provided data from which transmissivity values were calculated. Transmissivity of 73.92 acre-feet per year per foot was calculated for the Airport well. This transmissivity figure, along with the recharge available to the aquifer, indicates a supply of water that far exceeds the water demand of the project.

Potential reduction in stream flow could have an adverse effect on the fishery resources of the Hot Creek Fish Hatchery. The lowering of natural groundwater levels, subsequent reduction in downstream spring flows, and changes in the character of the geothermal mixture of the waters could have impacts on the operations of the fishery. Wildermuth Environmental, Inc. conducted a study of the Mammoth Creek/Hot Creek Basin in 1996. [3-30] The effects of several potential commercial development projects on the Hot Creek headsprings were assessed. The study showed that even under severe drought conditions, as had been experienced in the area during the recent past, groundwater extraction of up to 2,385 acre-feet per year did not impact flows in Hot Creek. In a study of increased consumption use, with water conservatively assumed to directly contribute to the headsprings, this was extrapolated to estimate the impact of future development. Consumptive use of up to 2,700 acre-feet per day would not significantly impact the flows from the headsprings. Maximum annual water demand for the terminal building facility is projected to be less than 18 acre-feet per year, well below the 2,700 acre-feet per day available.

The paved surfaces being proposed for the aircraft apron area and runway and taxiway extensions are impervious to water. Impervious surfaces increase the volume of stormwater runoff and may effect the relative quality of surface drainage. Runoff from impervious aeronautical surfaces may contain increased quantities of oils, grease, deicing fluid, and other complex hydrocarbon compounds. Construction of a new terminal building and automobile parking facilities would also result in an increase in runoff.

The proposed project would require the minimum addition of water impervious pavement as development would utilize portions of the 3,400-foot paved overrun, as needed. The overrun is already constructed of water impervious material.

A new package treatment plant would be installed to handle the sewage treatment. The design and maintenance of this package treatment plant would be in accordance with the requirements and regulations of the RWQCB and Mono County Health Department. The proper permits for the discharge of waste would be obtained from these agencies prior to the installation of these facilities. No wastewater disposal system would be within 100 feet of a stream or in areas where groundwater is believed to be less than five feet below the surface of the ground. The discharge of either treated or untreated wastewater to streams would be prohibited. Wells to sample groundwater would be provided to monitor both performance of the subterranean wastewater disposal and to access adverse water quality impacts. Sewage effluent would have to be treated by a package plant that would provide secondary treatment with supplemental nitrate reduction. A complete report of waste discharge for the package treatment plant would be filed with Regional Board staff at least 120 days prior to plant construction.

Groundwater would be extracted from the Convict Creek drainage system, which is down gradient from the Mammoth Creek/Hot Creek Basin. There should be no significant impact to the Hot Creek Fish Hatchery if wells are not drilled any closer than 6,000 feet to the Hatchery and are located on the Convict Creek Watershed. [I-2]

AR 001149

All existing pavement and the pavement for the future runway extension and taxiways would drain into the surrounding ground as they presently do. All new pavements for the commercial aircraft parking apron, automobile parking lot, and terminal roadway would be designed such that all the drain water from these areas would be collected in inlets and pipe structures. These drain waters would be carried through an oil/water separator to separate any oils from the stormwater. The resulting stormwater would then be discharged into leaching trenches or leaching fields. The discharge from the oil/water separator would be tested on a routine basis to determine the continuing effectiveness of this type of treatment. Should the discharge show any deleterious contamination, additional treatment would be provided. To address accidental spills of fluids, such as aviation fuel, the Town of Mammoth Lakes has adopted a Spill Prevention Plan for the Airport, which can be found in Appendix D.

All aircraft would be deiced at the same location on the commercial airline apron. The area on which the aircraft would park during the deicing operations would be graded such that all of the water from this area would be collected at one drop inlet. The pipes from this inlet would be constructed such that in normal operations, without any deicing fluid, the stormwater runoff would be discharged into the oil/water separator. When deicing operations are being performed, the valves would be set such that all of the deicing fluids would be diverted to a holding tank. The runoff would be collected in the holding tank and removed from the site and disposed of in a suitable manner. Best Management Practices (BMPs) such as not allowing oil changes and/or car maintenance on-site would be used to mitigate potential water quality impacts.

A Stormwater Pollution Prevention Plan (SWPPP) would be prepared and implemented for all construction activities in accordance with Regional Board regulations. Grading/drainage and erosion control plans would be submitted to the Regional Board as part of the SWPPP.

Exhibit III-17 shows the *Flood Insurance Rate Map*, published by the Federal Emergency Management Agency (FEMA). As depicted in Exhibit III-17, no part of the Airport or project site, in the proposed plan is located in a floodplain. As measured from the Airport's eastern boundary, the Airport is approximately 1.2 miles from a 100-year floodplain (Zone A) associated with Convict Creek.

The proposed project would have no significant environmental impacts on hydrology, water supply, or water quality because after meeting all the above mentioned design requirements, it would not create or contribute runoff which would exceed the capacity of existing or planned storm-water drainage systems or provide substantial additional sources of polluted runoff. There would be no violation of applicable water quality standards or water discharge requirements and it would not substantially deplete groundwater resources or interfere with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of a local groundwater table level. The project would not impede or redirect flood flows or place housing within a 100-year flood hazard area.

3.6.3 Mitigation Measures

As stated above, the proposed plan would not cause significant environmental impacts with respect to hydrology, water supply, or water quality during either the construction or operation of the proposed project. The proposed project would comply with all federal, State and local laws pertaining to storm water runoff and drainage systems. These steps would already occur with implementation of the proposed project, therefore no additional mitigation measures would be required. All water quality measures would be complied into a comprehensive water quality plan for the project area.

AR 001150

3.6.4 Unavoidable Significant Impacts

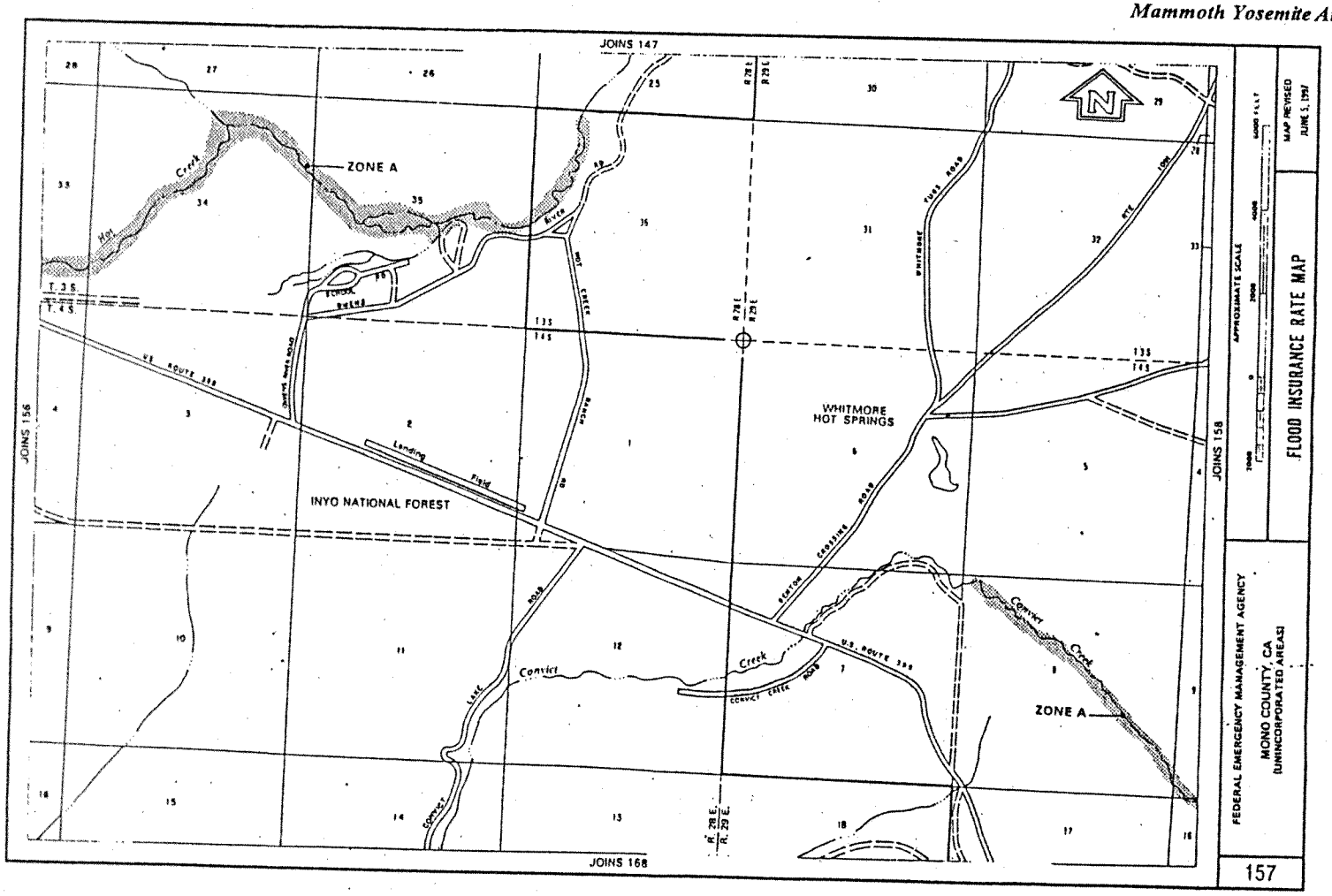
As discussed above, the proposed project is not anticipated to have any new unavoidable significant impacts on hydrology, water supply, or water quality.

3.6.5 Cumulative Impacts

The cumulative environmental impacts of the proposed project and the Airport Commercial Development Plan were reviewed in the 1997 *Mammoth Lakes Airport Expansion Subsequent Environmental Impact Report and Updated Environmental Assessment* [I-2] and were certified as not significant.

The *Sierra Business Park Specific Plan and EIR* [3-2] found the hydrology and water quality impacts of the Sierra Business Park project less than significant. The project has specific measures like stormwater pollution prevention plan and monitoring wells as part of the proposed project to ensure against any impacts on water quality in the region.

The proposed project, Airport Commercial Development Plan and Sierra Business Park would have no significant cumulative environmental impacts on hydrology, water supply, or water quality because after meeting all the design requirements, they individually or cumulatively would not create or contribute runoff which would exceed the capacity of existing or planned storm-water drainage systems or provide substantial additional sources of polluted runoff. There would be no violation of applicable water quality standards or water discharge requirements and it would not substantially deplete groundwater resources or interfere with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of a local groundwater table level. None of these projects would impede or redirect flood flows or place housing within a 100-year flood hazard area, therefore no adverse cumulative impacts on the area's water quality would result.



Source: Federal Emergency Management Agency, Flood Insurance Rate Map, Community Number 060194 C, Panel 157.
Prepared by: Ricondo & Associates, Inc.

Exhibit III-17

Mammoth Yosemite Airport Area Floodplains Map

3.7 Noise

The aircraft noise and construction noise effects of the proposed project have been evaluated in the previously certified 1986 EIR/EA and the 1997 SEIR/EA documents. Please refer to Appendix A for the summary of aircraft noise and construction noise impacts, their significance, and mitigation measures from the 1997 SEIR/EA (which incorporated the 1986 EIR/EA).

This section discusses potential environmental impacts with respect to noise as a result of the proposed modifications to the Airport, which were not previously evaluated. The changes associated with the Airport proposal, which may impact noise include a new updated aviation demand forecast. No other changes are proposed to the Airport, which would result in operational and construction noise effects, which have not already been evaluated.

FAA Order 5050.4A [3-31] prescribes the methodology for preparing aircraft noise exposure maps. In accordance with these guidelines, an aircraft noise exposure analysis was performed, which is discussed in greater detail in Appendix F. The noise analysis, prepared for 1999, 2003 (initial year of operation), and 2022, was used to assess the effects of noise from aircraft operations on the Airport environs associated with the proposed project. A discussion of noise analysis techniques and noise exposure metrics, as well as the assumptions used for the noise analysis, is included in Appendix F.

No analysis for construction noise was performed as the proposed project has already been certified in 1986 EIR/EA and 1997 SEIR/EA. The changes in the proposed project suggested in this SSEIR reduce the over all scope of construction. The proposed project would comply with Town of Mammoth Lakes Noise Element [3-32], which specifically addresses noise from construction activities.

As required by the California Airport Noise Regulation (CCR Title 21, Subchapter 6) [3-33], aircraft noise exposure has been quantified using the Community Noise Equivalent Level (CNEL). Paragraph 85.a of FAA Order 5050.4A [3-31] specifies the use of the FAA's average day-night noise level metric (DNL) when performing noise exposure analyses in order to be consistent with those used for environmental impact statements and environmental assessments as well as in FAR Part 150 Noise Compatibility Programs. [3-34] However, in the State of California, the FAA accepts the CNEL metric as a substitute for the DNL metric. Noise exposure criterion levels of CNEL 60, 65, 70, and 75 were selected, as required by the California Department of Transportation, Division of Aeronautics [3-35]. Because of the relatively small size of the CNEL 70 and 75 noise exposure areas, which do not extend beyond the airfield, only the CNEL 60 and 65 are presented on the noise exposure maps.

Typically, in noise exposure analyses, the population and numbers of dwelling units, schools, and religious facilities that could be affected are estimated within each of these noise exposure ranges. However, in this case, there are no noise sensitive land uses within the noise exposure areas.

Estimates of total noise exposure resulting from aircraft operations, as expressed in CNEL, can be interpreted in terms of their probable effect on land uses. Suggested guidelines for evaluating land use compatibility in aircraft noise exposure areas were originally developed by the FAA and are shown in **Table III-14**. The guidelines reflect the statistical variability of the responses of large

Table III-14

Suggested Land Use Compatibility Guidelines in Aircraft Noise Exposure Areas

The designations in this table do not constitute a federal determination that any use of land is acceptable or unacceptable under federal, state, or local law. The responsibility for determining the acceptable and permissible land uses and the relationship between specific properties and specific noise contours rests with the local authorities.

Land use	CNEL 65 to 70	CNEL 70 to 75	CNEL 75+
Residential			
Residential other than mobile homes and transient lodgings	NLR required *(a)*	NLR required *(a)*	Incompatible
Mobile homes	Incompatible	Incompatible	Incompatible
Transient lodgings	NLR required *(a)*	NLR required *(a)*	NLR required *(b)*
Public use			
Schools, hospitals, and nursing homes	NLR required *(a)*	NLR required *(a)*	Incompatible
Churches, auditoriums, and concert halls	NLR required *(a)*	NLR required *(a)*	Incompatible
Governmental services	Compatible	NLR required	NLR required *(b)*
Transportation	Compatible	Compatible *(c)*	Compatible *(c)*
Parking	Compatible	Compatible *(c)*	Compatible *(c,d)*
Commercial use			
Offices, business, and professional	NLR required	NLR required	NLR required *(b)*
Wholesale and retail—building materials, hardware, and farm equipment	Compatible	Compatible *(c)*	Compatible *(c,d)*
Retail trade—general	NLR required	NLR required	NLR required *(b)*
Utilities	Compatible	Compatible *(c)*	Compatible *(c,d)*
Communication	NLR required	NLR required	NLR required *(b)*
Manufacturing and production			
Manufacturing—general	Compatible	Compatible *(c)*	Compatible *(c, d)*
Photographic and optical	Compatible	NLR required	NLR required *(b)*
Agriculture (except livestock) and forestry	Compatible	Compatible	Compatible
Livestock farming and breeding	Compatible	Compatible	Incompatible
Mining and fishing resources production and extraction	Compatible	Compatible	Compatible
Recreational			
Outdoor sports arenas and spectator sports	Compatible	Compatible	Incompatible
Outdoor music shells, amphitheaters	Incompatible	Incompatible	Incompatible
Nature exhibits and zoos	Compatible	Incompatible	Incompatible
Amusements, parks, resorts, and camps	Compatible	Compatible	Incompatible
Golf courses, riding stables, and water recreation	Compatible	Compatible	Incompatible *(b, c)*

CNEL = Community Noise Equivalent Level average sound level, in A-weighted decibels.

Compatible = Generally, no special noise attenuating materials are required to achieve an interior noise level of DNL 45 in habitable spaces, or the activity (whether indoors or outdoors) would not be subject to a significant adverse effect by the outdoor noise level.

Incompatible = Generally, the land use, whether in a structure or an outdoor activity, is considered to be incompatible with the outdoor noise level even if special attenuating materials were to be used in the construction of the building.

NLR = Noise Level Reduction: NLR is used to denote the total amount of noise transmission loss in decibels required to reduce an exterior noise level in habitable interior spaces to DNL 45. In most places, typical building construction automatically provides an NLR of 20 decibels. Therefore, if a structure is located in an area exposed to aircraft noise of DNL 65, the interior noise level would be about DNL 45. If the structure is located in an area exposed to aircraft noise of DNL 70, the interior noise level would be about DNL 50, so an additional NLR of 5 decibels would be required if not afforded by the normal construction. This NLR can be achieved through the use of noise attenuating materials in the construction of the structure.

(a) The land use is generally incompatible with aircraft noise and should only be permitted in areas of infill in existing neighborhoods or where the community determines that the use must be allowed.
(b) NLR required between DNL 75 and 80; incompatible for DNL 80 and above.
(c) NLR required in offices or other areas with noise-sensitive activities.
(d) Incompatible for DNL 85 and above.

Source: Ricondo & Associates, 2000, as derived from the U.S. Department of Transportation, Federal Aviation Administration, Federal Aviation Regulations Part 150, *Airport Noise Compatibility Planning*, Code of Federal Regulations, Title 14, Chapter I, Subchapter I, Part 150, Table 1, January 18, 1985, as amended
Prepared By: Ricondo & Associates, Inc.

AR 001154

groups of people to noise. Therefore, any particular level might not accurately reflect an individual's perception of an actual noise environment. Compatible or incompatible land use is determined by comparing the predicted or measured CNEL at a site with the levels given in the table.

Each generalized land use listed in Table III-14 includes a wide range of human activities that have various sensitivities to noise intrusions. CNELs in the table should be interpreted only as indications of potential aircraft noise effects on people living and working in areas surrounding an Airport. Although specific CNELs are obtained from a noise analysis, they do not dictate specific reactions that residents affected by those noise levels may have, nor do they require specific mitigation. The noise levels are intended only as guides for land use development.

3.7.1 Environmental Setting

The types of aircraft (fleet mix), the number of operations by time of day, and the number of departures by stage length for an average day at the Airport in 1999 are presented in Table F-3 in Appendix F. On an average day in 1999, a total of approximately 16 aircraft departures were performed at the Airport, the majority of which were by single or twin-engine propeller general aviation aircraft. The noise exposure associated with operations on an average day in 1999 is shown on **Exhibit III-18**.

As shown on Exhibit III-18, the area exposed to aircraft noise of CNEL 65 and higher remains within the airfield boundary of the Airport on either Airport property or vacant land controlled by the Airport through leases (LADWP land at the east end of the Airport) or use permits (Forest Service lands south of the Airport property boundary). The CNEL 60 and higher noise exposure area remains largely on either Airport property, vacant land, or the U.S. Highway 395 right-of-way. Current land use plans show this area would remain compatible with noise from aircraft operations.

There is an engine runup area located at the eastern end of Runway 27. For reduction in existing noise levels, a new mid field runup area would be constructed in conjunction with the first phase of Airport improvements. This runup area would replace the current runup area and would reduce the noise reflection off of Doe Ridge towards the Sierra Nevada Aquatic Research Laboratory (SNARL) facility. Additionally, Mammoth Yosemite Airport has a policy, that restricts low level flights over both the Hot Creek Fish Hatchery and SNARL facility.

3.7.2 Significant Environmental Impacts

Based on CEQA Guidelines, Appendix G [3-1], a project is considered to have a significant impact in terms of noise if the project results in the exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other regulatory agencies.

Noise exposure maps were prepared for the proposed project for the years 2003 and 2022 to estimate and compare the potential effects of aircraft noise on existing land uses. Noise exposure maps were prepared for 2003 to demonstrate the changes in noise exposure that could occur with the Airport expansion in the earliest year that the development would be operational and for 2022 to evaluate the longer-range impacts of the Airport development. The projected annual distribution of runway use is presented in Table F-8 in Appendix F.

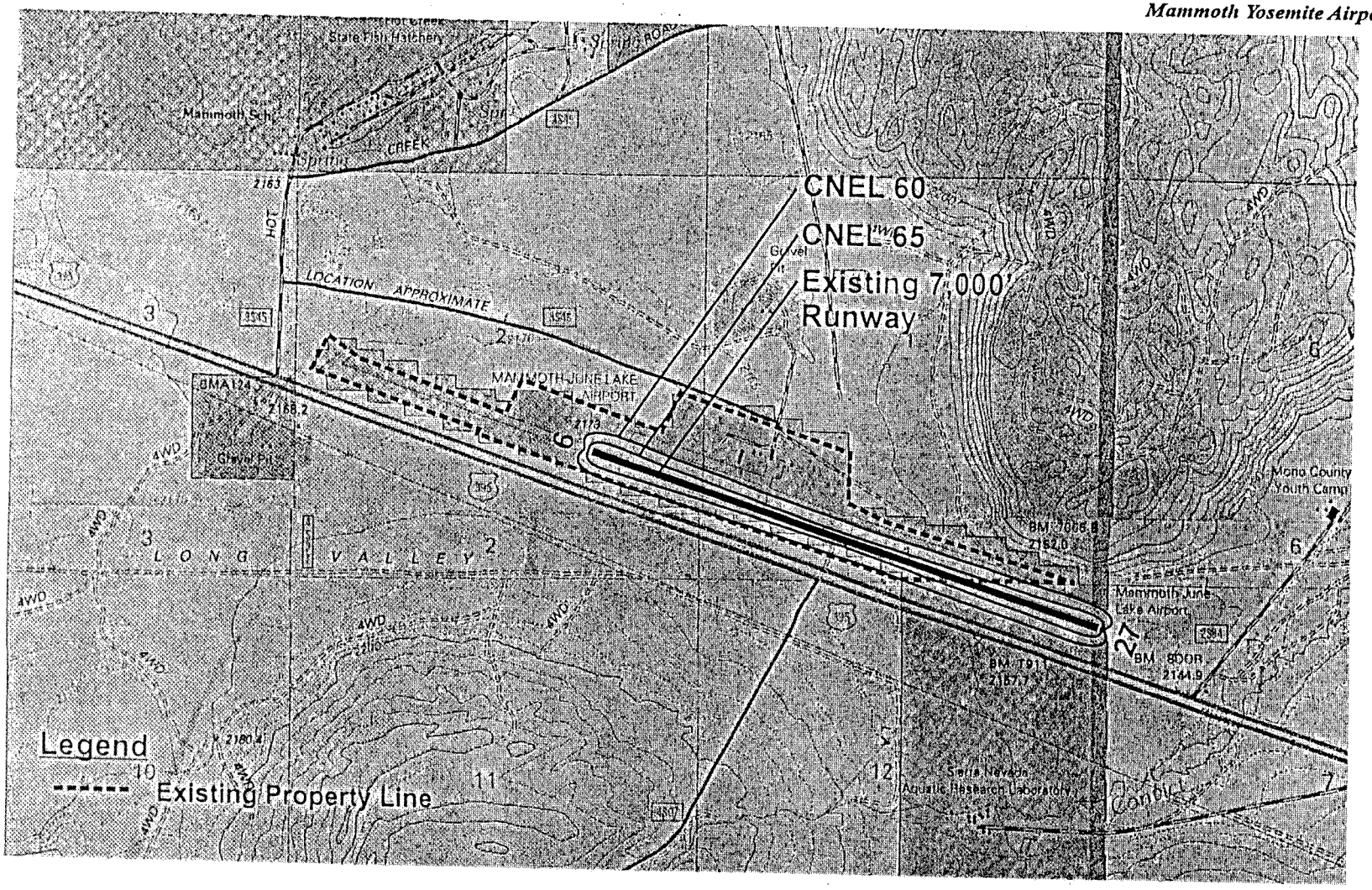
Moving the start-of-roll point for departures with the runway extensions results in existing aircraft operating at the Airport climbing for a longer distance, and subsequently at higher altitudes, over

Airport property when overflying areas in the vicinity of the Airport. In certain instances, this results in some reduction in aircraft noise exposure for the general aviation fleet of aircraft at the Airport.

However, because the runway development permits the use of the Airport by larger air carrier aircraft, the resulting increase in operations would cause an increase in the overall noise exposure area. It was assumed for the proposed project, that the fleet mix and number of aircraft operations at the Airport by time of day in 2003 and 2022 would increase over the existing conditions due to the introduction of air carrier aircraft operations.

Noise exposure maps showing the CNEL 60 and 65 noise exposure areas were developed for the proposed project for both 2003 and 2022 as shown on **Exhibit III-19** and **Exhibit III-20.** As shown on the exhibits, the area exposed to aircraft noise of CNEL 65 and higher for the proposed project remains within the airfield boundary of the Airport on either Airport property or vacant land controlled by the Airport through leases or use permits. There are no noise sensitive land uses and no people living within the CNEL 65 noise exposure area. The CNEL 60 and higher noise exposure area remains largely on Airport property, vacant land, or the U.S. Highway 395 right-of-way. Current land use plans show this area as remaining as compatible land uses.

A hotel and residential condominium development is planned on Airport property, north of the airfield. This area would be outside the CNEL 60 noise exposure area for the proposed project. In addition to the noise exposure maps, a grid point analysis was conducted to evaluate potential changes in noise exposure at specific points in the vicinity of the Airport. These areas, as shown on **Exhibit III-21,** include the Hot Creek State Fish Hatchery, the Hot Creek Ranch, the planned hotel/condominium complex on Airport property and SNARL. **Table III-15** summarizes the CNEL values calculated by the INM for the proposed project at these locations. As described in Table III-17, Grid Points 1 and 2 refer to the location of the hatchery, Grid Point 3 refers to the location at the Hot Creek Ranch, Grid Points 4 and 5 refer to locations along Hot Creek, Grid Point 6 refers to the location at the on-Airport hotel/condominium complex, and Grid Point 7 refers to the location of SNARL facilities. None of these facilities are located within the existing or future CNEL 65 noise exposure area for the proposed project. Although each grid point would show some increase in noise exposure levels with the proposed project, the noise exposure levels remain low. It is anticipated that these areas would also not experience direct overflights of air carrier jet aircraft because the planned operating procedure is for air carrier jet aircraft to arrive on a straight-in arrival procedure from the east and depart using an initial turn to the south, away from these development areas for departures to the west.

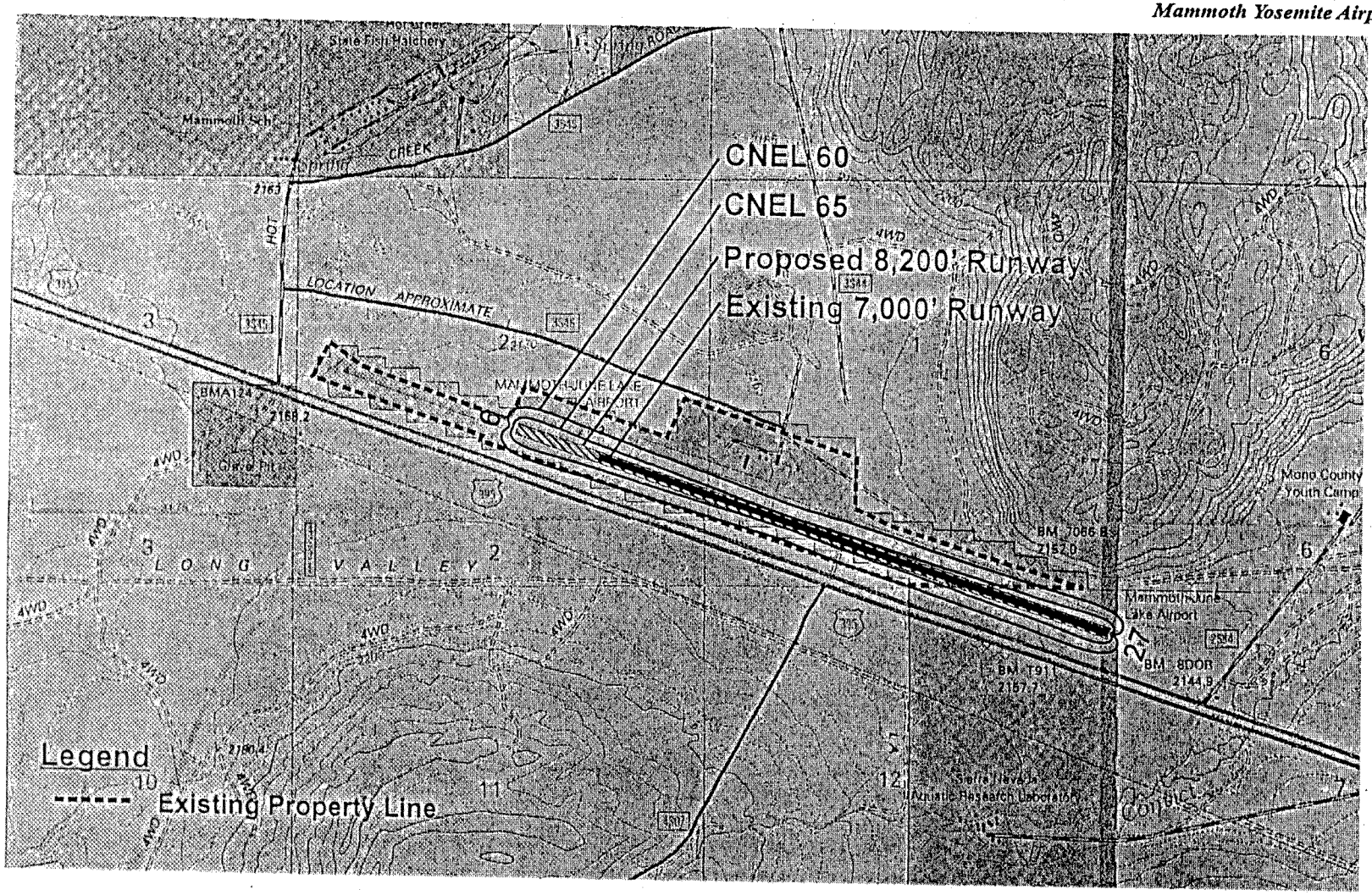


Source: Brown-Buntin Associates, Inc.
Prepared by: Ricondo & Associates, Inc.

Exhibit III-18

north Scale 1" = 2000'

Existing 1999 Noise Contours

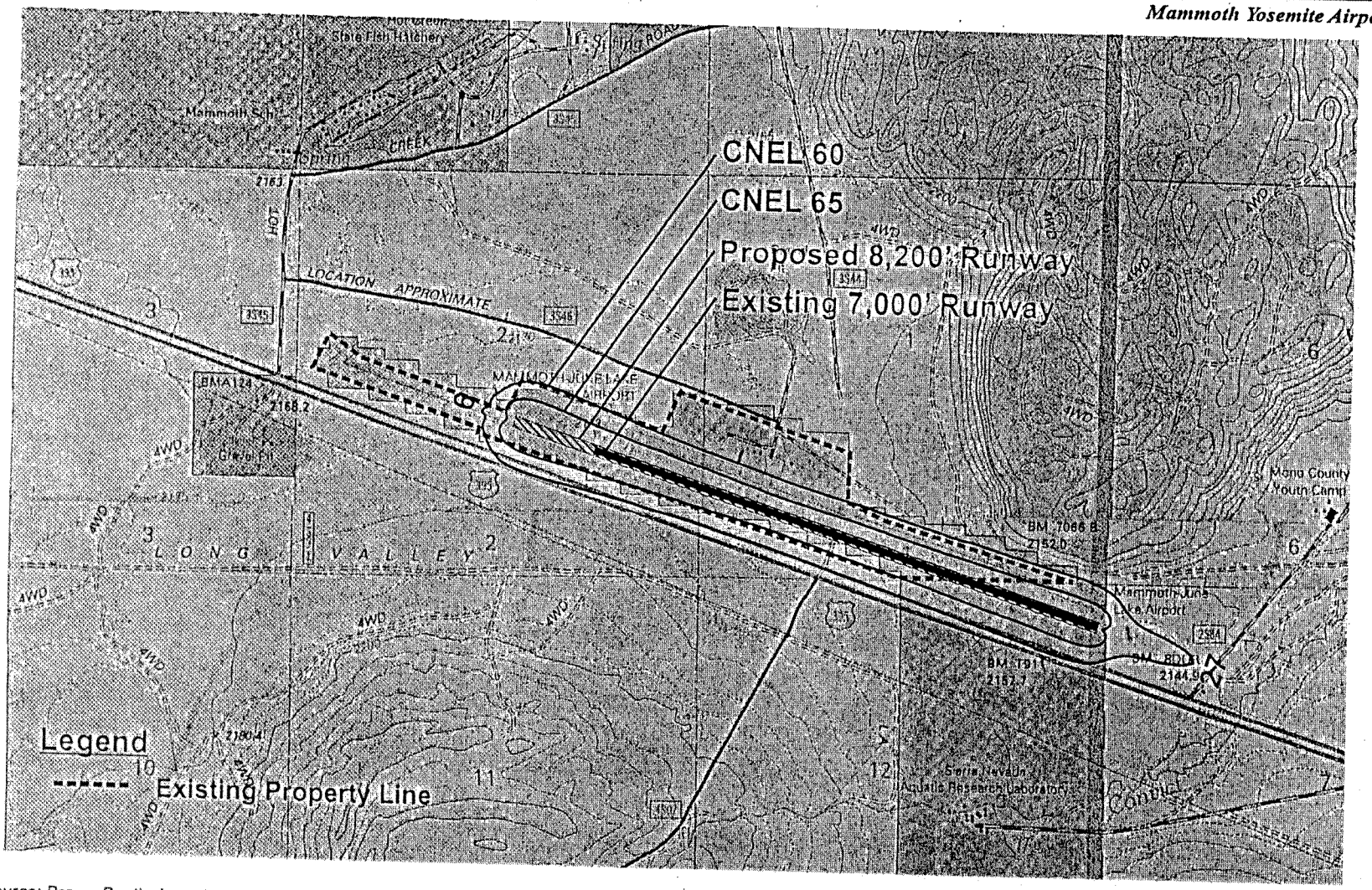


Source: Brown-Buntin Associates, Inc.
Prepared by: Ricondo & Associates, Inc.

Exhibit III-19

north Scale 1" = 2000'

Proposed Project - 8,200' Runway 2003 Noise Contours

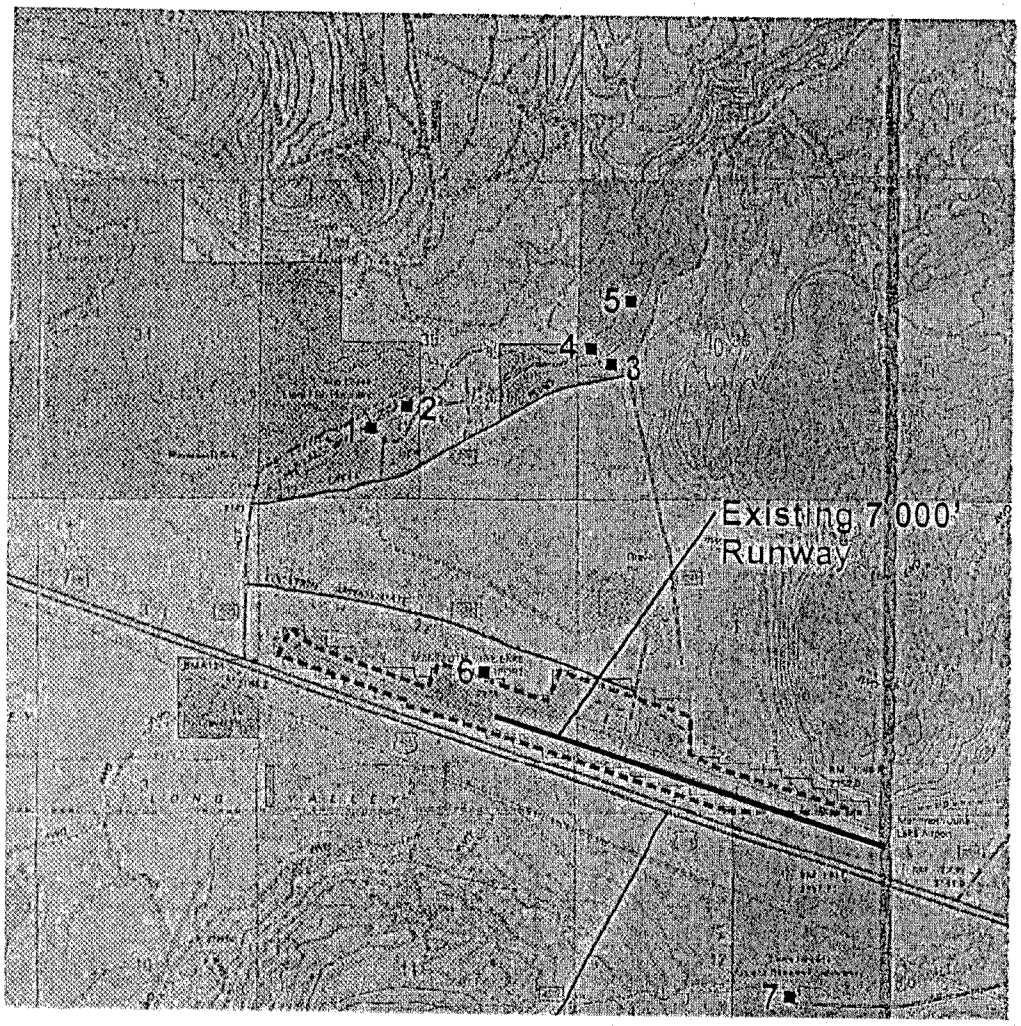


Source: Brown-Buntin Associates, Inc.
Prepared by: Ricondo & Associates, Inc.

Exhibit III-20

north Scale 1" = 2000'

Proposed Project - 8,200' Runway
2022 Noise Contours



Legend

1 Hatchery-South
2 Hatchery-North
3 Hot Creek Ranch
4 Hot Creek Ranch-South
5 Hot Creek Ranch-North
6 Planned Hotel/Condominium Complex
7 Sierra Nevada Aquatic Research Laboratory
---- Existing Property Line

Source: Brown-Buntin Associates, Inc.
Prepared by: Ricondo & Associates, Inc.

Exhibit III-21

north Scale 1" = 3000

Aircraft Noise Analysis Grid Points

Table III-15
CNEL Values at Grid Locations

Grid Point	Existing	Proposed Project	
	1999	2003	2022
1 – Hatchery-south	38.3	39.1	42.3
2 – Hatchery-north	37.5	38.2	41.4
3 – Hot Creek Ranch	35.9	36.5	39.5
4 – Hot Creek-south	35.6	36.3	39.3
5 – Hot Creek-north	33.0	33.7	36.8
6 – On-Airport hotel/ condominium complex	49.3	53.6	58.8
7 - Sierra Nevada Aquatic Research Laboratory	30.5	35.2	41.0

Source: Brown-Buntin Associates, July 2000
Prepared by: Ricondo & Associates, Inc.

Exhibits III-6 and III-7 show the arrival and departure flight paths for air carrier operations from Runway 9 and 27 in relation to the communities in the region. Also depicted are the portion of Hot Creek that is potentially eligible for the National Wild and Scenic Rivers System, the land fill site, Devils Postpile National Monument, and the BLM lek sites of concern. Aircraft altitudes in the vicinity of these areas are also depicted on the exhibits. Aircraft noise levels at the outlying areas would be well below the level of significance. Air Carrier aircraft would remain eight miles from Devils Postpile National Monument and on the opposite side of Mammoth Mountain. Air Carrier aircraft also turn away from this site to gain altitude before proceeding on course to their destinations.

The FAA has established instrument departure procedures (DP) which provide the pilot with a way to depart the Airport and transition to the en route airspace safely. The primary reason is to provide obstacle clearance protection to aircraft in instrument meteorological conditions (IMC) or operating under instrument flight rules (IFR). If an aircraft may turn in any direction from a runway, and be clear of obstacles, that runway meets what is called diverse departure criteria. No DP is required for airports that meet this criterion. At an airport where there is an obstacle penetration, a DP would be developed.

The high terrain in and around Mammoth Yosemite Airport causes numerous obstacle penetrations especially to the west of the Airport. Because of these obstructions DPs have been developed for aircraft departing from both Runway 9 and Runway 27. The DP for aircraft departing Runway 9 includes a climbing left turn to a northeast heading and fly that heading until intercepting the 307° radial of the radio navigation aid located in Bishop, California. The aircraft then proceed southeast bound towards Bishop. Similarly the DP for aircraft departing Runway 27 includes a climbing left turn to a northeast heading and maintaining that heading until intercepting the 307° radial and then proceeding southeast to Bishop. When the aircraft reaches Bishop it may proceed along the route filed with Air Traffic Control (ATC) unless otherwise instructed. Following these procedures when departing either Runway 9 or Runway 27 ensures proper obstacle clearance.

Departure control ATC services are provided by the Oakland Air Route Traffic Control Center (ARTCC) located in Fremont, CA. Oakland ARTCC provides separation from other instrument

aircraft, obstacle clearance, and navigational service through the use of radar vectors. A vector is a heading that provides an aircraft navigational guidance by radar. Any radar vector used by Oakland ARTCC must assure that the aircraft being vectored has proper clearance from obstacles. Each area under Oakland ARTCC's control has a minimum vectoring altitude (MVA) assigned to it. A MVA is the lowest altitude, mean sea level (MSL), that an aircraft operating under IFR will be vectored by Oakland ARTCC. The MVA for the area along the Mammoth-Yosemite DP is 16,000' MSL. This means that an aircraft can not be turned by ATC until it is above 16,000'.

In summary, procedures for aircraft operating under IFR currently exist to ensure separation from the high terrain in the area. These procedures route aircraft to the east, away from Yosemite, the Town of Mammoth Lakes and Devil's Postpile. Aircraft must stay on this easterly routing to ensure terrain clearance until the aircraft is either at Bishop, CA or above 16,000' MSL. These procedures would be used by air carrier aircraft forecasted to use the Airport because of the development project.

General aviation aircraft would be the primary source of aircraft noise in the vicinity of the lek sites north and east of the Airport because the downwind and base legs of the general aviation approach patterns and earlier turns on departure. The General Aviation flight patterns north of the Airport are depicted on Exhibit F-4 in Appendix F.

In summary, **Table III-16** shows the area exposed to CNEL 60 to 65 and CNEL 65 and higher for the 1999 operating conditions and the proposed project for the forecast 2003 and 2022 operation levels. In terms of environmental impact, the extent of impact is often indicated by the number of people exposed to CNEL 65 and higher. There are no populated areas or other incompatible land uses planned within the CNEL 65 or higher noise exposure areas for the proposed project for 2003 or 2022.

Table III-16

Estimated Noise Exposure Areas for the Proposed Project

Noise Impact Factor Area Exposed (acres)	Existing 1999	Proposed Project
2003		
CNEL 65+	39	48
CNEL 65-60	47	61
Total CNEL 60+	86	109
2022		
CNEL 65+		105
CNEL 65-60		105
Total CNEL 60+		210

CNEL = Community noise equivalent level, in A-weighted decibels

Source: Brown-Buntin Associates, July 2000
Prepared By: Ricondo & Associates, Inc.

The closest potential noise sensitive area is the proposed on-Airport hotel and residential condominium development, which is outside the CNEL 60 noise exposure area. The Mono County Noise Element [3-36] and the Town of Mammoth Lakes Noise Element [3-32], in conformance with State Standards, recommends that interior residential noise levels not exceed CNEL 45. Standard building practice in the cold weather mountainous regions will generally reduce noise levels inside the buildings within this area to less than CNEL 45.

All of the commercial development areas, including the on-Airport commercial development areas, SNARL and the planned Sierra Business Park development area, would be located outside the area exposed to CNEL 60 and higher for all the alternatives. As indicated in Table III-16, commercial uses in these areas would be compatible.

As the proposed project would not result in the exposure of persons to or generation of noise levels in excess of CNEL 60 or indoor noise level greater than CNEL 45 in areas or on facilities not compatible with that noise level. Therefore, the proposed plan does not significantly impact the environment in terms of operational noise.

3.7.3 Mitigation Measures

The proposed project would not result in a significant increase in aircraft noise exposure in populated or otherwise noise-sensitive areas.

3.7.4 Unavoidable Significant Impacts

The proposed project does not significantly impact the environment in terms of aircraft noise. Therefore, there are no unavoidable significant impacts.

3.7.5 Cumulative Impacts

As the proposed project would not results in the exposure of persons to or generation of noise levels in excess of CNEL 60 and indoor noise level greater than CNEL 45 in areas or on facilities not compatible with that noise level, therefore it will have no adverse effect on noise. The growth in aircraft operations at the Airport as a result of the Airport Commercial Development Plan was included in the noise analysis of Section 3.7 and the Sierra Business Park is not anticipated to incorporate sensitive receptor uses (e.g., homes, child care facilities, churches, hospitals), therefore, no adverse cumulative impacts on noise would be anticipated from these projects.

3.8 Public Services and Utilities

The effects of the Airport on public services and utilities has been evaluated in the previously certified 1986 EIR/EA and the 1997 SEIR/EA documents. Please refer to Appendix A for the summary of impacts on public services, their significance, and mitigation measures from the 1997 SEIR/EA (which incorporated the 1986 EIR/EA).

Public Services include fire protection, police protection, schools, snow removal/roadway maintenance, neighborhood and regional parks, and libraries. Utilities and service systems include water supply, power, and natural gas and sanitary sewage and solid waste disposal.

This section discusses potential environmental impacts with respect to public services and utilities as a result of the proposed modifications to the Airport, which were not previously evaluated. The current Airport proposal includes construction of a new package treatment plant (instead of a new leach field), and relocation or replacement of Green Church from its present location to Sierra Nevada Aquatic Research Laboratory (SNARL) facilities. No other changes are proposed to the Airport, which would result in impacts on public services which have not already been evaluated.

3.8.1 Environmental Setting

3.8.1.1 Public Services

The structure that formerly housed High Sierra Community Church is located east of the Airport and is known locally as the "Green Church" as shown on Exhibit II-1. The structure was built in 1954 by local Presbyterians and was used for religious purposes until the mid-1980s. By the mid-1980's, the population of the area had shifted and was concentrated eight miles to the west, within the boundaries of the Town of Mammoth Lakes and the Presbyterian congregation relocated there. Green Church is presently owned by SNARL and the land on which it is located is owned by City of Los Angeles and is leased to SNARL.

3.8.1.2 Utilities

The RWQCB Water Quality Control Plan generally encourages the consolidation of domestic and industrial wastewater treatment and disposal facilities. The entire basin in which Mammoth Yosemite Airport is located has been designated as an area in which septic tank and leaching fields cannot be used except with special approval of the RWQCB.

The addition of certain facilities at an Airport like terminals and other related buildings may result in the generation of additional amounts of solid waste. Airfield improvements, however, do not normally have a direct effect on solid waste collection or disposal, other than that, which is associated with the construction itself.

In addition to the collection of solid waste, various observations support the conclusion that waste disposal sites are artificial attractants to birds. Accordingly, disposal sites in the vicinity of an Airport are incompatible with safe flight operations due to the potential for bird strikes. As outlined in FAA Order 5200.5A, this analysis ensures that there are no waste disposal sites located within:

- 5,000 feet of any runway end used only by piston powered aircraft;

- 10,000 feet of any runway end used or planned to be used by turbine powered (i.e., jet) aircraft; and
- a five mile radius of a runway end that attracts or sustains hazardous bird movement from feeding, water, or roosting areas into or across the runways and/or approach and departure pattern of aircraft.

The Mono County Department of Public Works is responsible for solid waste management in Mono County and for daily operation of the Benton Crossing Landfill, which is the destination for all municipal solid waste generated in the Mammoth Lakes area. Solid waste is transported to the Benton Crossing Landfill approximately five miles northeast of the Airport.

3.8.2 Significant Environmental Impacts

3.8.2.1 Public Services

A project is considered to have significant impact to public services if the proposed project results in the need for new or physically altered services, or the construction of which could cause significant environmental impact, to maintain acceptable service ratios, response times, or other performance objectives for the following public services:

The location of the "Green Church" is incompatible with FAA Airport design criteria for the proposed project. The "Green Church" lies in the Runway Protection Zone (RPZ). FAA Advisory Circular (AC) 150/5300-13, *Airport Design,* sets forth the criteria for development in a RPZ. The function of the RPZ is to enhance the protection of people and property on the ground. Land uses prohibited from the RPZ are residences and places of public assembly such as churches, schools, hospitals, office buildings, shopping centers, and other uses with similar concentrations of persons. The administrative use of the "Green Church" would constitute a place of public assembly. Therefore, the "Green Church" would not be available as a meeting location or otherwise used as a place of public assembly.

Under the proposed project Green Church would be relocated from its present location to SNARL facilities.

3.8.2.2 Utilities

A new package treatment plant would be installed to accommodate the sewage treatment. The design and maintenance of this package treatment plant would be in accordance with the requirements and regulations of the RWQCB and Mono County Health Department.

The 1997 study of water and sewer requirements for the Airport Commercial Development Plan, entitled *Mammoth Lakes Airport Water and Sewer Analysis* [3-29] conducted by the engineering firm of Triad/Holmes and Associates estimated an average daily demand of 8,000 gallons for the sewage treatment. Airport flight operations generate wastes consisting of oils, grease, deicing fluid, and other complex hydrocarbon compounds. If these waste products are not properly disposed of, the operation of domestic wastewater treatment facilities could be disrupted.

Given the projected estimate in the updated forecast of aviation demand in Section 1.2.2, the average daily enplanements would increase from 330 in 2003 to 910 in 2022, as indicated in **Table III-17**. Mono County Department of Public Works indicated in a letter dated June 6, 2000 (Appendix D), that a typical waste generation rate for commercial aircraft is one pound per passenger per trip. As a

result, by 2022, 910 pounds of waste per day may ultimately be generated by the increased air traffic. Further, based on the projection of Mono County Department of Public Works, depending upon the type of services provided in an expanded terminal, the waste generation rate would at least double, bringing the total waste generation at the facility to an estimated 1,820 pounds per day by 2022.

Table III-17
Projected Average Daily Base Case Enplanements– Mammoth Yosemite Airport

	2003*	2007	2012	2017	2022
Winter Enplanements	37,000	111,900	145,600	172,500	200,300
Summer Enplanements	0	48,000	97,100	115,000	133,500
Totals	37,700	159,900	242,700	287,500	333,800
Average Daily Enplanements	330	440	660	790	910

*there would only be winter service (16 weeks) in 2003.

Source: Ricondo & Associates, Inc., Kent Myers, and committed service information from American Airlines
Prepared By: Ricondo & Associates, Inc., July 2000

According to information provided by the Department of Public Works in Mono County dated June 6, 2000 (Appendix D), the existing permitted landfill capacity will be able to accommodate an increase in the solid waste of 10 tons per day. Accordingly, the quantity of waste that may potentially be generated at an expanded Mammoth Yosemite Airport would not have a significant impact on County Landfills. There are no solid waste disposal facilities located within 5,000 feet of all the alternatives.

As discussed above, the proposed project would not have any significant adverse impacts on utilities as it does not substantially increase the demand such that existing or planned capacity or distribution systems or available supply would be exceeded.

3.8.3 Mitigation Measures

The Uniform Relocation Assistance and Real Acquisition Policies Act of 1970 requires that the owner of any business that must be relocated be offered assistance in finding a new location and reestablishing the business.

A letter of understanding in this regard was signed between Town of Mammoth Lakes, Regents of the University of California, Mammoth Mountain Ski Area, and Hot Creek Aviation and is included in Appendix D. Under this agreement the Town of Mammoth Lakes and Hot Creek Aviation, with the cooperation of The Regents of University of California, would locate an appropriate site and construct a class room and lecture hall facility consisting of approximately 1,300 square feet.

No significant impacts to utilities are anticipated as a result of the project. Therefore, no mitigation measures are required except for the regular precautions that are taken during any construction project to protect the existing infrastructure such as underground pipes.

AR 001166

3.8.4 Unavoidable Significant Impacts

The SNARL facilities at "Green Church" would be replaced with similar facilities at another location, most probably on the site of the main SNARL campus in accordance with the Uniform Relocation Assistance and Real Acquisition Policies Act of 1970.

The proposed project is not expected to cause any significant impacts with respect to Utilities, and therefore no unavoidable significant impacts are anticipated.

3.8.5 Cumulative Impacts

3.8.5.1 Public Services

The cumulative environmental impacts of the proposed project and the Airport Commercial Development Plan were reviewed in the 1997 *Mammoth Lakes Airport Expansion Subsequent Environmental Impact Report and Updated Environmental Assessment* [I-2]. The Airport Commercial Development Area, and Sierra Business Park projects are not anticipated to have an adverse impact on public services like fire service, police service, schools, parks, and roads. Therefore there will be no cumulative significant adverse impacts to public services and utilities.

The proposed project would result in the relocation or replacement of the SNARL classroom and lecture hall facilities located in the "Green Church." The Airport Commercial Development Plan and Sierra Business Park could provide a location for the replacement facilities for the "Green Church".

3.8.5.2 Utilities

The forecast quantity of sewage effluent from the proposed project and the Airport's Commercial Development Plan is 50,000 gallons per day. Sewage effluent from the Sierra Business Park may vary considerably depending on the proposed industrial uses of the lots. However, the sewage quantity is not expected to exceed the maximum disposal quantity of 500 gallons per acre per day allowed by the Lahontan RWQCB. Maximum sewage output of the three projects, at their full build out, could approach 68,000 gallons per day. The Lahontan RWQCB would require all of the projects to use a package plant that would supply secondary treatment with supplemental nitrate reduction.

As the proposed project, Airport commercial development plan, and the Sierra Business Park cumulatively do not substantially increase the demand for utilities such that existing or planned capacity or distribution systems or available supply would be exceeded, there would be no significant adverse cumulative impacts on utilities.

IV. Project Alternatives

"An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation." CEQA § 15126.6(a).

The environmental evaluation of each alternative has been performed in less detail than that described in Section III, Environmental Impacts of the Proposed Project, but in sufficient detail to determine whether the alternative will reduce or eliminate corresponding impacts of the proposed project, and whether the alternative can obtain proposed project alternatives. CEQA § 15126.6(d).

4.1 Range of Alternatives

Following are the Project Objectives for the proposed Mammoth Yosemite Airport Expansion Project.

1. Amend the runway characteristics to enhance safety for narrow body air carrier aircraft up to the size of a Boeing 757-200 to operate at the Airport.
2. Provide transportation alternative to the private automobile for residents of and visitors to Mammoth Lakes.
3. Reduce adverse vehicular air emissions associated with visitors to Mammoth Lakes and vicinity by replacing some of the vehicle trips with air passenger trips.
4. Maintain eligibility for the Town of Mammoth Lakes to receive Airport Improvement Program (AIP) funds from the FAA or to impose Passenger Facility Charges to assist in funding some of the proposed improvements.

Keeping these project objectives in mind, the lead agency, the Town of Mammoth Lakes, identified a total of alternatives resulting in runway lengths ranging from 7,000 to greater than 9,000 feet and various airfield improvements including the No Project alternative (retain the 7,000-foot runway). An aircraft performance analysis was conducted to determine the potential for providing air service to various markets from Mammoth Yosemite Airport. This aircraft performance analysis can be found in Appendix E. On the basis of aircraft performance analysis and airport design criteria, four alternatives were retained for future consideration in addition to the no project alternative and four alternatives were excluded from further evaluation. The runway extensions, evaluated in the retained alternatives, could be accomplished both to the east and to the west.

The Town also considered, as an offsite alternative, use of Bishop Airport instead of the Mammoth Yosemite Airport for air carrier service. However, the Town recognized a number of environmental and feasibility issues associated with use of Bishop Airport as an alternative to the Mammoth Yosemite Airport, which ultimately eliminated Bishop as an infeasible alternative to the Mammoth Yosemite Airport. This is further discussed in Section 4.3.3.

4.2 Alternatives Retained for Further Consideration

The five alternatives retained for further consideration are listed below.

- Alternative 1 – 7,000-Foot Runway (No Project)
- Alternative 2 – 8,000-Foot Runway (Proposed Project)
- Alternative 3 – 9,000-Foot Runway
- Alternative 4 – Extend Runway beyond 9,000 feet
- Alternative 5 – Extend Runway to the East.

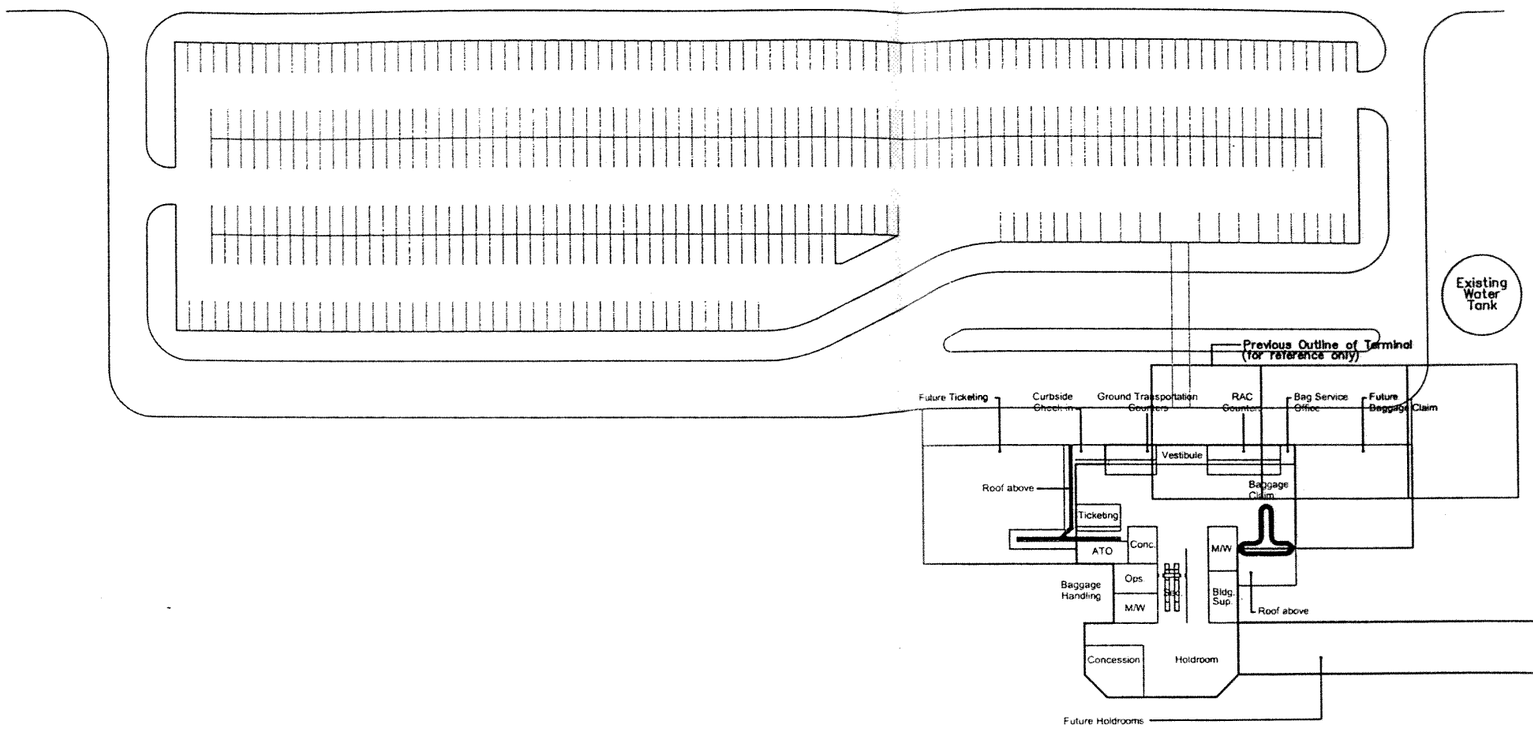
All of the retained alternatives, with the exception of Alternative 1 (No Project), have the following common airfield infrastructure and terminal developments:

- Strengthen the runway and taxiways to accommodate narrow-body air carrier aircraft up to the size of a B-757-200 aircraft
- Widen the runway from 100 to 150 feet on the south side of the runway, shifting the runway centerline 25 feet to the south
- Widen the parallel taxiway from 50 to 75 feet by 20 feet on the south side and five feet on the north side
- Widen selected connecting taxiways from 50 to 75 feet
- Extend the parallel taxiway to match the runway extension
- Add an air carrier apron for three air carrier aircraft with expansion capabilities to accommodate up to six air carrier aircraft
- Construct Airport access road improvements including connections to the new passenger terminal building.
- Expand the automobile surface parking facilities
- Acquire land to the east of the Airport that is currently leased for Airport use
- Improve security fencing to include a 8 foot high perimeter fence around the airfield
- Construction of a passenger terminal complex and related support areas as depicted in **Exhibit IV-1**.
- Construction of a new package wastewater treatment plant (instead of a new leach field).

These infrastructure improvements will occur in all alternatives. Most of these airfield improvements have already been reviewed for their environmental impacts either in the 1986 EIR/EA or in 1997 SEIR/EA. The only changes which are being reviewed in this document include the widening of the runway from 100 to 150 feet on the south side of the runway and shifting the runway centerline 25 feet to the south, and the construction of a new package treatment complex (instead of a leach field). Each of the five project alternatives is briefly described below and discussed in relation to potential environmental impacts as well as the attainment of project objectives.

4.2.1 Alternative 1 – 7,000-Foot Runway (No Project)

Alternative 1 is depicted in **Exhibit IV-2**. This alternative retains Runway 9-27 at its existing length of 7,000 feet. There are no further improvements to the existing airport infrastructure, except those required for maintenance or required by the FAA for safety reasons.



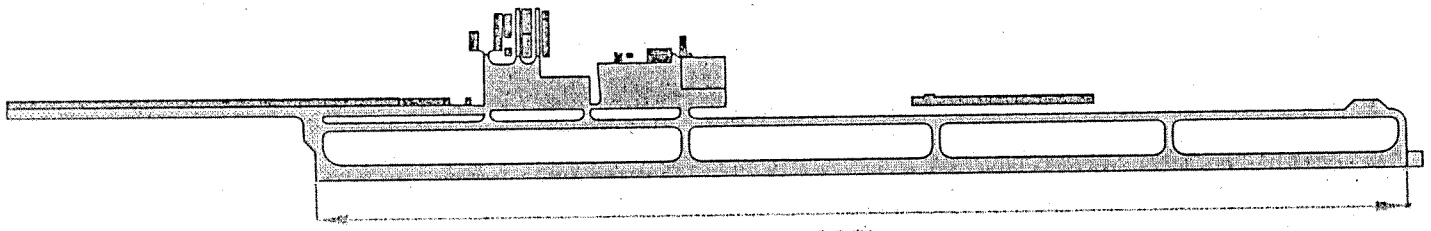
AR 001171

Source: Reinard W. Brandley, Engineer / Ricondo & Associates, Inc.
Prepared by: Ricondo & Assoicates, Inc.

Exhibit IV-1

north

Terminal Concept



Source: Reinard W. Brandley, Engineer / Ricondo & Associates, Inc.
Prepared by: Ricondo & Associates, Inc.

Exhibit IV-2

0 1,200 ft.

Legend
Existing Airfield
Potential Airport Improvement

Alternative 1 - No Project

It is important to note that the Airport currently possesses a limited FAR Part 139 certificate for operations. A limited FAR Part 139 certificate allows air carrier aircraft to operate into the airfield on an unscheduled (i.e. charter) basis. The regulation governing the criteria for air carriers was changed in the mid 1990s to include aircraft whose seating capacities are 19 seats or greater. Many aircraft of this type have served Mammoth Yosemite Airport on a scheduled basis in the past under the old regulations and may do so in the future under the current regulations. Should operators of aircraft of these types elect to provide regularly scheduled service to the Airport in the future, Mammoth Yosemite Airport would have to have a full FAR Part 139 certification. An important part of meeting FAA safety regulations for scheduled operations is the required security fencing and a secure terminal building for the Airport. Before scheduled operations could start, the Airport would have to install improved security fencing and a terminal building that meets FAA security regulations.

Due to lack of any environmental impacts, Alternative 1 (No Project) would be environmentally superior to the proposed project. However, the No-Project Alternative is rejected from further consideration on the basis that it would not meet any of the proposed project objectives.

4.2.3 Alternative 2 – 8,200-Foot Runway (Proposed Project)

The proposed project, illustrated in **Exhibit IV-3**, extends Runway 9-27 1,200 feet to the west resulting in a runway length of 8,200 feet. The proposed project meets all the project objectives and was analyzed in Section III of this SSEIR. There are no new significant environmental impacts other than the relocation or replacement of "Green Church" from its present location to SNARL facilities.

Under this alternative, the entire aeronautical pavement area would be on Airport property, though, the required safety areas that meet specific FAA guidelines would be located on property owned by the United States government and administered by United States Forest Service (USFS). The Town of Mammoth Lakes would be required to obtain a special use permit for an additional 25 feet of land along the length of the runway to the south and 25 feet of land to the west of Airport property for the runway safety area.

4.2.3 Alternative 3 – 9,000-Foot Runway

Alternative 3, illustrated in **Exhibit IV-4** extends Runway 9-27 to the west to achieve a length of 9,000 feet. This alternative would retain all the other components of the proposed project (Alternative 2). Under this alternative, while the entire aeronautical pavement would be on Airport property, the required safety areas that must meet specific FAA guidelines would be located on property administered by the United States Forest Service (USFS). This would require the Town of Mammoth Lakes to purchase the property or obtain a special use permit from the USFS for the additional 25 feet of land along the length of the runway to the south and 825 feet of land to the west of Airport property for the runway safety area.

Alternative 3 would have environmental impacts that are greater than the proposed project in the Soil/Land transformation, Hydrology and Water Quality, and Biological Resources categories as more land would need to be cleared and graded and there would be greater storm water runoff due to increase in pavement area. The additional 825 feet of land required to the west of Airport property for the runway safety area would also potentially affect additional mule deer and sage grouse habitat. Environmental Impacts similar to the proposed project (i.e., no new significant impacts) would occur in the categories of Aesthetics/Light and Glare, Air Quality, Traffic, Noise, Public Services, and Utilities. This length of the runway was approved in the 1986 EIR/EA and 1997 SEIR/EA, the only

changes to the previously approved project needed to meet the project objectives include the widening of the runway from 100 to 150 feet and relocation or replacement of 'Green Church".

4.2.4 Alternative 4 – Extend Runway Beyond 9,000 Feet

Alternative 4, illustrated in **Exhibit IV-5,** extends Runway 9-27 to the west to achieve a length greater than 9,000 feet. This alternative would meet all the project objectives but would entail a larger environmental impact due to an increase in previously approved length of 9,000 feet in 1986 EIR/EA and 1997 SEIR/EA. Depending on the ultimate runway length desired, some aeronautical pavement along with the required safety areas, would not be on Airport property. This would require the Town of Mammoth Lakes to purchase the property or obtain a special use permit from the USFS.

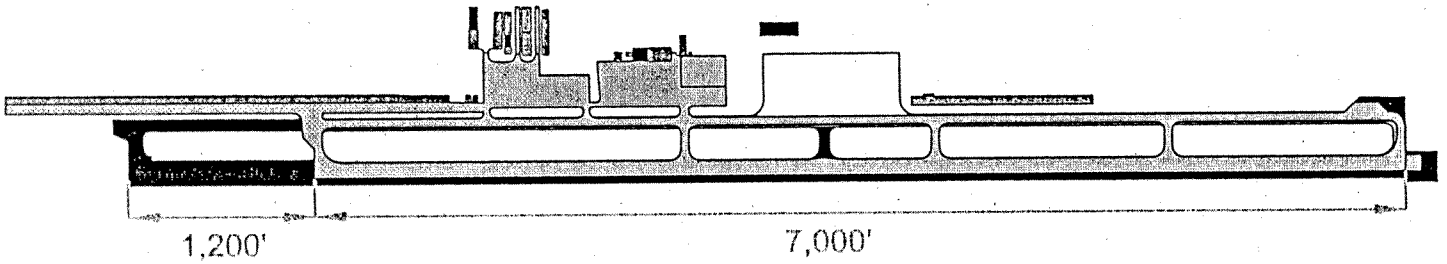
Alternative 4 would generate impacts that are greater than the proposed project and are likely to be significant in the categories of Soil/Land transformation, Hydrology and Water Quality, and Biological Resources. This alternative would meet all the project objectives but would entail a greater environmental impact due to an increase in land which would require to be cleared and graded along with greater storm water runoff due to increase in pavement area. The additional length of the runway would also potentially affect additional mule deer and sage grouse habitat. Impacts similar to the proposed project (i.e., no new significant impacts) would occur in the categories of Aesthetics/Light and Glare, Air Quality, Traffic, Noise, Public Services, and Utilities. This alternative was rejected because Alternative 2 (proposed project) provides an environmentally superior alternative and meets all the project objectives at a lesser cost.

4.2.5 Alternative 5 – Extend Runway to the East

Alternative 5, illustrated in **Exhibit IV-6,** is the extension of Runway 9-27 to the east to achieve possible runway lengths of 8,200, 9,000, or greater than 9,000 feet. The City of Los Angeles owns the land east of the airfield and it is currently used for recreational purposes. Extensions of aeronautical facilities to the east would require the Town of Mammoth Lakes to acquire or lease the required land from the City of Los Angeles.

Alternative 5 would generate impacts that are greater than the proposed project and likely to be significant in the categories of Soil/Land transformation, Hydrology and Water Quality, Traffic, and Biological Resources depending on the runway length constructed. This alternative would meet all the project objectives but would entail a greater environmental impact due to an increase in land which would require to be cleared and graded along with greater storm water runoff due to increase in pavement area. The additional length of the runway would also potentially affect additional mule deer and sage grouse habitat and the dry meadow area located east of the Airport rather than the already disturbed land west of the Airport that is currently used as a paved stopway. Benton Crossing Road would have to be relocated, because it would conflict with associated safety areas or aeronautical pavement.

Environmental Impacts similar to the proposed project (i.e., no new significant impacts) would occur in the categories of Aesthetics/Light and Glare, Air Quality, Noise, Public Services, and Utilities. This alternative was rejected because Alternative 2 (proposed project) provides an environmentally superior alternative and meets all the project objectives at a lesser cost.



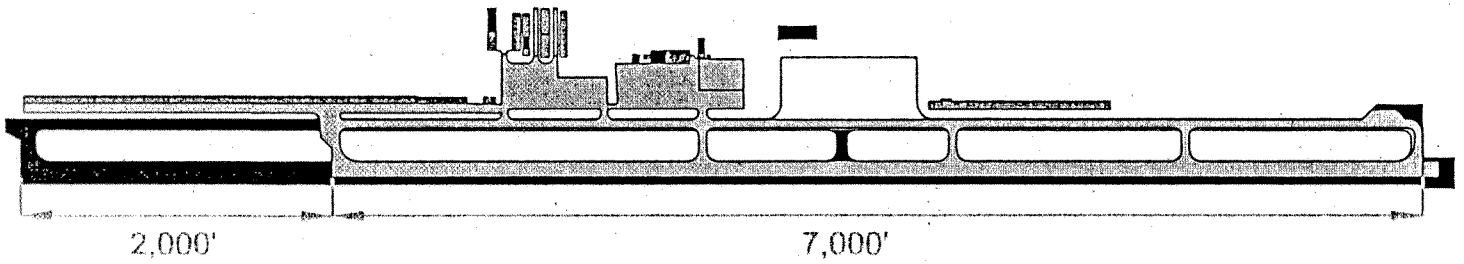
Source: Reinard W. Brandley, Engineer / Ricondo & Associates, Inc.
Prepared by: Ricondo & Associates, Inc.

Exhibit IV-3

0 1,200 ft.

Legend
Existing Airfield
Potential Airport Improvement

Alternative 2 - Proposed Project
8,200 ft. Runway



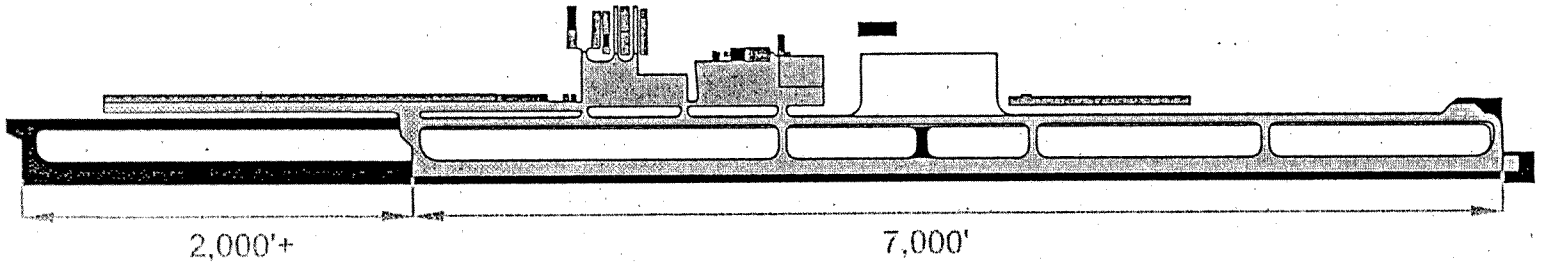
Source: Reinard W. Brandley, Engineer / Ricondo & Associates, Inc.
Prepared by: Ricondo & Associates, Inc.

Exhibit IV-4

0 1,200 ft.

Legend
Existing Airfield
Potential Airport Improvement

Alternative 3 - 9,000 ft. Runway



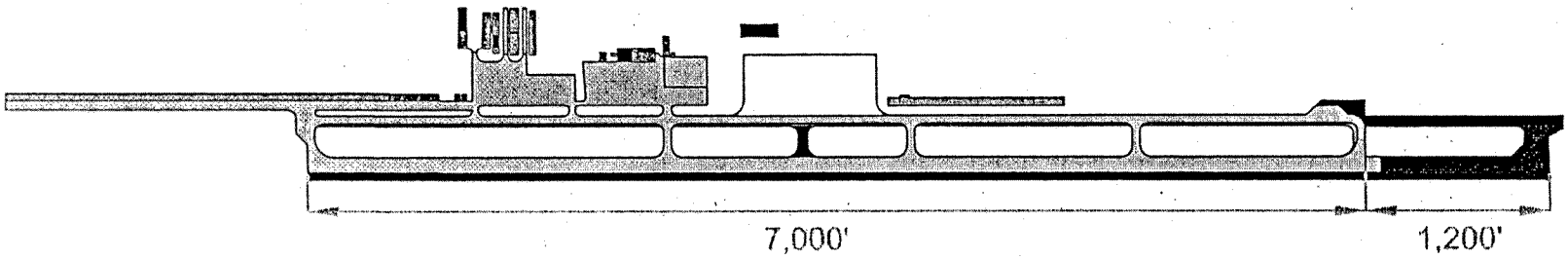
Source: Reinard W. Brandley, Engineer / Ricondo & Associates, Inc.
Prepared by: Ricondo & Associates, Inc.

Exhibit IV-5

0 1,200 ft.

Legend
Existing Airfield
Potential Airport Improvement

Alternative 4 - Extend Runway Beyond 9,000 ft.



Source: Reinard W. Brandley, Engineer / Ricondo & Associates, Inc.
Prepared by: Ricondo & Associates, Inc.

Exhibit IV-6

0 1,200 ft.

Legend
Existing Airfield
Potential Airport Improvement

Alternative 5 - Extend Runaway to the East

4.3 Comparison of Environmental Impacts Of Project Alternatives

This section analyzes the difference in impact of the four build alternatives (Alternative 2, 3, 4, and 5). The environmental categories discussed in Section III, which are affected by the changes to the proposed project, are analyzed. These include Aesthetics/Light and Glare, Air Quality, Biological Resources, Traffic, Soils/Land Transformation, Hydrology and Water Quality, Noise, and Public Services and Utilities.

4.3.1 Aesthetics/Light and Glare

There would be no substantial difference between impacts of Alternative 2 (proposed project), 3, 4, and 5 on the environmental category of Aesthetics/Light and Glare. These impacts were analyzed for the proposed project in Section 3.1 of this SSEIR.

4.3.2 Air Quality

4.3.2.1 Operational Emissions

There would be no substantial difference between impacts of Alternative 2 (proposed project), 3, 4, and 5 on the environmental category of Air Quality as far as operational emissions are concerned. These impacts were analyzed for the proposed project in Section 3.2 of this SSEIR.

4.3.2.2 Construction Emissions

The methodology for calculating the construction emissions for all the alternatives would be the same as described in Section 3.2.2.2. **Table IV-1** gives a summary of the construction emissions for the different alternatives.

Table IV-1

2002 Construction Emissions and De Minimis Criteria (Tons per year)

	PM-10	VOC	NO_x
Alternative 1 (No Project)			
Non-road emissions	0	0	0
On-road emissions	0	0	0
Total	0	0	0
Alternative 2 (Proposed Project)			
Non-road emissions	2.0	1.5	21.8
On-road emissions	56.7	1.4	13.7
Total	58.7	2.9	35.5
Alternative 3			
Non-road emissions	2.5	1.9	27.1
On-road emissions	67.5	1.8	17.1
Total	70.0	3.6	44.2
Alternative 4			
Non-road emissions	2.5	1.9	27.1
On-road emissions	67.5	1.8	17.1
Total	70.0	3.6	44.2
Alternative 5			
Non-road emissions	2.0	1.5	21.8
On-road emissions	56.7	1.4	13.7
Total	58.7	2.9	35.5
De minimis criteria	100	50	100

Source: Ricondo & Associates, Inc.
Prepared by: Ricondo & Associates Inc.

AR 001179

Total project related emissions (construction and operational) for the all five alternatives are summarized in **Table IV-2.**

Table IV-2

Total Project Emissions and De Minimis Criteria (Tons per year)

	PM-10	VOC	NOx
2002 Construction Impacts			
Alternative 1 (No Project)	0	0	0
Alternative 2 (Proposed Project)	58.7	2.9	35.5
Alternative 3	70.0	3.6	44.2
Alternative 4	70.0	3.6	44.2
Alternative 5	58.7	2.9	35.5
2003 Operational Impacts			
No Project	20.0	3.6	1.2
Proposed Project	8.6	3.7	10.6
Change in Emissions	(-11.5)	(+ 0.1)	(+ 9.4)
2007 Operational Impacts			
No Action	52.1	4.1	1.3
Proposed Project	25.9	10.6	28.4
Change in Emissions	(-26.1)	(+ 6.5)	(+ 27.0)
2022 Operational Impacts			
No Project	86.5	5.9	2.1
Proposed Project	52.0	17.5	55.9
Change in Emissions	(-34.5)	(+ 11.6)	(+ 53.8)
De minimis criteria	100	50	100
Total Annual Emissions Great Basin Valleys (a)	20,075	4,745 (b)	3,285
Total Annual Emissions Mono County (c)	9,950	2,256 (b)	843

(a) 1996 Estimated Value. Produced by the California Air Resources Board.
(b) Estimate is for Reactive Organic Compounds (ROC)
(c) 2000 Estimated Value. Produced by the California Air Resources Board

Source: Ricondo & Associates, Inc.
Prepared by: Ricondo & Associates, Inc.

The proposed project and alternatives are presumed to conform with air quality standards promulgated in the Clean Air Act and the California Clean Air Act. As the preceding analysis demonstrates, the project will not result in emissions that would exceed the applicable de-minimis threshold rates, nor would the project be considered "regionally significant" with regard to air pollution emissions because project emissions would be a minute fraction of the total emissions in the region.

There would be no substantial difference between impacts of Alternative 2 (proposed project), 3, 4, and 5 on the environmental category of Air Quality as far as construction emissions are concerned. It is expected that *de minimis* thresholds for criteria pollutants being analyzed in this SSEIR will not be exceeded in any year if the proposed project is implemented.

AR 001180

4.3.3 Biological Resources

4.3.3.1 Vegetation

Under the proposed project, approximately 10.5 acres of sagebrush scrub habitat would be removed. For the other project alternatives, between 9.5 and 41.9 acres of sagebrush scrub habitat would be removed. Sagebrush scrub habitat is locally and regionally abundant. Therefore, the loss of this habitat type is not considered a significant adverse effect.

For the construction of Alternative 5, a portion of dry meadow east of the Airport would be required. This habitat could serve as potential lek site for sage grouse. Reduction in the meadow's size and location of the runway closer to the dry meadow habitat could reduce opportunities for lek formation in the vicinity of the Airport.

No Significant Natural Areas of Rare Natural Communities were located in the project area. Therefore, no impacts to these resources would occur from the proposed project.

4.3.3.2 Wildlife

Sage Grouse

Alternative 2 (proposed project), 3, and 4 would require the disturbance of a portion the sagebrush habitat west of the Airport, which is used by sage grouse along with mule deer. Alternative 5 would affect the dry meadow east of the approach end of Runway 27, which is a suitable habitat for sage grouse winter use and summer foraging (see Appendix I Figure 2). It could not be determined during the survey if sage grouse were using this area as a lek site. Alternative 5, the extension of the runway to the east, would eliminate important wintering habitat between the approach end of Runway 27 and Benton Crossing Road.

For all project alternatives, a six- to eight-foot high security fence would be constructed around the airfield. Although sage grouse could fly over the fence to use the enclosed sagebrush scrub habitat, the fence could inhibit their use of this habitat. The construction work proposed at the Airport, including construction of the security fence, is not expected to have an adverse effect on sage grouse given the current disturbed nature of the site.

There is no difference between the build alternatives as far as effects of aircraft flight path and noise effects on wildlife are concerned. These were both addressed in Section 3.3.2.2.

Mule Deer

There is no difference between the build alternatives as far as effects of perimeter fence, increased light, noise, airport and vehicle traffic, and human disturbance are concerned. These were all addressed in Section 3.3.2.2.

The location of the fence and the affected deer habitat for the proposed action and all alternatives is depicted in Exhibit III-8. **Table IV-3** summarizes the number of acres of high quality deer habitat that would be lost due to security fencing for each alternative. Proposed mitigation measures would reduce the potential impacts.

Table IV-3

Eliminated High Quality Deer Habitat Loss (acres)

Alternative	Eliminated habitat loss (acres)
1 – No Project	0.0
2 – Extend Runway 8,200 feet to the west	9.5
3 – Extend Runway 9,000 feet to the west	10.5
4 – Extend Runway beyond 9,000 feet to the west	21.9
5 - Extend Runway to the east	41.9

Source: Jones & Stokes, Inc., September 2000.
Prepared by: Ricondo & Associates, Inc.

The proposed project and project alternatives are not expected to directly impact mule deer migration as analyzed in Section 3.3.2.2.

Raptors

There would be no substantial impacts of Alternative 2 (proposed project), 3, 4, and 5 on Raptors.

4.3.3.3 Threatened and Endangered Species

There would be no substantial difference between impacts of Alternative 2 (proposed project), 3, 4, and 5 on threatened and endangered species. As analyzed in Section 3.4 the proposed project would have no adverse impacts on Owens Tui Chub, Lahontan Cutthroat Trout, Bald Eagle, and Sierra Nevada Big Horn Sheep.

4.3.3.4 Water Resources

There would be no substantial difference between impacts of Alternative 2 (proposed project), 3, 4, and 5 on water resources. As analyzed in Section 3.4 the proposed project would have no adverse impacts on water resources.

4.3.4 Transportation/Traffic

There would be no substantial difference between impacts of Alternative 2 (proposed project), 3, and 4 on the environmental category of Transportation/Traffic. These impacts were analyzed for the proposed project in Section 3.4 of this SSEIR. Alternative 5 would require the relocation of Benton Crossing Road.

4.3.5 Soil/Land Transformation

Alternative 3 would have environmental impacts that are greater than the proposed project in the Soil/Land transformation as more land would need to be cleared and graded and there would be greater storm water runoff due to increase in pavement area.

Alternative 4 extends Runway 9-27 to the west to achieve a length greater than 9,000 feet. Depending on the ultimate runway length desired, some aeronautical pavement along with the required safety areas, would not be on Airport property. This would require the Town of Mammoth Lakes to purchase the property or obtain a special use permit from the USFS. Alternative 4 would generate impacts that are greater than the proposed project in Soil/Land transformation due to an increase in land which would require to be cleared and graded along with greater storm water runoff due to increase in pavement area.

Alternative 5 is the extension of Runway 9-27 to the east to achieve possible runway lengths of 8,200, 9,000, or greater than 9,000 feet. The City of Los Angeles owns the land east of the airfield and it is currently used for recreational purposes. Extensions of aeronautical facilities to the east would require the Town of Mammoth Lakes to acquire or lease the required land from the City of Los Angeles.

Alternative 5 would generate impacts that are greater than the proposed project and likely to be significant in the Soil/Land transformation category.

4.3.6 Hydrology, Water Supply, and Water Quality

Alternatives 3,4, and 5 would have a greater impact on Hydrology, Water Supply, and Water Quality than Alternative 2 (proposed project) as all these alternatives have greater storm water runoff due to increase in pavement lengths.

4.3.7 Noise

Noise exposure maps were prepared for all of the alternatives for the years 2003 and 2022 to estimate and compare the potential effects of aircraft noise on existing land uses. Noise exposure maps were prepared for 2003 to demonstrate the changes in noise exposure that could occur with the Airport expansion in the earliest year that the development would be operational and for 2022 to evaluate the longer-range impacts of the Airport development alternatives.

In this analysis, the primary factor contributing to the changes in noise exposure between each alternative is the location of the proposed extension (east vs. west) and length of the extension. The projected annual distribution of runway use is presented in Table F-8 in Appendix F.

Moving the start-of-roll point for departures with the runway extensions results in existing aircraft operating at the Airport climbing for a longer distance, and subsequently at higher altitudes, over Airport property when overflying areas in the vicinity of the Airport. In certain instances, this results in some reduction in aircraft noise exposure for the general aviation fleet of aircraft at the Airport. However, because the runway development permits the use of the Airport by larger air carrier aircraft, the resulting increase in operations would cause an increase in the overall noise exposure area.

Noise exposure maps showing the CNEL 60 and 65 noise exposure areas were developed for each of the alternatives for both 2003 and 2022. The following indicates the exhibits associated with each alternative:

- *Alternative 1—Existing 7,000-Foot Runway (No Action).* Aircraft noise exposure in 2003 and 2022 for Alternative 1 is shown on **Exhibit IV-7** and **Exhibit IV-8**, respectively.
- *Alternative 2—8,200-Foot Runway (Proposed Action).* Aircraft noise exposure in 2003 and 2022 for Alternative 2 is shown on Exhibit III-19 and Exhibit III-20, respectively.
- *Alternative 3—9,000-Foot Runway.* Aircraft noise exposure in 2003 and 2022 for Alternative 3 is shown on **Exhibit IV-9** and **Exhibit IV-10**, respectively.
- *Alternative 4—Greater than 9,000-Foot Runway.* Aircraft noise exposure for this alternative would be dependent on the exact length of the runway. It is anticipated to be similar to Alternative 3 but shifted to the end of the proposed runway.

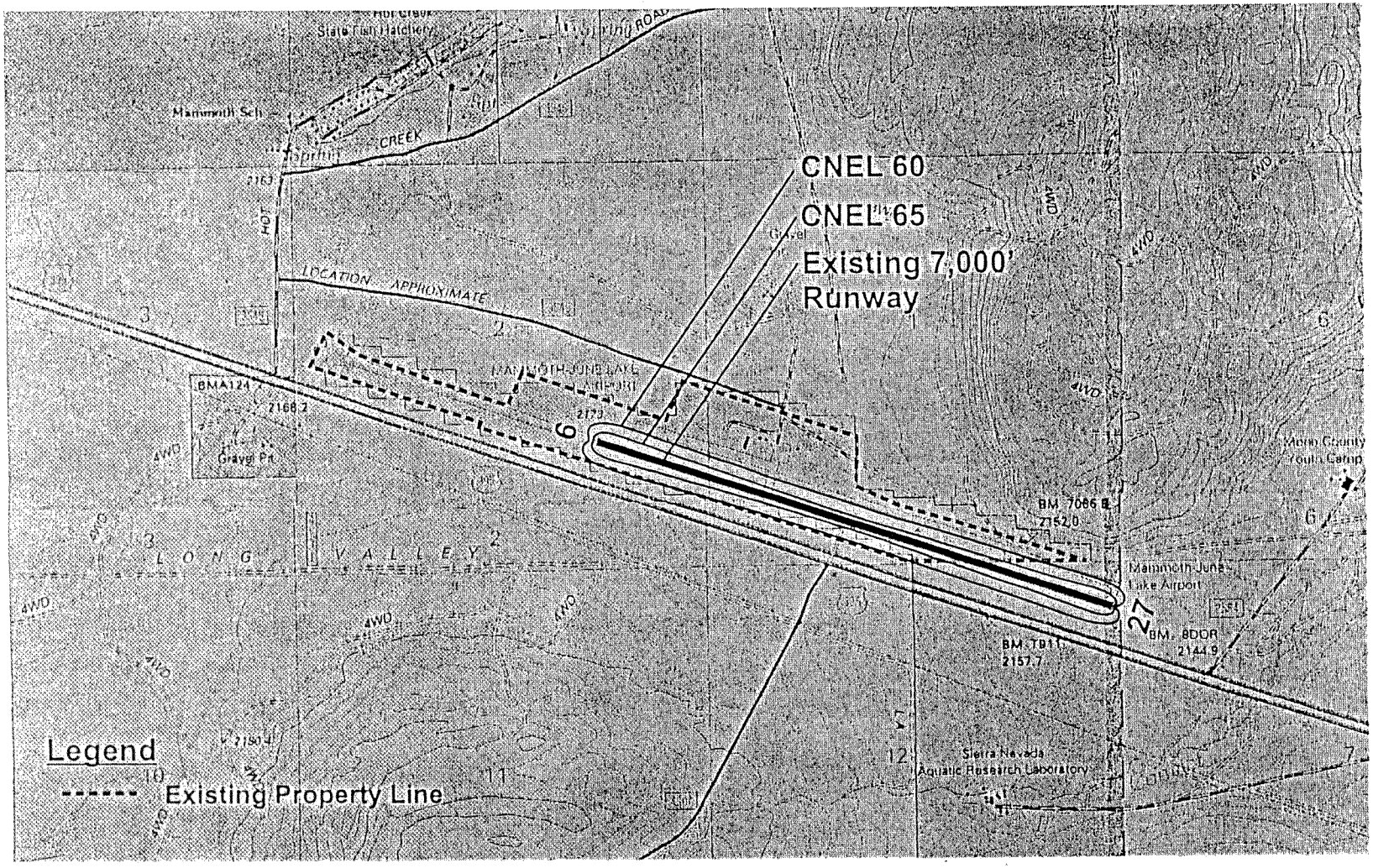
AR 001183

- ***Alternative 5—8,200-Foot Runway, Extension to the East.*** Aircraft noise exposure in 2002 and 2022 for Alternative 5 is shown on **Exhibit IV-11** and **Exhibit IV-12**, respectively.

As shown on the exhibits for the alternatives, the area exposed to aircraft noise of CNEL 65 and higher for each of the alternatives remains within the airfield boundary of the Airport on either Airport property or vacant land controlled by the Airport through leases or use permits. There are no noise sensitive land uses and no people living within the CNEL 65 noise exposure area for any of the alternatives. The CNEL 60 and higher noise exposure area remains largely on Airport property, vacant land, or the U.S. Highway 395 right-of-way. Current land use plans show this area as remaining as compatible land uses. Areas west of the Airport are compatible land uses and therefore, it is anticipated that noise impacts for Alternative 4 would not be significantly different than Alternative 3.

A hotel and residential condominium development is planned on Airport property, north of the airfield. This area would be outside the CNEL 60 noise exposure area for each of the alternative

In addition to the noise exposure maps, a grid point analysis was conducted to evaluate potential changes in noise exposure at specific points in the vicinity of the Airport. These areas, as shown on Exhibit III-24, include the Hot Creek State Fish Hatchery, the Hot Creek Ranch, the planned hotel/condominium complex on Airport property and the Sierra Nevada Aquatic Research Laboratory (SNARL). **Table IV-4** summarizes the CNEL values calculated by the INM for Alternatives 1, 2, 3, and 5 at these locations. As described in Table IV-4, Grid Points 1 and 2 refer to the location of the hatchery, Grid Point 3 refers to the location at the Hot Creek Ranch, Grid Points 4 and 5 refer to locations along Hot Creek, Grid Point 6 refers to the location at the on-Airport hotel/condominium complex, and Grid Point 7 refers to the location of SNARL facilities. None of these facilities are located within the existing or future CNEL 65 noise exposure area for any of the alternatives. Although each grid point would show some increase in noise exposure levels with the development alternatives, the noise exposure levels remain low. It is anticipated that these areas would also not experience direct overflights of air carrier jet aircraft because the planned operating procedure is for air carrier jet aircraft to arrive on a straight-in arrival procedure from the east and depart using an initial turn to the south, away from these development areas for departures to the west.

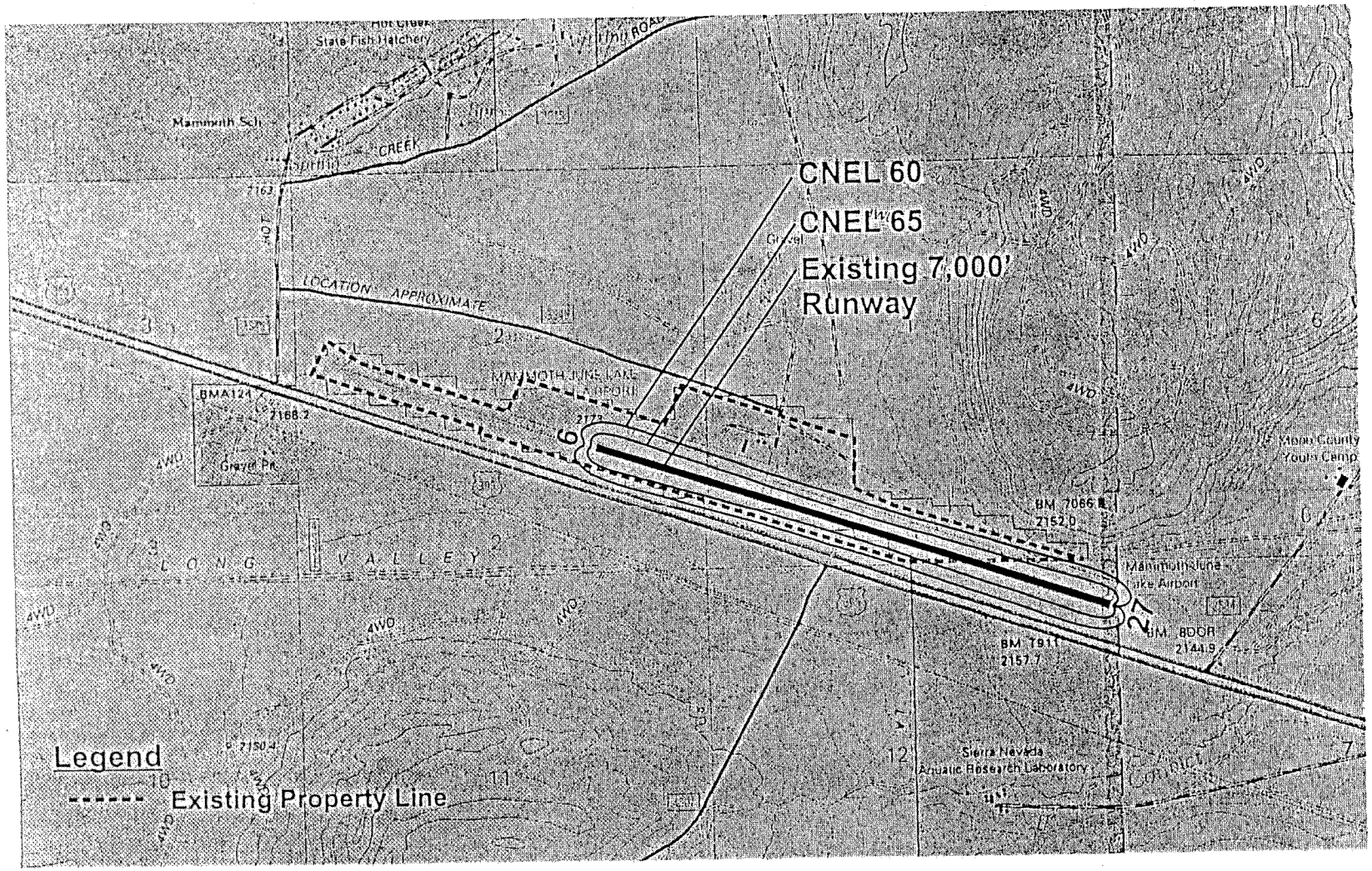


Source: Brown-Buntin Associates, Inc.
Prepared by: Ricondo & Associates, Inc.

Exhibit IV-7

north Scale 1" = 2000'

Alternative 1 (No Project) 2003 Noise Contours

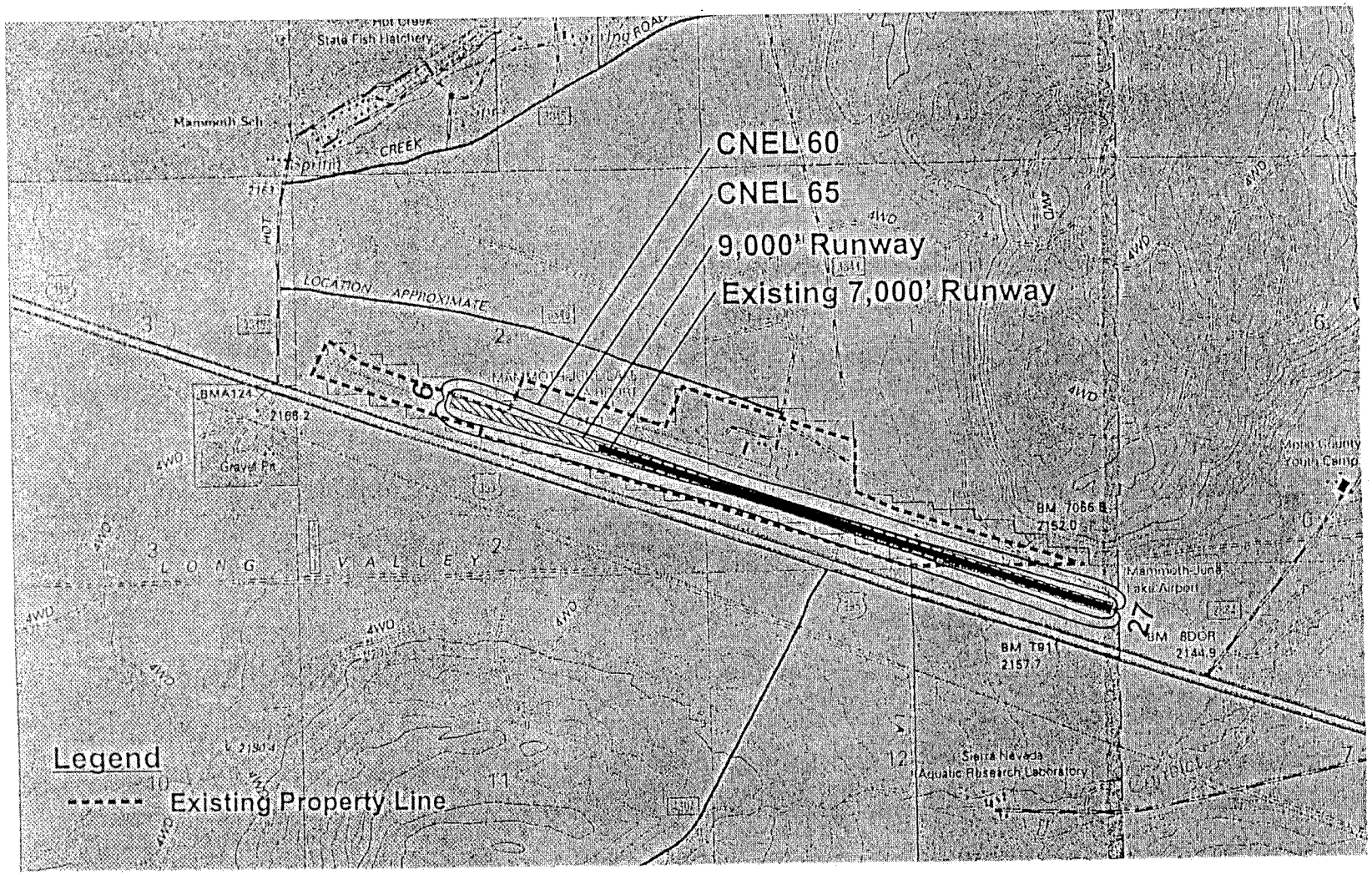


Source: Brown-Buntin Associates, Inc.
Prepared by: Ricondo & Associates, Inc.

Exhibit IV-8

north Scale 1" = 2000'

Alternative 1 (No Project) 2022 Noise Contours

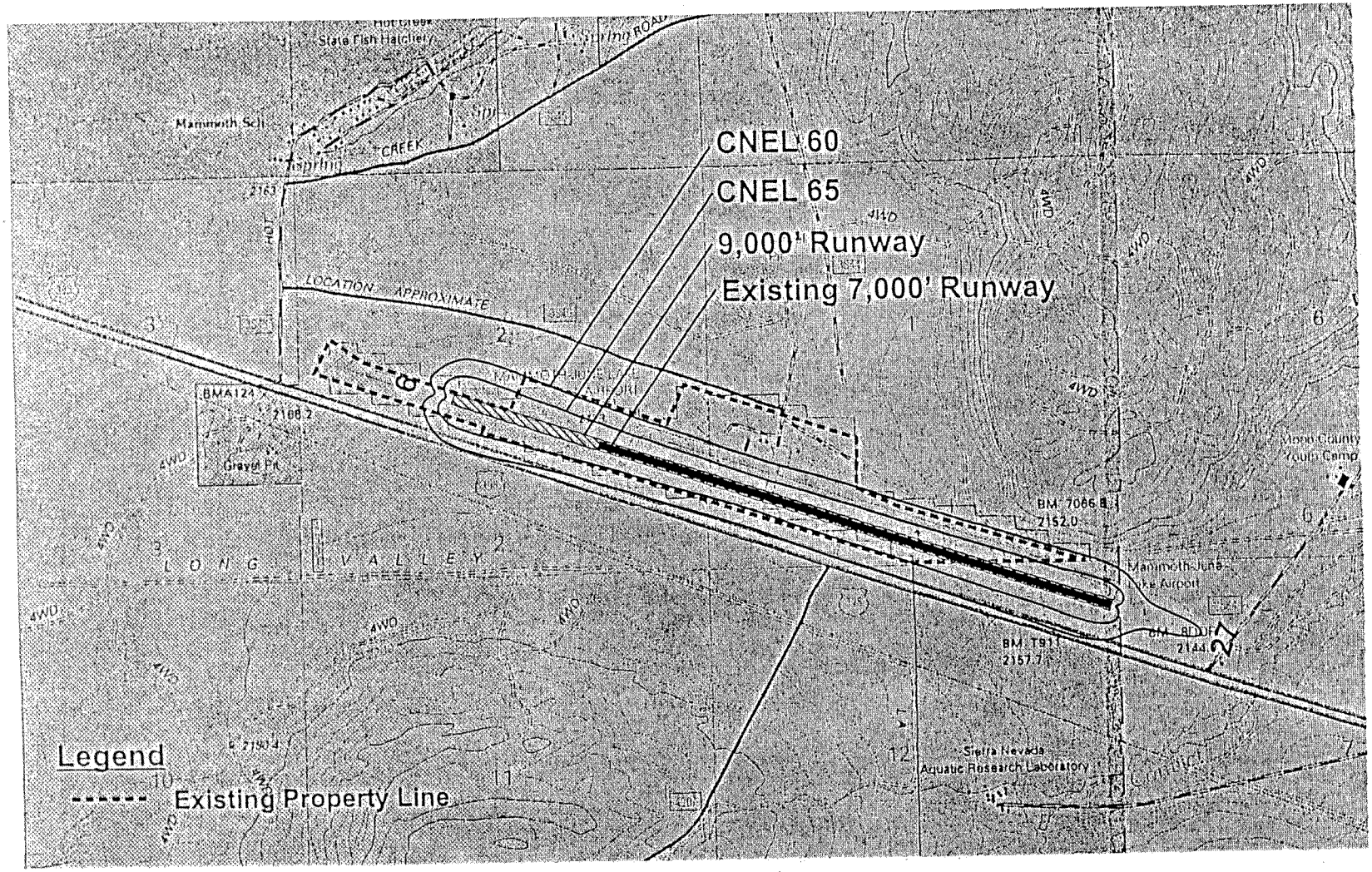


Source: Brown-Buntin Associates, Inc.
Prepared by: Ricondo & Associates, Inc.

Exhibit IV-9

north Scale 1" = 2000'

Alternative 3 (9,000' Runway) 2003 Noise Contours

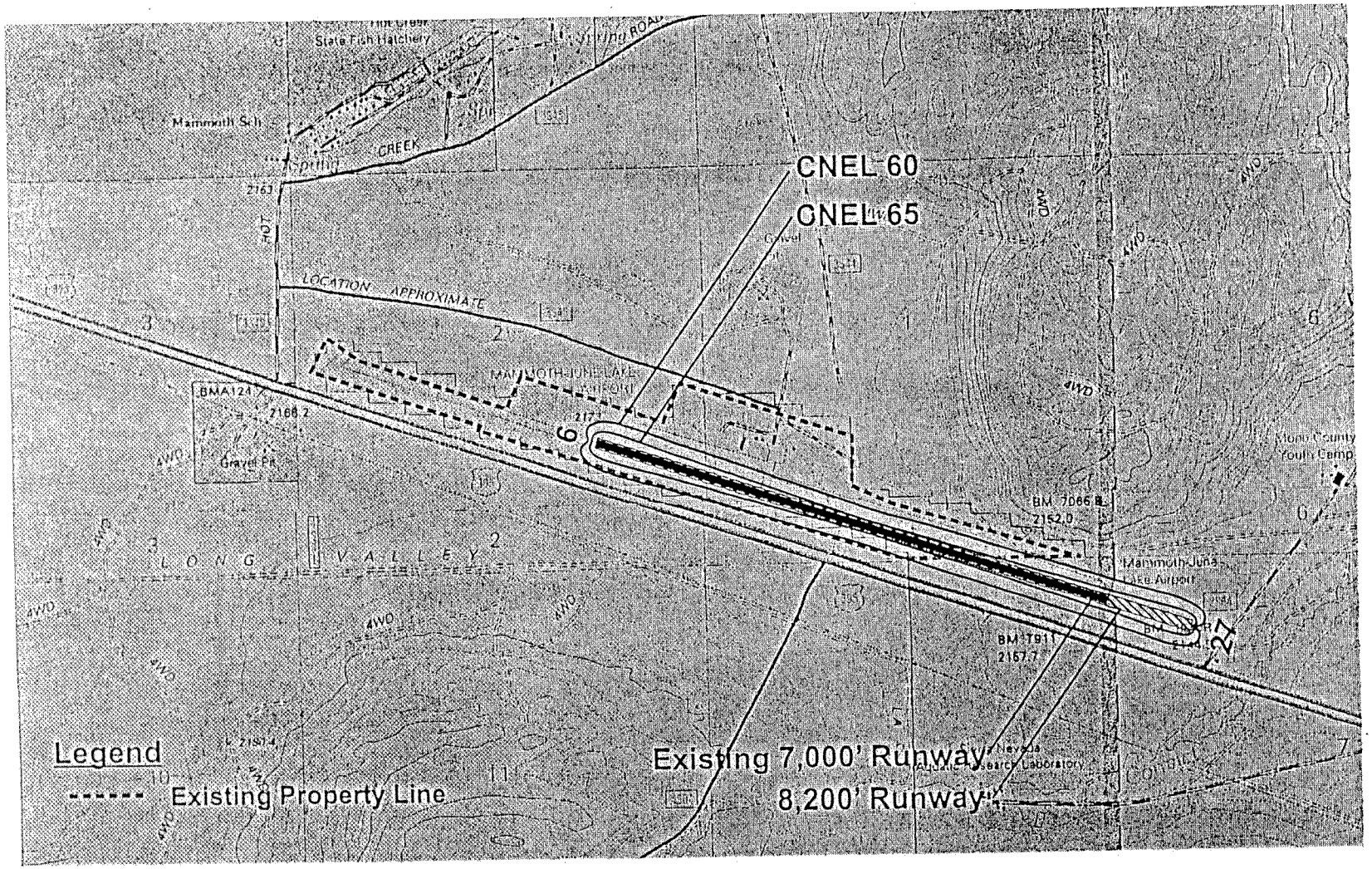


Source: Brown-Buntin Associates, Inc.
Prepared by: Ricondo & Associates, Inc.

Exhibit IV-10

north Scale 1" = 2000'

Alternative 3 (9,000' Runway) 2022 Noise Contours

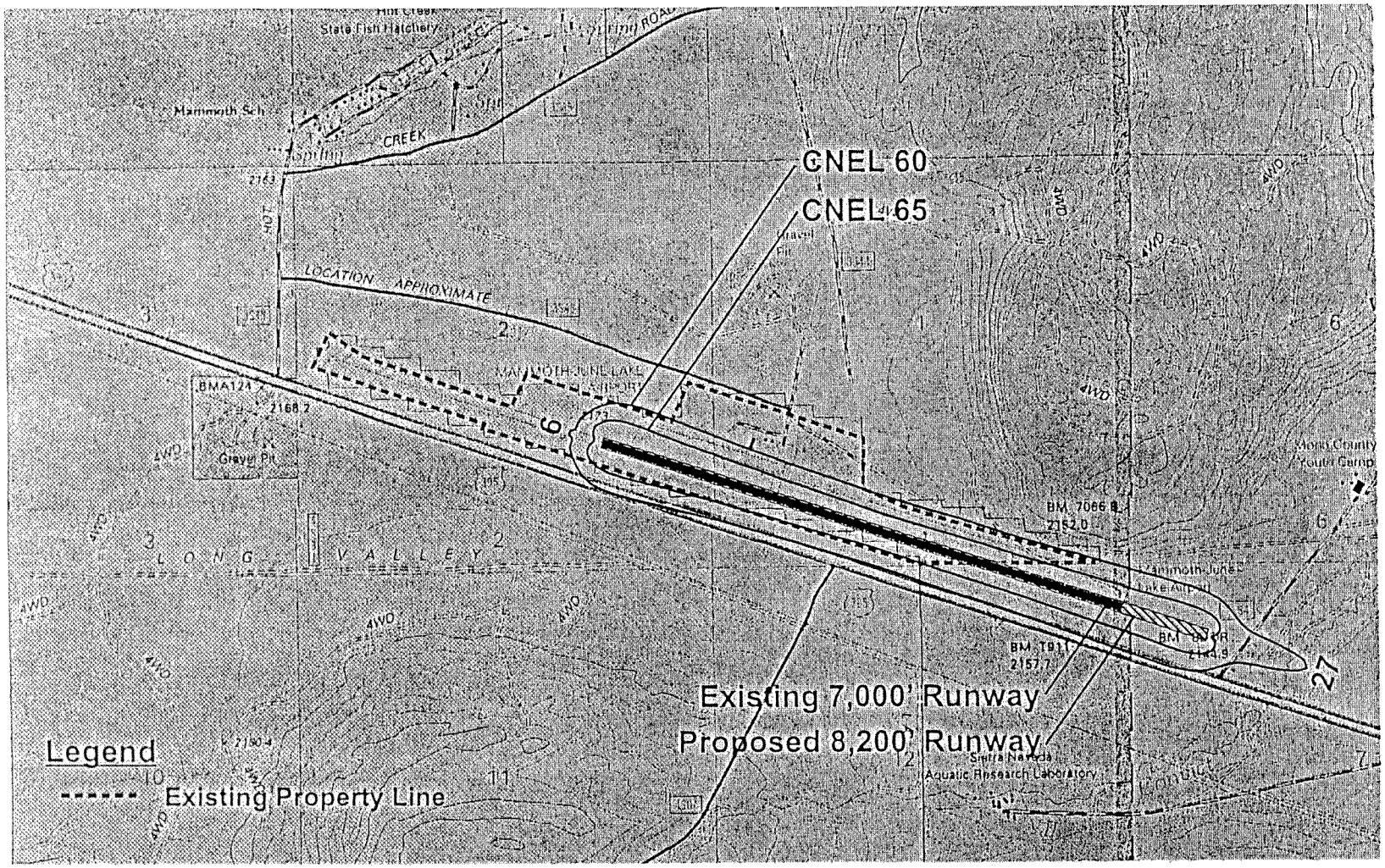


Source: Brown-Buntin Associates, Inc.
Prepared by: Ricondo & Associates, Inc.

Exhibit IV-11

north Scale 1" = 2000'

Alternative 5 (8,200' Runway - Eastward Extension) 2003 Noise Contours



Source: Brown-Buntin Associates, Inc.
Prepared by: Ricondo & Associates, Inc.

Exhibit IV-12

north Scale 1" = 2000'

Alternative 5 (8,200' Runway - Eastward Extension) 2022 Noise Contours

Table IV-4

CNEL Values at Grid Locations

Grid Point	Existing 1999	Alternative (a) 1	2	3	5
2003					
1 – Hatchery-south	38.3	38.8	39.1	39.1	39.1
2 – Hatchery-north	37.5	37.9	38.2	38.3	38.6
3 – Hot Creek Ranch	35.9	36.3	36.5	36.5	36.7
4 – Hot Creek-south	35.6	36.0	36.3	36.2	36.4
5 – Hot Creek-north	33.0	33.4	33.7	33.6	33.7
6 – On-Airport hotel/	49.3	49.7	53.6	52.4	50.9
7 - Sierra Nevada Aquatic Research	30.5	30.9	35.2	35.3	35.1
2022					
1 – Hatchery-south		41.4	42.3	42.3	42.3
2 – Hatchery-north		40.5	41.4	41.5	41.7
3 – Hot Creek Ranch		38.9	39.5	39.5	39.8
4 – Hot Creek-south		38.6	39.3	39.2	39.4
5 – Hot Creek-north		36.0	36.8	36.7	36.9
6 – On-Airport hotel/		52.4	58.8	57.3	55.8
7 - Sierra Nevada Aquatic Research		33.5	41.0	41.0	40.7

CNEL = Community noise equivalent level, in A-weighted decibels.

(a) Alternative 1—7,000-foot runway (no action)
Alternative 2—8,200-foot runway (proposed action)
Alternative 3—9,000-foot runway
Alternative 5—8,200-foot runway, extension to the east

Source: Brown-Buntin Associates, July 2000
Prepared by: Ricondo & Associates, Inc.

In summary, **Table IV-5** shows the area exposed to CNEL 60 to 65 and CNEL 65 and higher for the 1999 operating conditions and each of the alternatives for the forecast 2003 and 2022 operation levels. In terms of environmental impact, the extent of impact is often indicated by the number of people exposed to CNEL 65 and higher. There are no populated areas or other incompatible land uses planned within the areas that would be exposed to CNEL 65 or higher noise exposure areas for any of the alternatives for 2003 or 2022.

The closest potential noise sensitive area is the proposed on-Airport hotel and residential condominium development, which is outside the area exposed to CNEL 60 and higher. The Mono County Noise Element [3-33] and the Town of Mammoth Lakes Noise Element [3-34], in conformance with State Standards, recommends that interior residential noise levels not exceed CNEL 45. Standard building practice in the cold weather mountainous regions will generally reduce noise levels inside the buildings within this area to less than CNEL 45.

AR 001191

Table IV-5

Comparison of Estimated Noise Exposure Areas by Alternative

Noise impact factor	Existing	Alternative *(a)*			
	1999	1	2	3	5
Area exposed (acres)					
2002					
CNEL 65+	39	39	48	48	48
CNEL 65-60	47	47	61	66	61
Total CNEL 60+		86	109	114	109
2022					
CNEL 65+		62	105	110	105
CNEL 65-60		56	105	112	105
Total CNEL 60+		118	210	222	210

CNEL = Community noise equivalent level, in A-weighted decibels.
(a) Alternative 1—7,000-foot runway (no project)
Alternative 2—8,200-foot runway (proposed project)
Alternative 3—9,000-foot runway
Alternative 5—8,200-foot runway, extension to the east

Source: Brown-Buntin Associates, July 2000
Prepared By: Ricondo & Associates, Inc.

All of the commercial development areas, including the on-Airport commercial development areas, SNARL and the planned Sierra Business Park development area, would be located outside the CNEL 65 (and CNEL 60) noise exposure area for all the alternatives. As indicated in Table III-16, commercial uses in these areas would be compatible.

As the proposed project would not result in the exposure of persons to or generation of noise levels in excess of CNEL 60 and indoor noise level greater than CNEL 45. Therefore, the proposed plan does not significantly impact the environment in terms of operational noise.

4.3.8 Public Services and Utilities

There would be no substantial difference between impacts of Alternative 2 (proposed project), 3, 4, and 5 on the environmental category of Public Services and Utilities. These impacts were analyzed for the proposed project in Section 3.8 of this SSEIR.

AR 001192

4.4 Alternatives Previously Considered and Eliminated from Further Consideration

4.4.1 Reasons for Eliminating Alternative 6 - Widen 7,000 Foot Runway

This alternative's runway length, 7,000 feet is not sufficient to meet the project objectives. It is less than the length required by the air carrier that is scheduled to begin operations from Mammoth Lakes to Dallas/Fort Worth and Chicago during the winter season of 2002/2003. Additionally, other major airline hubs (such as Denver, Los Angeles, Houston, and Salt Lake City) have previously been identified as feasible origin and destination points for Mammoth Lakes. Results of the aircraft performance analysis (Appendix E) showed that only very short-range destination cities, such as Denver, Los Angeles, and Salt Lake City, could be effectively served year-round from a 7,000-foot runway. Significant weight penalties for air carrier aircraft serving longer distance destinations could be imposed, making air carrier service unfeasible. As a result of this alternative's failure to provide service to the targeted markets, it would not meet project objectives and was eliminated from further consideration.

4.4.2 Reasons for Eliminating Alternative 7 - Widen the Runway Without Shifting the Runway 25 Feet to the South

Based on the Airport elevation, type of passenger service anticipated, and current airline scheduling plans, the design aircraft selected for Mammoth Yosemite Airport is a narrow body aircraft up to and including Boeing 757-200. The current runway centerline to taxiway centerline separation is 300 feet. The Boeing 757 requires runway centerline to taxiway centerline separation of 312.5 feet. By widening the runway 50 feet on the south side of the runway, thereby shifting the runway centerline 25 feet south, the required runway centerline to taxiway centerline separation would be provided. Widening the taxiway to the north would place the taxiway too close to the east hangars.

Taxiway centerline to a fixed or movable object separation for a Boeing 757 is 97.5 feet. The current taxiway centerline to a fixed or movable object is 90.5 feet. By widening the parallel taxiway 20 feet on the south side and five feet on the north side, the taxiway centerline would be shifted 7.5 feet to the south. This provides a runway to taxiway separation of 317.5 feet and a taxiway centerline to a fixed or movable object (east hangers) of 98 feet. The 317.5-foot runway to taxiway separation protects for both the RSA and Taxiway Safety Area and provides an additional five feet for the airfield drainage system.

This runway location in Alternative 7 would not allow the parallel taxiway to have adequate clearance from the east general aviation hangars, thus precluding the use of the taxiway by Boeing 757 aircraft. Boeing 757 aircraft would have to back taxi on the runway for departure. Air carrier aircraft at other non-hub air carrier airports in the United States perform back taxiing operations on runways, although it is not preferred operating practice and should only be used when other design options are not possible. Because of the inability of this alternative to normally serve the design aircraft, it does not meet the project objectives and was eliminated from further consideration.

4.4.3 Reasons for Eliminating Alternative 8-Develop Another Airport in the Region

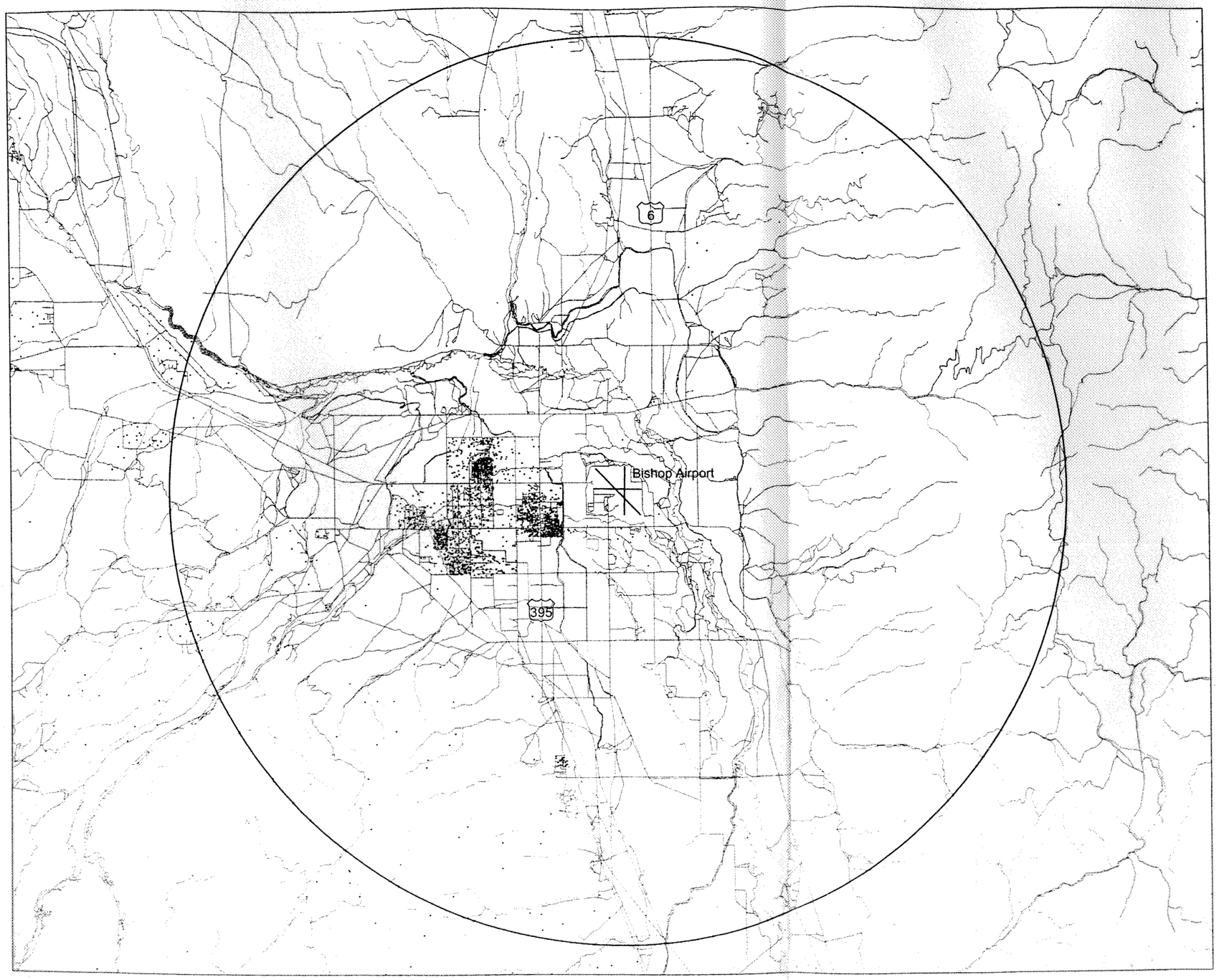
The next closest airfield to Mammoth Lakes is a general aviation airport located at Bishop, California. The distance from Bishop to Mammoth Mountain is about 50 miles, and while the distance from the Mammoth Yosemite Airport to Mammoth Mountain is less than 10 miles. Access from Bishop Airport to regional recreational areas (e.g., Mammoth Mountain) would require drivers to pass through downtown Bishop along a two-lane residential street and through a major downtown intersection. This would generate neighborhood compatibility, traffic and air quality issues in Bishop, which would not result with use of the Mammoth Yosemite Airport. This would be further exacerbated by the fact that skiers (peak season airport users) would be required to travel approximately 50 miles from Bishop to Mammoth Mountain ski areas, versus less than 10 miles with use of the Mammoth Yosemite Airport. the use of Bishop Airport would not only result in downtown vehicular traffic and air quality impacts, but would also contribution to regional vehicular and air quality impacts.

The primary population of Bishop, California is located within one to five miles of the Bishop Airport and much of the population resides directly under the flight path for the east-west runway at the Airport. The primary population of the Town of Mammoth Lakes, Sunny Slopes, and Lake Crowley are all located significantly further away from Mammoth Yosemite Airport and south of the flight path of the Airport's runway. **Exhibits IV-7** and **IV-8** show the general proximity of the populated areas in the vicinities of Bishop Airport and Mammoth Yosemite Airport, respectively. Based on a visual review, there is the potential for greater aircraft noise impacts at Bishop Airport.

Moreover, U.S. Highway 395 between Bishop and Mammoth Lakes has a steep grade making for difficult driving during periods of inclement winter weather, and resulting in occasional additional traffic congestion along the highway.

The airfield at Bishop Airport is currently not certified for FAR Part 139 and there are currently no plans to obtain FAR Part 139 certification in the immediate future. Mammoth Yosemite Airport is already operating under a limited FAR Part 139 certification. The runway length on the longest runway at Bishop would be sufficient to accommodate the aircraft types and markets identified. However, the existing runways and taxiways would have to be widened and strengthened and taxiway and terminal improvements similar to those proposed for Mammoth Lakes would have to be undertaken. Given the time required for planning, engineering, and construction of the required facilities, it is highly doubtful that all of the needed improvements could be accomplished at significantly less cost than the proposed project at Mammoth Yosemite Airport. Without Part 139 certification, the FAA would not allow Bishop Airport to be operated as an air carrier passenger airport. Moreover, the Town of Mammoth Lakes has no control over the development of the Bishop Airport and is uncertain as to whether the air carriers would opt to serve the Mammoth Lakes market from the Bishop Airport.

An early coordination meeting was held with representatives of Bishop on January 31, 2000, and a copy of a letter to the FAA Airports District Office documenting the discussions at that meeting is provided in Appendix D of this SSEIR. Representatives from Bishop indicated their potential plans to attract commuter service to Bishop Airport. The use of Mammoth Yosemite Airport and Bishop Airport would be complementary in nature rather than competitive.



LEGEND

10-Mile Radius

1 Dot = 5 persons

Source: U.S. Census Bureau, 1990 Census
Prepared by: Ricondo & Associates, Inc.

north
0 12,000 Feet

AR 001195

Exhibit IV-13
Bishop Area Population Density Map

RICONDO & ASSOCIATES

LEGEND

- 10-Mile Radius
- 1 Dot = 5 persons

Source: U.S. Census Bureau, 1990 Census
Prepared by: Ricondo & Associates, Inc.

north
0 12,000 Feet

AR 001196

Exhibit IV-14
Mammoth Lakes Area Population Density Map

A further discussion with the Airport Manager at Bishop Airport was held on November 30, 2000. Bishop is planning several airfield maintenance projects and the construction of a 4,900 square foot general aviation terminal. However, the County was not planning on obtaining an FAR Part 139 certification at that time because of the high costs of upgrading the facilities to meet the requirements for commuter operations.

Based upon all of the above reasons, use of Bishop Airport as an alternative was considered to be infeasible and would not meet the project objectives and was eliminated from further consideration.

4.4.4 Reasons for Eliminating Alternative 9 - Use Alternate Modes of Transportation

Visitors would have to fly to either Reno or Los Angeles and drive to the Mammoth Lakes area. This itinerary would not reduce visitor travel time to the region, which the Town of Mammoth Lakes has identified as a problem in attracting new visitors to the region. There are currently no imminent plans to provide high-speed rail from existing airports, such as Reno or Los Angeles, to the Mammoth Lakes area. Based upon the unavailability of certain modes of alternative transportation (high-speed rail) and the inability of other alternative modes (private car and bus) to reduce visitor travel time, this alternative does not meet the project objectives. It was considered the same as the no-project Alternative 1 and was eliminated from further consideration.

4.4.5 Reasons for Eliminating Alternative 10-Develop a New Airport in the Region at a Different Site

The construction of a new airport at a different site in the region to replace or augment Mammoth Yosemite Airport has been considered by Mono County. The reports *Mammoth Lakes/June Lake Airport, Site Selection & Master Plan,* 1978, Wadell Engineering Corporation [4-1], and *Final Environmental Impact Report, Mammoth Lakes Area Airport, Site Selection and Master Plan,* 1975, Wadell Engineering Corporation [4-2], document the evaluations and findings conducted for Mono County. Public workshops were conducted as part of the studies.

Eight potential airport sites were evaluated of which most were eliminated due to excessive earthwork, inaccessibility, rugged terrain, distance from users, and airspace obstructions. Several sites in Long Valley, between Benton Crossing Road and Lake Crowley, were considered potential options with few airspace obstructions and relatively open development areas. However, environmental impacts associated with the development of a new airport within a recreational area, disruption of sage grouse strutting grounds, disruption of wetlands, and other impacts within a natural area were considered "overwhelming." [4-1] It was recommended, and adopted by Mono County, that the existing Airport site be continued to be developed rather than the development of a new airport. As stated in the Final Environmental Impact Report:

> "The existing airport site has been developed in airport use for more than 30 years and is adjacent to State Highway 395 and other improved roads, such that the adverse impacts of airport expansion and development on the natural environment would be significantly less than within the essentially natural setting of the Lake Crowley site." [4-2]

The County adopted plans to continue the development of Mammoth Yosemite Airport and, since then, significant public and private development has occurred at the Airport.

AR 001197

The physical and environmental conditions that existed at the sites evaluated in the previous site selection studies have not changed significantly since the completion of the previous studies. New environmental regulations, however, have been adopted that would make such development of a new airport even more onerous today than at the time of previous studies.

Construction costs would also likely be several times the cost associated with continued development at Mammoth Yosemite Airport. General construction costs for new airport facilities of this size are conservatively estimated to be at least $100 million and could be significantly greater. The U.S. Forest Service, Bureau of Land Management, and Los Angeles Department of Public Works own most of the land at the potential sites. The Town of Mammoth Lakes and Mono County do not have control over the land at the potential new airport sites and significant land acquisition costs could be incurred. Given the time required for the environmental, planning, financial, land acquisition, and construction process, it is likely that a new airport would not be operational for at least five years or more.

Based upon the evaluations previously conducted regarding the development of a new airport in the region and local adopted plans, this alternative was eliminated from further consideration due to the major environmental impacts it will have on any undisturbed site in the region. These impacts would be much larger than any other alternative that would modify the existing Airport facilities to meet the project objectives.

V. Long Term Implications of Proposed Project

The following section describes the long-term effects of the Mammoth Yosemite Airport Expansion Project. These effects are discussed in terms of (1) the relationship between local short-term uses of the environment and the maintenance and enhancement of long-term productivity, (2) irreversible environmental changes which would be involved in the proposed project, if it were implemented, and (3) the growth-inducing impact of the proposed project.

5.1 Relationship Between Local Short-Term Uses and the Maintenance and Enhancement of Long-Term Productivity

This section (1) identifies impacts that narrow the range of beneficial uses of the environment, or pose long-term risks to health or safety, and (2) discusses the justification of implementing the proposed project now, rather than reserving an option for alternatives which may not now be feasible but which may be in the future.

5.1.1 Impacts That Restrict Beneficial Uses of the Environment

As discussed in Section III, environmental impacts of the proposed project are not expected to significantly impact any environmental category. Therefore, no impacts that would restrict beneficial uses of the environment are anticipated to occur.

5.1.2 Justification for Project Implementation

As discussed in Section 1.2, Purpose and Need of the Proposed Project, the current physical and operational condition of Mammoth Yosemite Airport do not meet the project objectives, including airfield and terminal facilities that allow air carrier operations.

5.2 Significant Irreversible Environmental Changes Which Would be Involved in the Proposed Project Should it be Implemented

State CEQA Guidelines § 15126.2 (c) requires discussion of the irreversible changes in the environment should the project be implemented. As stated in the Guidelines, "uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely." Both primary and secondary impacts should be discussed particularly changes that would commit future generations to similar uses. Also irreversible damage can result from environmental accidents associated with the project. This section (1) describes the irretrievable commitment of resources, both in the construction and operation of the proposed project, and (2) discusses irreversible environmental damage that could result from negligent operation or failure of the proposed project's safeguards.

5.2.1 Irretrievable Commitment of Resources

Certain irreversible consequences would result from proposed project activities. These include the following:

- Resources consumed during construction of the proposed project including labor and construction materials such as sheet metal, paints, aluminum, metal insulation, concrete and fossil fuels.

- Resources, materials and labor consumed during the operation of the proposed project's principal uses including fossil fuels; electricity and natural gas; and water.

Implementation of the project will not create a new use of land for Airport purposes, as this use has long been planned at this site. The project will, however, support continued use of the Airport at this location and serve future generations with air passenger service into the region. Primary access to the Airport is via U.S. Highway 395, which is an existing highway and has been committed to this use before the Airport was developed. The project would not alter the purposes or function of the highway in the region.

5.2.2 Potential Irreversible Environmental Damage

As evaluated throughout Section III, environmental impacts of the proposed project, no significant unavoidable adverse environmental damage is anticipated as a result of the Mammoth Yosemite Airport Expansion Project. While extension of the runway by 1,200 feet and widening the runway from 100 feet to 150 feet will pave currently unpaved areas, the unpaved land is already committed to airport use and is not a biologically or otherwise unique or environmentally sensitive area. The site for the package wastewater treatment plant will not be a sensitive habitat for any endangered or threatened wildlife species, for which the loss of this land would reduce the population or availability of flora or fauna in the region. Installation of the package treatment plant is also designed to serve the Airport, thereby avoiding new service demands in the project area associated with the proposed project. Any negligent operation, or failure of industry safeguards that may occur, would do so with or without the proposed project since the Airport is in operation at the project site. Further, any accident or failure in implementation of industry standards are protected from resulting in offsite deleterious effects by the spill prevention plan and the creation of an emergency response plan. Therefore, no irreversible environmental damage as a result of negligent operation or failure of industry safeguards that may occur, can be isolated to the proposed project.

5.3 Growth-Inducing Impact of the Proposed Project

The following section (1) identifies ways in which the proposed project could foster economic or population growth, either directly or indirectly in the surrounding environment, and (2) discusses the characteristics of some projects which may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively.

The State CEQA Guidelines § 15126.2 (d) indicate that growth in and of itself is not necessarily assumed to be beneficial, detrimental or of little significance to the environment. CEQA requires that the EIR discuss ways in which the proposed project could foster economic or population growth, or directly or indirectly lead to the construction of new housing (CEQA Guidelines § 15126.2 (d)).

The Town of Mammoth Lakes is a resort town located in the Eastern Sierra Nevada Mountain Range of California. The region has two major national and international distinct seasonal attractions consisting of skiing in the winter and numerous outdoor recreational activities in the summer.

Since 1995, the Airport has not been served by scheduled commercial air service. By and large, the visitors come to the area either by using other airports such as Reno one of the Los Angeles area airports and then renting an automobile, or by driving to the area from their home.

During the 1980s, Mammoth Mountain Ski Area was one of the leading ski areas in North America. Skier visits during 1985/86 winter season, Mammoth Mountain's peak season, were

just over 1.6 million, which was the highest total in North America for that year. Subsequent years have seen an erosion of Mammoth's market position and a general decline in skier visits. The ski area has generally experienced between 500,000 to 700,000 fewer paid day skier visits compared with its peak 1985/86-year. The decline in the ski area's market position and performance has been based on a number of factors, which include the following:

- In 1986, a change in tax laws with respect to vacation homes largely removed the benefit of renting vacation homes, and Mammoth was not adding public beds.
- In the 1980s, Southern California entered into a recession that particularly affected the defense industry, a very important part of the region's economy. The Southern California region makes up approximately 85 percent of Mammoth Mountain's winter market.
- Drought conditions in the early 1990s and lack of sufficient snow making equipment adversely affected the Resort's image.
- A series of earthquakes in the region also adversely affected the Resort's image.
- Most importantly, the ski area and Town did not change to a destination mountain resort, while many other Colorado and Utah resorts, as well as the Whistler Resort in British Columbia, were undergoing major expansions on their mountains and in their resort villages.

With the arrival of Intrawest, one of the largest resort developers in the North America, as a major shareholder in Mammoth Mountain, the Town of Mammoth Lakes is experiencing substantial changes to both the ski area and to the Town's private and public accommodation base in order to increase tourism to the Region.

In the summer, aside from the domestic tourists, the Region attracts a number of Japanese and European tourists who fly to Los Angeles and drive to Yosemite and other national parks. Tourism to Yosemite, other national parks in the region, and other major recreational and scenic attractions is expected to increase in future years, regardless of whether Mammoth Yosemite Airport provides air carrier jet service or not. Based on statistics provided by Caltrans, approximately 1.5 million summer visitors are attracted to the Mammoth Lakes region yearly. Nearly 6.0 million tourists visited nearby Yosemite and other national parks in the area in 1998.

The growth in tourism of the Mammoth Lakes region is a fact recognized in the Town of Mammoth Lakes General Plan/Mono County General Plan [5-1]. Development is continuing in the Town of Mammoth Lakes with construction beginning on 2,403 new tourist units and 134,000 sq. ft. of new commercial development as well as just completed a new 18-hole golf course. In addition, plans are underway for a $131 million upgrade and renovation to mountain lifts, trails, equipment, and facilities. Other developments, including the Dempsey Corporation's Snowcreek development, also have real estate plans, which add more rooms. Within the next 10 years, it is anticipated that approximately 6,000 units will be developed to accommodate the projected growth in tourism. The growth projections are based upon the Town's marketing program, not development of local air service.

5.3.1 Economic Growth

The introduction of air carrier jet service to Mammoth Yosemite supports the planned tourism and residential growth. The estimated number of passenger enplanements is forecast to increase from 37,000 in 2002 to 333,800 in 2022. It is unknown how much of this increase would still occur if visitors used other airports or modes of transportation.

According to the study done by David A. Hughes & Associates, Ltd., titled *Comparison of Projected Visitor Demand with Proposed Accommodation Buildout at Mammoth Lakes*, July 23, 1999 [5-2], there are sufficient hotel/motel and other facilities to accommodate the projected increase in tourism for at least the next eight years and plans are proposed to provide facilities to accommodate growth beyond these levels. There would also be greater employment opportunities and an increase in sales and property taxes.

5.3.2 Population Growth and Housing

As tourism continues to grow, it is anticipated that more passengers would use the air carrier service at Mammoth Yosemite Airport. Therefore, more employment opportunities would also be generated by the Airport and airlines. At the same time, the increase in tourism would stimulate secondary growth in services offered by the community, such as additional hotels and restaurants, through which more job opportunities would be provided. As a result, more people could eventually move to the Mammoth Lakes area. New housing would have to be built to accommodate the increase in workers in the area. Other than the direct and indirect jobs related to employment at the Airport, the increase in population and housing and expansion of the region's economy would be expected to occur with or without the improvement of the Airport.

Existing land use planning documents for the region include population projections. The projected future population levels with the Mammoth Yosemite Airport improvements are consistent with adopted land use documents, including the Inyo National Forest Land and Resource Management Plan [2-2], the Mono County General Plan [2-3] and the Town of Mammoth Lakes General Plan [5-1].

The Town of Mammoth Lakes has adopted an urban limits policy, designed to limit the expansion of commercial, industrial, and residential development to the immediate vicinity of the existing community. The private uses proposed at the Airport are consistent with the zoning that existed prior to the annexation of the Airport by the Town and constitute a concentrated high-density development.

5.3.3 Land Ownership

The ownership of the land around Mammoth Yosemite Airport is an important factor in determining the long term growth inducing impacts of the proposed project. Most of the area in and around the Town of Mammoth Lakes is already built out, which would not allow the area to grow unchecked. As shown on Exhibit II-2, most of the land surrounding the Airport is in public ownership. There are only three small privately owned parcels of land.

The area north and northwest of the Airport is administered by the USFS and includes the area occupied by the USFS gravel/borrow pit and a portion of the Mammoth Geothermal Project. Two of the three generations of the facility reside on privately held land. The City of Los Angeles owns the land northwest of the Airport, which occupies the abandoned Mammoth Lakes Elementary School and Hot Creek Fish Hatchery. The land on which Hot Creek Ranch lies is privately owned. A large area northeast of the Airport is administered by the BLM and is undeveloped.

The area immediately east and southeast of the Airport is owned by the City of Los Angeles. This land contains the "Green Church," the Whitmore Hot Springs Recreational Area, the Mono County Juvenile Probation Facility, and the Mono County Animal Shelter. The eastern portion of the

Airport, including portions of the runway, is on land owned by and leased from Los Angeles Department of Public Works (LADPW). This land is currently in the process of being acquired by the Town of Mammoth Lakes for Airport use.

The land southeast of the Airport, on which the Caltrans Maintenance Station and Gravel Pit are located, is owned by the BLM. The City of Los Angeles owns the land to the south where SNARL's facilities are located, while the USFS administers the land to the south, which contains the Convict Lake Recreational Area.

The Mono County Sheriff Substation and Mono County Government Center is on land owned by the City of Los Angeles. The second private land parcel just west of the Airport is occupied by the Sierra Quarry.

The vast majority of the land in the vicinity of the Airport is controlled by three public agencies; The Bureau of Land Management, the United States Forest Service, and the City of Los Angeles. In order for the Town of Mammoth Lakes to grow significantly as a result of the Airport expansion or any other factor, development would have to take place on lands now owned or managed by one of these agencies. This would require changes to the current policies of the subject agencies that control the land. This is not considered likely, because these agencies and the Town have been working to decrease existing fragmentation of public land.

5.3.4 Transportation Facilities

Because the project would not induce growth in the region beyond that already expected, and because the project may facilitate a shift from personal vehicles to passenger aircraft, the project has the potential to decrease the rate of increase in the number of trips on the regional roadway system.

The potential for traffic congestion will also be lessened through the provision of the planned bus service between the Airport and Town. At the same time, Mariposa County (Yosemite) and nearby towns have been conducting an extensive national advertising campaign in newspapers and radios emphasizing that the area is safe and a natural wonderland. The U.S. Park Service plans to limit the number of automobiles permitted into Yosemite Valley by providing parking outside the entrance to the Park and using shuttle buses to bring in tourists. To support the U.S. Park Service's efforts to reduce vehicle trips to Yosemite Valley and increase lodging options outside of the park, shuttle bus service from Mammoth Lakes to the valley floor has been initiated in coordination with the Yosemite Area Regional Transportation System.

5.3.5 Conclusion

Mammoth Yosemite Airport accommodates planned growth in and around the Town of Mammoth Lakes by providing a desired transportation alternative. The project would provide beneficial environmental effects by accommodating the forecast growth in accordance with the Town's general policy to improve air quality by reducing vehicular miles traveled through the provision of an alternative to the personal automobile. This forecast growth takes into account the constraints due to limited availability of developable land, which as discussed above, is mostly owned by USFS, BLM, and City of Los Angeles.

VI. Cited References

I-1 *Environmental Impact Report and Environmental Assessment Mammoth/June Lakes Airport Land Use Plan,* State Clearinghouse No. 86060901 (1986 EIR/EA)

I-2 *Mammoth Lakes Airport Expansion Subsequent Environmental Impact Report and Updated Environmental Assessment*, 1997. State Clearinghouse No. SCH 96112089

1-3 *Mammoth Yosemite Airport Expansion Project Final Environmental Assessment,* December 2000.

1-4 U.S. Congress. *Federal Water Pollution Control Act of 1972 (Clean Water Act).* 33 U.S.C. §1251 et seq., 1972.

2-1 Mono County Zoning and Development Code – Title 19

2-2 *Inyo National Forest Land and Resource Management Plan*

2-3 Mono County General Plan

2-4 U.S. Congress. *Clean Air Act Amendments of 1990.* Public Law 101-49, 15 November 1990.

2-5 *California Clean Air Act (CCAA)*, 1988.

2-6 U.S. Congress. *Federal Water Pollution Control Act of 1987.*

2-7 Town of Mammoth Lakes Municipal Code.

2-8 Bishop Resource Management Plan.

3-1 CEGA Guidelines, Appendix G

3-2 Sierra Business Park Specific Plan and Draft EIR

3-3 U.S. Environmental Protection Agency. *General Conformity Final Rule.* 40 CFR Parts 6, 51, and 93, 30 November 1993.

3-4 The Great Basin Unified Air Pollution Control District and the Town of Mammoth Lakes. *Air Quality Management Plan for the Town of Mammoth Lakes.* November 30, 1990.

3-5 U.S. Department of Transportation, Federal Aviation Administration. Advisory Circular 150/5370-10A: *Standards for Specifying Construction at Airports.* February 1989, as amended.

3-6 Comment by Floyd F. Berro on Draft Environmental Assessment, Mammoth Yosemite Airport Expansion Project February, 2001.

AR 001206

3-7 Kucera 1988. *Ecology and Population Dynamics of Mule Deer in the Easter Sierra Nevada*, California. Ph.D. dissertation. University of California as cited in Jones & Stokes Associates. *Biological Study for the Mammoth Lakes Airport Expansion Project*. September 2000. Sacramento, CA. Prepared for Consulting Airport Engineer, Loomis, CA.

3.8 Taylor, T.J. 1988. Migration and seasonal habitats of the Casa Diablo deer herd. California Department of Fish and Game. Bishop, CA. as cited in Jones & Stokes Associates. *Biological Study for the Mammoth Lakes Airport Expansion Project*. September 2000. Sacramento, CA. Prepared for Consulting Airport Engineer, Loomis, CA.

3.9 U.S. Forest Service. *Final environmental impact statement for the Doe Ridge Golf Course.* Bishop, CA. 1990 as cited in Jones & Stokes Associates. *Biological Study for the Mammoth Lakes Airport Expansion Project*. September 2000. Sacramento, CA. Prepared for Consulting Airport Engineer, Loomis, CA.

3.10 Comments by Department of Fish and Game on Draft Environmental Assessment, Mammoth Yosemite Airport Expansion Project. November 2000.

3.11 Thomas, R. 1985. *Management Plan for the Sherwin Grade Deer Herd.* Unpublished report. California Department of Fish and Game. Bishop, CA as cited in Jones & Stokes Associates. *Biological Study for the Mammoth Lakes Airport Expansion Project*. September 2000. Sacramento, CA. Prepared for Consulting Airport Engineer, Loomis, CA.

3.12 Biological Assessment for the Mammoth Yosemite Airport Expansion Project Mono County, California, March 2001.

3.13 Jones & Stokes Associates. *Biological Study for the Mammoth Lakes Airport Expansion Project*. September 2000. Sacramento, CA. Prepared for Consulting Airport Engineer, Loomis, CA.

3-14 Personal Communication with Dr. Robert Gibson (University of Nebraska) March 2001

3-15 Personal Communication with Mr. Mathew Holloran from the University of Wyoming, March 2001, August 2001, and January 2002.

3-16 Remington, T.E. and C.E. Braun. 1991. *How surface coal mining affects sage grouse, North Park, Colorado*. Proceedings, Issues and Technology in the Management of Impacted Western Wildlife. Thorne Ecological Institute 5:128-132.

3-17 Lyon, A.G. 2000. *The potential effects of natural gas development on sage grouse (Centrocercus urophasianus) near Pinedale, Wyoming.* Thesis, University of Wyoming, Laramie, Wyoming, USA

3-18 Jackson Hole Airport Master Plan Update, Environmental Assessment, December 1996, P&D Environmental Services)

3-19 U.S. Department of Transportation. Federal Aviation Administration *FAA Advisory Circular 150/5200-33 Hazardous Wildlife Attractants on or Near Airports*, May 1,1997.

AR 001207

3-20 Taylor, T. 1996 Snowcreek Ski Area Deer Study 1995 Spring and Fall Migration Study Draft Report

3-21 Effects of Aircraft Noise and Sonic Booms on Domestic Animals and Wildlife: Bibliographic Extracts. Galdwin, Manci, and Villella, U.S. Fish and Wildlife Service, 1988.

3-22 Report Congress, Report on Effects of Aircraft Overflights on the National Park System, National Park Service, 1994.

3-23 Effects of Aircraft Noise and Sonic Booms on Fish and Wildlife: Results of Survey of U.S. Fish and Wildlife Service Endangered Species and Ecological Services Field Offices, Refuges, Hatcheries, and research Centres. Galdwin and Asherin, U.S. Fish and Wildlife Service. June 1988.

3-24 Wildlife Strikes to Civil Aircraft in the United States 1990-1999. Cleary, Wright, and Dolbeer, Federal Aviation Admnistration September 2000.

3-25 Personal communication with Brathwaite and Kerchefson. March 2001.

3-26 Grubb and Bowerman 1997

3-27 Baeur Planning & Environmental Services, Sierra Business Park Specific Plan and Draft EIR. Tustin, CA. 2000.

3-28 The California Department of Transportation (CALTRANS). CALTRANS Highway Design Manual.

3-29 TRIAD/HOLMES and Associates. *Mammoth Lakes Airport Water and Sewer Analysis*. 1997.

3-30 Mark Wildermuth. *A Study of the Mammoth Creek/Hot Creek Basin.* 1996 as cited in Town of Mammoth Lakes, *Mammoth Lakes Airport Expansion Subsequent Environmental Impact Report and Updated Environmental Assessment, 1997*

3-31 U.S. Department of Transportation. Federal Aviation Administration. *Airport Environmental Handbook.* Order 5050.4A. Washington, D.C.: GPO 8 October 1985.

3-32 Town of Mammoth Lakes Noise Element. (Section 8.16.090)

3-33 State of California Airport Noise Regulation (CCR Title 21, Subchapter 6).

3-34 Congress FAR Part 150 Noise Compatibility Programs.

3-35 California Department of Transportation, Division of Aeronautics.

3-36 Mono County Noise Element.

AR 001208

3-37 Personal Communication with Terry Russi, BLM.

3-38 U.S. Environmental Protection Agency. *General Conformity Final Rule*. 40 CFR 51, Subparts W; 40 CFR 93, Subpart B. 30 November 1993.

3-39 U.S. EPA document, *AP-42, Compilation of Air Pollutant Emissions Factors, Volume II: Mobile Sources, Fourth Edition (September 1985).*

3-40 Caterpillar *Performance Handbook*

3-41 USEPA document *Non-road Engine and Vehicle Emission Study - Report* (USEPA, November 1991) and subsequent reports.

3-42 *Second Triennial Review of the Assessment of the Impacts of Transported Pollutants on Ozone Concentration in California* prepared by the California Environmental Protection Agency Air Resources Board..

3-43 *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles.* October 2000. California Environmental Protection Agency Air Resources Board.

4-1 *Mammoth Lakes/June Lake Airport, Site Selection & Master Plan,* 1978, Wadell Engineering Corporation

4-2 *Final Environmental Impact Report, Mammoth Lakes Area Airport, Site Selection and Master Plan,* 1975, Wadell Engineering Corporation

5-1 Town of Mammoth Lakes General Plan

5-2 *Comparison of Projected Visitor demand with proposed accommodation buildout at Mammoth Lakes*, July 23, 1999. David A. Hughes & Associates, Ltd.

Appendix A

Mammoth Lakes Airport Mitigation Measures and Mitigation Monitoring and Reporting Plan (1997 SEIR/EA)

This table provides a summary of the proposed mitigation measures. The column labeled Implementation provides the monitoring outline and identifies the entity responsible for assuring implementation and the development or approval stage at which the measure will be implemented.

Potential Impacts	Significance	Mitigation Measures	Implementation
SOILS/LAND TRANSFORMATION Construction Disturbances of local environment including earthwork, dust, noise, and creation of stockpiles and debris.	Not significant with mitigation	All grading and earthwork activities must be conducted in accordance with an approved grading plan and permit issued by the Town of Mammoth Lakes. In addition to the standard conditions required by Town grading regulations, the following measures must be included: a. All earthwork must be conducted in accordance with a detailed project schedule which provides for completion of all work under a given permit in a single season. b. Limits of construction work shall be clearly delineated and disturbances of adjacent soil and vegetation shall be strictly avoided.	Town - Grading Permit Building Permit RWQCB - Grading Permit Building Permit
Increased Erosion from exposed soil surfaces during earthwork operations and after completion of construction. Potential long term visual impacts.	Not significant with mitigation	A drainage and erosion control plan for all major projects shall be required by the Town of Mammoth Lakes. All grading and earthwork shall conform to the requirements of the Regional Water Control Board for erosion and runoff control. Reports of waste discharge shall be prepared as required by the RWQCB. All disturbed areas shall be revegetated and revegetated areas shall be maintained to insure adequate establishment and growth. All temporary and permanent drainage and erosion control facilities shall be periodically inspected and maintained as set forth in the drainage and erosion control plans.	Town - Grading Permit Building Permit RWQCB - Grading Permit Building Permit Town - Grading permit
GEOLOGIC HAZARDS Development of residential projects and public facilities in an area of known seismic and volcanic potential may expose residents and visitors to risk.	Not significant with mitigation	All structures must be designed to meet the requirements of the Town of Mammoth Lakes building regulations and the uniform building code. The Town shall revise its Emergency Management Plan to incorporate the Mammoth Lakes Airport.	Town - Building permit Town - Next plan update, currently in

Potential Impacts	Significance	Mitigation Measures	Implementation Progress
HYDROLOGY/WATER SUPPLY			
There will be an increased demand of up to 60 af/yr on the subsurface water resources.	Not significant with mitigation	Eliminate the golf course from the commercial development plan. A comprehensive water supply, distribution, and storage system shall be developed for the land uses within the A zone. Wells shall be pump tested prior to project development. No commercial development shall be developed until adequate potable water resources are available.	Town - Plan approval Town - Development agreement Building permit
Lowering of groundwater levels may affect spring flows at the Hot Creek Fish Hatchery		No wells will be located closer than 6,000 feet from the fish hatchery springs.	Town - Well approval
WATER QUALITY			
Inadequate control of domestic and industrial (airport) waste may adversely affect the quality of groundwater.	Not significant with mitigation	All waste water treatment and disposal systems shall be designed and maintained in accordance with the requirements of the RWQCB and the Mono County Health Dept. Permits shall be obtained prior to installation of wastewater facilities as required by both agencies. Facilities shall be sized to accommodate maximum projected flows in each phase. A NPDES General Industrial Activities Storm Water Permit will be required for all aviation related facilities. Groundwater sampling wells shall be provided to monitor the performance of the centralized subsurface disposal systems and to assess potential adverse water quality impacts. Sampling shall be performed by the operator of the sewage disposal system with reports submitted to the RWQCB. The size, location and numbers of sampling wells shall conform to RWQCB requirements.	Town - RWQCB - Building permit
Erosion from exposed soil surfaces could result in discharges of sediment to adjacent surface waters.		See SOILS/LAND TRANSFORMATION	Town - RWQCB - Grading permit
Runoff from asphalt roadways and other impervious surfaces contain pollutants which may have adverse water quality impacts on surface streams.		Salt shall not be used for roadway deicing. All development shall conform to the RWQCB requirements for runoff control.	Town - On-going Town - RWQCB - Grading permit
Discharges of significant concentrations of nutrients and/or toxic chemicals from		The golf course shall be eliminated from the Commercial	Building permit

Potential Impacts	Significance	Mitigation Measures	Implementation
large landscaped areas could have long term adverse water quality impacts.		Development Plan. Prior to issuance of any grading or building permits for any of the projects described in the Commercial Development Plan, a fertilizer/pesticide management plan shall be submitted to the Town and RWQCB and approved by both agencies.	Town - Project approval Town - RWQCB - Grading permit Building permit
AIR QUALITY			
Projected expansion of airport operations will result in increased aircraft related pollutant emissions.	Not significant		
Construction activities will generate dust and exhaust emissions resulting in short-term localized air quality impacts.	Not significant with mitigation	All grading and construction shall comply with the requirements of the Great Basin Unified Air Pollution Control District and the Town of Mammoth Lakes Grading regulations.	Town - GBUAPCD - Grading permit
Development in the A zone may increase stationary air pollutant emissions associated with building heating.		All new construction shall comply with the provisions of Town of Mammoth Lakes Air Quality Management Plan.	Town - Building permit
Long term mobile air pollutant emissions arising from automobile traffic and may adversely affect air quality.	Not significant	Streets shall be swept after sorms where cinders or sand are applied as conditions permit.	Town - On-going
VISUAL/AESTHETIC RESOURCES			
Project developments may adversely affect the visual quality of state and local scenic highways. USFS Visual Quality Objective of Retention cannot be met.	Significant	All developments, including signs and grading , within the A zone shall comply with the Town of Mammoth Lakes design review regulations and policies and property maintenance regulations. Earthwork, grading, and vegetative removals shall be minimized. All site disturbances shall be revegetated with plants and landscaping which blend visually with the regional environment. The number and type of on-site signs shall be strictly regulated. Use permits are required for all freestanding signs. All utilities shall be placed underground. Exterior lighting shall be shielded and downward directed and shall be minimized to that necessary for security and safety.	Town - Grading permit Land use approvals Building permit
High winds may distribute trash and litter from airport trash bins.		All developments within the A zone shall have trash receptacles and facilities which are covered. The private developer (lessee) shall conduct daily litter patrols in the vicinity of the gas station	Town - Land use approval conditions, on-

Potential Impacts	Significance	Mitigation Measures	Implementation
		and mini-market.	going
Mass grading and large scale earthwork projects may create long term visual scars.	Not significant with mitigation	Eliminate the cross wind runway and the golf course from the development proposal. All site grading shall be contoured to blend with the existing topography. Removal of vegetation shall be limited to those areas that are to be graded, constructed upon, or landscaped. All grading limits shall be clearly delineated and penalties shall be imposed for earth disturbance or equipment parking outside of identified grading limits in accordance with the Town of Mammoth Lakes grading and civil penalties regulations. All revegetation and landscaping shall be maintained for the life of the project.	Town - Grading permit Land use approvals
BIOLOGICAL RESOURCES Proposed land uses in the Airport zone will result in the loss of less than 50 acres of sagebrush habitat.	Not significant	All of the existing old runway west of the proposed runway extension shall be restored to natural vegetation upon completion of the runway extension. Delete the crosswind runway and golf course from the commercial development proposal. Project grading and construction plans shall avoid disturbance of off site natural areas. (see grading limits above) Development shall take place only between the access road and the runway, except for aviation improvements and signs.	Town - Grading permit Use permit
ARCHAEOLOGICAL/CULTURAL RESOURCES Construction and development activities may disturb or destroy significant or unique archaeological resources.	Not significant with mitigation	Site specific archaeological surveys shall be conducted for all areas not previously surveyed. Sites shall be avoided. If avoidance is not feasible, excavation and testing shall be required.	Town - Grading permit Land use approval
REGIONAL PLANNING AND POPULATION Proposed land uses require modification to the Town of Mammoth Lakes general plan and zoning regulations.	Not significant with mitigation	Development proposal includes general plan and zoning amendments.	Town - Zoning approvals Land use approvals

Potential Impacts	Significance	Mitigation Measures	Implementation
Proposed development will increase existing regional population by providing up to 250 hotel suites or 250 (100 over existing plans) condominium units for new visitors or residents and 100 RV spaces. This represents less than 3.5% of currently available units in the vicinity.	Not significant	None required	
Population growth and development will result in increased human activity and possible disturbance of the natural environment.	Not significant with mitigation	Future development shall be limited to the zones designated for such use. See Town of Mammoth Lakes urban limit policy. Access outside of approved development areas shall be limited to existing improved roadways. Off road vehicle use shall be prohibited within the A zone. Zone land surrounding the airport to conform to new Caltrans airport land use planning recommendations contained in Caltrans Airport Land Use Planning Handbook and height limit zoning to conform to FAR part 77 of the F.A.A.	
EMPLOYMENT/HOUSING			
Airport development will create approximately 108 new jobs with 36 being moderate income or below.	Not significant with mitigation	A housing mitigation fee of $2,000 per completed hotel or condo unit shall be set aside by the developer for construction of twelve 3-bedroom rental units to be affordable at median income rents.	Town - Development agreement
TRAFFIC AND TRANSPORTATION			
Ultimate expansion of airport facilities and land uses designated in the plan will increase automobile traffic within the planning area to 2,560 ADT and 360 VPH.	Not significant with mitigation	Roads will be constructed to the standards of the Town of Mammoth Lakes and Mono County.	Town - Mono County - Grading permit
Projected increases in automobile traffic may create safety hazards and congestion at existing intersections		Timing, design, and construction of required intersection improvements will be determined based upon a traffic analysis to be submitted in conjunction with the first phase of the commercial development plan. Facilities shall be incorporated into the project design to facilitate passenger pick-up and drop-off by buses and taxis.	Town - Caltrans - Conditional use permit Town - CUP/project design

Potential Impacts	Significance	Mitigation Measures	Implementation
NOISE			
Expansion of aircraft operations at the Mammoth Lakes Airport will result in a significant increase in noise levels adjacent to the airport.	Significant	No residential development is permitted within the 65 dB CNEL contour. Non-residential development may be permitted within the 65 dB CNEL contour if structures are soundproofed to limit interior noise levels to 45 dBA. Aircraft hangars and storage areas do not require soundproofing. For the purposes of administering chapter 8.16 of the Municipal Code, the proposed project is determined to be Limited Commercial, Some Multiple Dwellings. All residential structures shall include soundproofing construction to limit interior noise levels according to Chapter 8.16 of the Municipal Code.	Town - CUP Building permit
		Control departure traffic to avoid low level flights over the fish hatchery or the Sierra Nevada Aquatic Research Laboratory. Require Runway 27 departing aircraft to face east or west for engine runups to reduce noise reflection off Doe Ridge towards SNARL. Signing and pilot information shall be provided to discourage engine runup at the eastern 2000 feet of runway 27.	Town - Flight regulation adoption, During FY 1997/8
Aircraft approach and departure patterns over fish hatchery produce significant single event noise exposure to fish hatchery and SNARL. Area of noise impact may increase with commercial jet traffic.		Enforce policy restricting low-level flights over the fish hatchery and SNARL. Delete crosswind runway from the airport layout plan.	Town - Plan adoption
SAFETY AND WELFARE			
Development within the vicinity of the Mammoth Lakes Airport may adversely affect the safety of air navigation and represent hazards to residents and the general public.	Not significant with mitigation	All development within the A zone shall comply with the adopted land use policies plan of the ALUC.	Town - Land use approvals Building permit
Existing emergency assistance and fire protection facilities at the airport are inadequate.		The development of a complete water supply, storage, and distribution system capable of providing adequate fire suppression flows shall be implemented. The system may be phased with development and must meet the requirements of the Long Valley FPD.	Town - LVFPD - First building permit

Potential Impacts	Significance	Mitigation Measures	Implementation
		The church structure located off the east end of the runway shall be relocated to a site designated by the owner of the building within the SNARL compound. The building shall be relocated within one year of receiving the certificate of occupancy for the 200th unit of the condo or hotel.	Town - Runway extension
ENERGY The project will result in an increase in the consumption of energy for heating and lighting.	Not significant	All new construction shall conform to Title 24 of the California Administrative Code.	Town - Building permit
CUMULATIVE IMPACTS In conjunction with projected regional population growth, the proposed airport development will cumulatively contribute to the following environmental impacts:			
Direct loss of wildlife habitat as well as a gradual degradation of habitat value due to construction disturbances and increased levels of human activity.	Not significant with mitigation	Delete crosswind runway from airport layout plan and delete golf course from commercial development plan.	Town - Plan adoption
Increases in runoff from impervious surfaces with attendant waste discharges.	Not significant with mitigation	See Water Quality mitigations.	
Increased demands on groundwater resources within the planning area.	Not significant with mitigation	See Hydrology mitigations.	
A general increase in the emission of pollutants from stationary and mobile sources.	Significant	See Air Quality mitigations.	
Alterations of the foreground view along certain sections of Highway 395 and distant views from the Convict Lake Road.	Significant	See Aesthetic Resources mitigations	

Potential Impacts	Significance	Mitigation Measures	Implementation
General increases in noise and activity levels associated with airport development and additional automobile traffic.	Not significant	See Noise mitigations	
Increased energy consumption for heating and lighting.		See Energy mitigations	

Appendix B – Notice of Preparation

Town of Mammoth Lakes

Community Development Department
P. O. Box 1609, Mammoth Lakes, CA 93546
(760) 934-8983 ext. 225 934-8608 fax

Date: April 13, 2001

RECEIVED
JUL 23 2001
RICONDO & ASSOCIATES

To: Responsible and Trustee Agencies
Interested Parties

From: Bill Taylor, Senior Planner

Subject: Notice of Preparation, Mammoth Yosemite Airport Expansion Project

A Notice of Preparation for the Mammoth Yosemite Airport Expansion Project is attached. Please respond with the scope and content of the environmental information which is germane to your agencies statutory responsibilities in connection with the proposed project.

Post-it® Fax Note 7671	Date	# of pages ▶ 5
To Tom Cornell	From Bill Taylor	
Co./Dept.	Co.	
Phone #	Phone #	
Fax #	Fax #	

Appendix I

NOTICE OF PREPARATION

To: State Clearinghouse
Post Office Box 3044
(Address)
Sacramento, CA 95812-3044

From: Town of Mammoth Lakes
Post Office Box 1609
(Address)
Mammoth Lakes, CA 93546

Subject: **Notice of Preparation of a Draft Environmental Impact Report**

The Town of Mammoth Lakes will be the Lead Agency and will prepare an environmental impact report for the project identified below. We need to know the views of your agency as to the scope and content of the environmental information which is germane to your agency's statutory responsibilities in connection with the proposed project. Your agency will need to use the EIR prepared by our agency when considering your permit or other approval for the project.

The project description, location, and the potential environmental effects are contained in the attached materials. A copy of the Initial Study (☐ is ☒ is not) attached.

Due to the time limits mandated by State law, your response must be sent at the earliest possible date but not later than 30 days after receipt of this notice.

Please send your response to William T. Taylor at the address shown above. We will need the name for a contact person in your agency.

Project Title: Mammoth Yosemite Airport Expansion Project

Project Applicant, if any:

Date April 13, 2001

Signature William T. Taylor

Title Senior Planner

Telephone (760) 934-8989, extension 225

Reference: California Code of Regulations, Title 14, (CEQA Guidelines) Sections 15082(a), 15103, 15375.

THE TOWN OF MAMMOTH LAKES CALIFORNIA

COMMUNITY DEVELOPMENT

P. O. Box 1609 Mammoth Lakes, CA 93546

(760) 934-8989 Ext. 225 Fax (760) 934-8608

Notice Of Preparation

Mammoth Yosemite Airport Expansion Project

Draft Subsequent Environmental Impact Report

The Town of Mammoth Lakes is proposing to construct a series of improvements at Mammoth Yosemite Airport, primarily for the purpose of enabling commercial jet air carriers service to operate at the Airport. The current proposal modifies an earlier airport expansion plan approved by the Town. The principal changes from the project previously approved are a widening of the runway and a revision in the aviation demand forecast decreasing the total number of flight operations and increasing the number of passenger enplanements.

Prior to making many of these improvements, the Town must comply with the California Environmental Quality Act and the Town has determined that it will prepare a Subsequent Environmental Impact Report. The proposed subsequent EIR will be subsequent to the Final Subsequent EIR certified by the Town of Mammoth Lakes in 1997 (SCH 96112089). In addition, pursuant to the CEQA Guidelines governing environmental impact review when a federal agency has already prepared its own environmental review, the new subsequent EIR will rely, in part, on the Final Environmental Assessment for the Mammoth Yosemite Airport Expansion Project (SCH 200034005) prepared for the Federal Aviation Administration. The purpose of the new subsequent EIR, which will be circulated for public review as a draft subsequent EIR is to address changes to the project from the project approved in 1997 and to supplement the Final Environmental Assessment to address the requirements of CEQA.

Commercial airline service to the airport is scheduled to begin during the winter season in 2002/2003, to include air carrier service to and from Dallas/Fort Worth International Airport and other destinations using turbojet aircraft such as the Boeing 757 (B-757-200). Commuter and regional jet aircraft service is also anticipated to other regional markets.

The current airport facilities include a 7,000-foot long by 100 feet wide runway, a parallel taxiway system, general aviation hangars, tie-downs, and support facilities, and limited landside passenger processing facilities. It has been determined that modifications would be required to the airport facilities to comply with Airport Design Standards for current operations and to accommodate the projected air service.

PROPOSED AIRPORT IMPROVEMENTS

The following is a list of the proposed improvements to facilities at Mammoth Yosemite Airport to accommodate air carrier service:

· Strengthen the runway and taxiways to accommodate up to B-757-200 aircraft

· Widen the runway from 100 feet to 150 feet on the south side of the runway, resulting in a shift of the runway centerline 25 feet to the south

· Widen the parallel taxiway from 50 feet to 75 feet—20 feet on the south side and 5 feet on the north side

· Extend the runway 1,200 feet to the west to provide the necessary runway length for air carrier aircraft operations, i.e., the B-757-200

· Extend the parallel taxiway to be consistent with the length of the runway extension

· Add an air carrier apron for three to six air carrier aircraft

· Add a 75-foot wide connecting taxiway to access the air carrier apron area

· Expand the Runway Safety Area (RSA) from 500 feet to 1,000 feet to the east of the runway (required to comply with FAA airport design standards for current operations)

· Improve the security fencing from the existing barbed wire to a 6 to8 foot chain link fence to meet FAA standards

· Develop passenger terminal building facilities

· Construct Airport access road improvements

· Expand the automobile parking lot

· Acquire in fee simple and/or lease of lands owned by the Los Angeles Department of Public Works (LADPW) that currently occupy the future extension of the Runway Safety Area (required to comply with FAA airport design standards for current operations).

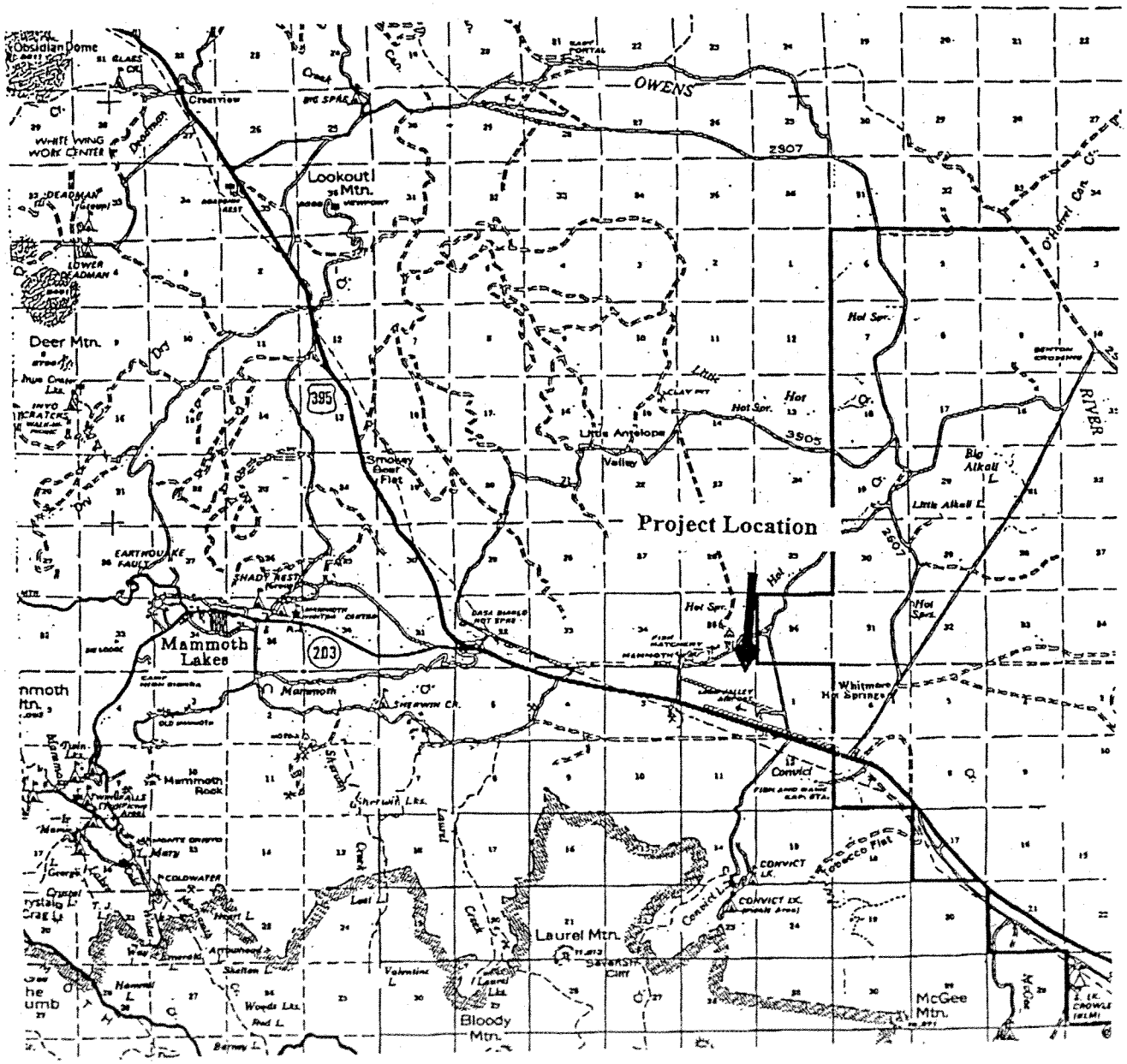
Environmental impacts proposed to be evaluated include possible effects to Threatened and Endangered Species, air quality, sage grouse and mule deer, visual quality, noise, cultural resources, water supply and water quality, traffic and transportation, land use, and cumulative and growth inducing effects.

The airport is located primarily in sections 1 and 2 of Township 4 south, Range 28 east, Mount Diablo Meridian, Mono County, California. It is located to the north of U.S. 395 four miles east of its junction with State Route 203 (see attached map).

MAMMOTH YOSEMITE AIRPORT EXPANSION PROJECT

NOTICE OF PREPARATION

Project Location Map



Notice of Preparation Mailing List

State Clearinghouse
1400 10th Street, Room 108
Sacramento, CA 95814

Dave Wood Ranches
William J. Thomas
25366 W. Dorris
Coalinga, CA 93210

Kathleen Morse
District Ranger
Mammoth Ranger Station
P. O. Box 148
Mammoth Lakes, CA 93546

Earth Justice
Bruce Nilles
180 Montgomery Street
San Francisco, CA 94104

Scott Burns
Community Devel. Director
County of Mono
P. O. Box 347
Mammoth Lakes, CA 93546

Sandy Hesnard
Environmental Planner
Caltrans – Division of Aeronautics
1120 "N" Street; Room 3300
Sacramento, CA 94274

Ellen Hardebeck, PhD
Air Pollution Control Officer
Great Basin Unified APCD
157 Short Street, Suite 6
Bishop, CA 93514

Ed Tallyn
Soil Scientist
Natural Resource Conservation Service
136 Edward Street
Bishop, CA 93514

Steve Addington, Field Office Mngr.
Bureau of Land Management
Bishop Field Office
N. Main Street, Suite E
Bishop, CA 93514

Lahontan RWQCB
Doug Feay
15428 Civic Drive, Suite 100
Victorville, CA 92392-2494

Friend of Yosemite Valley
Gregory M. Adair
P. O. Box 702
Yosemite, CA 95389

Peggy Temple
City of Corona, Planning Dept.
815 W. 6th Street
Corona, CA 92882

Duane Ono
Deputy Air Pollution Control Officer
Great Basin Unified APCD
157 Short Street
Bishop, CA 93514

Gary Myers
Southern Mono Health Care District
P. O. Box 660
Mammoth Lakes, CA 93546

Denyse Racine
Environmental Specialist III
Dept. of Fish & Game, Region 6
407 West Line Street
Bishop, CA 93514

Dan Dawson, Director
Univ. of Calif., Santa Barbara
SNARL
Route 1, P. O. Box 198
Mammoth Lakes, CA 93546

Gene Coufal
City of Los Angeles
Dept. of Water & Power
P. O. Box 51111
Los Angeles, CA 90051

Reinard Bradley
Consulting Airport Engineer
6125 King Road, Suite 201
Loomis, CA 955650-8004

Mr. Terry Russi, Biologist
Bureau of Land Management
785 N. Main Street, Suite E
Bishop, CA 93514

Rich Boardman
Dept. of Public Works
County of Mono
P. O. Box 457
Bridgeport, CA 93517

Draft Supplement to Subsequent Environmental Impact Report Distribution list

State Clearinghouse
Room 108
1400 10th Street, Room 121
Sacramento, CA 95814

Steve Addington, Field Office Mngr.
Bureau of Land Management
Bishop Field Office
N. Main Street, Suite E
Bishop, CA 93514

Lahontan RWQCB
Doug Feay
15428 Civic Drive, Suite 100
Victorville, CA 92392-2494

Elisha Novak
Federal Aviation Administration
831 Mitten Rd.
Burlingame, CA 84010

Kathleen Morse
District Ranger
Mammoth Ranger Station
P. O. Box 148
Mammoth Lakes, CA 93546

Friend of Yosemite Valley
Gregory M. Adair
P. O. Box 702
Yosemite, CA 95389

Scott Burns
Community Devel. Director
County of Mono
P. O. Box 347
Mammoth Lakes, CA 93546

Duane Ono
Deputy Air Pollution Control Officer
Great Basin Unified APCD
157 Short Street
Bishop, CA 93514

Sandy Hesnard
Environmental Planner
Caltrans – Division of Aeronautics
1120 "N" Street; Room 3300
Sacramento, CA 94274

Gary Myers
Southern Mono Health Care District
P. O. Box 660
Mammoth Lakes, CA 93546

Ellen Hardebeck, PhD
Air Pollution Control Officer
Great Basin Unified APCD
157 Short Street, Suite 6
Bishop, CA 93514

Denyse Racine
Environmental Specialist III
Dept. of Fish & Game, Region 6
407 West Line Street
Bishop, CA 93514

Ed Tallyn
Soil Scientist
Natural Resource Conservation Service
136 Edward Street
Bishop, CA 93514

Dan Dawson, Director
Univ. of Calif., Santa Barbara
SNARL
Route 1, P. O. Box 198
Mammoth Lakes, CA 93546

Gene Coufal
City of Los Angeles
Dept. of Water & Power
P. O. Box 51111
Los Angeles, CA 90051

Reinard Bradley
Consulting Airport Engineer
6125 King Road, Suite 201
Loomis, CA 955650-8004

AR 001228

Mr. Terry Russi, Biologist
Bureau of Land Management
785 N. Main Street, Suite E
Bishop, CA 93514

Rich Boardman
Dept. of Public Works
County of Mono
P. O. Box 457
Bridgeport, CA 93517

Carolyn Yee
Caltrans District 9
500 South Main Street
Bishop, CA 93514

Diane K. Noda
Ventura Fish and Wildlife Service
2493 Portola Rd., Suite B

Deanna Dulen, Superintendent
Devils Postpile National Monument
P.O. Box 3999
Mammoth Lakes, CA 93546

Chip Jenkins
Yosemite National Park
P.O. Box 577
Yosemite. CA 95389

Trent Orr
Earthjustice
180 Montgomery Street, Suite 1725
San Francisco, CA 94104-4209

Janill Richards, Deputy Attorney General
1515 Clay Street, 20th Floor
Oakland, CA 94612-1413

AR 001229

Responses to Comments on Draft Supplement to Subsequent Environmental Impact Report
Distribution list

The Responses to Comments were distributed to the following State Agencies who commented on the Draft SSEIR. The responses to comments were sent on 22nd February, 2002, 10 days prior to the Lead Agency decision on certification of the SSEIR.

State Clearinghouse
Room 108
1400 10th Street, Room 121
Sacramento, CA 95814

Lahontan RWQCB
Doug Feay
15428 Civic Drive, Suite 100
Victorville, CA 92392-2494

Sandy Hesnard
Environmental Planner
Caltrans – Division of Aeronautics
1120 "N" Street; Room 3300
Sacramento, CA 94274

Dan Dawson, Director
Univ. of Calif., Santa Barbara
SNARL
Route 1, P. O. Box 198
Mammoth Lakes, CA 93546

Carolyn Yee
Caltrans District 9
500 South Main Street
Bishop, CA 93514

Janill Richards, Deputy Attorney General
1515 Clay Street, 20th Floor
Oakland, CA 94612-1413

Darrell Wong
Department of Fish & Game
Eastern Sierra-Inlands Desert Region
Bishop Field Office
407 W. Line Street
Bishop, CA 93514

Appendix C – Scoping Comments

The Town of Mammoth Lakes received nine comment letters in response to the Notice of Preparation (NOP).

Agency	Date	Contact Person
California Department of Transportation, District 9	May 16, 2001	Carolyn Yee
California Department of Transportation, Division of Aeronautics	May 8, 2001	Sandy Hesnard
Mono County, Department of Public Works	April 16, 2001	Rich Boardman
Native American Heritage Commission	April 26, 2001	Rob Wood
California Regional Water Quality Control, Lahontan Region	May 16, 2001	Douglas E. Feay
California Department of Fish and Game, Eastern Sierra-Inland Deserts Region	May 11, 2001	Steve Parmenter
United States Forest Service, Inyo National Forest	May 18, 2001	Kathleen S. Morse
United States Fish and Wildlife Service	May 21, 2001	Diane K. Noda
National Park Service, Devils Postpile National Monument	May 24, 2001	Deanna M. Dullen

E OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY GRAY DAVIS, Governor

:PARTMENT OF TRANSPORTATION
:TRICT 9
SOUTH MAIN STREET
HOP, CA 93514-3423
ne (760) 872-1214
(760) 872-0678
(760) 872-9043

May 16, 2001

Mr. William T. Taylor, Senior Planner
Town of Mammoth Lakes
PO Box 1609
Mammoth Lakes, California 93546

File: 09-MONO
NOP DEIR
SCH #: 2000034005

REF: NOTICE OF PREPARATION (NOP) ON THE MAMMOTH YOSEMITE AIRPORT EXPANSION PROJECT (AKA MAMMOTH LAKES AIRPORT EXPANSION PROJECT) DRAFT SUBSEQUENT ENVIRONMENTAL IMPACT REPORT (DSUBSEQUENT EIR) FOR THE TOWN OF MAMMOTH LAKES (APRIL 2001)

Dear Mr. Taylor:

The California Department of Transportation (Caltans) appreciates the opportunity to review and comment on the Notice of Preparation concerning the Mammoth Yosemite Airport Expansion Project Draft Subsequent Environmental Impact Report for the Town of Mammoth Lakes (Town).

To date, we are still awaiting a complete response that will fully address all of our public safety and traffic concerns for this proposed project along and near U.S. Highway (Hwy) 395. These concerns were stated within our previous correspondence to you dated, November 13, 2000 for the Draft Environmental Assessment and May 21 & 26, 2000 for the Notice of Intent to Prepare an Environmental Assessment. Please incorporate the aforementioned concerns when you respond to this comment letter.

Caltrans recommends that the Town continues to coordinate and consult with the Federal Aviation Administration (FAA), U.S. Fish and Wildlife Services (FWS), Caltrans Division of Aeronautics, Caltrans District 9 in Bishop, and the California State Department of Fish and Game (DF&G). We need to continue to work cooperatively to address all issues that may impact our transportation corridors during all stages of planning, design, and construction on this proposed project to ensure that all traffic safety and quality standards are met on State facilities. After review of this NOP DSUBSEQUENT EIR and the Final Environmental Assessment (FEA) dated December 2000, the following additional concerns need to be addressed during the first construction phase for this proposed project.

- Daily enplanements must be limited to a maximum of 702 passengers. This number must be actual and not based upon any average. If this number is exceeded at any time, a revisit concerning traffic impact remediation alternatives must be initiated immediately (i.e. interchange).
- The new Airport Road access must be constructed to connect both Hot Creek Hatchery Road and Benton Crossing Road from the east/back side of the airport facility for emergency and traffic mitigation measures.
- The Convict Lake access must be eliminated an a conforming/standard Caltans perimeter fence installed. If the two (2) adjoining Mono County (County) roads are inaccessible during an emergency situation(s), the emergency vehicle(s) can run over State right-of-way property and complete replacement and/or repair work at the County's own cost within one week of the incident.
- The U.S. Hwy 395 south and Hot Creek Hatchery Road intersection must have its left turn pocket lengthened to meet the Highway Design Manual standards, Topic (See Enclosure A).
- A traffic and deer monitoring program needs to be developed and implemented. It should be coordinated, reviewed, and approved by Caltrans, DF&G, and FWS.
- Collection of Developer Fees Fund needs to be established, implemented and deposited into a revolving account for future, traffic impact mitigation alternatives (i.e. interchange, channelization devices, etc.).
- An interchange alternative must be implemented if there are any additional developments near or north of this vicinity or increased enplanement over the established maximum number of 702 passengers per day. This and any other future traffic mitigation measures must be paid for through the established Revolving Developer Fees Fund by the Town.

If any of the aforementioned remediation measures are unable to be implemented due to extenuating circumstances, the following traffic impact mitigation alternatives need to initiated.

- The US Hwy 395 north and Hot Creek Hatchery Road intersection must have a left turn pocket installed to address traffic impacts going south.
- The US Hwy 395 north intersection at Hot Creek Hatchery Road must have a right deceleration lane and right acceleration lane installed entering and exiting into the airport facility grounds

Please continue to forward copies of reports on this proposed project for our review, comments, and records. If you have any questions, please contact me at (760) 872-1492. We look forward in continuing to work with you in a cooperative manner.

Sincerely,

CAROLYN YEE
IGR/CEQA Coordinator

Attachment / Enclosure

c: Jerry Gabriel
Ralph Cones
Nancy Escallier
Brian Mc Elwain
Robert A. Wiswell
Bill Costa
Ron Helgeson
State Clearinghouse: Brian Grattidge
Janill L. Richards, California State Department of Justice
Darrell M. Wong, California State Department of Fish & Game
Diane K. Noda, U.S. Fish & Wildlife Service
Elisha Novak, Federal Aviation Administration
William Manning, Mammoth Lakes Airport

DEPARTMENT OF TRANSPORTATION
DIVISION OF AERONAUTICS M.S. #40
1120 N STREET - ROOM 3300
P.O. BOX 942874
SACRAMENTO, CA 94274-0001
(916) 654-4959
FAX (916) 653-9531

May 8, 2001

Mr. William Taylor
Town of Mammoth Lakes
P.O. Box 1609
Mammoth Lakes, CA 93546

Dear Mr. Taylor:

Re: *Notice of Preparation (NOP) for Proposed Improvements at Mammoth Lakes Airport: SCH# 2000034005*

The California Department of Transportation (Caltrans) Division of Aeronautics has reviewed the above-referenced document with respect to CEQA. The current proposal modifies an earlier airport expansion plan that was approved by the Town of Mammoth Lakes.

According to the NOP, the proposed improvements at Mammoth Lakes Airport are needed to allow the airport to support air carrier service. Since the improvements will include a runway extension, the Division of Aeronautics will require an amended State Airport Permit. The airport will not be allowed to have commercial service until the Caltrans Division of Aeronautics has issued an amended permit. For assistance with the permit requirements, the applicant should contact the Acting Chief of the Division of Aeronautics, Austin Wiswell. The plans to lengthen, strengthen and widen the runway and extend the taxiways should also be submitted to Mr. Wiswell for review.

As part of the amended permit process, we must ensure that the proposal is in full compliance with CEQA. In addition to reviewing the NOP, we will also require copies of the Draft and Final EIRs and the Notice of Determination should the project be approved. The Draft EIR should address potential airport-related noise and safety impacts associated with the project. The proposal should also be submitted to the Mono County Airport Land Use Commission (ALUC).

Thank you for the opportunity to review and comment on this proposal. We look forward to reviewing the Draft EIR. If you have any questions regarding our comments, please call me at 916/654-5314.

Sincerely,

Sandy Hesnard

SANDY HESNARD
Environmental Planner

c : State Clearinghouse, Mono County ALUC

RICHARD BOARDMAN
Director of Public Works
EVAN NIKIRK
ssistant Director of Public Works
STEVE ANDERSON
Road Operations Manager
SUSAN ARELLANO
Administrative Assistant

County of Mono
Department of Public Works

Post Office Box 457 • 74 North School Street • Bridgeport, California 93517

TELEPHONE
(760) 932-5252
(760) 932-5253
FACSIMILE
(760) 932-76
monopw@qnet

April 16, 2001

Mr. Bill Taylor, Senior Planner
Town of Mammoth Lakes
Community Development Department
PO Box 1609
Mammoth Lakes, CA 93546

Re: NOP Mammoth Yosemite Airport Expansion Project

Dear Bill,

Mono County presently maintains the 2 primary access roads serving the Mammoth Yosemite airport. I would hope the Draft EIR would include a comprehensive traffic analysis concerning potential impacts to the existing road system. Should the project be proposing any additional road improvements that will impact other County roads, I would hope you would include those improvements in your analysis.

I would request that you include the County Public Works Department on your project mailing list. Thanks for the opportunity to identify my concerns. Should you have additional questions feel free to give me a call.

Sincerely,

Rich Boardman

Rich Boardman, Director

C: Scott Burns, Community Development Director

STATE OF CALIFORNIA — Gray Davis, Governor

NATIVE AMERICAN HERITAGE COMMISSION
915 CAPITOL MALL, ROOM 364
SACRAMENTO, CA 95814
(916) 653-4082
(916) 657-5390 - Fax

April 26, 2001

William T. Taylor
Town of Mammoth Lakes
P.O. Box 1609
Mammoth Lakes, CA 93546

RE: SCH# 2000034005 – Mammoth Yosemite Airport Expansion Project

Dear Mr. Taylor:

The Native American Heritage Commission has reviewed the above mentioned NOP. To adequately assess the project-related impact on archaeological resources, the Commission recommends the following actions be required:

- ✓ Contact the appropriate Information Center for a records search. The record search will determine:
  - Whether a part or all of the project area has been previously surveyed for cultural resources.
  - Whether any known cultural resources have already been recorded on or adjacent to the project area.
  - Whether the probability is low, moderate, or high that cultural resources are located within the project area.
  - Whether a survey is required to determine whether previously unrecorded cultural resources are present.
- ✓ If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
  - The report containing site significance and mitigation measurers should be submitted immediately to the planning department.
  - The site forms and final written report should be submitted within 3 months after work has been completed to the Information Center.
- ✓ Contact the Native American Heritage Commission for:
  - A Sacred Lands File Check.
  - A list of appropriate Native American Contacts for consultation concerning the project site and assist in the mitigation measures.
- ✓ Provisions for accidental discovery of archeological resources:
  - Lack of surface evidence of archeological resources does not preclude the existence of archeological resources. Lead agencies should include provisions for accidentally discovered archeological resources during construction per California Environmental Quality Act (CEQA) §15064.5 (f).
- ✓ Provisions for discovery of Native American human remains
  - Health and Safety Code §7050.5, CEQA §15064.5 (e), and Public Resources Code §5097.98 mandates the process to be followed in the event of an accidental discovery of any human remains in a location other than a dedicated cemetery and should be included in all environmental documents.

If you have any questions, please contact me at (916) 653-4040.

Sincerely,

AR 001238

Rob Wood
Associate Governmental Program Analyst

CC: State Clearinghouse

Vinston H. Hickox
Secretary for Environmental Protection

California Regional Water Quality Control Board

Lahontan Region

Gray Davis
Governor

Victorville Office
Internet Address: http://www.swrcb.ca.gov/rwqcb6
15428 Civic Drive, Suite 100, Victorville, California 92392
Phone (760) 241-6583 • FAX (760) 241-7308

May 16, 2001

FILE No.: 6B26S003680

William T. Taylor
Town of Mammoth Lakes
Airport Manager
P.O. Box 1609
Mammoth Lakes, CA 93546

COMMENTS ON THE NOTICE OF PREPARATION (NOP) FOR MAMMOTH YOSEMITE AIRPORT EXPANSION PROJECT, STATE CLEARINGHOUSE (SCH) NO. 2000034005, MONO COUNTY

The California Regional Water Quality Control Board staff (Board staff) on April 16, 2001, received documentation detailing the Town of Mammoth Lakes intention to prepare a new draft Environmental Impact Report (DEIR) for the Mammoth Yosemite Airport Expansion Project. Board staff has the following comments.

1. **Project Description**

Previous DEIR documents addressed mitigation measures relating to different parts of the proposed airport expansion but did not evaluate those areas as one project or evaluate the cumulative impacts for all proposed changes (airport commercial development plan). The NOP documentation dated April 2001 states that the project description has changed, but as before does not list all the proposed changes. The new project description (April 2001) is stated as encompassing the runway expansion plus the total number of flights and increased number of passenger enplanements. As stated in our March 2000 comments, Board staff believes that the DEIR must address all aspects of the airport expansion. If it does not then there can be no accounting for cumulative impacts. Cumulative impacts on the site environment from the proposed restaurant, condominiums, and hotel need to be addressed in the DEIR.

2. **Water Quality**

Both surface and ground water quality issues in the airport expansion area are of paramount importance. Water in this region supports fish hatcheries, recreation, municipal water supply, agriculture and many other beneficial uses. The cumulative effect on water quality due to development can be significant. Potential impacts to water quality from daily operation of the restaurant, condominiums, hotel and airport along with pumping of ground water for daily uses and unforeseen events such as spills must be evaluated in the new DEIR on an individual basis as well as on an cumulative effect basis.

3. Previous Comments

Board staff has written three letters of comment, March 6, 2001 (SCH. NO. 2001022028), March 23, 2000 (SCH. NO. 200034005), and November 8, 2000 (No SCH. NO.) regarding the Mammoth Airport expansion project. Issues discussed in the three letters are:

- environmental site assessment regarding past site contamination;
- wetlands site assessment;
- construction and industrial stormwater runoff system must be adequately designed to handle higher runoff during times of greater than 20-year storm;
- septic system impacts;
- hazardous material storage and spill issues;
- evaluation of potential overdraft and recharge (water balance), as it relates to protection of beneficial uses; and
- alteration of stream or drainage course(s).

We request the issues above be addressed in the new DEIR. We have enclosed a copy of the three letters for your reference.

We would be happy to discuss any of these issues further with you. If you have any questions, please contact me at (760) 241-7353, or Cindi Mitton at (760) 241-7413.

Sincerely,

Douglas E. Feay

Douglas E. Feay
Associate Engineering Geologist

Enclosures:
1. Letter dated March 6, 2001
2. Letter dated March 23, 2000
3. Letter dated November 8, 2000

cc: Mailing List

DF/rc/Y:\Doug\Final\NOP2001MamAirpt.doc

MAILING LIST
MAMMOTH LAKES AIRPORT EXPANSION PROJECT

J.S. Army Corp of Engineers
.325 "J" Street
Sacramento, CA 95814-2922

Inyo National Forest
873 N. Main Street
Bishop, CA 93514

U.S. EPA – Region 9
75 Hawthorne Street
San Francisco, CA 94105

Darrell Wong
Department of Fish and Game
407 W. Line St.
Bishop, CA 93514

Dennis Lampson
Mono County Health Department
P.O. Box 476
Bridgeport, CA 93517

Mono County Planning
P.O. Box 347
Mammoth Lakes, CA 93546

Jnited States Forest Service
Pacific Southwest Region
.323 Club Drive
Vallejo, CA 94592

State Clearinghouse
P.O. Box 3044
Sacramento, CA 95812-3044

Jim Kuykendahl
SWRCB – CWP
1001 "I" Street, 17th Floor
Sacramento, CA 95814-2828

Tim Thomas
National Fish and Wildlife Service
122 E. Main, Suite 202
Barstow, CA 92311

Janill L. Richards
Deputy Attorney General
Department of Justice
1515 Clay Street, 20th Floor

Elish Novak
F.A.A.
831 Mitten road
Burlingame, CA 94818-1301

Great Basin
Air Pollution Control District
157 Short Street, Ste. 6
Bishop, CA 93514-3537

:mailist

California Regional Water Quality Control Board
Lahontan Region

Victorville Office
Internet Address: http://www.swrcb.ca.gov/rwqcb6
15428 Civic Drive, Suite 100, Victorville, California 92392
Phone (760) 241-6583 • FAX (760) 241-7308

Gray Davis
Governor

on H. Hickox
Secretary for
Environmental
Protection

March 6, 2001

FILE No.: 6A26S314760

State Clearinghouse
P.O. Box 3044
Sacramento, CA 95812-3044

COMMENTS ON THE MITIGATED NEGATIVE DECLARATION, STATE CLEARINGHOUSE (SCH) NO. 2001022028, HOT CREEK CONDOMINIUMS, MAMMOTH YOSEMITE AIRPORT EXPANSION PROJECT, MONO COUNTY

The California Regional Water Quality Control Board (Regional Board) staff has reviewed the Mitigated Negative Declaration (Neg. Dec.) for the proposed construction of 188 condominiums at the Mammoth Yosemite Airport Expansion Project. The Town of Mammoth Lakes submitted the Neg. Dec. on February 7, 2001. Regional Board staff has the following comments.

General Comments

The proposed Airport Expansion Project includes 188 condominiums, a hotel, restaurant, and sewage treatment facility. The expansion-site consists of five lots for the proposed airport expansion. Lots one to three are designated for the proposed construction of the 188 condominiums in three phases of construction. Lot four is reserved for the future hotel and restaurant. Lot five is the location for the sewage treatment facility. This Neg. Dec. addresses only the environmental concerns associated with the 188 condominiums. Included in the proposed 188 condominiums will be a day care center, recreational areas, parking areas, and ten stormwater retention basins for infiltration of stormwater. The hotel, restaurant, and sewage treatment facility are not addressed in this Neg. Dec.

Specific Comments

The Neg. Dec. should include evaluation of the potential impacts associated with the proposed hotel, restaurant, and sewage treatment facility. Potential impacts of the development associated with the airport expansion should be evaluated for an analysis of cumulative impacts and for the proposed mitigation to be evaluated in the framework of the entire proposed airport expansion.

The following specific comments address only those questions in Section 8, on page 8 (a-f, below), that address areas regulated by the Regional Water Quality Control Board.

Section 8 (a) Violate any water quality standards or waste discharge requirements.

The lead agency (Town of Mammoth Lakes) responded with Less Than Significant Impact due to construction of a sewage treatment facility. The lead agency did not include what mitigation measure would be used at the sewage treatment facility to prevent water quality standards from being violated. The package treatment plant should provide secondary sewage treatment with supplemental nitrate reduction. Monitoring of ground water quality using permanent monitoring wells should also be provided. The proponent should be aware that a complete Report of Waste Discharge for the package treatment plant needs to be filed with Regional Board staff at least 120 days prior to plant construction.

Water quality standards related to stormwater runoff and infiltration need to be addressed. Stormwater from parking areas should be treated to make the stormwater of acceptable quality for infiltration. Treatment measures such as oil/water separators and hydrocarbon filters could be implemented. Some type of sampling devices should be installed that allows sampling of stormwater prior to infiltration and after treatment. Best Management Practices (BMPs) such as not allowing oil changes and/or car maintenance on-site could also be used to mitigate potential water quality impacts.

The issue of waste discharge related to construction activities has not been addressed. As part of the airport stormwater construction permit (6B26S310411), the project proponent is required to develop and implement a Stormwater Pollution Prevention Plan (SWPPP) for all construction activities. The SWPPP is subject to review by Regional Board staff. The Regional Board will require submittal of grading/drainage and erosion control plans as part of the SWPPP. We request the project proponent contact Regional Board staff to discuss the proposed grading/drainage plans.

During construction, dewatering water cannot be discharged into any drainage, stream or wetlands area. Such discharges may require a discharge permit from the Regional Board, as the dewatering water has the potential to contain pollutants. We recommend dewatering water be discharged to land if a suitable land location exists, provided ground water samples do not indicate ground water has been impacted by pollutants. Dewatering water must be contained and not cause a nuisance.

Once mitigation measures related to above mentioned issues are incorporated into the proposed project in the Neg. Dec. then the finding of "Less than Significant with Mitigation Incorporated" would be appropriate.

Section 8 (b) Substantially degrade ground water supplies or interfere substantially with ground water recharge such that there would be a net deficit in aquifer volume or a lowering of the local ground water table level (e.g., the production rate of preexisting nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?

The lead agency responded with the fact that two wells and a water storage tank are located on-site and that the usage of on-site wells will not impact the Convict Creek drainage area or Hot Creek hatchery. They also stated that the 1997 Environmental Impact Report (EIR) previously evaluated the impact to ground water and that the impact would be minimal.

Regional Board staff requests applicable data from the 1997 impact evaluation also put in the Neg. Dec. The 1997 EIR did not include the results of a water balance study or other study to support the above conclusion. The water balance study would take into account all imports and exports of surface and ground water and the effect on the ground water basin. In addition, the airport managers should keep careful records of volumes pumped from ground water and volumes recharged to ground water. A water balance calculation should be done annually and the results reported to Regional Board staff for evaluation. The water study should evaluate any potential impacts to wetlands or water quality of surface waters from the proposed use at the airport. If an overdraft should occur corrective measures can be implemented before sever damage is done to the ground water quality.

Section 8 (c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on or off-site?

The lead agency responded with a Less Than Significant Impact. The lead agency pointed out that the site is flat and there will be no streams or rivers impacted by the project. They stated that all stormwater would remain on-site. Regional Board staff agrees with this assessment.

Section 8 (d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or surface runoff in a manner which would result in flooding on or off the site.

The lead agency referred to the comment in part (c) above. As long as all the stormwater remains on-site then statement (c) above would be accurate.

Section 8 (e) Create or contribute runoff which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.

The lead agency responded with Less Than Significant Impact. The stormwater system has been designed for a 20-year storm. However, plans should be in-place to manage stormwater above the design capacity of the system. Additionally, there will be an overflow swale constructed to accommodate any additional runoff, which would prevent stormwater from leaving the site. The stormwater runoff will be treated using BMPs. However, the project as proposed did not list BMPs that will be used to treat stormwater. The proposed project must include the mitigation measures that will be implemented for stormwater treatment and management.

Section 8 (f) Otherwise substantially degrade water quality?

The lead agency referenced part (a) for the response to this question. Please refer to our comments under part (a) above.

If you have any questions, please contact me at (760) 241-7353, or Cindi Mitton at (760) 241-7413.

Sincerely,

Douglas E. Feay
Associate Engineering Geologist

cc. David S. Hickson, Assoc. Planner
The Town of Mammoth Lakes
P.O. Box 1609
Mammoth Lakes, CA 93546

DF/rc/HotCkMthAiPtNEGDEC.doc

California Regional Water Quality Control Board
Lahontan Region

Victorville Office
Internet Address: http://www.mscomm.com/~rwqcb6
15428 Civic Drive, Suite 100, Victorville, California 92392
Phone (760) 241-6583 • FAX (760) 241-7308

A. H. Hickox
Secretary for
Environmental
Protection

Gray Davis
Governor

March 23, 2000

FILE: 6B26S003680

Mr. Bill Manning-Airport Manger
Town of Mammoth Lakes
Mammoth Lakes Airport
Route 1 Box 209
Mammoth Lakes CA. 93546

COMMENTS ON NOTICE OF INTENT TO PREPARE AN ENVIRONMENTAL ASSESSMENT (EA) FOR PROPOSED IMPROVEMENTS AT MAMMOTH LAKES AIRPORT, INYO COUNTY, SCH# 2000034005

California Regional Water Quality Control Board Lahontan Region Board staff (Board staff) has reviewed the Notice of Intent to Prepare an Environmental Assessment (EA) for Proposed Improvement at Mammoth Lakes Airport submitted by Mono County. The purpose of the Notice of Intent is to solicit any specific concerns or issues that should be addressed in the EA. Board staff has the following comments.

Project Summary

The Notice proposed the following airport improvements:

- Strengthen the runway and taxiways to accommodate up to B-757-200 aircraft.
- Widen the runway from 100 feet to 150 feet on the south side of the runway, resulting in a shift of the runway centerline 25 feet to the south.
- Widen the parallel taxiway from 50 feet to 75 feet—20 feet on the south side and 5 feet on the north side.
- Extend the runway 1,200 feet to the west to provide the necessary runway length for desired air carrier aircraft operations, i.e., the B-757-200.
- Extend the parallel taxiway to be consistent with the length of the runway extension.
- Add an air carrier apron for the three to six air carrier aircraft.
- Add a 75-foot wide connecting taxiway to access the air carrier apron area.
- Add turn buttons at the runway ends to permit back-taxiing on the runway during the initial phase of development.
- Expand the Runway Safety Area from 500 feet to 1000 feet to the east of the runway (required to comply with FAA airport design standards for current operations).
- Improve the security fencing from the existing 6 feet to 8 feet in height to meet FAA standards.

- Develop passenger terminal building facilities.
- Construct Airport access road improvements.
- Expand the automobile parking lot.
- Acquire in fee simple and/or lease lands owned by Los Angeles Department of Water and Power (LADWP) that currently occupy the further extension of the Runway Safety Area (required to comply with FAA airport design standards for current operations)

Specific Comments

The Board staff has the following specific comments:

1. **Environmental Site Assessment**
   Batchelor Environmental Services requested data from the Lahontan Water Board for the Mammoth Lakes Airport in a letter dated May 3, 1999. The data was for a Level 1 Site Investigation at the airport. Board staff would like a copy of that site investigation and requests that information from the site Investigation be included in the EA.

2. **Wetland Impacts**
   The Environmental Impact Report (EIR) dated March 1997, contained a Wetland Survey and Special-Status Species report by Jones and Stokes Associates dated March 16, 1995. Board staff requires notification by the Army Corps of Engineers that they have reviewed the study. If a permit is required (Construction Permit) by the Army Corps of Engineers, Board staff will need a copy of that permit. It should be noted that the 1995 Wetlands Survey might need to be updated to conform to current Army Corps of Engineer requirements for Wetlands.

   If any portion of the project involves fill or disturbance of wetland areas, the project proponent must also file an application with the Regional Board.

   The widening of the eastern end of the current runway may impact wetlands. In addition, the access road located at the eastern end of the airport may have been constructed in wetlands. If any work has already occurred in wetland areas, appropriate mitigation must be incorporated into the project.

   Board Staff requests the Jones and Storkes report be submitted to the Department of Fish and Game for review. The Department of Fish and Game has a local office in Bishop California.

3. **Stormwater Runoff and Other**

As stated in your Subsequent Environmental Impact Report (EIR) data March of 1997 under section E. Drainage, "soils throughout the Mammoth Lakes Airport consist of sands, gravel's, and boulders.....soils are very pervious and drainage water readily infiltrates into the ground". Also stated in the same section was "Future development will carry stormwater from the development area.....where it will be allowed to infiltrate and recharge the existing ground water". Given that ground water is very shallow (approximately 15 feet below ground surface), there is a potential for ground water contamination by stormwater runoff, which may contain hydrocarbons or other contaminants from daily airport operations, wash water and spills. In 1991 a gravel pit south of the current airport location was found to contain ground water that had been contaminated by hydrocarbons. Consideration must be given to methods that prevent contamination and/or remove contamination from stormwater runoff before the runoff is allowed to infiltrate into the soil. We request that such control measures be incorporated into the proposed project.

4. **Septic System Impacts**

The EIR (March 1997) proposed to mitigate the impact of domestic and industrial waste discharge by a centralized sewage collection, treatment and disposal system at the airport. Due to the proposed high volume of sewage flow (53,260 gpd for proposed condominiums, restaurant, and other facilities), highly permeable soils and shallow ground water, any disposal of sewage water would require the sewage to be treated to secondary level for ground water disposal via infiltration and tertiary level for surface water disposal.

5. **Hazardous Materials and Under Ground Storage Tanks**

Increased airport capacity will require increased fuel storage, hazardous materials usage and fire fighting materials. The impact of the additional hazardous materials to the site should be addressed in the EA. The proposed should include appropriate mitigation measures such as development and implementation of a spill prevention, contaminant and clean-up plan.

6 **Project Description**

It is unclear why the project description to be evaluated by the EA under the National Environmental Policy Act (NEPA) process is different than the project evaluated by the California Environmental Quality Act (CEQA) process. The EA should include a description of the entire project, and describe the relationship between the 1997 EIR and the proposed EA. The EA must evaluate cumulative impacts from all proposed activities associated with the project.

Thank you for the opportunity to review the Notice of Intent. We look forward to working with the town to develop Mammoth Lakes Airport.

If you have any questions, please contact me at (760) 241-7353, or Cindy Mitton at (760) 241-7413.

Sincerely,

Douglas E. Feay

Douglas E. Feay
Associate Engineering Geologist

Cc: U.S. Army Corp of Engineers
1325 J. St.
Sacramento, CA 95814-2922

EPA District #9
75 Hawthorne Street
San Francisco, CA 94105

Department of Fish and Game
ATTN: Darrell Wong
407 W. Line St.
Bishop, CA 93514

Mono County Health Department
PO Box 476
Bridgeport, CA 93517

Mono County Planning
PO Box 347
Mammoth Lakes, CA 93546

United States Forest Service
Pacific Southwest Region
1323 Club Drive
Vallejo, CA 94592

California Regional Water Quality Control Board
Lahontan Region

n R. Hickox
cretary for
Environmental
Protection

Victorville Office
Internet Address: http://www.swrcb.ca.gov/rwqcb6
15428 Civic Drive, Suite 100, Victorville, California 92392
Phone (760) 241-6583 • FAX (760) 241-7308

Gray Davis
Governor

November 8, 2000

FILE No.: 6B26S003680

William Manning
Town of Mammoth Lakes
Airport Manager
P.O. Box 1609
Mammoth Lakes, CA 93546

COMMENTS ON THE DRAFT ENVIRONMENTAL ASSESSMENT (DEA) FOR MAMMOTH YOSEMITE AIRPORT EXPANSION PROJECT, MONO COUNTY

The California Regional Water Quality Control Board staff (Regional Board staff) has reviewed the DEA for the Mammoth Yosemite Airport Expansion Project submitted by the Town of Mammoth Lakes on October 10, 2000. Regional Board staff has the following comments.

General Comments

Regional Board staff submitted comments on the Notice of Intent to prepare an Environmental Assessment to the Town of Mammoth Lakes on March 23, 2000. The specific comments below evaluate the DEA with respect to addressing our remarks contained in the March 23, 2000 letter. In addition, comments are provided regarding any new information contained in the DEA that was not part of the Notice of Intent.

Specific Comments

1. **Environmental Site Assessment**

Appendix H of the DEA contains a Level I Site Investigation prepared by Batchelor Environmental Services. The site investigation is dated May 17, 1999. Batchelor reported that several underground tanks were removed from the airport prior to construction of the new hangers. The report states that testing indicated hydrocarbon contamination of subsurface soil. Also stated is that there was no impact to ground water. However, Regional Board staff could not find any ground water data. Ground water must be sampled and analyzed to demonstrate that there is no impact. Before the ground water is sampled, Regional Board staff requests review and approval of the sampling plan. If it is found that ground water has been impacted by hydrocarbons, then a remedial plan will need to be submitted to Regional Board staff for review.

2. **Wetland Impacts**

Appendix G contains a report by Jones and Stokes entitled "Biological Study for the Mammoth Lakes Airport Expansion Project, Mono County." The report states that no

wetlands were identified in the project area. However, "the dry meadow in the eastern portion of the project study area supported a prevalence of hydrophilic species and exhibited a primary hydric soil indicator (a low chroma of 1), primary and secondary hydrological indicators were not observed." The conclusions made by Jones and Stokes were based on the March 16, 1995 wetland study. Regional Board staff previously requested that this study be provided to the Army Corps of Engineers for determination of jurisdictional wetlands. Regional Board staff could find no evidence that this report was reviewed by the Army Corp of Engineers. The area at the eastern end of the runway has ground water at six-feet below the ground during spring runoff. We request that the Town of Mammoth Lakes provide the previously requested determination, or a new wetlands study will be required before runway expansion can be undertaken.

3. **Stormwater Runoff**

Section 5.6.3, Mitigation Measures, contains proposed measures to reduce the impact of stormwater runoff on ground water and surface water. Mitigation measures propose collection of all surface runoff for the aircraft parking apron, automobile parking lot, and terminal roadway. The collected runoff will be piped to an oil/water separator for treatment. The oil/water separator should be equipped with a port for sampling the discharge. Once the oil is separated from the water the resultant water will then be allowed to infiltrate into the ground. The pavement for the runway and taxiways would be allowed to infiltrate without treatment by the oil/water separator. Regional Board staff has evaluated the potential for adverse impact of the proposed activities in the runway and taxiways and it does not appear that the potential impact would be significant provided that these areas are only used for taxi and takeoff. Any change in use, such as parking of aircraft or support equipment, would subject these areas to the same requirements for collection and treatment of runoff as discussed for other areas.

Regional Board staff requests to review the spill prevention, containment, and cleanup plan to insure adequate protection for all areas. There should be a description of the spill prevention, containment and cleanup plan included in the DEA.

4. **Septic System Impacts**

Section 5.6.3, Mitigation Measures, proposes the use of a package treatment plant to provide secondary sewage treatment with supplemental nitrate reduction. In addition, it is proposed to monitor ground water quality using monitor wells. Regional Board staff concurs with this proposed mitigation measure. A Report of Waste Discharge (RWD) needs to be filed with the Regional Board.

5. **Hazardous Materials and Under Ground Storage Tanks**

Section 5.19, Solid Waste/Hazardous Waste, states that there are no new hazardous materials storage areas proposed for the expansion project. Existing fuels are stored in above ground tanks. All underground tanks have been removed or abandoned in place. While there is no proposed increase of hazardous materials storage areas, there will be an increase in hazardous

materials usage at the site. Increased usage of hazardous materials (increased airport activity) increase the potential of contamination to surface waters and/or ground water. See comment three above regarding including a discussion of a spill prevention, containment, and cleanup plan in the DEA.

6. **Project Description**

The DEA document addresses mitigation measures relating to the runway expansion but does not, for the most part, evaluate cumulative impacts (Section 5.23) for all proposed changes (airport commercial development plan). The DEA states that the airport commercial development plan was evaluated in 1997 as part of the Environmental Impact Report (EIR) and that the DEA will only address issues related to the runway expansion. Regional Board staff recommends there be a summary included in the project description that lists the conclusion of the 1997 EIR.

7. **Construction Activities**

As part of the airport NPDES construction permit (6B26S310411), the project proponent is required to develop and implement a Storm Water Pollution Prevention Plan (SWPPP) for the runway construction. The SWPPP is subject to review by the Regional Board staff. The Regional Board will require submittal of grading/drainage and erosion control plans as part of the SWPPP. We request the project proponent contact Regional Board staff to discuss the proposed grading/drainage plans.

During construction, dewatering water cannot be discharged into any drainage, stream or wetlands area. Such discharges may require a discharge permit from the Regional Board, as the dewatering water has the potential to contain pollutants. We recommend dewatering water be discharged to land if a suitable land location exists, provided ground water samples do not indicate ground water has been impacted by pollutants. Dewatering water must be contained and not cause a nuisance.

If you have any questions, please contact me at (760) 241-7353, or Cindi Mitton at (760) 241-7413.

Sincerely,

Douglas E. Feay

Douglas E. Feay
Associate Engineering Geologist

cc: Mailing List

DF/rc/final/MamothaiprtEA.doc

MAILING LIST

U.S. Army Corp of Engineers
1325 "J" Street
Sacramento, CA 95814-2922

U.S. EPA – Region 9
75 Hawthorne Street
San Francisco, CA 94105

Darrell Wong
Department of Fish and Game
407 W. Line St.
Bishop, CA 93514

Dennis Lampson
Mono County Health Department
P.O. Box 476
Bridgeport, CA 93517

Mono County Planning
P.O. Box 347
Mammoth Lakes, CA 93546

United States Forest Service
Pacific Southwest Region
1323 Club Drive
Vallejo, CA 94592

State Clearinghouse
P.O. Box 3044
Sacramento, CA 95812-3044

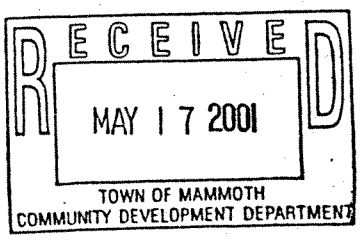
Jim Kuykendahl
SWRCB – CWP
1001 "I" Street, 17th floor
Sacramento, CA 95814-2828

Inyo National Forest
873 N. Main Street
Bishop, CA 93514

STATE OF CALIFORNIA - THE RESOURCES AGENCY

GRAY DAVIS, *Governor*

DEPARTMENT OF FISH AND GAME
Eastern Sierra-Inland Deserts Region
Bishop Field Office
407 W. Line Street
Bishop, CA 93514
(760) 872-1171



May 11, 2001

Mr. William T. Taylor
Senior Planner
Town of Mammoth Lakes
Community Development Department
P.O. Box 1609
Mammoth Lakes, CA 93546

Notice of Preparation
Draft Subsequent Environmental Impact Report
Mammoth Yosemite Airport Expansion Project
Mono County

Dear Mr. Taylor,

The Department of Fish and Game (Department) has reviewed the Notice of Preparation (NOP) to Prepare a Draft Environmental Impact Report (EIR) for proposed Improvements at Mammoth Yosemite Airport. The Town of Mammoth Lakes is proposing to construct a series of improvements at Mammoth Lakes Airport, primarily for the purpose of enabling commercial jet air carriers service to operate at the Airport. The current proposal modifies an earlier airport expansion plan approved by the Town. The principal changes from the project previously approved are a widening of the runway and a revision in the aviation demand forecast decreasing the total number of flight operations and increasing the number of passenger enplanements. Proposed improvements included strengthening the runway and taxiways to accommodate up to B-757-200 aircraft, widening the runway from 100 feet to 150 feet, widening the parallel taxiway from 50 feet to 75 feet, extending the runway 1,200 feet to the west, extending the parallel taxiway to be consistent with the runway extension, addition of an air carrier apron, addition of a 75-foot wide connecting taxiway, expansion of the Runway Safety Area (RSA) from 500 feet to 1,000 feet, improvement of security fencing from 6 feet to 8 feet, development of passenger terminal building facilities, construction of airport access road improvements, expansion of the automobile parking lot, and acquisition of lands owned by the Los Angeles Department of Public Works.

The Department is providing comments on this NOP as the state agency which has the statutory and common law responsibilities with regard to fish and wildlife

resources and habitats. California's fish and wildlife resources, including their habitats, are held in trust for the people of the State by the Department (Fish & Game Code section 711.7). The Department has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and the habitats necessary for biologically sustainable populations of those species (Fish & Game Code section 1802). The Department's fish and wildlife management functions are implemented through its administration and enforcement of the Fish and Game Code (Fish & Game Code Section 702). The Department is a trustee agency for fish and wildlife under the California Environmental Quality Act (see CEQA Guidelines, 14 Cal. Code Regs. Sec. 15386(a)). The Department is providing these comments in furtherance of these statutory responsibilities, as well as its common law role as trustee for the public's fish and wildlife.

The Department has written comment letters addressing the Environmental Assessment (EA) and Finding of No Significant Impact (FONSI) prepared by the Federal Aviation Administration for this project dated March 16, 2000, November 14, 2000, January 8, 2001, and April 19, 2001. Our previous comments still apply, and these letters are hereby incorporated by reference into this letter.

Potential environmental impacts from the proposed project which could affect the quality of the human environment include, but are not necessarily limited to, increased noise and adjacent use impacts to Department hatchery operations and residences at the Hot Creek Fish Hatchery; direct loss of important wildlife habitat for mule deer, sage grouse, and mountain lion; indirect impacts to sage grouse foraging and nesting habitat and leks; increased mortality to sage grouse as a result of project fencing; disturbance to deer migration areas and increased road kills from project-related facilities and operation; disruption of seasonal foraging areas and patterns for raptors including bald and golden eagle, northern harrier, American peregrine falcon, Swainson's hawk, prairie falcon, American kestrel, red-tailed hawk, ferruginous hawk, rough-legged hawk, and other raptors; disturbance to nesting waterfowl and other aquatic and riparian birds; alteration in the quantity or quality of surface or ground water, including impacts to spring flow, habitat for Owens tui chub, and domestic water supply for Fish Hatchery residences.

To enable our staff to adequately review and comment on the proposed project, we recommend the following information be included in the Draft EIR:

1. A complete assessment of the flora and fauna within and adjacent to the project area, with particular emphasis upon identifying endangered, threatened, and locally unique species and sensitive habitats. All assessments must be completed using protocols and methodologies approved by the Department and U.S. Fish and Wildlife Service (USFWS). Assessments must be completed at appropriate times of the year and during appropriate survey hours.

a) A thorough assessment of rare plants and rare natural communities, following the Department's May 2000 Guidelines for Assessing Effects of Proposed Projects on Rare, Threatened, and Endangered Plants and Natural Communities (Attachment 1).

b) Biological surveys of the project site should be conducted during the appropriate seasons of the year to detect presence of species which occupy the site both year-round and seasonally. This should include surveys for mammals, amphibians, reptiles, resident and migratory raptors, waterfowl and songbirds which may utilize the area. Focused species-specific surveys, conducted at the appropriate time of year and time of day when sensitive species are active or otherwise identifiable are also required. A complete assessment of sensitive wildlife species winter, spring and summer use should be addressed. Species-specific survey protocols should be developed in consultation with the Department and the USFWS. Measures should be identified to provide protection of existing habitat, or mitigation proposed for project impacts to these species and their associated habitat areas.

c) Rare, threatened and endangered species to be addressed should include all those which meet the California Environmental Quality Act (CEQA) definition. (See CEQA Sec. 15380.) Surveys for these species must be conducted using approved methodologies in coordination with the Department and the USFWS. All persons conducting the surveys must have the required permits from the resource agencies. In particular, those species listed in Tables 1 and 2 of the Owens Basin Wetland and Aquatic Species Recovery Plan should be discussed.

d) The Department's California Natural Diversity Data Base in Sacramento should be contacted 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.

e) The EIR should discuss the use of the airport and surrounding vicinity by wintering bald and golden eagles, and migratory raptors. The Hot Creek, Laurel Pond, and Crowley Lake areas support the highest concentrations of wintering eagles in the Eastern Sierra, based on data collected over the last 10 years.

2. A thorough discussion of direct, indirect and cumulative impacts expected to adversely affect biological resources, with specific measures to offset such impacts.

a) Project impacts should also be analyzed relative to their effect on off-site habitats and populations. Specifically, this should include nearby public lands, open space, adjacent natural habitats and riparian ecosystems. Impacts to and maintenance of wildlife corridor/movement areas should be fully evaluated and provided.

b) The proposed project has the potential to have a negative impact on the Round Valley Deer Herd and the Casa Diablo Deer Herd. The document should discuss the project's conformance with the Deer Herd Management Plans which have been prepared by the Department. The document should thoroughly discuss the potential disturbance to the deer herd resulting from increased noise, lights, airplane and vehicle traffic, and any other impacts associated with the project. This should further include an analysis of the potential for the project to force deer away from the area during migration periods and any resultant increase in deer highway fatalities. The document should offer proven and effective measures for reducing or eliminating impacts to the deer herd. We believe that the discussion of impacts to mule deer and absence of mitigation measures in the 1997 Subsequent EIR did not adequately address the impacts to this resource.

The deer fencing and mitigation plan should be developed by the responsible agencies and included in the EIR. The fence design and location should also be coordinated with Caltrans, as well as with the Department and the U.S. Forest Service. Analysis of deer migration corridors indicates that it may be necessary to construct one or more underpasses for migrating deer under Highway 395. Fencing along both sides of Highway 395 to funnel deer to the underpasses may also be necessary. A solution to the problem of deer crossing Highway 395 at Hot Creek Road must also be developed.

The EIR should contain a detailed and specific mitigation plan for loss of deer habitat. The revegetation plan should describe the size of the mitigation area, schedule for implementation and completion, responsible parties, sources of vegetative material, a monitoring plan, and success criteria. This mitigation site should also not be assumed to be adequate for impacts to sage grouse. As we have discussed, sage grouse may be impacted on leks, wintering areas, nesting areas or all. The deer mitigation site could potentially serve as mitigation for sage grouse wintering areas, but would not be suitable mitigation for impacts to sage grouse lekking areas and nesting habitat.

c) The Department believes that the proposed project also has the potential to have a negative impact on sage grouse. This species has undergone rapid population declines throughout its range, including Long Valley. Discussion of impacts to this species was inadequate in the 1997 SEIR. Guidelines for sage grouse management and development within sage grouse habitat were developed in January, 2000, by BLM, Idaho Department of Fish and Game, and Colorado Division of Wildlife and should be used to assist in the analysis of impacts to sage grouse. BLM biologists in Bishop are also presently conducting radio-telemetry research on the Long Valley sage grouse population, and results of this research should also be used in the EIR.

Populations of sage grouse have declined by up to 47% throughout much

of its range (Connelly 2000). The development of roads, powerlines, fences, reservoirs, ranches, farms and housing developments has resulted in sage grouse habitat loss and fragmentation. Structures such as powerlines and fences post hazards to sage grouse because they provide additional perch sites for raptors, and sage grouse may be injured or killed when they fly into these structures (Connelly 2000).

Recent genetic investigations performed by Dr. Tom Quinn's lab at Denver University indicate that the Long Valley sage grouse population is one of a small number of populations in Mono County and Lyons County, Nevada, that are genetically differentiated from sage grouse populations elsewhere (Dr. Robert Gibson, pers comm). Maintaining genetic diversity is a key concept in maintaining viable populations of all species. These preliminary results argue for the careful analysis of any land use which could potentially impact the viability of the Long Valley sage grouse population. If the Long Valley sage grouse population drops below a viable level, there are no other genetically similar birds with which to simply repopulate the area. The Long Valley population appears to be isolated from the only other substantial population in Mono County (Bodie Hills). The Long Valley population's size seems to be very sensitive to increased mortality. This population has not rebounded from reduced hunting pressure over the last 5 years. The reason is unknown, but it highlights the vulnerability of this population. (R. Gibson, pers comm.)

The areas adjacent to the airport, and particularly within the proposed flight path, are of concern. The area to the east of the airport and north of US 395 includes critical areas of winter, breeding and summer habitat for sage grouse. Aircraft may disturb birds on leks. Grouse almost invariably leave when small planes fly over the leks in Long Valley (R. Gibson pers comm). Aircraft may also disturb flocks of sage grouse that use this area in winter and early spring. Radio-telemetry data show that this area is a key area during this time of year when areas further north and west are under deep snow. Under such conditions sage grouse are potentially more easily located by predators than at other times because snow cover restricts usable habitat. For birds that rely on inactivity and cryptic coloration to escape detection by raptors, the potential consequences of repeated disturbance under such circumstances should be apparent (R. Gibson, pers comm). That is, it is highly likely that repeated disturbance could result in significantly higher predation rates, and therefore, significant declines in the population. The irrigated meadows around Convict Creek between the airport and Crowley Lake are a major foraging area for sage grouse in summer. The birds spend the day in the adjacent sagebrush. These birds are also threatened with disturbance in association with the proposed flight path. The area north and west of the airport (across Hot Creek) includes important nesting and lekking areas (especially Lek #8 which has been one of 2 major leks in the valley in the last 2-3 years). These birds are also vulnerable to disturbance associated with aircraft noise.

Sage grouse often fly low when moving short distances. Cattle fences have been a problem around Lek #2 because they intercept birds moving between

feeding/roosting and lekking sites. Collisions presumably occur in the dark or at very low light levels at dusk and dawn which is when sage grouse mostly fly around. Data show that sage grouse will abandon leks found in close proximity to overhead transmission lines and power poles, which provide perches for raptors and ravens who prey on adult grouse, eggs and chicks.

The EIR should discuss impacts of peak noise on sage grouse. The noise discussion in the EA uses a method that evaluates average noise levels. It also uses a standard that is based on human tolerance for noise levels. The analysis in the EIR should focus on the peak noise associated with aircraft landings and takeoffs, and analyze how this noise will affect sage grouse on their wintering areas, nesting areas, and breeding areas (leks). The analysis should include projected air traffic levels in the year 2022. Based on our review of the submitted information, and current scientific knowledge regarding sage grouse in Long Valley, we continue to believe that the proposed change in operations at the airport could have significant impacts on sage grouse in Long Valley. Researchers have documented that overhead disturbances cause sage grouse to remain motionless for significantly longer periods than lateral disturbance (dogs, people). Ongoing research in Northern California has documented abandonment of leks by sage grouse due to the presence of overhead transmission lines. Sage grouse are sensitive to overhead disturbance, even without the noise factor, because they are preyed upon by avian predators such as golden eagle and bald eagle.

The Department had proposed earlier that an effective mitigation measure could be to restrict the use of the flight corridor during the display period (mid-March through mid-May) to between the hours of mid-morning to late afternoon. In a meeting on November 29, 2000, the Town of Mammoth Lakes indicated it would not restrict the air carriers' hours of operations. However, the Supplemental Information to the EA states that disturbance to grouse is not likely if flights are at mid-day when birds would be away from the leks. The Department continues to believe that disturbance to sage grouse resulting in significant impacts to the Long Valley population could occur without these seasonal restrictions on operating hours.

The Supplemental Information provided with the EA cites information collected from a sage grouse lek located at the Jackson Hole Airport. The two situations may not be comparable because the information provided does not indicate the level of use of the Jackson Hole Airport, the type of aircraft, the hours of operation, the effects on female sage grouse, or long-term effects on the population. The data collected at Jackson Hole did not include data on female sage grouse. Although male sage grouse continue to strut at the airport, no information has been collected on nest initiation rates by females, or on distances females move to establish nests. These factors could play a role in the long-term fate of the Long Valley sage grouse population.

d) The EIR should address potential impacts to bald eagle, a state and federal listed species. As we have stated in our earlier comments, the Hot Creek, Crowley, and Laurel Pond areas surrounding the airport support concentrations of wintering bald and golden eagles. At a meeting on January 19, 2001, consultants for the project discussed a study which investigated the effects of jet aircraft on bald eagles. Our understanding was that this study would be presented in the Supplemental Information. Although the Supplemental Information contains a fairly thorough discussion of the risk of bird strikes involving passerines, the use of the airport area by bald eagles is not mentioned. No studies investigating impacts of jet aircraft on bald eagles are mentioned in the Supplemental Information. We believe that this issue deserves a thorough analysis in the EIR.

e) A cumulative effects analysis should be developed, as directed by 40 CFR 1508.25 (a)(2) and (c). General Plans, Specific Plans, as well as past, present and anticipated future projects, including those projects outside the control of the agency, should be analyzed relative to their impacts on similar plant communities and wildlife habitats.

The Department believes the document should include an analysis of water supply availability not only for growth-inducing impacts which will follow and how this relates with the future water supply capacity of Mammoth Lakes, and any resultant impacts to adjacent surface and spring flows of influence within this watershed. In identifying future projects adding to the cumulative impacts of the proposed project, the Department is aware of the following projects which will impact, at a minimum, the Round Valley deer herd, the Casa Diablo deer herd, resident sage grouse and/or their habitats, and add to growth-inducing impacts and increased needs for water supply: 1) Sherwin/Snowcreek Ski Area; 2) Intrawest resort developments, including the reported requirement for an increased airport and aircraft size capability to secure development of the proposed 250 room hotel/lodge, and the increased need for well water for expansion of the snowmaking system; 3) Eastern Sierra College Center-Mammoth; 4) Lakeridge Ranch Estates; 5) Sierra Business Park; and 6) the proposed Pacifica residential development in Round Valley. Recent news broadcasts report that the Town of Mammoth Lakes Strategic Marketing Plan projects that one million additional skier visits per season are necessary in order to keep existing lodging profitable. The airport expansion project will undoubtedly play a key role in providing these additional visitor use days. Additional visitation will result in increased human presence and disturbance in backcountry and front country areas, and additional pressures to adjacent public lands and biological resources on those lands.

We continue to believe that the cumulative and growth-inducing impacts of the Airport Master Plan need to be revisited and updated. Recent changes in the habitat capability of sage grouse and resulting population declines have occurred throughout the range of the sage grouse, necessitating listing of one population, and increasing concern on the part of biologists and land managers for the remaining

populations. Additional information regarding the genetic isolation of the Long Valley population has also come to light within the last year. The analysis conducted in the Airport Master Plan EIR is out of date should be updated. We believe that a thorough analysis of the developments proposed for the Long Valley area, and their impacts to sage grouse, should be conducted. Direct, indirect, growth-inducing and cumulative impacts should be addressed. The analysis should include a long-term population survey and impact analysis of the Long Valley population as a whole, as well as impacts to individual leks. The analysis should include impacts at full build-out and maximum operational level of the airport. A comprehensive mitigation plan for these impacts should be prepared. This analysis and mitigation plan should include lands owned, managed, or administered by the Town, Mono County, USFS, BLM, DWP and private lands. Potential mitigation measures could include relocation of the county landfill, to reduce raven predation on sage grouse eggs and chicks, closing roads into sage grouse habitat, or purchase of grazing leases.

We believe the Cumulative Effects analysis should reflect that the proposed Rimrock Ranch Subdivision in Mono County, and the proposed Pacifica Development in Inyo County will, as proposed, have significant negative impacts on the Round Valley Deer Herd. Even projects which have a less than significant impact when analyzed alone, such as the Sierra Business Park, can have significant impacts when viewed as part of the bigger picture. Although the proposed deer mitigation site and the fence design should minimize impacts to the Round Valley and Casa Diablo deer herds, we continue to believe that increased noise, lights, human presence, and growth-inducing impacts of the proposed project will have cumulative impacts on mule deer when viewed as part of an overall trend along the migration route of these herds. The FEA and FONSI do not address this impact. This conclusion is supported by statements made in the biological report prepared for this project by Jones and Stokes Associates.

3. A range of alternatives should be analyzed to ensure that alternatives to the proposed project in this area are fully considered and evaluated. A range of alternatives which avoid or otherwise minimize impacts to sensitive biological resources should be included. Specific alternative locations should also be evaluated in areas with lower resource sensitivity, where appropriate.

a) Mitigation measures for project impacts to sensitive plants, animals, and habitats should emphasize evaluation and selection of alternatives which avoid or otherwise minimize project impacts. Off-site compensation for unavoidable impacts through acquisition and protection of high-quality habitats elsewhere should be required.

b) The Department considers Rare Natural Communities as threatened habitats having both regional and local significance. Thus these communities should be fully avoided and otherwise protected from project-related impacts.

4. If the project has the potential to adversely affect species of plants or animals listed under the California Endangered Species Act, either during construction or over the life of the project, a permit must be obtained under Section 2081 of the Fish and Game Code. Such permits are issued to conserve, protect, enhance and restore state-listed threatened or endangered species and their habitats. Early consultation is encouraged, as significant modification to a project and mitigation measures may be required in order to obtain a 2081 permit. If the project has the potential to impact species of plants or animals listed as threatened or endangered by the USFWS , a consultation under Section 7 of the Endangered Species Act will be required. A list of federal and state listed species found within the project area is found in Tables 1 and 2 of the Owens Basin Wetland and Aquatic Species Recovery Plan. In addition, recent legislation requires that all 2081 permits issued by the Department comply with CEQA.

5. Section 1603 of the Fish and Game Code requires any person who proposes a project that will substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake or use materials from a streambed to notify the Department before beginning the project. Similarly, under section 1601 of the Fish and Game Code, before any State or local governmental agency or public utility begins a construction project that will: 1) divert, obstruct, or change the natural flow or the bed, channel, or bank of any river, stream, or lake; 2) use materials from a streambed; or 3) result in the disposal or deposition of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into any river, stream, or lake, it must first notify the Department of the proposed project.

Notification is generally required for any project that will take place in or in the vicinity of a river, stream, lake, or their tributaries. This includes rivers or streams that flow at least periodically or permanently through a bed or channel with banks and watercourses having a surface or subsurface flow that support or have supported riparian vegetation. If you are not certain that your proposed project will require a Lake or Streambed Alteration Agreement, the Department recommends that you submit a complete notification package.

Based on the notification materials you submit to the Department and, if necessary, an investigation of the project site by the Department, the Department will determine if your proposed project may impact fish or wildlife resources. *If the Department determines that your proposed project may substantially adversely affect existing fish or wildlife resources, you will need to obtain a Lake or Streambed Alteration Agreement from the Department and your proposed project, unless it is otherwise exempt, will have to be reviewed in accordance with the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.) before you may begin any work.*

a) The EIR should contain a discussion of potential adverse impacts from any

increased runoff, sedimentation, soil erosion, and/or urban pollutants on streams and watercourses on or near the project site, with mitigation measures proposed to alleviate such impacts.

Thank you for the opportunity to comment on the proposed project. Questions regarding this letter and further coordination on these issues should be directed to Ms. Denyse Racine, Environmental Specialist III, at (760) 872-1158.

Sincerely,

Steve Parmenter

Steve Parmenter,
Acting Habitat Conservation Supervisor

Attachment

cc: Mr. Brian Grattidge, State Clearinghouse
Mr. George Walker, USFWS
Mr. Steve Addington, BLM
Ms. Kathleen Morse, USFS
Mr. Jeff Bailey, USFS
Ms. Janill Richards, DAG, Environment Section, DOJ
Ms. Katy Walton, Caltrans
Mr. Jim Lerner, ARB

Guidelines for Assessing the Effects of Proposed Projects on Rare, Threatened, and Endangered Plants and Natural Communities

State of California
THE RESOURCES AGENCY
Department of Fish and Game
December 9, 1983
Revised May 8, 2000

The following recommendations are intended to help those who prepare and review environmental documents determine **when** a botanical survey is needed, **who** should be considered qualified to conduct such surveys, **how** field surveys should be conducted, and **what** information should be contained in the survey report. The Department may recommend that lead agencies not accept the results of surveys that are not conducted according to these guidelines.

1. Botanical surveys are conducted in order to determine the environmental effects of proposed projects on all rare, threatened, and endangered plants and plant communities. Rare, threatened, and endangered plants are not necessarily limited to those species which have been "listed" by state and federal agencies but should include any species that, based on all available data, can be shown to be rare, threatened, and/or endangered under the following definitions:

   A species, subspecies, or variety of plant is "endangered" when the prospects of its survival and reproduction are in immediate jeopardy from one or more causes, including loss of habitat, change in habitat, over-exploitation, predation, competition, or disease. A plant is "threatened" when it is likely to become endangered in the foreseeable future in the absence of protection measures. A plant is "rare" when, although not presently threatened with extinction, the species, subspecies, or variety is found in such small numbers throughout its range that it may be endangered if its environment worsens.

   Rare natural communities are those communities that are of highly limited distribution. These communities may or may not contain rare, threatened, or endangered species. The most current version of the California Natural Diversity Database's List of California Terrestrial Natural Communities may be used as a guide to the names and status of communities.

2. It is appropriate to conduct a botanical field survey to determine if, or to the extent that, rare, threatened, or endangered plants will be affected by a proposed project when:

   a. Natural vegetation occurs on the site, it is unknown if rare, threatened, or endangered plants or habitats occur on the site, and the project has the potential for direct or indirect effects on vegetation; or
   b. Rare plants have historically been identified on the project site, but adequate information for impact assessment is lacking.

3. Botanical consultants should possess the following qualifications:

   a. Experience conducting floristic field surveys;
   b. Knowledge of plant taxonomy and plant community ecology;
   c. Familiarity with the plants of the area, including rare, threatened, and endangered species;
   d. Familiarity with the appropriate state and federal statutes related to plants and plant collecting; and,
   e. Experience with analyzing impacts of development on native plant species and communities.

4. Field surveys should be conducted in a manner that will locate any rare, threatened, or endangered species that may be present. Specifically, rare, threatened, or endangered plant surveys should be:

   a. Conducted in the field at the proper time of year when rare, threatened, or endangered species are both evident and identifiable. Usually, this is when the plants are flowering.

When rare, threatened, or endangered plants are known to occur in the type(s) of habitat present in the project area, nearby accessible occurrences of the plants (reference sites) should be observed to determine that the species are identifiable at the time of the survey.

b. Floristic in nature. A floristic survey requires that every plant observed be identified to the extent necessary to determine its rarity and listing status. In addition, a sufficient number of visits spaced throughout the growing season are necessary to accurately determine what plants exist on the site. In order to properly characterize the site and document the completeness of the survey, a complete list of plants observed on the site should be included in every botanical survey report.

c. Conducted in a manner that is consistent with conservation ethics. Collections (voucher specimens) of rare, threatened, or endangered species, or suspected rare, threatened, or endangered species should be made only when such actions would not jeopardize the continued existence of the population and in accordance with applicable state and federal permit requirements. A collecting permit from the Habitat Conservation Planning Branch of DFG is required for collection of state-listed plant species. Voucher specimens should be deposited at recognized public herbaria for future reference. Photography should be used to document plant identification and habitat whenever possible, but especially when the population cannot withstand collection of voucher specimens.

d. Conducted using systematic field techniques in all habitats of the site to ensure a thorough coverage of potential impact areas.

e. Well documented. When a rare, threatened, or endangered plant (or rare plant community) is located, a California Native Species (or Community) Field Survey Form or equivalent written form, accompanied by a copy of the appropriate portion of a 7.5 minute topographic map with the occurrence mapped, should be completed and submitted to the Natural Diversity Database. Locations may be best documented using global positioning systems (GPS) and presented in map and digital forms as these tools become more accessible.

5. Reports of botanical field surveys should be included in or with environmental assessments, negative declarations and mitigated negative declarations, Timber Harvesting Plans (THPs), EIR's, and EIS's, and should contain the following information:

a. Project description, including a detailed map of the project location and study area.
b. A written description of biological setting referencing the community nomenclature used and a vegetation map.
c. Detailed description of survey methodology.
d. Dates of field surveys and total person-hours spent on field surveys.
e. Results of field survey including detailed maps and specific location data for each plant population found. Investigators are encouraged to provide GPS data and maps documenting population boundaries.
f. An assessment of potential impacts. This should include a map showing the distribution of plants in relation to proposed activities.
g. Discussion of the significance of rare, threatened, or endangered plant populations in the project area considering nearby populations and total species distribution.
h. Recommended measures to avoid impacts.
i. A list of all plants observed on the project area. Plants should be identified to the taxonomic level necessary to determine whether or not they are rare, threatened or endangered.
j. Description of reference site(s) visited and phenological development of rare, threatened, or endangered plant(s).
k. Copies of all California Native Species Field Survey Forms or Natural Community Field Survey Forms.
l. Name of field investigator(s).
j. References cited, persons contacted, herbaria visited, and the location of voucher specimens.

MITIGATION GUIDELINES

REGARDING IMPACTS TO RARE, THREATENED, AND ENDANGERED PLANTS

by

CALIFORNIA NATIVE PLANT SOCIETY
RARE PLANT SCIENTIFIC ADVISORY COMMITTEE

February 1991
Revised April 1998

This document is intended to guide in the assessment and mitigation of impacts to rare and endangered plants. It supports the California Native Plant Society Policy Regarding Mitigation of Impacts to Rare and Endangered Plants (Appendix A). The goals of the policy are to prevent decline of rare plants and their habitats and to ensure that effective rare plant preservation measures are implemented.

In California the right to develop land is subject to regulation by public agencies that have discretionary control over project approval. The National Environmental Policy Act of 1969 (NEPA) and the California Environmental Quality Act of 1970 (CEQA) require project applicants to disclose, consider and avoid or reduce significant project impacts to rare or endangered species. Environmental documents required under those laws contain the project disclosures and evaluations and are available for public review.

EVALUATION GUIDELINES

Before identifying mitigation options for a project, the vegetation types, rare plants and habitats, and specialized biotic resource areas must be identified and the project impacts described and assessed. The Society recommends following the Department of Fish and Game's Guidelines for Assessing Effects of Proposed Developments on Rare and Endangered Plants and Plant Communities (Appendix B). An important aspect of the evaluation is determining whether an impact is significant as defined by CEQA and NEPA. Under CEQA, for example, an significant impact is one which would produce a substantial, or potentially substantial, adverse change in the environment.

MITIGATION GUIDELINES

The Society endorses the mitigation concepts in the California Environmental Quality Act, Statutes and Guidelines (1986) because they may be applied specifically to rare plants. The types of mitigation for environmental impacts that are listed in CEQA (Section 15370) are:

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

These mitigation measures can be applied to a variety of environmental impacts but are not always appropriate to mitigating rare plant impacts. Mitigation measures should be developed on a site-specific basis in consultation with appropriate resources agencies. Under existing laws, a project applicant or a local lead agency may have the responsibility of consulting with public regulatory agencies on matters relating to project impacts on rare species.

For rare plants, effective mitigation options that can avoid or reduce impacts may be limited. The use of more than one measure may be necessary depending upon the type of project and the factors that make plant species rare (e.g., unusual soils, microclimates, or water regimes). Each project must be individually evaluated to determine which mitigation method or methods will avoid or reduce impacts defined by CEQA or NEPA as significant to a less than significant level. Because the life history and ecological information needed to judge whether mitigation measures are adequate is often lacking, additional biological research may be necessary prior to mitigation design and/or implementation in order to determine which measures will be most appropriate.

Of the five mitigation types in the California Environmental Quality Act, the California Native Plant Society fully supports those which avoid net reduction of population size or species viability. For most plant species this requires the protection of habitat essential to the survival of the species. In some instances, this also requires that impacts be fully avoided in order to prevent a significant impact (i.e., a net loss of plant numbers, habitat, or genetic variability essential to the future existence and recovery of the species). Alternatives such as site restoration and off-site introduction are generally unproven, and usually unsuccessful.

Avoidance:

Impacts to rare plants may be avoided by: (1) pre-project planning and design; (2) reconfiguring an existing project design; or (3) adopting the no-project alternative. Project planning and design measures to avoid impacts may include arrangement of facilities on-site to avoid sensitive features. Additional measures are almost always required to protect avoided sites from impacts associated with construction and operation of the project. Such protection can include, but is not limited to, fencing, open space or conservation easements, and transfer of development rights. See Appendix C for a brief discussion of conservation easements.

Each of the other mitigation alternatives included in the CEQA guidelines involves the acceptance of a net loss and/or use of transplantation, artificial propagation, seed transfer, or habitat restoration. The Society believes that these methods do not fully mitigate for significant impacts to rare plants and their habitats for three reasons:

(1) These alternatives compromise and ultimately negate mitigation by allowing net losses of rare plant populations and habitat. Mitigation must, according to CEQA, fully offset or reduce significant impacts to a less than significant level.

(2) Most rare plants are restricted to their known locations because they have specialized, poorly understood, habitat requirements. Creating the exact environmental conditions that these plants require may not be possible.

(3) The Society does not endorse alteration of naturally occurring plant communities through transplantation because the methodology for most rare plants is untested and therefore unreliable and because most past attempts have ultimately failed.

Although the Society does not endorse significant net losses of rare plant numbers or habitat, we recognize that where such losses are allowed or are deemed unavoidable, off-site restoration, compensation, transplantation or other salvage methods should be attempted to enhance degraded populations or provide for partial survival of the sacrificed population. Such measures also provide additional knowledge of the species' horticultural and ecological requirements. Such measures should never be performed so that an otherwise unaffected population is in any way jeopardized, for example by genetic contamination.

Mitigation alternatives other than avoidance are discussed below. These should be used alone or in combination to reduce impacts to less than significant levels. They should also be used in conjunction with monitoring and long-term management agreements.

Reducing Impacts:

The significance of impacts may be minimized by reducing the size of the project (i.e., partial avoidance) and by locating the project in the least environmentally sensitive area. Areas where impacts are avoided should be surrounded by buffer zones where impacts are absorbed, and set aside and permanently protected in conservation or open space easements. Efforts should be made to salvage portions of the population that will be lost.

Restoration:

Restoration can be used to mitigate impacts from projects approved prior to environmental regulations, or impacts allowed through a "statement of overriding considerations."

Depending upon the degree of impact, habitat restoration may be as simple as removing debris and controlling public access. In more complex situations, however, partial or total restoration of degraded habitat may require extensive revegetation, and soil protection and stabilization programs. Restoration must be tailored to the specific project site based on the habitat and species involved. General guidelines for restoration projects involving rare plants are discussed in Appendix D.

Reduction Over Time:

Impacts may be significantly reduced or eliminated by controlling public access and by fencing or staking the habitat area to prevent accidental intrusion into the site. Monitoring rare plants and habitats during all phases of a project will help ensure that construction and operation activities do not encroach on protected habitat.

When project actions have ended, restraints may or may not be removed depending on the completed project's potential for long-term impacts on the sensitive area. In most instances, control of public access to sensitive habitat sites needs to be continued beyond the construction phase of an individual project, especially in moderate and high density development areas. Public education about the value of the protected resources should also be considered for these areas.

Attempts to reduce or eliminate impacts over the life of the project should be required for all projects if the potential exists for secondary impacts due to human access; mitigation agreements that require placement of a conservation or open space easement on the mitigation site should be considered to implement this measure.

Off-site Compensation:

Compensating for the impact by protecting substitute resources or environments has been used in some instances to mitigate unavoidable impacts. In most instances off-site compensation does not fully reduce impacts to an insignificant level because a net loss of individuals or habitat that supports a natural self-sustaining rare plant population results. In spite of this, off-site compensation is a useful tool under specific circumstances where other mitigation alternatives cannot be applied or do not fully mitigate significant impacts.

Off-site compensation has been approached in several different ways, including: 1) permanent protection of an existing off-site native population; 2) permanent protection of an off-site introduced population; 3) a combination of 1) and 2); or 4) mitigation banking.

Determining habitat value for off-site compensation is difficult. The size of the acquisition will vary depending upon the type, condition, extent and rarity of the habitat and species. In any case, the acquisition and

permanent protection of an alternative parcel does not alter the fact that the loss of the initial site brings the rare habitat and species one step closer to ultimate extinction. Species preservation is greatly enhanced when plants are protected at a number of separate sites. Although the permanent protection of a vigorous, self-sustaining population of the species tends to reduce the endangerment potential of the species at that particular site, it does not necessarily fully compensate for the loss of the habitat known to support a viable population. To further reduce the endangerment potential for the species and habitat, the ratio of acquisition to loss must in most cases exceed 1:1 for any species. The ratio should be higher for rarer species, particularly for those that occupy irreplaceable habitats. In addition, enhancing off-site compensation areas (e.g., reducing grazing or OHV impacts) can help to more fully compensate for the net loss of plants at a project site.

If transfer of the threatened population is being attempted, an ecological study of the site, including an inventory of rare species, is needed to identify the feasibility of introduction. Genetic contamination can occur by mixing of populations of the rare plants and needs to be avoided, as does hybridization between the rare plant and close relatives that could occur at the introduction site. In no case are unthreatened populations to be jeopardized by the transfer of genetic material from the threatened site. If the compensation site is considered suitable, acquisition or other permanent protection efforts are required to ensure adequate long-term protection, and therefore to mitigate for a net loss of rare plants or habitat. A propagation program should be developed for the salvage and transfer of rare plant populations from the initial parcel before initiating any activities. Permits may be required from California Department of Fish and Game (DFG) or the U.S. Fish and Wildlife Service. Propagation methods for the salvaged population must be developed on a case-specific basis. The propagation program schedule must provide adequate lead time to plan and carry out transfer at the correct time of the year. In order to serve as mitigation, the transfer must be successfully completed before the project's construction activities eliminate plants or habitats. Maintenance and monitoring programs which include the collection of data to document degree of success should also be developed for the compensation site to ensure the transplanted population is self-sufficient and thereby demonstrate success.

MITIGATION IMPLEMENTATION

The mitigation design, implementation techniques and reporting procedures must be clearly documented. Responsibilities of the landowner/applicant, contractors, and agencies, and criteria that define successful mitigation, should be placed in writing to prevent later confusion or disagreement. The DFG Plant Conservation Program has prepared a mitigation plan annotated outline that includes the basic information needed to develop a mitigation plan for State-listed plant species that would be acceptable to the DFG. This document discusses important considerations in designing appropriate mitigation and monitoring plans and establishing appropriate performance criteria, and should be consulted when developing mitigation for impacts to any rare plant species.

Mitigation agreements entered into as a condition of a discretionary permit must contain assurances of implementation, monitoring and maintenance. Permits for development generally require a mitigation plan prior to approval. Project construction is sometimes completed before mitigation is fully implemented, especially where restoration or revegetation is involved. In these and related instances mitigation commitments should be guaranteed by a negotiable performance security. The amount of the negotiable security should be large enough to complete the mitigation and to purchase other rare plant habitat in the event the applicant fails to successfully complete the work in accordance with the approved mitigation agreement.

Clear criteria should be included in the mitigation agreement to define the conditions under which the mitigation measures are to be considered complete or successful, so that the performance security may be returned. Any mitigation effort requiring manipulation of plants or of habitats should be monitored for success or failure for a minimum of five years before relinquishing the performance security. The duration of the evaluation period must be based on the biological constraints of the species involved.

MAINTENANCE AND MONITORING IMPLEMENTATION

Maintenance and monitoring of rare plant populations and habitats are essential even where these are "protected" by mitigation measures. Monitoring enables project applicants and regulatory agencies to document compliance with mitigation agreements. Monitoring also enables scientists to gather valuable knowledge on the effectiveness of rare plant mitigation methods. The financial responsibility for monitoring and maintenance of rare plant populations and habitat is typically that of the project applicant. In all cases, monitoring should be conducted by an experienced botanist. Maintenance responsibilities must be clearly stated in contractual agreements to eliminate any confusion during future maintenance and monitoring.

Maintenance must consider the ecological needs of the species and habitat and the types of mitigation used. Where undisturbed habitat is set aside, maintenance may consist of little more than controlling public access, maintaining fences, or periodic weed removal. Restoration and revegetation programs may require more complex maintenance programs. For example, invasive non-native plants may require specialized control measures to keep them from spreading; herbivores may also need to be controlled to protect the native vegetation.

Monitoring programs must be developed to meet the needs of the specific mitigation program. For example, it may be necessary to monitor the progress of construction activities, if these activities have the potential to damage rare plant habitat. Monitoring of restoration and revegetation projects is essential to document success or failure and identify areas where additional work is needed. Monitoring undisturbed sites that have been set aside and are not likely to suffer direct or cumulative impacts may require only periodic visits to determine if easement violations have occurred. Requirements to correct violations should be described in the conservation easement or mitigation agreement.

In the past, mitigation for many approved projects was not properly implemented and agencies failed to enforce compliance by project developers. To rectify this, legislation passed in 1989 (AB 3180, Cortese) amended CEQA by adding section 21081.6 to allow California agencies to require monitoring of mitigation measures that were defined for a given project. The features to be monitored must be outlined in a formal monitoring plan which must be sufficient to identify failures in mitigation throughout the life of the project, not just during the construction phase. Agencies can enforce compliance with monitoring plans through several means, including specifying penalties for failure to meet monitoring obligations, through the use of existing police power such as fines or restraining orders, and/or by requiring a performance security of the project applicant.

Monitoring a conservation easement is the responsibility of the easement holder, whether this is a nonprofit organization or a public agency. The easement holder is also responsible for seeking redress for violations of the conservation easement contract.

CONCLUSION

The Society supports project alternatives that completely avoid significant project impacts to rare and endangered plant species and their habitats. In cases where other mitigation alternatives are approved, mitigation plans should be designed based on the specific requirements of the species and habitat involved. Although the current limited understanding of the ecological requirements for most rare species makes this task difficult, the use of preliminary ecological studies in mitigation planning will help to develop successful mitigation programs. Emphasis must be placed on conserving not only the rare plant but its habitat. The increased awareness of the need for solutions to problems of human impact on the environment and endangered species is encouraging. This awareness and concern has led to the participation of many agencies, conservation organizations, and concerned individuals in an effort to develop the criteria needed for rare plant protection. The California Native Plant Society has dedicated itself to helping realize this goal, and is always available to assist private individuals, local governments, public agencies and others in designing truly effective mitigation measures. Some of the references

cited in the bibliography contain information relating to studies of specific rare plants and mitigation implementations for specific development projects.

ACKNOWLEDGEMENTS

The CNPS Mitigation Policy and Guidelines were produced through the dedicated effort of many individuals. Special thanks go to Betty Guggolz for her lead role in the production of this document and her patient endurance of innumerable modifications to the text. Others who contributed valuable advice, criticism and support were: Ken Berg, Roxanne Bittman, Fredrica Bowcutt, Susan Cochrane, Charlice Danielsen, Phyllis Faber, Jack Guggolz, James Jokerst, Tim Messick, Mary Meyer, James Nelson, Thomas Oberbauer, David Schonum, Teresa Sholars, Mark Skinner, James Payne Smith, Joan Vilms, Laurie Wickenheiser, and Vernal Yadon.

BIBLIOGRAPHY

Barrett, Thomas. S., and Putnam Livermore, for the Trust For Public Land. The Conservation Easement in California, Island Press, Covelo, California, 1983.

Christian, John. U.S. Fish and Wildlife Service Mitigation Policy, Federal Register, Vol. 46 No. 15, Department of the Interior, Washington D. C., 1981.

Elias, Thomas S. (ed.). Conservation and Management of Rare and Endangered Plants, California Native Plant Society, 1987.

Fahselt, D. The Dangers of Transplantation as a Conservation Technique. Natural Areas Journal 8:238-243, 1988.

Hall, Lauren A. Transplantation of Sensitive Plants as Mitigation for Environmental Impacts. Pages 413-420 in Elias, Thomas S. (ed.) "Conservation and Management of Rare and Endangered Plants", California Native Plant Society, 1987.

Hoose, Philip M. Building An Ark, Tools for Preservation of Natural Diversity through Land Protection, Island Press, 1981.

Howald, Ann M., and Laurie P. Wickenheiser. Mitigation Plan Annotated Outline for Endangered Plants of California. California Department of Fish and Game, Endangered Plant Program, 1990.

Nachlinger, Jan, Gankin, Roman and Robert Powell (eds.). C.N.P.S. Working Conference, Conservation, Rare Plants and Legislation, February 5-7, 1982, Yosemite Institute, Marin Headlands, California Native Plant Society, July 1982.

Remy, Michael H., Thomas, Tina A., Duggan, Sharon E., and James G. Moose. Guide to the California Environmental Quality Act, Solano Press Books, 1990.

Rieger, John P. and Bobbie A. Steele (eds.). Proceedings of the Native Plant Revegetation Symposium, Nov.15, 1984, San Diego, California, California Native Plant Society, 1985.

Smith, J.P., Jr. and Ken Berg (eds.). Inventory of Rare and Endangered Vascular Plants of California, 4th ed. Special Publication No.1, California Native Plant Society, Sacramento, California, 1988.

RELEVANT LEGISLATION

California Endangered Species Act. Fish and Game Code, Sections 2050-2098.

Native Plant Protection Act. Fish and Game Code, Sections 1900-1913.

State of California, The California Environmental Quality Act, Statutes and Guidelines. Office of Planning and Research, 1986.

State of California. Tracking CEQA Mitigation Measures Under AB 3180, Office Of Planning and Research, 1989.

The Federal Endangered Species Act of 1973. (Public Law 93-295).

The National Environmental Policy Act of 1969. (42 USC 4321-4347).

APPENDIX A

CALIFORNIA NATIVE PLANT SOCIETY

POLICY REGARDING MITIGATION OF IMPACTS TO RARE AND ENDANGERED PLANTS

The policy of the California Native Plant Society is that all potential direct, indirect, and cumulative impacts to rare, threatened, or endangered plants and their habitats must be assessed and that appropriate measures be implemented to prevent such impacts resulting from projects. The policy of the Society is also that environmental documents and mitigation plans be based on complete, accurate and current scientific information. Viability of rare, threatened, or endangered plants and their habitats takes precedence over economic or political expediency. Because of the tremendous diversity of rare plant habitats in California, and the dependence of rare plants on their local habitats, it is imperative that mitigation measures be developed on a site specific basis. Local environmental conditions, species biology, land use patterns and other factors must be incorporated into the design of mitigation plans.

The goals of this policy are to prevent the decline of rare plants and their habitats and to ensure that effective rare plant preservation measures are implemented.

Of the mitigation measures listed in the California Environmental Quality Act, the Society fully endorses only that of avoiding the impact. Measures to minimize, to rectify, or to reduce or eliminate the impact over time are recognized by the Society as partial mitigation. The Society does not recognize off-site compensation as mitigation.

Guidelines for project review and evaluation of mitigation proposals are available from the California Native Plant Society. The Rare Plant Scientific Advisory Committee will revise the guidelines periodically so that they are easily used with the California Environmental Quality Act and other current legislation.

Adopted by the CNPS Board of Directors: June 6, 1987

g. Discussion of the importance of rare, threatened, or endangered plant populations with consideration of nearby populations and total species distribution.

h. Recommended measures to avoid impacts.

i. List of all species occurring on the project site.

j. Description of reference site(s) visited and phenological development of rare or endangered plant(s).

k. Copies of all California Native Species Field Survey Forms or Natural Community Field Survey Forms.

l. Name of field investigator(s).

m. References cited, persons contacted, herbaria visited, and disposition of voucher specimens.

APPENDIX C

CONSERVATION EASEMENTS

Open Space or Conservation Easements have been used in a number of jurisdictions throughout California. In open space or conservation easements the landowner transfers the rights to develop a parcel to a conservation organization or public agency. The legal basis for this action is found in Government Code Section 51050 et seq., particularly Section 51083.5 which describes the granting of easements to nonprofit organizations. Easements granted to an impartial third party, interested organization, or resource agency are the only secure types. Those granted to a local public jurisdiction can be eliminated or modified with a majority vote.

Determining the appropriate size of an easement is difficult. It must be large enough to support, in perpetuity, a biologically secure, reproducing population with an adequate buffer zone. The proposed land use surrounding the easement and current and future land uses of the conservation or open space easement area must also be taken into consideration. A land use or management plan that accounts for the type of rare plant habitat and the biology of the resident species needs to be developed for easement areas. The design of the protection area boundaries and management plan must be scientifically based, utilizing baseline studies and species biology information.

Conservation and open space easement contracts should include a legal description of the easement parcel, the purpose of the easement and describe the specific resources or conditions being protected by the easement. The contract should also include the rights of the grantee, the grantors rights and uses, restrictions of undesirable activities, and a general restriction of all uses inconsistent with the purposes of the easement. Language should be included that states that the conditions of the easement contract are binding not only on the grantor, but also on his heirs, assigns, and all other successors and interests so that the term of the easement runs with the land in perpetuity.

Conservation easement contracts should also include: (1) specific restrictions to protect the site from land use change, introduction of nonnative plant species and public access; and (2) the right of the grantee to enforce compliance with the terms of the easement and to require restoration of the habitat at the grantor's expense should damage to the habitat result from violation of the agreement by the grantor.

Maintenance and monitoring agreements and guideline documents for the conservation easement should be incorporated into the easement contract.

APPENDIX D

BRIEF GUIDELINES FOR RESTORATION PROJECTS

General guidelines for restoration projects are as follows:

1. Prior to the development of a restoration program, the goals of the completed project must be established and a course of action developed to achieve that goal.

2. Pre-impact site conditions should be determined. Clues to this may be found in remnants of the existing habitat, in herbarium research, and from botanists who have collected in the area in the past. Local historical files or societies may be a source of information if the site is near an urban area.

3. Other site factors which may require study are land contours, soil types, erosion control, topsoil protection, and pre-impact hydrologic patterns.

4. An ecological study of the species being considered for reintroduction is necessary, including their total distribution, other habitat sites, associated species and pollinators.

5. Revegetation methodology research may include propagation techniques, material sources, propagule collection and preparation, planting densities, seedling protection, weed and invasive exotics control, site protection, public access and many other factors. The present knowledge of propagation requirements for rare plants is so limited that all efforts to propagate and reintroduce them in the wild should be carried out under the direct supervision of a specialist well versed in the cultural requirements of the genus.

6. A maintenance and monitoring program should also be included in the development of restoration/revegetation plans, and should utilize consistently documented data to further augment the existing knowledge of the species and to develop criteria for other revegetation projects.

APPENDIX E

DEFINITIONS

The following definitions are used in this document:

Maintenance: the process of ensuring that rare plants and their habitats remain viable and in good condition.

Mitigation: actions taken to avoid or reduce significant adverse impacts. Impacts are less than significant if no net loss of population size or habitat quality results.

Mitigation banking: A large preserve or open space which individual developers buy into at a predetermined compensation ratio to satisfy their mitigation debt. Mitigation banking focuses mitigation efforts into significant amounts of habitat rather than permitting establishment of many smaller and less significant or less defensible preserves or open space areas.

Monitoring: periodic assessment of the status of a plant population or habitat to determine its condition and reveal trends in vigor and viability; should be conducted in a scientific and standardized fashion.

Off-site Compensation: preservation in perpetuity of alternate sites containing similar habitat types and species to offset or "compensate" for unavoidable losses. The ratio of acquisition to loss should be greater than one to one for any species. In lieu of this, an equitable sum of money may be paid for the purchase of an alternate site.

Preservation: the maintenance and protection of rare plants and habitats at levels that existed prior to the commencement of a project.

Rare Species: for the purpose of this policy, and to avoid undue repetition, the word "rare" is used to include "rare", "threatened", and "endangered" plant species as defined in Section 3(4)(15) of The Federal Endangered Species Act of 1973, and The California Environmental Quality Act Guidelines, Section 15380 (1986). The latter section is reproduced below:

> (b) A species of plant is:
> (1) "Endangered" when its survival and reproduction in the wild are in immediate jeopardy from one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, disease, or other factors; or
> (2) "Rare" when either:
> (A) Although not presently threatened with extinction, the species is existing in such small numbers throughout all or a significant portion of its range that it may become endangered if its environment worsens; or
> (B) The species is likely to become endangered within the foreseeable future throughout all or a significant portion of its range and may be considered "threatened" as that term is used in the Federal Endangered Species Act.
> (c) A species of plant shall be presumed to be rare or endangered if it is listed in:
> (1) Sections 670.2 or 670.5, Title 14, California Administrative Code; or
> (2) Title 50, Code of Federal Regulations, Section 17.11 or 17.12 pursuant to the Federal Endangered Species Act as threatened or endangered; or
> (d) A species not included in any listing identified in subsection (c) shall nevertheless be considered to be rare or endangered if the species can be shown to meet the criteria in subsection (b).

Division 2, Chapter 1.5 of the California Fish and Game Code (California Endangered Species Act Section 2067)

defines a "threatened" species as a native species or subspecies of a plant that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of special protection and management efforts required in this chapter.

Transfer of Development Rights (TDR): Under this process, an applicant may gain density bonuses in designated development areas if rare plant populations and habitat are left in permanent open space. This alternative also requires an organized plan by a local agency identifying those areas to be left undisturbed and those that may be used by the applicant for density increases in return for protecting the areas to be left undisturbed. Protection in perpetuity is a necessary requirement of TDR proposals that are implemented to protect rare plant populations. TDR is being used increasingly as a mitigation tool for on-site rare plant protection.

Unavoidable significant impacts: impacts resulting from a "statement of overriding considerations" where the public benefits of a project have been determined to outweigh the significance of the environmental impact, or where an emergency situation or natural disaster may destroy, or has destroyed rare plant habitat and species.

APPENDIX F

CNPS RARE PLANT LISTS (Skinner and Pavlik 1994)

The California Native Plant Society's Society's Inventory of Rare and Endangered Vascular Plants of California lists 1742 plant species, subspecies, and varieties that CNPS considers to be endangered, rare, of limited distribution, extinct, or insufficiently known in California. They are assigned to one of five "lists" in an effort to categorize their degree of rarity. This information was most recently published in:

Skinner, M. and B. Pavlik. 1994. *Inventory of Rare and Endangered Vascular Plants of California.* Fifth edition. California Native Plant Society, Sacramento, CA. 338 + vi pages.

List 1A: Plants Presumed Extinct in California

The 37 plants of List 1A are presumed extinct because they have not been seen or collected in the wild in California for many years. Although most of them are restricted to California, a few are found in other states as well. In many cases, repeated attempts have been made to rediscover these plants by visiting known historical locations. Even after such diligent searching, CNPS is constrained against saying that they are extinct, since for most of them rediscovery remains a distinct possibility. Note that care should be taken to distinguish between "extinct" and "extirpated." A plant is extirpated if it has been locally eliminated, but it may exist in abundance elsewhere in its range.

All of the plants constituting List 1A meet the definitions of Sec. 1901, Chapter 10 (Native Plant Protection Act [NPPA]) or Secs. 2062 and 2067 (California Endangered Species Act [CESA]) of the California Department of Fish and Game Code, and are eligible for state. Should these taxa be rediscovered, it is mandatory that they be fully considered during preparation of environmental documents relating to the California Environmental Quality Act (CEQA).

List 1B: Plants Rare, Threatened or Endangered in California and Elsewhere

The 857 plants of List 1B are rare throughout their range. All but a few are endemic to California. All of them are judged to be vulnerable under present circumstances or to have a high potential for becoming so because of their limited or vulnerable habitat, their low numbers of individuals per population (even though they may be wide ranging), or their limited number of populations. Most of the plants of List 1B have declined significantly since the arrival of non-indigenous humanity in California.

All of the plants constituting List 1B meet the definitions of Sec. 1901, Chapter 10 (NPPA) or Secs. 2062 and 2067 (CESA) of the California Department of Fish and Game Code, and are eligible for state listing. It is mandatory that they be fully considered during preparation of environmental documents relating to CEQA.

List 2: Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere

Except for being common beyond the boundaries of California, the 272 plants of List 2 would have appeared on List 1B. From the federal perspective, plants common in other states or countries are not eligible for consideration under the provisions of the Endangered Species Act. Until 1979, a similar policy was followed in California. However, after the passage of the NPPA, plants were considered for protection without regard to their distribution outside the state.

All of the plants constituting List 2 meet the definitions of Sec. 1901, Chapter 10 (NPPA) or Secs. 2062 and 2067 (CESA) of the California Department of Fish and Game Code, and are eligible for state listing. It is mandatory that they be fully considered during preparation of environmental documents relating to CEQA.

List 3: Plants About Which We Need More Information – A Review List

The 47 plants that comprise List 3 are united by one common theme – CNPS lacks the necessary information to assign them to one of the other lists or to reject them. Nearly all of the plants remaining on List 3 are taxonomically problematic. Data regarding distribution, endangerment, ecology, and taxonomic validity will be gratefully received by CNPS.

United States Department of Agriculture
Forest Service
Inyo National Forest
Mammoth Ranger Station
P.O. Box 148
Mammoth Lakes, CA 93546
(760) 924-5500
(760) 924-5531 TDD

File Code: 1950

Date: May 18, 2001

William T. Taylor, Senior Planner
Town of Mammoth Lakes
Community Development Department
P.O. Box 1609
Mammoth Lakes, CA. 93546

Dear Mr. Taylor:

Enclosed are our comments on the Notice of Preparation for the Mammoth Yosemite Airport Expansion Project. An analysis of the proposed uses on National Forest land will be prepared after the EIR and CEQA process, with a separate decision issued by our agency for all improvements planned on federal property. This decision document will be completed prior to issuing a Special Use Permit for the proposed uses and will tier to any relevant information already compiled by the FAA and the Town. Thus, the actions proposed to occur on National Forest land should be adequately analyzed in the EIR to enable our agency to disclose any potential environmental effects in our decision documentation.

- The Subsequent Environmental Impact Report (EIR) should address any environmental effects associated with the widening of the runway from 100 feet to 150 feet on the south side of the runway.
- The placement of security fencing to meet FAA standards may affect visual quality objectives on National Forest lands. This should be disclosed in the Report and mitigated where possible.
- The Biological Evaluation (BE) for the expansion project should include any possible effects to sage grouse, mule deer or other local wildlife species with the goal of incorporating any existing information into the NEPA process. The formal consultation process with the U.S. Fish and Wildlife Service should be completed and documented as part of the EIR, including agency concurrence that the project may proceed.
- Off-site mitigation for wildlife enhancement purposes is tentatively planned for National Forest land in the vicinity of the gravel pit. Planting of vegetation for mule deer habitat, fencing and maintenance of this site are improvements that should be analyzed in the EIR for potential environmental effects. A revegetation plan for the gravel pit site was provided to other agency representatives by our Forest Botanist on February 21, 2001. This information should be incorporated into the mitigation requirements.

If have questions or need further information regarding our environmental documentation process, please contact Rick Murray, Lands Assistant, at the Lee Vining office at 647-3013.

Thank you for the opportunity to provide these additional comments.

Sincerely,

KATHLEEN S. MORSE
District Ranger

Cc: R.Murray, D51

United States Department of the Interior

FISH AND WILDLIFE SERVICE

Ventura Fish and Wildlife Office
2493 Portola Road, Suite B
Ventura, California 93003

May 21, 2001

Bill Taylor, Senior Planner
Town of Mammoth Lakes
Community Development Department
P.O. Box 1609
Mammoth Lakes, California 93546

Subject: Notice of Preparation of an Environmental Impact Report for the Mammoth Yosemite Airport Expansion Project, Mammoth Lakes, California (SCH#2000034005)

Dear Mr. Taylor:

The U.S. Fish and Wildlife Service (Service) has reviewed the notice of preparation of an environmental impact report (EIR) for the proposed expansion of the existing facilities located at the Mammoth Yosemite Airport. The project would consist of strengthening, widening from 100 to 150 feet, and extending by 1,200 feet the runways to accommodate up to B-757-200 aircraft. Additional actions include improvements to taxiways, adding an air-carrier apron for three air-carrier aircraft, developing passenger-terminal building facilities, and improving the airport access roads. The current proposal modifies an earlier airport expansion plan approved by the Town of Mammoth Lakes. Additional changes from the previously approved project are a widening of the runway and revision in the aviation demand forecast to decrease the total number of fligh operations and increase the number of passenger enplanements.

We offer the following information and recommendations to aid you in planning for the conservation of sensitive wildlife habitats and federally listed species that could occur on the preferred or alternative sites and as a means to assist you in complying with pertinent federal statutes. The following comments are prepared in accordance with the Endangered Species Act of 1973, as amended (Act), and other authorities mandating Department of the Interior concern for environmental values.

The following issues should be thoroughly addressed in the draft EIR:

1. A complete discussion of the purpose and need for the project.

2. A description of the proposed project, including all feasible alternatives and the no action alternative. This alternatives analysis is important to the Service's evaluation of the project as feasible alternatives often reduce effects to biological resources.

3. Specific acreages and detailed descriptions of the amount and types of habitat that may be affected by the proposed project or project alternatives. Of particular concern will be the acreage of wetland and riparian habitats to be affected. This number should be verified by the U.S. Army Corps of Engineers or U.S. Environmental Protection Agency. Maps and tables should be included to assist in evaluation of project-related effects.

4. Quantitative and qualitative information concerning fish and wildlife resources associated with each habitat type.

5. A list of federal candidate, proposed or listed threatened and endangered species, state listed species, and locally declining or sensitive species that are found at or near the project site. A detailed discussion of these species, focusing on their site-related distribution and abundance and the anticipated effects of the project on these species, should be included.

Three federally listed species are known to occur in the vicinity of the project, the federally threatened bald eagle (*Haliaeetus leucocephalus*), and the endangered Sierra Nevada bighorn sheep (*Ovis canadensis californiana*) and Owens tui chub (*Gila bicolor snyderi*) and its designated critical habitat.

We anticipate that the Federal Aviation Administration (FAA) will be required to consult with the Service, pursuant to section 7(a)(2) of the Endangered Species Act of 1973, as amended (Act), regarding its proposed funding of the airport expansion. The information contained in your environmental impact report will be useful in completing our consultation with the FAA.

Only listed species are protected by the Act. However, we recommend that you consider sensitive species in your planning; this course of action can help reduce the need to list additional species as endangered or threatened. We also recommend that you review information in the California Department of Fish and Game's (CDFG) Natural Diversity Data Base and that you contact the CDFG at (916) 324-3812 for information on any species of concern that may occur in this area.

6. An assessment of the effects on biological resources, including those which are direct, indirect, and cumulative need to be reviewed. Increased visitor use may affect the Sierra Nevada bighorn sheep. Spills of hazardous materials may percolate through the soil and eventually enter the waters of Hot Creek and pose a risk to the Owens tui chub and its critical habitat. The effect of increased visitor use on water quality and quantity in relation to the habitat of listed species should also be analyzed. All aspects of the project should be included in this assessment.

7. An analysis of the effects of the project on the hydrology of associated drainages, and any other riparian or wetland communities within the sphere of influence of the project. The effects of alteration of natural flows within the affected creeks and rivers should be thoroughly examined. The draft EIR should thoroughly analyze the potential effects of all alternatives on Hot Creek.

8. Specific plans to offset project-related effects, including cumulative habitat loss, degradation, and modification resulting from the direct, indirect, and cumulative consequences of the action. If necessary, adverse project-related effects should be mitigated on-site through re-creation or revegetation of affected habitat types. The objective of the mitigation plan should be to offset qualitative and quantitative project-induced loss of wildlife habitat values. Avoidance of adverse effects through modification of the project is often the most effective means of conserving wildlife.

If you have any questions regarding this letter, please contact Tim Thomas of my staff at (760) 255-8890.

Sincerely,

Diane K. Noda

Diane K. Noda
Field Supervisor