

APPENDIX A: AVIATION FORECAST

Mammoth Yosemite Airport Aviation Activity Forecasts 2019 Addendum

Prepared for the Town of Mammoth Lakes



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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 Angeles (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

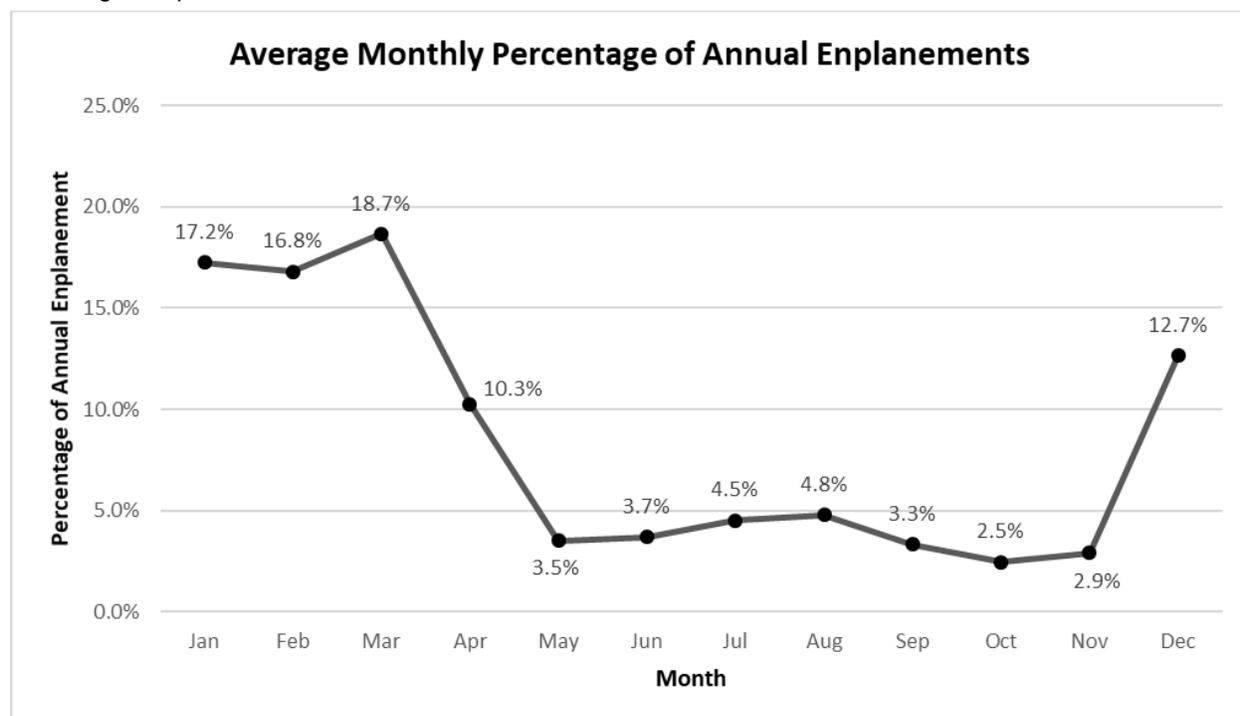
Table 1. Historical Aviation Activity													
Passenger Enplanements ³				Itinerant Operations					Local Operations			Total Operations	Based Aircraft
Fiscal Year	Air Carrier	Commuter	Total	Air Carrier	Air Taxi & Commuter	General Aviation	Military	Total	Civil	Military	Total		
2009	0	6,157	6,157	312	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
	2019	15,953
Forecast Years	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

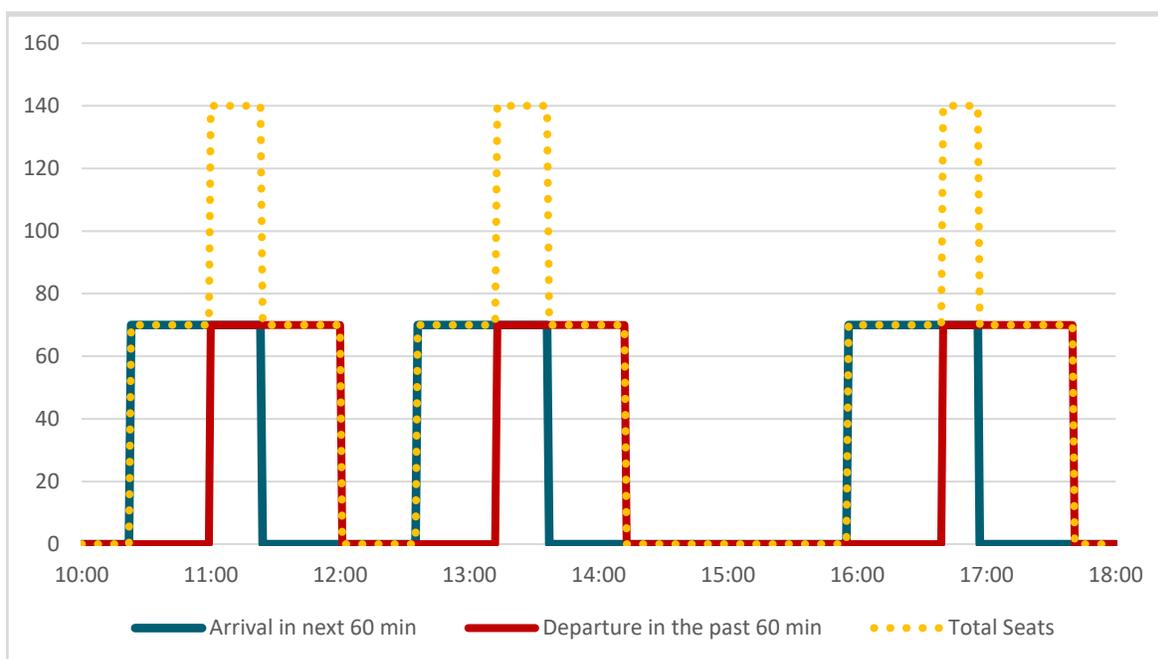
* Time is expressed as a 24-hour clock. LAX flight times will change between January 7 to February 13, 2019.
Source: Schedule - Airport

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									
Year	Itinerant Operations					Local Operations			Total Operations
	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			
<u>Itinerant</u>			
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
<u>Local</u>			
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 B: 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:
The logo for Salix consulting, inc. features a stylized green tree with three leaves on the left, followed by the word "Salix" in a large, bold, green serif font. Below "Salix" is the text "consulting, inc." in a smaller, green, sans-serif font.

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Revised April 2021

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Appendices B1-B2. Potentially occurring Special-Status Species (CNDDDB query results)

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).

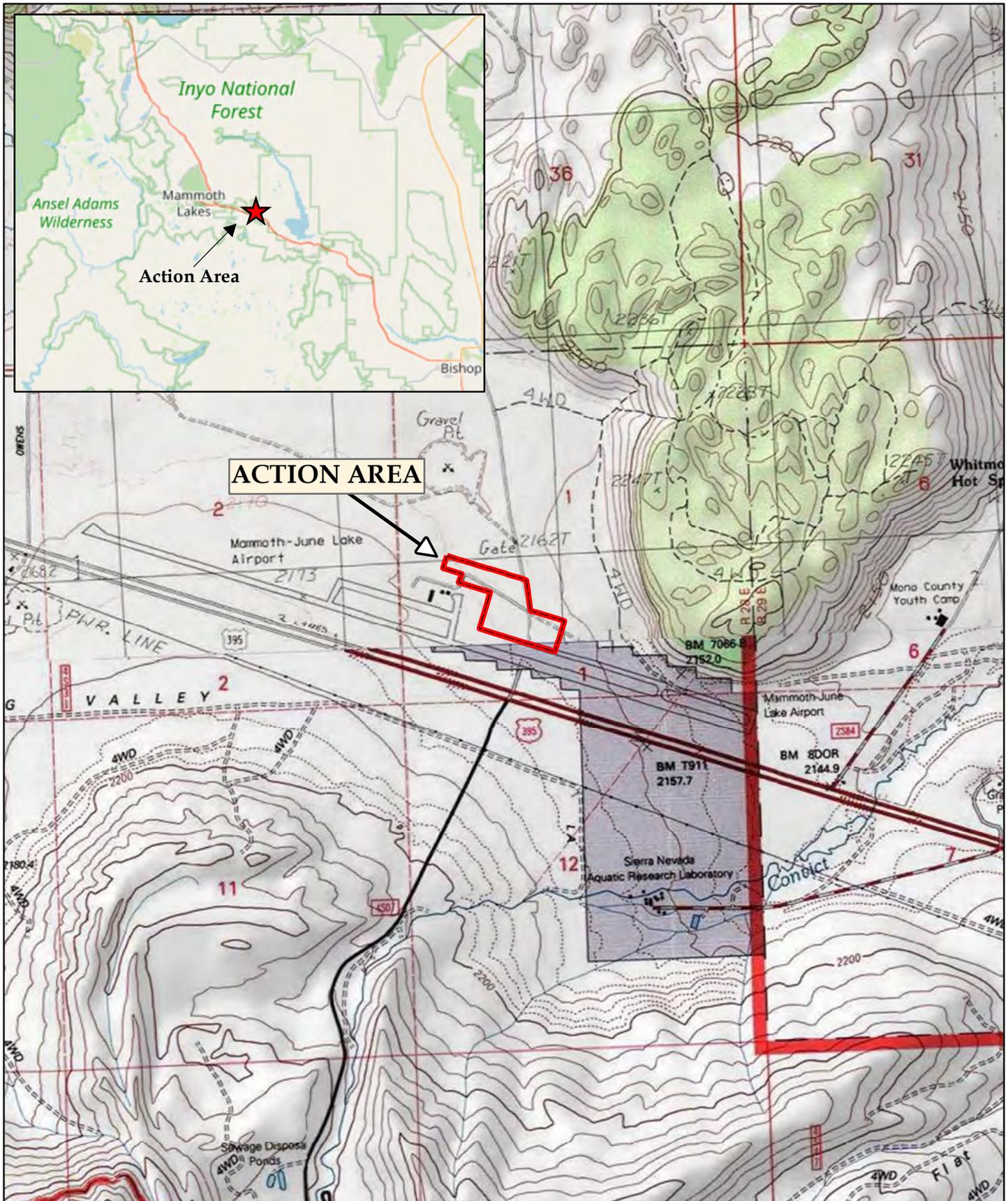
The purpose of this Biological Assessment (BA) is to review the proposed Terminal Area Development project at the Mammoth Yosemite Airport in sufficient detail to determine whether and, if so, to what extent, the Proposed Action (refer to Section 3.0) may affect federally listed threatened or endangered 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.



ACTION AREA

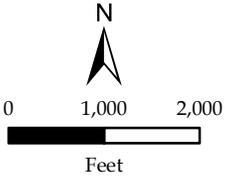
Source Maps: USGS Topographic Map
Whitmore Hot Springs Quad 1:24,000
S1 T4S R28E

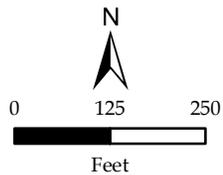
Figure 1

SITE AND VICINITY MAP

Mammoth Yosemite Airport

Town of Mammoth Lakes, Mono County, CA





 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 taxi lanes 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.

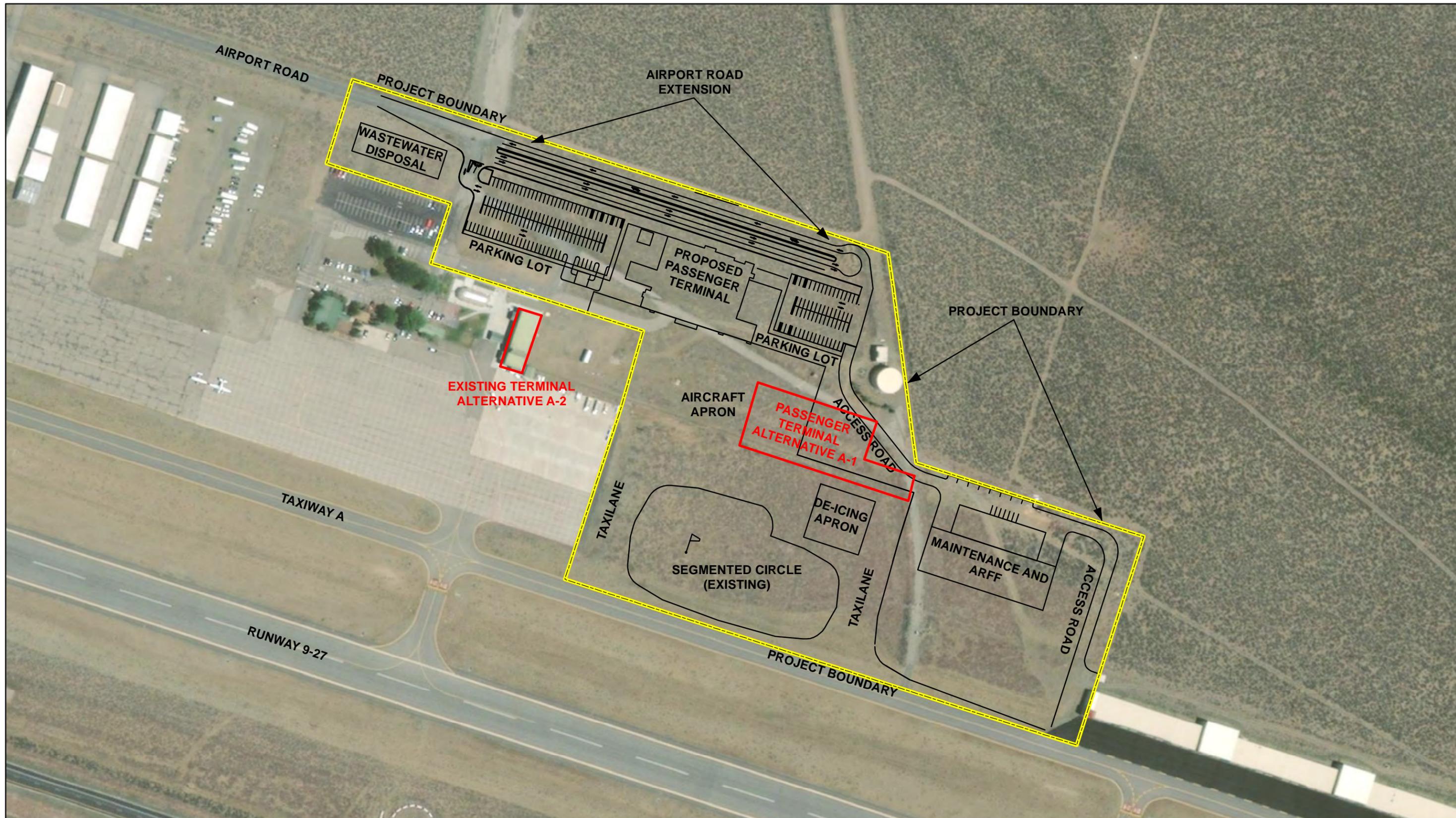


Figure 3

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 reseeded activities onsite.

3.0 ACTION AREA

The Action Area for the purposes of this BA consists of areas to be affected directly 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 the findings of a biological survey conducted by Jeff Glazner, Principal Biologist of Salix Consulting, in September 2019, 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).

The field evaluation in September 2019 was conducted 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.

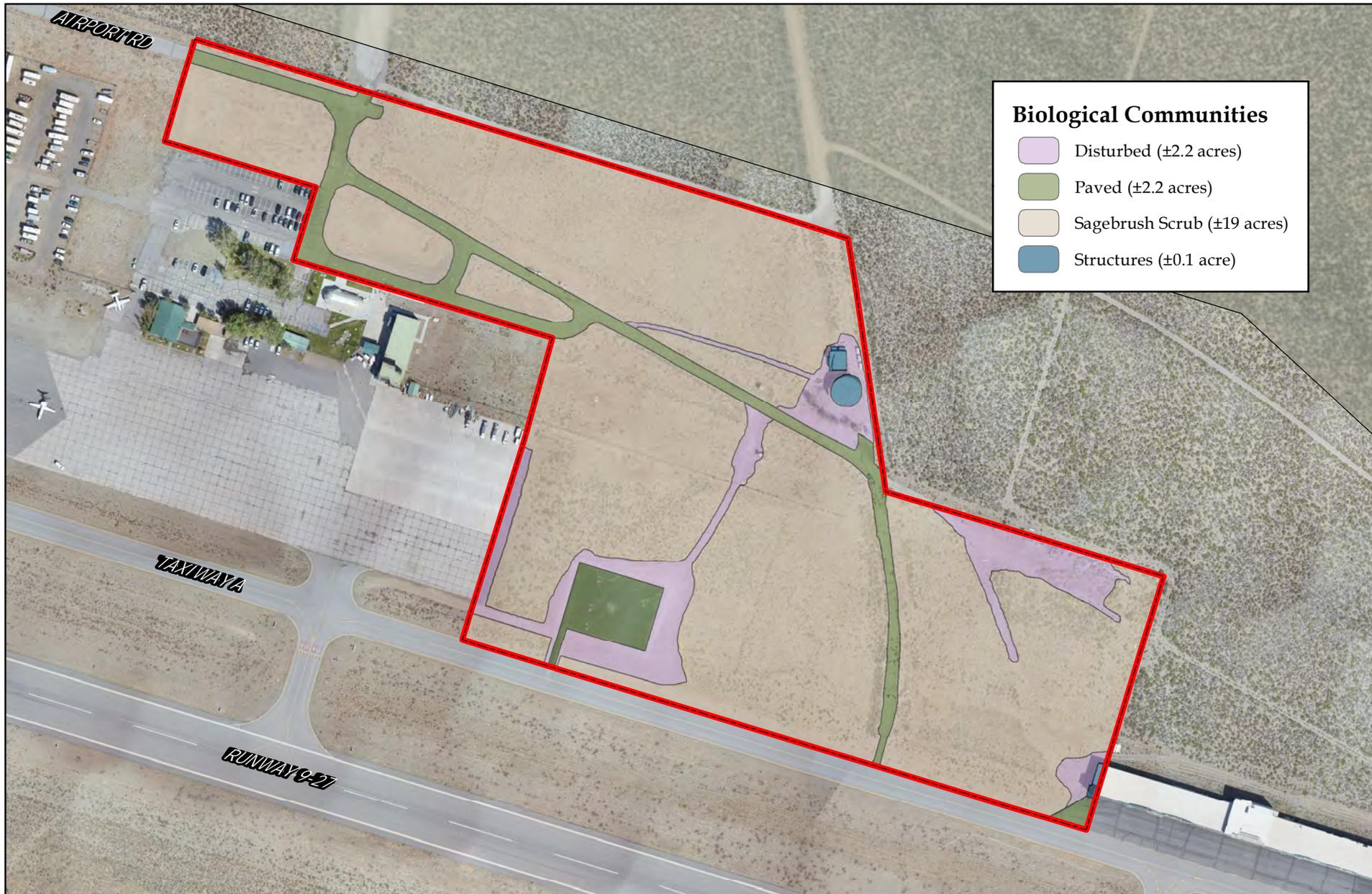
The study area was assessed for waters of the U.S. by reviewing aerial photography and through a thorough ground assessment. The study area contains no depressions that hold water for an extended period, groundwater discharge areas, or surface drainages. There are no waters of the U.S. in the study area.

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.

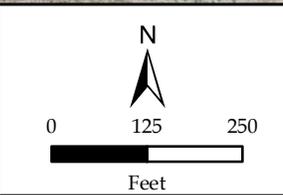
Table 1.
Biological Communities Present within the
Mammoth Yosemite Airport Terminal Area Development Project Action Area

Biological Community	Approximate Acreage
Sagebrush scrub	19
Paved	2.5
Disturbed	2.5
Structures	<0.1
Total	24



Biological Communities

- Disturbed (±2.2 acres)
- Paved (±2.2 acres)
- Sagebrush Scrub (±19 acres)
- Structures (±0.1 acre)



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 tectorum*). 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 airport is located within an area where deer may linger for up to 6-10 weeks before moving on to winter and/or summer ranges (Caltrans 2016). The biggest "hot-spot" for deer-vehicle collisions 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.*



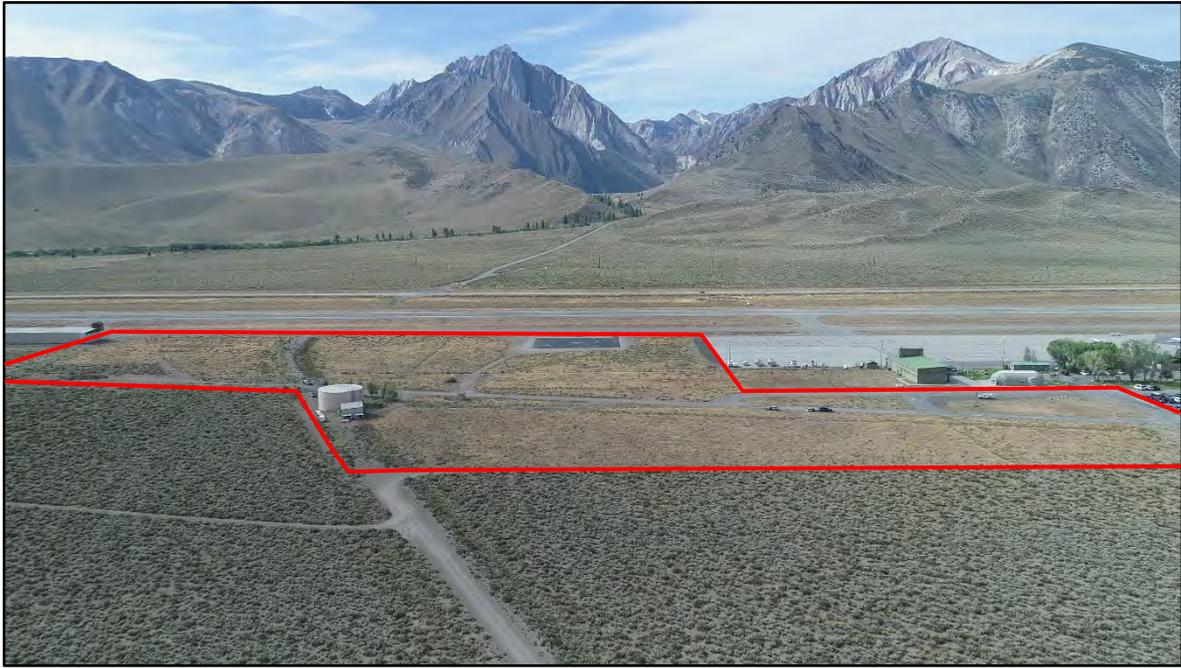
Looking east over action area. *Photo Date 9-16-19.*



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.*



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.*



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.



Figure 5d

SITE PHOTOS

Mammoth Yosemite Airport
Town of Mammoth Lakes, Mono County, CA

A 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. According to CalTrans, in a March 2016 meeting with CalTrans and Town of Mammoth Lakes (TOML) regarding a proposal to construct a deer fence around the airport,

“airport personnel described the general pattern of the deer, as generally avoiding the areas of the airport with buildings and hangars creating a pattern of use where the deer track around the airport to the north and south. At the south end of the air field the deer cross through Caltrans’ standard barb wire fence and continue on to the opposite side of airport property and on to foraging areas to the east of the airport. The TOML acknowledged that there may be increased DVCs resulting from construction of the airport fence. As it is now, deer are unimpeded by the Caltrans right of way fence (standard 42” tall barb wire fence) separating the airport from Caltrans right of way; deer cross the highway from the west to gain access to foraging areas east of the airport.”

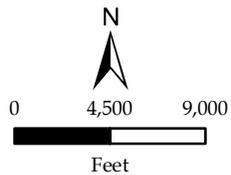
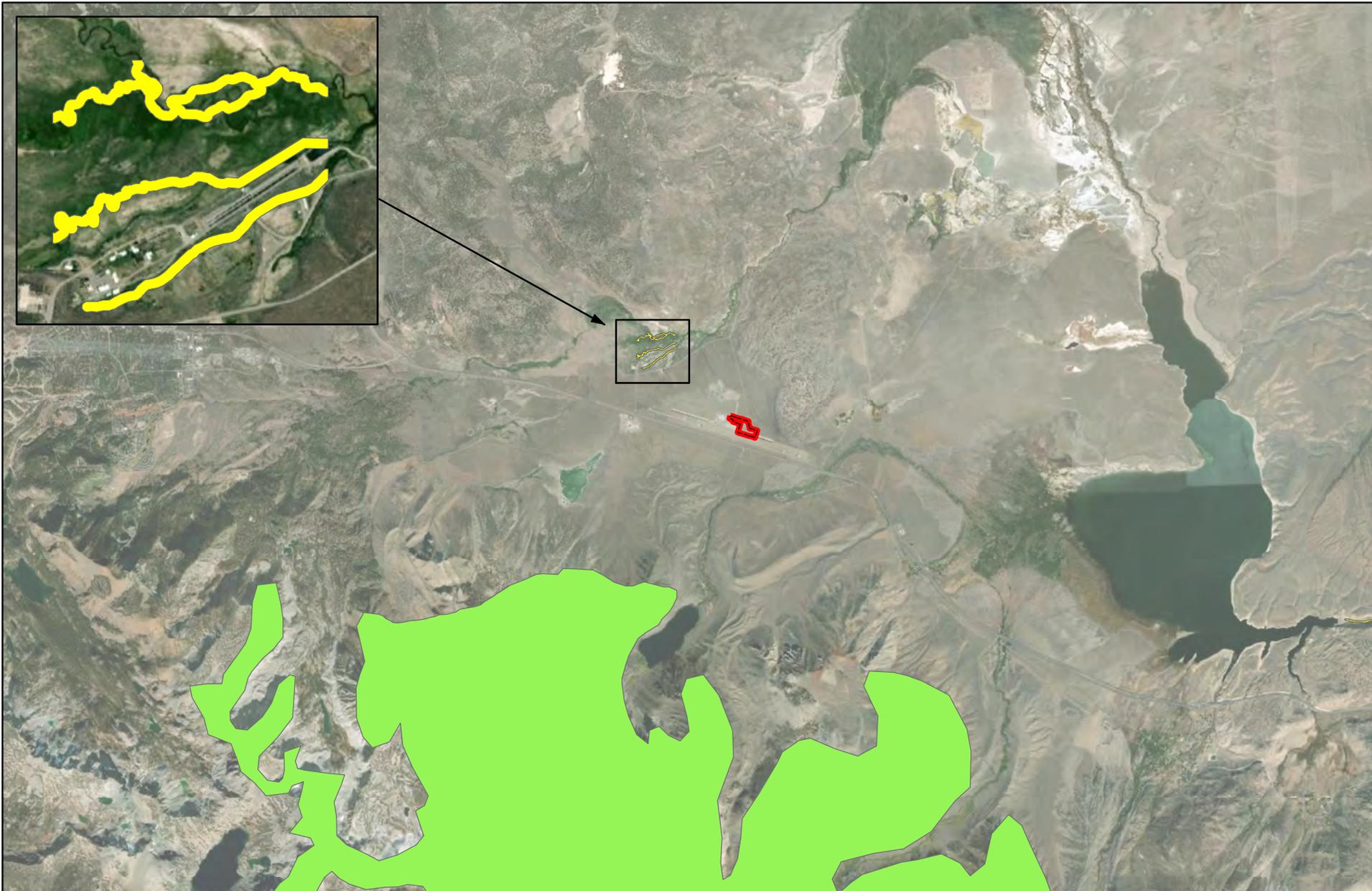
4.0 FEDERAL ENDANGERED, THREATENED, CANDIDATE, AND PROPOSED THREATENED OR PROPOSED ENDANGERED SPECIES

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 2021) (Appendix A). The California Natural Diversity Data Base (CNDDDB 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 12 federally listed species that may be present were included on these lists:

- Fisher (*Pekania pennanti*) (E)
- 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)
- Monarch butterfly (*Danaus plexippus*)
- Southwestern willow flycatcher (*Empidonax traillii extimus*)
- Yellow-billed cuckoo (*Coccyzus americanus*)
- 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, the Yosemite toad, southwestern willow flycatcher, or yellow-billed cuckoo.



Action Area (±23.58 acres)



Owens Tui Chub



Sierra Nevada bighorn sheep

Imagery: 9-17-19 Salix Consulting
Overlaid on DigitalGlobe 6/19/2015 Basemap

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 by Jeff Glazner of Salix Consulting, Inc., 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 12 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 (<i>Pinus albicaulis</i>)	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.

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
Fish				
Lahontan cutthroat trout <i>(Oncorhynchus clarkii henshawi)</i>	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.
Owens tui chub <i>(Siphateles bicolor snyderi)</i>	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 <i>(Cyprinodon radiosus)</i>	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 <i>(Rana sierrae)</i>	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.

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
Yosemite toad (<i>Anaxyrus canorus</i>)	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.
Insects				
Monarch butterfly <i>Danaus plexippus</i>	C	Ranges from southern Canada through northern South America. Eggs are laid singly on underside of a young leaf of milkweed during the spring and summer. Wintering habitat typically provides access to streams, plenty of sunlight, and appropriate roosting vegetation, relatively free of predators	None	None. No suitable habitat for egg-laying or overwintering present within Action Area.
Birds				
Southwestern willow flycatcher <i>Empidonax traillii extimus</i>	FE	Uncommon summer resident in upper elevation montane riparian and wet meadow areas, usually with a thick growth of shrubby willow.	None	None. No suitable habitat present within Action Area.
Yellow-billed cuckoo <i>Coccyzus americanus</i>	FT	Inhabits riparian forests along the broad, lower floodplains of larger rivers. Nests in thickets of willows and cottonwoods with an understory of blackberry, nettle, or wild grape.	None	None. No suitable habitat present within Action Area.
Mammals				
Sierra Nevada red fox (<i>Vulpes vulpes necator</i>)	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.

Table 2
Federally Listed Species Known from the Region of the
Mammoth Yosemite Airport Terminal Area Development Project Action Area

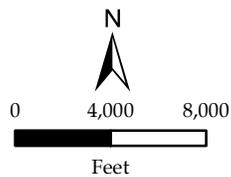
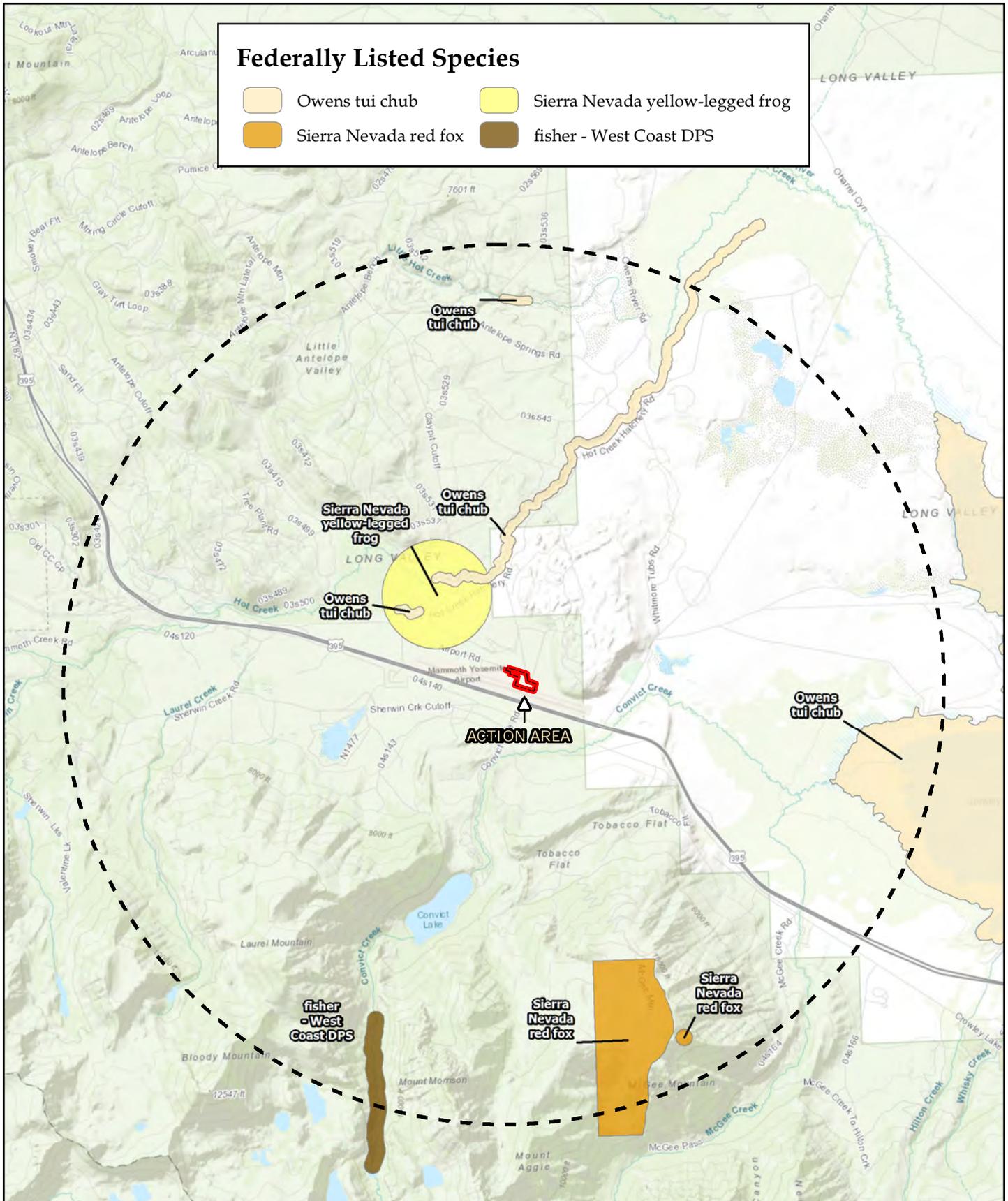
Species	Federal Status*	Preferred Habitat	Critical Habitat Present?	Potential for Occurrence
Sierra Nevada bighorn sheep <i>(Ovis canadensis sierrae)</i>	E	Typical terrain is rough, rocky and steep; also encompasses alpine meadows, summit plateaus, and hanging meadows fed by springs within escape terrain. 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.
Fisher <i>(Pekania pennanti)</i>	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
- C Federal Candidate Species

Federally Listed Species

- Owens tui chub
- Sierra Nevada yellow-legged frog
- Sierra Nevada red fox
- fisher - West Coast DPS



- Action Area
- 5-Mile Radius

Figure 7

CNDDDB 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
Results of USFWS IPaC Query Request



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Reno Fish And Wildlife Office
1340 Financial Boulevard, Suite 234
Reno, NV 89502-7147
Phone: (775) 861-6300 Fax: (775) 861-6301
<http://www.fws.gov/reno/>

In Reply Refer To:

March 24, 2021

Consultation Code: 08ENVD00-2021-SLI-0217

Event Code: 08ENVD00-2021-E-00634

Project Name: Mammoth Airport

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

To Whom It May Concern:

The attached species list indicates threatened, endangered, proposed, and candidate species and designated or proposed critical habitat that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act of 1973, as amended (ESA, 16 U.S.C. 1531 *et seq.*), for projects that are authorized, funded, or carried out by a Federal agency. Candidate species have no protection under the ESA but are included for consideration because they could be listed prior to the completion of your project. Consideration of these species during project planning may assist species conservation efforts and may prevent the need for future listing actions. For additional information regarding species that may be found in the proposed project area, visit <http://www.fws.gov/nevada/es/ipac.html>.

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

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

designated or proposed critical habitat. Guidelines for preparing a Biological Assessment can be found at: http://www.fws.gov/midwest/endangered/section7/ba_guide.html.

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

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

The Nevada Fish and Wildlife Office (NFWO) no longer provides species of concern lists. Most of these species for which we have concern are also on the Animal and Plant At-Risk Tracking List for Nevada (At-Risk list) maintained by the State of Nevada's Natural Heritage Program (Heritage). Instead of maintaining our own list, we adopted Heritage's At-Risk list and are partnering with them to provide distribution data and information on the conservation needs for at-risk species to agencies or project proponents. The mission of Heritage is to continually evaluate the conservation priorities of native plants, animals, and their habitats, particularly those most vulnerable to extinction or in serious decline. In addition, in order to avoid future conflicts, we ask that you consider these at-risk species early in your project planning and explore management alternatives that provide for their long-term conservation.

For a list of at-risk species by county, visit Heritage's website (<http://heritage.nv.gov>). For a specific list of at-risk species that may occur in the project area, you can obtain a data request form from the website (http://heritage.nv.gov/get_data) or by contacting the Administrator of Heritage at 901 South Stewart Street, Suite 5002, Carson City, Nevada 89701-5245, (775) 684-2900. Please indicate on the form that your request is being obtained as part of your coordination with the Service under the ESA. During your project analysis, if you obtain new information or data for any Nevada sensitive species, we request that you provide the information to Heritage at the above address.

Furthermore, certain species of fish and wildlife are classified as protected by the State of Nevada (<http://www.leg.state.nv.us/NAC/NAC-503.html>). You must first obtain the appropriate license, permit, or written authorization from the Nevada Department of Wildlife (NDOW) to

take, or possess any parts of protected fish and wildlife species. Please visit <http://www.ndow.org> or contact NDOW in northern Nevada (775) 688-1500, in southern Nevada (702) 486-5127, or in eastern Nevada (775) 777-2300.

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

The Service's Pacific Southwest Region developed the *Interim Guidelines for the Development of a Project Specific Avian and Bat Protection Plan for Wind Energy Facilities* (Interim Guidelines). This document provides energy facility developers with a tool for assessing the risk of potential impacts to wildlife resources and delineates how best to design and operate a bird- and bat-friendly wind facility. These Interim Guidelines are available upon request from the NFWO. The intent of a Bird and Bat Conservation Strategy is to conserve wildlife resources while supporting project developers through: (1) establishing project development in an adaptive management framework; (2) identifying proper siting and project design strategies; (3) designing and implementing pre-construction surveys; (4) implementing appropriate conservation measures for each development phase; (5) designing and implementing appropriate post-construction monitoring strategies; (6) using post-construction studies to better understand the dynamics of mortality reduction (*e.g.*, changes in blade cut-in speed, assessments of blade "feathering" success, and studies on the effects of visual and acoustic deterrents) including efforts tied into Before-After/Control-Impact analysis; and (7) conducting a thorough risk assessment and validation leading to adjustments in management and mitigation actions.

The template and recommendations set forth in the Interim Guidelines were based upon the Avian Powerline Interaction Committee's Avian Protection Plan template (<http://www.aplic.org/>) developed for electric utilities and modified accordingly to address the unique concerns of wind energy facilities. These recommendations are also consistent with the Service's wind energy guidelines. We recommend contacting us as early as possible in the planning process to discuss the need and process for developing a site-specific Bird and Bat Conservation Strategy.

The Service has also developed guidance regarding wind power development in relation to prairie grouse leks (sage-grouse are included in this). This document can be found at: http://www.fws.gov/southwest/es/Oklahoma/documents/te_species/wind%20power/prairie%20grouse%20lek%205%20mile%20public.pdf.

Migratory Birds are a Service Trust Resource. Based on the Service's conservation responsibilities and management authority for migratory birds under the Migratory Bird Treaty Act of 1918, as amended (MBTA; 16 U.S.C. 703 *et seq.*), we recommend that any land clearing or other surface disturbance associated with proposed actions within the project area be timed to avoid potential destruction of bird nests or young, or birds that breed in the area. Such destruction may be in violation of the MBTA. Under the MBTA, nests with eggs or young of migratory birds may not be harmed, nor may migratory birds be killed. Therefore, we recommend land clearing be conducted outside the avian breeding season. If this is not feasible,

we recommend a qualified biologist survey the area prior to land clearing. If nests are located, or if other evidence of nesting (*i.e.*, mated pairs, territorial defense, carrying nesting material, transporting food) is observed, a protective buffer (the size depending on the habitat requirements of the species) should be delineated and the entire area avoided to prevent destruction or disturbance to nests until they are no longer active.

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

If wetlands, springs, or streams are known to occur in the project area or are present in the vicinity of the project area, we ask that you be aware of potential impacts project activities may have on these habitats. Discharge of fill material into wetlands or waters of the United States is regulated by the U.S. Army Corps of Engineers (ACOE) pursuant to section 404 of the Clean Water Act of 1972, as amended. We recommend you contact the ACOE's Regulatory Section regarding the possible need for a permit. For projects located in northern Nevada (Carson City, Churchill, Douglas, Elko, Esmeralda, Eureka, Humboldt, Lander, Lyon, Mineral, Pershing, Storey, and Washoe Counties) contact the Reno Regulatory Office at 300 Booth Street, Room 3060, Reno, Nevada 89509, (775) 784-5304; in southern Nevada (Clark, Lincoln, Nye, and White Pine Counties) contact the St. George Regulatory Office at 321 North Mall Drive, Suite L-101, St. George, Utah 84790-7314, (435) 986-3979; or in California along the eastern Sierra contact the Sacramento Regulatory Office at 650 Capitol Mall, Suite 5-200, Sacramento, California 95814, (916) 557-5250.

We appreciate your concern for threatened and endangered species. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

The table below outlines lead FWS field offices by county and land ownership/project type. Please refer to this table when you are ready to coordinate (including requests for section 7 consultation) with the field office corresponding to your project, and send any documentation regarding your project to that corresponding office. Therefore, the lead FWS field office may not be the office listed above in the letterhead.

Lead FWS offices by County and Ownership/Program

County	Ownership/Program	Species	Office Lead*
Alameda	Tidal wetlands/marsh adjacent to Bays	Salt marsh species, delta smelt	BDFWO
Alameda	All ownerships but tidal/estuarine	All	SFWO
Alpine	Humboldt Toiyabe National Forest	All	RFWO

Alpine	Lake Tahoe Basin Management Unit	All	RFWO
Alpine	Stanislaus National Forest	All	SFWO
Alpine	El Dorado National Forest	All	SFWO
Colusa	Mendocino National Forest	All	AFWO
Colusa	Other	All	By jurisdiction (see map)
Contra Costa	Legal Delta (Excluding ECCHCP)	All	BDFWO
Contra Costa	Antioch Dunes NWR	All	BDFWO
Contra Costa	Tidal wetlands/marsh adjacent to Bays	Salt marsh species, delta smelt	BDFWO
Contra Costa	All ownerships but tidal/estuarine	All	SFWO
Del Norte	All	All	AFWO
El Dorado	El Dorado National Forest	All	SFWO
El Dorado	LakeTahoe Basin Management Unit		RFWO
Glenn	Mendocino National Forest	All	AFWO
Glenn	Other	All	By jurisdiction (see map)
	All except Shasta Trinity National Forest	All	AFWO
Humboldt			
Humboldt	Shasta Trinity National Forest	All	YFWO
Lake	Mendocino National Forest	All	AFWO
Lake	Other	All	By jurisdiction (see map)
Lassen	Modoc National Forest	All	KFWO
Lassen	Lassen National Forest	All	SFWO
Lassen	Toiyabe National Forest	All	RFWO
Lassen	BLM Surprise and Eagle Lake Resource Areas	All	RFWO

Lassen	BLM Alturas Resource Area	All	KFWO
Lassen	Lassen Volcanic National Park	All (includes Eagle Lake trout on all ownerships)	SFWO
Lassen	All other ownerships	All	By jurisdiction (see map)
Marin	Tidal wetlands/marsh adjacent to Bays	Salt marsh species, delta smelt	BDFWO
Marin	All ownerships but tidal/estuarine	All	SFWO
Mendocino	Russian River watershed	All	SFWO
Mendocino	All except Russian River watershed	All	AFWO
Modoc	Modoc National Forest	All	KFWO
Modoc	BLM Alturas Resource Area	All	KFWO
Modoc	Klamath Basin National Wildlife Refuge Complex	All	KFWO
Modoc	BLM Surprise and Eagle Lake Resource Areas	All	RFWO
Modoc	All other ownerships	All	By jurisdiction (See map)
Mono	Inyo National Forest	All	RFWO
Mono	Humboldt Toiyabe National Forest	All	RFWO
	All ownerships but tidal/estuarine	All	SFWO
Napa			
Napa	Tidal wetlands/marsh adjacent to San Pablo Bay	Salt marsh species, delta smelt	BDFWO
Nevada	Humboldt Toiyabe National Forest	All	RFWO
Nevada	All other ownerships	All	By jurisdiction (See map)

Placer	Lake Tahoe Basin Management Unit	All	RFWO
Placer	All other ownerships	All	SFWO
Sacramento	Legal Delta	Delta Smelt	BDFWO
Sacramento	Other	All	By jurisdiction (see map)
San Francisco	Tidal wetlands/marsh adjacent to San Francisco Bay	Salt marsh species, delta smelt	BDFWO
San Francisco	All ownerships but tidal/estuarine	All	SFWO
San Mateo	Tidal wetlands/marsh adjacent to San Francisco Bay	Salt marsh species, delta smelt	BDFWO
San Mateo	All ownerships but tidal/estuarine	All	SFWO
San Joaquin	Legal Delta excluding San Joaquin HCP	All	BDFWO
San Joaquin	Other	All	SFWO
Santa Clara	Tidal wetlands/marsh adjacent to San Francisco Bay	Salt marsh species, delta smelt	BDFWO
Santa Clara	All ownerships but tidal/estuarine	All	SFWO
Shasta	Shasta Trinity National Forest except Hat Creek Ranger District (administered by Lassen National Forest)	All	YFWO
Shasta	Hat Creek Ranger District	All	SFWO
Shasta	Bureau of Reclamation (Central Valley Project)	All	BDFWO
Shasta	Whiskeytown National Recreation Area	All	YFWO

Shasta	BLM Alturas Resource Area	All	KFWO
Shasta	Caltrans	By jurisdiction	SFWO/AFWO
Shasta	Ahjumawi Lava Springs State Park	Shasta crayfish	SFWO
Shasta	All other ownerships	All	By jurisdiction (see map)
Shasta	Natural Resource Damage Assessment, all lands	All	SFWO/BDFWO
Sierra	Humboldt Toiyabe National Forest	All	RFWO
Sierra	All other ownerships	All	SFWO
Siskiyou	Klamath National Forest (except Ukonom District)	All	YFWO
Siskiyou	Six Rivers National Forest and Ukonom District	All	AFWO
Siskiyou	Shasta Trinity National Forest	All	YFWO
Siskiyou	Lassen National Forest	All	SFWO
Siskiyou	Modoc National Forest	All	KFWO
Siskiyou	Lava Beds National Volcanic Monument	All	KFWO
Siskiyou	BLM Alturas Resource Area	All	KFWO
Siskiyou	Klamath Basin National Wildlife Refuge Complex	All	KFWO
Siskiyou	All other ownerships	All	By jurisdiction (see map)
Solano	Suisun Marsh	All	BDFWO
Solano	Tidal wetlands/marsh adjacent to San Pablo Bay	Salt marsh species, delta smelt	BDFWO
Solano	All ownerships but tidal/estuarine	All	SFWO
Solano	Other	All	By jurisdiction (see map)

Sonoma	Tidal wetlands/marsh adjacent to San Pablo Bay	Salt marsh species, delta smelt	BDFWO
Sonoma	All ownerships but tidal/estuarine	All	SFWO
Tehama	Mendocino National Forest	All	AFWO
Tehama	Shasta Trinity National Forest except Hat Creek Ranger District (administered by Lassen National Forest)	All	YFWO
Tehama	All other ownerships	All	By jurisdiction (see map)
Trinity	BLM	All	AFWO
Trinity	Six Rivers National Forest	All	AFWO
Trinity	Shasta Trinity National Forest	All	YFWO
Trinity	Mendocino National Forest	All	AFWO
Trinity	BIA (Tribal Trust Lands)	All	AFWO
Trinity	County Government	All	AFWO
Trinity	All other ownerships	All	By jurisdiction (See map)
Yolo	Yolo Bypass	All	BDFWO
Yolo	Other	All	By jurisdiction (see map)
All	FERC-ESA	All	By jurisdiction (see map)
All	FERC-ESA	Shasta crayfish	SFWO
All	FERC-Relicensing (non-ESA)	All	BDFWO

***Office Leads:**

AFWO=Arcata Fish and Wildlife Office

BDFWO=Bay Delta Fish and Wildlife Office

KFWO=Klamath Falls Fish and Wildlife Office

RFWO=Reno Fish and Wildlife Office

YFWO=Yreka Fish and Wildlife Office

Attachment(s):

- Official Species List
 - USFWS National Wildlife Refuges and Fish Hatcheries
 - Migratory Birds
 - Wetlands
-

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Reno Fish And Wildlife Office

1340 Financial Boulevard, Suite 234

Reno, NV 89502-7147

(775) 861-6300

Project Summary

Consultation Code: 08ENVD00-2021-SLI-0217

Event Code: 08ENVD00-2021-E-00634

Project Name: Mammoth Airport

Project Type: TRANSPORTATION

Project Description: Proposed Airport Terminal Area development project, approx. 24 acres.
No estimated time of implementation.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@37.627826850000005,-118.84543299485003,14z>



Counties: Mono County, California

Endangered Species Act Species

There is a total of 11 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

1. [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.

Mammals

NAME	STATUS
Fisher <i>Pekania pennanti</i> Population: SSN DPS No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/3651	Endangered
Sierra Nevada Bighorn Sheep <i>Ovis canadensis sierrae</i> Population: Sierra Nevada There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/3646	Endangered

Birds

NAME	STATUS
Southwestern Willow Flycatcher <i>Empidonax traillii extimus</i> There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/6749	Endangered
Yellow-billed Cuckoo <i>Coccyzus americanus</i> Population: Western U.S. DPS There is proposed critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/3911	Threatened

Amphibians

NAME	STATUS
Sierra Nevada Yellow-legged Frog <i>Rana sierrae</i> There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/9529	Endangered
Yosemite Toad <i>Anaxyrus canorus</i> There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/7255	Threatened

Fishes

NAME	STATUS
Lahontan Cutthroat Trout <i>Oncorhynchus clarkii henshawi</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/3964	Threatened
Owens Pupfish <i>Cyprinodon radiosus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4982	Endangered
Owens Tui Chub <i>Gila bicolor ssp. snyderi</i> There is final critical habitat for this species. Your location overlaps the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/7289	Endangered

Insects

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

Conifers and Cycads

NAME	STATUS
Whitebark Pine <i>Pinus albicaulis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1748	Proposed Threatened

Critical habitats

There is 1 critical habitat wholly or partially within your project area under this office's jurisdiction.

NAME	STATUS
Owens Tui Chub <i>Gila bicolor ssp. snyderi</i> https://ecos.fws.gov/ecp/species/7289#crithab	Final

USFWS National Wildlife Refuge Lands And Fish Hatcheries

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 OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

Migratory Birds

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

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.
 3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

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
<p>Bald Eagle <i>Haliaeetus leucocephalus</i></p> <p>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.</p> <p>https://ecos.fws.gov/ecp/species/1626</p>	Breeds Dec 1 to Aug 31
<p>Brewer's Sparrow <i>Spizella breweri</i></p> <p>This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA</p> <p>https://ecos.fws.gov/ecp/species/9291</p>	Breeds May 15 to Aug 10

NAME	BREEDING SEASON
Golden Eagle <i>Aquila chrysaetos</i> 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 <i>Pipilo chlorurus</i> 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 <i>Tringa flavipes</i> 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 <i>Contopus cooperi</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3914	Breeds May 20 to Aug 31
Pinyon Jay <i>Gymnorhinus cyanocephalus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9420	Breeds Feb 15 to Jul 15
Sage Thrasher <i>Oreoscoptes montanus</i> 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	Breeds Apr 15 to Aug 10
White Headed Woodpecker <i>Picoides albolarvatus</i> 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	Breeds May 1 to Aug 15
Willow Flycatcher <i>Empidonax traillii</i> 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	Breeds May 20 to Aug 31

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.

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.

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.

■ probability of presence ■ breeding season | survey effort — no data

SPECIES JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC



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>

Migratory Birds FAQ

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](#) 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.

Wetlands

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.

FRESHWATER EMERGENT WETLAND

- [PEM1A](#)
- [PEM1B](#)
- [PEM1C](#)
- [PEM1F](#)
- [PEM1Cx](#)

FRESHWATER POND

- [PABKx](#)
- [PUBHh](#)
- [PUBKx](#)
- [PUSKx](#)

FRESHWATER FORESTED/SHRUB WETLAND

- [PSSA](#)
- [PSSC](#)
- [PSSCx](#)

RIVERINE

- [R5UBF](#)
 - [R2UBH](#)
-

Appendices B1 and B2
Potentially Occurring Special-Status Species
CNDDDB Query Results



Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database



Query Criteria: Quad (Old Mammoth (3711868) OR Whitmore Hot Springs (3711867) OR Convict Lake (3711857) OR Watterson Canyon (3711866) OR Toms Place (3711856)) AND Taxonomic Group (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
<i>Accipiter gentilis</i> northern goshawk	ABNKC12060	None	None	G5	S3	SSC
<i>Anaxyrus canorus</i> Yosemite toad	AAABB01040	Threatened	None	G2G3	S2S3	SSC
<i>Aplodontia rufa californica</i> Sierra Nevada mountain beaver	AMAF01013	None	None	G5T3T4	S2S3	SSC
<i>Bombus morrisoni</i> Morrison bumble bee	IIHYM24460	None	None	G4G5	S1S2	
<i>Buteo swainsoni</i> Swainson's hawk	ABNKC19070	None	Threatened	G5	S3	
<i>Catostomus fumeiventris</i> Owens sucker	AFCJC02090	None	None	G3G4	S3	SSC
<i>Centrocercus urophasianus</i> greater sage-grouse	ABNLC12010	None	None	G3G4	S2S3	SSC
<i>Coturnicops noveboracensis</i> yellow rail	ABNME01010	None	None	G4	S1S2	SSC
<i>Empidonax traillii</i> willow flycatcher	ABPAE33040	None	Endangered	G5	S1S2	
<i>Erethizon dorsatum</i> North American porcupine	AMAFJ01010	None	None	G5	S3	
<i>Falco mexicanus</i> prairie falcon	ABNKD06090	None	None	G5	S4	WL
<i>Gulo gulo</i> California wolverine	AMAJF03010	None	Threatened	G4	S1	FP
<i>Hygrotus fontinalis</i> travertine band-thigh diving beetle	IICOL38050	None	None	G1	S1	
<i>Lepus townsendii townsendii</i> western white-tailed jackrabbit	AMAE03041	None	None	G5T5	S3?	SSC
<i>Martes caurina sierrae</i> Sierra marten	AMAJF01014	None	None	G4G5T3	S3	
<i>Ochotona princeps schisticeps</i> gray-headed pika	AMAEA0102L	None	None	G5T4	S2S4	
<i>Oncorhynchus clarkii henshawi</i> Lahontan cutthroat trout	AFCHA02081	Threatened	None	G5T3	S1	
<i>Pekania pennanti pop. 2</i> Fisher - Southern Sierra Nevada ESU	AMAJF01022	Endangered	Threatened	G5T1	S1	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
<i>Picoides arcticus</i> black-backed woodpecker	ABNYF07090	None	None	G5	S2	
<i>Pyrgulopsis wongi</i> Wong's springsnail	IMGASJ0360	None	None	G2	S2	
<i>Rana sierrae</i> Sierra Nevada yellow-legged frog	AAABH01340	Endangered	Threatened	G1	S1	WL
<i>Rhinichthys osculus ssp. 2</i> Owens speckled dace	AFCJB3705F	None	None	G5T1T2Q	S1S2	SSC
<i>Rhinichthys osculus ssp. 5</i> Long Valley speckled dace	AFCJB3705E	None	None	G5T1	S1	SSC
<i>Riparia riparia</i> bank swallow	ABPAU08010	None	Threatened	G5	S2	
<i>Siphateles bicolor snyderi</i> Owens tui chub	AFCJB1303J	Endangered	Endangered	G4T1	S1	
<i>Sorex lyelli</i> Mount Lyell shrew	AMABA01020	None	None	G3G4	S3S4	SSC
<i>Strix nebulosa</i> great gray owl	ABNSB12040	None	Endangered	G5	S1	
<i>Vulpes vulpes necator</i> 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 (Old Mammoth (3711868) OR Whitmore Hot Springs (3711867) OR Convict Lake (3711857) OR Watterson Canyon (3711866) OR Toms Place (3711856)) AND Taxonomic Group (Ferns OR Gymnosperms OR Monocots OR Dicots OR Lichens OR Bryophytes)

Mammoth Airport Plants - 5-quad

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Astragalus johannis-howellii</i> Long Valley milk-vetch	PDFAB0F4H0	None	Rare	G2	S1	1B.2
<i>Astragalus lemmonii</i> Lemmon's milk-vetch	PDFAB0F4N0	None	None	G2	S2	1B.2
<i>Astragalus monoensis</i> Mono milk-vetch	PDFAB0F5N0	None	Rare	G2	S2	1B.2
<i>Atriplex pusilla</i> smooth saltbush	PDCHE041P0	None	None	G4	SH	2B.1
<i>Boechea bodiensis</i> Bodie Hills rockcress	PDBRA06240	None	None	G3	S3	1B.3
<i>Boechea cobrensis</i> Masonic rockcress	PDBRA06080	None	None	G5	S3	2B.3
<i>Boechea dispar</i> pinyon rockcress	PDBRA060F0	None	None	G3	S3	2B.3
<i>Botrychium ascendens</i> upswept moonwort	PPOPH010S0	None	None	G3G4	S2	2B.3
<i>Botrychium crenulatum</i> scalloped moonwort	PPOPH010L0	None	None	G4	S3	2B.2
<i>Botrychium minganense</i> Mingan moonwort	PPOPH010R0	None	None	G4G5	S3	2B.2
<i>Calochortus excavatus</i> Inyo County star-tulip	PMLIL0D0F0	None	None	G2	S2	1B.1
<i>Carex scirpoidea ssp. pseudoscirpoidea</i> western single-spiked sedge	PMCYP03C85	None	None	G5T4	S2	2B.2
<i>Claytonia megarhiza</i> fell-fields claytonia	PDPOR030A0	None	None	G5	S2	2B.3
<i>Crepis runcinata</i> fiddleleaf hawksbeard	PDAST2R0K0	None	None	G5	S3	2B.2
<i>Draba cana</i> canescent draba	PDBRA110M0	None	None	G5	S2	2B.3
<i>Draba lonchocarpa</i> spear-fruited draba	PDBRA111F0	None	None	G5	S2S3	2B.3
<i>Draba praealta</i> tall draba	PDBRA11210	None	None	G5	S3	2B.3
<i>Elymus scribneri</i> Scribner's wheat grass	PMPOA2H170	None	None	G5	S3	2B.3



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
<i>Eremothera boothii ssp. boothii</i> Booth's evening-primrose	PDONA03052	None	None	G5T4	S3	2B.3
<i>Eremothera boothii ssp. intermedia</i> Booth's hairy evening-primrose	PDONA03056	None	None	G5T3T4	S3	2B.3
<i>Helodium blandowii</i> Blandow's bog moss	NBMUS3C010	None	None	G4	S2	2B.3
<i>Hulsea vestita ssp. inyoensis</i> Inyo hulsea	PDAST4Z073	None	None	G5T2T3	S1S2	2B.2
<i>Ivesia kingii var. kingii</i> alkali ivesia	PDR0S0X092	None	None	G4T3Q	S2	2B.2
<i>Kobresia myosuroides</i> seep kobresia	PMCYP0F010	None	None	G5	S2	2B.2
<i>Lupinus duranii</i> Mono Lake lupine	PDFAB2B1E0	None	None	G2	S2	1B.2
<i>Mentzelia torreyi</i> Torrey's blazing star	PDLOA031S0	None	None	G4	S2	2B.2
<i>Micromonolepis pusilla</i> dwarf monolepis	PDCHE0F020	None	None	G5	S3?	2B.3
<i>Orobanche ludoviciana var. arenosa</i> Suksdorf's broom-rape	PDORO04073	None	None	G5T5	S2	2B.3
<i>Parnassia parviflora</i> small-flowered grass-of-Parnassus	PDSAX0P0A0	None	None	G5?	S2	2B.2
<i>Pedicularis crenulata</i> scalloped-leaved lousewort	PDSCR1K0A0	None	None	G4	S1	2B.2
<i>Phacelia gymnoclada</i> naked-stemmed phacelia	PDHYD0C1X0	None	None	G4	S2	2B.3
<i>Phacelia inyoensis</i> Inyo phacelia	PDHYD0C2F0	None	None	G2	S2	1B.2
<i>Sabulina stricta</i> bog sandwort	PDCAR0G0U0	None	None	G5	S3	2B.3
<i>Salix brachycarpa var. brachycarpa</i> short-fruited willow	PDSAL02531	None	None	G5T5	S2	2B.3
<i>Salix nivalis</i> snow willow	PDSAL024K0	None	None	G5	S2	2B.3
<i>Sphaeromeria potentilloides var. nitrophila</i> alkali tansy-sage	PDAST8S061	None	None	G5T4?	S2	2B.2
<i>Stuckenia filiformis ssp. alpina</i> slender-leaved pondweed	PMPOT03091	None	None	G5T5	S2S3	2B.2
<i>Thelypodium integrifolium ssp. complanatum</i> foxtail thelypodium	PDBRA2N062	None	None	G5T4T5	S2	2B.2
<i>Trichophorum pumilum</i> little bulrush	PMCYP0Q250	None	None	G5	S3	2B.2



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
<i>Triglochin palustris</i> marsh arrow-grass	PMJCG02040	None	None	G5	S2	2B.3
<i>Viola purpurea ssp. aurea</i> golden violet	PDVIO04420	None	None	G5T2	S2	2B.2

Record Count: 41

APPENDIX C: 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 Floodway 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 inboard of 12.0' 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 the 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 "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, projection, or UTM zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences. It may feature 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, NN0512
National Geodetic Survey
SSMC-3, #6202
1315 East-West Highway
Silver Spring, Maryland 20910-3282
(301) 715-3242

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) 715-3242, 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 geographically compiled at a scale of 1:12,000 from the National Agriculture Imagery Program (NAIP) orthophotography dated 2005.

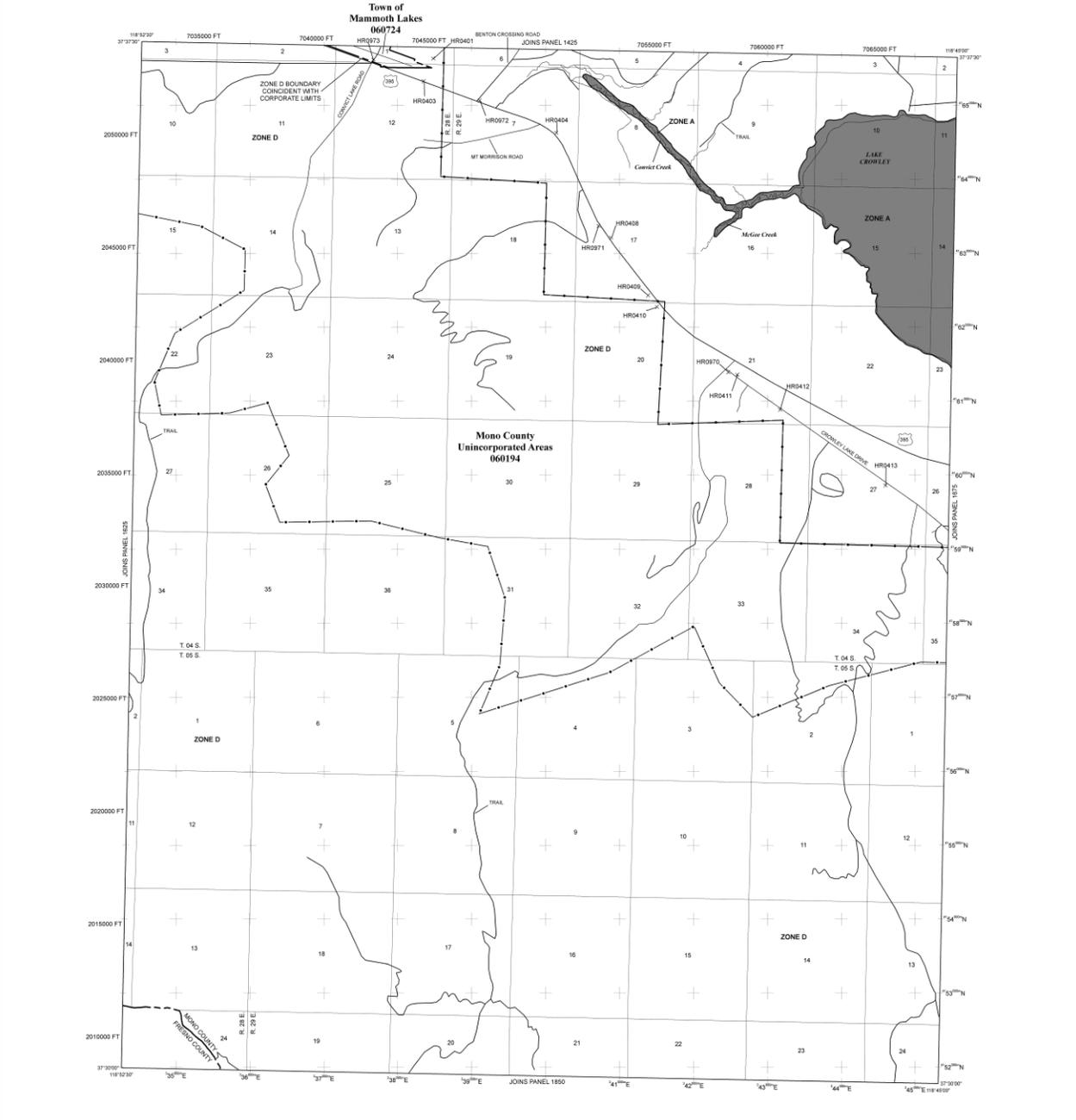
This map reflects more detailed and up-to-date stream channel configurations than those shown on the previous FIRM for this jurisdiction. The floodplains and floodways that were transferred from the previous FIRM may have been adjusted to conform to these new stream channel configurations. As a result, the Flood Profiles and Floodway Data in the Flood Insurance Study Report (which contains authoritative hydraulic data) may reflect stream channel discharges that differ from what is shown on this map.

Corporate limits shown on this map are based on the best available data at the time of publication. Because changes due to annexations or de-annexations may have occurred after the map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Please refer to the separately printed **Map Index** for an overview map of the county showing the layout of map panels, community map repository addresses, and a listing of Communities table containing National Flood Insurance Program data for each community as well as a listing of the panels on which each community is located.

Contact the **FEMA Map Service Center** at 1-800-368-9616 for information on available products associated with this FIRM. Available products may include previously issued Letters of Map Change, a Flood Insurance Study report, and/or digital versions of this map. The FEMA Map Service Center may also be reached by Fax at 1-800-368-9620 and its website at <http://www.fema.gov>.

If you have questions about this map or questions concerning the National Flood Insurance Program in general, please call 1-877-FEMA-MAP (1-877-336-2627) or visit the FEMA website at <http://www.fema.gov>.



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 the 1% annual flood. Areas of Special Flood Hazard include Zone A, AE, AH, AC, AO, AR, AV, 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** No Base Flood Elevations determined.
- ZONE AH** Flood depths of 2 to 3 feet (usually areas of ponds); Base Flood Elevations determined.
- ZONE AO** Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined, or areas of shallow flood; 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 abandoned. Zone AR areas are protected from the 1% annual chance flood by a Federal Flood Control System in being retained to provide protection from the 1% annual chance or greater flood.
- ZONE AV** Area is protected from 1% annual chance flood by a Federal Flood Control System; other construction; no Base Flood Elevations determined.
- ZONE VE** 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 increase in flood height.

OTHER FLOOD AREAS

ZONE B 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 D** Areas determined to be outside the 0.2% annual chance floodplain; areas in which flood hazards are undetermined; see profile.
- COASTAL BARRIERS RESOURCES SYSTEM (CBRS) AREAS** CBRS areas and OFAs are normally located within or adjacent to Special Flood Hazard Areas.
- OTHERWISE PROTECTED AREAS (OPAs)** OPAs are normally located within or adjacent to Special Flood Hazard Areas.

- Floodplain boundary
- Floodway boundary
- Zone D boundary
- CBRS and OFA boundary
- Boundary defining Special Flood Hazard Area zones and boundaries defining Special Flood Hazard Areas of different Base Flood Elevations, flood depths or flood velocities.
- Base Flood Elevation line and water elevation in feet* (SL, 967)
- Base Flood Elevation value when uniform within zone; elevation in feet*

* Referenced to the North American Vertical Datum of 1988

87°07'45" 32°22'00"
78°10'N
600000 FT
100-meter Universal Transverse Mercator grid values, zone 12N
DXX510 x
M1:5
Riser Pole

MAP REPOSITORY
Refer to listing of Map Repositories on Map Index
EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE MAP
February 18, 2011
EFFECTIVE DATES OF REVISIONS 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 the community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6667.



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)

COMMUNITY	NUMBER	PANEL	RIFLEX
MONO COUNTY LIBERTY TOWNSHIP	060704	1650	D
MERCED COUNTY	060704	1650	D

Refer to User's Map Number. When names are listed in user when placing map orders, the Community Number or Flood Insurance Study Report should be used on insurance applications to the subject community.

MAP NUMBER
06051C1650D

EFFECTIVE DATE
FEBRUARY 18, 2011

Federal Emergency Management Agency

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 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 to landward of 2.0 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 NNGS12
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 (CASLI) dated 2000 or later. Additional information was photogrammetrically compiled at a scale of 1:12,000 from the National Agriculture Imagery Program (NAIP) orthorectified imagery dated 2005.

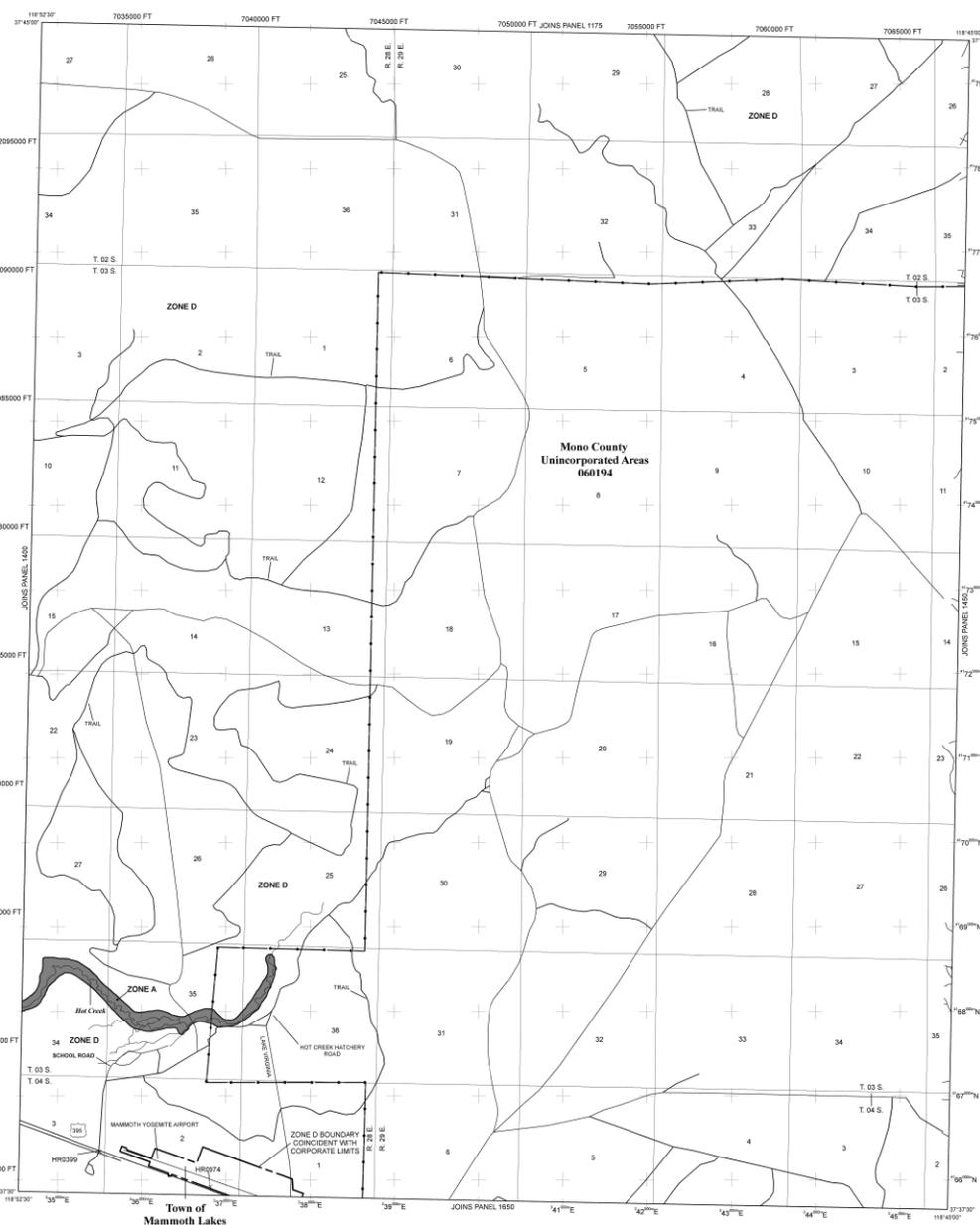
This map reflects more detailed and up-to-date stream channel configurations than those shown on the previous FIRM for this jurisdiction. The floodplains and floodways that were transferred from the previous FIRM may have been adjusted to conform to these new stream channel configurations. As a result, 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.

Corporate limits shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Please refer to the separately printed **Map Index** for an overview map of the county showing the layout of map panels, community map repository addresses, and a listing of Communities table containing National Flood Insurance Program data for each community as well as a listing of the panels on which each community is located.

Contact the **FEMA Map Service Center** at 1-800-358-9616 for information on available products associated with this FIRM. Available products may include previously issued Letters of Map Change, a Flood Insurance Study report, and/or digital versions of this map. The FEMA Map Service Center may also be reached by fax at 1-800-358-9600 and its website at <http://www.fema.gov>.

If you have questions about this map or questions concerning the National Flood Insurance Program in general, please call 1-877-FEMA-MAP (1-877-358-2627) or visit the FEMA website at <http://www.fema.gov>.



Town of Mammoth Lakes 060724

LEGEND

SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

- ZONE A** No Base Flood Elevations determined.
- ZONE AE** Base Flood Elevation determined.
- ZONE AH** Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevation determined.
- ZONE AD** Flood depths of 1 to 3 feet (usually sheet flow or rising streams); average depth determined; For areas of shallow flow 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 destroyed. Zone AD 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 Elevation determined.
- ZONE V** Coastal flood zone with velocity hazard (wave action); no Base Flood Elevation determined.
- ZONE VE** Coastal flood zone with velocity hazard (wave action); Base Flood Elevation 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 to 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 discharge 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 Boundary
CONTOUR 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 boundary
- CBRS and OPA boundary
- Boundary dividing Special Flood Hazard Area zones and showing shading Special Flood Hazard Areas of different base Flood Elevations, flood depths or flood velocities.
- Base Flood Elevation line and value; elevation in feet*
- Base Flood Elevation line and value; elevation in feet*

* Referenced to the North American Vertical Datum of 1988

Zone section line
 Truncated line
 Geographic coordinates referenced to the North American Datum of 1983 (NAD 83). Elevation in meters.
 1000 meter Universal Transverse Mercator grid values, zone 11E
 600000 FT 1000-foot grid value; California State Plane coordinate system, zone 10 (SPZON 442), Lambert Conformal Conic Projection
 DMS510 X
 M15 River Mile
 Refer to listing of Map Repositions on Map Index
MAP REPOSITION:
 EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP: February 18, 2011
 EFFECTIVE DATES OF REVISIONS TO THIS PANEL:

For community map revision history prior to community 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 1-800-638-6633.

MAP SCALE: 1" = 2000'

1000 0 2000 4000 FEET
 300 0 600 1200 METERS

NFIP 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	SHEET
MAMMOTH LAKES, TOWN OF	06051C	1425	D
	06051C	1425	D

Note to User: This Map Number shown above should be used when placing map orders. The Community Number shown above should be used for purchase applications for the subject community.

MAP NUMBER
 06051C1425D

EFFECTIVE DATE
 FEBRUARY 18, 2011

Federal Emergency Management Agency

APPENDIX D: SHPO CORRESPONDENCE



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

Archaeological and traditional property locations are considered confidential and should not be disclosed to the general public or unauthorized persons.

This document contains sensitive information regarding the nature and location of archaeological sites. Public access to information regarding the location, character, or ownership of a cultural or heritage resource is restricted by law per Section 304 of the National Historic Preservation Act; Section 9(a) of the Archaeological Resources Protection Act; Executive Order 13007; and is exempt from the California Public Records Act under Government Code Section 6254.10.



**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,

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

Julianne Polanco
State Historic Preservation Officer

APPENDIX E: NOISE MODEL

Noise Modeling: Mammoth Yosemite Airport, prepared January 2020, Revised May 2021

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.

Two Aviation Environmental Design Tool v.2d (AEDT) noise models are presented: Year 2018 as the affected environment 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 (Table 1 in Appendix A of 14 CFR Part 150, *Land Use Compatibility with Yearly Day-Night Average Sound Levels*) for land uses within airport environs indicate that Yearly Day-Night Average Sound Levels (DNL) levels below 65 dB are compatible for all sensitive land uses including residential development. The FAA recognizes the Community Noise Equivalent Level (CNEL) as an alternative metric for California.

(CROL1.CROL1) 18312

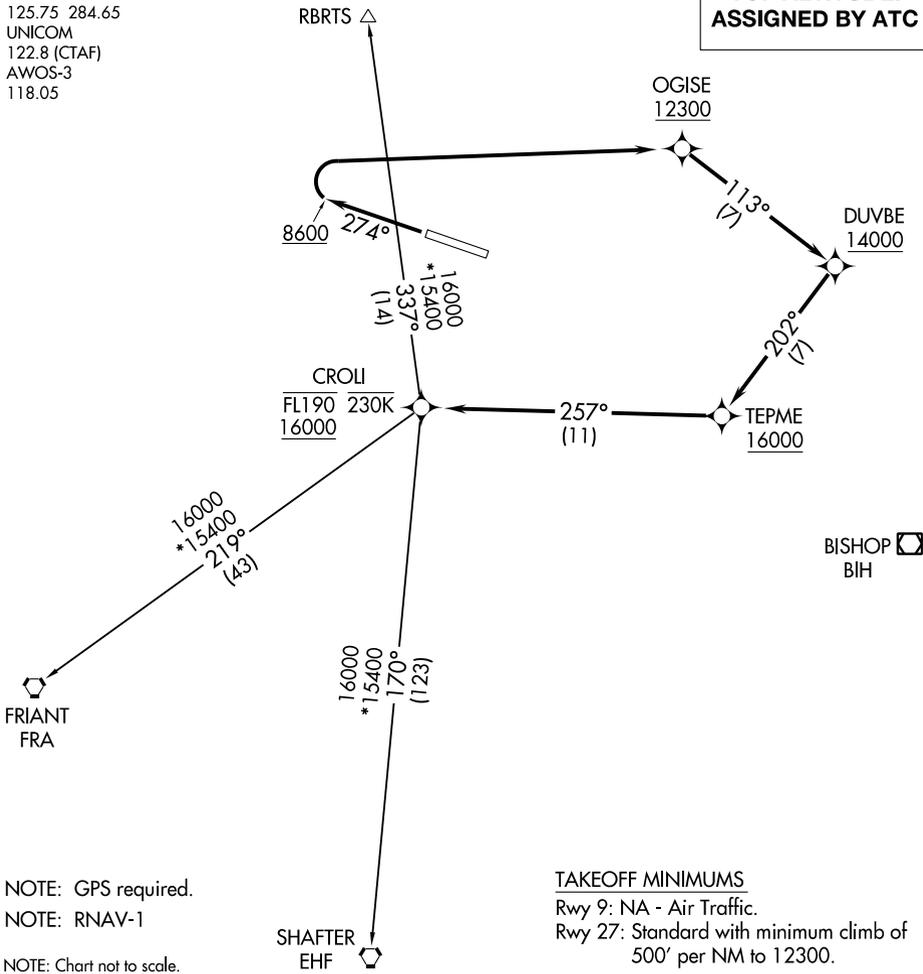
CROL1 ONE DEPARTURE (RNAV)

AL-6841 (FAA)

MAMMOTH YOSEMITE (MMH)
MAMMOTH LAKES, CALIFORNIA

OAKLAND APP CON
125.75 284.65
UNICOM
122.8 (CTAF)
AWOS-3
118.05

**TOP ALTITUDE:
ASSIGNED BY ATC**



SW-2, 02 JAN 2020 to 30 JAN 2020

SW-2, 02 JAN 2020 to 30 JAN 2020

NOTE: GPS required.
NOTE: RNAV-1
NOTE: Chart not to scale.

TAKEOFF MINIMUMS
Rwy 9: NA - Air Traffic.
Rwy 27: Standard with minimum climb of 500' per NM to 12300.

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 CROL1 at or above 16000 and at or below FL190, thence. . . .

. . . .on (transition) maintain 16000, expect filed altitude 10 minutes after departure.

SHAFTEF TRANSITION (CROL1.EHF)
FRIANT TRANSITION (CROL1.FRA)
RBRTS TRANSITION (CROL1.RBRTS)

CROL1 ONE DEPARTURE (RNAV)
(CROL1.CROL1) 05MAR15

MAMMOTH LAKES, CALIFORNIA
MAMMOTH YOSEMITE (MMH)

(NIKOL1.NIKOL) 16091

NIKOL ONE DEPARTURE (OBSTACLE)

SL-6841 (FAA)

MAMMOTH YOSEMITE (MMH)
MAMMOTH LAKES, CALIFORNIA

OAKLAND CENTER
125.75 284.65
UNICOM
122.8 (CTAF)
AWOS-3
118.05

MINA
115.1 MVA
Chan 98

TAKEOFF MINIMUMS

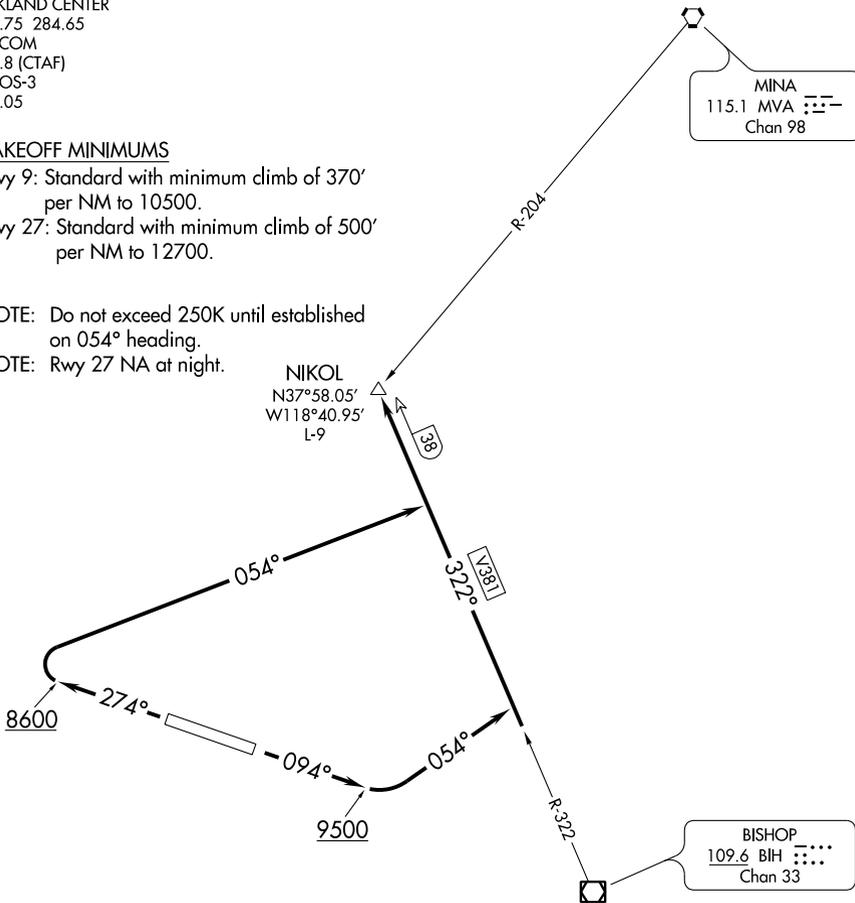
Rwy 9: Standard with minimum climb of 370' per NM to 10500.

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.

NIKOL
N37°58.05'
W118°40.95'
L-9



SW-2, 02 JAN 2020 to 30 JAN 2020

SW-2, 02 JAN 2020 to 30 JAN 2020

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.

NIKOL ONE DEPARTURE (OBSTACLE)

(NIKOL1.NIKOL) 05MAR15

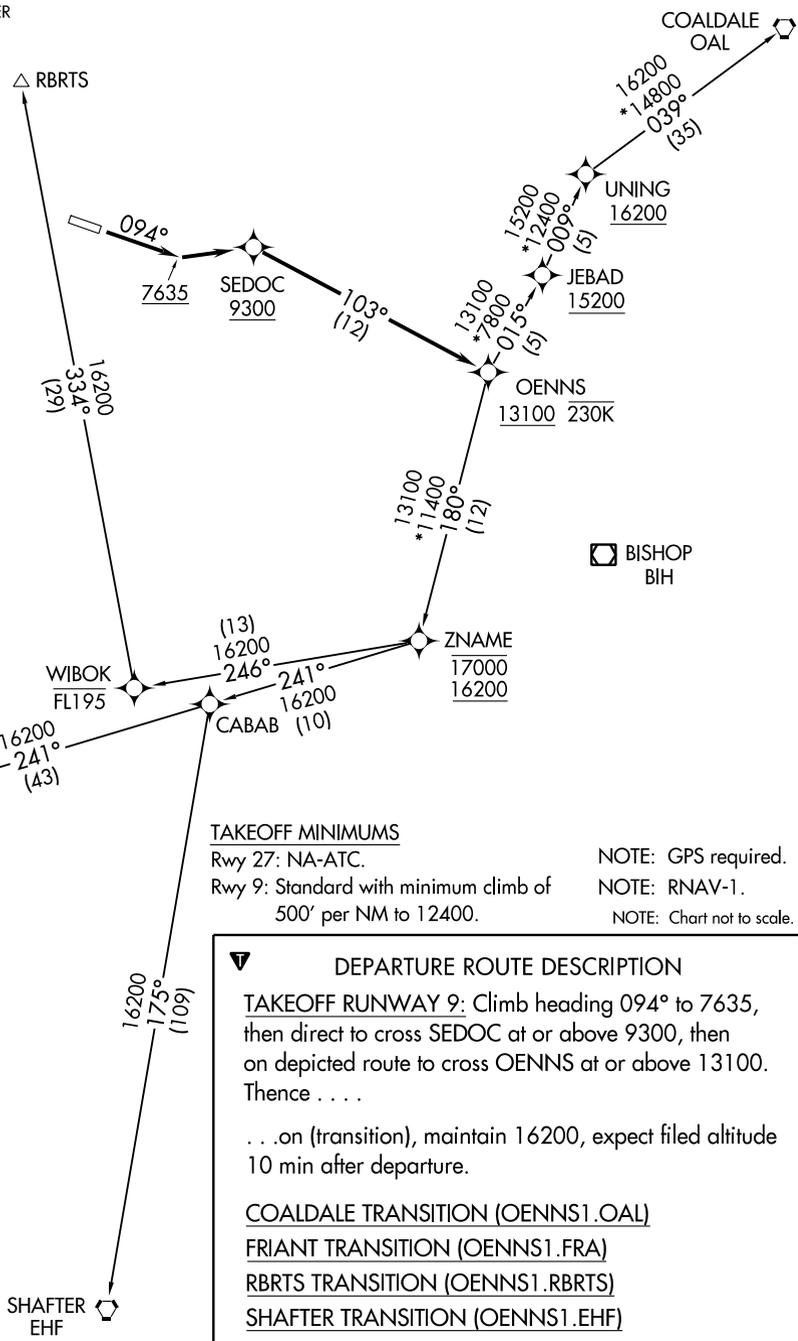
MAMMOTH LAKES, CALIFORNIA
MAMMOTH YOSEMITE (MMH)

OENNS ONE DEPARTURE (RNAV)

AL-6841 (FAA)

MAMMOTH YOSEMITE (MMH)
MAMMOTH LAKES, CALIFORNIA

OAKLAND CENTER
125.75 284.65
UNICOM
122.8 (CTAF)
AWOS-3
118.05



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)

OENNS ONE DEPARTURE (RNAV)

APPENDIX F: GROUNDWATER

Mammoth Yosemite Airport: Groundwater Technical Memorandum

Prepared By Geolmagery
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.

CONCLUSION

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)

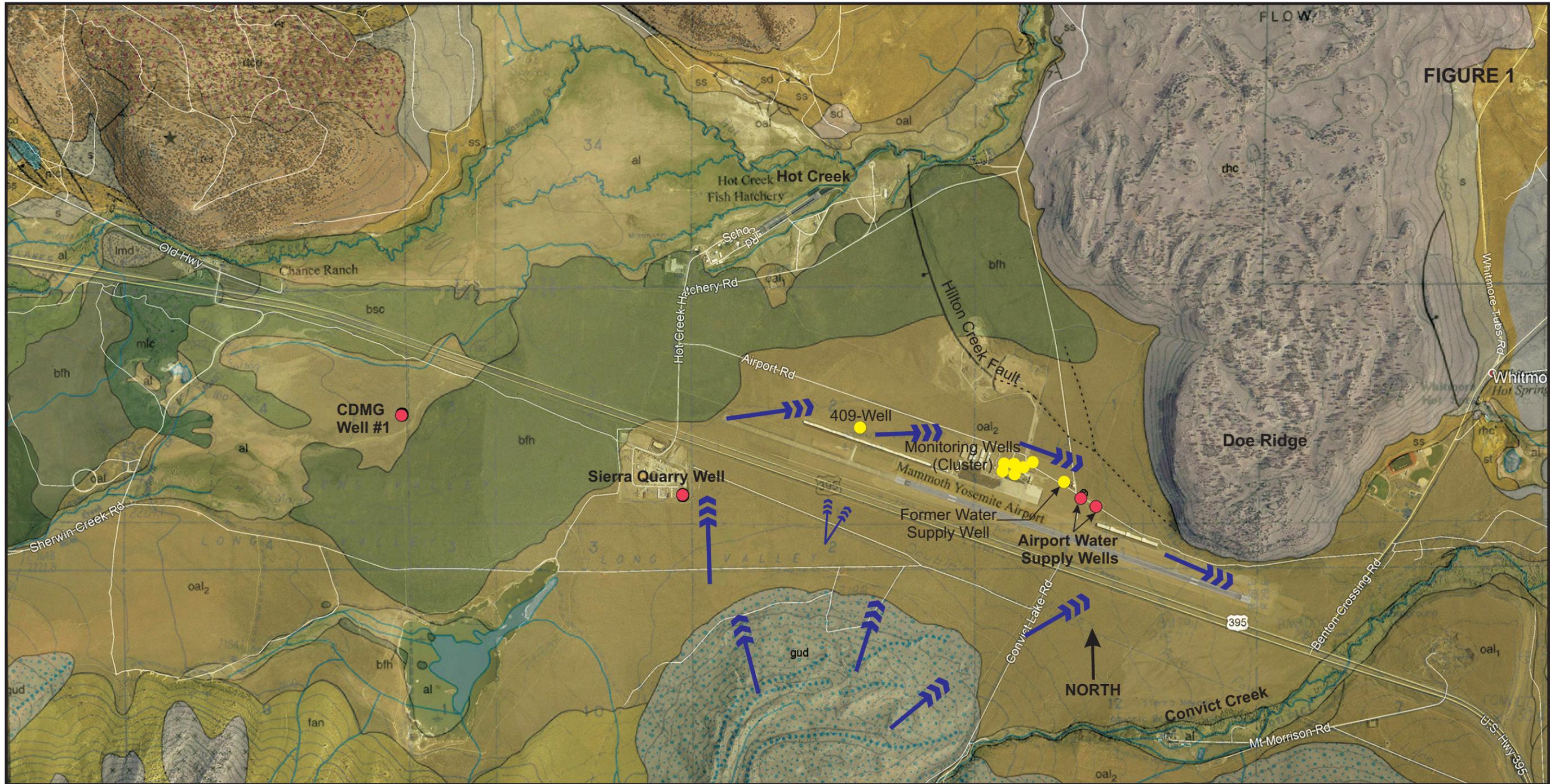
Hildreth, Wes and Fierstein, *Eruptive History of Mammoth Mountain and its Mafic Periphery, California*, USGS Professional Paper 1812, 2016.

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
- oal₂: 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

Mono County Health Department

Construction Guide for Residential and Commercial On-Site Sewage Treatment & Disposal System

I. Scope:

This construction guide and permit application procedure has been prepared to assist the property owner in meeting State and local regulations for construction, alteration, and/or repair of a conventional (standard) sewage treatment & dispersal system for residential use and commercial uses with domestic waste flows. A conventional system consists of a septic tank, distribution piping and leach lines. Leach beds may be considered in special circumstances but these are generally impractical for soil conditions in Mono County. Seepage pits and cesspools are prohibited in Mono County.

II. Procedure

A. Submit an Application:

The property owner or authorized agent shall submit an application, plot plan, site location map and permit fee to the Mono County Health Department (MCHD).

1. The **application** shall be on a **form** designated by the health department.
2. A **plot plan** (Figure-1, "Typical Plot Plan") shall be submitted with the application and shall contain all of the following information:
 - a. On the property, the proposed or existing
 - (1) Water supply source(s) including wells, springs, streams, lakes, ponds and canals. If on a public water system, indicate the name of the public water system and the location of the connection.
 - (2) Streams, lakes, ponds, streams and drainage courses
 - (3) Buildings
 - (4) Septic tank
 - (5) Leach lines and/or bed
 - (6) Driveways and parking pads
 - (7) Elevations and slope or grade of the land.
 - b. On adjoining property, within 100 feet of the proposed system
 - (1) Water wells (irrigation and domestic wells)
 - (2) Other water supply sources such as springs, streams and canals
 - (3) Streams, springs and water courses
 - (4) Access roads
 - c. The plan may be sketched and should be drawn to scale. (Please indicate the scale used.)
3. A **site location map** should be submitted with the application that shows the location of the property.
4. All **commercial systems** shall be designed by an appropriately licensed consultant. Soil tests shall be conducted by an appropriately licensed geologist or soil scientist and shall be verified by MCHD. Verification of all tests and procedures by the MCHD is required by inspection while the tests are being conducted.
5. The appropriate **permit fee** shall be submitted with the application.

B. Identify the Site:

In order for the health department to properly evaluate the site, the property corners should be located and flagged prior to the site evaluation and permit issuance.

C. Test Trenches

The property owner shall arrange to excavate a minimum of two test trenches in the proposed disposal area for inspection by the health department. Each trench shall be a minimum of 10 feet deep. The need for test trenches varies in certain areas of Mono County. In some areas the requirement for the test trenches may be waived, whereas in other areas additional test trenches may be required. Please contact the health department for requirements in your area.

D. Percolation Tests

The property owner shall arrange for completion of a minimum of two percolation tests in the proposed disposal area. As with the test trenches the need for percolation tests vary in certain areas of Mono County. In some areas the requirement for the test may be waived while in other areas additional percolation tests may be required. Please contact the health department for requirements in your area. Where percolation tests are required a Registered Engineer, Registered Geologist or Registered Environmental Health Specialist shall conduct the test.

E. Issuance of a permit:

After evaluation of the property and inspection of the test trenches and percolation tests, if the proposed sewage disposal system is satisfactory for the site, a permit will be issued by this department for installation of the system.

F. Alternative Systems

If the health department determines that the site is not suitable for a conventional system, an alternative system may be considered. Whenever possible, after evaluating the property and test results, the health department may provide recommendations concerning alternative systems that may be acceptable. A Registered Civil Engineer, Registered Engineering Geologist or Registered Environmental Health Specialist shall design the alternative system. All alternative systems shall comply with the Mono County Health Department requirements for alternative systems.

G. Aerobic systems:

The health department may approve an aerobic system if the system will produce results at least equivalent to a septic tank, whether their aeration systems are operating or not.

H. Inspections required:

1. Site inspection (prior to issuance of permit);
2. Soil profile trenches (prior to issuance of permit);
3. Open trench inspection (prior to placement of leach rock);
4. Septic tank, leach-lines, distribution system (final inspection).

III. Site Criteria and Construction Requirements:

A. Site Criteria:

1. The *soil* in the absorption field shall be a loam, sandy loam, silty loam or clayey loam as determined by USDA soil classification system. The coarse fragment (e.g. gravel, rock, and boulders) shall be less than 50% (by volume).
2. The *soil percolation rate* in the absorption field shall be not less than 5 minutes per inch or greater than 60 minutes per inch, as determined by the U.S. EPA Manual percolation test procedures.
3. In all portions of the absorption field the *depth or soil* beneath the bottom of the trench shall be a minimum of 5 feet to bedrock, an impermeable stratum (e.g. heavy clay) and/or ground water and seasonal ground water.
4. Sufficient area, equal to 100% of the initial area, shall be set-aside exclusively for repair and, if necessary, replacement of the system.
5. The natural *slope* in the area of the absorption field shall be less than 30 percent (30%).
6. All portions of the absorption system shall be *located* and constructed in compliance with Table – 1, “Location of Sewage Disposal System.”

B. Septic Tank:

1. **Septic tanks** shall be constructed of concrete, plastic, fiber reinforced plastic or steel and shall be *approved* by the Mono County Health Department for installation in Mono County. Wooden septic tanks are prohibited.
2. Septic tanks shall meet the *capacity* as described in Table – 2, “Capacity of Septic Tank.”
3. The septic tanks shall be *installed* in an excavation in native soil. The bottom of the excavation and tank (inside) shall be level. The tank inlet pipe and tank outlet pipe shall be level (with a maximum grade drop of 2 inches from the invert of the inlet pipe to the invert of the outlet pipe).
4. An excavation around a concrete or steel tank may be back-filled with native soil provided the boulders and large rocks have been removed.
5. An excavation around a fiberglass or plastic tanks shall be back-filled with a minimum of 12 inches of fill sand or concrete sand on the bottom and sides of the tank. During placement of the back-fill, the tank shall be filled with water to support the walls of the tank.
6. Upon completion of the installation a minimum of 12 inches of earth shall be placed over the septic tank.
7. **Access risers** extending from the septic tank lids to the ground surface are recommended for all septic tanks. Access risers extending from the septic tank lids to the ground surface are required for septic tanks installed under concrete and/or pavement; the risers shall be accessed through a manhole covers.
8. The minimum thickness of any steel septic tank shall be No. 12 U.S. gauge (0.109”) and each such tank shall be protected from corrosion, both externally and internally, by an approved bituminous coating.

C. Distribution and Drainage Piping

1. The **building sewer** piping from the house to the septic tank shall be constructed of ABS or Schedule 40 PVC pipe. A clean out shall be installed at every 90-degree bend and every 100 feet of sewer line. The sewer (inlet) piping shall extend 2-3 inches into the first compartment of the septic tank. For tanks that do not have an inlet baffle, an **inlet tee** shall be installed on the end of the sewer pipe on the inside of the septic tank. The invert portion of the tee shall extend 12-15 inches below the water surface.
2. All **distribution piping** from the septic tank to the drainage piping shall be constructed of solid 4-inch ABS or PVC pipe. A minimum of 5 feet of distribution piping shall be installed between the septic tank and drainage piping. The distribution (outlet) piping shall extend 2-3 inches into the second compartment of the septic tank. For tanks that do not have an outlet baffle, an **outlet tee** shall be installed on the end of the distribution piping on the inside of the tank. The invert of the tee shall extend 12-15 inches below the water surface. All joints and connections in the distribution system shall be watertight.
3. If more than one leach line is installed a **distribution box** shall be installed in native (undisturbed soil) at the head of the disposal field. A minimum of 5 feet of solid distribution piping shall be installed between the septic tank and distribution box and the distribution box and drainage piping. On level ground the distribution box shall be installed for *equal distribution* to each lateral. On sloping ground the distribution box shall be installed for *serial distribution*. When the total amount of leach line exceeds 500 feet the leach field shall be *pressure dosed* to the distribution box.
4. Leach line **drainage piping** shall be constructed of 4 inch perforated ABS or PVC pipe.

D. Conventional Leach Line

1. **Leach lines** shall be constructed in trenches excavated in native and undisturbed soil. Each line shall consist of drain rock, perforated plastic drainage piping and cover material.
2. The **required amount of leach line** is based on the daily flow and the absorption capacity (percolation rate) of the soil.
 - a. *Daily flow* for a single-family dwelling is 150 gallons per day per bedroom. Daily flow for a multiple family dwelling is 150 gpd per bedroom for up to 6 units, then 100 gpd per bedroom for each additional unit.
 - b. The *soil's absorption capacity* is based on a number of factors including soil texture and soil structure. The most accurate method of determining the absorption capacity is by conducting two or more percolation tests.
 - c. The amount of *leach line needed* is calculated from the absorption capacity described in Table – 3, “Capacity of the Absorption Field.” An estimate of needed leach line is described in Table – 4, “Estimate of Required Amount of Absorption Field.”

- d. If rocks, boulders, heavy clay or other impermeable material are encountered during the trench installation, additional leach line shall be installed to compensate for the loss of absorption area.
3. The leach line **trenches** shall be installed parallel to the contour of the slope.¹ The trench width shall be a minimum of 18 inches and a maximum of 36 inches. The trench length shall not exceed 100 feet. The bottom of the trench shall be level with a maximum fall of 3 inches per 100 feet of trench. All smeared and compacted surfaces shall be removed from the trenches by raking to a depth of 1 inch and the loose material removed. If more than one trench is installed, the separation between trenches shall be a minimum of two times the depth of the trench.
 4. The leach line **drain rock** shall be sorted stone varying in size from three-fourths (3/4) inch to two and one-half (2-1/2) inches. The stone shall be free of fines such as clay, silt, sand and gravel. The depth of the drain rock below the drainpipe shall be a minimum of 12 inches and a maximum of 36 inches.
 5. The leach line **drainage piping** shall be installed level (with a maximum fall of 3 inches per 100 feet) over the required depth of drain rock. The ends of the drainage piping shall be capped. After installation of the drainage piping, additional drain rock shall be placed around and over the drainage piping to a depth of 2 inches over the drainage piping.
 6. The drain rock shall be *covered* with **untreated building paper**, straw or filter fabric to prevent the intrusion of soil into the drain rock. Roofing paper is prohibited. A minimum of 12 inches of **earth back fill** shall be placed over the untreated building paper, straw or filter fabric.
 7. Following is a summary of leach line construction requirements:

	<u>Minimum</u>	<u>Maximum</u>
Length of each line	-----	100
Bottom width of trench	18 inches	36 inches
Spacing of trenches, edge-to-edge	2 x depth	-----
Depth of earth cover	12 inches	-----
Drain rock under drain line	12 inches	36 inches
Drain rock over drain line	2 inches	4 inches
Grade of perforated piping	level	3-inches/100 ft.
Grade of trenches	level	3-inches/100 ft.

E. Chamber Leach Line

An equivalent amount of chamber leach line may be used in lieu of conventional (rock and pipe) leach line. For information concerning chamber leach lines please see the Mono County Health Department supplement for chamber leaching systems.

F. Observation Pipe

An observation pipe shall be installed at the end of each leach line. Each observation pipe shall consist of a solid 4 inch vertical pipe extending from the bottom of the leach line to the ground surface. The portion of the pipe in the drain rock or chamber shall be drilled or slotted to permit wastewater flow into the pipe. The bottom of the pipe

¹ That is, the trench depth shall not vary more than one foot from the shallowest to deepest end.

may be pressed into the soil or fill sand for stability. The top of the pipe shall be covered with a removable cap.

G. Final Inspection

1. Upon completion of the installation the owner shall prepare the system for health department inspection by
 - a. Removing the tank lids and distribution box lid(s).
 - b. Completing a flow test by filling the septic tank, distribution box and piping with water.
2. The tank top, distribution box and drainage piping end caps shall be exposed for the inspection. The distribution piping and drainage piping shall be left exposed whenever practical.
3. The owner or installer shall contact the Mono County Health Department 24 hours in advance to setup an appointment for inspection of the installation.

H. System Operation and Maintenance

1. Shallow rooted grasses may be planted over a septic tank and leach field. However, avoid planting brush or trees (especially hydrophilic plants such as cotton woods, aspens or willows) on or near the system.
2. For proper system operation :
 - a. Do not flush diapers, sanitary products, cigarette butts, hair, and/or plastics into the system.
 - b. Do not dispose of harsh chemicals such as paints, solvents and cleaners into the household drainage piping. Use bleaches and laundry detergent in moderate amounts. Labels on these products will help in determining their effect on the system.
 - c. Do not disposal of cooking grease and other oils into the drainage piping.
 - d. Avoid the use a garbage disposal.
 - e. Do not drain a hot tub or indoor spa into system.
 - f. Do not drain water purifier backwash water into system.
3. The septic tank should be pumped every 5 to 7 years. More frequent pumping may be required for systems with heavy use.

IV. Tables

Table – 1
Location of Sewage Disposal System

<u>Minimum Horizontal Distance Required From</u>	<u>Building Sewer</u>	<u>Septic Tank</u>	<u>Leach Lines</u>
Water supply wells	50 feet	100 feet	100 feet
Private domestic water line	1 foot	5 feet	5 feet
Public water main	10 feet	10 feet	10 feet
Property line,	clear	5 feet	5 feet
Property line, special conditions*	25 feet	25 feet	50 feet
Perennial Streams & Springs	50 feet	100 feet	100 feet
Ephemeral Streams	25 feet	2 5 feet	50 feet
Lake or Reservoir	50 feet	50 feet	200 feet
Cut or fill bank	10 feet	10 feet	4 x Height
Cut or fill bank, special conditions	25 feet	25 feet	50 feet
Distribution box	(None)	5 feet	5 feet
Disposal field	(None)	5 feet	10 feet
Building or Structure	2 feet	5 feet	8 feet
Large trees	(None)	10 feet	10 feet

(*“Special conditions” apply in areas where private wells and springs are used for domestic water supply.)

Table – 2
Capacity of Septic Tank

<u>Single Family Dwelling, # of Bedrooms</u>	<u>Multiple Dwelling Units or Apartment (1-bedroom each)</u>	<u>Other Uses Maximum Fixture Units Served</u>	<u>Minimum Septic Tank Capacity in Gallons</u>
1		15	750
2 or 3		20	1000
4	2 units	25	1200
5 or 6	3	30	1500
	4	45	2000
	5	55	2250
	6	60	2500
	7	70	2750
	8	80	3000
	9	90	3200
	10	100	3500

For Commercial installations the system size shall be based on Table K-3 of the California Plumbing Code or an equivalent standard.

**Table – 3
Capacity of the Absorption Field²**

<u>Soil Texture</u>	<u>Percolation Rate (mpi)</u>	<u>Absorption Capacity (gpd/sq. ft.)³</u>
Gravel, coarse sand	< 1	not suitable ⁴
Coarse to medium sand	1-5	1.2
Fine sand, loamy sand	6-15	0.8
Sandy loam, loam	16-30	0.6
Loam, porous silt loam	31-60	0.45
Silty Clay loam, clay loam ⁵	61-120	0.2

**Table – 4
Estimate of Required Amount of Absorption Field**

The following chart may be used for estimating the amount of leach line or leach bed needed for your system:

Septic Effluent Application Rate gpd/sq. ft.	Leach Line Required LF/bedroom ⁶	Leach Bed Required SF/bedroom ⁷
1.2	25	125
0.8	38	188
0.6	50	250
0.45	67	333
0.2	150	750

V. Figures:

- A. Typical Plot Plan
- B. Leach Line Observation Pipe (Typical)

² Rates are based on septic effluent from a domestic source and may not be applicable for other use.

³ Rates are suitable for sidewall and bottom area on leach lines and bottom area only on leach beds.

⁴ Site may be suitable for standard system with 2 feet of concrete sand below the drain rock. Use application rate of 1.0 gpd/sf.

⁵ This soil type is unsuitable if clays are expansive.

⁶ Lineal feet per bedroom of standard leach line 3' wide by 3' deep with 18" of drain rock below the drainpipe.

⁷ Square feet per bedroom of leach bed bottom area with 12" of drain rock below the drainpipes.

APPENDIX G: US DOT Section 4f



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 is 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 Road¹, 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-foot long and 60-foot 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

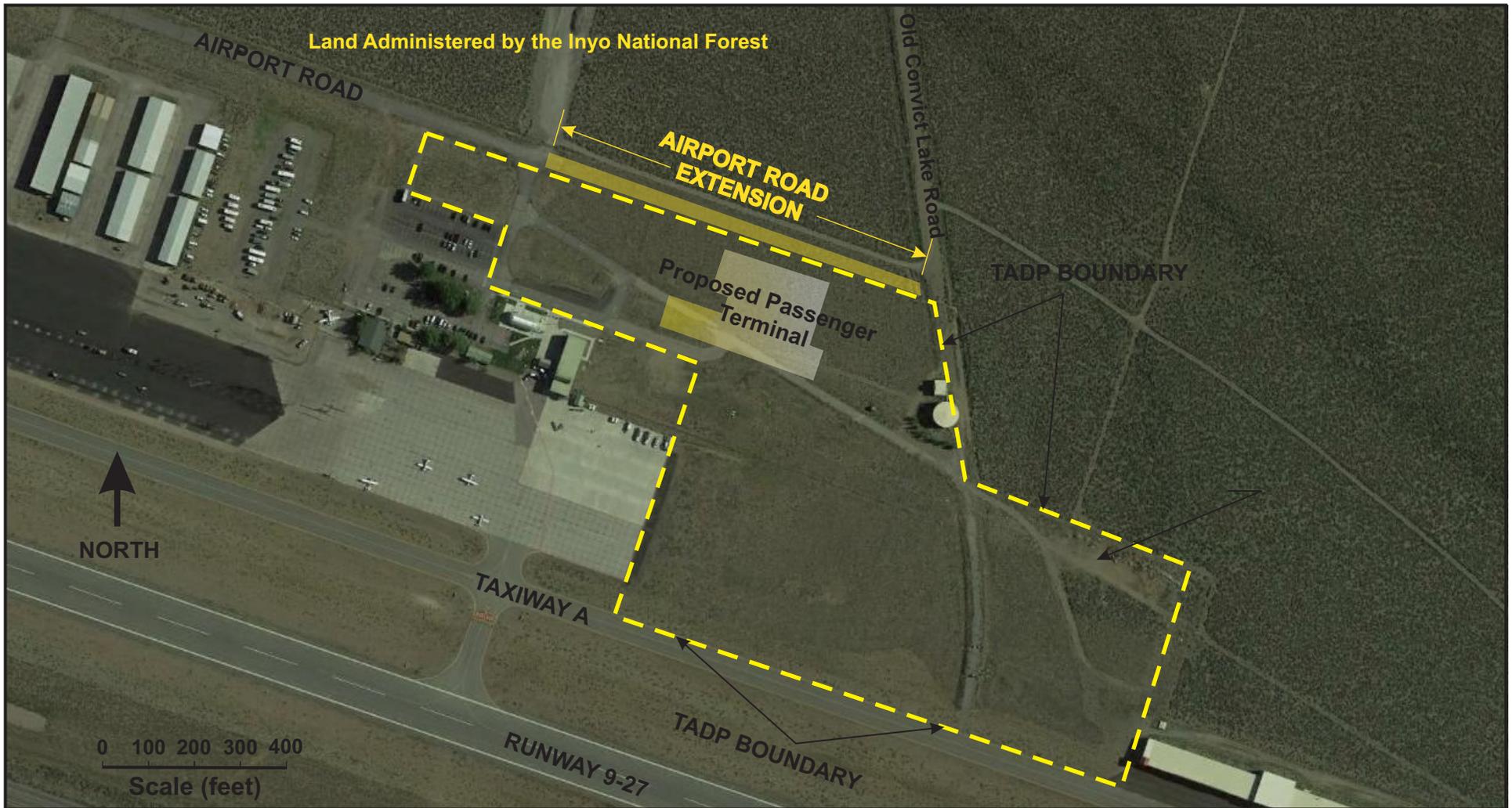
Laurie J. Suttmeier
Manager, San Francisco Airports District Office
Signed by: LAURIE J SUTTMEIER

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

**Mammoth Yosemite Airport
Town of Mammoth Lakes**

October 2020

Project Layout from:
Mammoth Yosemite Airport Terminal Area Development Plan, January 2015
Image Source: GoogleEarth

Enclosure

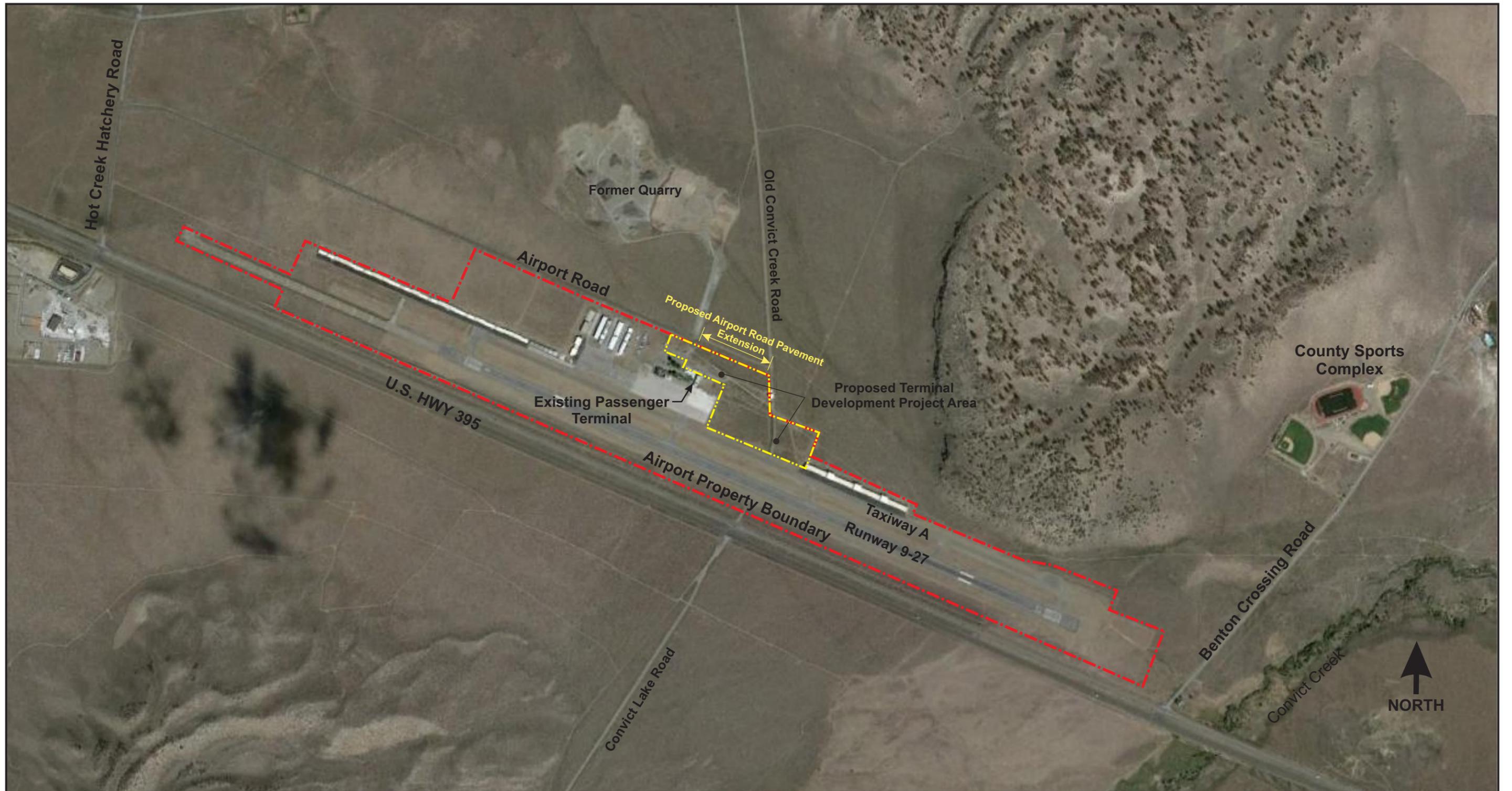


Exhibit 2

**U.S. DOT Section 4(f) Evaluation
for the Extension of Airport Road
Within an Existing Easement**

**Mammoth Yosemite Airport
Town of Mammoth Lakes**

Project Layout from:
Mammoth Yosemite Airport Terminal Area Development Plan, January 2015
Image Source: GoogleEarth

October 2020

Enclosure

JIM WARD
DEPUTY DIRECTOR

RICHARD BOARDMAN
DEPUTY COUNTY SURVEYOR

COUNTY OF MONO
DEPARTMENT OF PUBLIC WORKS

P.O. Box 457
BRIDGEPORT, CALIFORNIA 93517

EX 252

FILE COPY

TO Dave Marlow DATE October 29, 1984
USFS PROJECT Airport Road
Mammoth Ranger District SENT BY

ATTENTION _____
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
 - FOR YOUR FILES
 - FOR SIGNATURE AND RETURN
 - READ AND COMMENT
 - OTHER

REMARKS| _____

cc: Dan Morse-FAA

BY Richard Boardman
Deputy County Surveyor

Enclosure 3



RECORDED IN MONO COUNTY CALIFORNIA 2522

RESOLUTION NO. 84-108 BOARD OF SUPERVISORS, COUNTY OF MONO

'84 OCT 1 AM 9 43

RENN NOLAN NO FEE COUNTY RECORDER

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. Peigne Signature

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PASSED AND ADOPTED this 25th day of September, 1984,
by the following vote of the Board of Supervisors, County of

Mono:

AYES: Sunervisors Alpers, Johnson, Lawrence, Stanford.

NOES: None

ABSENT: Vacancy, District 4

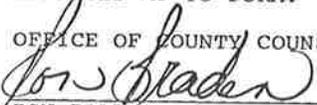
ABSTAIN: None


ROBERT J. STANFORD, CHAIRMAN
BOARD OF SUPERVISORS
COUNTY OF MONO

ATTEST:
MARJORIE E. PEIGNE
Clerk to the Board

APPROVED AS TO FORM:

BY: 
Nancy Wells
Deputy Board Clerk

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 contractual 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

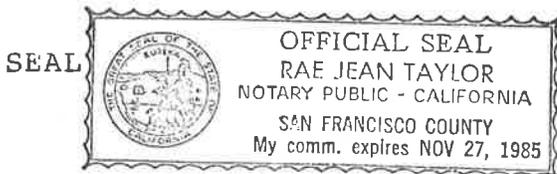
By Norwood F. Robertshaw
Director, Lands
Pacific Southwest Region
Forest Service
Department of Agriculture

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.



Rae Jean Taylor
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 S $\frac{1}{2}$ NW $\frac{1}{4}$, N $\frac{1}{2}$ SW $\frac{1}{4}$
Sec. 2 N $\frac{1}{2}$ SE $\frac{1}{4}$

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 $^{\circ}$ 09'12"E., a distance of 1060.90 feet. Thence S89 $^{\circ}$ 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 $^{\circ}$ 00'00"; thence S71 $^{\circ}$ 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 $^{\circ}$ 30'33"E., 3511.98 feet.

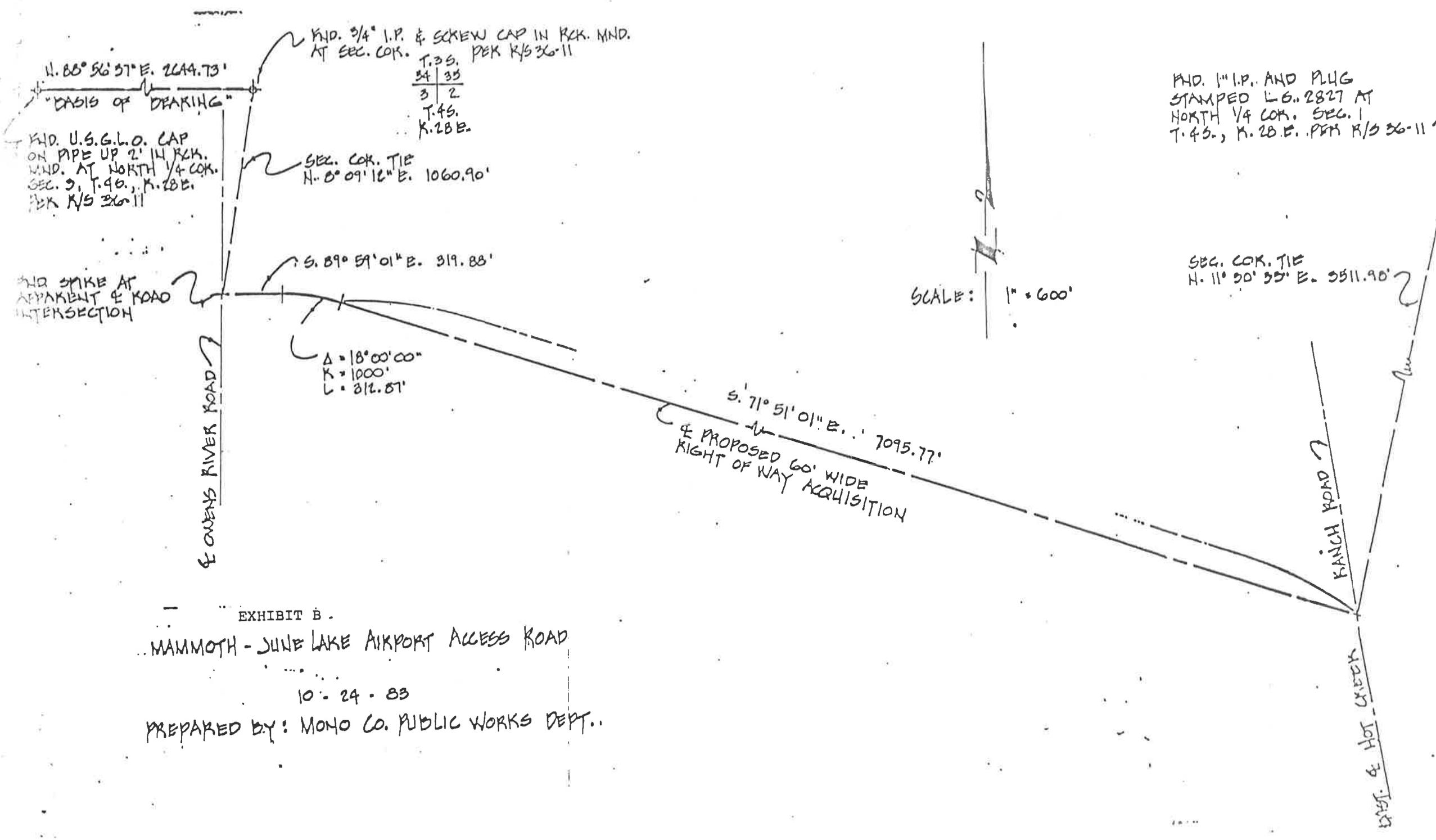
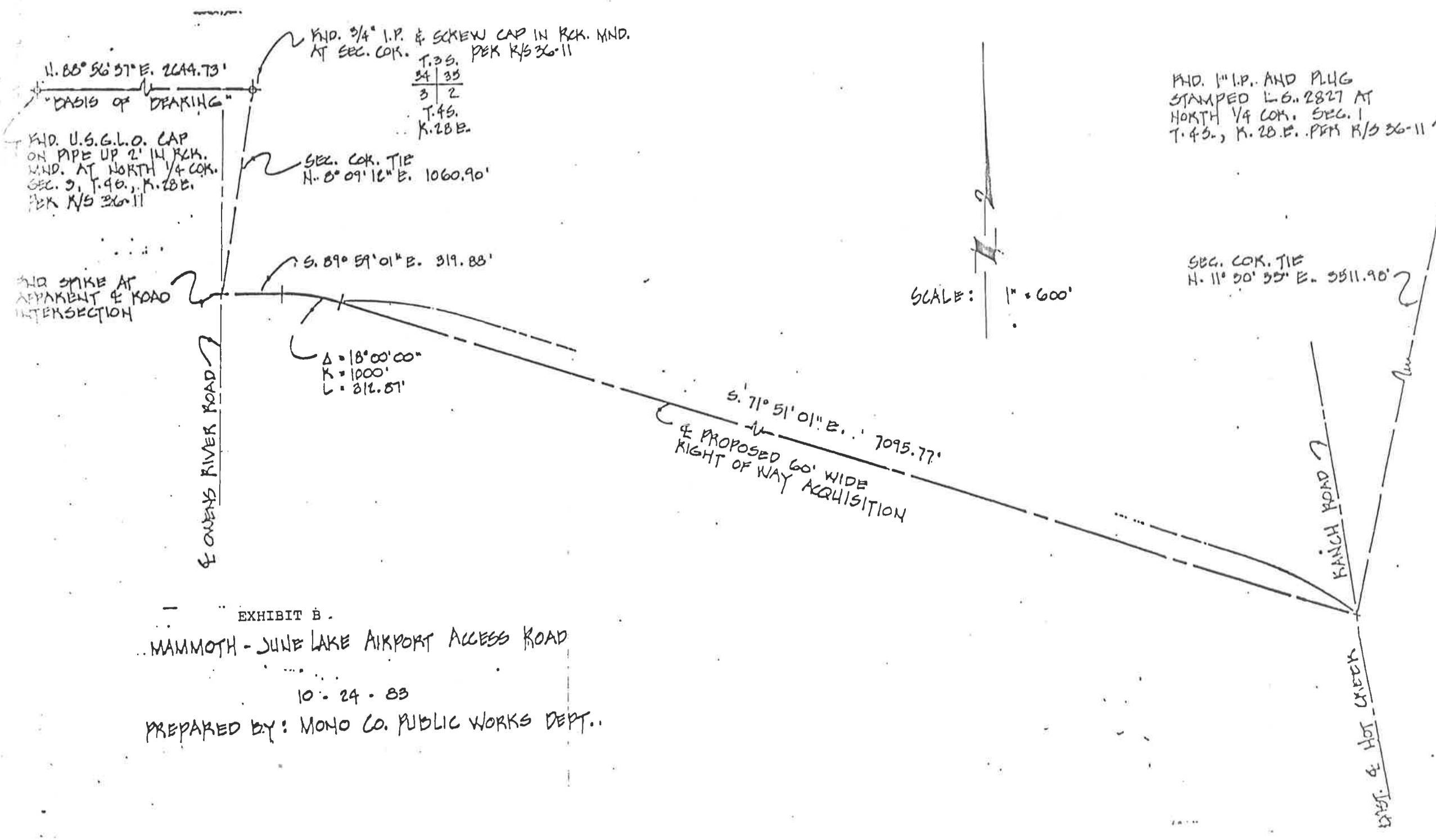


EXHIBIT B.
 MAMMOTH - JUNE LAKE AIRPORT ACCESS ROAD
 10 - 24 - 83
 PREPARED BY: MONO CO. PUBLIC WORKS DEPT.



N. 88° 56' 57" E. 2644.73'

"BASIS OF DEAKING"

KND. U.S.G.L.O. CAP
ON PIPE UP 2' IN RCK.
MND. AT NORTH 1/4 COR.
SEC. 9, T.4S., R.28E.
PEK K/S 36-11

KND. 3/4" I.P. & SCREW CAP IN RCK. MND.
AT SEC. COR. T.3S. PEK K/S 36-11

34	35
3	2
T.4S.	
R.28E.	

SEC. COR. TIE
N. 8° 09' 12" E. 1060.90'

KND. 1" I.P. AND PLUG
STAMPED L.G. 2827 AT
NORTH 1/4 COR. SEC. 1
T.4S., R.28E. PEK K/S 36-11

END SPIKE AT
APPARENT E ROAD
INTERSECTION

S. 89° 59' 01" E. 919.88'

SCALE: 1" = 600'

SEC. COR. TIE
N. 11° 50' 55" E. 9511.90'

Δ = 18° 00' 00"
R = 1000'
L = 212.87'

S. 71° 51' 01" E. 7095.77'
PROPOSED 60' WIDE
RIGHT OF WAY ACQUISITION

OWENS RIVER ROAD

RANCH ROAD

EAST OF HOT CREEK

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

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

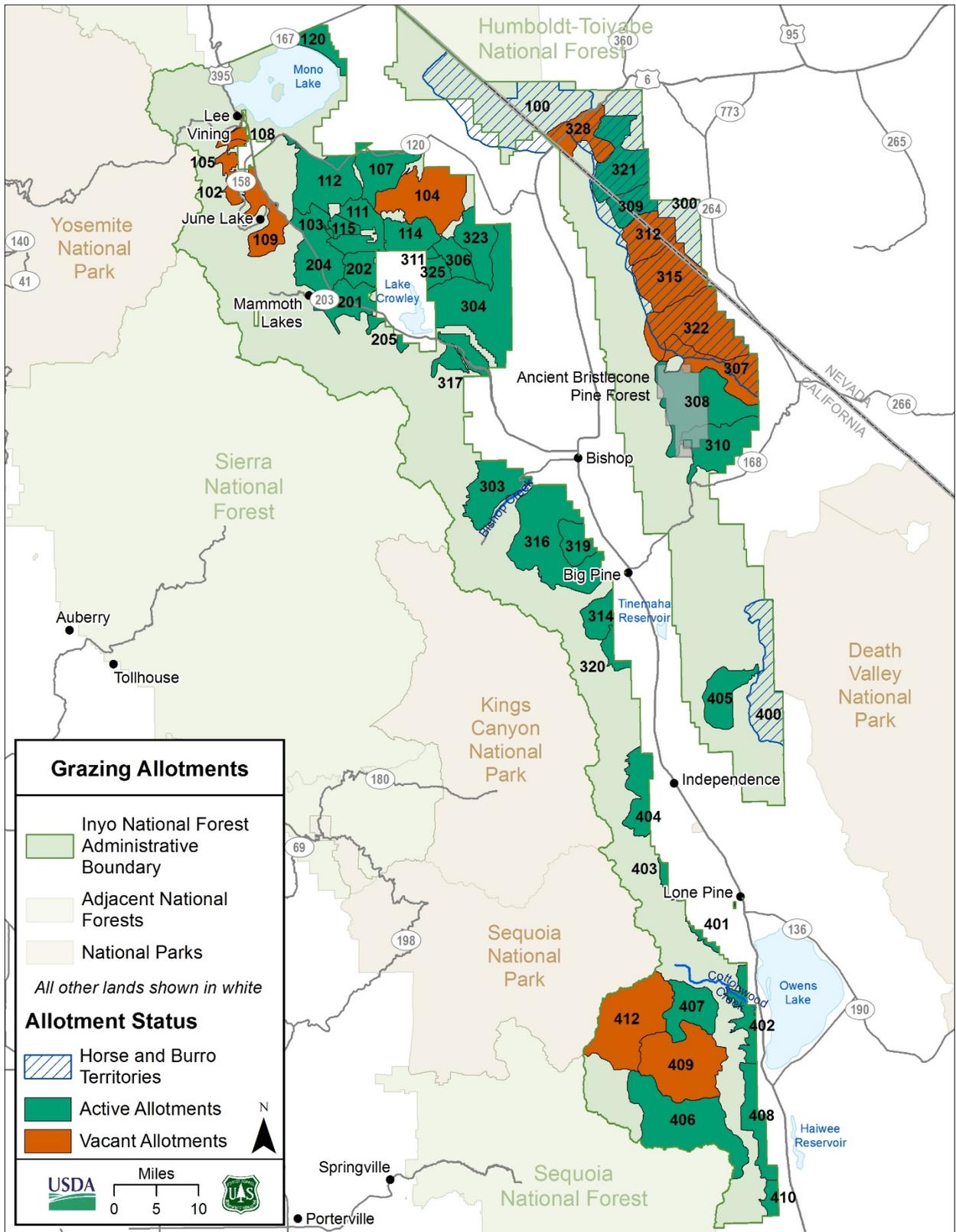


Figure 22. Livestock grazing allotments and wild horse and burro territories on the Inyo National Forest 2017

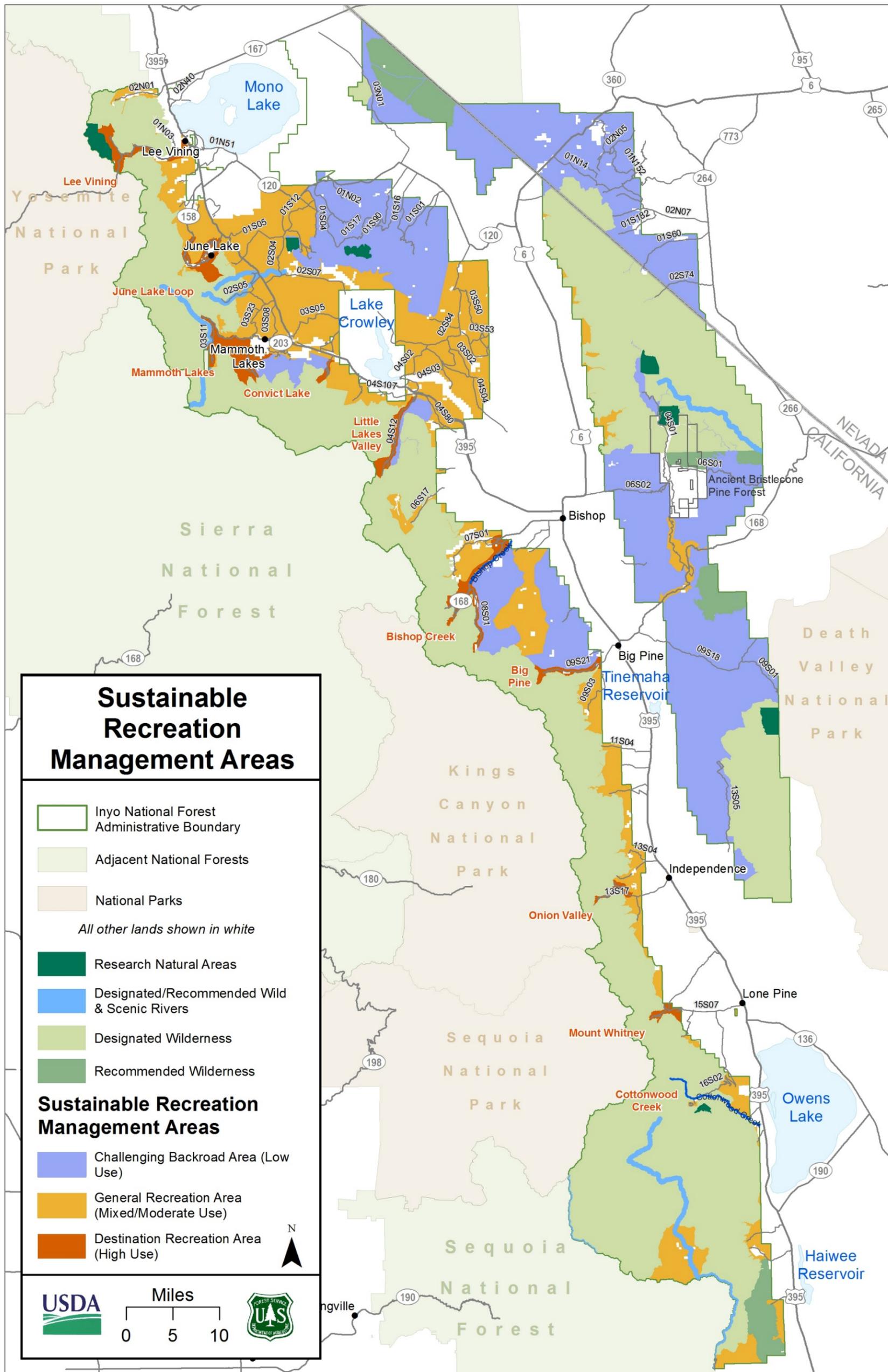


Figure 15. Recreation Management Areas on the Inyo National Forest

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.iron@usda.gov or 760-965-9609.

Sincerely,

LESLEY YEN
Forest Supervisor

Cc: Gordon Martin, District Ranger
Camille Garibaldi, FAA

APPENDIX H: GRANT 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 I: SCOPING

**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.

Terminal Area Development Plan Project Description

Conceptual Project shown on Exhibit 1

The Town plans to construct the TADP located on the Airport, generally east of the existing passenger terminal building and south of the proposed Airport Road extension. The new passenger terminal (38,688 square feet), two vehicle parking lots with a total of 190 spaces and new aircraft aprons will occupy approximately 5.5 acres of undeveloped land in the northern portion of the Airport.

New aircraft aprons and connecting taxiways are proposed between the new passenger terminal and the Airport's main taxiway (Taxiway A). The aircraft aprons which include an aircraft parking apron and de-icing apron will occupy about six acres of undeveloped land.

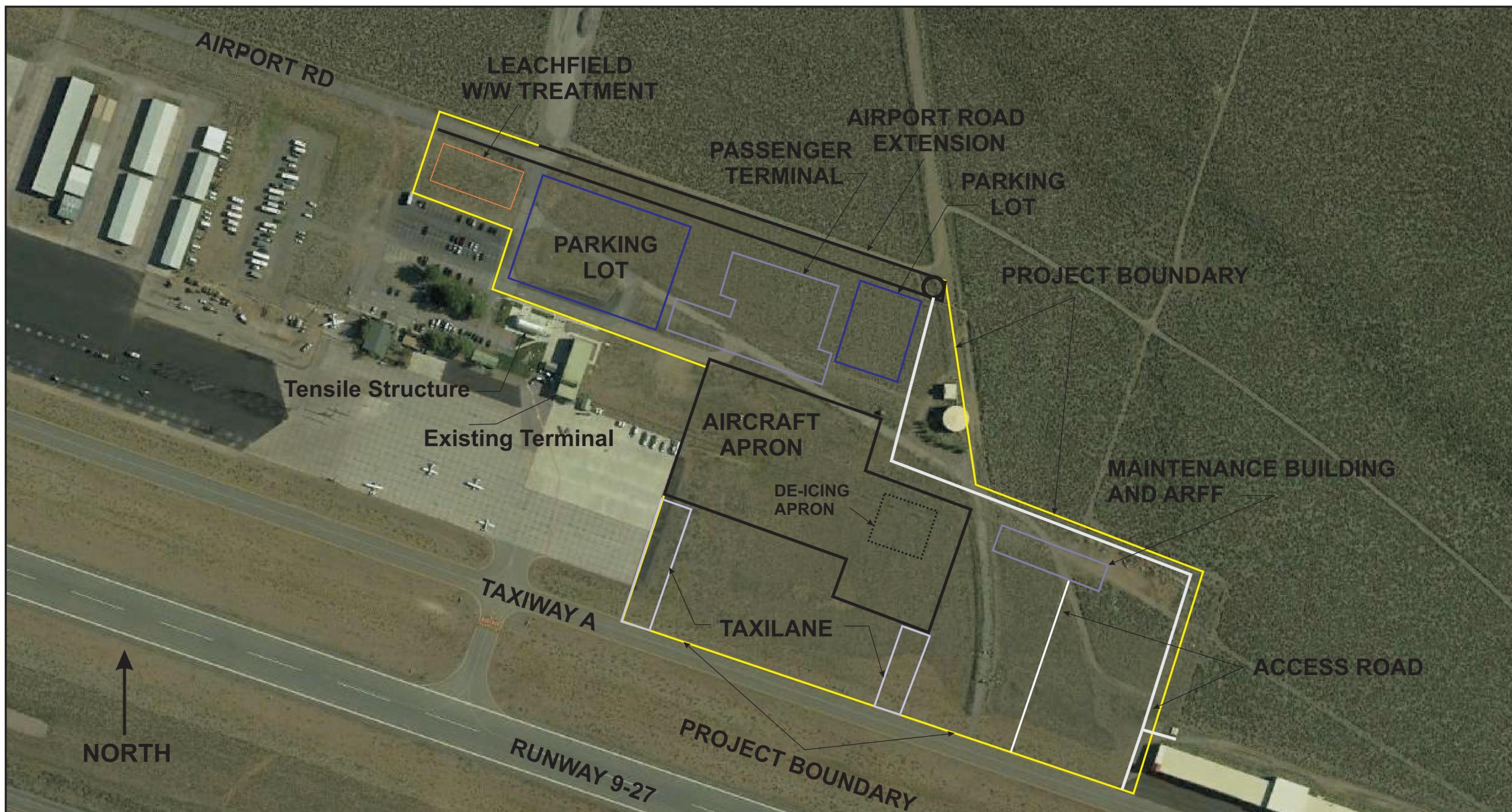
Airport Road will be extended approximately 840 feet east of its existing terminus and will be widened to serve the front of the terminal and provide passenger drop-off and pick-up and access to two parking lots. The extended road will be terminated in a cul-de-sac.

A new maintenance facility will be located approximately 600 feet southeast of the proposed passenger terminal. The maintenance facility includes a 12-bay Aircraft Rescue and Fire Fighting (ARFF)/snow removal equipment building (9,750 square feet), equipment parking apron (32,750 square feet) and new access road (400 feet x 25 feet).

Project Components

This EA and EIR evaluate the impacts of the following proposed TADP components as shown in Exhibit 1:

- New passenger terminal building, (maximum size 38,688 square feet)
- Access and service roads
- Automobile parking – passenger
- Aircraft parking apron
- Aircraft de-icing apron
- Connecting taxiways
- Twelve-bay (maximum) maintenance and ARFF building
- Supporting infrastructure and utilities
- Demolition of the temporary tensile structure and some paved access roads



Mammoth Yosemite Airport Terminal Area Development Plan

Scoping Meeting
Exhibit 1
October 24, 2019

Image from Google Earth; Imagery Date: 6/26/2016
Conceptual Project Layout from:
Mammoth Yosemite Airport Terminal Area Development Plan, January 2015

Environmental Resource Categories That Will Be Assessed in the EA and EIR

The Town is preparing two stand-alone environmental compliance documents; An Environmental Assessment (EA) in accordance with the National Environmental Policy Act of 1969, as amended, for which the Federal Aviation Administration is the lead agency, and an Environmental Impact Report (EIR) in accordance with the California Environmental Quality Act for which the Town of Mammoth Lakes is the lead agency. Although similar in content and in their intent to fully inform the public, the EA and EIR differ slightly in how some data are presented.

Table 1 identifies the environmental resource category to be evaluated in the EA and EIR and may help you identify your areas of interest and concern.

Feel free to use the attached comment form. 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.

**Table 1: Environmental Resource Categories
Mammoth Yosemite Airport
Terminal Area Development Plan**

Resource Category	National Environmental Policy Act Environmental Assessment	California Environmental Quality Act Environmental Impact Report
Air Quality	The EA will evaluate the potential for project construction and the occupancy/use of the replacement terminal and associated facilities to cause air quality impacts in accordance with the guidance provided by the Great Basin Unified Air Pollution Control District (GBUAPCD).	Existing air quality conditions and existing and projected future air emissions from airport operations will be described from existing available documentation. The EIR will document potential air quality impacts resulting from project construction, such as dust generation, construction vehicle and equipment emissions, and odors. The EIR will document any incremental increases in aircraft or vehicle emissions associated with passenger terminal improvement. The EIR will describe project consistency with regional air quality planning programs applicable to the Great Basin Valleys Air Basin.
Biological Resources	The EA will address the potential for impacts on biological resources including special status and endangered species.	The EIR will identify and describe existing biological conditions on and near the project site including special-status species, migratory birds, wetlands, and sensitive habitat areas. The EIR will consider the potential biological resource effects of project construction and operation, including potential effects on on-site resources as well as off-site impacts on special-status species nesting and foraging activities.
Climate	The EA will evaluate the potential for project construction and the occupancy/use of the replacement terminal and associated facilities to result in greenhouse gas emission impacts in accordance with the guidance provided by the Great Basin Unified Air Pollution Control District (GBUAPCD).	See CEQA Greenhouse Gas Emissions
Coastal Resources	The EA will document the absence of potential impacts to coastal resources.	Not specifically analyzed under CEQA

**Table 1: Environmental Resource Categories
Mammoth Yosemite Airport
Terminal Area Development Plan**

Resource Category	National Environmental Policy Act Environmental Assessment	California Environmental Quality Act Environmental Impact Report
DOT Section 4(f)	The EA will evaluate the potential impact of the proposed project on the physical use and constructive use of Section 4(f) properties including parks and recreational areas, publicly owned wildlife and waterfowl refuges, and historic sites in the Airport vicinity.	Not specifically analyzed under CEQA
Energy	Not specifically analyzed under NEPA	The EIR will examine potential energy consumption associated with project construction and operations and will determine whether such consumption would be wasteful or inefficient.
Farmlands and Agriculture	The EA will document the absence of potential impacts to prime farmland, unique farmland, and farmland statewide and locally important farmland.	The EIR will document the suitability of the project site for agriculture and forestry and the effects of proposed development on these on-site capabilities, if any. The EIR will consider the potential effects of proposed improvements on use of National Forest lands use and any nearby areas used or zoned for timber production.
Geology and Soils	Not specifically analyzed under NEPA	The Town and surrounding area is situated within a seismically active region, capable of producing surface rupture, ground motion, or soil settlement of sufficient magnitude to damage buildings or structures during an earthquake. The EIR will describe the seismicity, geologic hazards and soil conditions of the area from the <i>Town of Mammoth Lakes 2005 General Plan Update Final Environmental Impact Report</i> (General Plan EIR) and the potential exposure of proposed improvements and airport users to these conditions.

**Table 1: Environmental Resource Categories
Mammoth Yosemite Airport
Terminal Area Development Plan**

Resource Category	National Environmental Policy Act Environmental Assessment	California Environmental Quality Act Environmental Impact Report
Greenhouse Gas Emissions	Not specifically analyzed under NEPA	Proposed terminal area improvements would involve increases in greenhouse gas emissions both during construction and operation of the proposed project. The EIR will quantify the greenhouse gas emissions from project construction and long-term operations, including building, and transportation emissions, the applicability of state and local “green” building standards and the consistency of the resulting emissions with applicable greenhouse gas reduction plans and standards.
Hazardous Materials	Hazardous Materials, Solid Waste, and Pollution Prevention. The EA will address the potential for hazardous materials to be present at the Airport and evaluate possible hazards within existing and planned land uses, including any airport operation hazards to surrounding land uses.	The EIR will document existing hazardous materials and waste records on and in the vicinity of the Airport and consider the potential hazards and hazardous materials concerns related to construction and operation of the project. Concerns to be addressed would include storage and use of hazardous materials such as fuels, cleaning and degreasing solvents, and other materials used in the regular maintenance of buildings and landscaping. The EIR will consider potential hazards associated with the transport, use, or disposal of hazardous materials, and the potential for reasonably foreseeable upset or accident conditions involving the release of hazardous materials into the environment. The EIR will evaluate the potential for project interference with applicable emergency response or evacuation plans.
Historical and Cultural Resources	Historical, Architectural, Archeological, and Cultural Resources. The EA will evaluate the possible impact of demolishing the existing passenger terminal. In addition, the EA will address the potential for cultural impacts related to archaeological, paleontological, human remains, and tribal-related cultural resources.	The EIR will describe the cultural resource sensitivity of the project site and vicinity. No cultural resources have yet been recorded on or in the immediate vicinity of the site. However, the EIR will analyze the potential for encountering undiscovered historical and archaeological resources during project construction and prescribe mitigation measures that would reduce potential for significant cultural resources

effects to a less than significant level.

**Table 1: Environmental Resource Categories
Mammoth Yosemite Airport
Terminal Area Development Plan**

Resource Category	National Environmental Policy Act Environmental Assessment	California Environmental Quality Act Environmental Impact Report
Land Use	The EA will evaluate the TADP consistency with the Town of Mammoth Lakes' ordinances and other applicable local, regional, state, and federal land use plans, policies and regulations.	The EIR will identify and describe applicable land use plan designations and zoning. The proposed project will be evaluated for consistency with the existing policies and standards of the Town General Plan, Mammoth Lakes Municipal Code (Municipal Code), the Mono County General Plan, the Inyo National Forest Land and Resource Management Plan and other applicable land use plans and standards. The EIR will consider potential adverse impacts on adjacent land uses.
Natural Resources	The EA will evaluate existing terminal natural resource and energy demand compared to the TADP and will address availability of local supplies.	The EIR will describe the existing utility systems on and near the project site, including existing systems serving the Airport. The EIR will consider increases in utility demand associated with the project as well as the potential for direct project impacts on existing utility facilities.
Noise	Noise and Noise-Compatible Land Use will be assessed for potential noise impacts resulting from the construction and occupancy/use of the terminal and associated facilities and the compatibility of these facilities with aviation noise from airport operations. Noise impacts related to potential changes in aircraft operations may also be evaluated.	The EIR will document existing and projected future noise levels in the project area including aircraft operations and vehicular traffic. The EIR will describe the project's short-term construction noise as well as any long-term changes in noise levels in the area that may result from project operations in comparison to applicable noise thresholds as set forth in the Town of Mammoth Lakes General Plan.
Population and Housing	Not specifically analyzed under NEPA	The project proposes improvements to an existing airport facility and would not construct or demolish housing or extend airport infrastructure in such a way that it could influence new housing development or population growth. As such, the project is not expected to have a substantial impact on population and housing.

**Table 1: Environmental Resource Categories
Mammoth Yosemite Airport
Terminal Area Development Plan**

Resource Category	National Environmental Policy Act Environmental Assessment	California Environmental Quality Act Environmental Impact Report
Public Services	Not specifically analyzed under NEPA	The EIR will report on contacts with potentially affected public service agencies, such as fire protection and law enforcement, in order to describe relevant existing conditions, potential project impacts, and recommended mitigation measures, if needed. The EIR will document any potential increased demand for services and any potential need for the construction, alteration or expansion of service facilities associated with the project. The Draft EIR will evaluate the ability of the project to receive adequate service based on applicable Town standards and, if adequate services are not available, recommended mitigation measures if necessary.
Socioeconomics	Socioeconomics, Environmental Justice, and Children’s Environmental Health and Safety Risks will be evaluated for potential impacts on population and housing in the Airport vicinity and effects on minority and low-income populations.	Not specifically analyzed under CEQA
Transportation	Not specifically analyzed under NEPA	The EIR will describe existing transportation systems associated with the airport. The EIR will consider the potential impacts of project construction and operations and effects on local and regional transportation facilities, internal circulation, and emergency access to the project site. The EIR will consider traffic issues as well as potential effects on public transit and other alternative modes of transportation.

**Table 1: Environmental Resource Categories
Mammoth Yosemite Airport
Terminal Area Development Plan**

Resource Category	National Environmental Policy Act Environmental Assessment	California Environmental Quality Act Environmental Impact Report
Tribal Cultural Resources	AB 52 does not specifically apply under NEPA	The Draft EIR will analyze the potential impacts of the TADP on resources of importance to tribes with a geographical and cultural affiliation to the project site. The analysis will include the results of tribal notification as required by AB 52 and any tribal consultation that may be requested pursuant to AB 52.
Wildfire	Not specifically analyzed under NEPA	The EIR will document the existing wildfire hazards associated with the airport site and surroundings as well as on-site fire management facilities and services. The EIR will consider the wildfire risk to the project site, along with other potential hazards such as exposure of project occupants to pollutant concentrations from a wildfire, exacerbation of fire risks from project features, and exposure to downslope or downstream flooding or landslides arising from wildfires.
Visual Effects	The EA will address the potential for impacts related to aesthetic and visual effects.	The EIR will identify and describe existing views of the Airport and environs as seen from Airport Road, US 395 and open space lands surrounding the Airport. The proposed project may result in short-term aesthetic impacts related to project construction and long-term effects from the addition of new terminal area buildings, lighting and other improvements. Potential effects of these changes on existing views from the affected public places and on the populations using these facilities will be evaluated in the EIR.

**Table 1: Environmental Resource Categories
Mammoth Yosemite Airport
Terminal Area Development Plan**

Resource Category	National Environmental Policy Act Environmental Assessment	California Environmental Quality Act Environmental Impact Report
Water Resources	The EA will evaluate any changes in drainage patterns, including issues associated with wetlands, floodplains, surface waters, groundwater, wild and scenic rivers and water quality resulting from the TADP.	The EIR will describe the surface and groundwater hydrology of the project site and vicinity. The EIR will analyze construction-related effects on hydrology and water quality; effects on or exposure to flooding; any potential long-term water quality effects, including potential effects of land disposal of treated wastewater effluent; permanent changes to stormwater drainage and/or flooding; project-related impacts to groundwater quantity and quality; and off-site hydrology and water quality impacts.
Cumulative Impacts	The Council on Environmental Quality (CEQ) Regulations define a cumulative impact as “the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions” (40 CFR § 1508.7). Cumulative impacts will be evaluated as the total combined impacts on the environment of the proposed action or alternative(s) and other known or reasonably foreseeable actions.	Consistent with CEQA Guidelines Section 15130, the Draft EIR will discuss the cumulative impacts of the proposed project, addressing each topic covered in the environmental analysis.
Project Alternatives	Referred to as the “the heart of the environmental document” (40 CFR 1502.14), the alternative analysis compares the no action, the proposed action, and reasonable alternatives (if any), and each reasonable alternative’s expected environmental effects.	Under CEQA, environmental documentation must include an analysis of a reasonable range of alternatives to the project, including the “No Project” alternative. The Draft EIR will consider alternatives to the project, potentially including the alternatives considered in the NEPA EA, as applicable, along with other reasonable alternatives to the project. Each alternative will be contrasted with the proposed project in terms of the extent to which project’s objectives are met and a reduction in adverse impacts is achieved. The environmentally superior alternative will be identified.

**Mammoth Yosemite Airport
Terminal Area Development Plan
Environmental Assessment - Environmental Impact Report**

Public Scoping Comment:

Commenter Name:

Commenter Address:

Commenter Email:

Commenter Telephone:

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.

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,

A handwritten signature in blue ink that reads "Gayle J. Rosander".

GAYLE J. ROSANDER
External Project Liaison

c: State Clearinghouse
Mark Reistetter, Caltrans D9



Jared Blumenfeld
Secretary for
Environmental Protection



Department of Toxic Substances Control

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/>.

Ms. Kim Cooke
November 18, 2019
Page 3

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.Kereazis@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 (CNDDDB) in Sacramento should be contacted at (916) 322-2493 or CNDDDB@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 CNDDDB Field Survey Forms be completed and submitted to CNDDDB to document survey results. Online forms can be obtained and submitted at: <https://www.wildlife.ca.gov/Data/CNDDDB/Submitting-Data>

Please note that CDFW's CNDDDB 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 CNDDDB 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 it is unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey) or to take, possess, or destroy the nest or eggs of any such bird 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 be injured or killed, and individuals should be moved only as far as 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

Kim Cooke, Associate Planner
Town of Mammoth Lakes
November 12, 2019
Page 8

during Project surveys to the California Natural Diversity Database (CNDDDB). The CNDDDB field survey form can be found at the following link: http://www.dfg.ca.gov/biogeodata/cnddb/pdfs/CNDDDB_FieldSurveyForm.pdf. The completed form can be mailed electronically to CNDDDB at the following email address: CNDDDB@wildlife.ca.gov. The types of information reported to CNDDDB 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.

PETER C. PUMPHREY, CHAIR | PATTY Z. KOUYOUMDJIAN, EXECUTIVE OFFICER

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)

**NOTICE OF AVAILABILITY
OF A DRAFT ENVIRONMENTAL ASSESSMENT
VIRTUAL PUBLIC WORKSHOP AND VIRTUAL PUBLIC HEARING
MAMMOTH YOSEMITE AIRPORT
PROPOSED TERMINAL AREA DEVELOPEMENT PROJECT
MAMMOTH LAKES, CALIFORNIA**

The Town of Mammoth Lakes has prepared a Draft Environmental Assessment (DEA) to identify the potential environmental impacts associated with proposed Terminal Area Development Project on the Mammoth Yosemite Airport.

The DEA evaluates the development of the following Proposed Action:

- New passenger terminal building
- Access and service roads, including an extension of Airport Road
- Automobile parking for passenger and rental cars
- Aircraft parking 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

Copies of the DEA are available for a 35-day review period beginning on **June 19, 2021** and ending on **July 23, 2021**. A virtual public workshop will be held on **July 19, 2021** from 4 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 meetings at: Meeting ID – 243 175 7893; pass code 5z1Mja; or by call-in number: 1-669-900-6833 and use pass code 842052.

Documents may be viewed on the Town’s web page at <https://www.townofmammothlakes.ca.gov/939> and at the following physical locations:

The DEA is also available for review at the following physical 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
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Because of evolving COVID-19 pandemic restrictions, the Town will make copies of the DEA available on USB or in print by contacting the address below. **All written and electronically submitted comments must be received by close of business (5 p.m. PDT) on July 23, 2021.** Please send any comments you may have to:

Kim Cooke, Associate Planner
Town of Mammoth Lakes
P.O. Box 1609
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