. Please consider the following in environmental analysis:

- Aesthetics and Visual Resources - Consider that US 395 is designated as a Scenic Highway in this corridor.
- Biological Resources - Assess and address any impacts on animal movement patterns. Utilize current information/resources of the Eastern Sierra Wildlife Stewardship Team, which includes Mammoth Lakes staff member Haley Lang.
- Transportation - Assess and address traffic impacts for the US 395/Hot Creek Road intersection.
- Utilities and Service Systems - Assess if any project utility upgrades would be within US 395 right-of-way (thus, necessitating a Caltrans encroachment permit).
- If not already in consultation, the Town should do so with Mono County. The County has a project proposed to rehabilitate Hot Creek Hatchery and Airport Roads.

We value our cooperative working relationship with the Town regarding development affecting the state transportation system. For any questions, feel free to contact me at (760) 872-0785 or at gayle.rosander@dot.ca.gov.

Sincerely,

Gayle J. Rosander

GAYLE J. ROSANDER
External Project Liaison

c: State Clearinghouse
Mark Reistetter, Caltrans D9

Department of Toxic Substances Control

Jared Blumenfeld
Secretary for
Environmental Protection

Meredith Williams, Ph.D.
Acting Director
8800 Cal Center Drive
Sacramento, California 95826-3200

Gavin Newsom
Governor

November 18, 2019

Ms. Kim Cooke
Town of Mammoth Lakes Community and Economic Development
P.O. Box 609
Mammoth Lakes, California 93546

NOTICE OF PREPARATION OF A DRAFT ENVIRONMENTAL IMPACT REPORT FOR MAMMOTH YOSEMITE AIRPORT TERMINAL AREA DEVELOPMENT PLAN PROJECT – DATED OCTOBER 21, 2019
(STATE CLEARINGHOUSE NUMBER: 2019100384)

Dear Ms. Cooke:

The Department of Toxic Substances Control (DTSC) received a Notice of Preparation (NOP) for an Environmental Impact Report (EIR) for Mammoth Yosemite Airport Terminal Area Development Plan Project.

The proposed project would include a new approximately 40,000 square foot, three-gate passenger terminal and an associated aircraft parking apron of approximately 130,500 square feet capable of parking three commercial aircraft. The project would include automobile parking lots, an aircraft de-icing apron, new taxiways, an Airport Road extension, service road realignment, a package wastewater treatment plant and wastewater disposal field, new electrical service, and an Aircraft Rescue and Fire Fighting-Snowplow building with a new vehicle parking apron and access road.

DTSC recommends that the following issues be evaluated in the EIR, Hazards and Hazardous Materials section:

1. The forthcoming EIR should acknowledge the potential for project site activities to have resulted in the release of hazardous wastes/substances. In instances in which releases have occurred, further studies should be carried out to delineate the nature and extent of the contamination, and the potential threat to public health and/or the environment should be evaluated. The EIR should also identify the mechanism(s) to initiate any required investigation and/or remediation and

the government agency who will be responsible for providing appropriate regulatory oversight.

2. If buildings or other structures are to be demolished on any project sites included in the proposed project, surveys should be conducted for the presence of lead-based paints or products, mercury, asbestos containing materials, and polychlorinated biphenyl caulk. Removal, demolition and disposal of any of the above-mentioned chemicals should be conducted in compliance with California environmental regulations and policies. In addition, sampling near current and/or former buildings should be conducted in accordance with DTSC's 2006 *Interim Guidance Evaluation of School Sites with Potential Contamination from Lead Based Paint, Termiticides, and Electrical Transformers* (https://dtsc.ca.gov/wpcontent/uploads/sites/31/2018/09/Guidance_Lead_Contamination_050118.pdf).

3. If any projects initiated as part of the proposed project require the importation of soil to backfill any excavated areas, proper sampling should be conducted to ensure that the imported soil is free of contamination. DTSC recommends the imported materials be characterized according to *DTSC's 2001 Information Advisory Clean Imported Fill Material* (https://dtsc.ca.gov/wp-content/uploads/sites/31/2018/09/SMP_FS_Cleanfill-Schools.pdf).

4. If any sites included as part of the proposed project have been used for agricultural, weed abatement or related activities, proper investigation for organochlorinated pesticides should be discussed in the EIR. DTSC recommends the current and former agricultural lands be evaluated in accordance with DTSC's 2008 *Interim Guidance for Sampling Agricultural Properties (Third Revision)* (https://dtsc.ca.gov/wp-content/uploads/sites/31/2018/09/Ag-Guidance-Rev-3-August-7-2008-2.pdf).

DTSC appreciates the opportunity to review the NOP. Should you need any assistance with an environmental investigation, please submit a request for Lead Agency Oversight Application, which can be found at: https://dtsc.ca.gov/wp-content/uploads/sites/31/2018/09/VCP_App-1460.doc. Additional information regarding voluntary agreements with DTSC can be found at: https://dtsc.ca.gov/brownfields/.

If you have any questions, please contact me at (916) 255-3710 or via email at Gavin.McCreary@dtsc.ca.gov.

Sincerely,

Gavin McCreary
Project Manager
Site Evaluation and Remediation Unit
Site Mitigation and Restoration Program
Department of Toxic Substances Control

cc: (via email)

Governor's Office of Planning and Research
State Clearinghouse
State.clearinghouse@opr.ca.gov

Ms. Lora Jameson, Chief
Site Evaluation and Remediation Unit
Department of Toxic Substances Control
Lora.Jameson@dtsc.ca.gov

Mr. Dave Kereazis
Office of Planning & Environmental Analysis
Department of Toxic Substances Control
Dave.Kereasis@dtsc.ca.gov

State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Inland Deserts Region
3602 Inland Empire Blvd., Suite C-220
Ontario, CA 91764
www.wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director

November 12, 2019
Sent via email

Kim Cooke
Associate Planner
Town of Mammoth Lakes
P.O. Box 1609
Mammoth Lakes, CA 93546
kcooke@townofmammothlakes.ca.gov

Subject: Notice of Preparation of a Draft Environmental Impact Report
Mammoth Yosemite Airport Improvements Project
State Clearinghouse No. 2019100384

Dear Ms. Cooke:

The California Department of Fish and Wildlife (CDFW) received a Notice of Preparation (NOP) of a Draft Environmental Impact Report (DEIR) from the Town of Mammoth Lakes for the Mammoth Yosemite Airport Improvements Project (Project) pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines.[1]

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife. Likewise, we appreciate the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under the Fish and Game Code.

CDFW ROLE

CDFW is California's **Trustee Agency** for fish and wildlife resources, and holds those resources in trust by statute for all the people of the state. (Fish & G. Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines § 15386, subd. (a).) CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species (*Id.*, § 1802). Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency

[1] CEQA is codified in the California Public Resources Code in section 21000 et seq. The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources.

PROJECT DESCRIPTION SUMMARY

Description: The Town of Mammoth Lakes (Town; Lead Agency) proposes improvements and additions to the passenger terminal area at the existing Mammoth Yosemite Airport to provide adequate passenger terminal facilities for existing and projected commercial airline operations. The Project includes construction of a new terminal building, aircraft parking and de-icing aprons and taxiways, maintenance facilities, and associated infrastructure.

Location: The Mammoth Yosemite Airport consists of approximately 246 acres located approximately six miles east of the Town, adjacent to and north of U.S. Highway 395 between Hot Creek Hatchery Road and Benton Crossing Road. The proposed Project site is in the vicinity of the existing terminal area, located at approximately 37° 37' 41" north and 118° 50' 30" west on the Whitmore Hot Springs U.S. Geological Survey 7.5-minute quadrangle map.

COMMENTS AND RECOMMENDATIONS

CDFW offers the comments and recommendations below to assist the Town in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources. The comments and recommendations are also offered to enable CDFW to adequately review and comment on the proposed Project with respect to impacts on biological resources. CDFW recommends that the forthcoming DEIR address the following:

Assessment of Biological Resources

Section 15125(c) of the CEQA Guidelines states that knowledge of the regional setting of a project is critical to the assessment of environmental impacts and that special emphasis should be placed on environmental resources that are rare or unique to the region. To enable CDFW staff to adequately review and comment on the Project, the DEIR should include a complete assessment of the flora and fauna within and adjacent to the Project footprint, with particular emphasis on identifying rare, threatened, endangered, and other sensitive species and their associated habitats. CDFW recommends that the DEIR specifically include:

1. An assessment of the various habitat types located within the Project footprint, and a map that identifies the location of each habitat type. CDFW recommends that floristic, alliance- and/or association-based mapping and assessment be completed following *The Manual of California Vegetation*, second edition (Sawyer et al. 2009). Adjoining habitat areas should also be included in this assessment where site activities could lead to direct or indirect impacts offsite. Habitat mapping at the alliance level will help establish baseline vegetation conditions.

2. A general biological inventory of the fish, amphibian, reptile, bird, and mammal species that are present or have the potential to be present within each habitat type onsite and within adjacent areas that could be affected by the Project. CDFW's California Natural Diversity Database (CNDDB) in Sacramento should be contacted at (916) 322-2493 or CNDDB@wildlife.ca.gov to obtain current information on any previously reported sensitive species and habitat, including Significant Natural Areas identified under Chapter 12 of the Fish and Game Code, in the vicinity of the proposed Project. CDFW recommends that CNDDB Field Survey Forms be completed and submitted to CNDDB to document survey results. Online forms can be obtained and submitted at: https://www.wildlife.ca.gov/Data/CNDDB/Submitting-Data

   Please note that CDFW's CNDDB is not exhaustive in terms of the data it houses, nor is it an absence database. CDFW recommends that it be used as a starting point in gathering information about the *potential presence* of species within the general area of the Project site.

3. A complete, *recent* inventory of rare, threatened, endangered, and other sensitive species located within the Project footprint and within offsite areas with the potential to be affected, including California Species of Special Concern (CSSC) and California Fully Protected Species (Fish and Game Code § 3511). Species to be addressed should include all those which meet the CEQA definition (CEQA Guidelines § 15380). The inventory should address seasonal variations in use of the Project area and should not be limited to resident species. Focused species-specific surveys, completed by a qualified biologist and conducted at the appropriate time of year and time of day when the sensitive species are active or otherwise identifiable, are required. Acceptable species-specific survey procedures should be developed in consultation with CDFW and the U.S. Fish and Wildlife Service, where necessary. Note that CDFW generally considers biological field assessments for wildlife to be valid for a one-year period, and assessments for rare plants may be considered valid for a period of up to three years. Some aspects of the proposed Project may warrant periodic updated surveys for certain sensitive taxa, particularly if the Project is proposed to occur over a protracted time frame, or in phases, or if surveys are completed during periods of drought.

4. A thorough, recent, floristic-based assessment of special status plants and natural communities, following CDFW's *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (see https://www.wildlife.ca.gov/Conservation/Plants).

5. Information on the regional setting that is critical to an assessment of environmental impacts, with special emphasis on resources that are rare or unique to the region (CEQA Guidelines § 15125[c]).

Analysis of Direct, Indirect, and Cumulative Impacts to Biological Resources

The DEIR should provide a thorough discussion of the direct, indirect, and cumulative impacts expected to adversely affect biological resources as a result of the Project. To

ensure that Project impacts to biological resources are fully analyzed, the following information should be included in the DEIR:

1. A discussion of potential impacts from lighting, noise, human activity (e.g., recreation), defensible space, and wildlife-human interactions created by zoning of development projects or other Project activities adjacent to natural areas, exotic and/or invasive species, and drainage. The latter subject should address Project-related changes on drainage patterns and water quality within, upstream, and downstream of the Project site, including: volume, velocity, and frequency of existing and post-Project surface flows; polluted runoff; soil erosion and/or sedimentation in streams and water bodies; and post-Project fate of runoff from the Project site.

2. A discussion of potential indirect Project impacts on biological resources, including resources in areas adjacent to the Project footprint, such as nearby public lands (e.g. National Forests, State Parks, etc.), open space, adjacent natural habitats, riparian ecosystems, wildlife corridors, and any designated and/or proposed reserve or mitigation lands.

3. An evaluation of impacts to adjacent open space lands from both the construction of the Project and long-term operational and maintenance needs.

4. A cumulative effects analysis developed as described under CEQA Guidelines § 15130. Please include all potential direct and indirect Project related impacts to riparian areas, wetlands, wildlife corridors or wildlife movement areas, aquatic habitats, sensitive species and other sensitive habitats, open lands, open space, and adjacent natural habitats in the cumulative effects analysis. General and specific plans, as well as past, present, and anticipated future Projects, should be analyzed relative to their impacts on similar plant communities and wildlife habitats.

Alternatives Analysis

Note that the DEIR must describe and analyze a range of reasonable alternatives to the Project that are potentially feasible, would "feasibly attain most of the basic objectives of the project," and would avoid or substantially lessen any of the Project's significant effects (CEQA Guidelines § 15126.6[a]).

Mitigation Measures for Project Impacts to Biological Resources

The DEIR should include appropriate and adequate avoidance, minimization, and/or mitigation measures for all direct, indirect, and cumulative impacts that are expected to occur as a result of the construction and long-term operation and maintenance of the Project. When proposing measures to avoid, minimize, or mitigate impacts, CDFW recommends consideration of the following:

1. *Fully Protected Species*: Fully protected species may not be taken or possessed at any time. Project activities described in the DEIR should be designed to completely avoid any fully protected species that have the potential to be present within or adjacent to

the Project area. CDFW also recommends that the DEIR fully analyze potential adverse impacts to fully protected species due to habitat modification, loss of foraging habitat, and/or interruption of migratory and breeding behaviors. CDFW recommends that the Lead Agency include in the analysis how appropriate avoidance, minimization and mitigation measures will avoid indirect impacts to fully protected species.

2. *Sensitive Plant Communities*: CDFW considers sensitive plant communities to be imperiled habitats having both local and regional significance. Plant communities, alliances, and associations with a statewide ranking of S-1, S-2, S-3, and S-4 should be considered sensitive and declining at the local and regional level. These ranks can be obtained by querying the CNDDB and are included in *The Manual of California Vegetation* (Sawyer et al. 2009). The DEIR should include measures to fully avoid and otherwise protect sensitive plant communities from Project-related direct and indirect impacts.

3. *Mitigation*: CDFW considers adverse Project-related impacts to sensitive species and habitats to be significant to both local and regional ecosystems, and the DEIR should include mitigation measures for adverse Project-related impacts to these resources. Mitigation measures should emphasize avoidance and reduction of Project impacts. For unavoidable impacts, onsite habitat restoration and/or enhancement should be evaluated and discussed in detail. If onsite mitigation is not feasible or would not be biologically viable and therefore not adequately mitigate the loss of biological functions and values, offsite mitigation through habitat creation and/or acquisition and preservation in perpetuity should be addressed.

   The DEIR should include measures to perpetually protect the targeted habitat values within mitigation areas from direct and indirect adverse impacts in order to meet mitigation objectives to offset Project-induced qualitative and quantitative losses of biological values. Specific issues that should be addressed include restrictions on access, proposed land dedications, long-term monitoring and management programs, control of illegal dumping, water pollution, increased human intrusion, etc.

4. *Habitat Revegetation/Restoration Plans*: Plans for restoration and revegetation should be prepared by persons with expertise in local ecosystems and native plant restoration techniques. Plans should identify the assumptions used to develop the proposed restoration strategy. Each plan should include, at a minimum: (a) the location of restoration sites and assessment of appropriate reference sites; (b) the plant species to be used, sources of local propagules, container sizes, and seeding rates; (c) a schematic depicting the mitigation area; (d) a local seed and cuttings and planting schedule; (e) a description of the irrigation methodology; (f) measures to control exotic vegetation on site; (g) specific success criteria; (h) a detailed monitoring program; (i) contingency measures should the success criteria not be met; and (j) identification of the party responsible for meeting the success criteria and providing for conservation of the mitigation site in perpetuity. Monitoring of restoration areas should extend across a sufficient time frame to ensure that the new habitat is established, self-sustaining, and capable of surviving drought.

CDFW recommends that local onsite propagules from the Project area and nearby vicinity be collected and used for restoration purposes. Onsite seed collection should be initiated in advance of project activities to accumulate sufficient propagule material for subsequent use in future years. Onsite vegetation mapping at the alliance and/or association level should be used to develop appropriate restoration goals and local plant palettes. Reference areas should be identified to help guide restoration efforts. Specific restoration plans should be developed for various Project components as appropriate.

Restoration objectives should include protecting special habitat elements or re-creating them in areas affected by the Project; examples could include retention of woody material, logs, snags, rocks, and brush piles.

5. *Nesting Birds and Migratory Bird Treaty Act:* Please note that it is the Project proponent's responsibility to comply with all applicable laws related to nesting birds and birds of prey. Migratory non-game native bird species are protected by international treaty under the federal Migratory Bird Treaty Act (MBTA) of 1918, as amended (16 U.S.C. 703 *et seq.*). In addition, sections 3503, 3503.5, and 3513 of the Fish and Game Code (FGC) afford protective measures as follows: Section 3503 states that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by FGC or any regulation made pursuant thereto; Section 3503.5 states that is it unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by FGC or any regulation adopted pursuant thereto; and Section 3513 states that it is unlawful to take or possess any migratory nongame bird as designated in the MBTA or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the MBTA.

   CDFW recommends that the DEIR include the results of avian surveys, as well as specific avoidance and minimization measures to ensure that impacts to nesting birds do not occur. Project-specific avoidance and minimization measures may include, but may not be limited to: Project phasing and timing, monitoring of Project-related noise (where applicable), constructing sound walls, and buffers, where appropriate. The DEIR should also include specific avoidance and minimization measures that will be implemented should an active nest be located within the Project site. If pre-construction surveys are proposed in the DEIR, CDFW recommends that they be required no more than three (3) days prior to vegetation clearing or ground disturbance activities, as instances of nesting could be missed if surveys are conducted sooner.

6. *Moving out of Harm's Way:* The proposed Project is anticipated to result in the clearing of natural habitats that support native species. To avoid direct mortality, CDFW recommends that the lead agency condition the DEIR to require that a CDFW-approved qualified biologist be retained to be onsite prior to and during all ground- and habitat-disturbing activities to move out of harm's way special status species or other wildlife of low or limited mobility that would otherwise be injured or killed from Project-

related activities. Movement of wildlife out of harm's way should be limited to only those individuals that would otherwise by injured or killed, and individuals should be moved only as far a necessary to ensure their safety (i.e., CDFW does not recommend relocation to other areas). Furthermore, it should be noted that the temporary relocation of onsite wildlife does not constitute effective mitigation for the purposes of offsetting Project impacts associated with habitat loss.

7. *Translocation of Species*: CDFW generally does not support the use of relocation, salvage, and/or transplantation as mitigation for impacts to rare, threatened, or endangered species as studies have shown that these efforts are experimental in nature and largely unsuccessful.

Lake and Streambed Alteration Program

Fish and Game Code section 1602 requires an entity to notify CDFW prior to commencing any activity that may do one or more of the following: Substantially divert or obstruct the natural flow of any river, stream or lake; substantially change or use any material from the bed, channel or bank of any river, stream, or lake; or deposit debris, waste or other materials that could pass into any river, stream or lake. Please note that "any river, stream or lake" includes those that are episodic (i.e., those that are dry for periods of time) as well as those that are perennial (i.e., those that flow year-round). This includes ephemeral streams, desert washes, and watercourses with a subsurface flow. It may also apply to work undertaken within the flood plain of a body of water.

Upon receipt of a complete notification, CDFW determines if the proposed Project activities may substantially adversely affect existing fish and wildlife resources and whether a Lake and Streambed Alteration (LSA) Agreement is required. An LSA Agreement includes measures necessary to protect existing fish and wildlife resources. CDFW may suggest ways to modify your Project that would eliminate or reduce harmful impacts to fish and wildlife resources.

CDFW's issuance of an LSA Agreement is a "project" subject to CEQA (see Pub. Resources Code 21065). To facilitate issuance of an LSA Agreement, if necessary, the DEIR should fully identify the potential impacts to the lake, stream, or riparian resources, and provide adequate avoidance, mitigation, and monitoring and reporting commitments. Early consultation with CDFW is recommended, since modification of the proposed Project may be required to avoid or reduce impacts to fish and wildlife resources. To obtain a Lake or Streambed Alteration notification package, please go to https://www.wildlife.ca.gov/Conservation/LSA/Forms.

ENVIRONMENTAL DATA

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a data base which may be used to make subsequent or supplemental environmental determinations. (Pub. Resources Code, § 21003, subd. (e).) Accordingly, please report any special status species and natural communities detected

during Project surveys to the California Natural Diversity Database (CNDDB). The CNNDB field survey form can be found at the following link: http://www.dfg.ca.gov/biogeodata/cnddb/pdfs/CNDDB_FieldSurveyForm.pdf. The completed form can be mailed electronically to CNDDB at the following email address: CNDDB@wildlife.ca.gov. The types of information reported to CNDDB can be found at the following link: http://www.dfg.ca.gov/biogeodata/cnddb/plants_and_animals.asp.

FILING FEES

The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required in order for the underlying Project approval to be operative, vested, and final. (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089.)

CONCLUSION

CDFW appreciates the opportunity to comment on the NOP of a DEIR for the Mammoth Yosemite Airport Improvements Project to assist the Town of Mammoth Lakes in identifying and mitigating Project impacts on biological resources.

Questions regarding this letter or further coordination should be directed to Rose Banks, Environmental Scientist, at (760) 873-4412 or Rose.Banks@wildlife.ca.gov.

Sincerely,

Scott Wilson
Environmental Program Manager

cc: State Clearinghouse

REFERENCES

Sawyer, J. O., T. Keeler-Wolf, and J. M. Evens. 2009. A manual of California Vegetation, 2nd ed. California Native Plant Society Press, Sacramento, California. http://vegetation.cnps.org/

Lahontan Regional Water Quality Control Board

November 15, 2019

Kim Cooke, Associate Planner
Town of Mammoth Lakes Planning Department
P.O. Box 1609
Mammoth Lakes, CA 93546
kcooke@townofmammothlakes.ca.gov

File: Environmental Doc Review
Mono County

Comments on the Notice of Preparation of a Draft Environmental Impact Report for the Mammoth Yosemite Airport Terminal Area Development Plan Project, Mono County, State Clearinghouse Number 2019100384

Lahontan Region Water Quality Control Board (Water Board) staff received a Notice of Preparation (NOP) of an Environmental Impact Report (EIR) for the above-referenced project (Project) on October 25, 2019. The NOP was prepared by Town of Mammoth Lakes Planning Department and submitted in compliance with provisions of the California Environmental Quality Act (CEQA). Water Board staff, acting as a responsible agency, is providing these comments to specify the scope and content of the environmental information germane to our statutory responsibilities pursuant to CEQA Guidelines, California Code of Regulations, title 14, section 15096. Based on our review of the NOP, we recommend the following: 1) the most recent and current documents/publications be utilized in to the EIR to establish baseline environmental conditions; 2) cumulative effects of sewage treatment and disposal systems be considered in the environmental analysis; and 3) a mitigation measure be included that requires the preparation and implementation of site-specific Storm Water Pollution Prevention Plan (SWPPP) to effectively treat storm water runoff during the life of the Project. Our comments on the Project are outlined below.

WATER BOARD'S AUTHORITY

All groundwater and surface waters are considered waters of the State. All waters of the State are protected under California law. State law assigns responsibility for protection of water quality in the Lahontan Region to the Lahontan Water Board. Some waters of the State are also waters of the United States. The Federal Clean Water Act (CWA) provides additional protection for those waters of the State that are also waters of the United States.

The Water Quality Control Plan for the Lahontan Region (Basin Plan) contains policies that the Water Board uses with other laws and regulations to protect the quality of waters of the State within the Lahontan Region. The Basin Plan sets forth water quality standards for surface water and groundwater of the Region, which include designated beneficial uses as well as narrative and numerical objectives which must be maintained or attained to protect those uses. The Basin Plan can be accessed via the Water Board's web site at Basin Plan - References.

GENERAL COMMENTS AND RECOMMENDATIONS

1. The NOP states, "The EIR will describe the seismicity, geologic hazards and soils conditions of the area from the *Town of Mammoth Lakes 2005 General Plan Update Final Environmental Impact Report* (General Plan EIR) and potential exposure of proposed improvements and airport users to these conditions." The General Plan EIR alone is inadequate. The EIR must consider the most recent and up to date documents/publications from all sources, including federal, state, county, and local agencies, when establishing baseline conditions and in evaluating the Project's potential impacts on environmental resources, particularly on water quality and hydrology.

2. The EIR should identify and consider all existing sewage treatment and disposal systems and associated infrastructure (i.e. sewer lines) in addition to any new or modifications to existing systems and associated infrastructure.

3. The EIR should consider the long-term cumulative effects of all existing and proposed sewage treatment and disposal systems on water quality and hydrology.

4. A Project-specific SWPPP and implementation of site-specific erosion and sediment control best management practices (BMPs) is an effective way to reduce potentially significant water quality impacts to a less than significant level. To that end, we recommend the development and implementation of a Project-specific SWPPP during both the construction and post-construction (industrial) phases of the Project. The SWPPP should be applicable to all areas of the Project site throughout the life of the Project.

5. Equipment staging areas, excavated soil stockpiles, and hazardous materials (i.e. oils and fuels) should be sited in upland areas outside surface waters and adjacent flood plain areas. The EIR should include a mitigation measure for the preparation and implementation of a comprehensive Spill Prevention and Response Plan that outlines the site-specific monitoring requirements and lists the BMPs necessary to prevent hazardous material spills or to contain and cleanup a hazardous material spill, should one occur.

6. All surface waters are waters of the State. The EIR will need to fully delineate the extent of waters of the State and evaluate potential impacts to these resources with respect to hydrology and water quality as a result of Project implementation

7. The Project site is located within the Long Hydrologic Area of the Owens Hydrologic Unit (626.40), and groundwater beneath the Project site is contained within the Long Valley Groundwater Basin (6-11). The beneficial uses of these water resources are listed either by watershed (for surface waters) or by groundwater basin (for groundwater) in Chapter 2 of the Basin Plan. We request that the EIR identify and list the beneficial uses of the water resources within the Project area and include an analysis of the Project's potential impacts to water quality and hydrology with respect to those beneficial uses.

8. The EIR should identify the water quality standards that could potentially be violated by the Project and consider these standards when evaluating thresholds of significance for impacts. Water quality objectives and standards, both numerical and narrative, for all waters of the State within the Lahontan Region, including surface waters and groundwater, are outlined in Chapter 3 of the Basin Plan. Implementation of the proposed Project must comply with all applicable water quality standards and prohibitions, including provisions of the Basin Plan.

9. Buffer areas should be identified, and exclusion fencing used to protect water resources and to prevent unauthorized vehicles or equipment from entering or otherwise disturbing the surface waters. Equipment should use existing roadways to the extent feasible.

PERMITTING REQUIREMENTS FOR INDIVIDUAL PROJECTS

10. A number of activities implemented by individual projects in accordance with the General Plan amendment have the potential to impact waters of the State and, therefore, may require permits issued by either the State Water Resources Control Board (State Water Board) or Lahontan Water Board. The required permits may include the following.

11. Streambed alteration and/or discharge of fill material to a surface water may require a CWA, section 401 water quality certification for impacts to federal waters (waters of the U.S.), or dredge and fill waste discharge requirements for impacts to non-federal waters, both issued by the Lahontan Water Board.

12. Land disturbance of more than 1 acre may require a CWA, section 402(p) storm water permit, including a National Pollutant Discharge Elimination System (NPDES) General Construction Storm Water Permit, Water Quality Order (WQO) 2009-0009-DWQ, obtained from the State Water Board, or individual storm water permit obtained from the Lahontan Water Board.

13. Depending on the Standard Industrial Classification (SIC) code for industrial-type activities at a specific site, individual projects may require an NPDES General Industrial Storm Water Permit, WQO-2014-0057-DWQ, obtained from the State Water Board, or individual storm water permit obtained from the Lahontan Water Board.

14. Discharge of waste to land (i.e. evaporation ponds) may require waste discharge requirements (WDRs) issued by the Lahontan Water Board in compliance with the CCR, title 27, section 20005 et seq. If the Project includes wastes that can be characterized as either designated and/or non-hazardous, and a planned discharge to land would occur, the discharger will be required to submit the Report of Waste Discharge application, Form 200, to the Water Board.

We request that the EIR recognize the potential permits that may be required for the Project, as outlined above, and identify the specific activities that may trigger these permitting actions in the appropriate sections of the environmental document. Information regarding these permits, including application forms, can be downloaded from our web site at http://www.waterboards.ca.gov/lahontan/. Early consultation with Water Board staff regarding potential permitting is recommended.

Thank you for the opportunity to comment on the NOP. If you have any questions regarding this letter, please contact me at (760) 241-4942 jeffrey.fitzsimmons@waterboards.ca.gov or Jan Zimmerman, Senior Engineering Geologist, at (760) 241-7404 or jan.zimmerman@waterboards.ca.gov. Please send all future correspondence regarding this Project to the Water Board's email address at Lahontan@waterboards.ca.gov and Project name in the subject line.

Jeff Fitzsimmons
Engineering Geologist

cc: State Clearinghouse (SCH 2019100384) (state.clearinghouse@opr.ca.gov)
Nick Buckmaster, CDFW (nick.buckmaster@wildlife.ca.gov)
Louis Molina, Mono County (lmolina@mono.ca.gov)

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NOTICE OF AVAILAIBILTY

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www.SierraEmployment.com

Mammoth Taxi is accepting resumes for experienced drivers with great customer service and clean driving records. **We are also looking for office staff** for the right person with great organizational skills and customer service background. Please inquire with Scottie at 760-914-7433. www.mammoth-taxi.com.

Alpenhof Lodge

Alpenhof Lodge is accepting applications for maintenance, housekeeping, front desk and night audit positions. We are looking for full and/or part time team members to fill year round and seasonal positions. Applicants must be able to work weekends and holidays. Please apply in person at 6080 Minaret Rd, Mammoth

vacasa

Housekeepers Wanted in Mammoth Lakes! Flexible hours, $23/hour from + Drive time paid & mileage reimbursement, between cleans. **Maintenance Assistant @ $20.00 per** free health benefits depending on hours worked, sick time and PTO! To apply please go to www.vacasa.com/careers!

Sherwin Villas is hiring an assistant condo manager. Tuesdays & Wednesdays 8am-5pm. Year round position,
call 760-934-6808 for details.

Mammoth Gear Exchange in Bishop and Alpine Approach in Mammoth seek team members. Pay dependent on experience. Inquiries/resumes to: dave@mammothgear.com

Tonik hiring FT/PT. Apply in person @ 501 Old Mammoth Road**. 760-924-7727**

Breakfast Club is Hiring waitstaff, host, bus person Apply in person 2987 Main Street

MAMMOTH RESERVATIONS

Guest Service Representative
Seeking responsible, reliable personnel for busy rental management company. Excellent phone/customer service skills, attention to detail required. This is a guest / customer facing role, experience with dealing with visitors and a friendly/outgoing personality will be a great fit. Previous reservation or administration experience preferred. Full-time or part-time options available, year-round starting immediately, must be able to work weekends. Competitive pay and benefits package available. Please email resume to sarah@mammothreservations.com.

Rental Agency Looking For Quality Control Personnel. This position requires high attention to detail and involves doing pre-arrival and departure inspections in rental units, housekeeping quality checks and reporting. Candidate must have a vehicle and valid drivers license, basic computer skills. Competitive hourly pay, Part-time or Full-Time and flexible schedules available. For more details inquire to Luis at 760-914-0768 or email resume to sarah@mammothreservations.com

Help Wanted

MAMMOTH HOSPITAL
Elevate Your Health

Mammoth Hospital is currently hiring for the following positions:
Surgery Scheduler
Surgery and Oncology Coordinator
Environmental Services Technician/ Housekeeping To view more open positions and to apply, visit: https://mammoth-hospital.breezy.hr/

Chevron
MAMMOTH CHEVRON

Mammoth Chevron Seeking experienced cashier/customer service associate. Must be honest, personable and enjoy making customers smile! Day and evening shifts available.
$17.50+ per hour starting pay & vacation benefits for qualified individuals.
Apply in person or call 760-934-8111.

East Side Bake Shop seeks experienced staff passionate about community and good food. Bakers, counter associates, dishwasher, food prep. Send resume to eastsidebakeshop@gmail.com, or call 760.914.2696

Sweetwater Plumbing Inc. Hiring for 2 full time positions. Journeyman Plumber and Plumbers Apprentice. Job is located in Mammoth Lakes. Call 760-914-1266 for details.

Shilo Inn is accepting applications for :*Full time housekeepers
*Full time Maintenance Worker
*Front desk/night auditor
Please call Donna or JC at 760-965-0544

Housekeeper Mammoth Mountain Chalets is looking for our next housekeeping team member. Full time. Duties include dusting, cleaning, scrubbing, sweeping, mopping, vacuuming, disinfecting, Etc. Ensure the work and cleaning schedules are followed. To apply: reservations@mmchalets.com or call 760-934-8518

Front Desk Agent responsible for providing attentive, courteous and efficient service to all guests during taking reservations and during their stay. Coordinating with maintenance and housekeeping for Chalet readiness. To apply, email reservations@mmchalets.com or call 760-934-8518

ASCENT: THE ART OF CANNABIS now hiring retail sales agents. Please email resume to info@ascentmammoth.com

SKADI is hiring a professional cook. This is a full time position. Ideal candidate is passionate, detail oriented and politely disciplined. Please contact us at info.skadi @ gmail.com or text us at 760.915.0962

Mono Inn in Lee Vining, CA is hiring experienced Sous Chef, starting at $18/hr DOE. Line Cook starting at $16/hr DOE. Candidates should be experienced in a fast-paced kitchen and willing to develop their fine dining skills. Willing to train the appropriate candidate interested in progressing in the kitchen. Housing available. Must be a team player and reliable. Interested candidates please inquire at 760-647-6581 or hillary@monoinn.com.

CSA#1 is looking to hire instructors who would like to share their talents with the Crowley Lake Community and surrounding areas. If you would be interested in teaching a class, a series of classes, or a special workshop we'd love to see if it could be a good fit. Instructors are paid $30/hour.
Please contact Isabel at isbxoxo@gmail.com

Mammoth Museum History Trolley Storytellers Program seeking people of all ages, genders and backgrounds for part time weekend positions.
4-6 hour shifts compensated at $25.00/ hr. Potential to earn $1,800.00/month (or more) just working weekends and holidays !!! Acting or storytelling ability is preferred but not required. Training provided. Call or text Mike @ (760)914-1632 for more details ASAP.

Substitute letter carrier for Postal Contract Delivery Service Contractor.
3 days / week Excellent memory required!
Must pass FBI investigation: Drug screen
Driving record Fingerprints
Call Mike 760-914-1463

Help Wanted

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Obsidian Private Residence: Front desk,Full Time or Part Time Positions: Seeking a responsible, outgoing Reservation & office administration employee!
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T-Bar Social Club in June Lake seeks an experienced table server to crush it this summer, starting immediately!. We offer a drama free work environment, benefits include entry to concerts and free pizza. $15/ hour plus great tips. Contact info@balancedrocksaloon.com to apply.

Bishop Care Center is hiring for current, licensed CNA's, LVN's and RN's - Full-time or Part-time positions available with benefits (401k, paid vacation & more).
All shifts available to support and care for residents in our Skilled Nursing Facility. All experience levels are welcome. Our team is like a family, our pay is excellent, this is an opportunity worth looking into.
To apply: Contact tpuckett@plum.com or call 760.872.1000.

Bishop Care Center is looking for an Independent, self-driven, licensed Cosmetologist to provide weekly services to our residents. Flexible schedule, set your own schedule. Must work well with seniors and have a great positive customer service attitude. Cosmetologists will be 1099 contracted and must carry their own insurance.
To apply: Contact tpuckett@plum.com or call 760.872.1000.

Help Wanted

INYO MONO ADVOCATES for COMMUNITY ACTION, Inc.

Job Openings for "People Helping People" PT Street Outreach Specialist in our Mammoth Lakes office. FT Street Outreach Specialist in Bishop. Positions are open until filled. Please go to our Website for a Job Description & Application at: www.imaca.net. or 760 873-8557 ext.1016 or IMACA office at 180 Clarke Street, Bishop, Ca. 93514 Applicants must complete an IMACA application form.Inyo Mono Advocates For Community Action, Inc. Is An Equal Opportunity Employer

SIERRA ESCROW is looking for full time escrow trainee or experienced person in Escrow. Good pay and benefits. Send resume to donn@sierraescrow.com or call 760.924 7514.

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Mammoth Lakes
CALIFORNIA

Notice of Availability (NOA)

Draft Environmental Assessment (DEA) For The Mammoth Yosemite Airport Terminal Area Development Project

Notice is Hereby Given that the Town of Mammoth Lakes has prepared a Draft Environmental Assessment (DEA) pursuant to the National Environmental Policy Act (NEPA) to identify the potential environmental impacts associated with the proposed Terminal Area Development Project on the Mammoth Yosemite Airport (MMH) property.

The DEA evaluates development of the following Proposed Action:

- New passenger terminal building
- Maintenance, Aircraft Rescue and Fire Fighting (ARFF), and snow removal equipment storage building (maintenance facility)
- Access and Service Roads
- Automobile parking for passenger and rental cars
- Aircraft Parking Apron
- Aircraft de-icing apron and de-icing fluid holding tank
- Connecting taxi lanes to Taxiway A
- Supporting infrastructure and utilities
- Demolition of the tensile structure and paved access roads

Comment Period: A **35-day** public review period for the DEA begins on **June 19, 2021** and ends at 5:00 p.m. on **July 23, 2021.** Responses will be prepared for all comments received on the Draft EA. Comments and responses to this notice should be submitted in writing to Kimberly Cooke, Associate Planner, Town of Mammoth Lakes Community and Economic Development Department, P.O. Box 1609, Mammoth Lakes, CA 93546, or drop off at the Town offices at 437 Old Mammoth Road, Suite 230, Mammoth Lakes, CA 93546, via fax at (760) 934-7493, or via email at kcooke@townofmammothlakes.ca.gov.

Copies of the Draft EA are available during the 35-day public review period at the following locations: Town of Mammoth Lakes, Community and Economic Development Department, 437 Old Mammoth Road, Suite 230, Mammoth Lakes, CA 93546; Mono County Library, 400 Sierra Park Road, Mammoth Lakes, CA 93546; Mammoth Yosemite Airport (by appt.), 1300 Airport Road, Mammoth Lakes, CA 93546; and Town of Mammoth Lakes website: https://www.townofmammothlakes.ca.gov/939

Public Workshop and Public Hearing: A virtual public workshop will be held on **July 19, 2021**, from 4:00 p.m. to 4:30 p.m. to address questions regarding the proposed project; a virtual public hearing will be held immediately following the virtual workshop from 4:30 p.m. to 5:30 p.m. During the virtual public hearing, the Town will take comments from the public; a court reporter will transcribe those comments. The virtual workshop and virtual public hearing can be accessed via **Zoom** at: **Meeting ID – 243 175 7893**; **pass code 5z1Mja** ; or by telephone number: 1-669-900-6833 and use pass code 842052.

Zoom: https://us02web.zoom.us/j/2431757893?pwd=SEJGYlVjTXlyRThUbjhzYlZVRHpvUT09

TS #2021-0102

VIRTUAL PUBLIC HEARING

VIRTUAL PUBLIC HEARING RE

MAMMOTH YOSEMITE AIRPORT

PROPOSED TERMINAL AREA DEVELOPMENT PROJECT

MAMMOTH LAKES, CALIFORNIA

--oOo--

REPORTER'S TRANSCRIPT OF PROCEEDINGS

OF

VIRTUAL PUBLIC HEARING

--oOo--

Monday, July 19, 2021

4:30 P.M. to 5:31 P.M.

--oOo--

21-199
Stenographically Reported By:
ROSE GONI DAVIS, CRR/RMR, CSR 8760

D&B DEPOSITION REPORTERS
601 University Avenue, Suite 148, Sacramento, CA 95825 | (916) 649-1060 | rose@dbreporters.com

VIRTUAL PUBLIC HEARING RE
MAMMOTH YOSEMITE AIRPORT
PROPOSED TERMINAL AREA DEVELOPMENT PROJECT
MAMMOTH LAKES, CALIFORNIA

--oOo--

REPORTER'S TRANSCRIPT OF PROCEEDINGS

OF

VIRTUAL PUBLIC HEARING

--oOo--

Monday, July 19, 2021

4:30 P.M. to 5:31 P.M.

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Stenographically Reported By:
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MONDAY, JULY 19, 2021, 4:30 P.M.

VIA ZOOM VIDEOCONFERENCE

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MS. COOKE: All right. I have 4:30 on my clock.

Good afternoon. I'm Kim Cooke, planner with the Town of Mammoth Lakes. We are going to be opening the public hearing at this time and take any public comments on the Draft Environmental Assessment document.

If we don't have anybody else on the line who can provide comments, we are going to stay on the line in case they join later.

Jim, I think I'll mute myself and just turn off my camera, unless I see anybody join us.

MR. WALLACE: All right. Do you think we should do a very short introduction so that it's on the record that this meeting is being called and just a short description of the project and maybe just repeat some of what was said in the workshop just so it's on the record?

MS. COOKE: Sure.

MR. WALLACE: Okay.

MS. COOKE: I'll just go back through some of my introduction for the workshop.

So the purpose of holding a public workshop

and public hearing today is to provide the public with information and interested agencies regarding the proposed project and the environmental analysis that was prepared for the project.

A 35-day public comment period for the draft EA began on June 19th of this year. We are nearing the end of the advertised public comment period, and we're providing this opportunity for the public to give verbal or written comments on the draft document.

All comments that we receive during this public hearing portion of the meeting will be taken. Responses will be prepared and included in the final EA document.

The public comment period will end at 5:00 p.m. on Friday, July 23rd. And any public comment will be received up until that time.

So preparation of this environmental assessment was initiated after town council approved the 2018-2019 through 2023-2024 Airport Capital Improvement Program, which was approved December 19th, 2018.

Adoption of the ACIP does not compel the town to complete or fund any of the listed projects, but it does make the identified projects eligible for Federal Aviation Administration airport improvement program funding.

Environmental review must be completed for all of the identified projects prior to construction. And all of the proposed airport actions that are subject to FAA approval require environmental impact analysis to be prepared pursuant to the National Environmental Policy Act, which we will refer to as NEPA.

The project is also subject to the California Environmental Quality Act, which we refer to as CEQA. And that is why both an environmental assessment and an environmental impact report were prepared for the project.

Town council authorized the preparation of the CEQA and NEPA review for projects included in the ACIP on June 26th, 2019. At that time, staff reported to town council that the completion of the environmental analysis would not necessarily lead to the terminal or apron projects moving on to design -- a design or construction phase. And it was stated that the comprehensive environmental review was being completed in order to address all of the projects that were included on the ACIP.

So the project site is identified as a 22-acre area of the Mammoth Yosemite Airport property. The town owns a total of 196 acres of the airport property. And approximately 8.7 acres of undeveloped land within the

22-acre project area will be occupied by the proposed improvements as a part of the project.

The scope of the environmental analysis for both NEPA and CEQA evaluates the implementation of the Terminal Area Development Plan at the Mammoth Yosemite Airport. The project includes construction of a new 39,288 square foot passenger terminal; a new 8,400 square foot maintenance building, including required Aircraft Rescue and Fire Fighting vehicle; an 850 square -- an 850-foot extension of Airport Road; new aircraft parking apron; a new de-icing apron; two vehicle parking lots and related infrastructure, which will include a new package wastewater treatment facility.

The proposed terminal area improvements are intended to allow the airport to function more efficiently and effectively to meet existing and projected demand.

So that concludes my description of the project. Our next steps are to receive any public input on the draft EA document. We will not be taking an action on the draft EA today. And we will be accepting verbal comments during this meeting. And we will accept any written comments that are provided up until the end of the public comment period.

And that is all I have.

MR. WALLACE: Okay. Well, let me read into the record the FAA's role in this project, if that's all right, Kim.

MS. COOKE: Yes.

MR. WALLACE: So the Town of Mammoth Lakes is the sponsor of the Mammoth Yosemite Airport and has prepared this Draft Environmental Assessment to evaluate the potential environmental effects of the construction and operation of a new passenger terminal, airport parking aprons, new maintenance facility, and supporting infrastructure as proposed in the Mammoth Yosemite Airport Terminal Area Development Plan, which was published in 2017.

The FAA has requested the Federal Aviation Administration's approval of the proposed Terminal Area Development Project on the airport layout plan and potential federal funding assistance for eligible elements of its proposed project.

The environmental assessment has been prepared pursuant to the requirements of the National Environmental Policy Act, as codified by the Council on Environmental Quality.

The FAA has also -- also uses specific guidance in specific FAA orders -- in this case, FAA

Order 1050.1F, which is called the Environmental Impacts Policies and Procedures, and FAA Order 5050.4B, National Environmental Policy Act implementing instructions for airport actions.

The FAA is the lead federal agency, and this EA analyzes and documents potential environmental impacts of implementing the proposed action -- that is, the Terminal Area Development Project -- and identifies mitigation measures that may be necessary to reduce the magnitude of those impacts.

The FAA is the lead federal agency for environmental compliance on the airport, and as such, they will have approval process over the EA and will make those decisions only after all public comments have been submitted.

Thank you. That's what we have.

(Time noted: 4:39 p.m.)

(No public comments made.)

MS. COOKE: Okay. So it is 5:30. We've reached the end of our public hearing portion of the meeting, and that will end our meeting for tonight. We did not receive any public comment on the draft EA document.

Jim, do you have any final items that we need to include in the record?

MR. WALLACE: No. I think we've got it covered, Kim.

MS. COOKE: Okay. Great.

Then shall we end the meeting?

(Whereupon, the meeting was adjourned at 5:31 p.m.)

REPORTER'S CERTIFICATE

State of California)
) ss.
County of Sacramento)

I, ROSE GONI DAVIS, a Certified Shorthand Reporter of the State of California, do hereby certify:

That I am a disinterested person herein; that the foregoing proceedings were reported in shorthand by me, ROSE GONI DAVIS, a Certified Shorthand Reporter of the State of California, and thereafter transcribed using computer-aided transcription and is a true and correct record of the proceedings held before me via Zoom videoconference.

IN WITNESS WHEREOF, I hereby certify this transcript at my office in the County of Sacramento, State of California, this July 22, 2021.

ROSE GONI DAVIS, CSR NO. 8760
Certified Shorthand Reporter of
the State of California