FINAL
ENVIRONMENTAL ASSESSMENT

Proposed Commercial Airline Service at Bishop Airport

Bishop Airport
Bishop, Inyo County, California

Prepared for:

Inyo County

and

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

Prepared by:

Environmental Science Associates, Inc.

August 2021

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

Responsible FAA Official

8/11/2021
Date

GENERAL INFORMATION ABOUT THIS DOCUMENT

WHAT IS IN THIS DOCUMENT? This Final Environmental Assessment (EA) was prepared to evaluate Inyo County's proposed introduction of commercial air passenger service to Bishop Airport (BIH). This Final EA provides information on the Proposed Action; discusses the purpose of and need for the Proposed Action; describes alternatives considered; and discloses the analyses and findings of potential environmental resource impacts associated with the Proposed Action, the No Action, and other reasonable alternatives.

BACKGROUND: BIH is a public-use airport owned and operated by the County of Inyo. The Airport is located approximately 1.5 miles east of the City of Bishop, and approximately 45 miles southeast of the town of Mammoth Lakes. BIH is classified as a Local General Aviation Airport in the National Plan of Integrated Airport Systems. BIH currently serves general aviation traffic and the air cargo and military traffic in the Eastern Sierra region. Inyo County has identified an unmet demand for commercial air passenger service in the Eastern Sierra region. To facilitate the introduction of commercial air passenger service at Bishop Airport, Inyo County seeks issuance of a Class I Operating Certificate from the FAA pursuant to 14 Code of Federal Regulations (CFR) Part 139. SkyWest Airlines (Operating as United Express) seeks to amend its Operations Specifications to allow the introduction of scheduled commercial air passenger service at BIH. Commercial Service aircraft would be accommodated on Runway 12/30.

WHAT SHOULD YOU DO? Read this Final EA to understand the potential environmental effects of the Proposed Commercial Airline Service at Bishop Airport project and the actions that Inyo County and the FAA may take relative to the proposal. Copies of the document may be viewed at the Inyo County Department of Public Works or on the Department of Public Works website. A list of the locations where the document is available for review can be found in Chapter 5 of this document.

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

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CHAPTER 1
Introduction and Purpose and Need

1.1 Introduction

Bishop Airport (BIH or the Airport) is a public-use airport located in Inyo County (County) in the Eastern Sierra region of California. The Airport is owned and operated by Inyo County, the airport sponsor, and is situated on land leased from the City of Los Angeles Department of Water and Power (LADWP). BIH is located approximately 1.5 miles east of the City of Bishop and approximately 45 miles southeast of the town of Mammoth Lakes. The location of the airport is shown on **Figure 1-1**. The Airport and vicinity are depicted on **Figure 1-2**.

Bishop Airport is designated in the Federal Aviation Administration's (FAA) National Plan of Integrated Airport Systems (NPIAS) as a general aviation airport. BIH currently serves general aviation activity, limited military activity, as well as charter and air cargo operations. There is currently no scheduled commercial air passenger service. Inyo County, as the Airport owner and operator, has identified an unmet demand for commercial air passenger service in the Eastern Sierra region. To meet this unmet demand, the County has expressed interest in obtaining a Class I Airport Operating Certification for Bishop Airport under Title 14 Code of Federal Regulations (CFR) Part 139, *Certification of Airports* (Part 139 Certification). By obtaining a Class I operating certificate under Part 139, BIH will be able to accommodate scheduled or unscheduled commercial airline passenger service. To help facilitate Part 139 Certification, the Airport will implement declared distances on Runway 12/30, the main runway at the Airport that will serve commercial air passenger aircraft, to achieve runway safety area (RSA) standards pursuant to FAA Advisory Circular (AC) 150/5300-13A, *Airport Design*, for the runway's critical design aircraft (Airport Reference Code [ARC] C-II, which includes aircraft such as the Bombardier Canadair Regional Jet 700 [CRJ-700]). United Airlines, Inc. and its partner SkyWest Airlines, operating as United Express (henceforth referred to as SkyWest Airlines) are interested in introducing commercial air passenger service to BIH. SkyWest Airlines has submitted a request to the FAA to amend its Operations Specifications, pursuant to 14 CFR Part 121, *Operating Requirements: Domestic, Flag, and Supplemental Operations*, to allow the airline to provide scheduled commercial air passenger service to BIH.

Issuing a Part 139 Airport Operating Certificate for Bishop Airport, amending the Operations Specifications for SkyWest Airlines, and approving the addition of declared distances to an Airport Layout Plan (ALP) are federal actions subject to environmental review under the National

Environmental Policy Act of 1969 (NEPA) (42 United States Code [U.S.C.] §§ 4321-4335)[1] and guidance contained in FAA Orders 1050.1F, *Environmental Impacts: Policies and Procedures*, and 5050.4B, *National Environmental Policy Act (NEPA) Implementing Instructions for Airport Actions*. Accordingly, this Environmental Assessment (EA) has been prepared pursuant to the requirements of Section 102(2)(C) of the NEPA and Council on Environmental Quality Regulations (CEQ Regulations)(40 CFR Parts 1500-1508),2 FAA Order 1050.1F, FAA Order 5050.4B, and the 1050.1F Desk Reference. This EA identifies and considers the potential environmental impacts associated with the Proposed Action. The FAA is the lead federal agency to ensure compliance with NEPA for the purpose of the Proposed Action.

1.2 Background

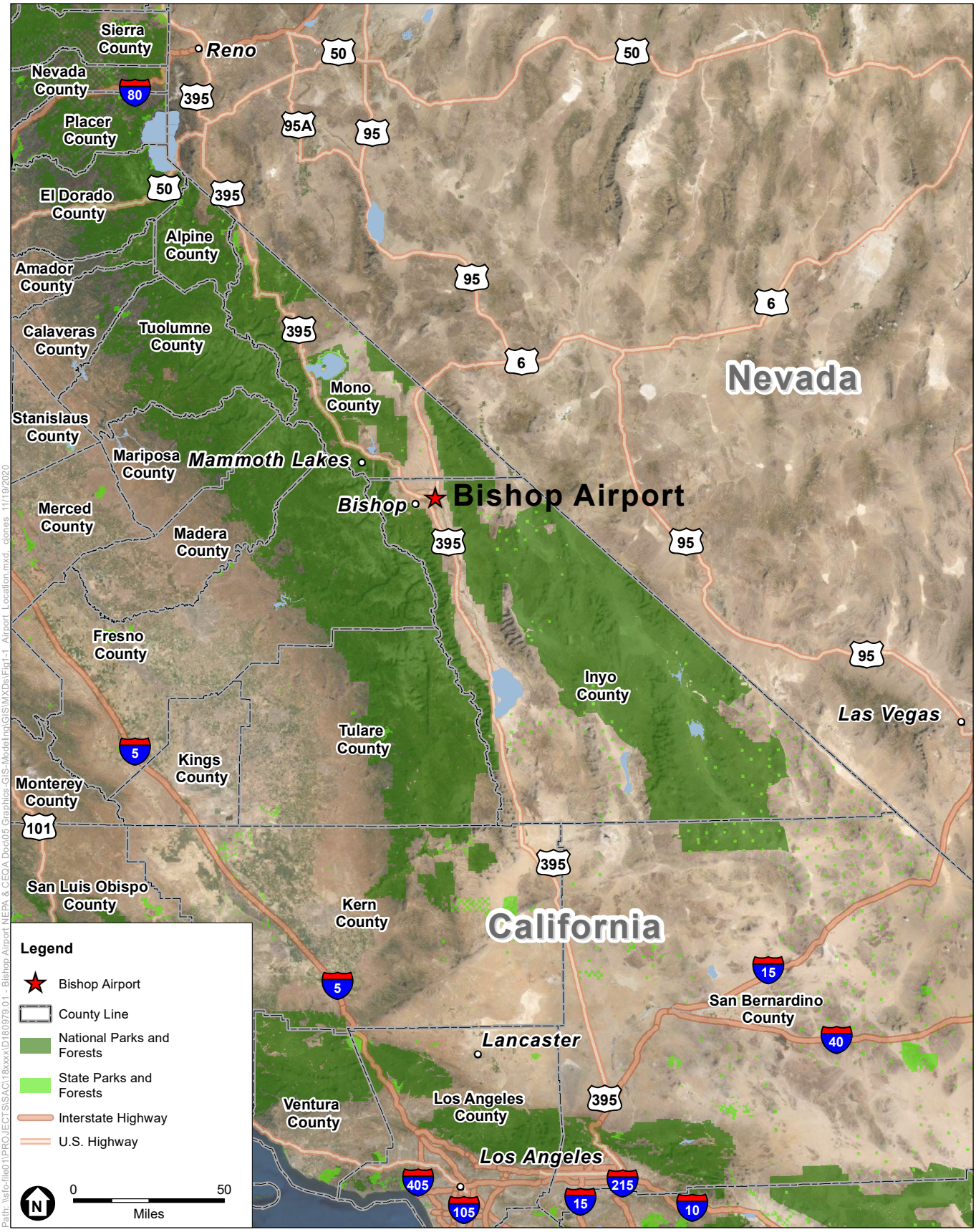
Inyo County has identified an unmet demand for commercial air passenger service in the Eastern Sierra region of California. Currently, commercial air passenger service to the region is only offered at Mammoth Yosemite Airport (MMH). Commercial service at MMH is provided by United Airlines, Inc. through its partner SkyWest Airlines (operating as United Express). While commercial air passenger service to MMH has been successful overall, there have been challenges that have resulted in unmet demand. For example, unpredictable winter weather conditions leading to low visibility and unfavorable crosswinds have led to an average flight cancellation rate of 12 percent during the winter season since commercial service began in 2008 (see *Mammoth Yosemite Airport Aviation Activity Forecasts, March 2017* in **Appendix D-1**, ***Bishop Airport Aviation Activity Forecast***). As Mammoth Mountain is a popular ski resort, demand for commercial air passenger service is heaviest during the winter season. Cancellation of airline flights has a direct financial impact to local stakeholders, negatively affecting airline schedules, and frustrating airline passengers. The high rate of cancelled flights and lack of flight schedule reliability has affected service and annual enplanements have declined since peaking in 2013.[3]

Bishop Airport, located approximately 45 miles southeast of Mammoth Lakes, currently serves general aviation traffic and the majority of air cargo and military traffic in the Eastern Sierra region. The Airport is less affected by the elevation and weather factors that have hampered service elsewhere, such as MMH. In response to Inyo County's request, the FAA recommended that Inyo County coordinate with the Town of Mammoth Lakes to identify a regional solution to meet the unmet demand for commercial air passenger service. Beginning in 2015, Inyo County and the Town of Mammoth Lakes began coordinating on a regional solution with other stakeholders, including

1 Implementation of commercial service is a discretionary action on the part of Inyo County and thus subject to the requirements of the California Environmental Quality Act (CEQA). An Initial Study is being prepared under CEQA to evaluate potential environmental impacts under State law.

2 CEQ Regulations adopted November 28, 1978. Preparation of the Draft EA was already in progress when the revised CEQ NEPA implementing regulations (40 CFR Parts 1500-1508) were promulgated in July 2020. Accordingly, the EA has been prepared in compliance with the previous version of the regulations, 40 CFR Parts 1500 - 1508 (1978, as amended in 1986 and 2005).

3 Other factors that have contributed to reductions in service include airline schedule adjustments due to inconvenient flight times, airport capacity during peak travel times, and elimination of routes with low passenger load factors.

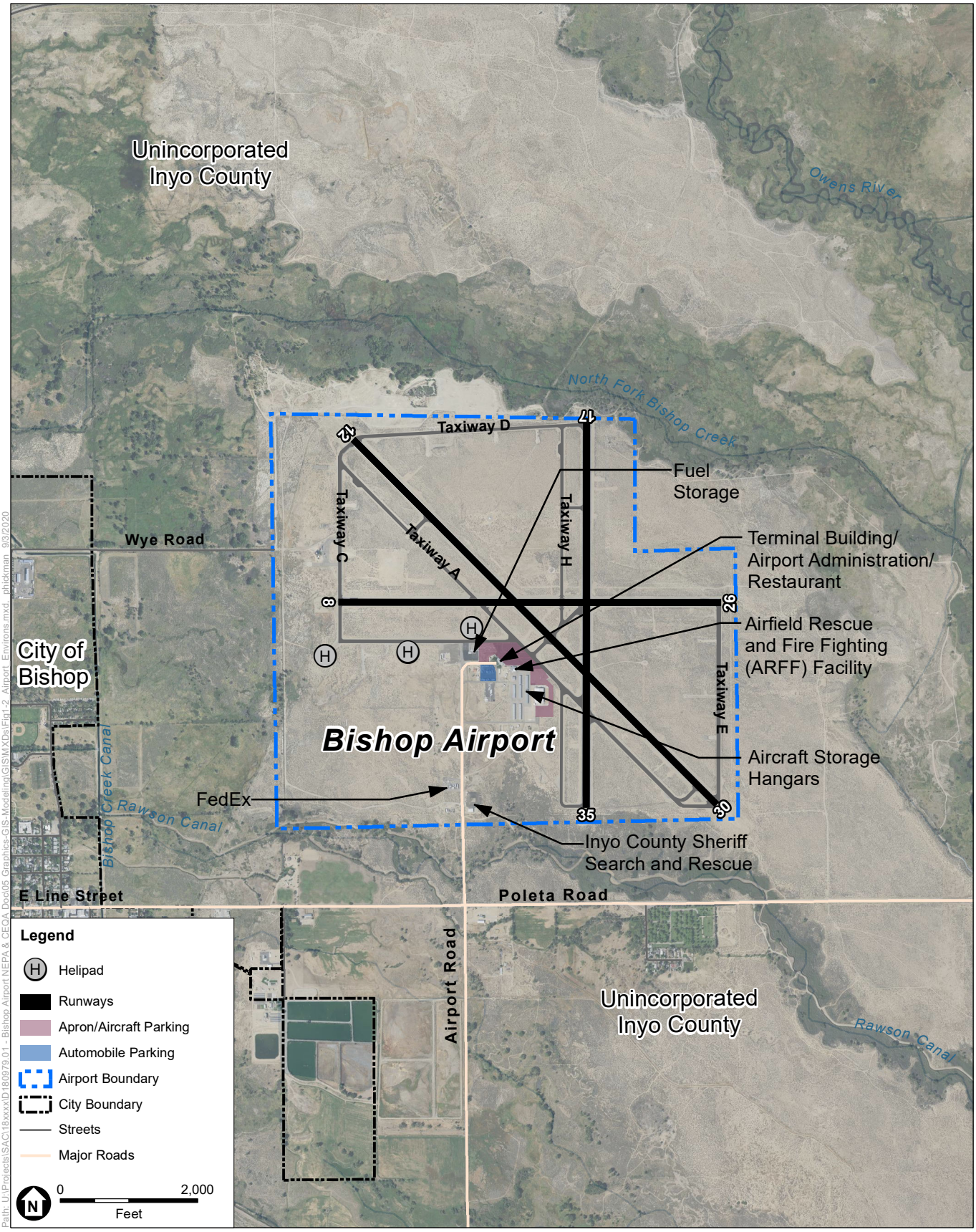


SOURCE: Esri; Inyo County Department of Public Works; ESA, 2020.

Proposed Commercial Airline Service at Bishop Airport

Figure 1-1
Airport Location
Bishop Airport

ESA



SOURCE: Esri; Inyo County Department of Public Works; ESA, 2020.

Proposed Commercial Airline Service at Bishop Airport

Figure 1-2
Airport Vicinity
Bishop Airport

ESA

Mammoth Lakes Tourism (MLT) and Mammoth Mountain Ski Area (MMSA). These efforts were focused on ensuring the continuity of commercial air passenger service in the region. The Eastern Sierra Council of Governments (ESCOG) has also supported efforts toward a regional solution to challenges facing commercial air passenger service. As part of its effort to reach a regional solution, ESCOG created the Mammoth Inyo Airport Working Group (MIAWG) to work on regional commercial air service strategies. In January 2018, Inyo County and the Town of Mammoth Lakes adopted and signed a *Statement of Intent for Flexibility and Cooperation in the Development of Infrastructure and Programs in Support of the Provision of Reliable and Expanded Commercial Air Service* (Statement)[4] and delivered it to the FAA. The Statement describes Inyo County and the Town of Mammoth Lakes' commitment to work together to find a regional solution to addressing the demand for commercial air passenger service in the Eastern Sierra.

SkyWest Airlines seeks amendment of its operations specifications which would allow it to offer commercial air passenger service at BIH beginning in December 2021 with CRJ-700 aircraft (ARC C-II).[5] Commercial air passenger service would begin with one arrival and one departure per day during the summer and shoulder seasons (April 16 through December 14) and three arrivals and three departures per day during the winter season (December 15 through April 15). Service during the summer and shoulder seasons would consist of one flight daily between Los Angeles International Airport (LAX) and BIH. Service during the winter season would initially consist of one flight daily between LAX and BIH, Denver International Airport (DEN) and BIH, and San Francisco International Airport (SFO) and BIH. An additional flight to/from SFO is anticipated to be added during the 2024 winter season and an additional flight to/from San Diego International Airport (SAN) is anticipated to be added during the 2027 winter season. A second winter season flight to/from LAX is anticipated to be added in 2028. It is anticipated that commercial air passenger service using Airport Reference Code (ARC)-III aircraft, such as the Embraer 175, would occur sometime during the first five years of operations (See **Appendix D** and **Appendix J**). Winter commercial air passenger service at MMH is subsidized through a Minimum Revenue Guarantee Contract managed through a public-private alliance between the Town of Mammoth Lakes, MMSA, and MLT, and largely funded through a Tourism Business Improvement District Tax. Similar to MMH, winter service at BIH would be subsidized through a Minimum Revenue Guarantee Contract with the same public-private alliance currently supporting airline operations at MMH. However, Inyo County would also join the alliance to help subsidize service at BIH.

Commercial service would be accommodated on the Airport's main runway, Runway 12/30. Runway 12/30 is described in greater detail in Section 1.2.1.1. To help facilitate Part 139 Certification, the Airport will implement declared distances on Runway 12/30 (the runway at the Airport that will serve commercial aircraft) to ensure that the RSAs meet the dimensional requirements for the runway's critical design aircraft as described in FAA Order 5200.8, *Runway Safety Area Program*, and FAA Advisory Circular 150/5300-13A, *Airport Design*. Declared

4 Statement of Intent for Flexibility and Cooperation in the Development of Infrastructure and Programs in Support of the Provision of Reliable and Expanded Commercial Air Service. Available at https://legistarweb-production.s3.amazonaws.com/uploads/attachment/pdf/139498/Statement_of_Intent_20180108_FINAL.pdf.

5 SkyWest Airlines initially anticipated beginning service at BIH in July 2021. The airline is now proposing to begin service in December 2021, the beginning of the 2022 winter season. The environmental analyses conducted for this EA evaluated calendar year 2022 as the first full year of service. Therefore, the shift in beginning of service to late 2021 does not affect the environmental analyses presented in this EA.

distances are the distances the airport owner declares available for an aircraft's takeoff run, takeoff distance, accelerate-stop distance, and landing distance requirements. The distances are Takeoff Run Available (TORA), Takeoff Distance Available (TODA), Accelerate-Stop Distance Available (ASDA), and Landing Distance Available (LDA). These distances are consistent with FAA requirements. The addition of declared distances to the ALP for Bishop Airport requires approval by the FAA, constituting a federal action. **Table 1-1** provides the dimensions for the declared distances to be implemented on Runway 12/30.

In response to questions raised during the scoping process, surface transportation services to and from BIH are not part of the Proposed Action. Regional stakeholders have indicated that taxi and private shuttle service using vehicles such as passenger vans and sports utility vehicles (SUVs) would be utilized to transport visitors to Mammoth Lakes and the Mammoth Mountain resort area. Mammoth Lakes hotel shuttles and shuttle service provided by the MMSA currently serving MMH would not expand service to BIH. Rental car service, which is currently provided at BIH by Enterprise Rent-a-Car but could be offered by other companies, will continue to be available to travelers. These vehicles would be parked at BIH in spaces reserved for rental vehicles. These connected actions, off-airport vehicle trips, will be included in the environmental analysis in Chapter 4, *Environmental Consequences*.

TABLE 1-1
DECLARED DISTANCES – RUNWAY 12/30

Runway	Type	Length (Feet)
12	TORA	7,498
12	TODA	7.498
12	ASDA	7,098
12	LDA	7,098
30	TORA	7,498
30	TODA	7,498
30	ASDA	6,743
30	LDA	6,743

NOTES:

TORA = Takeoff Run Available, the runway length declared available and suitable for the ground run of an aircraft taking off
TODA = Takeoff Distance Available, the TORA plus the length of any remaining runway or clearway beyond the far end of the TORA; the full length of TODA may need to be reduced because of obstacles in the departure area
ASDA = Accelerate-Stop Distance Available, the runway plus stopway length declared available and suitable for the acceleration and deceleration of an aircraft aborting a takeoff
LDA = Landing Distance Available, the runway length declared available and suitable for landing an aircraft.

SOURCE: Bishop Airport Layout Plan, Inyo County Department of Public Works, May 2019; Department of Transportation, Federal Aviation Administration, AC 150/5300-13A, *Airport Design*, February 2014.

1.2.1 Airport Facilities

The following sections describe the airside and landside facilities at BIH.

1.2.1.1 Airside Facilities

Bishop Airport is owned and operated by Inyo County and is situated on land leased from the LADWP. Inyo County holds an easement on the land leased from the LADWP ensuring indefinite use of the property as an airport. The Airport has three runways, Runway 12/30, Runway 17/35, and Runway 8/26. The ALP shows that the existing ARC is B-II with a critical/design aircraft of the Lockheed P-3 Orion, and a future ARC C-III with critical/design aircraft of Boeing 737/Airbus 319.[6]

Runway 12/30, the Airport's primary runway, is 7,498 feet long by 100 feet wide. Runway 12/30 is southeast/northwest oriented, paved with asphalt in excellent condition. Runways are designed to accommodate specific types of aircraft. The ALP identifies ARC C-II aircraft (e.g., Bombardier CRJ-700) as the critical design aircraft for Runway 12/30 with future ARC C-III designation.

The runway is marked with nonprecision instrument markings as well as medium intensity runway lights (MIRLs). Runway 12 has a 4-light Precision Approach Path Indicator (PAPI) with a 3.00-degree glide path and runway end identifier lights (REILs). Runway 30 has a 4-light PAPI with a 3.52-degree glide path and REILs. Runway 12 is served by two area navigation (RNAV) global positioning system (GPS) instrument approach procedures (RNAV (GPS) Y RWY 12 and RNAV (GPS) Z RWY 12). Runway 30 is served by an RNAV required navigation performance (RNP) instrument approach procedure (RNAV (RNP) RWY 30).

Runway 17/35 is north-south oriented, paved with asphalt and has nonprecision instrument markings as well as MIRLs. The runway is 5,600 feet long by 100 feet wide. Runway 17 has a 4-light PAPI with a 3.50-degree glide path on the left side of the runway and REILs. Runway 35 has a 4-light PAPI with a 3.00-degree glide path on the left side of the runway and REILs. Runway 17 is served by a Localizer Directional Aid instrument approach procedure with distance measuring equipment (DME RWY 17).

Runway 8/26 is east-west oriented and 5,567 feet long by 100 feet wide. Inyo County plans to close Runway 8/26 to comply with Runway Visibility Zone requirements (more information is provided in Table 3-10, *Past, Present, and Reasonably Foreseeable Projects*). The Runway 8 end will be converted to a taxiway and the Runway 26 end to helicopter parking. The runway is paved with asphalt, and has nonprecision instrument markings as well as MIRLs. Runway 8 has a 2-light PAPI with a 3.50-degree glide path. Runway 26 has a 2-light PAPI with a 3.00-degree glide path.

6 An airport designation that signifies the airport's highest Runway Design Code (RDC), minus the third (visibility) component of the RDC. The RDC is a code signifying the design standards to which the runway is to be built. The RDC is composed of two codes, the Aircraft Approach Category (AAC) and the Aircraft Design Group (ADG), plus the approach visibility minimums. The AAC is represented by a letter, A, B, C, D, or E, and represents a grouping of aircraft based on landing speed. The ADG is a classification of aircraft based in wingspan and tail height. B-II signifies an approach speed of 91 knots or more but less than 121 knots and a wingspan of 49' to 79' and a tail height of 20' to 30'. C-III signifies an approach speed of 121 knots or more but less than 141 knots and a wingspan of 79' to 118' and a tail height 30' to 45' (FAA AC 150/5300-13A, Airport Design, February 2014).

The airport traffic pattern off all runway ends is a standard left-hand pattern. Runways 12/30 and 17/35 are served by parallel taxiways (Taxiway A and Taxiway H, respectively). The Airport has three dedicated helipads south of the Runway 8 end.

1.2.1.2 Landside Facilities

Landside facilities at the Airport include a terminal building and airport administration building, an air cargo trailer, an aircraft parking apron and storage hangars, a maintenance building, an air ambulance/aircraft rescue and firefighting (ARFF) hangar, aircraft fuel storage facilities, an airport restaurant, and vehicle parking areas.

FedEx, Suddenlink Communications, the Inyo County Sheriff, and the Eastern Sierra Transit Authority (ESTA) also maintain facilities within the Airport lease.

1.2.2 BIH Aviation Forecast

The most recent aircraft operations forecast for BIH was prepared in March 2020 and approved by the FAA on April 28, 2020.[7] The forecast presents operations at BIH through 2033 and anticipates the introduction of commercial air passenger service in July 2021.[8] **Table 1-1** presents the forecast for BIH. The BIH forecast report is included in Appendix D-1.

The forecast developed by the Inyo County Department of Public Works and approved by the FAA initially anticipated beginning commercial air service at BIH in the winter of 2020[9] (December 15, 2020 is the beginning of the 2021 winter season) with three daily flights during the winter season followed by one daily flight in the summer and shoulder seasons. Initial commercial air service would be provided by SkyWest using CRJ-700 (C-II) aircraft. Commercial air passenger service is projected to increase with additional winter season flights added in 2024, 2027, and 2028. The forecasts anticipate the introduction of C-III operations with an Embraer 175 or similarly classified aircraft over the first five years. As shown in **Table 1-2**, aircraft operations and corresponding passenger enplanements are estimated to increase through 2028, at which point aircraft operations would plateau.

7 While the impacts of the COVID-19 public health emergency were not known at the time of the forecast development, the approved forecast still represents a reasonable estimate of future aviation activity at BIH. This forecast is included to provide a conservative estimate of potential environmental impacts associated with the Proposed Action. FAA forecast approval was based on the methodology, data, and conclusions at the time the document was prepared. However, it is necessary to acknowledge the impacts of the COVID-19 public health emergency on aviation activity, including reduced confidence in growth projections using currently-available data.

8 Due to the COVID-19 global pandemic, planned initiation of commercial air passenger service at BIH, if approved, would be postponed to at least December 2021.

9 Ibid.

TABLE 1-2
BIH AIRCRAFT OPERATIONS FORECAST

Year	Operation Type				Total Aircraft Operations	Enplanements	Growth (Change in Enplanement)	Percent (Change in Enplanement)
	Air Carrier	Commuter/ Air Taxi	General Aviation	Military				
2018[a]	0	6	23,000	3,000	26,006	-	-	-
2019[a]	0	6	23,000	3,000	26,006	3	-	-
2020[a]	0	6	23,000	3,000	26,006	3	-	-
2021	1,196	6	23,000	3,000	27,202	21,416	1,682	9%
2022	1,210	6	23,000	3,000	27,216	22,878	1,462	7%
2023	1,226	6	23,000	3,000	27,232	23,742	864	4%
2024	1,434	6	23,000	3,000	27,440	28,902	5,160	22%
2025	1,434	6	23,000	3,000	27,440	31,299	2,397	8%
2026	1,525	6	23,000	3,000	27,531	35,004	3,706	12%
2027	1,732	6	23,000	3,000	27,738	43,516	8,512	24%
2028	1,942	6	23,000	3,000	27,948	50,092	6,576	15%

NOTES:
[a] Years 2018 through 2020 derived from the FAA's Terminal Area Forecast (TAF) for Bishop Airport (January 2021).
Air Carrier operations assume 3% cancelation rate in winter season.

SOURCE: Draft Aviation Activity Forecast Bishop Airport, Inyo County Department of Public Works, March 2020 (Updated January 2021).

1.3 Purpose and Need

As stated in Section 1.2, Inyo County has determined there is an unmet demand for commercial air passenger service in the Eastern Sierra region. Current commercial air passenger service to the region has experienced unreliable flight schedules, attributed to factors such as cancellations due to unpredictable weather conditions. These unreliable flight schedules are constraining the ability to meet demand for service. Inyo County and other regional stakeholders have recognized these challenges and are working together to address unmet demand and ensure the continuity of commercial air passenger service in the Eastern Sierra region. Accordingly, the purpose of Inyo County's Proposed Action is to expand aviation operations by initiating commercial air passenger service at Bishop Airport. To facilitate the introduction of commercial air passenger service at Bishop Airport, Inyo County seeks issuance of a Class I Operating Certificate pursuant to 14 CFR Part 139. SkyWest Airlines seeks to amend its Operations Specifications to allow the introduction of scheduled commercial air passenger service at BIH. The need for the Proposed Action is to meet unsatisfied demand for commercial air passenger service in the Eastern Sierra region. The following sections describe the required steps necessary to meet the purpose and satisfy the need for the Proposed Action.

1.3.1 14 CFR Part 139 Operating Certificate

Inyo County has requested that the FAA issue a Class I Operating Certificate for Bishop Airport under 14 CFR Part 139. Issuing a Class I Operating Certificate would allow the Airport to accommodate commercial air passenger service. FAA Order 5280.5D, *Airport Certification Program Handbook*, states that issuance of a Class I Operating Certificate is required to serve scheduled commercial air service operations by large carrier aircraft.[10] The requirements for a Class I Operating Certificate are summarized in 14 CFR § 139.107, which states:

> An applicant for an Airport Operating Certificate is entitled to a certificate if -
> (a) The applicant provides written documentation that air carrier service will begin on a date certain.
> (b) The applicant meets the provisions of § 139.103.
> (c) The Administrator, after investigation, finds the applicant is properly and adequately equipped and able to provide a safe airport operating environment in accordance with –
>
> > (1) Any limitation that the Administrator finds necessary to ensure safety in air transportation.
> > (2) The requirements of the Airport Certification Manual, as specified under § 139.203.
> > (3) Any other provisions of this part that the Administrator finds necessary to ensure safety in air transportation.
>
> (d) The Administrator approves the Airport Certification Manual.

The FAA must ensure that the Airport meets all safety standards before issuing the Operating Certificate.

1.3.2 Operations Specification Amendment

As part of FAA's mission to ensure safety and efficiency in air commerce, it issues Operations Specifications to scheduled commercial air carriers. Operations Specifications essentially represent an agreement between the FAA and an air carrier dictating the conditions under which an air carrier may operate. SkyWest Airlines has submitted a request to the FAA to amend its Operations Specifications, pursuant to 14 CFR Part 121, to allow the airline to provide scheduled commercial air passenger service to BIH.

The FAA reviews the proposed amendment to Operations Specifications for SkyWest Airlines and based on a number of criteria such as available runway and taxiway length at the Airport, would either grant or deny the amendment. Federal law requires the FAA to make air commerce safety the primary consideration in determining the issuance of the specifications:

10 A "large carrier aircraft" is defined as having 31 or more passenger seats. See 14 CFR § 139.5.

> The Administrator of the Federal Aviation Administration shall issue an air carrier operating certificate to a person desiring to operate as an air carrier when the Administrator finds, after investigation, that the person properly and adequately is equipped and able to operate safely under this part and regulations and standards prescribed under this part. An air carrier operating certificate shall (1) contain terms necessary to ensure safety in air transportation; and (2) specify the places to and from which, and the airways of the United States over which, a person may operate as an air carrier. 49 USC § 44705.

The FAA has promulgated regulations for the purpose of fulfilling its obligation under the statute (see 14 CFR §119.51, 14 CFR §121, and FAA Order 9800.1). Accordingly, the FAA evaluates the requested amendment to Operations Specifications to determine that safety in air commerce will not be compromised.

1.3.3 Implementing Declared Distances

As discussed in Section 1.2, the Airport will help facilitate Part 139 Certification by implementing declared distances on Runway 12/30 to ensure that the RSAs meet the dimensional requirements for the runway's critical design aircraft as described in FAA Order 5200.8, *Runway Safety Area Program*, and FAA Advisory Circular 150/5300-13A, *Airport Design*. Declared distances must be noted on the Airport's ALP. Updates to an ALP must be approved by the FAA and constitute a federal action.

1.4 Description of the Proposed Action

The Proposed Action comprises the following elements:

- Inyo County would request a Part 139 Class I Airport Operating Certificate pursuant to 14 CFR Part 139 allowing commercial air service at Bishop Airport;
- Inyo County would implement declared distances on Runway 12/30 at BIH; and,
- SkyWest Airlines would obtain amendment to their Operations Specifications, to allow scheduled commercial air service to and from BIH.

Approval and implementation of the Proposed Action requires one or more federal actions by the FAA.

1.5 Requested Federal Actions

The federal actions for which the FAA is responsible include:

- Unconditional approval of the portion of the BIH ALP that depicts the declared distances for Runway 12/30 as required under 14 CFR Part 139;

- Approval of a Class I Airport Operating Certificate and the Airport Certification Manual for Bishop Airport pursuant to the requirements of 14 CFR Part 139; and

- Issuance of a C070 Operations Specification amendment pursuant to 14 CFR Part 121 to SkyWest Airlines to allow for scheduled commercial air passenger service to Bishop Airport.

1.6 Project Timing

If approved, commercial airline service is proposed to commence at BIH in July 2021.

1.7 Document Organization

This document consists of five chapters and 10 appendices:

Chapter 1 – Introduction and Purpose and Need. Chapter 1 provides background information on Bishop Airport, a brief description of the Proposed Action, as well as the purpose and need for the Proposed Action and the requested federal actions.

Chapter 2 – Alternatives. Chapter 2 includes a discussion of the identification and screening of alternatives considered as part of the NEPA process.

Chapter 3 – Affected Environment. Chapter 3 describes the existing environmental conditions within the general study area identified for the project.

Chapter 4 – Environmental Consequences. Chapter 4 discloses the potential environmental effects that the Proposed Action and No Action Alternative would have on the Airport environs per FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures* and Order 5050.4B, *NEPA Implementing Instructions for Airport Actions.*

Chapter 5 – Agency Coordination and Public Involvement. Chapter 5 summarizes agency coordination and the public involvement process. More detailed information on these topics is provided in **Appendices E** and **F**.

Appendices:

Appendix A –Acronyms. Appendix A includes a glossary of terms and list of acronyms used in this Environmental Assessment.

Appendix B – References. Appendix B includes references to materials used in the preparation of this Draft EA.

Appendix C – List of Preparers. Appendix C lists the names and the qualifications of individuals that prepared this Draft EA.

Appendix D – Aviation Activity Forecasts. Appendix D includes the aviation activity forecast for Bishop Airport, as well as information related to flight cancellations at Mammoth Yosemite Airport.

Appendix E – Agency Coordination. Appendix E discusses the various agencies and individuals contacted by the FAA as part of the preparation of this Draft EA.

Appendix F –Public Involvement. Appendix F discusses the public involvement activities, including scoping meetings and public workshops/hearings held in support of the NEPA process, as well as the comments received during the public review period and the responses to those comments.

Appendix G – Air Quality Technical Analysis. Appendix G discusses air quality analysis for the project.

Appendix H – Biological Assessment. Appendix H provides the biological assessment prepared for the project.

Appendix I –Cultural Resources Technical Analysis. Appendix I provides the cultural resources technical analysis prepared for the project.

Appendix J - Noise Technical Report. Appendix J discusses the noise modeling conducted for the project.

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CHAPTER 2
Alternatives

2.1 Introduction

This chapter provides a summary of the screening process employed to identify, compare, and evaluate alternatives to the Proposed Action. The alternatives analysis presented in this chapter was prepared in accordance with CEQ regulations (40 CFR § 1502.14); FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures*; and FAA Order 5050.4B, *National Environmental Policy Act (NEPA) Implementing Instructions for Airport Actions*.

2.1.1 Scope of the Alternatives Analysis

The alternatives analysis included the following elements:

- An overview of the alternatives screening process and the analysis used to evaluate each alternative.
- A description of the alternative(s) identified, including the No Action Alternative.
- A discussion of why some alternatives have been eliminated from further evaluation.
- Identification of the alternatives retained for further analysis.
- A list of applicable laws, regulations, executive orders and associated permits, licenses, and/or reviews taken into consideration in preparation of this EA.

As discussed in Section 2.2, *Range of Alternatives Considered*, three alternatives were initially evaluated for inclusion in this EA. Alternatives that did not meet the purpose and need for the Proposed Action were not carried forward for further analysis. Those alternatives carried forward for further analysis are discussed in Section 2.4, *Alternatives Retained for Further Analysis*. The No Action Alternative was also carried forward for further analysis pursuant to CEQ Regulations at 40 CFR §1502.14(d)).

2.1.1 Requirements of the National Environmental Policy Act

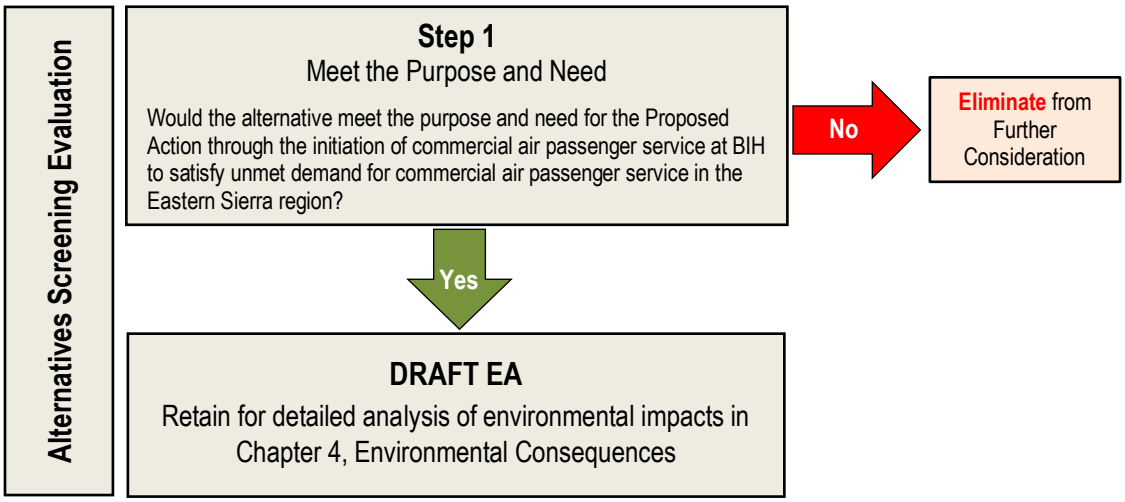
The CEQ regulations (40 CFR § 1502.14) for implementing NEPA (42 U.S.C. 4321 *et seq*.) require that federal agencies perform the following tasks:

- Rigorously explore and objectively evaluate all reasonable alternatives and, for alternatives that were eliminated from detailed study, briefly discuss the reasons for their having been eliminated.
- Devote substantial treatment to each alternative considered in detail, including the Proposed Action, so that reviewers may evaluate their comparative merits.
- Include reasonable alternatives not within the jurisdiction of the lead agency.
- Include the alternative of no action.

FAA Order 1050.1F states that there is no requirement for a specific number of alternatives or a specific range of alternatives to be included in an EA, and that an EA may limit the range of alternatives to the proposed action and no action when there are no unresolved conflicts concerning alternative uses of available resources (see FAA Order 1050.1F, para. 6-2.1(d).) NEPA mandates that all reasonable alternatives to a proposed action must be examined. Alternatives are "reasonable" if they meet the purpose and need for the proposed action.

2.2 Alternatives Screening

To identify a range of alternatives to carry forward for detailed environmental analysis, it was necessary to determine if they are reasonable. This determination was made by screening each alternative for its ability to meet the purpose and need for the Proposed Action. **Figure 2-1** depicts this screening process. Alternatives that were determined not to meet the purpose and need were eliminated from further consideration. As discussed in Section 1.3 of this EA, the purpose of the Proposed Action is to initiate commercial air passenger service at BIH to meet unsatisfied demand for commercial air passenger service in the Eastern Sierra region.



SOURCE: Environmental Science Associates, 2020.

Proposed Commercial Airline Service at Bishop Airport Draft Environmental Assessment

Figure 2-1
Alternatives Screening Process

The FAA will evaluate the request from Inyo County, operator of Bishop Airport, to issue a Class I Operating Certificate pursuant to 14 CFR Part 139 to allow for introduction of commercial air passenger service at BIH. The FAA will also address the request from SkyWest Airlines (operating as United Express on behalf of United Airlines) to amend its Operations Specifications pursuant to 14 CFR Part 121 to allow it to begin commercial air passenger service at BIH.

2.3 Range of Alternatives Considered

The following sections discuss the range of alternatives considered. **Table 2-1** provides a summary comparison of the range of alternatives considered.

TABLE 2-1
ALTERNATIVES COMPARISON SUMMARY

Screening Criteria	Proposed Action	Use of Other Inyo County Airports	Non-Aviation Transportation Alternative	No Action Alternative
Meet the Purpose and Need	Issuance of a Class I Operating Certificate pursuant to 14 CFR Part 139 for Bishop Airport and approval of an amendment to SkyWest Airlines' Operations Specifications allowing commercial air passenger service at Bishop Airport.	Introduction of commercial airline service at other County airports in lieu of Bishop Airport.	Introduction of non-aviation related transportation (i.e., bus and/or rail) in lieu of introducing commercial airline service at Bishop Airport.	Bishop Airport continues to operate as a General Aviation airport, and SkyWest Airlines' Operations Specifications remain unchanged. Demand for commercial air passenger service in the Eastern Sierra region would remain unmet.
Retain for detailed analysis in EA?	**Yes**	**No**	**No**	**Yes**

SOURCE: Environmental Science Associates, 2020.

2.3.1 Proposed Action Alternative

As described in Section 1.4, *Description of the Proposed Action*, under the Proposed Action, Inyo County seeks the FAA approval for a Part 139 Airport Operating Certificate for BIH. Part 139 Certification requires Inyo County to prepare and submit an Airport Certification Manual detailing how the Airport will comply with the requirements of 14 CFR Part 139 and to pass various inspections conducted by the FAA. These include inspection of Airport administrative records, and inspections of the airfield, ARFF practice and equipment, fueling facilities, and preparation for nighttime operations. The FAA would also make a determination regarding an amendment to Operations Specifications pursuant to 14 CFR Part 121 for SkyWest Airlines. The issuance of a Class I Operating Certificate to Inyo County would allow for the introduction of commercial air passenger service at BIH. An amendment to SkyWest Airlines' Operations Specifications would allow the airline to introduce scheduled commercial air passenger service to BIH. The safety and operational criteria that must be satisfied for approval of the amendment include suitable runway and taxiway dimensions to accommodate the aircraft proposed for service, the availability of instrument approach procedures serving the designated runway, and airport facilities suitable for

accommodating commercial airline passengers. Runway 12/30 is designed to serve ARC C-II aircraft such as the Bombardier Canadair Regional Jet (CRJ) 700 and would operate as the commercial service runway. SkyWest intends to initiate service with the CRJ700. Runway 12 is served by two instrument approach procedures, RNAV (GPS) Y RWY 12 and RNAV (GPS) Z RWY 12, and Runway 30 is served by one instrument approach procedure, RNAV (RNP) RWY 30.

The proposed commercial air passenger service is outlined in a letter of intent from United Airlines, Inc. and its partner SkyWest Airlines (provided in Appendix A to the *Bishop Airport Aviation Activity Forecast* included in Appendix D). The proposed commercial air passenger service would initially commence with one daily arrival and departure between BIH and LAX during the 2021 summer and shoulder seasons (April 15 through December 14) and three daily arrivals and departures between BIH and LAX, DEN, and SFO during the winter season (December 15 through April 14). An additional flight to/from SFO is anticipated to be added during the 2024 winter season and an additional flight to/from SAN is anticipated to be added during the 2027 winter season. A second winter season flight to/from LAX is anticipated to be added in 2028.

2.3.2 Use of Other Inyo County Airports

This alternative consists of introduction of commercial air passenger service at other airports in Inyo County. Inyo County operates three additional airports in addition to BIH: Independence Airport, Lone Pine Airport, and Shoshone Airport. Each of these airports currently accommodate general aviation aircraft operations. Independence Airport has a 3,533-foot-long runway, Lone Pine Airport has a 3,992-foot-long runway, and Shoshone Airport has a 2,380-foot-long runway. SkyWest Airlines plans to serve the Eastern Sierra region with the Bombardier CRJ700. None of the other three County airports has a runway long enough to meet the CRJ700's operational requirements.[1] Only Runway 12/30 at BIH can accommodate this class of aircraft in Inyo County. Furthermore, there are no instrument approach procedures serving the other three County airports and development of new instrument approach procedures is not possible at Independence or Lone Pine Airports because they are located in a Military Operations Area (MOA) which restricts their development. It is unlikely that an airline would be willing to serve an airport without an instrument approach procedure. Accordingly, the use of another County airport for the proposed commercial air passenger service would not be a reasonable alternative to the Proposed Action.

2.3.3 Non-Aviation Transportation Alternative

This alternative would exclude commercial air passenger service in the County and focus on non-aviation transportation such as bus and train. The Eastern Sierra region is not currently served by passenger rail service. During the summer months (June 15 through October 15), the Yosemite Area Regional Transportation System (YARTS) offers bus connections between Mammoth Lakes and the cities of Fresno, Merced, and Sonora via the Yosemite Valley. The YARTS bus routes provide direct access to the Fresno and Merced Amtrak stations. Both local and intercity bus service is currently provided to Bishop and Mammoth Lakes by the ESTA. The ESTA operates bus routes

[1] *CRJ 700 Airport Planning Manual, Revision 15*, Dec. 17, 2015. Retrieved Jan. 31, 2021 from: https://customer.aero.bombardier.com/webd/BAG/CustSite/BRAD/RACSDocument.nsf/51aae8b2b3bfdf6685256c300045ff31/ec63f8639ff3ab9d85257c1500635bd8/$FILE/ATTE8Q23.pdf/CRJ700APMR15.pdf

along the Highway 395 that connect Mammoth Lakes, Bishop and other Eastern Sierra communities to Reno, Nevada and the Lancaster Metrolink commuter rail station in Lancaster, California. Metrolink serves the greater Los Angeles metropolitan area. Regardless, the purpose of the Proposed Action is to satisfy the unmet demand for commercial air passenger service in the Eastern Sierra region. The use of non-aviation transportation does not meet the purpose and need to provide commercial aviation service in the Eastern Sierra region.

2.3.4 No Action Alternative

In accordance with CEQ regulations at 40 CFR § 1502.14, an EA must include a No Action Alternative. The purpose of the No Action Alternative is to provide a point of comparison against other alternatives to allow for the identification of potential environmental impacts. Under the No Action Alternative, FAA would not issue a Part 139 Class I Operating Certificate for BIH and there would be no amendment to the Operations Specifications for SkyWest Airlines) allowing commercial air passenger service to operate at BIH. Regional demand for commercial air passenger service at BIH would remain unmet. BIH would continue to accommodate general aviation aircraft operations.

2.4 Alternatives Retained for Further Analysis

Upon careful consideration of the range of alternative discussed in Section 2.3, the following alternatives have been identified for further evaluation in this EA.

2.4.1 Proposed Action

As discussed in Section 1.4, *Description of the Proposed Action*, a Part 139 Airport Operating Certificate for Bishop Airport would be issued to Inyo County. A Part 139 Airport Operating Certificate for BIH would allow it to operate as a commercial service airport. To help facilitate Part 139 Certification, the Airport will implement declared distances on Runway 12/30 to ensure that the RSAs meet the dimensional requirements for the runway's critical design aircraft as described in FAA Order 5200.8, Runway Safety Area Program, and FAA Advisory Circular 150/5300-13A, Airport Design. This will require an update to Bishop Airport's ALP, necessitating approval by the FAA. In addition, amendments to the Operations Specifications for SkyWest Airlines to operate at BIH would be approved pursuant to 14 CFR Part 121. Assuming all safety, operational, and environmental concerns are satisfied, an amendment to SkyWest's Operations Specifications would allow the airlines to introduce scheduled commercial service to BIH, beginning with the CRJ700.

2.4.2 No Action Alternative

Under the No Action Alternative, Bishop Airport would continue to operate as a GA airport. The FAA would not issue the County a Class I Operating Certificate under 14 CFR Part 139. Commercial air passenger service would not be introduced to BIH and the Airport would continue to serve general aviation activity, military activity, as well as charter and air cargo operations. FAA would not approve an amendment to SkyWest's Operation Specification to operate at BIH.

2.5 Federal Laws and Regulations Considered in this EA

Relevant federal laws and statutes, executive orders, and other federal regulations considered during preparation of this EA are listed in **Table 2-2**, **Table 2-3**, and **Table 2-4**.

TABLE 2-2
FEDERAL LAWS AND STATUTES CONSIDERED

Airport and Airway Improvement Act of 1982, as amended	42 U.S.C. 7401 *et seq.*
Aviation Safety and Capacity Expansion Act of 1990	P.L. 101-508
Aviation Investment and Reform Act for the 21st Century, 2000	P.L. 106-181
Vision 100--Century of Aviation Reauthorization Act of 2003	P.L. 108-176
FAA Reauthorization Act	P.L. 112-95
National Environmental Policy Act of 1969	42 U.S.C. 4321 *et seq.*
Noise Control Act of 1972	P.L. 92-574; 42 U.S.C. Section 4901
Aviation Safety and Noise Abatement Act of 1979	49 U.S.C. 47501 *et seq.*
Airport Noise and Capacity Act of 1990	49 U.S.C. 4752 *et seq.*
Clean Air Act of 1970, as amended	42 USC 4321 *et seq.*
Endangered Species Act of 1973, as amended	16 U.S.C. 1531 *et seq.*
Fish and Wildlife Coordination Act of 1958	16 U.S.C. 1531 *et seq.*
Magnuson-Stevens Fishery Conservation and Management Act of 1976, as amended	16 U.S.C. 1801 *et seq.*
Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended by the Community Environmental Response Facilitation Act of 1992	42 U.S.C. 9601 *et seq.*
Resource Conservation and Recovery Act of 1976, as amended by the Solid Waste Disposal Act of 1980	42 U.S.C. 6901 *et seq.*
Policy on Lands, Wildlife and Waterfowl Refuges, and Historic Sites [recodified from and formerly known as Section 4(f) of the *Department of Transportation Act of 1966*]	49 U.S.C. Section 303
National Historic Preservation Act of 1966, as amended	16 U.S.C. 470 *et seq.*
Archaeological and Historic Preservation Act of 1974, as amended	16 U.S.C. 469 *et seq.*
Land and Water Conservation Fund Act of 1965	16 U.S.C. 4601 *et seq.*
Clean Water Act, as amended	33 U.S.C. 1251 *et seq.*
Rivers and Harbors Act of 1899	33 U.S.C. 403 *et seq.*
Farmland Protection Policy Act	7 U.S.C. 4201 *et seq.*
Uniform Relocation Assistance and Real Property Acquisition Policies for Federal and Federally Assisted Programs	42 U.S.C. 61
Wild and Scenic Rivers Act of 1968	16 U.S.C. 1271 *et seq.*
Toxic Substances Control Act	15 U.S.C. 2601 *et seq.*
Coastal Zone Management Act of 1972	16 U.S.C. 1452 *et seq.*
Migratory Bird Treaty Act of 1918	16 U.S.C. 703-711

Notes: U.S.C. = United States Code, P.L. = Public Law

TABLE 2-3
EXECUTIVE ORDERS CONSIDERED

Executive Order 11593, "Protection and Enhancement of the Cultural Environment"	36 Federal Register 8921
Executive Order 11988, "Floodplain Management"	43 Federal Register 6030
Executive Order 11296, "Flood Hazard Evaluation Guidelines"	31 Federal Register 6030
Executive Order 11514, "Protection and Enhancement of Environmental Quality"	35 Federal Register 4247
Executive Order 13166, "Improving Access to Services for Persons with Limited English Proficiency"	65 Federal Register 50121
Executive Order 11990, "Protection of Wetlands"	42 Federal Register 26961
Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations"	59 Federal Register 7629
Executive Order 13045, "Protection of Children from Environmental Health Risks and Safety Risks"	62 Federal Register 19883
Executive Order 13783, "Promoting Energy Independence and Economic Growth"	82 Federal Register 16093

TABLE 2-4
FAA ORDERS, ADVISORY CIRCULARS, AND FEDERAL REGULATIONS CONSIDERED

U.S. Department of Transportation and FAA Orders
U.S. Department of Transportation (DOT), FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures*
U.S. DOT, FAA Order 5050.4B, *NEPA Implementing Instructions of Airport Actions*
U.S. DOT, Order 5280.5D, *Airport Certification Program Handbook*
U.S. DOT, Order 5650.2, *Floodplain Management and Protection*
U.S. DOT Order 5610.1D, *Procedures for Considering Environmental Impacts*
U.S. DOT, Order 5660.1A, *Preservation of the Nation's Wetlands*
U.S. DOT, Order 5680.1, *Final Order to Address Environmental Justice in Low-Income and Minority Populations*
U.S. DOT, FAA Joint Order 7110.65Y, *Air Traffic Organization Policy*
U.S. DOT, FAA Order 8900.1, Change 489*, Flight Standards Information Management System*
FAA Advisory Circulars
U.S. DOT, FAA AC 150/5070-6B, *Airport Master Plans*
U.S. DOT, FAA AC 150/5200-33C, *Hazardous Wildlife Attractants on or Near Airports*
U.S. DOT, FAA AC 36-3H, *Estimated Airplane Noise Levels in A-Weighted Decibels*
U.S. DOT, FAA AC 150/5300-13A, *Airport Design*
U.S. DOT, FAA AC 150/5320-6F, *Airport Pavement Design and Evaluation*
U.S. DOT, FAA AC 150/5370-10H, *Standards for Specifying Construction of Airports*
Code of Federal Regulations
Title 14 CFR Part 77, *Safe, Efficient Use and Preservation of the Navigable Airspace*
Title 14 CFR Part 119, *Certification: Air Carriers and Commercial Operators*
Title 14 CFR Part 139, *Airport Operations Specifications*
Title 14 CFR Part 150, *Airport Noise Compatibility Planning*
Title 14 CFR Part 151, *Federal Aid to Airports*
Title 14 CFR Part 152, *Airport Aid Program*

TABLE 2-4
FAA ORDERS, ADVISORY CIRCULARS, AND FEDERAL REGULATIONS CONSIDERED

Title 14 CFR Part 157, *Notice of Construction, Alteration, Activation, and Deactivation of Airports*
Title 14 CFR Part 169, *Expenditures of Federal Funds for Non-Military Airports or Air Navigational Facilities Thereon*
Title 36 CFR Part 800 (39 Federal Register [FR] 3365, January 25, 1974, and 51 FR 31115, September 2, 1986), *Protection of Historic Properties*
Title 40 CFR Part 93, *Determining Conformity of Federal Actions to State or Federal Implementation Plans*, Subpart B
Title 40 CFR Part 122, *EPA Administered Permit Programs: The National Pollutant Discharge Elimination System*
Title 40 CFR Part 124, *Procedures for Decision Making*
Title 40 CFR Part 172, *Hazardous Materials Table, Special Provisions, Hazardous Materials Communications, Emergency Response Information, and Training Requirements*
Title 40 CFR Parts 1500-1508 (1978, as amended in 1986 and 2005) , *President's Council on Environmental Quality*
Title 50 CFR Part 402, *Interagency Cooperation – Endangered Species Act of 1973, as amended*

CHAPTER 3
Affected Environment

3.1 Introduction

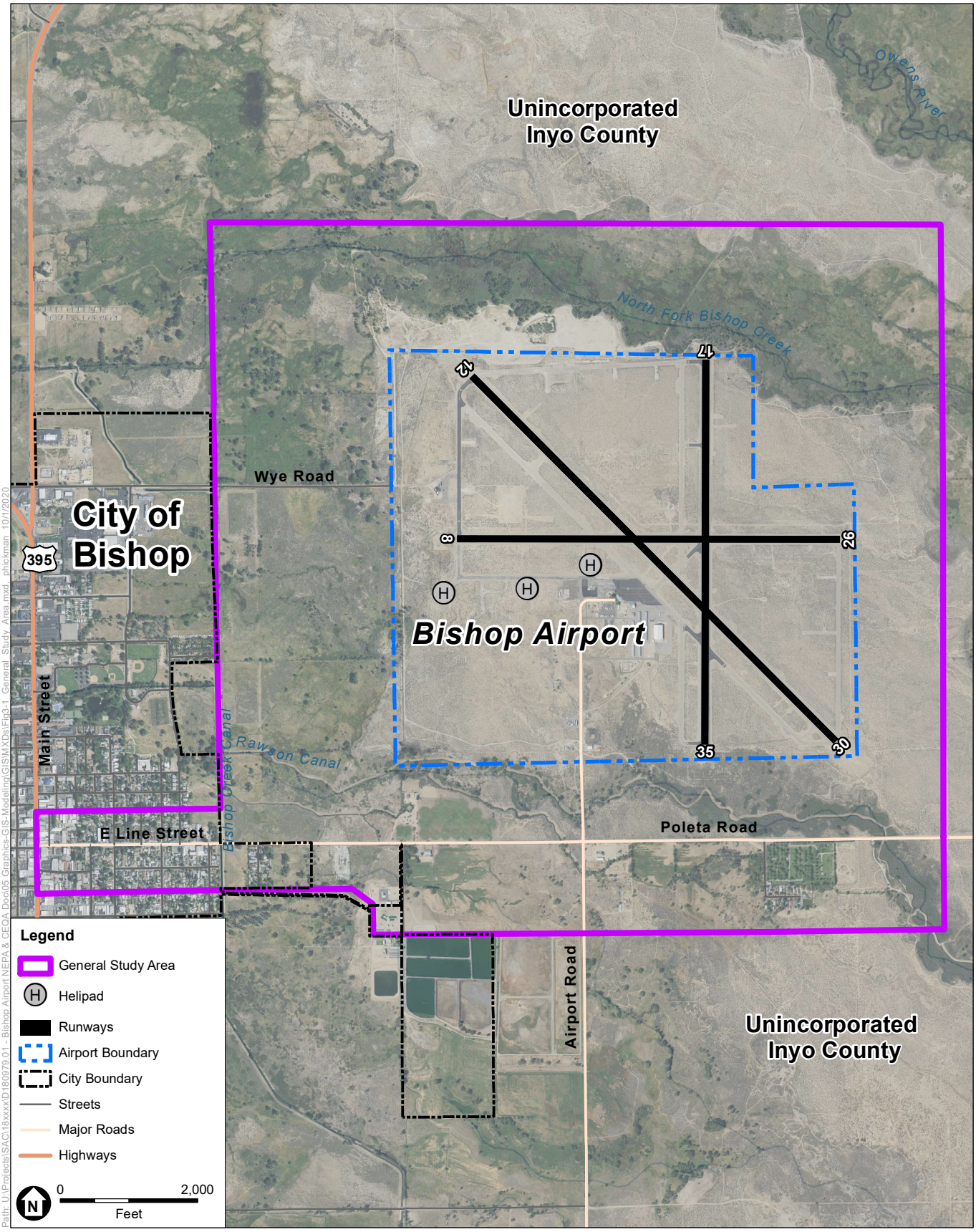
The Affected Environment chapter describes the existing physical, natural, and human environmental conditions within areas that could be directly, or indirectly, affected by the Proposed Action and the No Action Alternative. This information sets the stage on which potential environmental impacts can be assessed and compared. The environmental resource categories discussed in this chapter are organized as identified in FAA Orders 1050.1F, *Environmental Impacts: Policies and Procedures*, FAA Order 5050.4B, *National Environmental Policy Act (NEPA) Implementing Instructions for Airport Actions*, and the 1050.1F Desk Reference. The potential environmental impacts of the Proposed Action and No Action Alternative are discussed in Chapter 4, *Environmental Consequences*.

FAA Order 5050.4B states the affected environment chapter of an EA should succinctly describe only those environmental resources the Proposed Action and its reasonable alternatives are likely to affect. Per FAA Order 1050.1F and the guidance provided in the 1050.1F Desk Reference, the amount of information provided on potentially affected environmental resources is based on the expected impact and is commensurate with the impact's importance.

3.1.1 Study Areas

Study areas were identified to describe existing conditions in the vicinity of Bishop Airport and to assess the potential environmental impacts of the Proposed Action and the No Action Alternative. For the purposes of this EA, a General Study Area (GSA) of approximately 2,545 acres has been defined, as well as specialized study areas applicable to individual environmental resource categories where necessary. Environmental impact categories with specialized study areas include Biological Resources and Historic, Architectural, Archaeological, and Cultural Resources. As discussed in the 1050.1F Desk Reference, study areas may vary based on the impact category being analyzed. Information regarding specialized study areas is described, where applicable, within each environmental impact category discussed below.

The GSA is shown in **Figure 3-1**. The GSA encompasses the area around the Airport property and the surface route between the Airport and Highway 395 that would be used by most automobile traffic arriving to and departing from the Airport. The GSA boundary was defined using U.S. Census geometry, jurisdictional boundaries, Inyo County tax assessor parcel boundaries, roadway centerlines, and other identifiable features. The GSA represents the area where both direct and



SOURCE: Esri; Inyo County Department of Public Works; ESA, 2020.

Proposed Commercial Airline Service at Bishop Airport

Figure 3-1
General Study Area
Bishop Airport

ESA

indirect impacts may result from the implementation of the Proposed Action, and establishes the study area for the quantification of impacts to resource categories that involve issues that are regional in scope and scale, including noise, land use, and socioeconomic impacts.

3.1.2 Resources Not Affected

The environmental impact categories that would not be affected by either the Proposed Action or the No Action Alternative are discussed below. In accordance with guidance provided in FAA Order 1050.1F, FAA Order 5050.4B, and the 1050.1F Desk Reference, no further analysis of these resources is provided within this EA.

Coastal Resources

Inyo County is located approximately 200 miles from the Pacific Ocean and is outside of the California Coastal Zone that is defined as 1000 yards from the mean high tide line.

Farmlands

Farmlands are defined as those agricultural areas considered important and protected by federal, state, and local regulations. Important farmlands include pasturelands, croplands, and forests (even if zoned for development) considered to be "prime," "unique," or "of statewide or local importance." Farmland does not include land already in or committed to urban development or water storage as of August 4, 1984 (7 CFR § 658.2(a)(2)).

The Proposed Action does not involve land acquisition or the conversion of agricultural land to airport use and thus would not affect farmlands.

Department of Transportation Act, Section 4(f)

To qualify as a resource subject to the protective provisions included in Section 4(f) of the Department of Transportation Act of 1966 (DOT Act) (re-codified and renumbered as 49 U.S.C § 303(c))(Section 4(f) properties), land must be a publicly owned park, recreation area, or wildlife and waterfowl refuge of national, state, or local significance as determined by the officials having jurisdiction thereof. Because some of the areas around the Airport within the GSA have been occasionally used for recreational uses it was unknown whether these lands were considered to be recreational areas of national, state, or local significance by their managing agency. Inyo County contacted the LADWP, both owner of the land and the agency with jurisdiction over the properties in question to seek guidance as to whether the LADWP considers the property to qualify as a Section 4(f) property. LADWP indicated that the primary purpose of their lands in the GSA is watershed protection as a function of its operations providing municipal drinking water to the city of Los Angeles (see Appendix E). The LADWP permits public recreation on these lands as a secondary use at the agency's discretion; however, these areas do not function, and are not designated, as parks or recreational areas. As the recreational aspects of the LADWP-owned properties around the Airport within the GSA are secondary to their primary purpose, they would not represent publicly owned lands of a public park or recreation area or a wildlife and waterfowl refuge of national, state, or local significance. Therefore, LADWP-owned properties around the

Airport would not be considered Section 4(f) properties. There are no other properties within the GSA that would qualify as Section 4(f) properties. For these reasons, Section 4(f) properties are not evaluated further in this EA.

Water Resources (Wetlands, Floodplains, and Wild and Scenic Rivers Subcategories)

Wetlands, Floodplains, and Wild and Scenic Rivers are subcategories of the Water Resources environmental impact category. Each subcategory is to be considered when evaluating the potential environmental impacts of a proposed project. The following sections describe why these resources would not be affected by either the Proposed Action or the No Action Alternative.

Wetlands

The U.S. Fish and Wildlife Service (USFWS) maintains the National Wetlands Inventory (NWI) which can be accessed through an online tool called the Wetlands Mapper. A search using this tool indicates the presence of freshwater emergent wetlands and emergent freshwater shrub wetland located within the GSA along North Fork Bishop Creek and Rawson Canal.[1] Although wetlands are found within the GSA, neither the Proposed Action nor the No Action Alternative would result in any development or ground disturbance of any kind. Accordingly, there would be no direct or indirect impacts to wetlands. For these reasons, this resource is not further evaluated in this EA.

Floodplains

The Federal Emergency Management Agency (FEMA) publishes flood insurance rate maps (FIRMs) which indicate flood hazard locations. FIRM flood hazards can be viewed using FEMA's National Flood Hazard Layer Viewer mapping tool. A search of the GSA using this tool indicates the presence of Zone A flood hazard areas which are subject to 1-percent-annual-chance flood event inundation and for which no base flood elevation (BFE) has been established. Also present in the GSA is the Zone AE flood hazard area which is also subject to 1-percent-annual-chance flood event inundation but have a BFE determined to be less than 1 foot in depth.[2] Although floodplains are found within the GSA, neither the Proposed Action nor the No Action Alternative will result in any development or ground disturbance, including near floodplains. Therefore, there would be no direct or indirect impacts to floodplains and this resource category is not further evaluated in this EA.

Wild and Scenic Rivers

The nearest designated Wild and Scenic River is Cottonwood Creek, approximately 20 miles northeast of the Airport in the Inyo National Forest (NPS, 2020).

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1 U.S. Fish and Wildlife Service, National Wetlands Inventory, Wetlands Mapper, <https://www.fws.gov/wetlands/data/mapper.html> (accessed July 29, 2020).

2 Federal Emergency Management Agency, National Flood Hazard Layer (NFHL) Viewer, <https://hazards-fema.maps.arcgis.com/apps/webappviewer/index.html?id=8b0adb51996444d4879338b5529aa9cd&extent=-118.46094753383032,37.31956778504638,-118.31469204066644,37.38779505155614> (accessed July 29, 2020).

3.1.3 Existing Conditions Study Year

The year used to identify existing conditions in this EA is 2019. This represents the latest year for which full sets of data were available at the time preparation of this EA commenced.

3.1.4 Potentially Affected Resource Categories

This chapter provides information on existing conditions for the environmental resource categories the Proposed Action could potentially affect. These environmental resource categories include:

- Air Quality
- Biological Resources
- Climate
- Hazardous Materials, Solid Waste, and Pollution Prevention
- Historical, Architectural, Archaeological, and Cultural Resources
- Land Use
- Natural Resources and Energy Supply
- Noise and Noise-Compatible Land Use
- Socioeconomics, Environmental Justice, and Children's Environmental Health and Safety Risks
- Visual Effects
- Water Resources (Groundwater and Surface Waters only)

This chapter also provides a list of past, present, and reasonably foreseeable projects that may result in cumulative environmental impacts.

The following sections discuss each of the above-listed environmental resource categories in detail.

3.2 Air Quality

3.2.1 Introduction

The U.S. Environmental Protection Agency (USEPA) is required by the federal Clean Air Act of 1970 (CAA) (42 U.S.C. § 7401 *et seq*. [1970]), as amended, to set National Ambient Air Quality Standards (NAAQS) for common air pollutants considered harmful to public health and the environment. Accordingly, the U.S. EPA, established NAAQS for seven air pollutants, described as "criteria air pollutants." These pollutants include:

- ozone (O_3)
- carbon monoxide (CO)
- nitrogen dioxide (NO_2)
- sulfur dioxide (SO_2)
- particulate matter less than or equal to 10 microns in diameter (coarse particulates, or PM_{10})
- particulate matter less than or equal to 2.5 microns in diameter (fine particulates, or $PM_{2.5}$)
- lead (Pb).

In establishing the NAAQS, the U.S. EPA identified two sets of standards, primary and secondary. The primary standards are focused on protecting public health, including the health of populations with increased sensitivity to air pollution. The secondary standards are focused on protecting public welfare from other adverse effects of air pollution, such as damage to property and reduced visibility.

The States are required to analyze air quality in areas within their jurisdiction and make recommendations to the EPA on whether or not they meet the NAAQS. Those areas where air quality meets or surpasses the NAAQS are designated as being in "attainment" whereas those areas where the NAAQS are not being met are designated as being in "nonattainment." States that identify nonattainment areas must prepare a State Implementation Plan (SIP) that details the efforts that will be undertaken to meet the NAAQS by deadlines specified in the 1990 amendments to the CAA. Areas formally designated as being in "nonattainment" that have met the NAAQS are designated as being in "maintenance."

In the State of California, air quality is managed by the California Air Resources Board (CARB). The CARB regulates mobile emissions sources and oversees county and regional air district activities associated with managing air quality. The State of California has also established its own air quality standards, the California Ambient Air Quality Standards (CAAQS). The CARB regulates local air quality indirectly through the CAAQS, as well as setting vehicle emissions standards, conducting air quality research, air quality planning, and overseeing state and local coordination activities. The CAAQS are generally more stringent than the federal standards. Furthermore, under the General Conformity rule, federal agencies are required to ensure that federal actions conform to SIPs to achieve the NAAQS.[3]

The Proposed Action is located in the Great Basin Valleys - Air Basin (Air Basin). The Air Basin is monitored by the Great Basin Unified Air Pollution Control District (GBUAPCD), a regulatory entity created through a joint powers agreement between Inyo, Mono, and Alpine Counties. The GBUAPCD enforces federal laws delegated to it and state laws concerning stationary emissions sources. The GBUAPCD also establishes and enforces its own legal requirements. Enforcement of federal, state, and local air quality regulations in the Air Basin is handled by the GBUAPCD. Mobile emissions sources in California are typically regulated by the CARB.

3.2.2 Regulatory Context

Air quality management in the Air Basin is the responsibility of the GBUAPCD. The GBUAPCD has prepared air quality plans for four separate areas in the Air Basin. However, the GSA is not located in any of these planning areas, and is thus not located in an area designated as being in nonattainment or maintenance for any of the NAAQS. Because the Air Basin is in attainment for the NAAQS, there is no SIP applicable to the GSA.

This EA is focused on potential impacts to air quality associated with federal standards. However, for purposes disclosure it is important to note that Inyo County is designated as being in nonattainment for the CAAQS for O_3 and PM_{10}. The current NAAQS and CAAQS are discussed in greater detail in the Air Quality Technical Memorandum provided in **Appendix G-1** of this EA. **Table 3-1** provides the NAAQS and CAAQS and attainment status for the air basin.

[3] 42 USC § 7506(c).

TABLE 3-1
GREAT BASIN VALLEYS AIR BASIN – STANDARDS AND ATTAINMENT STATUS

Pollutant	Primary/Secondary	Averaging Time	Federal Standard	State Standard	Federal Attainment Status - Basin	State Attainment Status - Basin
Ozone (O_3)	Primary and secondary	1 Hour	0.12 ppm	0.09 ppm	Attainment	Nonattainment
	Primary and secondary	8 Hour	0.070 ppm	0.070 ppm	Attainment	Nonattainment
Respirable Particulate Matter (PM_{10})	Primary and secondary	24 Hour	150 µg/m^3	50 µg/m^3	Attainment	Nonattainment
	--	1 Year	--	20 µg/m^3	Attainment	Attainment
Fine Particulate Matter ($PM_{2.5}$)	Primary	1 Year	12 µg/m^3	12 µg/m^3	Attainment	Attainment
	Secondary	1 Year	15 µg/m^3	--	Attainment	Attainment
	Primary and secondary	24 Hours	35 µg/m^3	--	Attainment	Attainment
Carbon Monoxide (CO)	Primary	1 Hour	35 ppm	20 ppm	Attainment	Attainment
		8 Hour	9 ppm	9 ppm	Attainment	Attainment
Nitrogen Dioxide (NO_2)	Primary	1 Hour	0.100 ppm	0.18 ppm	Attainment	Attainment
	Primary and secondary	1 Year	0.053 ppm	0.030 ppm	Attainment	Attainment
Sulfur Dioxide (SO_2)	Primary	1 Hour	0.075 ppm	0.25 ppm	Attainment	Attainment
	Secondary	3 Hour	0.5 ppm	--	Attainment	Attainment
	--	24 Hour	--	0.04 ppm	Attainment	Attainment
Lead (Pb)	Primary and secondary	Rolling 3 month Average	0.15 µg/m^3	--	Attainment	Attainment
	--	30 Days	--	1.5 µg/m^3	Attainment	Attainment

SOURCES: California Air Resources Board, November 20, 2020; EPA Green Book. Available: <https://www.epa.gov/green-book> (accessed November 20, 2020).

3.2.3 Existing Conditions

The GBUAPCD monitors air quality at 14 locations throughout Inyo County. The closest air quality monitoring station to BIH is located at the White Mountain Research Center on East Line Street, about 1.2 miles southeast of the Airport. The White Mountain Research Center monitors concentrations of O_3, CO, SO_2, $PM_{2.5}$, and PM_{10}. There are no monitoring stations that measure concentrations of NO_2 near the Airport. **Table 3-2** summarizes air quality data from the White Mountain Research Station for the most recent three years.

TABLE 3-2
AIR QUALITY MONITORING DATA SUMMARY (2017-2019)

Pollutant	Monitoring Data by Year		
	2017	2018	2019
Ozone (O_3)			
Highest 1 Hour Average (ppm)	0.077	0.083	0.069
Days over National Standard	0	0	0
Highest 8 Hour Average (ppm)	0.071	0.075	0.064
Days over National Standard (0.070 ppm)	1	6	0
Sulfur Dioxide (SO_2)			
Highest 1 Hour Average (ppb)	1.1	0.6	0.9
Days over National Standard (75 ppb)	0	0	0
Highest 24 Hour Average (ppb)	0.3	0.4	0.2
Days over National Standard (140 ppb)	0	0	0
Carbon Monoxide (CO)			
Highest 1 Hour Average (ppm)	0.3	1.4	1.6
Days over Federal Standard (35 ppm)	0	0	0
Highest 8 Hour Average (ppm)	0.2	1.3	1.2
Days over National Standard (9.0 ppm)	0	0	0
Particulate Matter ≤ 10 Microns (PM_{10})			
Highest 24 Hour Average ($\mu g/m^3$) [a]	215	422	742
Estimated Days over National Standard (150 $\mu g/m^3$)	2	2	3
Particulate Matter ≤ 2.5 Microns ($PM_{2.5}$)			
Highest 24 Hour Average ($\mu g/m^3$) [a]	21	33.8	98.9
Estimated Days over National Standard (35 $\mu g/m^3$)	--	--	--

NOTES:
ppm = parts per million
ppb = parts per billion
$\mu g/m^3$ = micrograms per cubic matter
-- There was insufficient data available to determine the value
[a] exceptional events excluded

SOURCES: USEPA. Outdoor Air Quality Data for White Mountain Research Center; Monitor Values Report. 2020.

The climate in the Air Basin (and GSA) is determined by its terrain and geographical location. The Basin is situated in a valley between the Sierra Nevada Mountains to the west and the White-Inyo Mountains to the east. The Sierra Nevada Mountains to the west act as a barrier to precipitation creating a 'rain shadow' in the Basin. For this reason, the region has an arid climate with an average annual rainfall of about five inches. The temperature typically varies between 22°F to 97°F throughout the year with the hottest months in June through August. The average wind speed ranges from around five miles per hour (mph) in the fall to seven mph in the spring.

Air emissions sources at the Airport are typical of a general aviation facility. These sources include emissions from aircraft during the landing/take-off cycle and airport-related motor vehicles (e.g., passenger vehicles, heavy trucks, shuttles, etc.). The air emissions evaluated based on the number of aircraft operations at the Airport in 2019 were from the Airport's FAA Terminal Area Forecast (see Table 1-2 and Appendix D-2). There no emissions from any stationary sources such as diesel-powered generators at the Airport. Furthermore, there are no emissions from aircraft auxiliary

power units (APUs) and ground support equipment (GSE) as this equipment is not currently operated at the Airport. GSE and APU use are generally associated with commercial service aircraft, not the GA or military aircraft that currently operate at the Airport. Therefore, the bulk of air pollutants emissions generated from the Airport are produced by aircraft operations and off-airport vehicular travel.

Table 3-3 presents the existing conditions (2019) air pollutant emissions inventory calculated for the Airport. The emissions inventory was developed using the most recent version of FAA's Aviation Environmental Design Tool (AEDT Version 3c)[4] and the EMFAC2017 web database for motor vehicles. More information on the emissions inventory can be found in the Air Quality Technical Memorandum provided in Appendix G-1.

TABLE 3-3
EXISTING CONDITIONS AIR POLLUTANT EMISSIONS INVENTORY (TONS PER YEAR)

Emissions Source	CO	VOC	NO_X	SO_X	PM_{10}	$PM_{2.5}$
Aircraft	110.45	3.57	3.32	0.62	0.10	0.10
Off-Airport Vehicular Travel	1.10	0.15	0.27	<0.01	0.22	0.06
Total	**110.63**	**3.73**	**5.96**	**0.82**	**0.32**	**0.16**

NOTES:

CO = carbon monoxide
NO_x = oxides of nitrogen
PM_{10} = particulate matter less than or equal to 10 microns in diameter
$PM_{2.5}$ = particulate matter less than or equal to 2.5 microns in diameter
SO_X = oxides of sulfur
VOC = volatile organic compound

SOURCE: Environmental Science Associates, 2020.

3.3 Biological Resources

3.3.1 Introduction

This section describes biotic communities in the Airport environs, including plant communities, wildlife, and protected species with potential to exist within therein. This section is based on observations made during multiple field surveys to evaluate the potential for the presence of threatened or endangered species or critical habitat.

3.3.2 Regulatory Context

The provisions set forth in the federal *Endangered Species Act* (16 U.S.C. § 1531 *et seq*) require the FAA to determine whether a proposed project under its purview would affect a federally listed species or designated critical habitat for that species. Identification of candidate species (any species that either the USFWS or National Marine Fisheries Service (NMFS) is considering for listing as "endangered" or "threatened," but has not yet issued a proposed rule) is also required.

[4] The AEDT model is the current model approved by the FAA for modeling noise and air quality.

3.3.3 Biological Assessment Action Area

For purposes of meeting the requirements of Section 7 of the Endangered Species Act, a Biological Assessment (BA) was prepared for the FAA. The results of the BA are used herein to describe existing conditions at the Airport. An Action Area (AA) was delineated for use in preparing the BA. The AA is a distinct study area of approximately 403 acres used to analyze potential impacts to biological resources. Per the 1050.1F Desk Reference, the AA encompasses all areas that may be affected directly or indirectly by the Proposed Action, as well as immediately adjacent areas. The AA includes approximately 403 acres surrounding Runway 12/30, the runway safety areas (RSAs) beyond the runway ends, and within a 500-foot buffer surrounding these facilities, as well as two roadways into the RSAs. The AA is shown in **Figure 3-2**. The BA is provided in **Appendix H**.

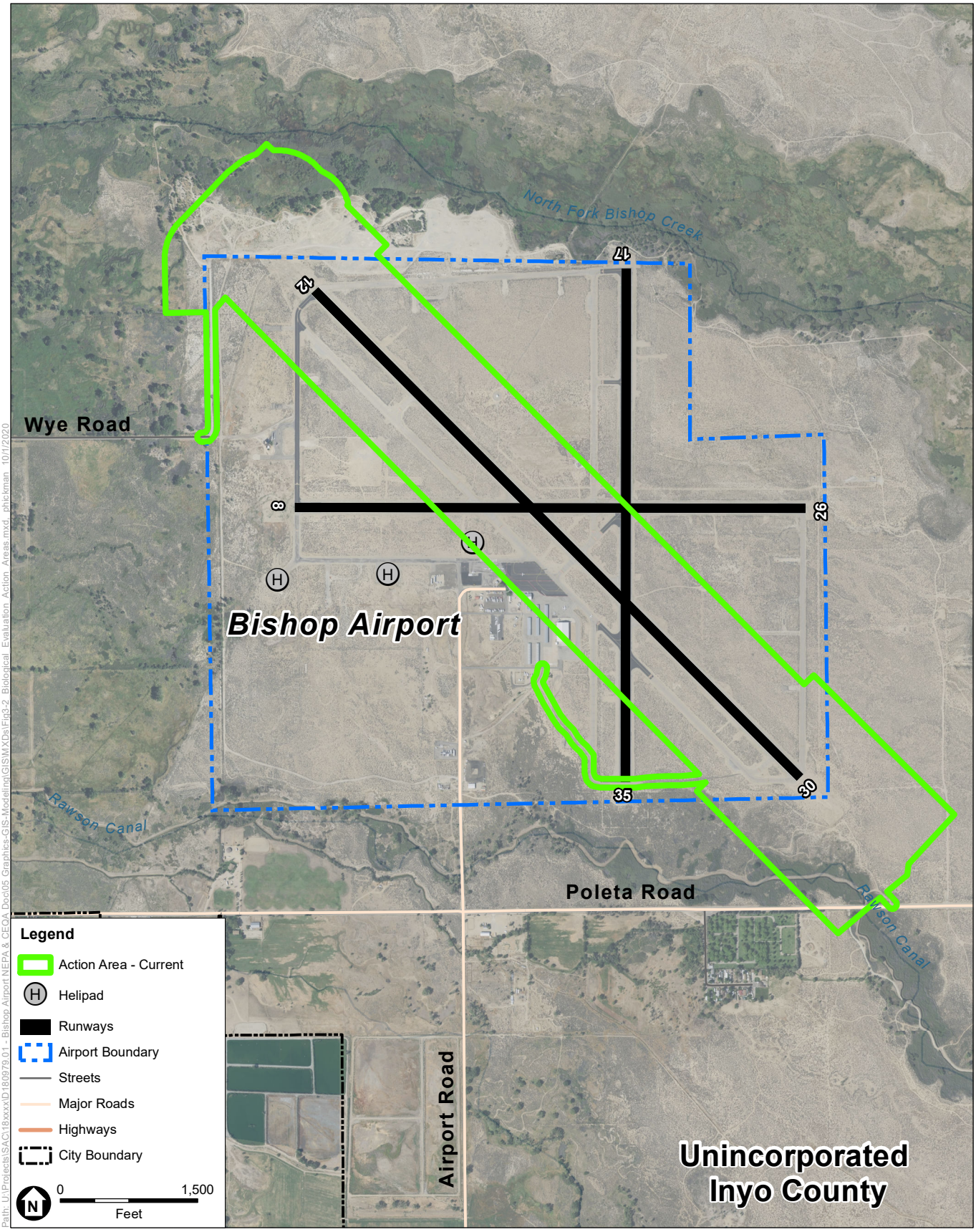
3.3.4 Existing Conditions

3.3.4.1 Vegetation Communities

Plant communities within the AA were identified using aerial photography and information collected during field surveys conducted by verified biologists on June 7, 2019 and May 1, 2020. The AA includes upland and wetland vegetation communities. Upland habitat within the AA consist primarily of low-intensity development, open space, and shrub/scrub habitat. The open space surrounding the runway are routinely graded and maintained by the Airport staff. The area to the northwest of the Runway 12 end was previously used for gravel mining, but is largely abandoned, except for occasional off highway vehicle (OHV) use. The shrub/scrub habitat within the AA consists primarily of low-growing ruderal grassland and common shrub species, such as rubber rabbitbrush (*Ericameria nauseosa*), with interspersed greasewood (*Sarcobatus vermiculatus*), and saltbush (*Atriplex* spp.).

Small portions of emergent herbaceous wetlands, hay/pasture, and woody wetlands occur within and immediately surrounding the AA in the northwest and southeastern parts of the RSAs beyond the Runway 12/30 ends. Wetland habitats were identified through research using the USFWS NWI database and field visits.[5] Wetland habitat is located along North Fork Bishop Creek and Rawson Canal. Field visits within the AA confirm that these areas consist of the following community vegetation types: Fremont cottonwood-willow riparian forest (*Populus fremontii-Salix gooddingii-S. lasiolepis S. laevigata Alliance*); Willow riparian woodland (*Salix gooddingii- S. lasiolepis Salix laevigata Alliance*); and Saltgrass meadow (*Distichlis spicata Alliance*). More detailed descriptions of upland and wetland habitats within the AA can be found in Appendix H.

5 U.S. Fish and Wildlife Service, National Wetlands Inventory. <https://www.fws.gov/wetlands/data/Mapper.html.> (accessed August 13 2020).



SOURCE: Esri; Inyo County Department of Public Works; ESA, 2020.

Proposed Commercial Airline Service at Bishop Airport

Figure 3-2
Biological Assessment Action Area
Bishop Airport

ESA

3.3.3.2 Wildlife

Federally Listed Species and Critical Habitat

The federally listed species with potential to occur in the AA are identified in **Table 3-4.** The species described in this section are based on the official list of threatened and endangered species provided by USFWS on September 30, 2020, field visits performed in 2019 and 2020, and research using the following sites: CDFW California Natural Diversity Database (CNDDB), Cornell Laboratory of Ornithology's eBird database, and the USFWS Environmental Conservation Online System (ECOS).

TABLE 3-4
FEDERAL LISTED SPECIES POTENTIALLY OCCURRING IN THE ACTION AREA

Common Name	Scientific Name	Species Type	USFWS Listing
Western Yellow-Billed Cuckoo[a]	*Coccyzus americanus occidentalis*	Birds	T
Southwestern Willow Flycatcher	*Empidonax traillii extimus*	Birds	E
Lahontan Cutthroat Trout	*Oncorhynchus clarkii henshawi*	Fish	T
Owens Pupfish	*Cyprinodon radiosus*	Fish	E
Owens Tui Chub[a]	*Gila bicolor ssp. snyder*	Fish	E
Fish Slough Milk-vetch[a]	*Astragalus lentiginosus var. piscinensis*	Plant	T

NOTES:

Species list was based on USFWS official species list in addition to research of historical information and survey efforts in 2019 and 2020. Potential to occur within the AA may also be influenced by occurrences in adjacent similar habitat.

[a] The USFWS has only designated Critical Habitat for Owens Tui Chub and Fish Slough Milk-vetch. Critical Habitat for the Western Yellow-billed Cuckoo is proposed and under review.

Status Codes:
E = Listed as Endangered
T = Listed as Threatened

SOURCES: U.S. Fish and Wildlife Service, Information, Planning, and Consultation (IPaC) System, April 29, 2020.

The USFWS lists the Western Yellow-billed Cuckoo (*Coccyzus americanus occidentalis*) as a threatened avian species potentially occurring within the AA. The Western Yellow-billed Cuckoo is a primarily riparian avian species inhabiting dense woodland areas along streams and rivers in the Western United States. They require large, contiguous tracts of riparian habitat for nesting and prefer Cottonwood-willow forests (*Populus spp* and *Salix spp.*) for breeding. Critical Habitat for the Western Yellow-billed Cuckoo is proposed and under review; however, the closest proposed location is over 100 miles south of the AA. Review of CNDDB records also indicate that the closest sighting of the Yellow-billed Cuckoo occurred 15 miles south of BIH in 2009. The species was not detected in the AA during the site visits conducted at the Airport.

Habitat suitable for the Southwestern Willow Flycatcher (*Empidonax traillii extimus;* SWFL) was identified during the site visits conducted at the Airport. Although the SWFL was not included on the USFWS list, it is included here as suitable habitat for this species was identified in the AA. The

SWFL is the only subspecies of willow flycatcher known to breed in the Owens River Valley.[6] To determine whether SWFL is present at the Airport, a USFWS-permitted biologist conducted species-specific surveys using USFWS protocols during the species' nesting season in Summer 2020. No SWFL were detected during any of the species-specific surveys. Therefore, it can be concluded that no willow flycatchers are utilizing the areas surveyed as breeding or foraging habitat. More information on the field surveys is included in Appendix H.

The USFWS lists the Lahontan Cutthroat Trout (*Oncorhynchus clarkii henshawi*), Owens Tui Chub (*Cyprinodon radiosus*), and Owens Pupfish (*Gila bicolor ssp. Snyde*) as endangered or threatened fish species potentially occurring within the AA. However, it is unlikely any of these fish species would be present in the AA. For example, the Crowley Lake watershed—where the Airport is located—is not considered a likely area where the Cutthroat Trout species may occur. Secondly, the closest population of the Owens Pupfish is approximately five miles from the AA in the Fish Slough Area of Critical Environmental Concern. Finally, Critical Habitat for Owens Tui Chub does not exist on or adjacent to the AA or GSA.

The USFWS listed the Fish Slough Milk-vetch (*Astragalus lentiginosus var. piscinensis*) as potentially occurring in the AA. This species of plant is largely dependent on desert spring-fed wetland ecosystems that consist of highly alkali soils. The California Native Plant Society (CNPS) Calflora database indicates that the Fish Slough Milk-vetch has been positively identified in Inyo County.[7] However, the closest population is approximately five miles from the AA and there are no historical records of its presence on Airport property. Furthermore, designated Critical Habitat does not exist on or adjacent to the AA or GSA.

State-Listed Species

Nine state-listed special-status species were identified with the potential to occur in the AA or in its immediate surroundings through field visits and research using the following sites: CDFW CNDDB, Cornell Laboratory of Ornithology's eBird database, and the USFWS ECOS. The state listed species of concern are included in **Table 3-5**.

None of the state-listed species identified in Table 3-5 are documented to occur within the AA. Three of the state species of special concern were positively identified within the AA during field visits: The Northern Harrier (*Circus hudsonius*), Yellow Warbler (*Setophaga petechia*), and Yellow-breasted Chat (*Icteria virens*). However, according to the CDFW Special Animals List (2020), these species are not at high risk of local extinction.[8] More information on state listed species can be found in Appendix H.

6 Paxton, E.H., 2000, Molecular genetic structuring and demographic history of the Willow Flycatcher: Flagstaff, Arizona, Northern Arizona University, MS thesis, 43 p.

7 California Native Plant Society, Calflora. <https://www.calflora.org/entry/observ.html?track=m#srch=t&cols=0,3,61,35,37,13,54,32,41&lpcli=t&taxon=Astragalus+lentiginosus+var.+piscinensis&chk=t&cch=t&inat=r&cc=INY.> (accessed July 31, 2020).

8 California Department of Fish and Wildlife, Special Animals List, July 2020.

TABLE 3-5
STATE-LISTED SPECIES POTENTIALLY OCCURRING IN THE ACTION AREA

Common Name	Scientific Name	Species Type	CDFW Listing
Owens Valley Vole	*Microtus californicus vallicola*	Mammal	SSC
Yellow-breasted Chat	*Icteria virens*	Birds	SSC
Burrowing Owl	*Athene cunicularia*	Birds	SSC
Yellow Warbler	*Setophaga petechia*	Birds	SSC
Northern Harrier	*Circus hudsonius*	Birds	SSC
Western Yellow-Billed Cuckoo	*Coccyzus americanus occidentalis*	Birds	E
Southwestern Willow Flycatcher	*Empidonax traillii extimus*	Birds	E
Owens Pupfish	*Cyprinodon radiosus*	Fish	E
Owens Tui Chub	*Gila bicolor ssp. snyder*	Fish	E

NOTES:

Species list was based on research of historical information and site visits in 2019 and 2020. Potential to occur within the AA may also be influenced by occurrences in adjacent similar habitat.

It is important to note that the Species of Special Concern is an administrative designation and carries no formal legal status. The intent of the designation is to focus attention on animals at possible conservation risk.

Status Codes:

E = Listed as Endangered
T = Listed as Threatened
SSC = Species of Special Concern

SOURCES: California Department of Fish and Wildlife, State and Federally Listed Endangered and Threatened Animals of California, July 17, 2020; California Department of Fish and Wildlife, Special Animals List, July 2020; California Department of Fish and Wildlife, Inland Deserts Region, <https://wildlife.ca.gov/Regions/6> (accessed August 4, 2020).

3.3.3.4 Migratory Birds

The Migratory Bird Treaty Act of 1918 (16 U.S.C. §§ 703-711) makes it illegal for anyone to take any migratory bird, nest, or eggs except under the terms of a valid permit. The migratory bird species in the area include hawks and other raptors, among many others. The complete list of migratory bird species with potential to occur in the AA and identified by the USFWS is included in Appendix H.

3.4 Climate

3.4.1 Introduction

This section defines greenhouse gases (GHGs), describes the sources of GHG emissions at the Airport, and provides the context for analysis of project-related effects on climate.

3.4.2 Regulatory Context

There are currently no accepted methods of determining significance for aviation project-related GHGs given the small percentage of emission contributed. Projected GHG emissions were estimated, consistent with the guidance provided in the FAA's 1050.1F Desk Reference. GHGs include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). Increasing concentrations of GHGs in the atmosphere affect global climate. Anthropogenic (i.e., man-made) sources of GHG emissions are primarily associated with the combustion of fossil fuels, including aircraft fuel.

Mass emissions of GHGs are accounted for by converting emissions of specific pollutants to carbon dioxide equivalent (CO_2e) emissions by applying the proper global warming potential (GWP) value for each pollutant. GWP represents the amount of heat captured by a mass of a specific GHG compared to a similar mass of CO_2. Some GHGs have greater warming potential than others; accordingly, they would represent a greater amount of equivalent CO_2. Specific GWP ratios are provided by the Intergovernmental Panel on Climate Change (IPCC) in its Fourth Assessment Report (AR4) (IPCC, 2007). By applying the GWP ratios, project-related CO_2e emissions can be tabulated in metric tons per year. Typically, the GWP ratio corresponding to the warming potential of CO_2 over a 100-year period is used as a baseline.

3.4.3 Existing Conditions

Similar to the existing conditions calculations conducted for the criteria air pollutants, existing GHG emissions were calculated for aircraft operations (see Table 1-2 and Appendix D-2) and off-airport vehicular travel, the sources for the bulk of air pollutants emissions generated from the Airport. **Table 3-6** shows estimated GHG emissions at the Airport for 2019. Using AEDT, Version 3c, the amount of CO_2 was calculated for aircraft operations based upon forecasted operations at the Airport. CH_4 and N_2O for aircraft were calculated using the methods found in the FAA *Aviation Emissions and Air Quality Handbook* (Version 3, Update 1). Emissions of GHGs from mobile sources, such as light-duty vehicles associated with passenger traffic and larger trucks, were calculated using the EMFAC2017 web database using estimated traffic levels provided by Inyo County (see Appendix G-1).

TABLE 3-6
EXISTING CONDITIONS (2019) GREENHOUSE GAS EMISSIONS
(ANNUAL METRIC TONS)

Source	Carbon Dioxide Equivalent (CO_2e) (metric tons)
Aircraft	2,690.73
Off-Airport Vehicular Travel	238.25
2019 Total	**2,928.98**

SOURCE: Environmental Science Associates, 2020.

3.5 Hazardous Materials, Solid Waste, and Pollution Prevention

3.5.1 Introduction

The purpose of this section is to characterize any known areas of environmental concern, areas with known contamination, and areas subject to past or present remediation efforts within the GSA that may be affected by the Proposed Action.

3.5.2 Regulatory Context

Materials are typically defined as being hazardous if they have specific characteristics defined as such or if they appear on a list of hazardous materials prepared by a federal, state, or local regulatory agency.

The USEPA has defined the term "solid waste" to include the following: any gaseous, liquid, semi-liquid, or solid material that is discarded or has served its intended purpose, unless the material is excluded from regulation. These materials are considered solid waste whether they are discarded, reused, recycled, or reclaimed.

The USEPA classifies a waste as hazardous if it is listed on the USEPA's list of hazardous waste and exhibits one or more of the following properties: ignitability (including oxidizers, compressed gases, and extremely flammable liquids and solids); corrosivity (including strong acids and bases); reactivity (including materials that are explosive or generate toxic fumes when exposed to air or water); or toxicity (including materials listed by the USEPA as capable of inducing systemic damage in humans or animals).

3.5.2.1 Hazardous Materials

Federal, state, and local laws regulate the use, storage, transport, and disposal of hazardous materials. Federal laws and regulations include:

- *Resources Conservation and Recovery Act* (RCRA)(42 U.S.C. § 6901 *et seq*)
- *Hazardous and Solid Waste Amendments Act of 1984* (HSWA)(Public Law 98-616)
- *Comprehensive Environmental Response, Compensation, and Liability Act of 1980* (CERCLA or Superfund)(42 U.S.C. § 9601 *et seq*)
- *Superfund Amendments and Reauthorization Act of 1986* (SARA)(Public Law 99-499)
- *Emergency Planning and Community Right-to-Know Act of 1986* (SARA Title III)(Public Law 99-499)

Federal regulations promulgated to implement these statutes are codified in Title 40 CFR, *Protection of the Environment*. Additional regulations that apply to workplace safety and transportation of hazardous materials are contained in Titles 29 and 49 of the CFR, respectively.

Hazardous materials management laws in California include:

- *Hazardous Waste Control Law* (California Health and Safety Code §§ 25100, *et seq*)
- *Safe Drinking Water and Toxic Enforcement Act* (Proposition 65)
- *Carpenter-Presley-Tanner Hazardous Substance Account Act* (California Health and Safety Code §§ 25300)

3.5.2.2 Solid Waste and Recycling

State and local jurisdiction have primary responsibility for regulating locally generated solid waste. The *California Integrated Waste Management Act of 1989* required that by the year 2000, each jurisdiction in the state must divert at least 50 percent of its solid waste from landfills or transformation facilities to recycling or composting facilities, or to implement policies to generally reduce waste. Similarly, Assembly Bill 341 (Solid Waste: diversion)(AB 431), implemented in 2011, increased this amount to 75 percent by the year 2020. The City of Bishop participates in the Mandatory Commercial Recycling program that has been in effect since 2012. Under this program, businesses that generate four cubic yards or more of trash per week are required to recycle. The City of Bishop also requires all projects to have a construction waste management plan in compliance with Section 4.408.2 of the *2010 California Green Building Standards Code*. Construction waste management plans are designed to encourage recycling, reuse, and diversion of construction waste.

3.5.2.3 Pollution Prevention

The *Pollution Prevention Act of 1990* (42 U.S.C. §§ 13101-13109) requires prevention and reduction of pollution at the source, when possible, so that waste has a reduced impact on the environment. Pollution reduction at the source includes practices to keep hazardous substances from being released into the environment prior to recycling, treatment, or disposal.

3.5.3 Existing Conditions

There are currently no sites located on Airport property that are permitted as either large or small quantity generators of hazardous wastes. A review of the USEPA's NEPAssist database was conducted to identify regulated facilities with geographical locations on or adjacent to the GSA. **Table 3-7** lists the RCRA sites within and immediately surrounding the GSA. Four active sites regulated by the USEPA under the RCRA were identified within the GSA, with an additional four sites located adjacent to the GSA boundary. The review of USEPA data did not reveal any National Priorities List (NPL) sites (also referred to as "Superfund" sites) on or within one mile of the GSA.

Current activities at the Airport that involve the use of hazardous materials include fueling, maintenance, and repair of aircraft and motor vehicles. Inyo County operations staff currently operate airport fuel trucks that primarily conduct fueling on the apron, but also serve helipads on the north side of the airfield and air hangars south of the terminal. There are also self-serve fueling options available at the fuel farm. Other operations involving hazardous materials include the use of oils and antifreeze for equipment maintenance, and paints, sealants, and oils for other activities.

Operations that entail use of hazardous materials are carried out in accordance with applicable laws and regulations.

TABLE 3-7
RCRA SITES

FRS ID	Name	Status	Compliance/ Enforcement Issues	Within GSA?
110055431938	FedEx Ground Package System Inc.	Active	None	Yes
110070454639	City of Bishop WWTP	Active	None	Yes
110055669904	7/11 Materials	Active	None	Yes
110002895127	Phillips Camera House	Active	None	Yes
110015672137	White Mtn. Ranger Station	Active	None	No
110066781646	Vons Store # 1753	Active	None	No
110065932307	Kmart #7756	Active	None	No
110002805297	Caltrans Bishop Maintenance Station	Active	None	No

NOTE:

Compliance and enforcement information available in the USEPA ECHO report is only available for the previous 5-year period.

SOURCE: USEPA, Enforcement and Compliance History Online (ECHO), <https://echo.epa.gov/> (accessed August 4, 2020).

Solid waste and recycling services in the City of Bishop and surrounding areas are provided by two waste management providers: Preferred Septic & Disposal and Bishop Waste. Both providers offer local solid waste collection and recycling services to residents and commercial businesses. Solid waste at the Airport is handled via two on-site dumpsters, emptied once a week by Preferred Septic & Disposal with which the Airport has a three-year contract that commenced on March 1, 2020. One additional on-site dumpster, emptied by Bishop Waste, serves the restaurant located in the terminal building. Solid waste produced by Airport activities is transported to the closest disposal site at Bishop-Sunland Landfill located approximately four miles southwest of the Airport off of Sunland Reservation Road. The local landfill is operated by Inyo County on land leased from LADWP. According to the CalRecycle Solid Waste Information System, the Bishop-Sunland Landfill has a maximum permitted capacity of 160 tons of solid waste per day and a cease operation date of 2064. The landfill has a capacity of 6 million cubic yards with a remaining capacity of 3.3 million cubic yards.[9] The landfill also accepts recyclable materials such as wood, metal, cardboard, paper, electronic waste, universal waste, glass, plastic, aluminum, mattresses, carpet, and various electronics.

[9] CalRecycle, SWIS Facility/Site Activity Details, Bishop Sunland Solid Waste Site (14-AA-0005), <https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/4236?siteID=648> (accessed November 20, 2020).

3.6 Historic, Architectural, Archaeological, and Cultural Resources

3.6.1 Introduction

This section discusses historic, architectural, archaeological, and cultural resources located in areas around the Airport. These resources reflect human culture and history in the physical environment, and may include structures, objects, and other features that were important in past human events. Historic, architectural, archaeological, and cultural resources also include definite locations (sites or places) of traditional cultural or religious importance to specified social and/or cultural groups.

3.6.2 Regulatory Context

The primary laws that pertain to the treatment of historic, architectural, archaeological, and cultural resources during environmental analyses are the *National Historic Preservation Act of 1966* (NHPA) (54 U.S.C. §§ 300101 *et seq*.), the *Archaeological Resources Protection Act* (16 U.S.C. §§ 470aa-470mm), and the *Native Graves Protection and Repatriation Act* (25 U.S.C. §§ 3001-3013).

3.6.2.1 Section 106 of the National Historic Preservation Act

The NHPA requires federal agencies with jurisdiction over a proposed federal action (referred to as an "undertaking" under the NHPA) to take into account the effects of the undertaking on historic properties. The term "historic properties" describes "any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register [of Historic Places]" (36 CFR § 800.16(l)(1)). Consultation under Section 106 is not required if the undertaking has no potential to affect historic properties. The regulations implementing Section 106 state: "If the undertaking is a type of activity that does not have the potential to cause effects on historic properties, assuming such historic properties were present, the agency official has no further obligations under section 106 of this part." (36 CFR § 800.3(a)(1). As documented in the 1050.1F Desk Reference, the regulations implementing Section 106 require the FAA to consult with certain parties, such as the State Historic Preservation Office (SHPO) and Tribal Historic Preservation Officer (THPO), of a Federally Recognized Indian Tribe pursuant to Section 1010(d)(2) of NHPA. Consultation with THPO(s) occur if an undertaking is occurring tribal lands or if an undertakings Area of Potential Effects (APE) is located outside tribal lands but include historic resources of religious and cultural significance to a tribe. The purpose of consultation is to identify potentially affected historic properties, assess effects to such properties, and seek ways to avoid, minimize, or mitigate any adverse effects on such properties. The agency also must provide an opportunity for public involvement (36 CFR § 800.1(a)). Consultation with Federally Recognized Native American tribes regarding issues related to Section 106 must recognize the government-to-government relationship between the Federal Government and Native American tribes as set forth in Executive Order (EO) 13175, "*Consultation and Coordination with Indian Tribal Governments*" and the Presidential Memorandum on Tribal Consultation, dated November 5, 2009. Documentation of the FAA's compliance with Section 106 for the Proposed Action is provided in **Appendix E**.

3.6.3 Existing Conditions

An Area of Potential Effects (APE) was established pursuant to 36 CFR § 800.4(a). The APE represents the geographic area in which the undertaking may directly or indirectly cause alterations in the character or use of historic properties. The APE for the Proposed Action includes Runway 12/30 with a 500-foot buffer that incorporates Taxiway A and is depicted in **Figure 3-3**. The APE accounts for existing arrival and departure procedures to Runway 12/30. Consultation with the California State Historic Preservation Office (SHPO), occurred over the telephone on November 5, 2020. The California SHPO representative indicated the evaluation approach was reasonable the Proposed Action would not affect historic properties, and that there was no need for formal consultation (see Appendix E for additional information).

A records search of the Eastern Information Center of the California Historic Resources Information System was completed in September 2020 and has indicated the presence of three cultural resources within or intersected by the APE. One resource listed on the NRHP, a tribal archaeological resource, is intersected by the APE. Due to the sensitivity of the site, the precise location will not be disclosed in this document. However, any potential impacts to the site will be assessed and documented in Chapter 4. The other two resources identified within the APE do not meet the requirements for eligibility on the NRHP.

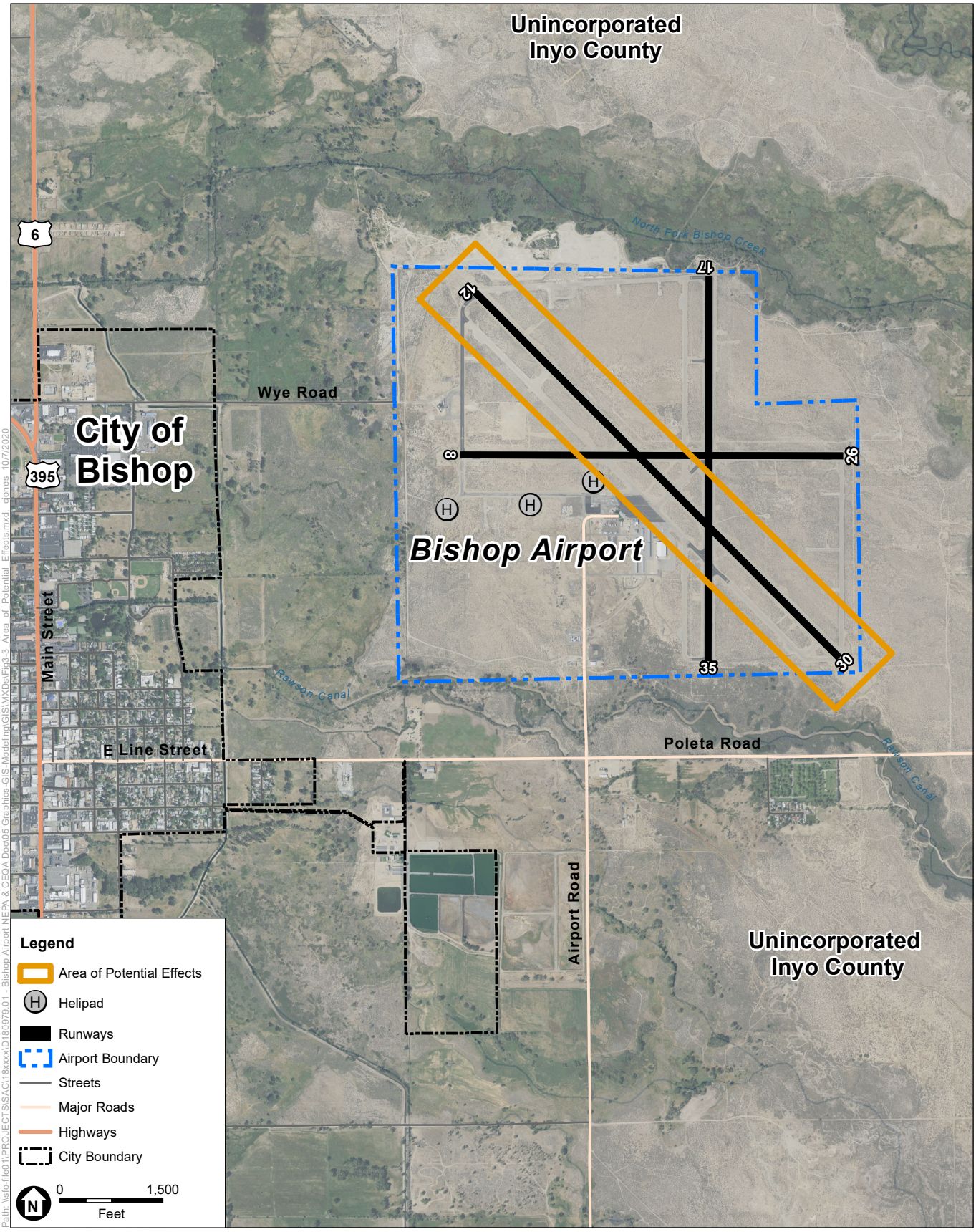
3.7 Land Use

3.7.1 Introduction

This section discusses local land use in the GSA. Land use development is guided by local government planning and is influenced by a variety of factors including transportation patterns, physical geography, and market forces. The City of Bishop and County of Inyo have land use regulatory authority within the areas of the GSA in their respective jurisdictions.

3.7.2 Regulatory Context

Per Section 1502.16(c) of the CEQ Regulations, NEPA documents are required to consider "conflicts between the proposed action and the objectives of Federal, regional, State, and local (and in the case of a reservation, Indian tribe) land use plans, policies and controls for the area concerned." In the event there is inconsistency with local land use plans, NEPA documentation must describe the degree to which an agency's proposed action would have to change to be consistent with the applicable plan(s)(40 CFR § 1506.2(d)). Certain grant assurances must be met to utilize Airport Improvement Program (AIP) funds for Airport projects. Per *the Airport and Airway Improvement Act of 1982* (49 U.S.C. § 47107(a)(10)), Grant Assurance 6, *Consistency with Local Plans*, requires proposed projects to be reasonably consistent with local plans of public agencies responsible for planning development of the area surrounding the airport. Other federal laws and regulations pertaining to the effects of airport actions on land use include the *Airport Improvement Program* (49 U.S.C § 47106(a)(1)), and the *Airport Safety, Protection of Environment, Criteria for Municipal Solid Waste Landfills* (40 CFR § 258.10). **Appendix E-1** includes a letter from Inyo County assuring compliance with Grant Assurance 6.



SOURCE: Esri; Inyo County Department of Public Works; ESA, 2020.

Proposed Commercial Airline Service at Bishop Airport

Figure 3-3
Area of Potential Effects
Bishop Airport

ESA

California law requires each city and county in the state to prepare and adopt a general plan to guide future development within their jurisdictions.[10] Land use decision-making authority for the lands in the GSA is the responsibility of the County of Inyo Planning Department and the City of Bishop Planning Department. The California State Aeronautics Act (Pub. Util. Code § 21001 *et seq*.) requires preparation of Airport Land Use Compatibility Plans (ALUCPs) for all public use and military airports in the state. ALUCPs address development of compatible land uses in areas around airports and are developed by Airport Land Use Commissions (ALUCs). The *Inyo County Policy Plan and Airport Comprehensive Land Use Plan* (CLUP) was adopted in December 1991.

The Order 1050.1F Desk Reference states that the compatibility of existing and planned land uses with an aerospace proposal is usually associated with noise impacts. However, in addition to the impacts of noise on land use compatibility, other potential impacts of FAA actions may also affect land use compatibility. Any impacts on land use, should be analyzed and described.

3.7.2.1 County of Inyo

The County of Inyo establishes the planning policies and objectives in the *Inyo County General Plan* that are applicable in the unincorporated areas of the county within the GSA. The legal standards implementing the policies of the general plan are established in the Inyo County Code Title 18, *Zoning*.

3.7.2.2 City of Bishop

A portion of the city of Bishop is located within the GSA. The City's planning policies are established in the *Land Use Element of the General Plan for the City of Bishop*. The associated legal standards implementing those policies are enumerated in the Bishop Municipal Code Title 17, *Zoning*.

3.7.2.3 City of Los Angeles - Department of Water and Power

Approximately 96 percent of the land within the GSA is owned and administered by the LADWP with much of the surface area leased to other entities including the County of Inyo for operation of Bishop Airport. The LADWP has established guidance regarding the management of commercial use, cultural resources, habitat conservation, livestock grazing, recreation, and rivers in the *Owens Valley Land Management Plan* (OVLMP).[11]

3.7.3 Existing Conditions

The existing land uses in the portions of the GSA located immediately off-airport include open access agricultural pasture lands and transportation infrastructure providing access to the Airport. Land uses south of the Airport and south of Poleta Road in unincorporated Inyo County, include a cemetery, traditional single family residential, mobile home residential, and agricultural use. Properties in the city of Bishop are located in the southwestern corner of the GSA along East Line

[10] Government Code §65030.1.

[11] Los Angeles Department of Water and Power and Ecosystem Sciences, Owens Valley Land Management Plan, April 28, 2010.

Street, and are developed with public facilities, single and multi-family residential, mobile home residential, commercial, industrial, and open space uses. Existing land uses in the GSA are depicted on **Figure 3-4**.

Planned land uses in the GSA are depicted on **Figure 3-5**. The Airport is located on land designated for public facilities and light industrial uses. Although the Airport is situated on land owned by the LADWP, Inyo County leases the land and was granted an easement in 2010 protecting the land for airport use. Off-airport lands abutting the BIH property boundary include agriculture and natural resource uses. A material pit located immediately north of the airfield has been reclaimed and the lease associated with that property will be terminated pending closure of the existing *Surface Mining and Reclamation Act of 1975* permit. Other land uses in the GSA include medium and medium high-density residential, and general and heavy commercial.

3.8 Natural Resources and Energy Supply

3.8.1 Introduction

This section discusses natural resources present in the GSA as well as the types and sources of energy supplied to the Airport.

3.8.2 Regulatory Context

In keeping with the spirit of NEPA, the FAA encourages the development of facilities designed and constructed with sustainability and energy efficiency best practices incorporated (FAA Order 1053.1). Specific federal statutes and regulations regarding natural resources and energy supply include the *Energy Independence and Security Act* (42 U.S.C. § 17001 *et seq*) and *the Energy Policy Act* (42 U.S.C. § 15801 *et seq*). Both of these laws require federal agencies to take actions to move their operations and infrastructure toward energy reliability and independence.

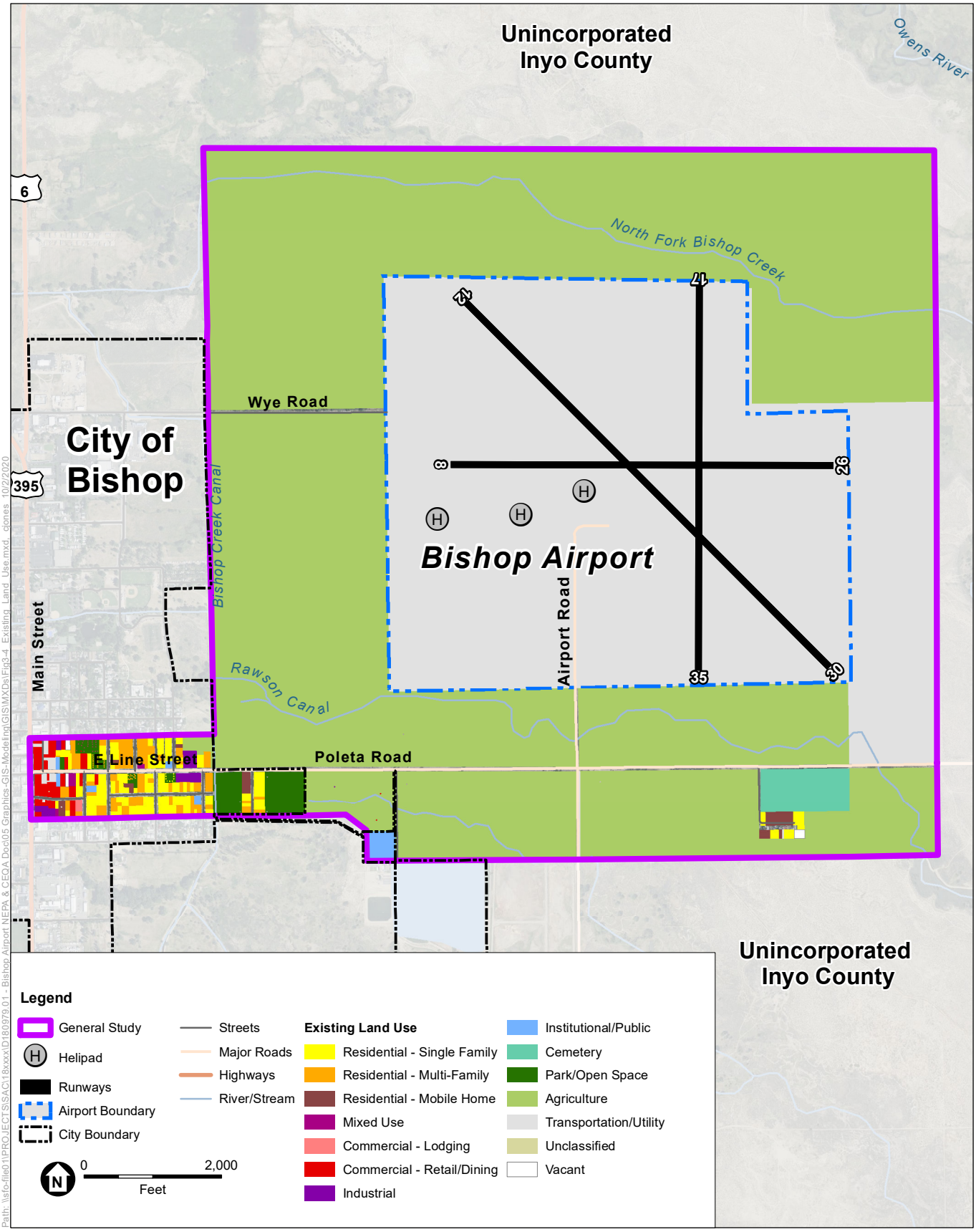
3.8.3 Existing Conditions

3.8.3.1 Natural Resources

There is currently no municipal water service provided to the Airport as water needs are met by two on-Airport wells: a domestic well and a fire suppression well. The domestic well is currently planned for decommission, but the fire suppression well is expected to continue meeting anticipated future water needs at the Airport.

3.8.3.2 Energy Supply

Electrical power is supplied to the Airport by Southern California Edison (SCE). SCE generates, transmits, and distributes electric power to 15 million people over a 50,000-square-mile service area that covers 15 counties and 180 cities in Central and Southern California. In 2019, Bishop Airport consumed approximately 100,000 kilowatt hours (kWh) of electric power.

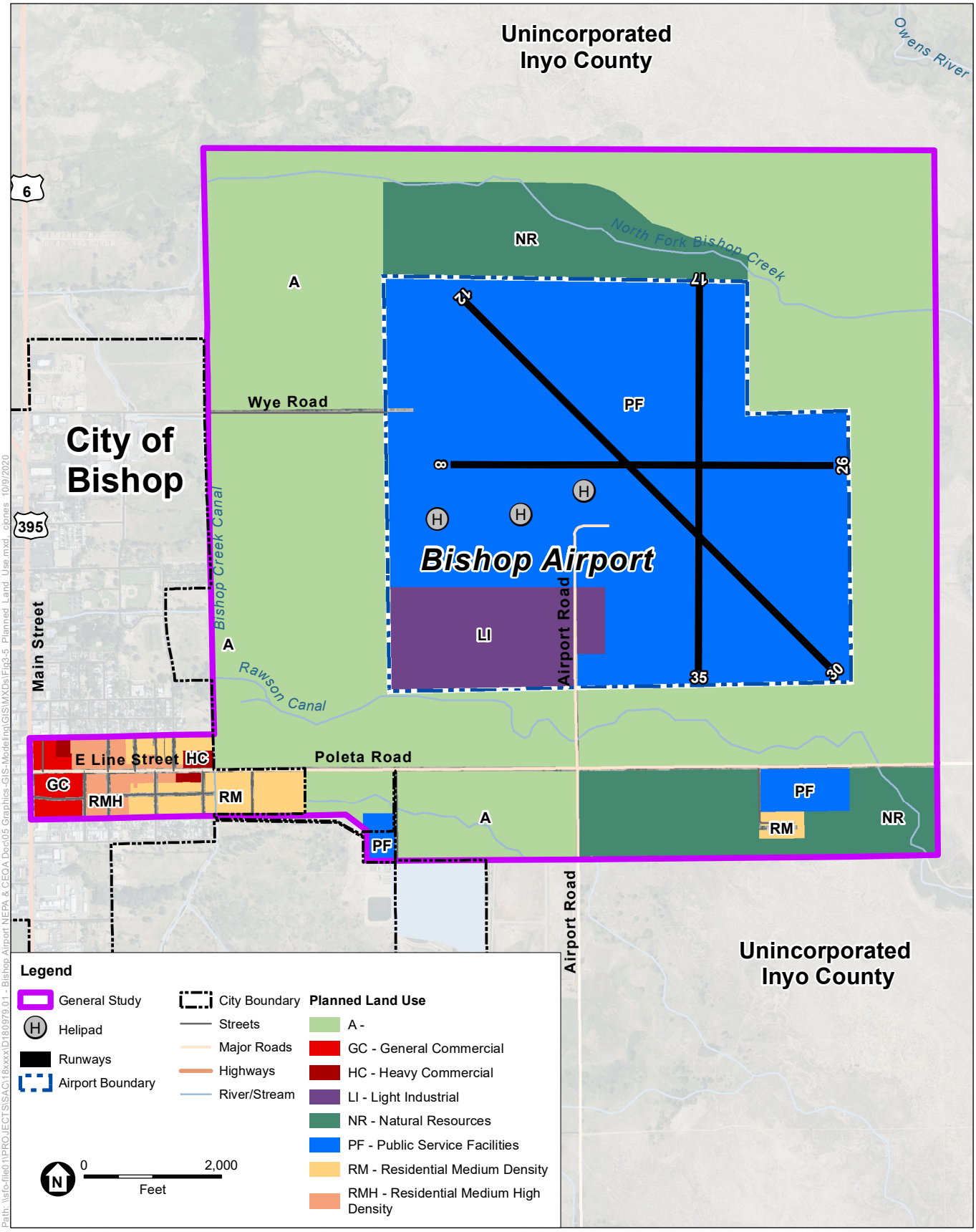


SOURCE: Esri; Inyo County Department of Public Works; County of Inyo Assessor, July 2020 (existing land use); ESA, 2020.

Proposed Commercial Airline Service at Bishop Airport

Figure 3-4
Existing Land Use
Bishop Airport

ESA



SOURCE: Esri; Inyo County Department of Public Works; County of Inyo Geographic Information System, January 2019 (County planned land use); City of Bishop Planning Department, November 1993 (City planned land use); ESA, 2020.

Proposed Commercial Airline Service at Bishop Airport

Figure 3-5
Planned Land Use
Bishop Airport

ESA

3.9 Noise and Noise-Compatible Land Use

3.9.1 Introduction

This section addresses the existing aircraft noise environment in the GSA and the methodology used to determine existing aircraft noise exposure.

3.9.2 Regulatory Context

The FAA requires an analysis of noise exposure when development actions may change the cumulative noise exposure of individuals to aircraft noise in areas surrounding an Airport. Common development actions that may change the cumulative noise environment include changes in aircraft operations and/or movements, introduction of new aircraft types to an Airport, or changes in aircraft tracks and profiles. Since the Proposed Action will result in additional aircraft using the Airport, a detailed noise study was conducted in accordance with FAA Order 1050.1F.

FAA Order 1050.1F requires that detailed noise analyses must be performed through noise modeling using an FAA-approved model. FAA's AEDT 3c, the latest version of the model available, was used for the aircraft noise exposure analysis documented in this EA. AEDT incorporates the number of annual average daily daytime, evening, and nighttime aircraft operations, flight paths, and flight profiles of aircraft, along with its extensive internal database of aircraft noise and performance information, to calculate Community Noise Equivalent Level (CNEL) at many points on the ground around an airport. Using a grid of noise receptor points, the AEDT contouring program draws contours of equal CNEL that can be superimposed onto land use maps. Three standard ranges of CNEL contours are presented in this EA, CNEL 65, 70, and 75 dB[12] and above.

The decibel (dB) is a unit used to describe sound pressure level. When expressed as weighted decibels (dBA), the sound has been filtered to reduce the effect of very low and very high frequency sounds, much as the human ear filters sound frequencies. Although referred to as dB in this document, the modeled noise levels are a-weighted to reflect how humans hear sound.

The FAA has determined that the cumulative noise energy exposure of individuals to noise resulting from aviation activities must be established in terms of yearly Day/Night Average Sound Level (DNL). However, the FAA recognizes CNEL as an acceptable alternative metric for airport projects in California. Both DNL and CNEL account for the noise levels of all individual aircraft events, the number of times those events occur, and the period of day/night in which they occur over a complete 24-hour period.[13] However, DNL adds a 10-dB weighting to noise events occurring during nighttime hours (10:00 p.m. to 7:00 a.m.). The addition of 10-dB reflects people's increased sensitivity to noise at night when ambient sound levels are lower. CNEL includes a 4.77-dB weighting to noise events occurring during the evening hours (7:00 p.m. to 10:00 p.m.), in addition to the 10-dB weighting during nighttime hours. Table 1 in Appendix A to 14 CFR Part

[12] All references to decibels in this EA refer to A-weighted decibels.

[13] FAA Order 1050.1F, Appendix B-1 and FAA Order 5050.4B, Chapter 1, paragraph 9.n.

150, *Airport Noise Compatibility Planning*, provides compatible land use guidelines that determine that all land uses are considered compatible when to noise levels less than DNL 65 dB.

3.9.3 Existing Conditions (2019)

The existing noise environment in the area surrounding BIH was evaluated based on the number of aircraft operations at the Airport in 2019 from the Airport's FAA Terminal Area Forecast (see Table 1-2 and Appendix D-2) and associated Airport operational characteristics (e.g., runway use, flight track locations, etc.). Additional information on the noise modeling completed for this EA is provided in the *Noise Modeling Technical Report* (see **Appendix J, *Noise Analysis Technical Report***).

As discussed in Section 3.9, *Land Use*, the existing land uses in portions of the GSA located immediately off-airport include agricultural pasture lands, areas designated for light industrial use, and transportation infrastructure providing access to the Airport. Land uses south of the Airport and south of Poleta Road, include a cemetery, residential uses, and agricultural use. Properties in Bishop, located in the southwestern corner of the GSA along East Line Street, and are developed with public facilities, residential, commercial, industrial, and open space uses.

Noise exposure resulting from existing aircraft operations at the Airport is depicted on **Figure 3-6** as CNEL 65, 70, and 75 dB contours. The CNEL contours are contained within Airport property and none of the contours extend beyond the Airport property line over areas of residential or other noise sensitive land uses. Land use within the CNEL 65 dB and higher contours is primarily limited to Runways 12/30 and 17/35. Most of the noise exposure is along runway ends. The area exposed to noise levels of CNEL 65 dB and higher totals 35.1 acres, all of which is on Airport Property. There are no incompatible land uses located within the 2019 CNEL 65 dB contour.

3.10 Socioeconomic Impacts, Environmental Justice, and Children's Environmental Health and Safety Risks

3.10.1 Introduction

This section describes existing economic and demographic conditions and transportation characteristics in the GSA. Socioeconomic issues relevant to the evaluation of environmental impacts include population, ethnicity of population and poverty status, employment, income and housing distribution, children's environmental health and safety, and public services.

3.10.2 Regulatory Context

EO 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, was enacted in 1994. The purpose of the EO is to focus federal attention on the environmental and human health effects of federal actions on minority and low-income populations with the goal of achieving environmental protection for all communities. The EO

SOURCE: Esri; Inyo County Department of Public Works; County of Inyo Assessor, July 2020 (existing land use); ESA, 2020.

Proposed Commercial Airline Service at Bishop Airport

Figure 3-6
2019 CNEL Contours and Existing Land Uses
Bishop Airport

directs federal agencies to identify and address the disproportionately high and adverse human health or environmental effects of their actions on minority and low-income populations, to the greatest extent practicable and permitted by law. The order is also intended to promote nondiscrimination in federal programs that affect human health and the environment, as well as provide minority and low-income communities' access to public information and public participation.

Executive Order 13045, *Protection of Children from Environmental Health Risks and Safety Risks* (April 1997), applies to health or safety risks that may disproportionately affect children. Environmental health risks or safety risks refer to risks to health or to safety that are attributable to products or substances that the child is likely to come in contact with or ingest such as air, food, water (potable or recreation), soil, and products children use or are exposed.

FAA Order 1050.1F describes socioeconomics as "an umbrella term used to describe aspects of a project that are either social or economic in nature." A socioeconomic analysis evaluates how elements of the human environment such as population, employment, housing, and public services might be affected by the Proposed Action and alternatives (FAA, 2015). The following sections describe population, employment, income, and housing in the GSA.

3.10.3 Existing Conditions

3.10.3.1 Socioeconomics

The following sections discuss socioeconomic factors within the GSA, including population, employment, income and housing, and surface transportation.

Population

The population of Inyo County was 18,546 at the 2010 decennial Census. Per the Census Bureau's American Community Survey 5-year population estimates, the population had decreased to 18,085 by 2018. This represents a three percent decrease in population. The population of the city of Bishop was 3,879 at the 2010 Census and an estimated 3,765 in 2018. This represents a three percent decrease in population.

Employment

Unemployment rate trends for Inyo County and the State of California are shown in **Table 3-8**. Between 2010 and 2019, there was a 6.2 percent decrease in unemployment in Inyo County and 8.1 percent decrease in the State of California. Both Inyo County and the State of California saw an overall decrease in unemployment between 2010 and 2019.

Income and Housing

Table 3-9 presents mean household incomes for 2018, the latest year for which data was available, in the Census tracts intersected by the GSA (Census Tracts 1 and 4), as well as Inyo County as a whole. In 2018, Census Tract 1 had a mean household income of $66,280 and Census Tract 4 had a mean household income of $53,974. Inyo County as a whole had a mean household income of

$68,448. In 2018, all census tracts around the Airport had mean household incomes above the U.S. Department of Housing and Urban Development, *Health and Human Services Poverty Guidelines* for a family of four, which was $25,701 in 2018.

TABLE 3-8
UNEMPLOYMENT TRENDS

Year	Inyo County	State of California
2010	9.7%	12.2%
2011	9.7%	11.7%
2012	9.1%	10.4%
2013	7.8%	8.9%
2014	6.8%	7.5%
2015	5.8%	6.2%
2016	5.3%	5.5%
2017	4.4%	4.8%
2018	3.9%	4.3%
2019	3.5%	4.1%

NOTES:
[a] Rates presented as average annual percentage.

SOURCES: Bureau of Labor Statistics, Local Area Unemployment Statistics, State of California; Inyo County 2010-2019. Accessed August 2020.

TABLE 3-9
INCOME AND HOUSING DATA

Area	Mean Household Income (2018)	Total Housing Units	Vacancy Rate
California	$101,493	14,084,824	7.9%
Inyo County	$68,448	9,540	15.3%
Census Tract 1, Inyo County, California	$66,280	1,277	3.4%
Census Tract 4, Inyo County, California	$53,974	2,924	6.9%

SOURCE: U.S. Census. 2020. Selected Economic Characteristics: 2018: American Community Survey 5-Year Estimates – California; Inyo County, California; Census Tracts 1 and 4.

In 2018, Census Tract 1 had 1,277 total housing units with a 3.4% vacancy rate. Census Tract 4 had 2,924 total housing units and a 6.9% vacancy rate. In comparison, Inyo County as a whole had 9,540 housing units and a vacancy rate of 15.3%.

Surface Transportation

Per FAA Order 1050.1F and its Desk Reference, an EA must evaluate if the Proposed Action has the "potential to disrupt local traffic patterns and substantially reduce the levels of service of roads

serving an airport and its surrounding communities." The Airport is connected to the local surface transportation network via Airport Road, a paved, two-lane road that begins on Airport property near the terminal building. Airport Road is aligned north-south and intersects with Poleta Road, south of the Airport property. Poleta Road runs east-west and becomes East Line Street approximately a mile west of the intersection with Airport Road, within the city of Bishop. East Line Street continues west for approximately 0.5 mile before intersecting with U.S. Highway 395/Main Street in the city of Bishop. U.S. Highway 395 is the major highway that runs the length of the Eastern Sierra region.

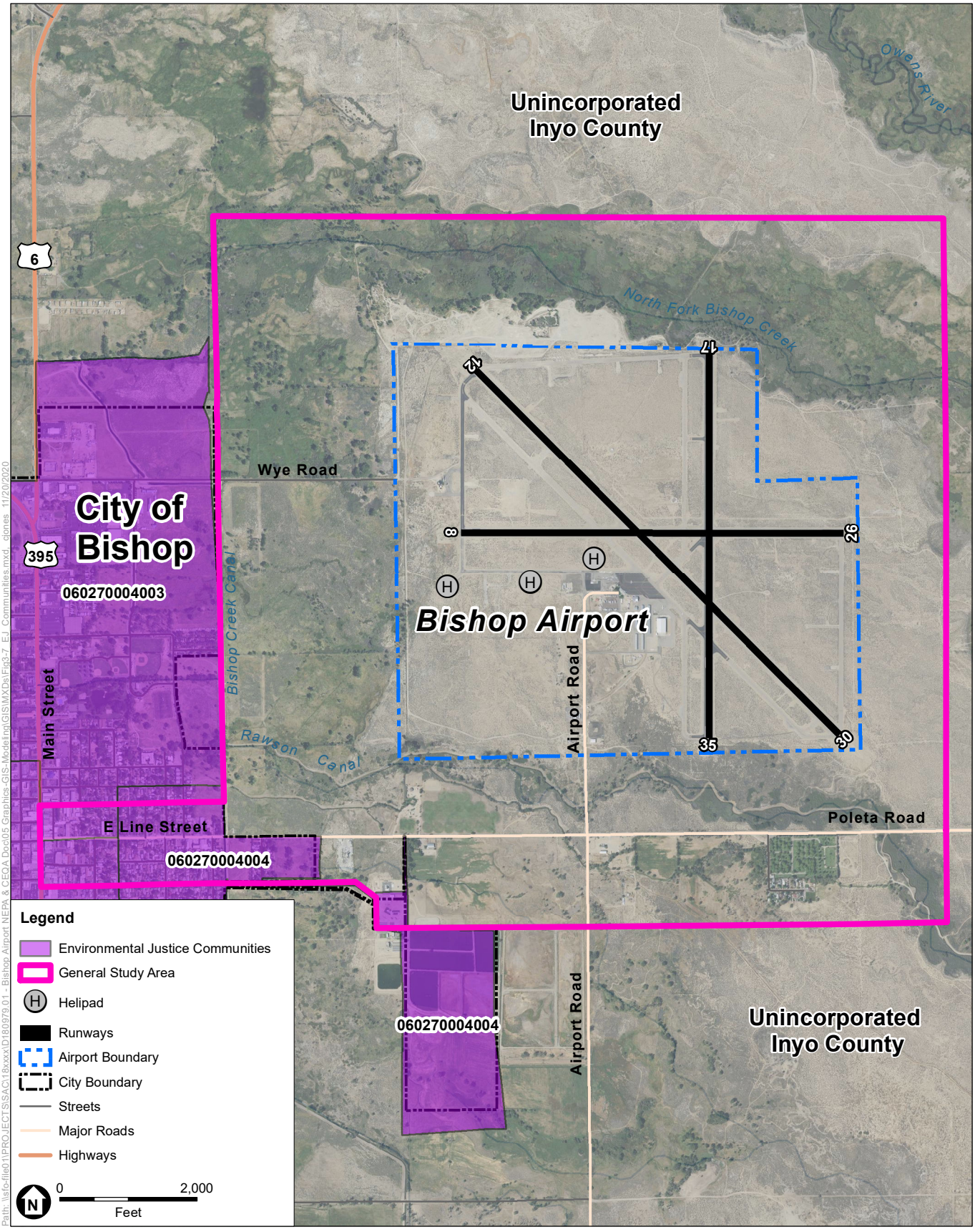
"Level of Service" (LOS) is a metric used in the realm of transportation planning to describe operating conditions at intersections and along roadway segments. LOS typically includes six levels of service: A through F. LOS A indicates free flowing traffic with no congestion, whereas LOS F represents overcapacity. The Federal Highway Administration (FHWA) has not promulgated regulations establishing specific minimum LOS values for federal highways. The portion of U.S. Highway 395/Main Street that runs through the GSA is under the jurisdiction of the California Department of Transportation (Caltrans). According to the Inyo County Regional Transportation Plan (RTP) Caltrans has designated LOS C as the minimal acceptable LOS for Inyo County state highway segments. The RTP indicates that U.S. Highway 395 through Bishop and from Bishop north to the Mono County line is expected to operate at LOS A through at least 2033.

3.10.3.2 Environmental Justice

The socioeconomic and minority characteristics of the population within the GSA are based on the U.S. Census Bureau's 2014-2018 American Community Survey 5-Year Data Release. Using the Census Bureau data, minority and low-income populations for each census block group within the GSA are identified using the AEDT 3c environmental justice screening tool. The AEDT calculates the average percentage of minority and low-income population within the GSA boundary. Census block groups that have minority and/or low-income populations greater than or equal to these thresholds are identified as environmental justice communities. The average percentage minority population for all census block groups within the GSA is 37.28 percent, and the average percentage low-income population is 13.33 percent. The GSA includes three census block groups identified as environmental justice communities. Environmental justice communities in the GSA are depicted on **Figure 3-7**. Summarized statistics for the GSA environmental justice communities are listed in **Table 3-10**.

3.10.3.3 Children's Environmental Health and Safety Risks

The GSA is located within the Bishop Unified School District, which administers two elementary schools, a junior high/middle school, and a high school in the city of Bishop. All four schools are located west of Highway 395, outside the GSA. No child daycare facilities were identified in the GSA.



SOURCE: AEDT 3c, August 2020; Esri; Inyo County Department of Public Works; ESA, 2020.

Proposed Commercial Airline Service at Bishop Airport

Figure 3-7
Environmental Justice Communities within the General Study Area
Bishop Airport

ESA

TABLE 3-10
ENVIRONMENTAL JUSTICE COMMUNITIES

Place/ Census Block Group	Population (2018)	Minority Population (2018)	Percentage Minority (2018)[1]	Population Living Below Poverty Level (2018)	Percentage Living Below Poverty Level (2018)[2]
California	39,148,760	8,563,966	21.6%	5,487,141	14.3%
Inyo County	18,085	2,587	14.3%	1,792	10.2%
60270004002	1,613	495	30.7%	228	16.1%
60270004003	1,406	272	19.3%	306	22.0%
60270004004	1,139	758	66.5%	26	23.0%

NOTES:

1 Based on total population verified minority status.
2 Based on total population verified income status.

SOURCES: U.S. Census Bureau, American Community Survey 5-Year Estimates – California, Inyo County, California, Census Block Groups; AEDT 3c, August 2020.

3.11 Visual Effects

3.11.1 Introduction

This section addresses the visual characteristics of the GSA.

3.11.2 Regulatory Context

Per the 1050.1F Desk Reference, an assessment of potential impacts to visual resources is required to consider the extent to which a proposed action could produce light emissions with potential to interfere with activity or cause annoyance or otherwise degrade the visual character of an existing environment. There is no other specified regulatory context for visual effects.

3.11.3 Existing Conditions

BIH is approximately two miles east of the city of Bishop in unincorporated Inyo County. The Airport is located in the Owens Valley, surrounded by the White Mountains to the east and the Sierra Nevada range to the west. The Airport is surrounded by open space with very little vegetation because of the desert climate. The North Fork Bishop Creek is to the north of the airport in the GSA. Existing light sources at the Airport primarily include runway and taxiway lights and lighted airfield directional signage. The lights on the runway and taxiway surfaces are Pilot Activated, with minimal nighttime activity. The Airport also has a rotating beacon that emits alternating white and green flashes of light from sunset to sunrise that identifies the location of the Airport from a distance at night. The FedEx Ground facility is equipped with security lighting along Airport Road. Other light sources may include lighting on the terminal area buildings, parking area streetlights, and urban light from the city of Bishop. There are no streetlights on the roads leading to the Airport.

3.12 Water Resources (Groundwater and Surface Water Subcategory only)

3.12.1 Introduction

This section describes the existing environment with regard to surface waters, groundwater, water supply, and wastewater treatment.

3.12.2 Regulatory Context

3.12.2.2 Groundwater, Surface Waters, and Water Quality

Clean Water Act (Federal)

The *Clean Water Act* (CWA)(33 U.S.C. §§ 1251–1387), as amended, establishes the basic structure for regulating discharges of pollutants into the Waters of the U.S. and regulating quality standards for surface waters. The basis of water quality regulations was enacted in 1948 under the original statute, the *Federal Water Pollution Control Act*, which in 1972 was reorganized and expanded into the CWA, and subsequent amendments. The CWA establishes a regulatory framework to reduce pollutant discharges into waterways and manage polluted runoff.

Safe Drinking Water Act (Federal)

The *Safe Drinking Water Act* (SDWA)(42 U.S.C. § 300f), enacted in 1974, is the principal federal law ensuring safe drinking water in the United States. The SDWA authorizes the USEPA to set national health-based standards for drinking water to protect against both naturally occurring and man-made contaminants that may be found in drinking water. Amendments to the Act in 1996 allowed for recognition of source water protection, operator training, funding for water system improvements, and the provision of public information regarding safe drinking water.

National Pollutant Discharge Elimination System Program (State)

The National Pollutant Discharge Elimination System (NPDES) permit program is administered in the State of California by the California State Water Resources Control Board (SWRCB) and regional water quality control boards. Authority to manage the NPDES permit program is granted by the USEPA to control water pollution by regulating point sources that discharge pollutants into Waters of the U.S. If discharges from industrial, municipal, and other facilities go directly to surface waters, project applicants must obtain permits prior to project implementation.

Municipal Stormwater Permit (Local)

California's Municipal Stormwater Permitting Program regulates stormwater discharges from Municipal Separate Storm Sewer Systems (MS4s).

Sustainable Groundwater Management Act (State)

In 2014, the California State Legislature approved a combination of bills that together formed the *Sustainable Groundwater Management Act*. The law requires the formation of local Groundwater Sustainability Agencies that must develop Groundwater Sustainability Plans (GSPs) for medium or high-priority groundwater basins in California by 2022. The goal of the GSPs is to make groundwater basins sustainable by the year 2042. The Proposed Action is situated in the Owens Valley groundwater basin, which is managed by the Owens Valley Groundwater Authority (OVGA). The OVGA was formed in August 2017 under a joint powers agreement, and is in the process of adopting a GSP.

State Executive Orders B-40-17 and B-37-16 (State)

On April 7, 2017, Governor Jerry Brown issued EO B-40-17, lifting a State of Emergency proclaimed in January of 2014 due to severe drought conditions. While the State of Emergency was lifted, EO B-40-17 retained actions taken in EO B-37-16 requiring the SWRCB to issue adjusted regulations recognizing the change in water conditions throughout the state and to develop a proposal for achieving mandatory reductions in potable water usage. EO B-37-16 also requires the SWRCB to work with the State Water Board to develop new water use targets in consultation with local agencies and water suppliers, and required preparation of monthly water usage reports. In addition, EO B-37-16 requires permanent prohibition of certain water usage practices, minimization of water waste, development of water shortage contingency plans, drought planning for rural communities, and development of agricultural water management plan requirements.

3.12.3 Existing Conditions

Surface Waters

North Fork Bishop Creek, Rawson Canal, and Bishop Creek Canal are surface waters present in the GSA. North Fork Bishop Creek runs from west to east through the GSA directly north of the airfield. Rawson Canal runs from west to east through the southern portion of the GSA between the airfield and Poleta Road until diverting south across Poleta Road before the eastern boundary of the GSA. Bishop Creek Canal runs north to south concurrent with the western edge of the GSA from Wye Road to Willow Street before crossing the GSA to Clarke Street. A small freshwater pond is also present near the northwest corner of the GSA approximately 1,700 feet from the Runway 12 threshold.

Groundwater

The Airport has two groundwater wells within the property boundary, one for domestic water use and one for fire suppression. There is no municipal water service at the Airport. Recharge to the groundwater system in the GSA is primarily from precipitation in the Owen's River valley and from runoff from the nearby Sierra Nevada Mountains. This runoff regularly replenishes the ground water basin to nearly overflowing.[14] The California Department of Water Resources identifies the

[14] U.S. Geological Survey, *Evaluation of the Hydrologic System and Selected Water-Management Alternatives in the Owens Valley, California*, 1998, <https://ca.water.usgs.gov/projects/owens/report/wsp2370/owensvalley_report.pdf> (accessed February 1, 2021).

water basin as low priority for purposes of developing a Groundwater Sustainability Plan under the State's *Sustainable Groundwater Management Act* (Div. 6 Water Code Part 2.74). The two wells meet current demand and are anticipated to meet future demand. According to LADWP's 2020 Annual Owens Valley Report, the groundwater levels in the Owens Valley rose by an average of 1.3 feet as a result of the wetter than normal runoff condition in the 2019 through 2020 season.[15] The primary sources of discharge are pumping wells, evapotranspiration, and underflow to the Owens Lake dry lakebed.

Water Quality

The USEPA requires water quality assessments of each state's waterbodies. The current water quality assessment for California was approved by the USEPA in April 2018. According to the Water Quality Atlas provided by California Environmental Protection Agency, none of the waterbodies in the vicinity of the GSA appear on the CWA Section 303d list of impaired waters. Bishop Creek Canal is the only waterbody listed in the Water Quality Atlas and is designated as a "Category 2 stream—water quality information is insufficient to determine an appropriate recommendation."

3.13 Past, Present, and Reasonably Foreseeable Future Actions

3.13.1 Introduction

This section describes projects proposed by the County of Inyo at the Airport, or by others in the vicinity of the Airport for the purpose of considering the cumulative impact of those projects when combined with the impacts associated with the Proposed Action or its alternatives. The cumulative impacts of these past, present, and reasonably foreseeable future projects are evaluated in Chapter 4, *Environmental Consequences*. For purposes of this analysis, reasonably foreseeable pertains to "(a)n action on or off-airport that a proponent would likely complete and that has been developed with enough specificity to provide meaningful information to a decisionmaker and the interested public."[16]

3.13.2 Regulatory Context

NEPA requires analysis of cumulative impacts. Cumulative impacts are those impacts that may result from an action "when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions" (40 CFR 1508.7 [1978, as amended in 1986 and 2005).

[15] Los Angeles Department Water and Power, <https://www.inyowater.org/wp-content/uploads/2020/05/FINAL-2020-OWENS-VALLEY-REPORT-final-revised-05.15.20.pdf> (accessed August 21, 2020).

[16] FAA Order 5050.4B, Sec. 9, para. q.

3.13.3 Existing Conditions

The GSA encompasses the area in which the Proposed Action would have potential for direct and indirect impacts to the environment. However, projects throughout Inyo County were identified and considered for inclusion in the analysis. No projects beyond the Airport were identified that had a potential for contributing to cumulative impacts. The temporal basis for identifying past, present, and reasonably foreseeable projects was five years before the existing conditions study year (i.e., 2015) and five years beyond the 2024 planning horizon (i.e., 2029). Introducing commercial air service at BIH, in combination with other past, present, and reasonably foreseeable future projects can contribute to cumulative impacts. Major transportation and development projects in the vicinity of BIH that could have some effect within the GSA were identified and will be considered in the assessment of cumulative impacts. **Table 3-11** lists the past, present, and reasonably foreseeable projects within the GSA.

TABLE 3-11
PAST, PRESENT, AND REASONABLY FORESEEABLE PROJECTS

Plan/Project Name	Description	Source
Past Projects		
Taxiway Rehabilitation Project at the Bishop Airport	Pavement rehabilitation of all airfield taxiways.	ARP SOP No 5.1; Documented CATEX, June 2, 2017
Runway 12-30 Pavement Rehabilitation and Markings at Bishop Airport	Pavement rehabilitation and new markings on Runway 12-30.	ARP SOP No. 5.1; Appendix A. Documented CATEX; June 2, 2017
Present Projects		
General Aviation Terminal Expansion at Bishop Airport	Construction of an expansion to the existing general aviation terminal at Bishop Airport.	ARP SOP No. 5.1; Appendix A. Documented CATEX; June 2, 2017
Future Projects		
Closure of Runway 8-26 and conversion to helicopter parking and taxiway at Bishop Airport	Closure of Runway 8-26 to achieve the FAA standard for Runway Visibility Zone (RVZ) for the Airport.	ARP SOP No. 5.1; Appendix A. Documented CATEX; June 2, 2017
The Eastern Sierra Transit Authority Operations and Administration Facility Project	New operations and administration facility at Bishop Airport.	Eastern Sierra Transit Authority, The Bishop Operations and Administration Facility Project, Categorical Exclusion Checklist, Attachment A
Install new Jet A fuel tank at Bishop Airport	Addition of a new 12,000-gallon above ground double walled Jet A fuel storage tank to the existing fuel farm at Bishop Airport.	ARP SOP No. 5.1; Appendix A. Documented CATEX; June 2, 2017

SOURCE: Environmental Science Associates, 2020

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CHAPTER 4
Environmental Consequences

4.1 Introduction

This chapter discusses potential direct or indirect impacts caused by the Proposed Action when compared to the No Action Alternative and whether they would be considered significant under NEPA or other special purpose laws as specified in FAA Orders 1050.1F and 5050.4B. Potential impacts are assessed for the environmental impact categories identified in FAA Order 1050.1F and discussed in detail in Chapter 3, *Affected Environment*.

The analyses discussed in this chapter include a description of the methodologies employed, the factors considered and the thresholds used to determine significance, and potential impacts, if any, of the Proposed Action and the No Action Alternative. Potential impacts are discussed in relation to the study areas defined in Chapter 3. Potential cumulative impacts resulting from the incremental effects of the Proposed Action when added to the effects of past, present, and reasonably foreseeable future actions are analyzed in Section 4.13, *Cumulative Impacts*.

Table 4-1 lists the environmental impact categories assessed in this EA, the thresholds of significance used to determine the potential for impacts as specified in FAA Order 1050.1F, and a side-by-side comparative summary of the potential for environmental impacts resulting from implementation of the Proposed Action under 2022 and 2028 forecasted conditions.

4.1.2 Study Years

This EA evaluates the environmental impact of the Proposed Action and No Action Alternative by analyzing the project during two different years of operation: 2022 and 2028. Study year 2022 is the first full year commercial air passenger service is anticipated to be in operation at Bishop Airport. Study Year 2028 is the sixth full year after the commencement of commercial air passenger service and the year when the Airport's forecast anticipates growth in passenger service to plateau (see Appendix D-1 for the aviation forecast). These study years provide a reasonable time frame in which to evaluate ongoing operation-related environmental impacts such as those associated with aircraft noise and air quality.

TABLE 4-1
IMPACT SUMMARY

Environmental Impact Category	Threshold of Significance	Significant Impact?	
		2022	2028
Air Quality	The action would cause pollutant concentrations to exceed one or more of the National Ambient Air Quality Standards (NAAQS), as established by the Environmental Protection Agency under the Clean Air Act, for any of the time periods analyzed, or to increase the frequency or severity of any such existing violations.	No	No
Biological Resources	The USFWS or NMFS determines that the action would be likely to jeopardize the continued existence of a federally-listed threatened or endangered species, or would result in the destruction or adverse modification of federally designated critical habitat. The FAA has not established a significance threshold for non-listed species. Other factors in considering whether an action would impact biological resources are discussed in Section 4.3, *Biological Resources*.	No	No
Climate	The FAA has not established a significance threshold for Climate, and no specific factors to consider were identified.	No	No
Hazardous Materials, Solid Waste, and Pollution Prevention	The FAA has not established a significance threshold for Hazardous Materials, Solid Waste, and Pollution Prevention. However, factors considered in determining whether an action would have impacts are discussed in Section 4.5, *Hazardous Materials, Solid Waste, and Pollution Prevention*.	No	No
Historical, Architectural, and Cultural Resources	The FAA has not established a significance threshold for Historical, Architectural, Archeological, and Cultural Resources. However, factors considered in determining whether an action would have impacts are discussed in Section 4.6, *Historical, Architectural, and Cultural Resources*.	No	No
Land Use	The FAA has not established a significance threshold for Land Use. The determination that significant impacts exist in the Land Use impact category is normally dependent on the significance of other impacts.	No	No
Natural Resources and Energy Supply	The FAA has not established a significance threshold for Natural Resources and Energy Supply. However, factors considered in determining whether an action would have impacts are discussed in Section 4.8, *Natural Resources and Energy Supply*.	No	No
Noise and Noise-Compatible Land Use	The action would increase noise by Community Noise Equivalent Level (CNEL) 1.5 dB or more for a noise-sensitive area that is exposed to noise at or above CNEL 65 dB, or that will be exposed at or above CNEL 65 dB level due to a CNEL 1.5 dB or greater increase, when compared to the No Action Alternative for the same timeframe. For example, an increase from CNEL 65.5 dB to 67 dB is considered a significant impact, as is an increase from CNEL 63.5 dB to 65 dB.	No	No

TABLE 4-1
IMPACT SUMMARY

Environmental Impact Category	Threshold of Significance	Significant Impact?	
		2022	2028
Socioeconomics, Environmental Justice, and Children's Environmental Health and Safety Risks	The FAA has not established a significance threshold for Socioeconomics, Environmental Justice, and Children's Environmental Health and Safety Risks. However, factors considered in determining whether an action would have impacts are discussed in Section 4.10, *Socioeconomics, Environmental Justice, and Children's Environmental Health and Safety Risks*.	No	No
Visual Effects	The FAA has not established significance thresholds for Visual Effects, which is broken into two categories: 1) Light Emission Effects; and 2) Visual Resources and Visual Character. However, factors considered in determining whether an action would have impacts are discussed in Section 4.11, *Visual Effects*.	No	No
Water Resources (Groundwater and Surface Waters only)	*Groundwater* - The action would: 1. Exceed groundwater quality standards established by Federal, state, local, and tribal regulatory agencies; or 2. Contaminate an aquifer used for public water supply such that public health may be adversely affected. *Surface Waters* - The action would: 1. Exceed water quality standards established by Federal, state, local, and tribal regulatory agencies; or 2. Contaminate public drinking water supply such that public health may be adversely affected. Factors to consider whether an action would impact groundwater and surface waters are discussed in Section 4.12, *Water Resources*.	No	No
Cumulative Impacts	Factors considered in determining whether an action would result in cumulative impacts are discussed in Section 4.13, *Cumulative Impacts*.	No	No

SOURCE: Department of Transportation, Federal Aviation Administration, Order 1050.1F, Paragraph 4-3.3 and Exhibit 4-1.

4.2 Air Quality

4.2.1 Methodology

Operational emissions of criteria air pollutants were estimated for the Proposed Action and the No Action Alternative for years 2022 and 2028. Consistent with guidance provided in FAA Order 1050.1F and the FAA's *Aviation Emissions and Air Quality Handbook* (Version 3, Update 1), the criteria air pollutants evaluated for purposes of producing an emissions inventory for future operations at BIH include CO, VOCs, NO_X, SO_X, PM_{10}, and $PM_{2.5}$.

Calculation of emissions of criteria air pollutants due to Airport operations under the Proposed Action and the No Action Alternative was completed using the FAA's AEDT, Version 3c. This analysis includes emissions estimates for aircraft operations and ground support operations that are anticipated under the Proposed Action. Changes in motor vehicle traffic emissions associated with travel on area

roadways was assessed using CARB's Emission Factor 2017 (EMFAC2017) web database with the Safer Affordable Fuel-Efficient (SAFE) vehicles rule applied for gasoline light duty vehicles. A summary of the technical assumptions and methodologies used to conduct the air quality analysis is included in Appendix G-1.

Since the GSA is not located in EPA-designated nonattainment or maintenance areas for any of the NAAQS, the General Conformity Rule (Section 176(c)(1) of the CAA) *de minimis* thresholds are not applicable to the Proposed Action.

4.2.2 Significance Thresholds

As discussed in the FAA Order 1050.F, Exhibit 4-1, the significance threshold for air quality includes determining if "the action would cause pollutant concentrations to exceed one or more of the NAAQS, as established by the EPA under the CAA, for any of the time periods analyzed, or to increase the frequency or severity of any such existing violations."

4.2.3 2022 and 2028 Impacts

4.2.3.1 No Action Alternative

Table 4-2 provides a summary of air emissions calculated for the No Action Alternative in 2022 and 2028. The No Action Alternative does not include estimated emissions from APU or GSE use because operations at the Airport do not include aircraft that use this type of equipment. Under the No Action Alternative, FAA would not issue Inyo County a Class I certificate under 14 CFR Part 139, or Operation Specification Amendment to SkyWest Airlines. Commercial air passenger service would not be introduced at BIH, and general aviation, military, and cargo operations would continue. Therefore, no impacts to air quality would occur under the No Action Alternative in either 2022 or 2028.

4.2.3.2 Proposed Action

Table 4-2 provides a summary of air emissions calculated for the Proposed Action in 2022 and 2028. In addition to aircraft emissions, the Proposed Action includes emissions from GSE used to serve commercial aircraft operations at BIH; however, the Proposed Action does not include emissions from APUs because parked aircraft would use diesel-powered pre-conditioned air units and ground power units instead of APUs to power the aircraft cabin. Additionally, the Proposed Action inventory includes estimated emissions from indirect off-airport vehicular travel. A summary of the technical assumptions and methodologies used to conduct the air quality impact analyses is included in Appendix G-1.

TABLE 4-2
PROPOSED ACTION AND NO ACTION ALTERNATIVE EMISSIONS INVENTORY (TONS PER YEAR) SUMMARY

	CO	VOC	NO_X	SO_X	PM_{10}	$PM_{2.5}$
2022 No Action Alternative						
Aircraft	109.54	3.58	5.69	0.82	0.10	0.10
Off-Airport Vehicular Travel	0.82	0.13	0.20	<0.01	0.22	0.06
Total	**110.36**	**3.71**	**5.89**	**0.82**	**0.32**	**0.16**
2022 Proposed Action						
Aircraft	112.23	3.77	8.32	1.13	0.12	0.12
GSE	0.12	0.04	0.10	0.00	0.00	0.00
Off-Airport Vehicular Travel	1.75	0.26	0.29	0.01	0.47	0.13
Total	**114.10**	**4.07**	**8.71**	**1.14**	**0.59**	**0.25**
Net Change	**3.74**	**0.36**	**2.82**	**0.32**	**0.27**	**0.09**
2028 No Action Alternative						
Aircraft	109.84	3.59	5.71	0.82	0.10	0.10
Off-Airport Vehicular Travel	0.57	0.10	0.13	<0.01	0.22	0.06
Total	**110.41**	**3.69**	**5.84**	**0.82**	**0.32**	**0.16**
2028 Proposed Action						
Aircraft	113.59	3.90	9.07	1.25	0.12	0.12
GSE	0.22	0.06	0.15	0.00	0.01	0.01
Off-Airport Vehicular Travel	1.86	0.29	0.23	0.01	0.72	0.19
Total	**115.67**	**4.25**	**9.45**	**1.26**	**0.85**	**0.32**
Net Change	**5.26**	**0.56**	**3.61**	**0.44**	**0.53**	**0.16**

NOTE:

Numbers may not add, due to rounding.

SOURCE: Environmental Science Associates, 2020.

4.2.4 Comparison to Significant Impact Thresholds

Table 4-2 shows the difference (net change) between the Proposed Action and the No Action Alternative in 2022 and 2028. Significant air quality impacts would be demonstrated if the Proposed Action would result in an exceedance of one or more of the NAAQS or increase in the frequency or severity of any such existing violations for any of the time periods analyzed. Emission of criteria pollutants in 2022 and 2028 under the Proposed Action would not result in a significant air quality impact because there would be no exceedance of the NAAQS or increase in the frequency or severity of any air quality violations in the Air Basin when compared to emissions under the No Action Alternative in either 2022 or 2028.

4.3 Biological Resources

4.3.1 Methodology

An evaluation of biological resources was conducted for the Proposed Action and No Action Alternative and includes plant and animal species listed as threatened or endangered under the ESA and/or by the CDFW. Biological resources within the GSA are identified using information collected during field surveys conducted in the AA delineated for use in preparation of the BA. The AA is shown on Figure 3-2 and discussed in detail in Section 3.3.3, *Biological Assessment Action Area*. All state and federally listed plant and animal species with potential to occur within the AA were evaluated for potential impacts as a result of the Proposed Action under 2022 and 2028 conditions. Formal Section 7 consultation with the USFWS or NMFS was not required because the FAA determined there would be no effect on federally-listed species or designated critical habitat within the AA for the Proposed Action. The BA is included in Appendix H.

The 1050.1F Desk Reference establishes factors to consider in evaluating potential environmental impacts to biological resources. However, these factors are not intended to be thresholds for significance determination. If any of the factors are present, then the FAA must evaluate these factors in light of the context of the Proposed Action. Other factors used in evaluating potential impacts include consideration of whether a project would have the potential for:

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

4.3.2 Significance Thresholds

Order 1050.1F and the 1050.1F Desk Reference provide the FAA's significance thresholds for determining impacts to biological resources. A significant impact to biological resources would occur when "the USFWS or NMFS determines that the action would be likely to jeopardize the continued existence of a federally-listed threatened or endangered species, or would result in the destruction or adverse modification of federally-designated critical habitat."

4.3.3 2022 and 2028 Impacts

4.3.3.1 No Action Alternative

Under the No Action Alternative, FAA would not issue Inyo County a Class I certificate under 14 CFR Part 139, or Operation Specification Amendment to SkyWest Airlines. Commercial air passenger service would not be introduced at BIH, and general aviation, military, and cargo operations would continue. Therefore, no impacts would occur under the No Action Alternative in either 2022 or 2028.

4.3.3.2 Proposed Action

Federally listed species

The official species list secured from the USFWS IPaC identifies five federally listed threatened, endangered, or sensitive species with the potential to occur within the AA. A list and evaluation summary of those species is included in Table 3-3 in Section 3.3.3.2, *Wildlife*. The analysis of the Proposed Action in the BA did not identify any potential effects on federally-listed fish, plant, and avian species within or immediately surrounding the AA (see Appendix H). No federally designated Critical Habitat was identified within one mile of the AA or GSA. The FAA considered the information in the BA and determined that the Proposed Action would have *no effect* on federally-listed species or designated critical habitat.

Migratory Birds

The USFWS IPaC also listed migratory birds of concern that have been identified in the vicinity of the AA. Sixteen species of birds were identified in the BA to be of particular concern either because they occur on the USFWS Birds of Conservation Concern list or warrant special attention. They include hawks, raptors, and other species of birds protected under the Migratory Bird Treaty Act of 1918 (16 U.S.C. §§ 703-711). The complete list of migratory bird species with potential to occur in the AA is included in the BA (see Appendix H).

It is important to note that historically, bird strikes have not been a major issue at BIH. The Proposed Action would only increase aircraft operations by one arrival and one departure per day during the summer breeding and nesting season when birds are most active. Most of the increase in operations will occur in the winter months (up to six arrivals/departures per day by 2028), when there are fewer breeding birds and birds are less active. Therefore, it is unlikely that commercial air passenger service would have a noticeable effect on migratory birds due to the proposed schedule and frequency of aircraft operations at BIH. Furthermore, the Proposed Action does not include the introduction of new arrival or departure procedures to the Airport. Commercial service aircraft will be departing and arriving using existing flight procedures and bird populations will not need to adapt to any novel aircraft flight tracks associated with the operation of commercial service aircraft.

State-listed species

The BA identifies nine state-listed special status species (i.e., threatened, endangered, or a species of special concern) with the potential to occur within the AA. A list of those species is included in Table 3-4. Investigation into the presence of these species at the Airport indicated that no known state-listed endangered or threatened species were documented to occur within the AA. Three species of special concern were identified within the AA during field surveys: Northern Harrier, Yellow Warbler, and Yellow-breasted Chat. Although these species were identified during field surveys, it is unlikely that commercial air passenger service would have a noticeable effect due to the proposed schedule and frequency of commercial service aircraft operations at BIH.

4.3.4 Comparison to Significant Impact Thresholds

A significant impact would occur if the Proposed Action would jeopardize the continued existence of federally listed, threatened, or endangered species, or the destruction or adverse modification of federally designated critical habitat. The Proposed Action would lead to an increase in aircraft operations when compared to the No Action Alternative in both 2022 and 2028. However, based on the information provided in the BA prepared for the Project, the FAA has determined that the Proposed Action would have *no effect* on federally listed threatened or endangered species or designated critical habitat. There is no designated Critical Habitat located within a mile of either the AA or the GSA and the Proposed Action does not include any ground disturbance that would affect areas within or immediately surrounding the AA or the GSA. Finally, the Proposed Action would not affect state-listed species or their habitat in 2022 or 2028.

4.4 Climate

4.4.1 Methodology

Per FAA Order 1050.1F, a NEPA document prepared by the FAA must consider the potential incremental change in CO_2 emissions that would result from a proposed action when compared to a no action alternative for the same timeframe. A projection of the GHG emissions was estimated consistent with the guidance in the 1050.1F Desk Reference. The analysis of GHG emissions generally follows the same methodology and modeling tools as the air quality criteria pollutant emissions analysis discussed in Section 4.2, *Air Quality.* GHG emissions inventories for 2022 and 2028 were prepared for the Proposed Action and No Action Alternative. The GHG emissions inventories account for direct and indirect emissions from airside sources (aircraft operations and GSE) and landside sources (area, energy, and mobile). A summary of the technical assumptions and methodologies used to conduct the climate analysis is included in Appendix G-1.

4.4.2 Significance Thresholds

The FAA has not established significance thresholds for assessing impacts to climate.

Current CEQ guidance states, "it is not currently useful for the NEPA analysis to attempt to link specific climatological changes, or the environmental impacts thereof, to the particular project or emissions, as such direct linkage is difficult to isolate and to understand."[23]

4.4.3 2022 and 2028 Impacts

4.4.3.1 No Action Alternative

Fossil fuel combustion is the primary source of GHG emissions at the Airport. The GHG emissions estimate for the No Action Alternative in both 2022 and 2028 was completed using the FAA's AEDT 3c model and the EMFAC2017 web database, as shown in **Table 4-3**. GHGs associated with the No Action Alternative include emissions from aircraft operations and motor vehicles. Under the No Action Alternative, FAA would not issue Inyo County a Class I certificate under 14 CFR Part 139, or Operation Specification Amendment to SkyWest Airlines. Commercial air passenger service would not be introduced at BIH, and general aviation, military, and cargo operations would continue. Therefore, no impacts to climate would occur under the No Action Alternative in either 2022 or 2028.

4.4.3.2 Proposed Action

GHGs associated with the Proposed Action include emissions from aircraft operations, GSE, and motor vehicles. Table 4-3 presents the estimated GHG emissions at BIH in 2022 and 2028 for both the Proposed Action and the No Action Alternative. Also shown is the net change in GHG emissions that would occur under the Proposed Action when compared to the No Action Alternative.

TABLE 4-3
GREENHOUSE GAS EMISSIONS INVENTORY

Operational Year	Emission Source	Estimated GHG Emissions Inventory in CO_2e (MT/year) No Action
2022	No Action Alternative	2,908.62
	Proposed Action*	4,419.00
	Net Change	**1,510.38**
2028	No Action Alternative	2,879.77
	Proposed Action*	5,104.23
	Net Change	**2,224.46**

NOTES:

CO_2e = carbon dioxide equivalent
* Includes emissions from GSE

SOURCE: Environmental Science Associates, September 2020.

[23] Department of Transportation, Federal Aviation Administration, 1050.1F Desk Reference, <https://www.faa.gov/about/office_org/headquarters_offices/apl/environ_policy_guidance/policy/faa_nepa_order/desk_ref/> (accessed August 26, 2020).

4.4.4 Comparison to Significant Impact Thresholds

As stated in Section 4.4.2, the FAA has not established significance thresholds for GHG emissions, and specific factors to consider in making a significance determination have not been identified. As shown in Table 4-3, the Proposed Action, when compared to the No Action Alternative, would result in an increase in GHG emissions at BIH of approximately 1,510 MT of CO_2e in 2022 and an increase of approximately 2,224 MT of CO_2e in 2028. In comparison, California emissions for 2018, the latest year for which emissions data is available, was 425.3 million MT of CO_2e[24] and gross U.S. emissions of CO_2e in 2018 (the latest year reported by the USEPA) totaled 6,457 million MT of CO_2e.[25] Total global emissions in 2017 totaled 53.5 gigatons of CO_2e.[26] The Proposed Action's contribution to GHG emissions would comprise a miniscule fraction of both U.S. and global GHG emissions. Accordingly, when compared to the No Action Alternative, the Proposed Action, would not result in a significant impact to climate.

4.5 Hazardous Materials, Solid Waste, and Pollution Prevention

4.5.1 Methodology

The potential to encounter any known areas of environmental concern, areas with known contamination, and areas subject to past or present remediation that may be affected by the Proposed Action were evaluated using USEPA's NEPAssist database. The locations of known, or potential environmental contamination or other hazards located within the GSA are described in Section 3.5, *Hazardous Materials, Solid Waste, and Pollution Prevention.* The basis of this assessment is derived from what is known about land use and the facilities at the Airport as well as operational requirements for the Proposed Action under 2022 and 2028 conditions. The results of the evaluation were compared to appropriate regulatory guidelines and criteria, including the potential for the Proposed Action to violate applicable laws or regulations; involve a contaminated site on the USEPA's NPL; or change the quantity, type, or collection of hazardous or solid waste that could exceed local capacity.

The FAA identified factors to consider when evaluating the environmental impacts on hazardous materials as a result of the Proposed Action and the No Action Alternative in 2022 and 2028. FAA Order 1050.1F provides the following factors to consider:

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24 California Air Resources Board, *California Greenhouse Gas Emission Inventory - 2020 Edition*., 2020, <https://ww3.arb.ca.gov/cc/inventory/data/data.htm> (accessed January 22, 2021).

25 U.S. Environmental Protection Agency, *Inventory of U.S. Greenhouse Gas Emissions and Sinks 1990 -2018, April 13, 2020*, <https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks-1990-2018> (accessed September 28, 2020).

26 United Nations Environment Programme, *Emissions Gap Report 2018, November 2018*, <https://www.unenvironment.org/resources/emissions-gap-report-2018> (accessed September 28, 2020).

- Actions that may violate applicable federal, state, tribal, or local laws or regulations for hazardous materials and/or solid waste management;
- Actions that may involve a contaminated site, including but not limited to sites listed on the USEPA's NPL;[27]
- Actions that produce an appreciably different quantity or type of hazardous waste;
- Actions that generate an appreciably different quantity or type of solid waste or use a different method of collection or disposal and/or would exceed local capacity; and
- Actions that adversely affect human health and the environment.

4.5.2 Significance Thresholds

FAA Order 1050.1F provides the Significance Thresholds, and the 1050.1F Desk Reference provide guidance on the framework, for evaluating impacts associated with hazardous materials or wastes. The FAA has not established a significance threshold for hazardous materials, solid waste, or pollution prevention.

4.5.3 2022 and 2028 Impacts

4.5.3.1 No Action Alternative

Under the No Action Alternative, FAA would not issue Inyo County a Class I certificate under 14 CFR Part 139, or Operation Specification Amendment to SkyWest Airlines. Commercial air passenger service would not be introduced at BIH, and general aviation, military, and cargo operations would continue. The Airport would continue to be used as a general aviation airport with no anticipated increase in waste or use of hazardous materials. Therefore, no impacts would occur under the No Action Alternative in 2022 or 2028.

4.5.3.2 Proposed Action

Hazardous Materials

As discussed in Section 3.5, *Hazardous Materials, Pollution Prevention, and Solid Waste*, there are no NPL properties located within or adjacent to the GSA. Eight RCRA sites were identified either within or adjacent to the GSA. However, none of these sites are physically located within the Airport boundary nor would they be used to support commercial aircraft operations at BIH.

Due to the introduction of commercial air passenger service, the Proposed Action would result in an increase in airside activity in 2022 and 2028. However, there would be no anticipated changes in the handling, use, or disposal of hazardous materials as a result of the Proposed Action in either 2022 or 2028. There would be an increase in fueling and maintenance of aircraft, GSE, and Airport

[27] The NPL or National Priorities List identifies known releases or threatened releases of hazardous substances, pollutants, or contaminants throughout the United States and its territories.

vehicles, as well as use of airport fuel trucks. This would include the more frequent use of fuels, oils, and antifreeze to serve commercial passenger aircraft. However, Airport ground crews would employ best management practices to minimize the potential for spills on Airport property in accordance with AC 150/5210-22, *Airport Certification Manual (ACM),* Section 139.321 - Handling and Storing of Hazardous Substances and Materials. The Bishop-Sunland Landfill accepts hazard materials and has sufficient capacity to operate until 2064.

The Proposed Action would result in an increase in landside operations with more frequent use of vehicles in both 2022 and 2028. This would be due to the increase in passenger vehicles and airport shuttle services operating to and from BIH and the Mammoth Lakes area. Hotel shuttle services would not be traveling to the Mammoth Lakes area from BIH. However, regional stakeholders have indicated that two independent shuttle companies that currently serve MMH would introduce service to BIH as a result of the Proposed Action. Furthermore, Enterprise Rent-a-Car currently offers rental car service to BIH with vehicles delivered to customers on demand from downtown Bishop. It is anticipated that the Proposed Action would generate an increase in rental car service at the Airport. However, rental cars would not be fueled or maintained on Airport property.

Despite the expected increase in landside vehicular operations, there are no anticipated changes in the handling, use, or disposal of associated hazardous materials as a result of the Proposed Action in either 2022 or 2028. Fueling and maintenance for rental vehicles, taxis, or shuttle vans would take place off-Airport at existing fueling stations. Therefore, the Proposed Action would not result in the increased use or handling of automotive fuels or other potentially hazardous materials within the GSA.

Solid Waste

The Proposed Action is likely to result in a minor increase in solid waste due to the introduction of airline passengers, airline and support employees, and ground transportation services (e.g., rental cars, shuttle vans, taxis). However, because any increase in solid waste from the increase in passengers and addition of commercial service would be minimal because on average, only 20% of a commercial service airport's municipal solid waste is from passenger deplaned waste.[28] Additionally, there is no likelihood of exceeding existing waste processing capacity, including the capacity of the Bishop-Sunland Landfill. The Bishop-Sunland Landfill has a maximum permitted capacity of 160 tons of solid waste per day and a cease operation date of 2064. It also has a capacity of 6 million cubic yards with a remaining capacity of 3.3 million cubic yards.

Pollution Prevention

The Proposed Action would not result in major changes to existing pollution prevention activities in accordance with AC 150/5210-22, Section 139.321. The Airport staff would continue to employ best practices to avoid, reduce, or prevent pollution within the GSA.

[28] *Recycling, Reuse and Waste Reduction at Airports*. FAA, April 24, 2013.

4.5.4 Comparison to Significant Impact Thresholds

Based on the above information, the Proposed Action when compared to the No Action Alternative would not result in significant impacts to hazardous materials, solid waste, or pollution prevention in either 2022 or 2028.

4.6 Historical, Architectural, Archaeological, and Cultural Resources

4.6.1 Methodology

This section analyzes the potential for direct and indirect impacts to historical, architectural, archaeological, and cultural resources (cultural resources) due to the Proposed Action. Also discussed in this section is the FAA's consultation with the California SHPO pursuant to Section 106 of the NHPA and its implementing regulations at 36 CFR Part 800.

The Proposed Action does not include ground disturbance or change to the existing instrument approach and departure procedures, therefore, the FAA determined that consultation with federally recognized Native American Indian tribes regarding cultural resources in the APE is not warranted.

As discussed in Section 3.6, *Historic, Architectural, Archaeological, and Cultural Resources*, an APE was established for determining where the Proposed Action might directly or indirectly alter the character of any cultural resources. The APE is depicted in Figure 3-3. An historical/archaeological resources records search was conducted at the eastern information center (EIC) of the California Historical Resources Information System (CHRIS) at the University of California Riverside. Records indicate that 14 cultural resources studies have been conducted within a ¼-mile radius of BIH property. One resource listed on the NRHP was identified within the APE. However, due to the sensitivity of the site, the precise location will not be disclosed in this document. Two other documented resources adjacent to the APE include areas where various pre-historic and historic artifacts and structure remnants have been found and documented, including lithic scatter and an abandoned fence line. Neither of these resources has been determined to meet the requirements for eligibility for listing on the NRHP.

In assessing the potential significance associated with a proposed action, one of the factors that the FAA considers is whether it would result in a finding of Adverse Effect through the Section 106 process. However, an adverse effect finding does not automatically trigger preparation of an EIS (i.e. a significant impact).

According to Section 106 of the NHPA, a proposed project has an effect on a historic property when the project may alter characteristics of the property that may qualify it for inclusion in the NRHP. An effect would be considered adverse when it diminishes the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Adverse effects include the physical destruction of all or part of the property, changes to aspects of the property's setting, or alteration of character-defining features [36 CFR § 800.9(b)].

4.6.2 Section 106 Consultation

The FAA consulted verbally with California SHPO on November 5, 2020. The FAA described the Proposed Action, the APE, and the results of the CHRIS records search. Based on this information, the FAA has determined that the Proposed Action would not alter, directly or indirectly, any of the identified resources intersected by the APE as defined in 36 CFR § 800.5. Therefore, the Proposed Action would have "no potential to cause effects" (36 CFR § 800.3(a)(1). The California SHPO indicated agreement that the Proposed Action would not affect historic properties and formal consultation under Section 106 of the NHPA was not warranted.

4.6.3 Significance Thresholds

As discussed in FAA Order 1050.1F, the FAA has not established a significance threshold for Historical, Architectural, Archaeological, and Cultural Resources.

4.6.4 2022 and 2028 Impacts

4.6.4.1 No Action Alternative

Under the No Action Alternative, FAA would not issue Inyo County a Class I certificate under 14 CFR Part 139, or Operation Specification Amendment to SkyWest Airlines. Commercial air passenger service would not be introduced at BIH, and general aviation, military, and cargo operations would continue. The Airport would continue to be classified and used as a general aviation airport with approximately 26,000 total operations annually. Suitably equipped aircraft would continue to use the existing instrument procedures to Runway 12/30 when desired. Therefore, no impacts to would occur to cultural resources under the No Action Alternative in 2022 or 2028.

4.6.4.2 Proposed Action

The FAA has determined that the Proposed Action has "no potential to cause effects" as established under 36 CFR § 800.3. The Proposed Action includes an additional 1,462 operations in 2022 and 6,576 operations in 2028 (up to three and six daily round-trip flights in 2022 and 2028, respectively). These aircraft would use existing instrument procedures with no ground disturbance. Therefore, no impacts to would occur to cultural resources under the Proposed Action in 2022 or 2028.

4.6.5 Comparison to Significant Impact Thresholds

The Proposed Action has "no potential to cause effects" to cultural resources. Accordingly, when compared to the No Action Alternative, the Proposed Action, would not result in a significant impact to cultural resources.

4.7 Land Use

4.7.1 Methodology

The evaluation of land use impacts in this section considers the following:

- Direct or indirect impacts (other than aircraft noise) that would affect land use in the vicinity of BIH;
- Consistency with approved local and state plans;
- Possible conflicts between the Proposed Action and the objectives of federal, regional, state, and local land use plans, policies, and controls; and
- That appropriate action, including the adoption of zoning laws, has been or will be taken, to the extent reasonable to restrict the use of land adjacent to or in the immediate vicinity of the Airport to activities and purposes compatible with its safe operation.

The analysis included review of the general plans and zoning ordinances of Inyo County and the City of Bishop, as well as applicable local land use management plans, such as the OVLMP. The purpose of this review was to identify whether the Proposed Action would conflict with local and regional land use plans. The County of Inyo, City of Bishop, and LADWP establish the land use plans and policies for areas surrounding BIH. No state or federal agencies have established specific land use plans applicable within the GSA. Future planned land uses in the GSA are shown in Figure 3-5.

Land use compatibility as it relates to aircraft noise, is discussed in Section 4.9, *Noise and Noise-Compatible Land Use.*

4.7.2 Significance Thresholds

Order 1050.1F, indicates the FAA has not established significance thresholds for land use.

Per the Order 1050.1F Desk Reference guidance, a determination that there are significant impacts to land use is normally dependent on whether there are significant impacts in other environmental impact categories. Potential impacts on noise compatible land use are discussed in Section 4.9, *Noise and Noise-Compatible Land Use*. Potential impacts to land use related to potential for disruptions to communities or relocation of residences or businesses is discussed in Section 4.10, *Socioeconomics, Environmental Justice, and Children's Environmental Health and Safety Risks*. This section of the EA focuses on the Proposed Action's consistency with land use plans, zoning ordinances, and other planning documents.

4.7.3 2022 and 2028 Impacts

4.7.3.1 No Action Alternative

Under the No Action Alternative, FAA would not issue Inyo County a Class I certificate under 14 CFR Part 139, or Operation Specification Amendment to SkyWest Airlines. Commercial air passenger service would not be introduced at BIH, and general aviation, military, and cargo operations would continue. The County would continue to operate BIH as a General Aviation Airport with an estimated 26,000 annual operations. No changes with a potential to affect local land use would occur.

4.7.3.2 Proposed Action

General Plan Land Use

The Proposed Action would result in additional aircraft operations at BIH (an approximate three percent increase by 2028). However, this would not affect surrounding land use. The introduction of commercial air passenger service at BIH is consistent with both the Inyo County General Plan Circulation Element and the City of Bishop General Plan Mobility Element.[29,30] Both plans identify the introduction of commercial air passenger service at BIH as an action to be supported by local land use policies. Policy P.5.2 in the Mobility Element of the City of Bishop General Plan specifically states support for the introduction of commercial airline service at BIH. Likewise, Policy AVI-1.5 in the Circulation Element of the County of Inyo General Plan establishes a commitment to foster successful commercial passenger service at BIH.

As shown on Figure 3-6, the Inyo County General Plan designates the majority of BIH as (PF) Public Service Facilities with (LI) Light Industrial land use located in the southwestern corner of the Airport property. Introduction of commercial air passenger service would be consistent with both land use designations. Commercial air passenger service would also be consistent with the OVLMP which allows such uses on lands associated with business leases provided it results in significant public benefit.[31]

The Airport is surrounded by land primarily designated for (A) Agriculture with areas immediately north of the Airport designated for (NR) Natural Resources. Most areas around the Airport property are used for agricultural grazing and related commercial livestock operations such as corrals and feed lots. The introduction of commercial air passenger service at BIH would be compatible with these land uses.

Zoning

BIH is located is in the (P) Public zoning district as identified in the Inyo County Zoning Ordinance. Introduction of commercial air passenger service at BIH would be consistent with the zoning for

29 *Inyo County General Plan*, December 2001, p. 7-28.

30 *City of Bishop General Plan, Mobility Element*, February 2012, p. 10.

31 *Los Angeles Department of Power and Water and Ecosystem Sciences, Owens Valley Land Management Plan*, April 28, 2010, p. 8-2.

this property, which permits public and quasi-public use by government agencies in this zoning district.[32] The lands immediately surrounding BIH are zoned for (OS) Open Space, which provides for the continued use of these areas for agricultural purposes.[33] As discussed above, introduction of commercial air passenger service would not interfere with the use of adjacent lands for agricultural purposes.

4.7.4 Comparison to Significant Impact Thresholds

As noted in Section 4.7.3, there are no established significance thresholds for potential impacts to land use. The Proposed Action is consistent with local and regional plans and objectives and no conflicts with these plans have been identified.

The introduction of commercial air passenger service at BIH would present no conflicts with existing zoning, as continued public use of the airport, including introduction of commercial air passenger service is consistent with permissible uses in the (P) Public zoning district as identified in Title 18 of the Inyo County Code.

4.8 Natural Resources and Energy Supply

4.8.1 Methodology

Demands on natural resources and energy supplies were determined by evaluating the extent to which the Proposed Action would result in changes in demand for electricity and fuel, as well as whether the change would cause demand to exceed available or future natural resources. This section analyzes whether the Proposed Action would have the potential to exceed the local energy supply when compared to the No Action Alternative. The analysis includes a discussion of future demands for energy and natural resources, including changes in demand for utility services and fuel consumption for operations.

Per FAA Order 1050.1F, Exhibit 4-1, the analysis should consider situations in which the proposed action or alternative(s) would have the potential to cause demand to exceed available or future supplies of these resources.

4.8.2 Significance Thresholds

The FAA has not established significance thresholds for determining impacts to Natural Resources and Energy Supply.

[32] Inyo County Code §18.72.010.
[33] Inyo County Code §18.12.010.

4.8.3 2022 and 2028 Impacts

4.8.3.1 No Action Alternative

Under the No Action Alternative, FAA would not issue Inyo County a Class I certificate under 14 CFR Part 139, or Operation Specification Amendment to SkyWest Airlines. Commercial air passenger service would not be introduced at BIH, and general aviation, military, and cargo operations would continue. The County would continue to operate BIH as a General Aviation Airport with an estimated 26,000 annual operations. Furthermore, there would be no increase in the use of passenger vehicles, rental cars, or passenger shuttles that would increase consumption of fossil fuels. However, based upon capacity identified in Section 3.8, sufficient resources are available to support continued operations.

4.8.3.2 Proposed Action

The Proposed Action is anticipated to commence with one daily arrival and departure (two additional aircraft operations) at BIH for eight months of the year during the summer and shoulder seasons (April 16 – December 14) and three daily operations for four months of the year during the winter season (December 15 – April 15). Winter season operations (three arrivals and three departures per day) are anticipated to increase to six arrivals and six departures per day by 2028. This represents an approximate three percent increase in total annual operations by 2028, at which point operations are expected to plateau.[34] These additional aircraft operations and other activities associated with commercial airline service at BIH would place a proportionate demand on electricity, fuel, and water supplies. However, the increase in demand on these resources would be minimal and is not anticipated to exceed local supplies.

4.8.4 Comparison to Significant Impact Thresholds

The Proposed Action is unlikely to result in more than a minimal increase in demand on electricity at the Airport. The Airport's existing fire suppression well is expected to continue meeting anticipated future water needs at the Airport. Electric power is supplied to the Airport by SCE which has sufficient power to service a 50,000-square-mile service area that covers 180 cities in Central and Southern California Any potential increase in demand is unlikely to exceed existing or future energy supplies. Similarly, fuel consumption attributable to the additional aircraft or motor vehicle operations is unlikely to occur at a rate that would exceed existing or anticipated fuel reserves. Finally, water at the Airport is currently supplied via groundwater wells on Airport property. As discussed in Section 3.12.3, the groundwater aquifer is regularly replenished by abundant run off from the Sierra Nevada Mountains. This water supply currently meets potable water and fire suppression needs at BIH and is anticipated to sufficiently meet demand through the planning horizon. Accordingly, no significant impacts to natural resources or energy supplies are anticipated.

[34] FAA approved the *Draft Aviation Activity Forecast Bishop Airport*, Inyo County Department of Public Works, March 2020, on April 28, 2020.

4.9 Noise and Noise-Compatible Land Use

4.9.1 Methodology

The FAA requires preparation of a noise analysis when a project may result in changes in aircraft noise exposure in areas surrounding an Airport. As discussed in FAA Order 1050.1F and further explained in the 1050.1F Desk Reference, a noise analysis requires use of an FAA-approved computer model to assess aircraft noise impacts. The FAA's AEDT 3c, was used to prepare CNEL contours for both the Proposed Action and the No Action Alternative.

As discussed in Section 3.9, inputs used by the AEDT noise model include the number of annual average daily daytime, evening, and nighttime aircraft operations, flight paths, and flight profiles of aircraft, along with its extensive internal database of aircraft noise and performance information, to develop CNEL contours. Flight tracks were developed based on a review of published flight procedures, as well as the consideration of terrain in the vicinity of BIH. No changes in aircraft arrival or departure flight procedures in the terminal or enroute environments are planned for the Proposed Action; therefore, the same flight tracks were modeled for both the No Action and Proposed Action Alternatives (see Appendix J for additional information). **Table 4-4** provides a summary of forecasted aircraft operations used in modeling noise for both the Proposed Action and No Action Alternative. The *Noise Analysis Technical Report*, provided in Appendix J, provides further information on the assumptions used in modeling noise for this EA.

TABLE 4-4
PROPOSED ACTION AND NO ACTION ALTERNATIVE AIRCRAFT OPERATION SUMMARY

Study Year	Scenario	Itinerant				Local		Total
		Air Carrier	Air Taxi[1]	General Aviation[2]	Military[2]	General Aviation[2]	Military[2]	
2019	Existing Condition	0	6	16,000	3,000	7,000	0	26,006
2022	No Action Alternative	0	6	16,000	3,000	7,000	0	26,006
2022	Proposed Action	1,210	6	16,000	3,000	7,000	0	27,216
2028	No Action Alternative	0	6	16,000	3,000	7,000	0	26,006
2028	Proposed Action	1,942	6	16,000	3,000	7,000	0	27,948

NOTES:

1 The BIH Activity Forecast document included in Appendix D-1 indicates there would be 6 operations diverted from MMH due to the weather. These are charter aircraft operations.

2 FAA Terminal Area Forecast for BIH included in Appendix D-2.

3 In June 2020, the County of Inyo provided the 2022 and 2028 proposed aircraft operations with aircraft types, schedule, and destination. These operations varied slightly from those in the BIH Aviation Activity Forecast (see Appendix D). A memorandum explaining the discrepancy was submitted to the FAA in January 2021 (also included in Appendix D).

SOURCE: BIH Aviation Activity Forecast, 2019; FAA TAF, 2020; County of Inyo, 2020.

4.9.2 Significance Thresholds

For purposes of identifying noise impacts the FAA's significance thresholds are provided in FAA Order 1050.1F, Exhibit 4-1, and further detailed in the 1050.1F Desk Reference. A significant noise impact would occur if a proposed action, when compared to a no action alternative for the same timeframe, "would increase noise by DNL 1.5 dB or more for a noise sensitive area that is exposed to noise at or above the DNL 65 dB noise exposure level, or that will be exposed at or above the DNL 65 dB level due to a DNL 1.5 dB or greater increase, when compared to the no action alternative for the same timeframe."

As part of the noise analysis, the 1050.1F Desk Reference requires that the following information be disclosed for future conditions:

- The number of residences or people residing within each noise contour where aircraft noise exposure is at or above CNEL 65 dB and the net increase or decrease in the number of people or residences exposed to that level of noise;
- The location and number of noise-sensitive uses in addition to residences (e.g., schools, churches, hospitals, parks, recreation areas) exposed to CNEL 65 dB or greater; and
- If CNEL 1.5 dB increases are documented within the CNEL 65 dB contour, the identification of noise-sensitive areas within the CNEL 60 dB contour that are exposed to aircraft noise at or above CNEL 60 dB but below CNEL 65 dB and are projected to experience a noise increase of CNEL 3 dB or more.

4.9.3 2022 and 2028 Impacts

4.9.3.1 No Action Alternative

As shown in Table 4-4, aircraft operations are anticipated to remain static under the No Action Alternative. A total of 26,006 annual aircraft operations are forecasted to occur at the Airport in both 2022 and 2028. This represents approximately 71 annual average daily aircraft operations.

Figure 4-1 depicts the No Action Alternative CNEL contours for 2022 and **Figure 4-2** depicts the No Action Alternative CNEL contours for 2028. As shown on these figures, the CNEL 65 dB contour is contained entirely within the Airport property in both 2022 and 2028. As the CNEL contours are entirely limited to Airport property, no noise-sensitive land uses, such as homes or schools, and no residential population, would be exposed to CNEL 65 dB or higher under the No Action Alternative in either 2022 or 2028.

4.9.3.2 Proposed Action

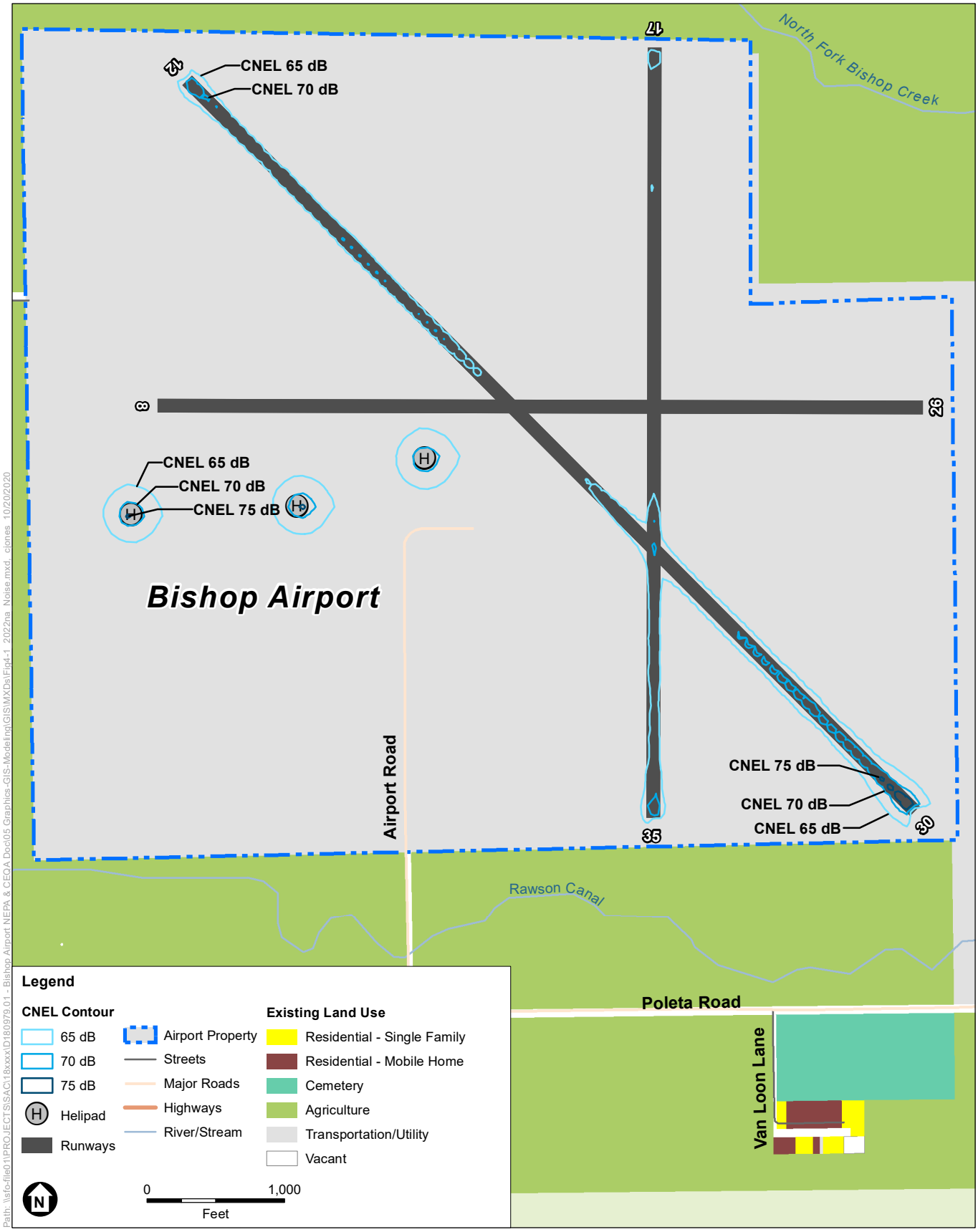
Table 4-4 provides a summary of projected aircraft operations in 2022 and 2028 under the Proposed Action. Under the Proposed Action, aircraft operations are anticipated to grow from 27,216 annual aircraft operations forecasted to occur at the Airport in 2022 to 27,948 annual aircraft operations forecasted to occur at the Airport in 2028. This represents approximately 75 annual average daily aircraft operations in 2022 and 77 annual average daily aircraft operations in 2028, which is up to

four and six additional annual average daily aircraft operations in 2022 and 2028, respectively, when compared to the No Action Alternative.

Figure 4-3 depicts the Proposed Action CNEL contours for 2022 and **Figure 4-4** depicts the Proposed Action CNEL contours for 2028. As shown on these figures, the CNEL 65 dB contour stays entirely within the Airport property in both 2022 and 2028. As the CNEL contours are entirely within the Airport property boundary, no noise-sensitive land uses, including homes or schools, and no residential population, would be exposed to CNEL 65 dB in either 2022 or 2028 under the Proposed Action. Additionally, because there is no construction and flight paths would not change, there would be no perceptible change in noise impacts to wilderness areas.

4.9.4 Comparison to Significant Impact Thresholds

Table 4-5 presents a summary of noise exposure under both the No Action Alternative and the Proposed Action in both 2022 and 2028. The noise exposure summary includes the total area within the CNEL 65 dB contours, number of people, and noise sensitive land uses that would be exposed to aircraft noise levels of CNEL 65 dB and higher in 2022 and 2028. As shown in the table, there are no noise-sensitive land uses found within the CNEL 65 dB and higher contours under either the No Action Alternative or the Proposed Action in 2022 or 2028. The CNEL 65 dB and higher contours remain entirely on Airport property in both study years. Accordingly, when compared to the No Action Alternative, the Proposed Action would not result in any noise impacts in either 2022 or 2028.



SOURCE: Esri; Inyo County Department of Public Works; County of Inyo Assessor, July 2020 (existing land use); ESA, 2020.

Proposed Commercial Airline Service at Bishop Airport

Figure 4-1
2022 No Action Alternative CNEL Contours and Generalized Land Use
Bishop Airport

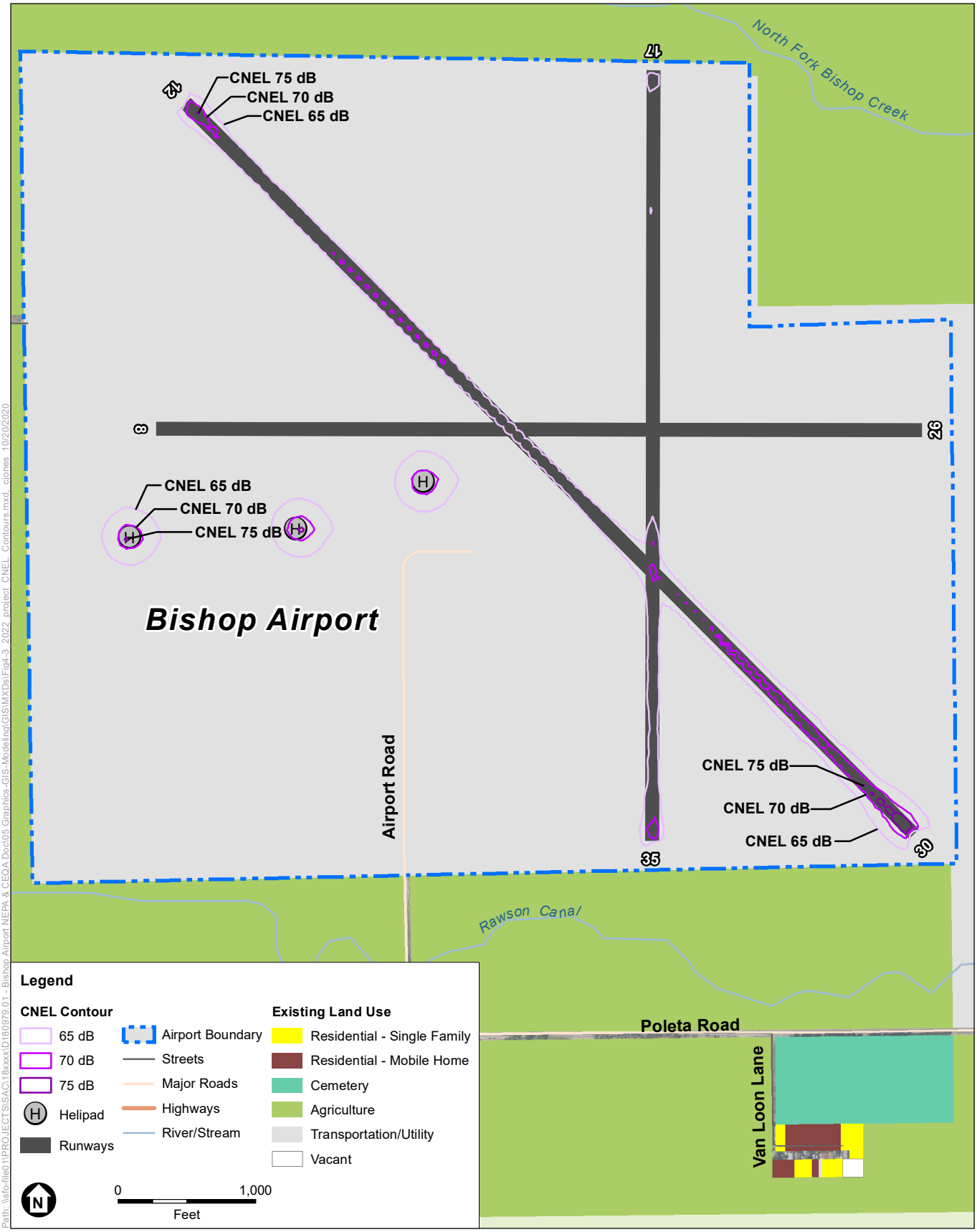
ESA

SOURCE: Esri; Inyo County Department of Public Works; County of Inyo Assessor, July 2020 (existing land use); ESA, 2020.

Proposed Commercial Airline Service at Bishop Airport

Figure 4-2
2028 No Action Alternative CNEL Contours and Generalized Land Uses
Bishop Airport

ESA



SOURCE: AEDT 3c, August 2020; Esri; Inyo County Department of Public Works; County of Inyo Assessor, July 2020 (existing land use); ESA, 2020.

Proposed Commercial Airline Service at Bishop Airport

Figure 4-3
2022 Proposed Action CNEL Contours and Generalized Land Uses
Bishop Airport

ESA

SOURCE: AEDT 3c, August 2020; Esri; Inyo County Department of Public Works; County of Inyo Assessor, July 2020 (existing land use); ESA, 2020.

Proposed Commercial Airline Service at Bishop Airport

Figure 4-4
2028 Proposed Action CNEL Contours and Generalized Land Uses
Bishop Airport

ESA

TABLE 4-5
NOISE SENSITIVE USES AND POPULATION WITHIN THE CNEL 65 dB AND HIGHER CONTOURS
PROPOSED ACTION AND NO ACTION ALTERNATIVE - 2022 AND 2028

	Households	Population	Places of Worship	Schools	Hospitals and Residential Healthcare	Historic Resources	Day Care and Assisted Living	Parks
2022 No Action Alternative	0	0	0	0	0	0	0	0
2022 Proposed Action	0	0	0	0	0	0	0	0
2028 No Action Alternative	0	0	0	0	0	0	0	0
2028 Proposed Action	0	0	0	0	0	0	0	0

NOTES:

CNEL = Community Noise Equivalent Level

Source: Environmental Science Associates, 2020.

As shown in Table 4-5, when compared to the No Action Alternative, the Proposed Action would not result in the exposure of people or noise-sensitive land uses to CNEL 65 dB or higher in either 2022 or 2028. Therefore, the Proposed Action would not result in significant noise impacts in either 2022 or 2028.

4.10 Socioeconomic Impacts, Environmental Justice, and Children's Environmental Health and Safety Risks

This analysis considers the existing and future conditions of the No Action Alternative and the Proposed Action to determine whether implementation of the Proposed Action would result in socioeconomic and environmental justice impacts or affect Children's Environmental Health and Safety Risks. Each category was evaluated according to guidance provided in FAA Order 1050.1F and the 1050.1F Desk Reference.

4.10.1 Socioeconomics

4.10.1.1 Methodology

The primary focus of the socioeconomics analysis in this EA is whether the Proposed Action would result in substantial economic impacts in the region, changes to the community tax base, or disruptions to local surface traffic conditions in the GSA. This analysis takes into consideration both existing and future conditions to determine potential outcomes for the No Action and Proposed Action alternatives and whether socioeconomic impacts would occur.

The analysis must consider certain factors, including whether a proposed action, when compared to the no action alternative, would:

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

The presence of these factors does not mean a significant impact exists. The significance of an impact is determined by evaluating its context and intensity.

4.10.1.2 Significance Thresholds

FAA Order 1050.1F does not establish a significance threshold for Socioeconomics.

4.10.1.3 2022 and 2028 Impacts

No Action Alternative

Under the No Action Alternative, the FAA would not issue a Class I certificate to Inyo County under 14 CFR Part 139, or Operation Specification Amendment to SkyWest Airlines, and the Airport would remain a GA airport that continues to accommodate general, military, and cargo operations. The Airport would serve approximately 26,000 total operations annually, of which 7,000 annual operations are local. These 7,000 annual operations (approximately 20 arrivals or departures per day) include pilots and passengers that would continue to access the airport using surface transportation, traveling on local roads to and from the Airport. There would be no increase in traffic volume associated with the No Action Alternative through 2028. The No Action Alternative would not include any physical development that would disrupt or divide the local community. Furthermore, it would not cause relocation of employees or place a strain on local housing stocks. While the Airport provides direct and indirect economic benefits to the community, the No Action Alternative would not result in an increase in economic benefits. Therefore, no significant socioeconomic impacts would occur.

Proposed Action

The Proposed Action would not include any physical development that would disrupt or divide the local community. Furthermore, it would not cause extensive relocation of employees that would place a strain on local housing stocks. The Proposed Action would include employment opportunities associated with the introduction of commercial air passenger service and related

services at BIH. Employment at BIH would be anticipated to increase by 12 to 16 new positions (depending on season) in 2022, with a potential increase of an additional two employees by 2028. New jobs arising from the Proposed Action may include baggage handlers, airfield personnel, Transportation Safety Administration security screeners, airline customer service/ticketing counter personnel, and rental car agents. It is expected that the potential employment opportunities would be filled locally and would be anticipated to provide a direct and indirect economic benefit to the surrounding community. The increase in employment opportunities at the Airport, as well as an increase in tourist traffic in the local area due to the introduction of commercial air passenger service would likely induce some local economic growth with a corresponding change in the community tax base; however, any economic growth would be beneficial to the local economy and the Eastern Sierra region as whole.

The Proposed Action would not result in an extensive relocation of community businesses that would produce economic hardship. Although several of the taxi and shuttle services that currently provide transportation between MMH and the Mammoth Mountain resort area have expressed interest in introducing service to BIH with the same fleet mix of Sprinter vans and SUVs, the change in service would be relatively minor and would likely produce greater income for both the businesses and the community in which they are based due to the lower potential flight cancellation rates anticipated at BIH.

The Proposed Action would see minor, seasonal increases in motor vehicle traffic on area roads due to the introduction of additional trips associated with increased employment at the Airport, passenger pick-ups and drop-offs, rental car trips, and shuttle service providing transportation to and from Mammoth Lakes. In 2022, the Proposed Action, when compared to the No Action Alternative, would be anticipated to contribute an additional estimated 93 daily vehicle trips during the winter season. This represents approximately 16 employee vehicle trips a day and approximately 77 passenger vehicle trips a day (26 vehicle trips associated with visitor arrivals and departures three times a day). In 2028, the Proposed Action, when compared to the No Action Alternative, would be anticipated to contribute 176 daily vehicle trips during the winter season. This represents approximately 20 employee vehicle trips a day and approximately 156 passenger vehicle trips a day (26 vehicle trips associated with visitor arrivals and departures six times a day). As there would be fewer aircraft operations during the summer and shoulder seasons, there would be fewer corresponding vehicle trips during these periods.

The most direct route to and from the Airport and the surrounding road network is along East Line Street/Poleta Road. East Line Street connects to Highway 395, the main thoroughfare through the City of Bishop and the primary highway that runs the length of the Eastern Sierra region. According to the 2019 Inyo County Regional Transportation Plan (RTP), in 2016 the annual average daily traffic volume at the intersections of Highway 395 and SR 168 (West Line Street) was 15,600 vehicles. Assuming this level of traffic volume held steady through the planning horizon and all vehicles to and from the Airport passed through this intersection, the contribution of traffic to/from the Airport associated with the Proposed Action would be minor, representing less than one percent of traffic volume at this intersection.

4.10.1.4 Comparison to Significant Impact Thresholds

As stated in Section 4.9.1.2, there are no established thresholds of significance for socioeconomics; however, there are several factors to be considered when evaluating potential for socioeconomic impacts. When considering these factors, all potential impacts associated with the Proposed Action would produce benign or positive socioeconomic effects. Therefore, the Proposed Action, when compared to the No Action Alternative, is unlikely to result in any significant socioeconomic impacts.

4.10.2 Environmental Justice

4.10.2.1 Methodology

EO 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations* (February 11, 1994), requires identifying and addressing disproportionately high and adverse human health or environmental effects on minority populations and low-income populations. A location is a potential environmental justice area of concern when the minority or low-income population of the analysis area is "meaningfully greater" than that of the surrounding areas. The analysis considers whether the Proposed Action would have disproportionately high and adverse human health or environmental effects on these communities.

The factors to be considered in determining whether an action would have the potential to lead to a disproportionately high and adverse impact to an environmental justice population include:

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

4.10.2.2 Significance Thresholds

The FAA has not established a significance threshold for Environmental Justice.

4.10.2.3 2022 and 2028 Impacts

No Action Alternative

As described in Section 3.10.3.2, three Census block groups within the GSA have been identified as environmental justice communities. Census block group 60270004004 meets the minority population and income thresholds for environmental justice communities in the GSA, and Census block groups 60270004002 and 60270004003 meet only the income threshold and would be characterized as low-income communities. Under the No Action Alternative, FAA would not issue Inyo County a Class I certificate under 14 CFR Part 139, or Operation Specification Amendment to SkyWest Airlines. Commercial air passenger service would not be introduced at BIH, and general aviation, military, and cargo operations would continue. Consequently, no impacts to minority or low-income populations would occur.

Proposed Action

Three Census block groups within the GSA have been identified as environmental justice communities (see No Action Alternative impacts). As discussed throughout Chapter 4, Environmental Consequences, no significant environmental impacts associated with the Proposed Action have been identified in either 2022 or 2028. Therefore, the Proposed Action would not result in disproportionately high and adverse human health or environmental effects to the identified low-income and minority populations.

4.10.2.4 Comparison to Significant Impact Thresholds

When compared to the No Action Alternative for the same timeframe, the Proposed Action is would not result in any significant environmental justice impacts to any of the identified environmental justice communities. Nor would the Proposed Action alter the physical environment in a manner that would uniquely affect any members of the identified environmental justice communities.

4.10.3 Children's Environmental Health and Safety Risks

4.10.3.1 Methodology

EO 13045, *Protection of Children from Environmental Health Risks and Safety Risks*, requires federal agencies to identify and assess environmental and safety risks that may disproportionately affect children and ensure that its actions address any disproportionate risks. Environmental health and safety risks are defined as risks to health or safety that are attributable to products or substances that a child is likely to come in contact with or ingest.

As discussed in FAA Order 1050.1F, the factor to consider is if the proposed action or alternative(s) would have the potential to lead to a disproportionate health or safety risk to children.

4.10.3.2 Significance Thresholds

The FAA has not established a significance threshold for Children's Environmental Health and Safety Risks.

4.10.3.3 2022 and 2028 Impacts

No Action Alternative

Under the No Action Alternative, FAA would not issue Inyo County a Class I certificate under 14 CFR Part 139 or Operation Specification Amendment to SkyWest Airlines. Commercial air passenger service would not be introduced at BIH, and general aviation, military, and cargo operations would continue. As discussed in Section 3.10.3.3, there are no children's schools, child daycare facilities, or other facilities such as public parks where children congregate located within the GSA. Therefore, no new adverse impacts would occur and there would be no effect on children's health or safety.

Proposed Action

As discussed in Section 3.10.3.3, there are no children's schools, child daycare facilities, or other facilities such as public parks where children congregate located within the GSA. The closest residential uses where children may live are located approximately half a mile southwest of the Runway 35 end and approximately a mile and half to the west of the Airport. As stated in Sections 4.2 and 4.9, the Proposed Action would not result in any significant adverse air quality or noise impacts that might affect the health of children. Furthermore, as there is no construction or ground disturbance associated with the Proposed Action, there is no potential for release of identified or heretofore undiscovered hazardous materials that would be harmful to children.

4.10.2.4 Comparison to Significant Impact Thresholds

The Proposed Action does not include activity that would lead to hazards that would represent health or safety risks to children. Therefore, the Proposed Action, when compared to the No Action Alternative for the same time frame, would not result in any adverse effects on children's environmental health or represent any new significant safety risks.

4.11 Visual Effects

4.11.1 Methodology

Analysis of potential impacts associated with visual effects was accomplished by reviewing surrounding land uses for light emission sensitivity as well as the potential for the Proposed Action to interfere with the aesthetics of the surrounding area. Various factors identified in Section 13.3.3 of FAA Order 1050.1F were reviewed and taken into consideration when evaluating the results of this evaluation for purposes of identifying potential impacts. This includes the degree to which an action may impact light emissions as well as visual resources and visual character.

- Light Emissions Effects
  - Create annoyance or interfere with normal activities from light emissions;
  - Affect the visual character of the area due to the light emissions, including the importance, uniqueness, and aesthetic value of the affected visual resources.
- Visual Resources and Visual Character Effects
  - Affect the nature of the visual character of the area, including the importance, uniqueness, and aesthetic value of the affected visual resources;
  - Contrast with the visual resources and/or visual character in the study area; and
  - Block or obstruct the views of visual resources, including whether these resources would still be viewable from other locations.

4.11.2 Significance Thresholds

The FAA has not established thresholds to determine the significance of Light Emissions and Visual Resources and Visual Character in FAA Order 1050.1F. However, the 1050.1F Desk Reference provide guidance on the framework for evaluating impacts associated with visual effects, as described above.

4.11.3 2022 and 2028 Impacts

4.11.3.1 No Action Alternative

Under the No Action Alternative FAA would not issue Inyo County a Class I certificate under 14 CFR Part 139, or Operation Specification Amendment to SkyWest Airlines. Commercial air passenger service would not be introduced at BIH, and general aviation, military, and cargo operations would continue. Accordingly, there would be no new source of light emissions or effects to the visual character of the surrounding area. Light emissions at the Airport would remain limited to parking areas and airport facilities. Visual resources and character would continue to reflect that of a general aviation airport.

4.11.3.2 Proposed Action

The Proposed Action does not include any physical development that would introduce new fixed light sources to the Airport. Therefore, any new light generated would be the direct result of aircraft operations. Under the Proposed Action, only one operation would occur after sunset during the winter season (December 15th through April 15th). This operation sees an aircraft arrive at 5:00 P.M. and depart at 6:00 P.M. During the winter season, sunset occurs between roughly 4:30 P.M. and 6:00 P.M. until the transition to Daylight Savings Time in early March. After the advent of Daylight Savings Time, all operations would take place during daylight hours until the beginning of the next winter season on December 15. The closest residential land uses are located approximately half a mile southwest of the Runway 35 end and approximately a mile and a half west of the Airport. Land use between the Airport and the nearest residential area is dedicated to open space and agricultural uses. Because of the distance between the nearest residential developments and the intermittent nature of this single aircraft operation, it is unlikely to cause a noticeable source of light emissions. Therefore, the Proposed Action is unlikely to introduce new light sources to cause annoyance or effect the visual character of the area.

As previously stated, the Proposed Action does not include development that would result in new buildings or other structures that would interfere with visual resources or the visual character of the surrounding area. Furthermore, because of the number and frequency of aircraft operations is limited, increasing to a maximum of five operations daily during the winter season in 2028, it is unlikely that aircraft in flight would detract from surrounding visual resources.

4.11.4 Comparison to Significant Impact Thresholds

The Proposed Action when compared to the No Action Alternative would not result in significant visual effects to the visual environment of BIH.

4.12 Water Resources (Groundwater and Surface Water Subcategory only)

4.12.1 Methodology

This section describes effects to water resources including surface waters and groundwater. The evaluation includes an analysis of potential impacts to groundwater and surface water values as a result of the No Action Alternative or Proposed Action. The potential impacts on groundwater resources were also assessed based on level of consumption to determine if either alternative would adversely affect groundwater quantity within the GSA. Finally, the evaluation includes potential surface water and groundwater quality impacts as well.

According to FAA Order 1050.1F, the factors to consider include, but are not limited to, if the proposed action or alternative would have the potential to:

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

4.12.2 Significance Thresholds

The FAA Order 1050.1F provides significance thresholds for surface waters and groundwater.

Surface Waters

An action is considered to have a significant impact if it (1) exceeds water quality standards established by Federal, state, local, and tribal regulatory agencies; or (2) contaminates public drinking water supply such that public health may be adversely affected.

Groundwater

An action is considered to have a significant impact if it (1) exceeds groundwater quality standards established by Federal, state, local, and tribal regulatory agencies; or (2) contaminates an aquifer used for public water supply such that public health may be adversely affected.

4.12.3 2022 and 2028 Impacts

4.12.3.1 No Action Alternative

Under the No Action Alternative, FAA would not issue Inyo County a Class I certificate under 14 CFR Part 139, or Operation Specification Amendment to SkyWest Airlines. Commercial air passenger service would not be introduced at BIH, and general aviation, military, and cargo

operations would continue. The operational characteristics that affect surface waters and groundwater would not change. Therefore, there are no significant environmental impacts to water resources under the No Action Alternative in 2022 and 2028.

4.12.3.2 Proposed Action

Surface Waters

As discussed in Section 3.3, the GSA includes several streams which drain directly into the Owens River. However, under the Proposed Action and construction activities would occur. Thus, surface waters would not be altered, modified, or filled as a result of the Proposed Action. Water quality impacts from stormwater pollution are also not anticipated to occur because there are no additional impervious surfaces associated with the Proposed Action and surface waters are located over 1,000 feet from both ends of Runway 12/30. Furthermore, the GSA is located in an arid region that receives an average annual rainfall of about five inches. Therefore, it is unlikely that stormwater would carry trace amounts of pollution to nearby streams.

Groundwater

As discussed in Section 3.12, water is supplied to the Airport through two groundwater wells. Under the Proposed Action, these wells would continue to supply water to the Airport and its passengers. As a result of the Proposed Action, the additional passengers are likely to increase consumption of groundwater before and after their respective flights. However, the Proposed Action would not make undue demands on existing groundwater supplies. As discussed in Section 4.8, *Natural Resources and Energy Supply*, the existing wells on Airport currently being used for domestic water use and fire suppression would meet any additional demand for water generated by the Proposed Action. The Proposed Action would not result in a significant impact to groundwater supplies.

The Proposed Action could result in potential groundwater pollution from stormwater infiltration to underground aquifers. Data collected from 2019 and 2020 on the closest water well (T490) monitored by the LADWP indicates that groundwater levels can range from approximately seven to 14 feet below the surface. Given the proximity of groundwater to the surface, trace amounts of pollution from oil, gasoline, and antifreeze that have spilled on impermeable surfaces could be carried to underground aquifers as stormwater pollution during heavy precipitation events. However, the Airport is located in an arid environment that receives very little rainfall. It is not anticipated that BIH would receive large enough amounts of precipitation to create enough stormwater runoff to have an appreciable effect on groundwater quality. Furthermore, Airport staff would continue to employ best practices to avoid, reduce, or prevent spills that could result in stormwater pollution within the GSA.

4.12.4 Comparison to Significant Impact Thresholds

The Proposed Action is not likely to result in significant impacts to water resources within or immediately surrounding the GSA. There are no ground disturbances or direct construction impacts associated with the Proposed Action. Additionally, there is no change in impervious surface area

or increase in stormwater quantity as a result of the Proposed Action. Therefore, the Proposed Action would not have an appreciable effect on surface water or groundwater quality. Although there is a projected increase in potable water usage within the GSA, there are no additional wells needed to meet the future demand as a result of the Proposed Action.

4.13 Cumulative Impacts

4.13.1 Methodology

Table 3-11, *Affected Environment*, lists the past, present, and reasonably foreseeable projects within the GSA considered in the cumulative impacts analysis. Cumulative effects and their significance may result from individually minor but collectively significant actions that take place over a period of time (40 CFR § 1508.7). In determining whether a proposed project would have a significant impact, an EA must include considerations of whether the action is related to other actions with individually insignificant but cumulatively significant impacts [40 CFR § 1508.27(b)(7)].

4.13.2 Cumulative Impact Discussion

Air Quality

As discussed in Section 4.2, emissions of criteria pollutants in 2022 and 2028 under the Proposed Action would not result in a significant air quality impact because there would be no exceedance of the NAAQS or increase in the frequency or severity of any air quality violations in the Air Basin. The past, present, and reasonably foreseeable future projects identified in Table 3-11 do not include actions that would result in significant negative impacts to air quality in the Air Basin and all projects are presumed to conform with applicable air quality regulations. Therefore, the Proposed Action would not contribute to significant cumulative impacts to air quality when considering other past, present, or reasonably foreseeable future projects.

Biological Resources

Based on information provided in the BA and according to Section 4.3, the FAA has determined that the Proposed Action would have no effect on federal-listed species within the Action Area defined for compliance with Section 7 of the Endangered Species Act. Projects listed in Table 3-11 are on Airport property, within the GSA, which does not include any federally or state-listed endangered, threatened, or candidate species or designated critical habitat. For example, the Taxiway Rehabilitation and Runway 12-30 Pavement Rehabilitation and Markings are projects to maintain existing pavement of the active runway and taxiway at Bishop Airport. The General Aviation Terminal Expansion project will be developed on existing pavement in a previously disturbed area. None of the projects listed in Table 3-11 would impact any federally or state-listed endangered, threatened, or candidate species or designated critical habitat. As such, there are no cumulative impacts as a result of the Proposed Action that would jeopardize the continued existence of federally listed threatened or endangered species or result in the destruction or adverse modification of federally designated critical habitat.

Climate

As discussed in Section 4.4, the FAA has not established significance thresholds for assessing impacts to climate, nor have specific factors been identified for consideration in making a significance determination for GHG emissions. All past, present, and reasonably foreseeable projects are not anticipated to emit substantial amounts of GHGs. Therefore, the Proposed Action is not anticipated to produce significant adverse effects on climate when considered with past, present, and reasonably foreseeable future projects.

Hazardous Materials, Solid Waste, and Pollution Prevention

As discussed in Section 4.5 above, the Proposed Action is not anticipated to result in any appreciable increase in the transport or handling of hazardous materials under 2022 or 2028 future conditions. The increase in solid waste produced by additional airside and landside operations resulting from the Proposed Action is not anticipated to exceed the capacity of the Bishop-Sunland Landfill, which has a capacity of 6 million cubic yards with a remaining capacity of 3.3 million cubic yards. Furthermore, existing pollution prevention practices are anticipated to sufficiently address any anticipated needs under 2022 and 2028 future conditions.

Past projects considered for this analysis have followed all applicable federal, state, and local environmental laws, and no resulting release of hazardous materials, solid waste, or pollutants is known to have occurred. Airport staff implement best practices during fueling operations to reduce the potential for leaks or spills at the Airport. Furthermore, any reasonably foreseeable future projects would be required to adhere to all federal, state, and local laws regarding hazardous materials, solid waste, and pollution prevention in accordance with AC 150/5210-22, Section 139.321.

Historical, Architectural, and Cultural Resources

As discussed in Section 4.6 above, the Proposed Action includes no construction activity. Therefore, the Proposed Action would not physically alter any cultural resources or introduce any audible or visual features that would compromise the integrity of any cultural resources. As the Proposed Action involves no ground disturbance and would not introduce any audible or visual features that would result in direct or indirect adverse effects to cultural resources, there is no potential for the Proposed Action to contribute to any cumulative degradation of cultural resources related to any other past or present future projects. All of the projects identified in Table 3-11 would be located on Airport property, on existing pavement, or previously disturbed areas.

Land Use

The Proposed Action would be consistent with local plans and zoning ordinances, and relevant past and present projects considered are assumed to comply with local plans and zoning ordinances. Reasonable foreseeable future projects are also subject to local review and approval processes, which should ensure compliance with applicable plans and zoning ordinances or result in the grant of variances or amendments as appropriate. As such, no significant cumulative impacts are expected to result from the combined impacts stemming from the Proposed Action with any other past, present, or reasonably foreseeable future projects.

Natural Resources and Energy Supply

As discussed in Section 4.8, BIH relies on on-site groundwater sources to meet demand for potable and firefighting water. As stated in Section 3.12.3, the groundwater basin is regularly replenished through runoff from the nearby Sierra Nevada mountains. These wells are expected to meet demand for water at BIH through the planning horizon. Energy needs and aircraft fuel consumption resulting from the Proposed Action (up to six flights in the Winter season in 2028) would be minimal and would not exceed local supplies. Natural resource needs associated with past, present, and reasonably foreseeable future projects are not anticipated to contribute to excessive demand on local supplies. Therefore, the Proposed Action is not anticipated to produce significant adverse effects on natural resources or local supplies of energy when considered with past, present, and reasonably foreseeable future projects.

Noise and Noise-Compatible Land Use

As discussed in Section 4.9, *Noise and Noise-Compatible Land Use*, the Proposed Action would not result in significant noise impacts. Changes to aircraft operations due to the projects identified in Table 3-11 were or would be temporary and minor. Accordingly, the Proposed Action noise exposure, when combined with past, present, and reasonably foreseeable future projects would not result in a significant noise impact.

Socioeconomic Impacts, Environmental Justice, and Children's Environmental Health and Safety Risks

As discussed in Section 4.10, the Proposed Action is not anticipated to induce activity such as increased traffic with potential to significantly impact socioeconomics, environmental justice communities, or children's environmental health and safety risks. The past, present, and reasonably foreseeable future projects identified in Table 3-11 would not result in any significant negative impacts to disadvantaged communities or children. In considering the low potential of the Proposed Action to significantly impact socioeconomics, environmental justice communities, or children's health and safety along with the other identified past, present, and reasonably foreseeable future projects, no cumulative impacts are anticipated.

Visual Effects

No new airfield lighting, facilities, or other infrastructure would be introduced as part of the Proposed Action, and no visual impacts are anticipated. The past, present, and reasonably foreseeable future projects included in this analysis either have been determined to result in no impacts or would feature mitigation to eliminate potential visual impacts. There is, therefore, no expectation for any cumulative visual effects with potential to detrimentally the visual characteristics in the GSA.

Water Resources

The Proposed Action would not have any significant effect on any surface or groundwater resources. Stormwater management best practices would continue to be followed at BIH after introduction of commercial passenger service. Groundwater wells currently utilized to meet potable water and fire suppression needs at BIH are anticipated to sufficiently meet demand through the

planning horizon because the groundwater basin is regularly replenished through runoff from the nearby Sierra Nevada mountains (see Section 3.12.3). Past, present and reasonably foreseeable future projects considered for this analysis either have no impacts to water resources or have included mitigation strategies such as various stormwater management best practices and erosion controls implemented during construction operations which would mitigate any impacts to below thresholds of significance. There are no impacts on water resources resulting from the Proposed Action. Therefore, there would be no contribution to any cumulative effect related to other proximate past, present, or reasonably foreseeable projects. Existing management practices for stormwater runoff would continue or be improved upon, and existing groundwater quantities would be sufficient to meet foreseeable demand. For these reasons, the Proposed Action would not contribute to significant cumulative impacts to water resources.

CHAPTER 5
Agency Coordination and Public Involvement

5.1 Summary of Public Outreach and Coordination

Under 40 CFR § 1501.4, federal agencies are required to involve environmental agencies, applicants, and the public, to the extent practicable, in the preparation of EAs. The primary components of the agency coordination and consultation and public involvement program for this EA include:

- Two in-person public scoping workshops;
- Publication of the Draft EA Notice of Availability;
- Circulation of the Draft EA and for agency and public review;
- A virtual public workshop and public hearing; and
- Preparation of a Final EA that will include responses to comments received on the Draft EA.

Keeping agencies and the public informed and gathering their input is an essential component of any environmental study. A summary of the public involvement program for this EA including two public scoping meetings, public comments, a virtual public workshop, a virtual public hearing and the summary of the agency coordination is shown below.

This EA includes documentation of coordination with the California Office of Historic Preservation – State Historic Preservation Officer. More information on the Agency Coordination is provided in Appendix E.

5.2 Scoping

Two in-person public scoping workshops were held for the early identification of environmental issues deserving of study. The first workshop was on January 22nd, 2020 in Bishop, California. The second workshop was on January 27th, 2020 in Mammoth Lakes, California. Comments submitted during these workshops can be found in Appendix F-2.

5.3 Notice of Availability of the Draft EA

A Notice of Availability (NOA) for the Draft EA was published on March 2, 2021 in the *Inyo Register* and March 4, 2021 in the *Mammoth Times*. Notice was also published on Inyo County's website[1] and the Town of Mammoth Lakes' website.[2] Proof of publication is included in Appendix F.

Copies of the EA are available for download from the County's website.[3] Hard copies of the Draft EA were available for review during the comment period at the Inyo County Department of Public Works (168 N. Edwards St., Independence, CA 93526) and for check out, from the Inyo County Free Library - Bishop Branch (210 Academy Ave., Bishop, CA 93514) and the Mono County Free Library - Mammoth Lakes Branch (400 Sierra Park Rd., Mammoth Lakes, CA 93546). Both the Inyo County Free Library and the Mono County Free Library were closed to the public; however, curbside pick-up was available by calling or emailing the library in advance. The Bishop Branch library can be contacted at bishoplib@inyocounty.us or (760) 873-5115 and the Mammoth Lakes Branch library can be contacted at mammothlakeslibrary@monocoe.org or (760) 934-4777.

5.4 Public Workshop/Public Hearing

A virtual Public Workshop was held to discuss the analyses presented in the Draft EA and to answer questions from the public. The virtual Public Workshop was held between 6:00 PM and 7:00 PM on April 1, 2021. A virtual Public Hearing to receive formal verbal comments from the public was held immediately after the virtual Public Workshop between 7:00 PM and 8:00 PM. All formal verbal comments made during the virtual Public Hearing were transcribed and responded to in Appendix F.

Registration to attend the virtual Public Workshop and/or the virtual Public Hearing was available at the following website: http://bit.ly/bishopairportregistration. More information on the virtual Public Workshop/Public Hearing can be found at https://www.inyocounty.us/services/public-works.

The virtual Public Workshop included a presentation describing the NEPA process, alternatives considered, the Proposed Action, and an overview of the analyses and results of the Draft EA environmental analysis. Following the presentation, a question and answer period was held with the Study Team answering questions from attendees in real-time.

The virtual Public Hearing included a brief overview of the Public Hearing process and an opportunity for members of the public and agency representatives to provide formal oral comments. Oral comments were transcribed by a court reporter and are included and addressed in Appendix F.

[1] https://www.inyocounty.us/services/public-works, under Bishop Airport - Proposed Commercial Air Service NEPA/CEQA Review
[2] https://www.townofmammothlakes.ca.gov/
[3] Ibid.

5.5 Draft EA Comment Period

The 41-day comment period began Tuesday, March 2, 2021 and ended on Monday, April 12, 2021 at 5:00 p.m. Pacific Standard Time. Responses to the comments received on the Draft EA are addressed in Appendix F.

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