

ENVIRONMENTAL ASSESSMENT

Southern Infrastructure Improvements Salt Lake City International Airport

EAXX-021-12-ARP-1782201743

Salt Lake City, Salt Lake County, Utah

Prepared for

**Salt Lake City Department of Airports
U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION**

As lead federal agency pursuant to the National Environmental Policy Act of 1969

Prepared by

HNTB

May 2026

I attest that the FAA has thoroughly considered all factors mandated by NEPA, and that this Environmental Assessment (EA) represents the agency's good-faith effort to prioritize and document the most critical environmental considerations within the congressionally mandated page limits and timeline. This prioritization reflects the FAA's expert judgment; any considerations addressed briefly or omitted were, in the agency's judgment, non-substantive and did not meaningfully inform the evaluation of environmental effects or the resulting decision.

Furthermore, I certify that this substantially complete EA reflects a thorough analysis adequate to inform and reasonably explain the FAA's final decision regarding the proposed federal action.

This Environmental Assessment becomes a Federal document when evaluated, signed and dated by the responsible Federal Aviation Administration (FAA) Official.

Responsible FAA Official

Date

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ACRONYMS AND ABBREVIATIONS

AC Advisory Circular	HUC Hydrologic Unit Code
ACMs asbestos containing materials	lbs pounds
ADG Airplane Design Group	I-215 Interstate 215
AFPP Airport Flight Path Protection	I-80 Interstate 80
AIP Airport Improvement Program	LUST leaking underground storage tank
APU auxiliary power unit	LWCF Land and Water Conservation Fund
ASOS Automated Surface Observing System	NAAQS National Ambient Air Quality Standards
AST aboveground storage tank	NEPA National Environmental Policy Act
ATC Air Traffic Control	NHPA National Historic Preservation Act
bgs below ground surface	N₂O nitrous oxide
BMPs Best Management Practices	NO₂ nitrogen dioxide
CAA Clean Air Act	NO_x nitrogen oxides
CERCLA Comprehensive Environmental Response, Compensation, and Liability Act	NRHP National Register of Historic Places
CFR Code of Federal Regulations	O₃ ozone
CH₄ Methane	PA Programmatic Agreement
CO carbon monoxide	Pb lead
CO₂ carbon dioxide	PM Particle Pollution
CO₂e carbon dioxide equivalent	PM_{2.5} particulate matter ≤ 2.5 microns in diameter
CWA Clean Water Act	PM₁₀ particulate matter ≤ 10 microns in diameter
U.S. DOT U.S. Department of Transportation	ppb parts per billion
EA Environmental Assessment	ppm parts per million
EAT End-Around Taxiway	RCRA Resource Conservation and Recovery Act
EC Engineer Circular	REC recognized environmental condition
EDR Environmental Database Report	ROD Record of Decision
EIS Environmental Impact Statement	RTR Remote Transmitter/Receiver
EO Executive Order	SEAT South End-Around Taxiway
EPA Environmental Protection Agency	SHPO State Historic Preservation Office
ESA Endangered Species Act	SIP State Implementation Plan
FAA Federal Aviation Administration	SLC Salt Lake City
FEMA Federal Emergency Management Agency	SLCDA Salt Lake City Department of Airports
FIRM Flood Insurance Rate Map	SLCIA Salt Lake City International Airport
FONSI Finding of No Significant Impact	SO₂ sulfur dioxide
ft foot/feet	SO_x sulfur oxides
ft² square foot/feet	SSCP Security Screening Checkpoint
GA General Aviation	SWPPP Stormwater Pollution Prevention Plan
GHG greenhouse gas	TAF Terminal Area Forecast
GSE ground support equipment	TES Threatened and Endangered Species

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TSA Transportation Security Administration

UDEQ Utah Department of Environmental
Quality

UDWQ Utah Department of Water Quality

UPDES Utah Pollution Discharge Elimination
System

U.S. United States

USACE United States Army Corps of Engineers

U.S.C United States Code

USDOT United States Department of
Transportation

USFWS United States Fish and Wildlife Service

UST underground storage tank

VOC volatile organic compound

ERRATA

Summary of Changes

The impact analysis in the Final Environmental Assessment considers the same Proposed Action that was analyzed in the Draft Environmental Assessment. The changes noted in this Errata result from several circumstances. First, the FAA considered the comments received from the public as well as state and Federal entities on the Draft EA and made revisions and clarifications accordingly. Second, the FAA revised textual errors. Third, the FAA made several revisions based on regulatory changes and new NEPA case law. These revisions involve climate, environmental justice, and cumulative impacts.

Location of Changes

Based on the revisions noted above, several sections in this Final EA have been updated from the Draft EA. For ease of review, this new material and revisions are listed below by chapter, section, and page number.

Table A: Changes to the Document

Location in Draft EA Document	Revision	Reason for Revision
List of Tables	The List of Tables was updated to correct multiple errors identified after the publication of the Draft EA.	Textual error identified between Draft and Final EA.
Footnotes	Footnote numbers updated.	Footnote “2” was removed between Draft and Final EA. This required renumbering of all following footnotes.
Chapter 1		
Section 1.1.1	Revised the U.S. Army Corps of Engineers (USACE) NEPA regulation reference as follows: “Therefore, this EA has been prepared pursuant to the requirements in USACE’s NEPA regulations for processing Section 408 Permission Requests, effective July 03, 2025.” In addition, a new footnote was added: “33 CFR Part 333 Processing of Department of the Army Permits; 33 USC 408 Permissions, National Environmental Policy Act Implementing Procedures.”	Text revised to include the correct USACE NEPA regulation in response to Comment Number 14.
Section 1.2.1	Replaced “Error? Reference source not found” text with “Figure 1-1”	Textual error identified between Draft and Final EA and in response to Comment Number 13.
Figure 1-1	Location of Figure 1-1 changed.	Editorial update for clarity.
Section 1.2.2 Surplus Canal and North Point Canal	Replaced “Error? Reference source not found” text with “Figure 1-2” on pages 1-2 and 1-5 in Draft EA.	Textual error identified between Draft and Final EA and in response to Comment Number 13.
Section 1.2.2 Employee Parking	Last sentence of second paragraph moved to the end of the first paragraph and revised to remove “Employee” to clarify that the number provided applies to all parking,	Text revised in response to Comment Number 11.
Section 1.2.3	Table 1-1 moved from page 1-8 to page 1-7.	Editorial update for clarity.

Location in Draft EA Document	Revision	Reason for Revision
Section 1.2.3	Figure 1-3 moved from page 1-7 to page 1-9.	Editorial update for clarity.
Section 1.4	Added the following text to the fourth paragraph: “(InterVISTAS, 2025)”	Text revised to add appropriate citation for information source.
Chapter 2		
Section 2.3.1	Corrected footnote number from “1” to “15”.	Textual error identified between Draft and Final EA.
Section 2.3.2	Removed the following sentence from the first paragraph under Employee Parking Alternative 3: “This alternative avoids wetland impacts and is considered the upland alternative.”	Textual error identified between Draft and Final EA.
Section 2.3.2	Added the following sentence in the last paragraph under Employee Parking Alternative 3: “Public transportation does not currently serve the north side of the airport.”	This was added in response to Comment Number 1.
Section 2.3.3	Replaced “Error? Reference source not found” text with “Figure 1-2”	Textual error identified between Draft and Final EA and in response to Comment Number 13.
Chapter 3		
Table 3-1	Description of Airport Trail in Table 3-1 was revised as follows: - Text “and the public” was added to the first sentence. - New sentence “This trail is part of the airport access control system and is only operable during specified times” added.	Text revised in response to comment (Comment #2) received on Draft EA.
Section 3.1.1	Text updated to remove “s” after FAA Order.	Editorial update.
Section 3.3	Greenhouse Gas language removed.	The Air and Greenhouse Gas Input and Assumptions Memorandum (Memo) utilized the best scientific data and methods available to the FAA at the time of its

Location in Draft EA Document	Revision	Reason for Revision
		development. The analysis relied on FAA Orders 1050.1F and 5050.4B, the FAA's <i>Aviation Emissions and Air Quality Handbook</i> (Version 3, Update 1), and the January 2023 CEQ draft Greenhouse Gas (GHG) guidance. Although Executive Order 13990—the basis for the CEQ draft guidance—was revoked after the analysis was completed but before the Draft EA was issued, subsequent regulatory updates and the issuance of FAA Order 1050.1G led to the removal of all greenhouse gas references from the Final EA. Consequently, the FAA did not rely on the results of the GHG analysis when making its decision.
Section 3.3.2	The nonattainment designation for ozone was changed from “moderate” to “serious.”	Error identified between Draft and Final EA.
Section 3.3.2 Table 3-5	The nonattainment designation for ozone was changed from “moderate” to “serious.” De minimis level changed from “100” to “50”.	Error identified between Draft and Final EA.
Section 3.3.2 Table 3-6	De minimis level changed from “100” to “50” for NO _x and from “—” to “50” for VOC.	Error identified between Draft and Final EA.
Section 3.3.3	“Error? Reference source not found” text removed from Reasonably Foreseeable Impact Analysis.	Textual error identified between Draft and Final EA and in response to Comment Number 13.
Section 3.4.3	Replaced “Error? Reference source not found” text with “Table 3-8”	Textual error identified between Draft and Final EA and in response to Comment Number 13.
Section 3.4.3 Table 3-8	Status for the Monarch butterfly was changed from “Candidate” to “Proposed Threatened”.	Textual error identified between Draft and Final EA and in response to Comment Number 15.
Section 3.4.3	The text “were observed” was moved within the same sentence.	Editorial update for clarity.

Location in Draft EA Document	Revision	Reason for Revision
Section 3.5.1	Removal of “and a Safety Management System (SMS) Plan” from second paragraph.	Textual error identified between Draft and Final EA.
Section 3.5.2	Removal of word “waste” from second paragraph.	Editorial update for clarity.
Section 3.5.2	Last sentence of last paragraph was revised to the following: “Preliminary sample data indicates PFAS is a minor contaminant of concern, which will be addressed in the contractor’s Health and Safety Plan.”	Updated to include preliminary results from on-going study provided after the release the Draft EA.
Section 3.5.3	Table 3-3 changed to Table 3-9.	Textual error identified between Draft and Final EA.
Section 3.6.3	Table 3-4 changed to Table 3-10.	Textual error identified between Draft and Final EA.
Section 3.6.3	Table 3-5 changed to Table 3-11.	Textual error identified between Draft and Final EA.
Section 3.6.3	Text was added to document consultation that occurred between the FAA and the Tribes between Draft and Final EA.	Updated text to reflect consultation completed.
Section 3.8.3	The following sentence was added under the Reasonably Foreseeable Impact Analysis section: “The parking lot and bus facility would also require electricity and telecommunications for lighting, charging, and security.”	Consultation completed
Section 3.9.2	Table 3-6 changed to Table 3-12.	Textual error identified between Draft and Final EA.
Section 3.11.2	Added header to Section 3.11.2 to Final EA and updated the header titles for the rest of the section.	Textual error identified between Draft and Final EA.
Section 3.11.3	Figure 3-4, Wetland Impacts, added.	Editorial update between Draft and Final EA.
Section 3.11.3 Surface Water	The following sentence was added: “The contractor would be required to comply with a SWPPP under the UDWQ General Construction Permit.”	Consultation completed. Editorial updated between Draft and Final EA.

Location in Draft EA Document	Revision	Reason for Revision
Section 3.11.3 Floodplain	Revised first sentence in first paragraph: “The Project Area alternatives require relocating the Surplus Canal during construction, resulting in a direct impact to the canal’s associated floodplain, which is designated as a Flood Zone A..”	Editorial update for clarity.
Section 3.11.3 Floodplain	Following text removed at end of second paragraph: “to reduce the impacts on wildlife habitats and water quality during construction.”	Editorial update between Draft and Final EA
Section 3.11.3 Floodplain	Following sentence added under No Action: “Ponds within the project area would remain in place, creating standing water that attracts birds and other wildlife. This increases the potential for wildlife-aircraft strike hazards along adjacent taxiways and runways.”	Consultation completed. Editorial update for clarity.
Section 3.11.4	Sentence revised to include SWPPP permit: “The contractor will implement BMPs and a SWPPP through the UDWQ General Construction Permit that would minimize construction runoff, erosion, and sedimentation.”	Editorial update for clarity.
Chapter 4		
Section 4.2	Section removed.	Editorial update between Draft and Final EA. Tribal consultation was discussed earlier in Section 3.6.
Section 4.3 Section 4.4 Section 4.5	PI Summary was completed	Editorial update between Draft and Final EA. These sections are discussed in the PI Summary Report, which is included in Appendix G.

Location in Draft EA Document	Revision	Reason for Revision
Chapter 5		
Table 5-1	Table headings updated.	Editorial update.
Table 5-1	Cara Glabau added to table.	Editorial update.
Appendix A		
	Clarification added to appendix cover sheet.	The Air and Greenhouse Gas Input and Assumptions Memorandum (Memo) utilized the best scientific data and methods available to the FAA at the time of its development. The analysis relied on FAA Orders 1050.1F and 5050.4B, the FAA’s Aviation Emissions and Air Quality Handbook (Version 3, Update 1), and the January 2023 CEQ draft Greenhouse Gas (GHG) guidance. Although Executive Order 13990—the basis for the CEQ draft guidance—was revoked after the analysis was completed but before the Draft EA was issued, subsequent regulatory updates and the issuance of FAA Order 1050.1G led to the removal of all greenhouse gas references from the Final EA. Consequently, the FAA did not rely on the results of the GHG analysis when making its decision.
Appendix D		
	Tribal coordination letters added.	Updated consultation completed.
Appendix G		
	New appendix to include comments and responses received on Draft EA.	Update as part of finalizing the EA.

CHAPTER 1: PURPOSE AND NEED

1.1 Introduction

Salt Lake City International Airport (SLCIA or the Airport) is the 21st busiest airport in North America and the 70th busiest in the world in terms of passenger numbers ¹. SLCIA is currently served by 12 airlines and their affiliates and is a major hub for Delta Air Lines. SLCIA is classified as a large hub commercial service airport in the National Plan of Integrated Airport Systems. Hub classifications are based on the number of passengers enplaned (boarded) at the airport, and a “large hub” classification means that SLCIA accommodates at least 1% of total United States (U.S.) enplaned passengers.

The SLCIA is operated and managed by the Salt Lake City Department of Airports (SLCDA), a department of Salt Lake City Corporation. SLCDA proposes to improve infrastructure at the southern extent of the airport campus. The Southern Infrastructure Improvement Project (Proposed Action) includes construction of the South End-Around Taxiway (SEAT), relocation of the Surplus Canal and North Point Canal, and construction of the South Employee Parking Area, Employee Screening and Bus Facility.

This Environmental Assessment (EA) was prepared pursuant to requirements of the *National Environmental Policy Act of 1969* (NEPA); *U.S. Department of Transportation (DOT) Order 5610.1D, DOT’s Procedures for Considering Environmental Impacts*; and Federal Aviation Administration (FAA) Order 1050.1G, *FAA National Environmental Policy Act Implementing Procedures*.

1.1.1 Cooperating Agency

The FAA invited the U.S. Army Corps of Engineers (USACE) to participate as a cooperating agency as described under 42 USC § 4336a(a)(3), and USACE accepted. Therefore, this EA has been prepared pursuant to the requirements in USACE’s NEPA regulations for processing Section 408 Permission Requests, effective July 03, 2025². The FAA and USACE federal actions subject to NEPA are included in *Section 1.5, Proposed Federal Actions*.

1.2 Background

1.2.1 Location and Layout

The SLCIA is located in Salt Lake County, approximately 5 miles northwest of downtown Salt Lake City and is generally bounded by Interstate-80 (I-80) to the South, the International Center and undeveloped land and wetlands to the West, additional undeveloped land and wetlands to North, and I-215 and light industrial or commercial property to the East. Figure 1-1 shows the airport location.

¹ SLC.gov. 2023. SLC International Airport – SLC Fast Facts. Accessed September 2023. Available at: <https://rb.gy/64c52>.

² 33 CFR Part 333 Processing of Department of the Army Permits; 33 USC 408 Permissions, National Environmental Policy Act Implementing Procedures

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1.2.2 Existing Facilities

The SLCIA facility footprint is approximately 300 acres, and the total airport acreage is approximately 8,040 acres. The airfield consists of three air carrier runways (17-35, 16L-34R, and 16R-34L) and one general aviation runway, 14-32. There is one terminal and two concourses. A parking garage is located immediately south of the terminal. Rental car agency counters are in the Gateway Center adjacent to the parking garage, and rental car pick-up is located on the ground floor of the parking garage. Long-term parking is located south and west of the terminal buildings and is serviced by shuttle buses. General aviation facilities including fixed base operators are located on the east side of the airfield. Cargo companies are located on the north and south end of the airport campus. Delta Air Lines operates a reservations center headquartered at the Airport. Support facilities include two fire stations, Salt Lake City Police station and Airport Operations Center, North Support (SLCDA maintenance), Delta and SkyWest Airlines maintenance hangars, a U.S. Post Office³, rental car service sites, a convenience store and gas station, end of runway deicing pads and buildings, a glycol treatment facility, an FAA Control tower, and toll plaza. The southern extent of the airport campus includes the Surplus Canal, Northpoint Canal and the former Wingpointe Golf Course.

OPTIMAL AIRFIELD CIRCULATION

The runway system at SLCIA consists of two parallel runways oriented in the north-south direction (16R/34L and 16L/34R) and a third nearly parallel runway oriented north-south (17/35). There is a fourth northeast-southwest runway (14/32) that SLCIA is in the process of decommissioning. Runway 16L/34R is a 12,002-foot-long, 150-foot-wide grooved asphalt runway with precision markings and Runway 16R/34L is a 12,000 foot-long, 150-foot-wide Portland Cement Concrete runway with precision markings. These two runways accommodate most of the commercial airline activity at SLCIA.

Runway 17/35 is a 9,597-foot-long and 150-foot-wide grooved asphalt runway. Access to and from Runway 17/35 via Taxiway M requires the crossing of Runway 16L/34R. In addition, aircraft must cross Runway 16L/34R to Taxiway Q to access the Taxiway L Deice Pad. To permit this operation, arrival separation for Runway 34R must be increased, which effectively drops the runway's arrival capacity.

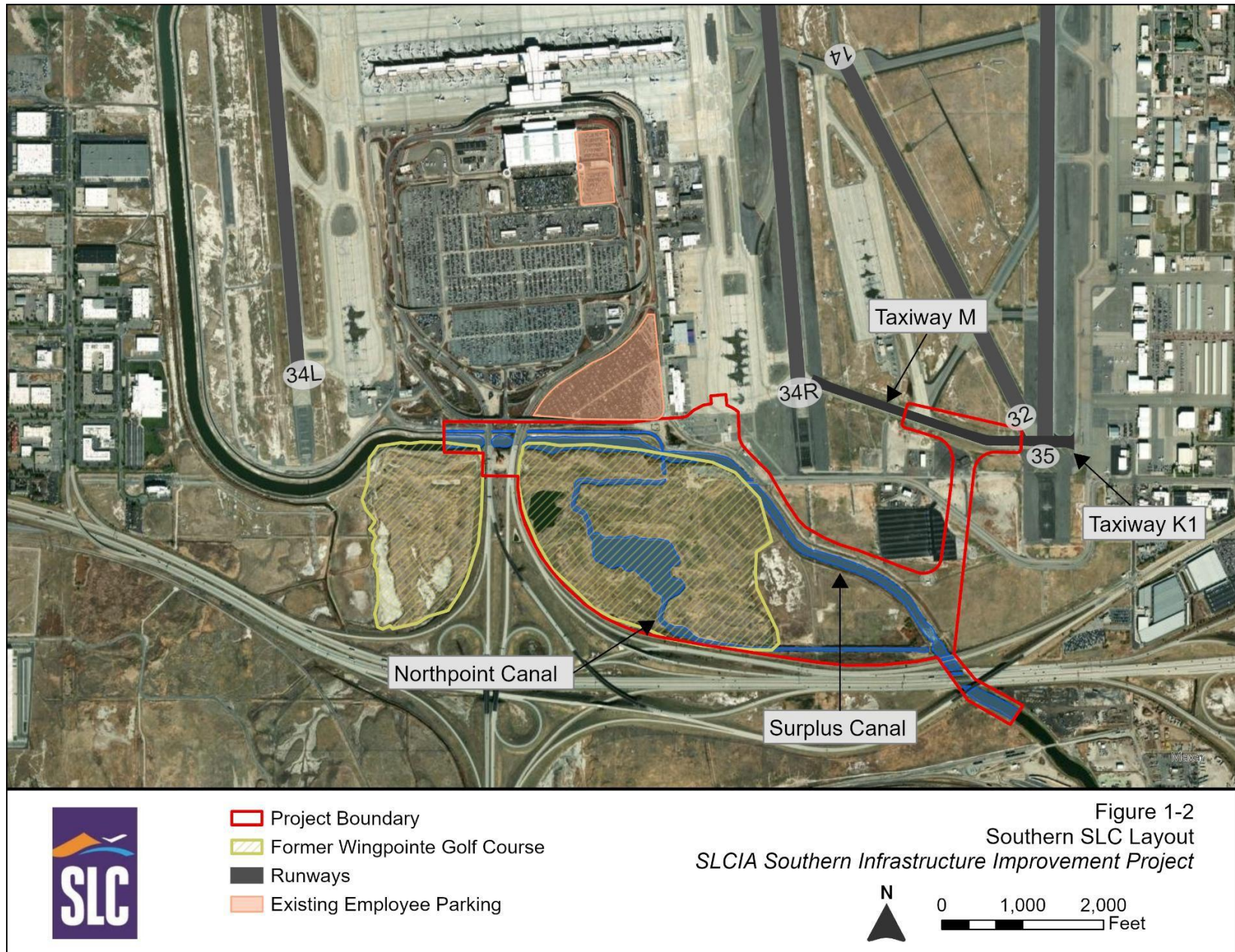
While arrivals to and departures from Runway 16L/34R are taking place, all other aircraft must wait in queue at the runway hold short line to circulate east and west to Runway 17/35, Taxiway L Deice Pad, general aviation area, or the terminals. This impedes aircraft movements, which causes delay, and requires an increase in Air Traffic Control (ATC) intervention and workload.

SURPLUS CANAL AND NORTH POINT CANAL

The Jordan Surplus Canal was originally constructed between 1885 and 1886 and has been enlarged three times. The segment within the Project Area was realigned twice for airport development, once in the 1980s and once in the 1990s. The existing Surplus Canal flows northward then westward through the eastern and northern extents of the Project Area (see Figure 1-2).

³ SLC.gov. 2022. SLC International Airport – About the Airport. Accessed September 2022. Available at: <https://slcairport.com/about-the-airport/>.

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USACE conducted a Routine Inspection of the Surplus Canal – Salt Lake City, Utah, levee system in September and October 2019. Based on observations made as part of the inspection, the Surplus Canal right bank – Salt Lake City, Utah and Surplus Canal left bank – Salt Lake City, Utah, levee systems were rated unacceptable. The unacceptable rating was due to encroachments, erosion/bank caving, vegetation growth, and sod cover related issues.^{4,5}

The North Point Canal flows westward through the southern Project Area, then northward (through the pond) in the central Project Area, then westward through the northern Project Area (see Figure 1-2). North Point Canal feeds into a pond located near the center of the proposed parking area. This pond and another man-made pond were water features for the former golf course. These ponds attract ducks, geese, and other migratory birds. While the ponds are located landside, the birds pose a threat to aircraft due to their size and tendency to flock. Birds are present at the ponds throughout most of the year; however, large numbers are present during the spring and fall migration periods.⁶ Birds tend to use the airport as a refuge to avoid hunting pressure from surrounding hunting clubs.

Hazardous wildlife are species of wildlife that may pose a direct or indirect hazard to aviation, including those that are likely to cause aircraft strikes or attract other wildlife that pose a strike hazard. During the past century, wildlife-aircraft strikes have resulted in the loss of hundreds of lives worldwide, as well as billions of dollars in aircraft damage. Airports reduce the risk of wildlife strikes through integrated wildlife management programs. These programs include changes to the habitat at and in the vicinity of the airport and methods to disperse or remove the birds and other wildlife that pose a risk to aviation safety. Management techniques such as hazing, population control, and lethal control (all utilized under the terms and conditions listed in the United States Fish and Wildlife Service [USFWS] depredation permit), pesticide spray application (to remove food sources), colony removal, and habitat modification are employed to reduce the number of birds and potential hazard from the ponds.

EMPLOYEE PARKING

Data for a Public Parking and Rental Car Conceptual Alternatives Study⁷ was compiled in February 2025. This parking study analyzed existing passenger and employee parking to determine future parking requirements. By approximately 2030, it was determined that SLCIA would need an additional 5,494 economy lot parking spots to meet future passenger parking needs and an additional 2,350 employee parking spots. Parking lots are currently reaching capacity (14,406 stalls) during peak hours.

Currently, there are multiple, scattered employee parking lots near various employment sites around the Airport. However, most employee parking is accommodated in two lots in the terminal campus. These lots are used by SLCDA employees and SLCIA tenants. Current employee lots have a capacity of 3,750 stalls with a current need for 4,300 stalls.

⁴ USACE (U.S. Army Corps of Engineers). 2020a. Flood Damage Reduction System Inspection Report — Surplus Canal right bank - Salt Lake City, Utah. October 2020.

⁵ USACE. 2020b. Flood Damage Reduction System Inspection Report — Surplus Canal left bank —Salt Lake City, Utah. October 2020.

⁶ SLCDA (Salt Lake City Department of Airports). 2021. *Salt Lake City International Airport Certification Manual - Appendix B Wildlife Hazard Management Plan*.

⁷ InterVISTAS. 2025. *Landside Master Plan Public Parking and Rental Car Conceptual Alternatives*. February 2025.

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EMPLOYEE SECURITY SCREENING

Terminal area employees are categorized as primarily working in the non-secure area or the secure area. Screening at the terminal building Transportation Security Administration (TSA) Security Screening Checkpoint (SSCP) for Airport and tenant employees adds to the congestion at the SSCP.

1.2.3 Aviation Activity Forecast

The 2022 Master Plan presents a forecast of the aviation activity for the Airport using 2017 as the baseline year and makes projections beginning in 2018 and extending over the 20-year planning horizon to 2037⁸. The basis for comparison of Master Plan forecasts was the FAA Terminal Area Forecast (TAF) 2017⁹ published in January 2018.

In accordance with FAA's Forecast Review and Approval Instructions, issued August 2024, the sponsor's forecast must be consistent with the TAF. To be consistent with the TAF, the sponsor's 5-year forecast should be within 10% of the TAF and a 10-year forecast should be within 15% of the TAF¹⁰. The FAA must approve sponsor forecasts before they can be used to prepare facility requirements in a master plan or before going forward with an environmental document that requires a forecast.

The 2022 Master Plan's 2017 data included the forecast prior to the COVID-19 pandemic (pandemic). However, the 2022 Master Plan Forecast was approved on May 1, 2019, and associated airport layout plan was approved by the FAA on August 10, 2021. As of September 2023, SLCIA was at or exceeding pre-pandemic numbers for enplanements¹¹. In May 2024, SLCDA submitted an update to the 2019 Forecast for FAA review and approval. **Table 1-1** provides the approved forecast for 2022, 2027 and 2037 activity levels considered for the analysis years for this EA. According to the approved SLCIA forecasts, from 2027 to 2037, total enplaned passengers are projected to increase by 19.2% from 15.6 million annual passengers (MAP) to 18.7 MAP, and total aircraft operations are projected to increase by 12.5% from 386,647 operations to 434,832 operations. **Table 1-1** includes a comparison to FAA TAF 2023, which was published in January 2024.

⁸ RS&H. 2022. Salt Lake City International Airport Master Plan 2022 — Chapter 2 Aviation Activity Forecast. Available at: [https://slcairport.com/assets/pdfDocuments/Master-Plan/Inventory%20of%20Existing%20Conditions%20v2.0%20\(03.18.2019\).pdf](https://slcairport.com/assets/pdfDocuments/Master-Plan/Inventory%20of%20Existing%20Conditions%20v2.0%20(03.18.2019).pdf).

⁹ FAA (Federal Aviation Administration). 2024. Federal Aviation Administration Terminal Area Forecast (TAF). Available at: https://www.faa.gov/data_research/aviation/taf

¹⁰ FAA (Federal Aviation Administration). 2024. *Forecast Review and Approval Instructions*. August 2024.

¹¹ Nelis, Patty (Airport Environmental Programs Manager, Salt Lake City International Airport). 2023. Regarding: SLC TAF Discussion Summary 090723. Email to: Staci Hill, HNTB. September 7, 2023.

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Table 1-1. Base Case Forecast Comparison with Federal Aviation Administration Terminal Area Forecast 2023

Category	2022		2027		2037	
	Base Case ¹²	TAF 2023	Base Case	TAF 2023	Base Case	TAF 2023
Enplanements	14,228,574	12,364,238	15,662,157	14,831,772	18,666,369	18,669,697
Passenger Operations	282,077	274,917	309,395	308,801	343,535	378,268
Cargo Operations	23,122		24,280		31,142	
GA Operations	42,825	50,203	45,624	51,111	52,807	51,885
Military Operations	7,348	3,152	7,348	4,275	7,348	4,275
Total Operations	355,372	344,304	386,647	380,155	434,832	452,231
GA Based Aircraft	284	346	295	374	303	437
Comparison with FAA TAF 2023 (percent difference)						
	2022		2027		2037	
Enplanements	-13.1%		-5.3%		0.0%	
Commercial Operations ¹³	-9.9%		-7.5%		-1.0%	
GA Operations	17.2%		12.0%		-1.7%	
Military Operations	-57.1%		-41.8%		-41.8%	
Total Operations	-3.1%		-1.7%		4.0%	
GA Based Aircraft	21.8%		26.8%		44.2%	

The five-year forecast (2022) meets 10% of the FAA TAF 2023 in commercial operations and total operations. The 10-year forecast (2027) meets 15% of the FAA TAF 2023 in enplanements, commercial operations, General Aviation (GA) operations, and total operations. Note that the 2022 forecast has 13% higher operations than the TAF; this is because SLCIA recovered to pre-pandemic operations sooner than expected.

¹² RS&H Salt Lake City International Airport Master Plan 2022. Table 2.1

¹³ Commercial Operations, included in the FAA TAF 2022, include scheduled air passenger and cargo operations.

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1.3 Description of the Proposed Project

Chapter 2 provides more detailed information on the Proposed Action. The Proposed Action includes the following projects (see Figure 1-3):

- Construction of the SEAT
- Construction of the South Parking Area, Employee Screening, and Bus Facility

The connected actions required to implement the Proposed Action include relocation of the Surplus and North Point canals; construction of a stormwater detention pond, stormwater pump station, and sewer lift station; relocation of North Temple alignment and salt storage facility; and relocation of the Automated Surface Observing System (ASOS) and Remote Transmitter/Receiver (RTR).

1.4 Purpose and Need

Pursuant to NEPA and FAA Order 1050.1G, an EA must include a description of the purpose of a Proposed Action and why it is needed. Identification of the purpose and need provides the rationale for the Proposed Action and forms the foundation for identification of reasonable alternatives that can meet the purpose for the Proposed Action, and, therefore, address the related need(s) or problem(s).

The purpose and need for the Proposed Action are to improve airfield circulation; accommodate existing and future employee and tenant parking needs; and provide a separate screening facility for airport employees and tenants.

The need for improving airfield circulation is to enhance runway safety, provide more timely and predictable gate arrivals, reduce fuel consumption and emissions, and increase runway capacity and hourly throughput to meet forecast demand.

The need for increased employee parking is to ensure adequate parking for all current and forecasted Airport and tenant employees. Current employee parking (3,750 stalls) is nearing capacity at peak hours and is unable to accommodate future demand (8,200 stalls by 2045) (InterVISTAS, 2025). In addition, the existing south employee parking lot has been identified as a preferred location for passenger parking. According to landside planning principles, the highest revenue generating and valued land uses should be located closest to the terminal and provide the highest level of customer service to passengers. The location of employee parking should not take precedence over customer-oriented facilities in the passenger terminal area.

The need for a separate screening facility is to reduce congestion at the TSA SSCP within the terminal and allow current and forecasted Airport and tenant employees to arrive at their work location with reduced delays.

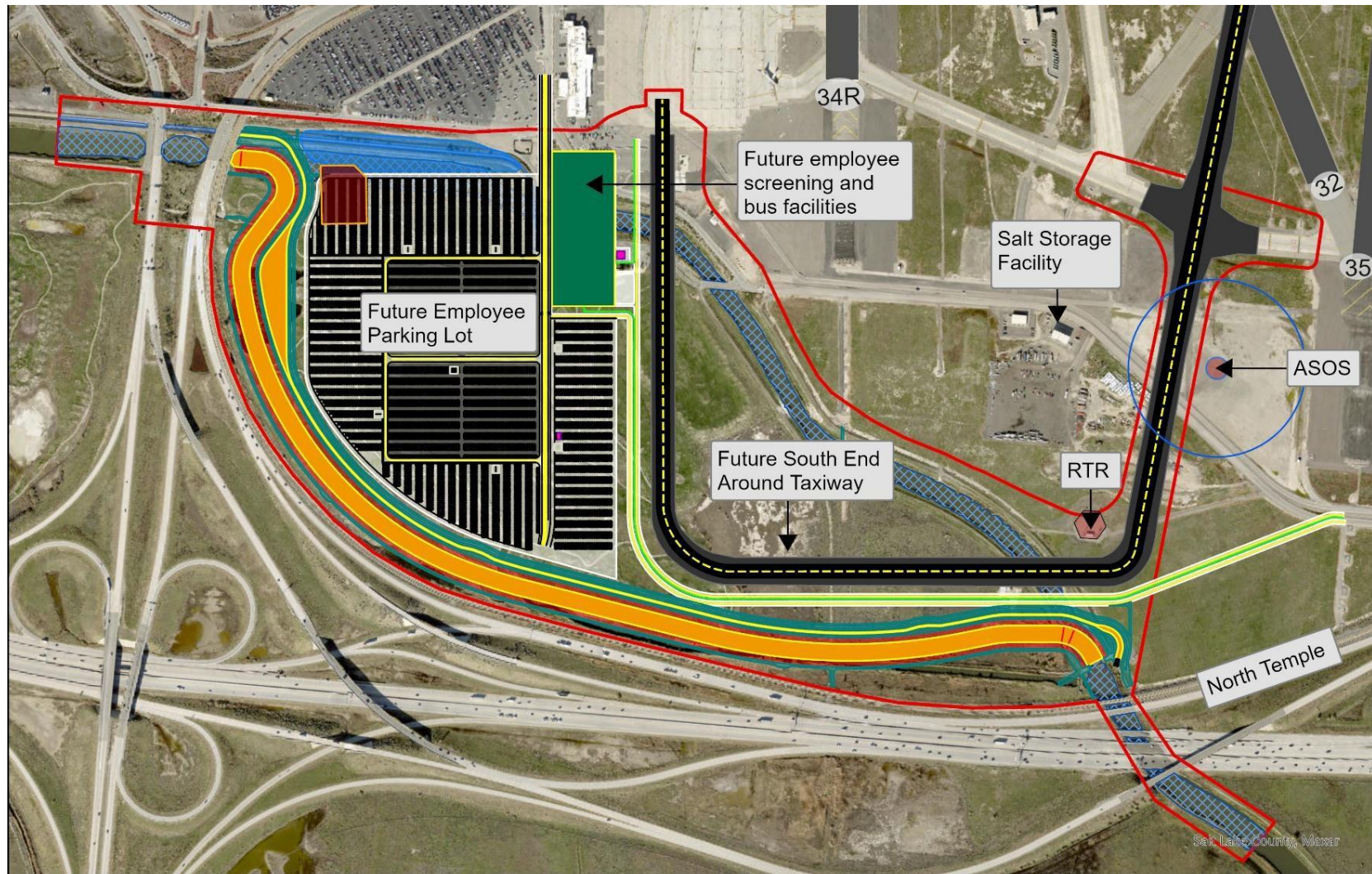
1.5 Proposed Federal Actions

This section summarizes the actions or approvals the FAA and USACE must take or give before SLCDCA can implement the Proposed Action.

1.5.1 FAA

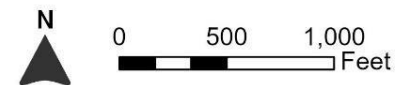
The FAA's proposed Federal actions subject to NEPA review are the following:

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- Project Area
- Runways
- Surplus Canal
- Northpoint Canal Realignment
- Detention Pond
- Pump Station
- Haul Route
- Sewer Lift Station

Figure 1-3
Proposed Action
SLCIA Southern Infrastructure Improvement Project



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- Unconditional approval of the Airport Layout Plan to depict those portions of the Proposed Action subject to FAA review and approval pursuant to 49 USC § 47107(a)(16)(B).
- Approval and construction, installation, and relocation of FAA-owned equipment (including navigational and visual aids) and associated infrastructure as well as any resulting flight procedures updates from the relocation of navigational aids.
- Release of federal obligations to use property for nonaeronautical purposes, including any obligations under 49 USC § 47107, in accordance with FAA Order 5190.6B.
- Approval of changes to the airport certification manual pursuant to 14 CFR Part 139.
- Determination of project eligibility for Airport Improvement Program (AIP) funding in accordance with 49 USC §§ 47101-47144.
- Determination of project eligibility to impose Passenger Facility Charges in accordance with 49 USC § 40117.

1.5.2 United States Army Corps of Engineers

The authority to grant permission for temporary or permanent use, occupation, or alteration of any USACE federally authorized civil works project is contained in Section 14 of the Rivers and Harbors Appropriation Act of 1899, as amended, codified at 33 U.S.C. 408 (Section 408). Section 408 authorizes the USACE Secretary, on the recommendation of the Chief of Engineers, to grant permission for the alteration or occupation or use of a USACE project if the Secretary determines that the activity would not be injurious to the public interest and would not impair the usefulness of the project. An alteration is defined as “an action by any entity other than USACE that builds upon, alters, improves, moves, obstructs, or occupies an existing USACE project (EC 1165-2- 220).”

The Clean Water Act prohibits the discharge of dredged or fill material into waters of the United States, except as authorized in a permit issued by the USACE pursuant to Section 404(b)(1) Guidelines of the Act. In carrying out this responsibility, the USACE must follow criteria established in 40 CFR Part 230, which are legally binding and must be met before a permit can be issued.

1.6 Timeframe for Implementation

If approved, construction of the Proposed Action is scheduled to occur in phases starting in Spring 2026. All portions of the Proposed Action will be fully operational by 2040.

1.7 Document Organization

- **Chapter 1: Purpose and Need:** Provides an introduction, description, and background on SLCIA, the Proposed Project, and the purpose and need.
- **Chapter 2: Alternatives:** Provides an overview of alternatives considered as part of the environmental evaluation process, and screening criteria to determine alternatives that will be carried forward for environmental analysis.

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- **Chapter 3: Affected Environment and Environmental Consequences:** Describes existing environmental conditions within the project Study Areas and compares the environmental impacts associated with the alternatives carried through for detailed analysis.
- **Chapter 4: Agency and Public Involvement:** Discusses the coordination and public involvement associated with the EA process.
- **Chapter 5: List of Preparers:** Contains list of preparers.
- **Appendices:** Contains various reference material, including technical information and record of coordination activities.

CHAPTER 2: ALTERNATIVES

2.1 Introduction

The evaluation of reasonable alternatives to the Proposed Action is considered the heart of the NEPA process. To comply with NEPA, alternatives must be rigorously explored and objectively evaluated.

This chapter summarizes the screening analysis used to identify a range of reasonable and prudent alternatives and expands upon those that were subsequently selected for full evaluation in this EA. The information provided in this chapter includes the following:

- An overview of the structure of the alternatives analysis used for this EA
- A description of the alternatives considered
- A brief statement explaining why the dismissed alternatives were eliminated from further study

2.2 Identification of the Potential Alternatives

The following sections summarize factors/steps considered in the alternative screening process, including meeting the purpose and need and feasibility.

2.2.1 Range of Alternatives Considered

Table 2-1 provides the alternatives considered. Each alternative is described in detail in Section 2.3.

Table 2-1. Range of Alternatives Considered

Type of Alternative	Alternative Description
Improve Airfield Circulation	Construct SEAT and relocate Surplus and North Point canals Construct SEAT with bridges over Surplus and North Point canals
Parking & Security Screening	Construct a single south lot without relocating the Surplus and North Point canals and construct a security screening facility, Construct a single south lot, relocate the Surplus and North Point canals, and construct a security screening facility. Construct north and south lots without relocating the Surplus and North Point canals and construct a security screening facility at the south lot.
No-Action Alternative	Retained for analysis pursuant to FAA Order 1050.1G

2.2.2 Alternatives Screening Process Overview

For this alternatives analysis, a three-step screening process was used (see Figure 2-1). The first step addressed whether the alternatives would satisfy the Purpose and Need. If the alternative satisfied the Purpose and Need, it moved to the second step, which determined if an alternative was feasible. In this case, feasibility was reviewed to ensure that the alternative could be implemented, or be practical, from a technical, operational, or economic perspective. Alternatives that passed the screening process, along with the No Action Alternative, were then evaluated for potential environmental effects.

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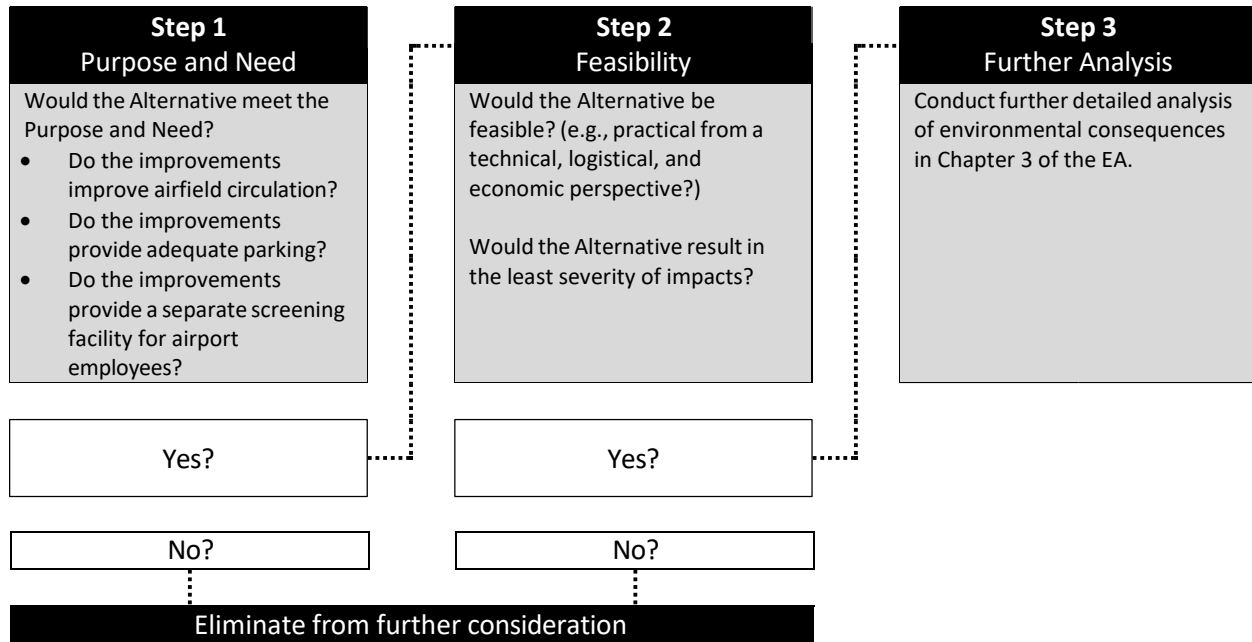


Figure 2-1. Alternatives Screening Process

2.3 Alternatives Considered

Because the Proposed Action reflects two separate and distinct areas of need, the alternatives development process considered each of the two needs separately.

2.3.1 Improve Airfield Circulation

A SEAT would reduce runway crossings, the potential for runway incursions, delay, and aircraft fuel consumption, thereby enhancing safety. In addition, the SEAT will improve airfield efficiency, improve airline gate arrival times, and increase the airfield overall capacity and hourly throughput. There are two alternatives to developing the SEAT (see Figure 2-2).

SEAT ALTERNATIVE 1: Construct South End-Around Taxiway and Relocate Surplus and North Point Canals

SEAT Alternative 1 would include the following elements:

- Relocating the Surplus Canal and North Point Canal (resolving existing violations)
- Construction of a stormwater pump station and stormwater detention pond in the northwest Project Area
- Construction of a sewer lift station
- Relocation of North Temple Alignment and salt storage facility
- Relocation of the ASOS and RTR
- Construction of a SEAT with a connection to Taxiway M

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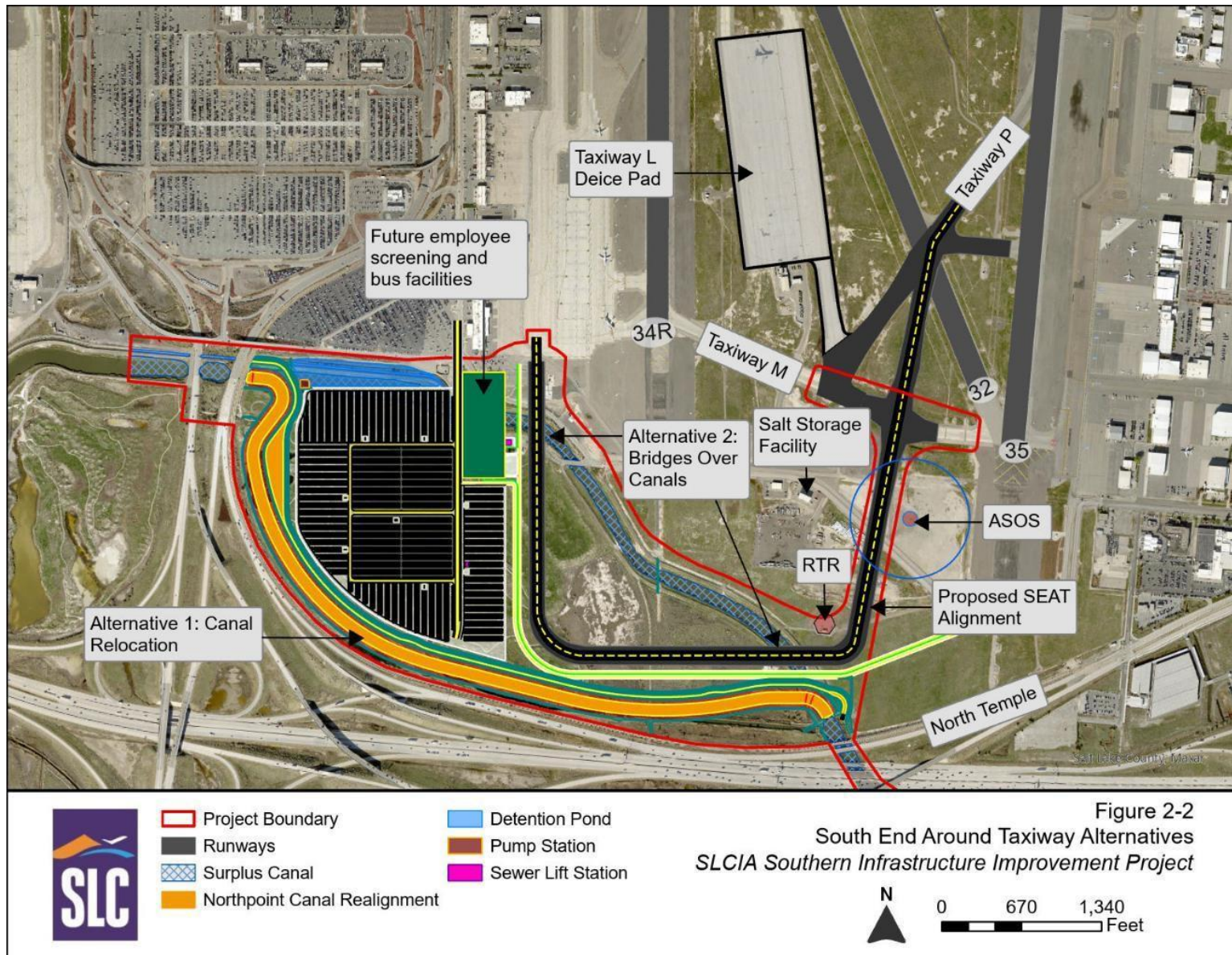


Figure 2-2. South End-Around Taxiway Alternatives

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The design intent of the SEAT would be to provide fully independent taxi and runway operations in all weather conditions. The SLCDCA has determined that the SEAT should be designed to accommodate Airplane Design Group (ADG) III aircraft (as well as Boeing 757 aircraft, which are ADG IV aircraft with tail heights just over 45 feet)¹⁴.

SEAT ALTERNATIVE 2: Construct South End-Around Taxiway with Bridges Over Canals

The SEAT Alternative 2 would include the following elements:

- Building the SEAT with bridges over the canals
- Building a connection directly into Taxiway M
- Relocation of North Temple alignment and salt storage facility
- Relocation of the ASOS and RTR

The safety enhancements and operational efficiencies gained with SEAT Alternative 2 are similar to SEAT Alternative 1. However, the bridges over the canals would need to be constructed to support aircraft, which would cause a significantly higher construction cost for this alternative when compared to SEAT Alternative 1. In addition, the Surplus Canal violations would not be addressed with this alternative. For these reasons, SEAT Alternative 2 was eliminated from further consideration.

2.3.2 Employee Parking

Employee parking should be operationally efficient and located as close to the terminal as possible without disrupting or displacing customer-focused services. The distance of employee parking from the terminal at SLCIA necessitates shuttling operations for terminal area employees.

Terminal area employees are categorized as primarily working in the non-secure area or the secure area. While employees can, and often do, serve roles in both areas of the terminal, each workday typically necessitates security screening for about 75% of the employee population entering the terminal and concourses (secure area). As indicated in Chapter 1, a parking lot that can accommodate at least 8,200 employee parking spaces is needed to meet 2045 future demand (InterVISTAS, 2025).

Understanding that employee lot locations are dependent upon preferred shuttling operations, three alternatives were developed. The primary differentiators between each analyzed alternative include vehicle miles traveled for shuttling operations, operating cost, vehicle emissions resulting from the shuttles, and providing a separate employee screening facility.

The following sections describe the Employee Parking Lot Alternatives. Figure 2-3 shows the three employee parking lot alternatives.

¹⁴ RS&H. 2022. Salt Lake City International Airport Master Plan 2022. Available at: [https://slcairport.com/assets/pdfDocuments/Master-Plan/Inventory%20of%20Existing%20Conditions%20v2.0%20\(03.18.2019\).pdf](https://slcairport.com/assets/pdfDocuments/Master-Plan/Inventory%20of%20Existing%20Conditions%20v2.0%20(03.18.2019).pdf).

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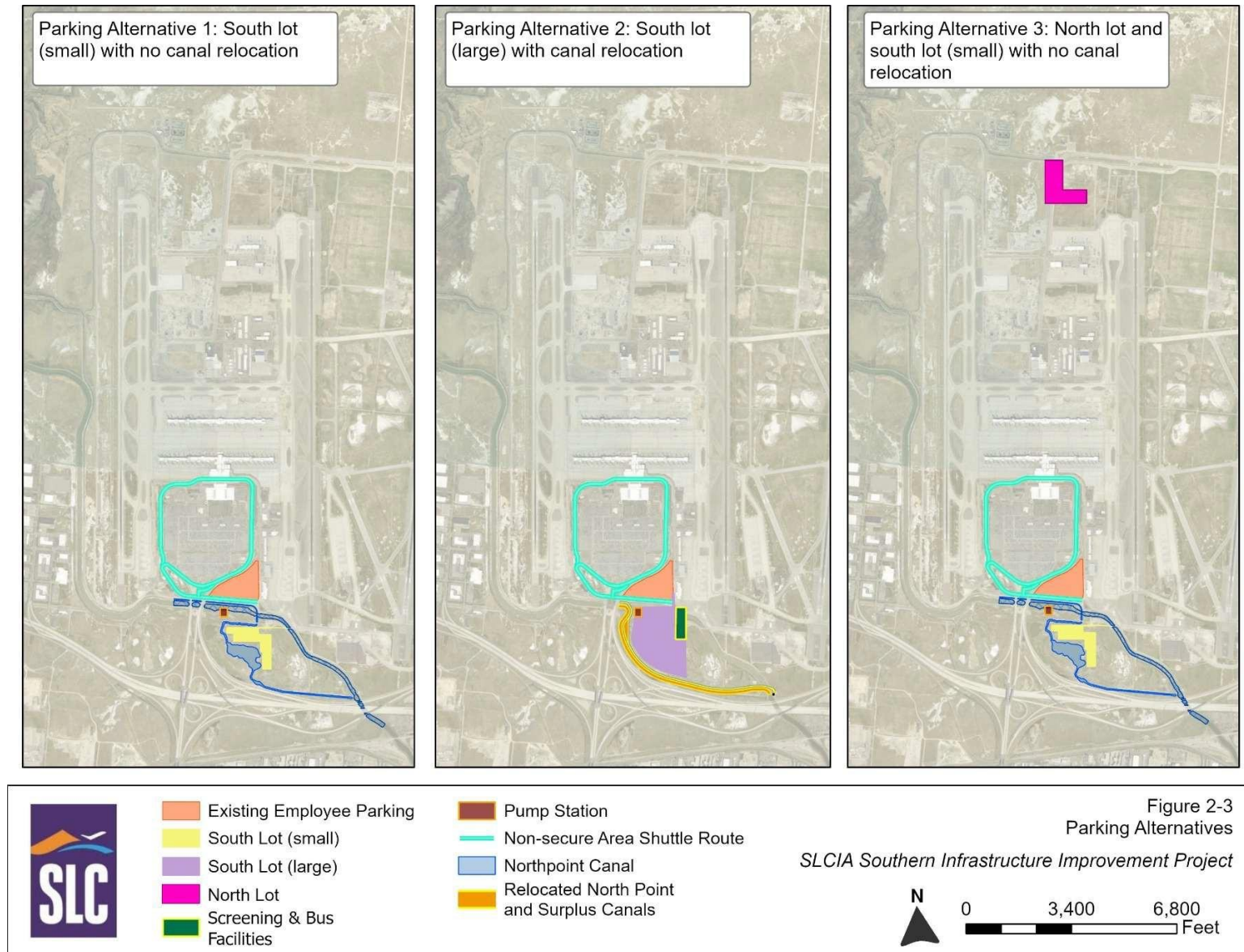


Figure 2-3. Employee Parking Alternatives

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Employee Parking ALTERNATIVE 1: Single South Lot with No Canal Relocation

Employee Parking Alternative 1 would relocate the employee parking lot approximately 0.25 mile to the south of the existing employee lot. This relocation would allow the existing employee lot to be used for airport customer parking.

The area to be used for Employee Parking Alternative 1 is approximately 25.6 acres. This would accommodate 2,930 380-square foot stalls.

Employee parking would occur only in the relocated lot. This alternative would not relocate the North Point Canal or Surplus Canal, and the ponds associated with these canals would remain. An on-site screening facility would eventually be constructed. Access to the relocated lot would occur via an existing bridge that was used to access the golf course while it was in operation. A new bridge would not be constructed.

Prior to the screening facility construction, secure and non-secure employees would come on a single shuttle bus from the employee lot until they are dropped off on the non-secure area of the terminal. Secure-side employees would use the TSA SSCP to enter the secure area. Employees would return to the front of the terminal for bussing back to the employee parking lot at the end of their shift.

Following screening facility construction, the procedures for screening employees at the employee parking lot would be the same as those used at the TSA SSCP although the equipment may differ. Employees working in the secure area would be screened and then board a secure shuttle bus, which would transport them to the secure drop off/pickup destination. Employees working in non-secured areas would park in the employee lot, board a shuttle and be dropped off in front of the terminal.

At the conclusion of work shifts, employees would board shuttles based on their work location. Secured-area employees would remain in the secured area until they have been transported to the screening facility. They would exit the secure area and return to their vehicle or other surface transportation. Non-secure employees would board a shuttle at the front of the terminal and be returned to the employee parking lot.

Under this alternative, the USACE violations would not be resolved as the Surplus Canal would not be relocated and constructed to approved conditions. While this alternative would provide parking spaces sooner, it would not fully replace the loss of existing parking spaces nor meet future employee parking demand.

Employee Parking ALTERNATIVE 2: Single South Lot with Canal Relocation

This Alternative would relocate the employee parking lot approximately 0.25 mile to the south of the existing employee lot. This relocation would allow the existing employee lot to be used for airport customer parking.

The area to be used for Employee Parking Alternative 2 is approximately 71.4 acres. This would accommodate 8,180 380-square foot stalls.

Employee parking would occur only in the relocated lot, and there would be no on-site screening prior to busing to the non-secure area. An on-site screening facility would eventually be constructed at the northeastern extent of the proposed employee parking area.

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Prior to the screening facility construction, secure and non-secure employees would come on a single shuttle bus from the employee lot until they are dropped off on the non-secure area. Secure-area employees would use the TSA SSCP to enter the secure area. Employees would return to the front of the terminal for bussing back to the employee parking lot at the end of their shift.

Following screening facility construction, the procedures for screening employees at the employee parking lot would be the same as those used at the TSA SSCP although the equipment may differ. Employees working in the secure area would be screened and then board a secure shuttle bus, which would transport them to the secure drop off/pickup destination. Employees working in non-secured areas would park in the employee lot, board a shuttle and be dropped off in front of the terminal.

At the conclusion of work shifts, employees would board shuttles based on their work location. Secured-area employees would remain in the secured area until they have been transported to the screening facility. They would exit the secure area and return to their vehicle or other surface transportation. Non-secure employees would board a shuttle at the front of the terminal and be returned to the employee parking lot.

Under this alternative, the USACE violations would be resolved during the Surplus Canal relocation and construction. This alternative would meet future employee parking demand.

Employee Parking ALTERNATIVE 3: Two Lots with No Canal Relocation

Employee Parking Alternative 3 would construct an employee parking lot approximately 0.25 mile to the south of the existing employee lot for non-secure employees. This lot relocation would allow the existing employee lot to be used for airport customer parking. A second lot would be constructed north of the terminal complex and dedicated for secure area employees.

Selection of a north lot site is dependent upon the degree of environmental impacts and overall cost to implement. There are numerous wetlands north of the terminal complex that complicate the ability to locate an upland site. The largest a parking lot could be while avoiding wetlands and safety areas is approximately 27.5 acres. The combined area for Parking Alternative 3 is approximately 53.1 acres. This would accommodate 6,086 380-square feet stalls.

This alternative would not relocate the North Point Canal or Surplus Canal, and the ponds associated with these canals would remain. An on-site screening facility would eventually be constructed at the northern lot. Access to the relocated, southern lot would occur via an existing bridge that was used to access the golf course while it was in operation. A new bridge would not be constructed.

Prior to the screening facility construction, secure and non-secure employees would come on a single shuttle bus from the employee lots until they are dropped off on the non-secure area of the terminal. Secure-area employees would use the TSA SSCP to enter the secure area. Employees would return to the front of the terminal for bussing back to the employee parking lots at the end of their shift.

Following screening facility construction, the procedures for screening employees at the northern parking lot would be the same as those used at the TSA SSCP although the equipment may differ. Employees working in the secure area would be screened and then board a secure shuttle bus, which would transport them to the secure drop off/pickup destination. Employees working in non-secured areas would park in the employee lot, board a shuttle and be dropped off in front of the terminal.

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Non-secure employees using the south lot would be shuttled to the front of the terminal building without screening requirements. The secure-side employees would be either shuttled to the terminal building where they would use the TSA SSCP or would be shuttled to the southern parking lot to be screened prior to boarding a secure shuttle bus and dropped off/picked up at secure-side terminal locations.

At the conclusion of work shifts, employees would board shuttles based on their work location. Secured-area employees would remain in the secured area until they have been transported to the screening facility. They would exit the secure area and return to their vehicle or other surface transportation. Non-secure employees would board a shuttle at the front of the terminal and be returned to the employee parking lot.

Under this alternative, the USACE violations would not be resolved as the Surplus Canal would not be relocated and constructed to approved conditions. While this alternative would provide needed parking, it would not meet future employee parking demand beyond 2037. In addition, the shuttle bus system vehicle miles traveled and operating costs would be approximately 15 percent higher than the single south lot alternative using dedicated shuttles. This would result in higher emissions in an area that is non-attainment. Employee trip lengths to reach a north lot also increase by an estimated 1,500,000 miles annually, also resulting in an increase in emissions. However, this alternative would avoid impacts to wetlands and meet the immediate employee parking needs. Public transportation does not currently serve the north side of the airport.

2.3.3 No Action Alternative

In the No Action Alternative, illustrated on Figure 1-2., no infrastructure improvements would occur at the southern extent of the SLCIA campus and all current operational procedures would remain the same.

Improve Airfield Circulation Resolution

In the No Action Alternative, a SEAT would not be constructed and the potential for runway incursions would not be resolved. The realignment of the Surplus and North Point Canal systems would also not occur. As Airport operations increase, idling emissions and aircraft delay times would also continue to increase. In addition, ATC intervention would continue to be an issue.

Employee Parking

In the No Action Alternative, employee parking would continue at the current employee parking lot location. Public and employee parking demand at SLCIA would continue to increase and would exceed the capabilities of Airport facilities. Employees and passengers would be required to park and shuttle at off-site locations.

The No Action Alternative does not meet the purpose and need for the Proposed Project as it would not improve the inefficiencies currently at the Airport, nor would the efficiency of aircraft taxiing movements improve. The No Action Alternative was evaluated throughout this EA for comparison against any other alternative that passed the screening criteria.

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2.4 Conclusion

SEAT Alternative 2 was not advanced for evaluation because of the increase in construction costs and inability to meet the violations identified along the Surplus Canal. This did not pass Step 1 of the screening process, and this alternative was eliminated from further consideration.

Employee Parking Alternative 1 was not advanced for evaluation because this alternative did not address future parking demand, nor did it resolve the Surplus Canal violations. This did not pass Step 1 of the screening process, and this alternative was eliminated from further consideration.

Employee Parking Alternative 3 was not advanced for evaluation because this alternative did not address future parking demand, nor did it resolve the Surplus Canal violations. This did not pass Step 1 of the screening process, and this alternative was eliminated from further consideration.

The screening process results are summarized in Table 2-2. Only the No Action, SEAT Alternative 1, and Employee Parking Alternative 2 were carried forward for detailed evaluation. These alternatives passed the first two steps of the Three-Step Alternative Screening Process, are reasonable, meet the purpose and need identified in Section 1.4 Purpose and Need, and are carried forward for evaluation in the EA together as the Preferred Alternative. The No Action Alternative serves as a basis of comparison with other alternatives retained for environmental analysis and was retained for analysis of environmental consequences.

Table 2-2. Summary of Alternative Screening

	Does Alternative Pass to Next Step?		Retain for Analysis in the EA?
	Step 1	Step 2	
Improve Airfield Circulation			
SEAT Alternative 1	Yes	Yes	Yes
SEAT Alternative 2	No		No
Parking			
Parking Alternative 1	No		No
Parking Alternative 2	Yes	Yes	Yes
Parking Alternative 3	No		No
No Action Alternative	No	No	Yes

CHAPTER 3: AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

3.1 Introduction

This chapter describes existing conditions within those areas that would be directly, or indirectly, affected by the Proposed Project and Alternatives and the reasonably foreseeable effects of the Proposed Project and alternatives considered. The environmental analysis presented in this chapter combines the required affected environment and environmental consequences sections.

Each resource category is organized into the following subsections:

- Regulatory Setting
- Affected Environment
- Environmental Consequences (including methodology, significance thresholds, and impact analysis)
- Mitigation Measures

3.1.1 Permits, Licenses, Other Approvals, or Reviews

The following is a preliminary list of potential permits required for implementation of the Proposed Action:

- Federal:
 - USACE: Section 404 Permit for discharge into Waters of the U.S.
 - USACE: Section 408 Permit for alteration of a civil works project
 - FEMA Letter of Map Revision
- State of Utah:
 - Utah Department of Environmental Quality (UDEQ), Division of Water Quality: Utah Pollution Discharge Elimination System (UPDES) General Permit for Storm Water Discharges Associated with Construction Activities
 - UDEQ, Division of Air Quality: Fugitive Dust Control Plan for disturbance of an area greater than 1 acre
 - Utah Department of Natural Resources, Division of Water Rights: Stream Alteration Permit for all projects that propose to alter the bed and/or banks of a natural stream in the State of Utah

The affected environment discussion has been prepared pursuant to requirements of the *National Environmental Policy Act of 1969* (NEPA) and FAA Order 1050.1G, *Policies and Procedures for Considering Environmental Impacts*.

Table 3.1 presents the environmental resource categories that would not be affected by the alternatives, along with the rationale for no further review of these categories. In accordance with guidance provided in FAA Order 1050.1G, environmental resources not present within the Study Area would not be affected by the alternatives and therefore are not discussed within this chapter.

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Table 3-1. Environmental Resource Categories Not Affected

Environmental Resource	Rationale
Coastal Resources	SLCIA is not located within a designated coastal zone pursuant to the Coastal Zone Management Act of 1972 as defined by National Oceanic and Atmospheric Administration.
U.S. Department of Transportation Act Section 4(f) Land and Water Conservation Fund (LWCF) Act of 1965, as amended, Section 6(f)	There are no parks or recreation areas within the Project Area. The Airport Trail provides airport employees and the public with perimeter access from the employee parking area to North Temple on the east side of the airport. This trail is a part of the airport access control system and is only operable during specified times. The cultural survey did not identify eligible historic resources within the Proposed Area of Potential Effect and immediate vicinity. Therefore, there are no Section 4(f) resources within the Project Area. There are no Section 6(f) resources in the Study Area. The Utah State database of LWCF State Assistance Program locations was searched, returning no results in the Study Area.
Farmlands	There are no prime, unique, statewide, or locally important farmlands present in the Study Area defined by criteria in 7 CFR § 658.5.
Noise and Noise Compatible Land Use	The Proposed Action would not increase operations, modify runway use, nor affect the number or type of aircraft using SLC¹⁵ and would not result in any permanent change to the Airport noise environment. The closest noise-sensitive sites to the Study Area are approximately 4,800 feet away and buffered by Interstate 215 and commercial development off N. Sun Arbor Terrace (Sky Harbor Apartments). Construction would generate temporary noise impacts associated with the use of heavy equipment and heavy trucks required to haul materials to the site. Construction activity associated with the Proposed Project would take place on SLC property in an area surrounded by industrial, commercial, and transportation land uses. During daytime construction, various noise levels would combine with aircraft noise and surface transportation noise and would be limited to the duration of the construction period. For these reasons, the Proposed Action construction noise would not generate a significant cumulative noise impact. Therefore, the Proposed Action would have no potential to result in noise impacts.
Wild and Scenic Rivers (of Water Resources)	There are no Wild and Scenic Rivers in the Study Area. The closest Wild and Scenic River segment is the Green River located over 100 miles to the southeast of the Study Area.

¹⁵ RS&H Salt Lake City International Airport Master Plan 2022., pages 361-362.

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The following environmental resources are assessed in this EA based on the requirements in FAA Order 1050.1G:

- Aviation Emissions and Air Quality
- Biological Resources
- Hazardous Materials, Pollution Prevention, and Solid Waste
- Historical, Architectural, Archaeological, and Cultural Resources
- Natural Resources and Energy Supply
- Socioeconomic Impacts and Children's Environmental Health and Safety Risks
- Visual Effects
- Water Resources

3.2 Study Areas and Years of Analysis

Study areas were identified to describe existing conditions in the vicinity of SLCIA and to assess reasonably foreseeable direct and indirect impacts of the Proposed Action and its alternatives. Unless otherwise discussed, the Study Area is for analyzed resources in the Project Area identified in Figure 1-3. The criteria used to define resource-specific Study Areas is described in the section addressing the associated resource.

Analysis years were established for the affected environment and forecast years were used for environmental analysis. Consistent with the approved aviation forecasts presented in Section 1.2.3 Aviation Activity Forecast and the proposed construction schedule, the analysis years are 2022, 2027, and 2037.

3.3 Aviation Emissions and Air Quality

This section describes regulatory setting and existing aviation emissions and air quality conditions in the area surrounding SLCIA. The Air Quality Assumptions Memorandum (**Appendix A**) provides the detailed analysis and presents findings of the assessment conducted for this EA. The air quality analysis extends upward from the ground surface to the mixing height, which is where air pollutants are "capped" from continued elevation increase by relative air temperature.

3.3.1 Regulatory Setting

Air quality is regulated by federal, state, and local laws. This includes rules and standards contained in the Clean Air Act (CAA) (42 U.S.C. §7401 et seq. [1970]), which is administered by the U.S. Environmental Protection Agency (EPA) in coordination with state and local governments; and the Utah Air Conservation Act, in which Title 19 (Environmental Quality Code), Chapter 2 of the Utah State Legislature - Utah Code empowers the Utah Air Quality Board to enact rules pertaining to Air Quality activities.

Under the CAA, the EPA established the National Ambient Air Quality Standards (NAAQS) (40 Code of Federal Regulations [CFR] Part 50) for pollutants considered harmful to public health and welfare (criteria air pollutants). These standards have been established for the following criteria air pollutants: carbon monoxide (CO), sulfur dioxide (SO₂), nitrogen dioxide (NO₂), ozone (O₃), particulate matter less than or equal to 10 microns aerodynamic diameter (PM₁₀), fine particulate matter less than or equal to 2.5 microns aerodynamic diameter (PM_{2.5}), and lead (Pb) (Table 3-2). Because emissions of O₃ cannot be calculated directly, volatile organic compounds (VOCs) and oxides of nitrogen (NO_x) (the primary precursors to O₃ formation) are used as surrogates.

Attainment areas are areas where pollutant levels have not exceeded the NAAQS, whereas non-attainment areas are those where one or more NAAQS were exceeded. Nonattainment areas are further classified as

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extreme, severe, serious, moderate, and marginal by the extent the NAAQS are exceeded. If an area has exceeded NAAQS in the past but currently meets the standards, the area is then designated as maintenance. States with regions that are nonattainment or maintenance are required to have a State Implementation Plan (SIP) in place to identify how the region will attain the NAAQS. Maintenance areas are subject to a SIP for two consecutive 10 year periods (20 years) after reaching attainment to ensure continued attainment.

Table 3-2. National Ambient Air Quality Standards¹⁶

Pollutant		Primary/ Secondary	Averaging Time	Level	Form
Carbon Monoxide (CO)		primary	8 hours	9 ppm	Not to be exceeded more than once per year
			1 hour	35 ppm	
Lead (Pb)		primary and secondary	Rolling 3-month average	0.15 µg/m ³⁽¹⁾	Not to be exceeded
Nitrogen Dioxide (NO ₂)		primary	1 hour	100 ppb	98th percentile of 1-hour daily maximum concentrations, averaged over 3 years
		primary and secondary	1 year	53 ppb ⁽²⁾	Annual Mean
Ozone (O ₃)		primary and secondary	8 hours	0.070 ppm ⁽³⁾	Annual fourth-highest daily maximum 8-hour concentration, averaged over 3 years
Particle Pollution (PM)	PM _{2.5}	primary	1 year	9.0 µg/m ³	Annual Mean, averaged over 3 years
		secondary	1 year	15.0 µg/m ³	Annual Mean, averaged over 3 years
		primary and secondary	24 hours	35 µg/m ³	98th percentile, averaged over 3 years
	PM ₁₀	primary and secondary	24 hours	150 µg/m ³	Not to be exceeded more than once per year on average over 3 years
Sulfur Dioxide (SO ₂)		primary	1 hour	75 ppm ⁽⁴⁾	99th percentile of 1-hour daily maximum concentrations, averaged over 3 years
		secondary	3 hours	0.5 ppm	Not to be exceeded more than once per year

Notes:

Units of measure for the standards are parts per million (ppm) by volume, parts per billion (ppb) by volume, and micrograms per cubic meter of air (µg/m³). Primary standards provide public health protection, including protecting the health of “sensitive” populations such as asthmatics, children, and the elderly. Secondary standards provide public welfare protection, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings.

- (1) In areas designated nonattainment for the Pb standards prior to the promulgation of the current (2008) standards, and for which implementation plans to attain or maintain the current (2008) standards have not been submitted and approved, the previous standards (1.5 µg/m³ as a calendar quarter average) also remain in effect.
- (2) The level of the annual NO₂ standard is 0.053 ppm. It is shown here in terms of ppb for the purposes of clearer comparison to the 1-hour standard level.
- (3) Final rule signed October 1, 2015, and effective December 28, 2015. The previous (2008) O₃ standards are not revoked and remain in effect for designated areas. Additionally, some areas may have certain continuing implementation obligations under the prior revoked 1-hour (1979) and 8-hour (1997) O₃ standards.
- (4) The previous SO₂ standards (0.14 ppm 24-hour and 0.03 ppm annual) will additionally remain in effect in certain areas: (1) any area for which it is not yet 1 year since the effective date of designation under the current (2010) standards, and (2) any area for which an implementation plan providing for attainment of the current (2010) standard has not been submitted and approved and which is designated nonattainment under the previous SO₂ standards or is not meeting the requirements of a SIP call under the previous

¹⁶ EPA (U.S. Environmental Protection Agency). October 2024. NAAQS Table. Available at: www.epa.gov/criteria-air-pollutants/naaqs-table.

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SO₂ standards (40 CFR 50.4(3)). A SIP call is an EPA action requiring a state to resubmit all or part of its SIP to demonstrate attainment of the required NAAQS.

3.3.2 Affected Environment

The EPA currently designates the area encompassing SLCIA in the following categories:

- Attainment – (CO), (Pb), and (NO₂)
- Nonattainment – (O₃), SO₂, and PM_{2.5}
- Maintenance – PM₁₀

Based on measured levels of the pollutants, the area in which SLCIA is located is currently designated to be a “serious” nonattainment area for O₃ and a “serious” nonattainment area for PM_{2.5}. The SO₂ designation does not have a descriptive identifier. The nonattainment areas are depicted in Figure 3-1.

An operational emissions inventory of aircraft and motor vehicles was prepared for existing conditions. Operational emissions were evaluated using the FAA’s Aviation Environmental Design Tool (AEDT, version 3f) and EPA’s Motor Vehicle Emissions Simulator (MOVES, version 4). The existing operational emissions for the year 2022 are provided in Table 3-3. For the existing condition, aircraft emissions result from those aircraft departing from Runway 35 using the existing taxiways; and motor vehicle emissions represent those that occurred from the airport entrance to the existing employee parking lot.

Table 3-3. Operational Emissions Existing Condition

Year	Source	CO (tons)	NO _x (tons)	SO _x (tons)	PM ₁₀ (tons)	PM _{2.5} (tons)	VOC (tons)
2022	Aircraft	227	38	11	1	1	57
	Motor Vehicle	10	1	<1	<1	<1	<1
	Total	237	38	11	1	1	57

Note: Values may reflect rounding.

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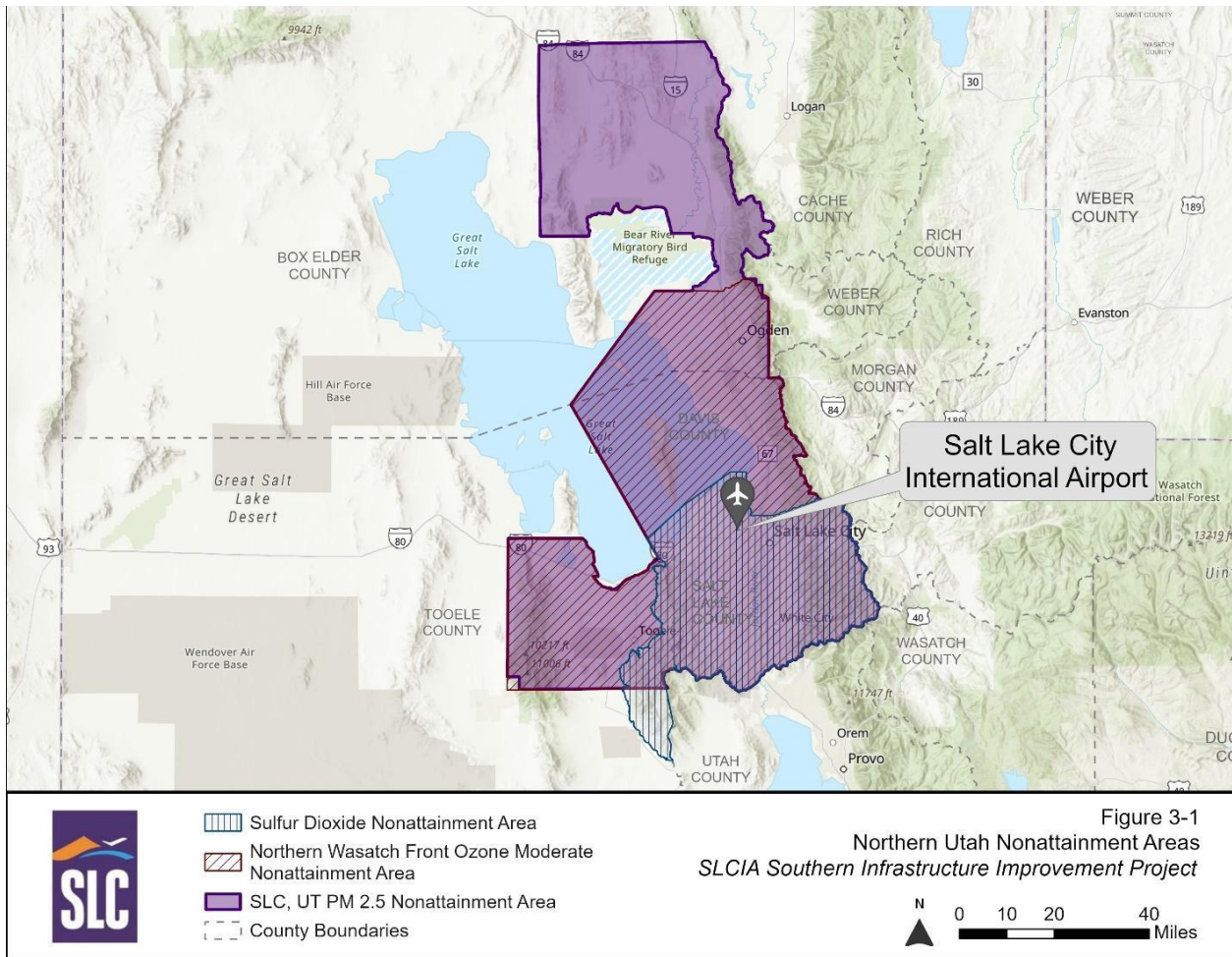


Figure 3-1. Northern Utah Nonattainment Areas¹⁷

¹⁷ Utah Department of Environmental Quality Division of Air Quality. 2024. Non Attainment Area Locator Tool. Accessed April 2024. Available at: <https://utahdeq.maps.arcgis.com/apps/webappviewer/index.html?id=dcc4eacb53a942f2a4b74a36ae5ea118>.

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3.3.3 Environmental Consequences

Methodology

Operation emissions were evaluated using the FAA's AEDT, version 3F. MOVES, version 4 was used to estimate on-road vehicle and on-road construction vehicle emissions. The Airport Construction Emissions Inventory Tool (ACEIT) was used to identify non-road construction equipment and EPA's MOVES was used to estimate emissions. Table 3-4 lists the Proposed Action's phases and construction projects.

Table 3-4. Proposed Action Phases and Construction Projects

Phase No.	Construction Projects	Start (Month/Year)	End (Month/Year)
1	Canal Relocation and wetland mitigation	April-26	April-27
1b	New detention pond	April-27	October-28
	New pumpstation	April-27	October-28
2	Employee lot	April-28	October-29
	Roadway Construction	April-28	October-29
3	Employee screening and maintenance facility	April-30	April-32
	Sitework for Facility	April-30	April-32
4	New North Temple (Roadway)	April-32	October-33
	Relocated Salt Storage facility	April-32	October-33
5	Relocate ASOS	April-34	October-35
6	Relocate RTR	April-36	October-37
7	Construct new End-Around Taxiway	April-38	October-40

Significance Thresholds

As described in FAA Order 1050.1G, a project is considered to have a significant air quality impact if, "[t]he 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." To address the SIP conformance requirements of the CAA for areas designated nonattainment or maintenance, the EPA established de minimis thresholds. These thresholds are only applicable to the pollutants for which the area has either designation. If project-related emissions (i.e., the net emissions when comparing future emissions with and without proposed improvements) are below the applicable de minimis level, the emissions are exempt from the CAA's SIP conformance requirements. If emissions are above an applicable de minimis level, a formal SIP conformity determination must be performed. Table 3-5 lists the de minimis levels for the air pollutants for which the area in which SLCIA is located is designated nonattainment or maintenance.

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Table 3-5. Air Pollutant *De Minimis* Levels

Pollutant	Standard	Designation	<i>De Minimis</i> Level (tons)
O ₃	2015 8-Hour	Serious nonattainment	50 ¹
SO ₂	1971 1-Hour	Nonattainment	100
PM _{2.5}	2006 24-Hour	Serious nonattainment	70 ²
PM ₁₀	1987 24-Hour	Maintenance	100

Notes:

Source: Title 40 Section 93 of the Code of Federal Regulations (40 CFR §93.153(b)(1) and (b)(2))

¹ The O₃ *de minimis* level is applicable to emissions of nitrogen oxides (NO_x) and volatile organic compounds (VOCs), precursors to the pollutant.

² The PM_{2.5} *de minimis* level is applicable to direct emissions of PM_{2.5}, SO₂, NO_x, and VOC, precursors to the pollutant.

Project-related construction activities are anticipated to begin in 2026 and end in 2040. Project-related motor vehicle emissions associated with the new employee south parking lot were estimated for opening year 2029 through build out year 2040 and for five years after build out (2045); and aircraft emissions associated with the south end-around taxiway were estimated for opening year 2040 and 2045 as the out year. FAA Order 1050.1G also suggests conducting analysis of for an out-year to understand the potential impacts associated with growth in activity after implementation.

Reasonably Foreseeable Impact Analysis

For the No Action, aircraft emissions result from those aircraft departing from Runway 35 using the existing taxiways; and motor vehicle emissions represent those that occurred from the airport entrance to the existing employee parking lot. For the Proposed Action, aircraft emissions result from those aircraft departing from Runway 35 using the south end-around taxiway; and motor vehicle emissions represent those that occurred from the airport entrance to the proposed employee parking lot. The construction, No Action and Proposed Action emissions are provided in Table 3-6.

As shown, the estimated increase in the criteria air pollutants and pollutant precursors for which the area is designated nonattainment and maintenance are all below the thresholds. Therefore, the CAA's SIP conformance requirements are not applicable to the Proposed Action.

Table 3-6. Construction and Operational Emissions (Tons)

Year	Alternative	Source	CO	NO _x	SO _x	PM ₁₀	PM _{2.5}	VOC
2026	Proposed Action	Construction	3	4	<1	3	<1	<1
	De Minimis		--	50	100	100	70	50
2027	Proposed Action	Construction	4	2	<1	3	<1	<1
	De Minimis		--	50	100	100	70	50
2028	Proposed Action	Construction	6	4	<1	5	1	4
	De Minimis		--	50	100	100	70	50
2029	No Action	Motor Vehicles	7	<1	<1	<1	<1	<1
		Total	7	<1	<1	<1	<1	<1
	Proposed Action	Motor Vehicles	26	1	2	<1	1	<1
		Construction	4	4	<1	3	<1	4
		Total	30	5	2	3	1	4

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Year	Alternative	Source	CO	NO _x	SO _x	PM ₁₀	PM _{2.5}	VOC
	Project Related Emissions		23	5	2	3	1	4
	De Minimis		--	50	100	100	70	50
2030	No Action	Motor Vehicles	6	<1	<1	<1	<1	<1
		Total	6	<1	<1	<1	<1	<1
	Proposed Action	Motor Vehicles	25	1	2	<1	1	<1
		Construction	2	1	<1	2	<1	<1
		Total	27	2	2	2	1	<1
	Project Related Emissions		21	2	1	2	1	<1
	De Minimis		--	50	100	100	70	50
2031	No Action	Motor Vehicles	6	<1	<1	<1	<1	<1
		Total	6	<1	<1	<1	<1	<1
	Proposed Action	Motor Vehicles	23	1	1	<1	1	<1
		Construction	3	1	<1	3	<1	<1
		Total	26	2	1	3	1	<1
	Project Related Emissions		20	2	1	3	1	<1
	De Minimis		--	50	100	100	70	50
2032	No Action	Motor Vehicles	6	<1	<1	<1	<1	<1
		Total	6	<1	<1	<1	<1	<1
	Proposed Action	Motor Vehicles	22	1	1	<1	1	<1
		Construction	3	1	<1	3	<1	<1
		Total	25	2	1	3	1	<1
	Project Related Emissions		19	2	1	3	1	<1
	De Minimis		--	50	100	100	70	50
2033	No Action	Motor Vehicles	5	<1	<1	<1	<1	<1
		Total	5	<1	<1	<1	<1	<1
	Proposed Action	Motor Vehicles	20	1	1	<1	1	<1
		Construction	2	1	<1	3	<1	<1
		Total	23	1	1	3	1	<1
	Project Related Emissions		17	1	1	3	1	<1
	De Minimis		--	50	100	100	70	50
2034	No Action	Motor Vehicles	5	<1	<1	<1	<1	<1
		Total	5	<1	<1	<1	<1	<1
	Proposed Action	Motor Vehicles	19	1	1	<1	1	<1
		Construction	1	<1	<1	2	<1	<1
		Total	20	1	1	2	1	<1
	Project Related Emissions		15	1	1	2	1	<1
	De Minimis		--	50	100	100	70	50
2035	No Action	Motor Vehicles	4	<1	<1	<1	<1	<1
		Total	4	<1	<1	<1	<1	<1
	Proposed Action	Motor Vehicles	18	1	1	<1	1	<1
		Construction	1	<1	<1	3	<1	<1

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Year	Alternative	Source	CO	NO _x	SO _x	PM ₁₀	PM _{2.5}	VOC	
		Total	19	1	1	3	1	<1	
	Project Related Emissions		14	<1	1	3	1	<1	
	De Minimis		--	50	100	100	70	50	
2036	No Action	Motor Vehicles	4	<1	<1	<1	<1	<1	
		Total	4	<1	<1	<1	<1	<1	
	Proposed Action	Motor Vehicles	17	1	1	<1	1	<1	
		Construction	1	<1	<1	2	<1	<1	
		Total	18	1	1	2	1	<1	
	Project Related Emissions		13	<1	1	2	1	<1	
	De Minimis		--	50	100	100	70	50	
2037	No Action	Motor Vehicles	4	<1	<1	<1	<1	<1	
		Total	4	<1	<1	<1	<1	<1	
	Proposed Action	Motor Vehicles	16	1	1	<1	<1	<1	
		Construction	1	<1	<1	3	<1	<1	
		Total	17	1	1	3	1	<1	
	Project Related Emissions		13	<1	1	3	1	<1	
	De Minimis		--	50	100	100	70	50	
2038	No Action	Motor Vehicles	4	<1	<1	<1	<1	<1	
		Total	4	<1	<1	<1	<1	<1	
	Proposed Action	Motor Vehicles	15	1	1	<1	<1	<1	
		Construction	1	1	<1	2	<1	1	
		Total	16	1	1	2	1	1	
	Project Related Emissions		12	1	1	2	1	1	
	De Minimis		--	50	100	100	70	50	
2039	No Action	Motor Vehicles	3	<1	<1	<1	<1	<1	
		Total	3	<1	<1	<1	<1	<1	
	Proposed Action	Motor Vehicles	14	1	1	<1	<1	<1	
		Construction	1	1	<1	3	<1	1	
		Total	16	1	1	3	1	1	
	Project Related Emissions		12	1	1	3	1	1	
	De Minimis		--	50	100	100	70	50	
2040	No Action	Aircraft	432	86	25	1	1	108	
		Motor Vehicles	3	<1	<1	<1	<1	<1	
		Total	435	86	25	1	1	108	
	Proposed Action	Aircraft	598	119	34	2	2	120	
		Motor Vehicles	14	1	1	<1	<1	<1	
		Construction	1	1	<1	3	<1	1	
		Total	613	120	35	4	2	121	
	Project Related Emissions		178	34	10	3	1	13	
	De Minimis		--	50	100	100	70	50	
2045	No Action	Aircraft	514	105	30	1	1	126	

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Year	Alternative	Source	CO	NO _x	SO _x	PM ₁₀	PM _{2.5}	VOC	
		Motor Vehicles	3	<1	<1	<1	<1	<1	
		Total	517	106	30	1	2	126	
	Proposed Action	Aircraft	702	144	41	2	2	139	
		Motor Vehicles	12	<1	1	<1	<1	<1	
		Total	713	144	42	2	3	139	
	Project Related Emissions		196	39	12	1	1	13	
	De Minimis		--	50	100	100	70	50	

Notes: Values may reflect rounding.

Source: Crawford, Murphy & Tilly, Inc. 2024. Air Quality Report SLC Environmental Assessment. (See Appendix A).

Although construction-related emissions associated with the Proposed Action would be well below *de minimis* thresholds and temporary in duration, these emissions could be further reduced by employing the BMPs and by incorporating the provisions of *FAA Advisory Circular 150/5370 – 10E, Standards for Specifying Construction of Airports*.

The model did not capture emissions from aircraft waiting for permission to cross Runway 16L/34R (known as “holding”) and holding time is expected to decrease under SEAT Alternative 1. However, holding-related emissions were anticipated to be well below *de minimis* thresholds and would not have increased emissions for the No Action to an exceedance of NAAQS.

SEAT Alternative 1 and Parking Alternative 2. As shown in Table 3-6, the Proposed Action would not result in an exceedance of one or more NAAQS or delay timely attainment of the NAAQS. Therefore, the Proposed Action would not result in a reasonably foreseeable significant impact on air pollutant emissions for construction or operation activities.

No Action Alternative. Under the No Action Alternative, there would be no construction activities and no changes to aircraft operational activities and, therefore, there would be no construction air pollutant emissions or changes to aircraft related air pollutant emissions.

3.3.4 Mitigation Measures

There are no mitigation measures required for the SEAT Alternative 1 and Parking Alternative 2 because the project-related emissions would not exceed the CAA General Conformity *de minimis* levels.

3.4 Biological Resources

3.4.1 Regulatory Setting

Typical categories of biological resources include terrestrial and aquatic plant and animal species; game and non-game species; special status species (state or federally-listed threatened or endangered species, or species of concern); and environmentally-sensitive or critical habitats. The federal Endangered Species Act of 1973, as amended, protects plants and wildlife that are listed as endangered or threatened by the U.S. Fish and Wildlife Services (USFWS). The Migratory Bird Treaty Act (MBTA) prohibits the take of birds listed under the MBTA. Birds protected under the MBTA are listed under 50 CFR Section 10.13.

A Biological Assessment has been completed to identify potential environmental impacts of the Proposed Action on federally-listed plant and animal species in accordance with the requirements of Section 7 of the Endangered Species Act (ESA; 16 U.S.C. 460 et seq., as amended)

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3.4.2 Affected Environment

The majority of the site is abandoned golf course greens and fairways from the former Wingpointe Golf Course. Some dilapidated golf cart paths still remain, but the native vegetation has reclaimed the greens and fairways. Wetland vegetation grows near the water bodies, and a wet meadow is on the eastern half of the action area. North Point Canal Conveyance System diverts from the Surplus Canal and becomes a meandering canal and an excavated pond within the old course. Another manmade pond is located just west of the canal near Terminal Drive. The vegetation in the uplands is mostly upland grasses and forbs dominated by the invasive cheatgrass (*Bromus tectorum*) and tumble mustard (*Sisymbrium altissimum*) with wetland vegetation dominated by common reeds (*Phragmites australis*), narrowleaf willows (*Salix exigua*), and saltgrass (*Distichlis spicata*). The observed species are identified in Table 3-7 and **Appendix B**. None of the observed plant species are protected.

Table 3-7. Species List

Latin Binomial	Common Name
<i>Salicornia utahensis</i>	Utah Swampfire
<i>Allenrolfea occidentalis</i>	Pickleweed
<i>Phragmites australis</i>	Common Reed
<i>Salix exigua</i>	Narrowleaf Willow
<i>Dipsacus fullonum</i>	Fuller's Teasel
<i>Distichlis spicata</i>	Saltgrass
<i>Elaeagnus angustifolia</i>	Russian Olive
<i>Tamarix chinensis</i>	Five-Stamen Tamarisk
<i>Cirsium arvense</i>	Canada Thistle
<i>Lepidium perforatum</i>	Clasping Pepperweed
<i>Phleum pratense</i>	Timothy
<i>Rosa woodsia</i>	Woods Rose
<i>Salsola tragus</i>	Russian Thistle
<i>Sisymbrium altissimum</i>	Tall Tumblemustard
<i>Bromus tectorum</i>	Cheatgrass
<i>Cardaria draba</i>	Whitetop
<i>Heterotheca spp.</i>	Aster
<i>Sphaeralcea spp.</i>	Globemallow
<i>Thinopyrum intermedium</i>	Intermediate Wheatgrass

Common bird species present include waterfowl (geese and ducks), gulls, pigeons, starlings, and raptors (hawks and owls). Common animals include coyotes, foxes, mice, and rabbits. The Airport has a comprehensive wildlife management program to make the Airport less attractive to wildlife that could interfere with flight operations, thus ensuring a safe environment for aviation and passengers.

The topography of the property is relatively flat with some shallow rolling hills that are residual from the golf course development.

Beyond the Study Area, the landscape is very developed and highly trafficked. There is abundant ground and air traffic due to the site's immediate connection to the Airport and I-80 West.

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3.4.3 Environmental Consequences

Methodology

As described in **Appendix B**, a variety of sources were consulted to determine what special-status species have the potential to occur within the Study Area. Table 3-8 includes all potential listed species and designated critical habitat as listed on the official Service list of Threatened and Endangered Species (TES) that may occur in or be affected by the Proposed Project.

Table 3.8. Potential Threatened and Endangered Species and Habitat in the Action Area

Species	Status	Habitat Requirements	Habitat in Action Area	Critical Habitat in Action Area
Birds				
Yellow-billed Cuckoo (<i>Coccyzus americanus</i>)	Threatened	Minimum of 12-acre patches of multi-storied riparian tree habitat. Sections must be at least 100 meters in width or length with a dense sub-canopy or shrub layer	None	Not Present
Insects				
Monarch butterfly (<i>Danaus plexippus</i>)	Proposed Threatened	Open areas with flowering plants and milkweed for breeding	None	Not Present
Suckley's Cuckoo Bumble Bee (<i>Bombus suckleyi</i>)	Proposed Endangered	Obligate parasite of bees from the <i>Bombus</i> genus for nesting and provisioning of young. Prefer abandoned rodent burrows for nesting and require diverse and abundant floral forage particularly in spring and fall	None	Not Designated
Plants				
Ute Ladies'-tresses (<i>Spiranthes diluvialis</i>)	Threatened	Found in moist to very wet meadows, along streams and ditches, in abandoned stream meanders, and near springs, seeps, and lake shores. In Utah, elevation range: 4,200-7,000 feet	None	Not Designated

A site visit was conducted to assess habitat suitability and/or presence/absence of species. Although wetlands were encountered, vegetation was either tall and thick phragmites stands or dominated by saltgrass and characteristic of highly salty soils. Both of those conditions are unsuitable for Ute Ladies'-tresses (*Spiranthes diluvialis*) which does not thrive in saline soils or in shady conditions with

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competition from dense, tall vegetation. No milkweed plants—a plant species monarch butterflies are dependent on for breeding—were observed so monarch butterflies are not expected to be present for breeding. Additional flowering plants were also not prevalent as a food source for butterflies.

Significance Thresholds

The FAA Order 1050.1G states that the significance threshold is *“The USFWS or the National Marine Fisheries Service determines that the action would be likely to jeopardize the continued existence of a federally listed threatened or endangered species or would result in the destruction or adverse modification of federally designated critical habitat.”* The FAA has not established a significance threshold for non-listed species.

Reasonably Foreseeable Impact Analysis

SEAT Alternative 1 and Parking Alternative 2. The State of Utah has no record of any TES within a half-mile of the Study Area, and based on the site visit, it was determined that habitat was not present for any of the potential threatened or endangered species in the project area. As such, these species are not expected to be present and will not be reviewed further because the proposed action will have no effect on them.

No Action Alternative. Under the No Action Alternative, there would be no construction or operations activities, and therefore there would be no impact to species or habitat.

3.4.4 Mitigation Measures

To minimize impacts and maximize conservation measures, the Airport anticipates coordinating with USACE on the planning and development of the Project, as well as by following Best Management Practices (BMPs). Specific measures and plans known at this time include the following:

- Ground nesting migratory birds such as killdeer, gulls, quail, ducks, and geese may be present in this area. If project construction takes place during nesting and breeding season (April to August). A qualified biologist will conduct ground surveys no more than five days prior to the commencement of work. If active nests are found, work in that area will be postponed until the young have fledged or the nest is no longer active, as determined by the biologist.
- Similarly, if any trees are expected to be removed as part of the project construction during nesting and breeding season (April to August), tree nesting surveys will also be conducted for migratory birds under the same protocol (no more than five days prior and tree removal will be postponed for any active nests until the young have fledged or the nest fails).
- Equipment will be cleaned to remove noxious weeds/seeds and petroleum products prior to moving on site. Additionally, any chemical pollutants produced during the construction activities shall be disposed of according to BMPs.
- Fueling machinery will occur off site or in a confined, designated area to prevent spillage into waterways and wetlands.
- Materials will not be stockpiled in the riparian areas or other sensitive areas such as wetlands.
- Fill materials will be free of waste, pollutants, and noxious weeds/seeds.

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- Excavated soils will be sorted into mineral soil and topsoil. When backfilling a disturbed site, topsoil will be placed on top to provide a seed bed for native plants.
- Excavated material and construction debris may not be wasted in any stream channel or placed in flowing waters or adjacent wetlands; this will include material such as grease, oil, joint coating, or any other possible pollutants. Excess material must be wasted at an upland site away from any channel.

3.5 Hazardous Materials, Pollution Prevention, and Solid Waste

3.5.1 Regulatory Setting

Federal legislation, enforced by the EPA, jointly regulates the release, handling, disposal, and remediation of hazardous materials. The Resource Conservation and Recovery Act (RCRA) sets standards and practices regarding the generation and management of hazardous wastes. The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA or Superfund) allocates government funds and resources to ensure timely remediation of accidental or unintentional release of hazardous material and environmental contaminants.

At the state level, the UDEQ administers and enforces the state's hazardous waste management rules and has received RCRA authorization from the EPA and also serves as the regulatory Local Oversight Program for most cases involving petroleum leaking underground storage tanks (LUSTs). The Utah Department of Water Quality (UDWQ) has jurisdiction over the Project Area involving groundwater contamination.

3.5.2 Affected Environment

The operation of the Airport involves the storage, use and transport of hazardous materials and the generation of hazardous wastes. Hazardous materials are transported to and from the Airport by pipeline and ground vehicles, as well as by passenger and cargo aircraft. The largest quantity of hazardous material used at the Airport is aviation fuel, which is consumed in operations and, therefore, generates minimum hazardous waste. Additional hazardous materials are used at the Airport during maintenance and cleaning of aircraft, ground vehicles, and equipment. Hazardous wastes generated at the Airport are transported off-site for recycling, treatment, and/or disposal by licensed waste disposal contractors.

According to SLCIA Sustainability efforts, the Airport had a 110% increase in tons collected for recycling, maintained a 95% construction waste diversion rate since 2019, and 300,000 tons of construction debris was recycled or reused¹⁸.

No National Priority List, Federal Engineering, or Institutional Control sites were identified within the Environmental Database Report (EDR) specified search area. Information reviewed in the EDR and the UDEQ Interactive Map does not indicate areas within the Study Area that have soil and/or groundwater contamination. However, several areas near the Study Area show soil and groundwater contamination.

¹⁸ SLCIA. 2024. *SLC International Sustainability*. <https://slcairport.com/sustainability/>. Accessed July 2024.

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These sites are identified as sites of concern. Contaminants of concern include diesel fuel, gasoline, volatile organic compounds (VOCs), and metals.

The sites of concern identified from the physical, historical, and records reviews were ranked as having a **Low**, **Moderate**, or **High** potential to find hazardous material within the Study Area.

Low Risk

This risk level identifies sites of concern where the likelihood for the Proposed Action to encounter recognized environmental conditions (RECs)¹⁹ is low due to lack of evidence to suggest that soil and/or groundwater from the site of concern is impacted, or the contamination from off-site migration is not expected to impact the Study Area during construction. Low-risk sites may also include potentially contaminated sites where remediation has previously occurred, but limited excavation is anticipated near the site, and/or disposal of excavated soils or groundwater is considered relatively straightforward.

Moderate Risk

This risk level identifies sites of concern where the likelihood for the Proposed Action to encounter a REC is moderate because of the type or extent of contaminant, and groundwater from the site of concern is impacted and has a reasonable potential to impact the Proposed Action from off-site migration, but there is no conclusive evidence that a REC exists. Moderate risk sites may also have the potential to be contaminated, but remediation of contamination, if present, is considered relatively straightforward.

High Risk

This risk level identifies sites of concern where the likelihood for the Proposed Action activity to encounter a REC is high, contamination is known to be extensive, and conclusive evidence has indicated that the REC has directly impacted the Proposed Action. Sites may also have a high risk if one or more existing or historic contamination sources is located within the Study Area.

Based on historical research, the former presence of a railroad line, adjacent USTs, emergency generator tanks, fueling operations, and adjacent general airport use from 1911 to the present would create a **Moderate** potential to encounter hazardous materials and contaminants of concern including petroleum products, VOCs, and metals. Areas of concern for the Proposed Project Area are shown on Figure 3 of the *Hazardous Materials Technical Memorandum* (Appendix C).

¹⁹ The term "recognized environmental condition (REC)" is defined in American Society for Testing and Materials E1527-21 as (1) the presence of hazardous substances or petroleum products in, on, or at the subject property due to a release to the environment; (2) the likely presence of hazardous substances or petroleum products in, on, or at the subject property due to a release or likely release to the environment; or (3) the presence of hazardous substances or petroleum products in, on, or at the subject property under conditions that pose a material threat of a future release to the environment. The term includes hazardous substances or petroleum products even under conditions in compliance with laws. The term is not intended to include de minimis conditions that generally do not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Conditions determined to be de minimis are not recognized environmental conditions.

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The Utah Western Pacific Railroad operated within the Study Area from about 1869 to the 1950s, with the tracks remaining in place until the late 1970s. Potential contaminants of concern include petroleum products, polycyclic aromatic hydrocarbons, and metals. Additionally, remnants of tracks could be discovered during the construction of the Proposed Action. This site is a **Moderate** risk.

The EDR identified 32 sites in all databases searched, as well as an additional 14 orphan sites within the search radius of the Study Area. The orphan sites could not be mapped due to lack of adequate address information. The specific locations were determined where possible.

Sites of Potential Environmental Concern and the associated risk ranking reviewed in the EDR Radius Map Report and reviewed on the UDEQ Interactive Map are described in Table 3-4. The table displays information pertaining to each site's identification, property address, the database(s) in which the site is listed, location within or approximate distance from the Proposed Action, and a brief description of the reason(s) the site is categorized as a **High**, **Moderate**, or **Low** risk. The EDR identified several duplicate sites with slightly different names or address information; these were consolidated in the table.

The Surplus Canal has been sampled upstream of the airport campus, and there is detectable per- and polyfluoroalkyl substances (PFAS) in the water. Potential PFAS contamination areas on the airport campus are currently being evaluated. Preliminary sample data indicates PFAS is a minor contaminant of concern, which will be addressed in the contractor's Health and Safety Plan.

3.5.3 Environmental Consequences

Methodology

The *Hazardous Materials Technical Memorandum* (See **Appendix C**) includes an evaluation of the existing uses and storage of hazardous materials at SLCIA in relation to the Proposed Action, as well as the generation of hazardous waste at SLCIA.

The following discussion includes a summary of the EDR Radius Report and identifies general areas where hazardous materials and/or soil contamination may be present. Sites that were listed as downgradient, located outside the Project Area, or in a position where impacts would not affect the Project Area, are not included in this discussion.

Significance Thresholds

The FAA has not established a significance threshold for Hazardous Materials, Solid Waste, and Pollution Prevention. The FAA lists factors to consider as any action that would have the potential to violate applicable Federal, State, tribal, or local laws or regulations regarding hazardous materials and/or solid waste management; involve a contaminated site; produce an appreciably different quantity or type of hazardous waste; generate an appreciably different quantity or type of solid waste or use a different method of collection or disposal and/or would exceed local capacity; or adversely affect human health and the environment.

Reasonably Foreseeable Impact Analysis

SEAT Alternative 1 and Parking Alternative 2. The Proposed Action could impact known hazardous sites in the study area that are a **Moderate** risk including contaminants associated with a former railroad line, adjacent USTs, and nearby airport fueling operations. The implementation of the Proposed Action would not result in reasonably foreseeable significant impacts on hazardous sites as all direct and

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construction impacts would be temporary and mitigated with a Contaminated Soil and Groundwater Management Plan which will include appropriate BMPs. Additionally, as a BMP, a Health and Safety Plan will be in place and followed throughout the Project.

Construction associated solid waste would be generated. Increased operations and enplanements would also increase the generation of solid waste at the Airport. Waste generated during construction of the Proposed Action and after implementation of the Proposed Action would be handled and disposed of according to federal, state, and local rules and regulations.

No Action Alternative. The No Action Alternative would not involve the development and construction of the Proposed Project and would not result in any risk to encounter hazardous materials.

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Table 3-9. Sites of Potential Environmental Concern

Site Name (as listed in EDR Report or UDEQ Database)	Listed Address	Database(s)	Distance From Proposed Project	Description/Potential Concern	Impact Risk
4000 W. Lift Station Upgrade	130 North 3700 West	ECHO, FINDS, NPDES	Roughly 200 feet east of the Study Area	The listings for the lift station show the facility has current permits and no violations associated with the permits.	Low
Avis Rent A Car	3781 Terminal Drive #22186	FINDS, LUST, UST, SPILLS	Approximately 0.46-mile to the north of the Study Area	The Avis Rent A Car facility at one time contained a 12,000-gallon gasoline tank installed in 1986, a 500-gallon used oil tank installed in 1986, a 550-gallon used oil tank installed in 1987, and a 550-gallon new oil tank installed in 1987. The former tanks are listed as being removed from the ground in 1993. At that time, a release of petroleum from the USTs was identified to have impacted soils and groundwater. Groundwater was identified to be to the northwest in a down-gradient position of the Proposed Project. Remediation was completed at the site showing contamination levels to be below the Tier 1 screening levels and to the satisfaction of the UDEQ. The facility was given a No Further Action letter in 1999 requiring no further remediation. The SPILLS listing indicated that a spill was reported in 2015 based on subsurface sampling that detected concentrations of gasoline range organics in groundwater. Further sampling indicated the concentrations were below the Tier 1 screening levels. The tanks were removed in 2016.	Low
Federal Express Corporation	220 North 3700 West	LUST, UST, RCRA Non-Generator	450 feet to the north of the Study Area	The facility at one time contained a 4,000-gallon gasoline tank installed in 1986 and a 10,000-gallon diesel tank installed in 1986. Both tanks were removed from the ground in 2004. During the removal, free phase petroleum product was discovered in two wells surrounding the two USTs. Nine monitoring wells were installed, and sampling events conducted from 2005 to 2007. Over excavation of the contaminated UST basin occurred in 2008. Following	Moderate

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Site Name (as listed in EDR Report or UDEQ Database)	Listed Address	Database(s)	Distance From Proposed Project	Description/Potential Concern	Impact Risk
				the excavation activities, two groundwater monitoring events were conducted that showed petroleum hydrocarbon contamination below the Tier 1 Screening Levels. Remediation was completed at the site showing contamination levels to be below the Tier 1 screening levels and to the satisfaction of the UDEQ. The facility was given a No Further Action letter in 2010 requiring no further remediation.	
FAA-SLC GS E/G	Runway 34 SLCIA	LUST, UST, and aboveground storage tank (AST)	350 feet to the north of the Study Area	The area contained at one time a 515-gallon diesel tank installed in 1977 and removed in 1998. A LUST was opened for the facility in 1998 due to contamination noted during the removal of the tank. It was given closure in 1999. The AST listing indicates that the facility contains an aboveground tank consisting of a 500-gallon diesel tank currently in use.	Moderate
FAA-Salt Lake City LOC E/G	Runway 16 SLCIA	LUST, UST, and AST	Roughly 1,000 feet to the north of the Study Area	The area contained at one time a 515-gallon diesel tank installed in 1971 and removed in 1998. The area also contains a 500-gallon AST currently in use. The LUST listing shows a release that was reported in 1998 and given closure in 2000.	Low
FAA – Salt Lake City ALS 34 / FAA Salt Lake City MM E/G	South Runway 34 SLCIA	LUST and UST	Roughly 350 feet to the north of the Study Area	The area contained at one time a 2,000-gallon diesel tank installed in 1990 and removed in 2020. A LUST was reported for the area in 2020 and appears to have not been closed. No additional information was found on the UDEQ website.	Moderate
FAA Salt Lake City RTR – B E/G	South of Runway 34	AST	Located within the Project Area as part of the RTR tower that will be moved as part of the Study Area	The RTR facility has a generator that is fed by a reported 500-gallon diesel AST. The tank is double walled and contained within the fenced facility of the RTR.	Moderate

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Site Name (as listed in EDR Report or UDEQ Database)	Listed Address	Database(s)	Distance From Proposed Project	Description/Potential Concern	Impact Risk
South Electrical Vault	Runway 14/32 South Perimeter Road, SLCIA	UST	Adjacent to the northeast to the Study Area	The vault includes a 6,000-gallon diesel tank that feeds an emergency backup generator. The UST is routinely inspected and has not been listed with a release since installation in 1997. The tanks is also listed as double-walled.	Moderate

Notes:

Sources: EDR. 2023. Environmental Database Resources Radius Map Report - Salt Lake International Airport. Inquiry Number: 7509558.2s. November 30, 2023

UDEQ (Utah Department of Environmental Quality). 2024. Utah Environmental Interactive Map. Accessed March 2024. [Available at: https://enviro.deq.utah.gov/](https://enviro.deq.utah.gov/).

ECHO = Enforcement and Compliance History Online

FINDS = Facility Index System

NPDES = National Pollutant Discharge Elimination System

SPILLS = Spill Incident Database Search

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3.5.4 Mitigation Measures

Prior to construction, a Contaminated Soil and Groundwater Management Plan will be prepared and will include appropriate BMPs. Additionally, as a BMP, a Health and Safety Plan will be in place and followed throughout the Project.

As a BMP, Special Provisions would be added to the construction contract to inform the contractor of the potential for anticipated and unanticipated hazardous materials, including PFAS.

3.6 Historic, Architectural, Archeological, and Cultural Resources

3.6.1 Regulatory Setting

Section 106 of the NHPA and its implementing regulations 36 CFR Part 800 *Protection of Historic Properties* requires federal agencies to consider the effects of their actions on historic properties included or eligible for inclusion in the National Register of Historic Places (NRHP) in consultation with the Utah State Historic Preservation Office (SHPO). **Appendix D, Cultural Resources Assessment**, contains information related to cultural resources and consultation between the FAA and the SHPO.

This EA defines historic properties as “...any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the NRHP maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization and that meet the NRHP criteria.”²⁰

Area of Potential Effect

The Area of Potential Effect (APE) is the area within which an undertaking may affect, directly or indirectly, a historic property or cultural resource. The APE encompasses areas proposed for disturbance and areas with the potential for noise and/or visual effects, including the view shed. The APE is in Township 1 North, Range 1 West, Sections 31–33 and Township 1 South, Range 1 West, Sections 4 and 5, Salt Lake Principal Meridian Utah. See Figure 3-2.

3.6.2 Affected Environment

The project area is in the north-central part of the broad Salt Lake Valley. Most of the area comprises the abandoned Wingpointe Golf Course, which opened in 1990. Additional portions of the project area include lands paved for airport operations and lands graded and filled to support airport infrastructure. The only portion of the project area where ground surfaces remain largely undisturbed since the historic period is located in the eastern portion of the area between the Surplus Canal and the golf course. The native loams in the area formed from alluvial processes associated with the Great Salt Lake.

²⁰ 36 CFR Part 800.16(l)(1)

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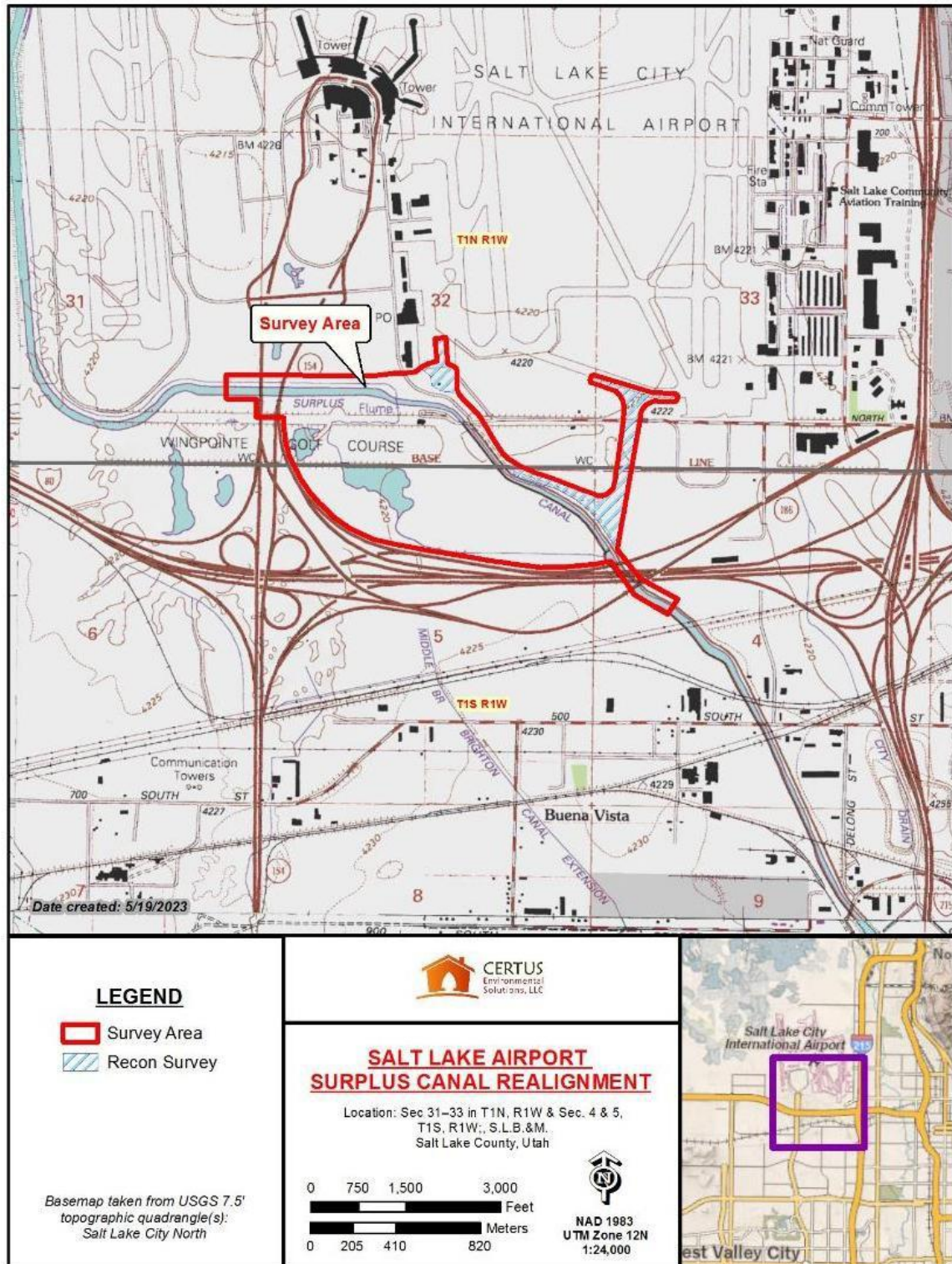


Figure 3-2. Proposed Area of Potential Effects and Study Area

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3.6.3 Environmental Consequences

Methodology

A combination of intensive-level and reconnaissance-level survey methods was utilized to identify cultural resources that could be affected by the Proposed Action. Sheri Murray Ellis of Certus inventoried most of the survey area at an intensive level by walking parallel transects spaced no more than 15 meters (50 feet) apart. Select portions exhibiting extensive modern development with pavement used for Airport purposes were inventoried at a reconnaissance-level from the nearest public access point in combination with aerial imagery. Navigation within the survey area was accomplished using aerial photographs and a handheld global positioning system (GPS) unit capable of decimeter accuracy.

Certus also applied the Utah Professional Archaeological Council linear sites guidelines to the linear sites in the survey area. These guidelines have been adopted by the Utah SHPO as standard site documentation and evaluation procedures.

Resources considered potentially eligible for the NRHP were also assessed for integrity of location, design, setting, materials, workmanship, feeling, and association. To be eligible for listing on the NRHP, the resource must possess integrity of those elements directly related to the criterion or criteria under which it would be determined eligible.

Significance Thresholds

The FAA has not established a significance threshold for Historical, Architectural, Archeological, and Cultural Resources. Appendix A of FAA Order 1050.1G provides a factor to consider when evaluating potential impacts. The factor states, *“The action 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).”*

Determination of Eligibility

The following sections identify the historical, architectural, archaeological, and cultural resources located within the APE. For the purposes of discussion, the term “architectural resources” refers to standing buildings, sites, structures, objects, or districts. “Archaeological resource” refers to prehistoric and historical subsurface sites.

Historical / Architectural Resources

Certus identified four cultural resource sites and two isolated occurrences in the APE (see Table 3-5 below). All but one of the sites had been documented previously, at least in part. The segment of the Middle Branch Brighton Canal (42SL303) previously reported in the survey area was destroyed by construction of the adjacent interchange and is not discussed further.

Table 3-10. Summary of Sites Identified in the Survey Area

Site No.	Description
42SL302	Jordan Surplus Canal
42SL306	Salt Lake, Garfield and Western Railroad Bridge Remains
42SL332	North Point Consolidated Canal
42SL1031	Historical Commercial Farm Complex

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These sites are summarized in Table 3-8 along with their recommendations of NRHP eligibility. The Cultural Resource Assessment recommends the Jordan Surplus Canal and North Point Consolidated Canal as eligible for listing on the NRHP. The FAA, USACE and Utah SHPO have recently determined that both canals are eligible for listing on the NRHP. However, the canal portions within the project area are non-contributing to the overall eligibility. Documentation for this determination is included in Appendix D.

Table 3-11. Summary of Sites and NRHP Eligibility Recommendations

Site Number	Description	Eligibility Recommendation
42SL302	Jordan Surplus Canal	Portion on Airport Property is Ineligible ^{21,22}
42SL306	Salt Lake, Garfield and Western RR bridge remains	Ineligible
42SL332	North Point Consolidated Canal	Portion on Airport Property is Ineligible
42SL1031	Historical commercial farm complex	Ineligible

Tribal consultation was conducted with Indian tribes that may be affected by the Proposed Action, including Eastern Shoshone Tribe of the Wind River Reservation, Northwestern Band of the Shoshone Nation, Shoshone-Bannock Tribes of the Fort Hall Reservation, Skull Valley Band of Goshute Indians, and Ute Indian Tribe. Appendix D contains the coordination letters that were sent. No responses were received from the Tribes regarding the Proposed Action.

3.6.4 Reasonably Foreseeable Impact Analysis

SEAT Alternative 1 and Parking Alternative 2. The FAA has determined that a Finding of No Adverse Effect is appropriate for this project and the SHPO concurred in a letter dated June 12, 2024. Therefore, the Preferred Alternative would not result in any reasonably foreseeable impact on historic, architectural, archeological, and cultural resources.

No Action Alternative. The No Action Alternative would not involve the development and construction of the Proposed Project and would not result in any impact on historic, architectural, archeological, and cultural resources.

3.6.5 Mitigation Measures

If previously unidentified prehistoric or historic archaeological resources are uncovered during construction activities, work will be discontinued within a 100-foot radius of the find. SLCIA will secure services of a qualified archaeologist to evaluate the resource, and the FAA will be notified for coordination with the SHPO. Work will not resume until authorized by the FAA.

²¹ Krull, Kandice (Environmental Protection Specialist, Federal Aviation Authority). 2023. Documentation of Section 106 Finding of No Adverse Effect (36 CFR Section 880.5(b)) for the Salt Lake City International Airport Drilling Project. Letter to Mr. Chris Merritt, Utah State Historic Preservation Office; June 29, 2023.

²² McGrath, Ryan (Archaeologist, Utah State Historic Preservation Office). 2023. Regarding: Salt Lake City International Airport Soil Boring Project. Letter to : Kandice Krull, FAA; June 29, 2023.

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3.7 Land Use

3.7.1 Regulatory Setting

Various statutes and regulations relevant to land use include State and local land use plans, comprehensive plans, and zoning laws.

3.7.2 Affected Environment

SLCIA is within Salt Lake County, zoned as a special purpose district (specifically an “airport district”) under the Salt Lake City municipal code title 21a – Zoning. Salt Lake City code 21a.32.060 defines the purpose of the airport district code is to *“provide a suitable environment for the Salt Lake City international airport and private uses that function in support of the airport facility. This district is appropriate in areas of the city where the applicable master plans support this type of land use.”*

Salt Lake City also delineates an Airport Flight Path Protection (AFPP) overlay district under Salt Lake City code 21a.34.04036 to protect land uses below aircraft navigation routes. The AFPP overlay district rules declare that the creation or establishment of an airport hazard is a public nuisance and an injury to the region served by SLCIA; that it is necessary in the interest of the public health, public safety, and general welfare that the creation or establishment of airport hazards be prevented; and that the prevention of these hazards should be accomplished, to the extent legally possible, by the exercise of the police power without compensation. Land uses within the immediate vicinity of SLCIA include open space, commercial, mixed use transit station, single family and multifamily residential, and agricultural. Less than 1 mile east of SLCIA is mainly residential, along with various commercial developments. Immediately south of SLCIA is open space, and west of the Airport is the International Center as well as agricultural land. North of the Airport is Farmington Bay, a section of the Great Salt Lake, including wetlands and open salt water.

3.7.3 Environmental Consequences

Methodology

The Proposed Project was reviewed to determine consistency with Salt Lake County and Salt Lake City zoning. The potential for the alternative to create habitat or increase wildlife attractants was considered. Additionally, potential impacts in other resource categories were analyzed as they relate to land use plans, and socioeconomics were identified and evaluated.

Significance Thresholds

The FAA has not established a threshold of significance for land use. Appendix A of FAA Order 1050.1G provides factors to consider when evaluating potential impacts. The factors state *“There are no specific independent factors to consider for Land Use. The determination that significant impacts exist in the Land Use impact category is normally dependent on the significance of other impacts.”*

Reasonably Foreseeable Impact Analysis

SEAT Alternative 1 and Parking Alternative 2. The Proposed Action would occur entirely on Airport property and would be consistent with the Airport District and AFPP overlay district. Due to proximity to an airfield, the proposed improvements are subject to wildlife hazard management actions to ensure the safety of aviation operations. Additionally, the placement and type of stormwater management is

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restricted due to wildlife hazard considerations. Steps will be taken to reduce the attractiveness of the canal in coordination with the USDA wildlife biologist. All stormwater drainage features will drain within 48 hours.

No Action Alternative. The No Action Alternative would not involve changes to SLCIA and would not result in any impact to land use or zoning.

3.7.4 Mitigation Measures

SLCIA, in coordination with the FAA, has shown appropriate action has been or will be taken, to the extent reasonable, to restrict the use of land next to or near SLCIA to uses that are compatible with normal airport operations pursuant to 49 U.S.C. §47107(a)(10). Wildlife mitigation measures as described in the Salt Lake City International Airport Wildlife Hazard Management Plan will be utilized to reduce the number of birds using land and water within the project area.

3.8 Natural Resources and Energy Supply

3.8.1 Regulatory Setting

FAA Order 1050.1G requires the consideration of energy requirements, natural depletable resource requirements, and the conservation potential of alternatives and mitigation measures in NEPA documents.

3.8.2 Affected Environment

Water is the primary natural resource used at SLCIA on a daily basis. Asphalt, aggregate, cement, steel, wood, and other natural resources have also been used in various construction projects at SLCIA. Other than water, none of the natural resources that the airport uses, or has used, are in short or rare supply.

Rocky Mountain Power supplies electricity, Enbridge Gas provides natural gas services, and the Salt Lake City Department of Public Utilities provides water and sewer service to SLCIA. Energy use at SLCIA is primarily in the form of electricity required for the operation of airport-related facilities, electric ground support equipment, and the Airport's electric fleet. Fuel is required for aircraft, and Airport maintenance vehicles/equipment.

3.8.3 Environmental Consequences

Methodology

Potential impacts to natural resources and energy supply were evaluated considering impacts to utilities servicing the area; capacity of water resources to support projects; fuel consumption; impacts to consumable materials, especially scarce or unusual materials; and state or local regulations.

Significance Thresholds

The FAA has not established a threshold of significance for natural resources and energy supply. However, the FAA considers the potential of the project to cause demand that exceeds available or future supplies of natural resources or energy supply when evaluating the context and intensity of potential impacts.²³

²³ FAA (Federal Aviation Administration). 2015. Order 1050.1G, Appendix A, p. A-4, June 30, 2025.

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Reasonably Foreseeable Impact Analysis

The Proposed Action would require the consumption of natural resources and energy supply during both construction and operation. Energy in the form of electricity, gasoline, and diesel fuel would be consumed during construction of the Proposed Action. Once operational, the Proposed Action would require additional energy use to provide water, heating, air conditioning, lighting, electricity, and telecommunications to the proposed employee screening facility. The parking lot and bus facility would also require electricity and telecommunications for lighting, charging, and security. The SEAT would require airfield lighting. The proposed southern infrastructure improvements have nearby existing utility connections and would require underground utility work to connect to existing utilities.

SEAT Alternative 1 and Parking Alternative 2. There is sufficient energy and resources to supply utilities to the new improvements during construction and future operations. Specifically, utility power for the Airport is transmitted and delivered by Rocky Mountain Power networks. The anticipated increase in additional resources and energy consumption required by the Proposed Project does not represent a significant additional demand on local utilities.

Based on the available infrastructure providing utility services in the region and the relatively minor project demands compared to the available resources, the Proposed Project would not result in a substantial demand for natural resources in short supply. The Proposed Project would not involve the use of any unusual or scarce resources nor cause a demand for the use of any unusual or scarce resources that are in short supply.

As the Proposed Action would not result in use of natural resources or energy in excess of available supplies, implementation of the Proposed Action would not result in a reasonably foreseeable significant impact on natural resources or energy.

No Action Alternative. Under the No Action Alternative, there would be no construction or change to activities. Delay and fuel burn would increase without the SEAT, which would result in a minor increase in use of natural resources. Thus, there would be no reasonably foreseeable significant impact to natural resources or energy supply as a result of the No Action Alternative.

3.8.4 Mitigation Measures

Mitigation measures are not required for natural resources or energy supply.

3.9 Socioeconomic Impacts and Children's Environmental Health and Safety Risks

3.9.1 Regulatory Setting

Socioeconomic Environment. 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 alternative(s).

Children's Environmental Health and Safety Risks. Pursuant to EO 13045, Protection of Children from Environmental Health Risks and Safety Risks, agencies are encouraged to identify potential impacts and ensure their policies, programs, activities, and standards address disproportionate risks to children.

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3.9.2 Affected Environment

SLCIA is entirely within Census Tract 9800, Block Group 1, which has a population of zero. Therefore, Salt Lake City, Utah was used to describe the socioeconomic characteristics in the airport area compared to Salt Lake County, Utah. The Salt Lake City and Salt Lake and Davis County areas are shown in Figure 3-3. See Table 3-9 for the comparison characteristics.

Table 3-12. Socioeconomic Characteristics²⁴

Characteristic	Salt Lake City, Utah	Salt Lake County	Davis County
Total Population	209,593	1,185,813	373,207
Percent below 18 Years of Age	18%	24.7%	30.8%
Percent in Civilian Labor Force (above 16 Years of Age)	73.0%	71.9%	69.5%
Total Households	85,435	407,673	118,498

For Children’s Environmental Health and Safety Risks, the closest school to SLCIA is Meadowlark Elementary, approximately 1,500 feet east of the Airport and roughly 6,000 feet to the northeast of the eastern border of the Project Area. The school serves students in kindergarten through sixth grade. The closest childcare center to SLCIA is the Sunshine House, located approximately 1,200 feet east of the Airport and roughly 7,000 feet northeast of the Project Area. The closest child-friendly recreational area is Westpointe Park, a city park located about 1,700 feet east of the Airport and roughly 9,500 feet to the northeast of the Project Area. The closest children’s health clinic is the Children’s Center, a children’s mental health clinic located approximately over 3 miles to the east-northeast from the Airport and Project Area.

3.9.3 Environmental Consequences

Methodology

The potential for the Proposed Action to result in the relocation of residences or businesses, division of established communities, disruption of orderly planned development, or changes in employment within the SLCIA was evaluated.

²⁴ US Census Bureau, 2024. QuickFacts Salt Lake City and Salt Lake County, Utah.
<https://www.census.gov/quickfacts/fact/table/saltlakecountyutah,saltlakecitycityutah/PST045223> Accessed October 23, 2024.

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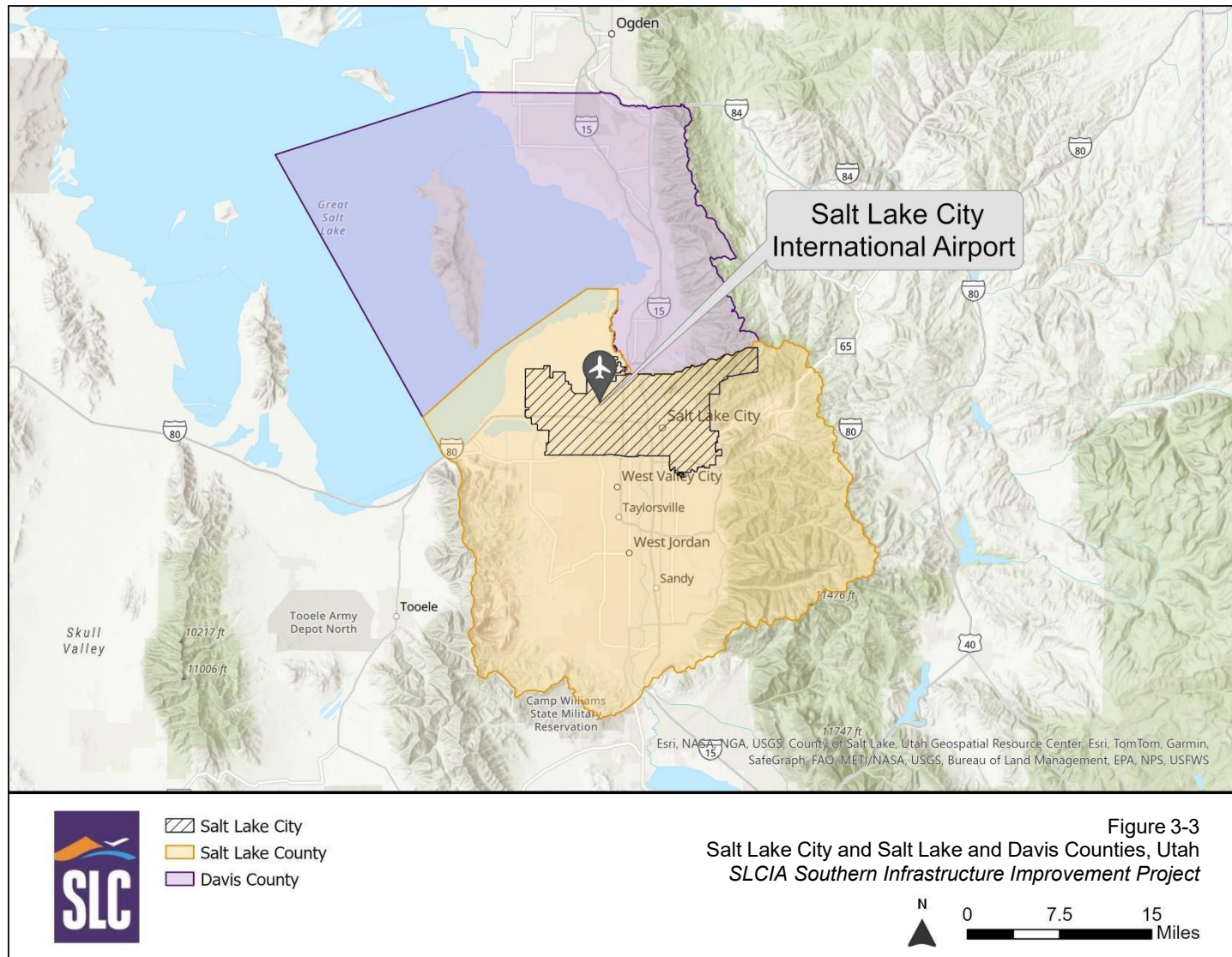


Figure 3-3. Salt Lake City, Salt Lake County and Davis County, Utah

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Significance Thresholds

The FAA has not established a threshold of significance for socioeconomics or children's environmental health and safety risks. Appendix A of FAA Order 1050.1G identifies factors to consider when evaluating impacts. For Socioeconomics, factors to consider include if the action would have the potential to *"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."* For Children's Environmental Health and Safety Risks, the factor includes when *"The action would have the potential to lead to a disproportionate health or safety risk to children."*

Reasonably Foreseeable Impact Analysis

SEAT Alternative 1 and Parking Alternative 2. No permanent, adverse economic impacts, which are associated with disruption of an established community and relocation of people or business, would occur. Growth in airport passengers and operations would occur regardless of the Proposed Action. Any increases in traffic would not be associated with the project, and regional access to the Airport would not be affected because of the project. Construction of the employee parking area would result in additional airport customer parking.

The Proposed Action would not result in noise impacts beyond any temporary construction noise impacts in the immediate project vicinity. The Proposed Action is located entirely on SLCIA property and would not require the acquisition or displacement of residents or businesses, or division of communities.

There are no residential land uses, daycare facilities, preschools, or schools in the project vicinity. The Proposed Project does not have the potential to lead to a disproportionate health or safety risk to children.

Implementation of the Proposed Action would not result in a reasonably foreseeable significant impact on socioeconomic resources or children's health and safety.

No Action Alternative. Under the No Action Alternative, construction would not occur and therefore there would be no impacts to surrounding communities, shift of any business or economic activity, or population movement or shifts in a community. However, there would be no beneficial temporary construction employment or expenditure in the local community.

There would be no disproportionate health or safety risk to children.

3.9.4 Mitigation Measures

The Proposed Project would have no adverse impacts and mitigation would not be required.

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3.10 Visual Effects

3.10.1 Regulatory Setting

Although there are no special purpose laws or requirements for visual effects or light emissions, the analysis for proposed projects must consider other special purpose laws and requirements that may be relevant. Regulations that may provide protection to visual resources include Section 106 of the NHPA for impacts to historic and cultural resources, the ESA for impacts to light-sensitive species, and applicable state and local regulations, policies, and zoning.

3.10.2 Affected Environment

SLCIA is not located in a fully urbanized area. The Airport is surrounded by wetland to the immediate north and west. To the south of the Airport and Project Area are transit uses and the existing highway infrastructure of I-80. To the east of the Airport and northeast of the Project Area, residential land uses exist with direct line of sight to the Airport. The SLCIA airport lighting features illuminate the airfield, automobile parking areas, access roadways, buildings, and apron areas. Vegetation, including shrubs, helps reduce the light emissions and visual effects from SLCIA.

3.10.3 Environmental Consequences

Methodology

The potential light emissions and visual impacts of the Proposed Action were determined by evaluating the existing land uses in the Project vicinity to determine current airport light sources (i.e., parking lots, roadways, etc.), and assess future light sources from the Proposed Project.

Significance Thresholds

The FAA has not established a threshold of significance for visual effects (Light Emissions; or Visual Resources or Visual Character). The factors to consider noted in Appendix A of FAA Order 1050.1G, include the degree to which the Proposed Project would have the potential to:

- Create significant annoyance or inference with normal activities; and affect the visual character of an area due to light emissions (i.e., importance, uniqueness, and aesthetic value).
- Affect the nature of the visual character of an area (importance, uniqueness, and aesthetic value); contrast with visual resources or character in the Study Area; and block or obstruct the views of visual resources, including whether the resources would still be viewable from other locations.

Reasonably Foreseeable Impact Analysis

SEAT Alternative 1 and Parking Alternative 2. The Proposed Project would require new lighting; however, light emissions in the area are expected to remain similar to current conditions. The Proposed Project would occur on Airport property and is consistent with current Airport light emissions and uses.

New light sources and construction lighting would be designed to direct light sources downward to prevent unnecessary light spillage at nighttime, would comply with FAA, Airport, and local standards,

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and would be consistent with the existing environment. Therefore, there would be no reasonably foreseeable light emission impacts associated with the Proposed Project.

The Proposed Project would be visually consistent and compatible with the SLCIA environment and with the land uses in the immediate vicinity. Development at the Airport would not block existing scenic views nor have demonstrable negative aesthetic effects.

The Proposed Project would not represent a substantial change to views from public vantage points. The overall change in views of the existing developed areas of the Airport from off-site locations would be comparable to the existing views of the Airport in its current context. Therefore, the impact of implementing the Proposed Action on visual resources is not significant.

No Action Alternative. Under the No Action Alternative, no construction would occur and no new light sources would be required and there would be no impact from light emissions or to the visual character.

3.10.4 Avoidance, Minimization, and Mitigation Measures

There are no mitigation measures required for visual effects or lighting.

3.11 Water Resources

3.11.1 Regulatory Setting

Applicable statutes for surface water at the project location include the following:

- Clean Water Act (33 U.S.C. p. 1251-1387)
- Fish and Wildlife Coordination Act (16 U.S.C. p. 661-667d)
- Rivers and Harbors Act (33 U.S.C. p. 401 and 403)

Applicable statutes and EOs for Floodplains include the following:

- EO 11988: Directs federal agencies to “take action to reduce the risk of flood loss, to minimize the impact of floods on human safety, health, and welfare, and to restore and preserve the natural and beneficial values served by floodplains.”

Statutes relevant to groundwater include the following:

- Safe Drinking Water Act (42 U.S.C. §§ 300(f)-300j-26)

Statutes relevant to wetlands include the following:

- EO 11990, *Protection of Wetlands*.
- Clean Water Act (33 U.S.C. p. 1251-1387)

For purposes of the Project and this EA, water quality standards include adherence to provisions of the federal CWA. The federal CWA promulgates the establishment of water quality standards, the control of discharges, the development of waste treatment management plans and practices, and the prevention or minimization of the loss of wetlands.

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3.11.2 Affected Environment

According to the FAA's Desk Reference, water resources are surface waters and groundwater that are important in providing drinking water and in supporting recreation, transportation and commerce, industry, agriculture, and aquatic ecosystems. The following sections describe water resources within SLCIA and the Project Area. Water resources in relation to the Project Area are discussed in detail in an assessment included in **Appendix E, Water Resources Technical Memorandum**.

Surface Water

Surface water within the Study Area is present in the wetland portions of the Project, the existing canals, and man-made ponds. The Surplus Canal diverts water from the Jordan River and flows through the Study Area before it continues north of the airport and discharges into Farmington Bay. The North Point Canal Conveyance System is a controlled diversion of the Surplus Canal, which flows through the southern portion of the Study Area. This diversion was made to create ponds for the now abandoned golf course. After leaving the Project Area it is carried above the Surplus Canal and then flows in a concrete lined canal, continuing to the north to discharge into wetlands abutting the Great Salt Lake. A storm drain distribution line that comes from the northeast Project Area connects into the Surplus Canal. The Great Salt Lake is located about 10 miles to the west of the Project.

The expected pollutants for SLCIA runoff are sediment, nutrients (e.g., fertilizers), oxygen-demanding substances (e.g., decaying vegetation), bacteria, heavy metals, synthetic organics, pesticides, and other substances. It is anticipated that rainfall runoff on runways, taxiways, and industrial and commercial sites carry multiple pollutants. These pollutants dissolve and are carried by gravity flow through the network of storm drain systems to the Surplus Canal.

Floodplains

Floodplain data was retrieved from the Federal Emergency Management Agency (FEMA) Flood Map Service Center for the Project Area. As illustrated on FEMA Flood Insurance Rate Map (FIRM) Panel 49035C0140E (effective September 21, 2001) and FIRM Panel 49035C0139E (effective September 21, 2001) areas along Surplus Canal are shown as a levee with the canal labeled as a Flood Zone A, which is defined as a special flood hazard area inundated by 100-year flood with no base flood elevations determined. All other portions of the Study Area are located within Flood Zone X, which is defined as areas determined to be outside the 500-year floodplain.

USACE and Salt Lake County Flood Control oversee the levee along the Surplus Canal. The Surplus Canal Deficiency Rehabilitation Project is working to bring violations along the levee system into compliance with USACE. Several violations will be corrected with the completion of the Proposed Action.

Groundwater

The SLCIA property intersects two hydrologic units. The western portion of the Airport property is within the Crystal Creek watershed (Hydrologic Unit Code [HUC] 12 ID: 160202040404) and the eastern portion of Airport property is within the Jordan River watershed (HUC 12 ID: 160202040405). Depths to groundwater range approximately 1 to 8 feet below ground surface (bgs). Flow rate is expected to be low due to the relatively flat topography. Recharge of the groundwater is expected at the Project site since most of the land surface within the Project Area is pervious material. There are no active water production wells on the Proposed Project Area.

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Wetlands

Wetlands are regulated under the CWA. The USACE and USEPA use the following for the regulation of wetlands: “Wetlands are areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.”

EO 11990, *Protection of Wetlands*, requires federal agencies to avoid, to the extent possible, adverse impacts to wetlands unless no practicable alternative exists. The Proposed Action must include all possible practicable measures to minimize the impact.

A total of 280 acres were surveyed as part of the aquatic resource delineation. During the delineation, 17 aquatic resources were identified, for a total of 24.19 acres of wetlands, 21.77 acres of excavated and natural ponds, 10,634 linear feet of the canals, and 3.09 acres of upland features of note.

The area delineated was previously the Wingpointe Golf Course. The golf course has been closed since 2015 and is currently overgrown with grasses and noxious weeds. The Surplus Canal and North Point Canal Conveyance System, both manmade canals, run through the project area, which discharge into the wetlands surrounding the Great Salt Lake and Farmington Bay. Both the canals and previous golf course design create a varied landscape, with many hills, depressions, and man-made ponds which used to be heavily irrigated.

3.11.3 Environmental Consequences

Methodology

Surface Water

Federal and state regulations for water resources were reviewed for the analysis of potential water quality impacts, including the federal CWA, UDWQ, and requirements associated with the Airport’s CWA Utah Pollutant Discharge Elimination System permit and Stormwater Pollution Prevention Plan (SWPPP). The applicable statutes establish water quality standards, control discharges and pollution sources, protect drinking water systems, and protect aquifers and other sensitive ecological areas. Impacts to surface waters are largely due to stormwater runoff associated with impervious surfaces and the capacity of the storm drain system. The Proposed Action, Alternatives and the No Action Alternative were reviewed regarding their potential to increase impervious surfaces, alter drainage areas, and impact stormwater runoff.

Floodplains

Impacts to the floodplain at airports are associated with construction and development within the 100-year floodplain and within areas prone to flooding. The Proposed Action, Alternatives and the No Action Alternative were reviewed regarding their proximity to the 100-year floodplain, the relative 100-year floodplain elevation in these areas, and the likelihood for construction to adversely impact floodplain values.

Groundwater

Impacts to groundwater at airports are largely associated with fuel spills/leaks and the potential vertical migration of aircraft deicing fluids. The Proposed Action, Alternatives and the No Action Alternative were reviewed regarding the potential to increase the likelihood of fuel spills/leaks and the potential to impact known hazardous material, PFAS, and/or soil contamination sites, during construction.

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Wetlands

The Proposed Action, Alternatives, and the No Action Alternative were compared to delineated wetlands to determine direct and indirect impact, if any, to these wetlands. Any wetland impacts identified would be classified to determine whether permitting would be required.

Significance Thresholds

Surface Water

A significant impact would occur, if an action would *“exceed water quality standards established by federal, state, local, and tribal regulatory agencies; or contaminate public drinking water supply such that public health may be adversely affected.”*

Floodplains

In accordance with FAA Order 1050.1G Appendix A, Floodplain impacts would be significant if: *“The action would cause notable adverse impacts on natural and beneficial floodplain values.”* Natural and beneficial floodplain values *“include but are not limited to: natural moderation of floods, water quality maintenance, groundwater recharge, fish, wildlife, plants, open space, natural beauty, scientific study, outdoor recreation, agriculture, aquaculture, and forestry.”*

Groundwater

A significant impact would occur, if an action would *“exceed groundwater quality standards established by federal, state, local, and tribal regulatory agencies; or contaminate an aquifer used for public water supply such that public health may be adversely affected.”*

Wetlands

As stated in FAA Order 1050.1G, a significant wetland impact would occur when the action would:

1. Adversely affect a wetland’s function to protect the quality or quantity of municipal water supplies, including surface waters and sole source and other aquifers
2. Substantially alter the hydrology needed to sustain the affected wetland system’s values and functions or those of a wetland to which it is connected
3. Substantially reduce the affected wetland’s ability to retain floodwaters or storm runoff, thereby threatening public health, safety or welfare (the term welfare includes cultural, recreational, and scientific resources or property important to the public)
4. Adversely affect the maintenance of natural systems supporting wildlife and fish habitat or economically important timber, food, or fiber resources of the affected or surrounding wetlands
5. Promote development of secondary activities or services that would cause the circumstances listed above to occur
6. Be inconsistent with applicable state wetland strategies.

Other agencies having expertise in wetland impacts may provide information and expertise for the FAA to use when it determines whether unavoidable wetland impacts are significant. As a result, appropriate agencies, and state and local natural resource or wildlife agencies should be coordinated with in the early stages of project planning. If wetland impact occurs on tribal lands, consultation with tribal natural resource and wildlife representatives should occur before making a significance determination.

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Reasonably Foreseeable Impact Analysis

Surface Water

SEAT Alternative 1 and Parking Alternative 2. Construction activities for the Proposed Project Area Alternatives would include ground disturbance, utility trenching, and the use of construction equipment to relocate the Surplus Canal. Surface water within the Project Area is present in the wetland portions of the project, the man-made ponds, and the existing canals. A storm drain distribution line that comes from the northeast Project Area connects into the North Point Canal. Extension of the storm drain distribution line would connect to the canal's new location.

Activities associated with SEAT Alternative 1 would impact 6,163 linear feet of the Surplus Canal and 2.79 acres of ponds (See Figure 3-4). Activities associated with Parking Alternative 2 would impact 17.07 acres of North Point Canal Pondered Area, 2,874 linear feet of North Point Canal concrete lined section, and 1.61 acres of ponds.

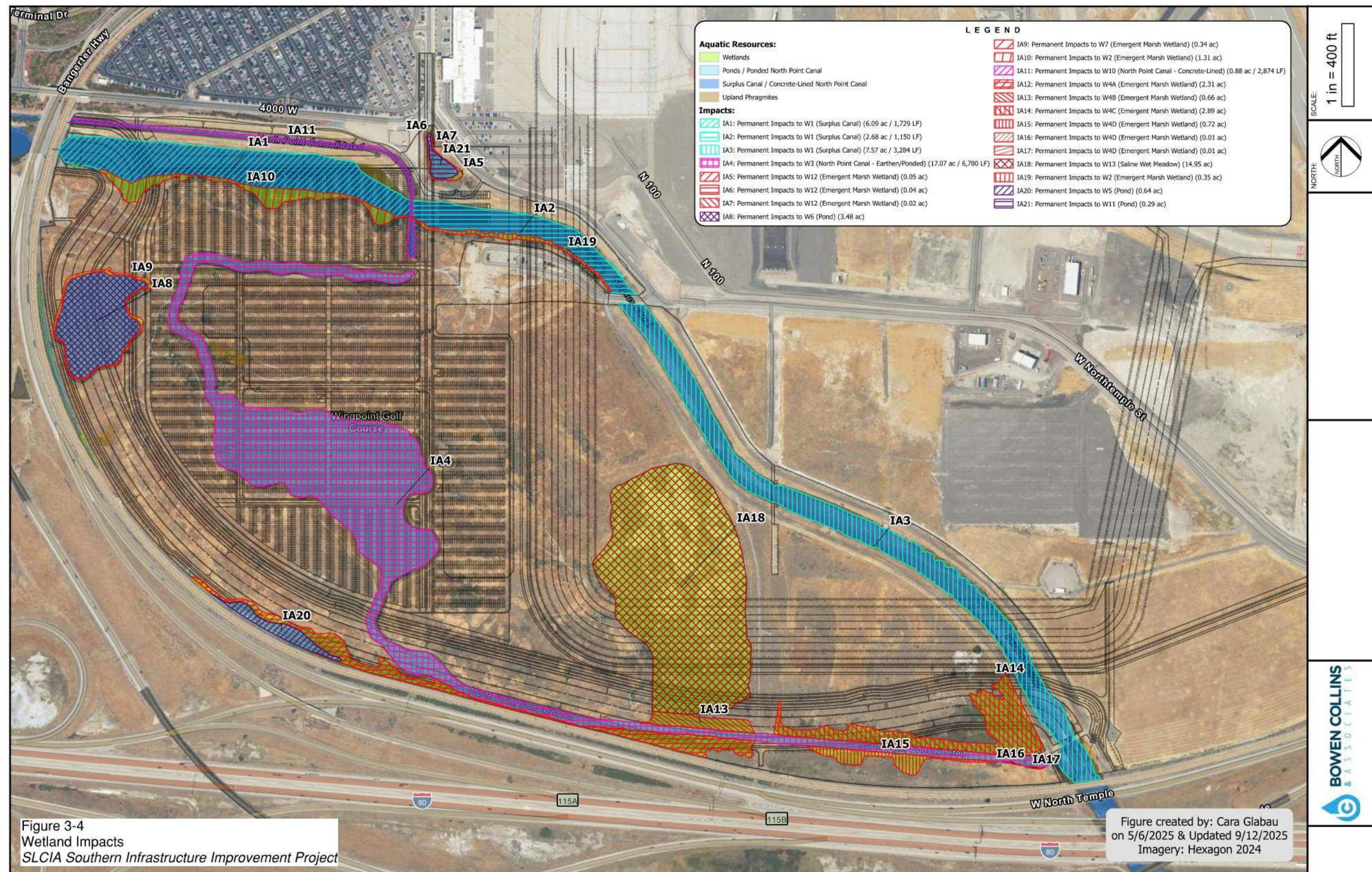
Mitigation measures in the form of Best Management Practices (BMPs) will be implemented to minimize the impacts on the portions of the canals that will not be included in the Project including installation of sediment fencing, installation of any needed inlet protection measures and check dams, and use of designated construction entrances. Additionally, all activities will be done in compliance with and in coordination with the USACE Section 404 Permit.

In compliance with UPDES Permit No. UT0024988, stormwater run-off would continue to be managed through the storm drain system and stormwater management would be designed to control runoff associated with the Proposed Action. The SLCIA SWPPP would be updated to reflect the Proposed Action. Any minor alterations in the drainage pattern would not substantially alter the overall drainage pattern of the Airport, and stormwater would continue to be managed within the Airport's storm drainage system.

If uncontrolled, construction activities have the potential to cause erosion and sedimentation that can impact water quality. Short-term construction impacts would be minimized by strict adherence to erosion and sediment control plans. It is expected that runoff from construction sites would be minimized by BMPs that would limit sediment transport. Implementation of cumulative projects during the same construction period could result in localized, temporary impacts to water quality. These impacts would result from land clearing and temporary construction activities and primarily consist of potential increases in sediment runoff and transport, siltation, and changes in storage volumes, flow velocities and pollutant levels in receiving water bodies. All off-airport construction activities should adhere to the design standards and guidelines contained in state and local specifications. These standards would help minimize any cumulative water quality impacts. As the Proposed Action would not result in the loss of but relocation of the Surplus Canal which would temporarily impact surface water, implementation of the Proposed Action would not result in a reasonably foreseeable significant impact on surface water as all direct impacts and construction impacts would be temporary and mitigated. The contractor would be required to comply with a SWPPP under the UDWQ General Construction Permit.

No Action Alternative. Under the No Action Alternative, construction would not occur and therefore there would be no impacts to surface water.

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Floodplains

SEAT Alternative 1 and Parking Alternative 2.

The Project Area alternatives require relocating the Surplus Canal during construction, resulting in a direct impact to the canal's associated floodplain, which is designated as a Flood Zone A. Construction activities will require the canal to be closed for a short period of time while being relocated. Operation of the canal will resume in the new alignment within the airport property, with similar flow, elevation, no impact to water quality, and without increasing any flood hazards.

According to EO 11988, *Floodplain Management*, since the relocation of the floodplain is unavoidable, the Project must include measures to minimize adverse impacts and restore the floodplain. Mitigation steps will include following the community's FEMA-approved floodplain management regulations, coordinating with Salt Lake County Flood Control Agency and USACE, constructing in compliance with and in coordination with the USACE Section 404 Permit, implementing erosion control measures, and minimizing the time the canal is shut down.

As the Proposed Action would not result in the loss of the floodplain and the correction of several identified violations associated with the deficiencies in the canal, implementation of the Proposed Action would not result in reasonably foreseeable significant impacts on the floodplain as all direct and construction impacts would be temporary and mitigated.

No Action Alternative. Under the No Action Alternative, construction would not occur and therefore there would be no impacts to identified Floodplains. However, the identified violations associated with the deficiencies in the Canal would not be resolved under the No Action Alternative and would need to be addressed by Salt Lake County Flood Control Agency separately. Ponds within the project area would remain in place, creating standing water that attracts birds and other wildlife. This increases the potential for wildlife-aircraft strike hazards along adjacent taxiways and runways.

Groundwater

SEAT Alternative 1 and Parking Alternative 2.

Construction activities for the Proposed Project Area Alternatives would include ground disturbance, utility trenching, and the use of construction equipment that could increase the potential for sediments and pollutants to be present in the stormwater runoff. Additionally, the implementation of the alternatives would increase impervious surfaces with the development of the paved parking areas and the SEAT. Groundwater depth is noted to be between 1 and 8 feet bgs. Based on the depth to groundwater, it is possible that excavations as part of the Proposed Project would intercept groundwater.

During construction, certain components associated with the Proposed Action, particularly subsurface utilities improvements, may require temporary dewatering during construction. Such dewatering would be relatively short-term in duration and the groundwater impacts, if any, would be localized in nature. Further, groundwater does not support beneficial uses (i.e., it is not used for drinking, irrigation, or industrial supply purposes) and no groundwater wells are located in the Project Area. A construction dewatering permit with the DWQ would be obtained prior to any construction activities. In accordance with the UDWQ Construction General Permit and Dewatering Permit along with the SWPPP, provisions will be included for the protection of groundwater and management of construction related dewatering activities. The contractor will implement BMPs to avoid spills, leaks, and other harmful materials from seeping into the ground and impacting groundwater.

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The Proposed Action would not result in the creation of any new wells supplying water to facilities or cause any reduction in groundwater levels that could impact other groundwater users in surrounding locations. Therefore, implementation of the Proposed Action would not result in a reasonably foreseeable significant impact on groundwater resources.

No Action Alternative. Under the No Action Alternative, construction would not occur, and therefore there would be no impacts to groundwater.

Wetlands

SEAT Alternative 1 and Parking Alternative 2.

Construction and implementation of the SEAT Alternative 1, including relocation of the Surplus Canal, would impact a total of 23.36 acres of wetlands. Construction and implementation of the Parking Alternative 2, including relocation of the North Point Canal, would impact 0.28 acres of wetlands. Most of the impacts to the wetlands would be the result of grading, excavation, and fill necessary to relocate the Surplus Canal, construct the SEAT and construct and pave the parking areas. Additionally, by relocating and altering the diversion gates for the Surplus Canal and North Point Canal, the man-made ponds would no longer have water supplied from the canals resulting in the elimination of the ponds. The vegetation in wetlands and vegetated corridors located adjacent to the Proposed Action area may be temporarily disturbed due to the presence of construction equipment. No grading would occur in these areas.

During construction, the contractor will implement an erosion control plan and utilize BMPs to reduce impacts to downstream waters and wetlands. Additionally, construction will be completed in compliance with and in coordination with the USACE Section 404 Permit.

Due to the direct impact and removal of wetlands for the Proposed Action, the SLCIA will purchase wetland mitigation bank credits to meet the wetland mitigation requirement.

The Proposed Action would result in the direct impact and removal of wetlands. The SEAT is fixed by function and cannot be relocated to avoid wetland impacts. The employee parking lot is not fixed by function. Therefore, an upland alternative was considered but ultimately eliminated because it did not meet the Purpose and Need. The implementation of the Proposed Action would not result in a reasonably foreseeable significant impact on wetlands as all impacts would be mitigated.

No Action Alternative. Under the No Action Alternative, construction would not occur and therefore there would be no impacts to wetlands.

3.11.4 Mitigation Measures and Permitting

The SLCDCA, as the owner and operator of SLCIA, is subject to UPDES requirements. UPDES Permit No. UT0024988, DWQ-2013-008367) issued by UDEQ on March 14, 2014. This permit governs its discharge into water bodies. This permit ensures compliance with water quality standards and pollution prevention measures. The permit includes provisions related to stormwater management and other environmental aspects.

The Airport is subject to the SWPPP requirements outlined in UPDES Permit No. UT0024988. The most current SWPPP utilized by the SLCDCA is dated with a revision date of March 18, 2021.

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Mitigation measures required for water resources to implement the Proposed Action and Alternatives include maintaining and following the UPDES Permit No. UT0024988 and the SLCIA SWPPP to minimize any surface water impacts. Stormwater design would comply with FAA recommendations for stormwater management facilities, and design would comply with FAA AC 150/5200 33C related to hazardous wildlife attractants.

During construction, the floodplain associated with the Surplus Canal would be temporarily disrupted while portions of the canal are relocated, and construction is done on and around the banks. Mitigation steps will include following the community's FEMA-approved floodplain management regulations, coordinating with Salt Lake County Flood Control Agency and USACE, constructing in compliance with and in coordination with the USACE Section 404 Permit, implementing erosion control measures, and minimizing the time the canal is shut down to reduce the impacts on wildlife habitats and water quality during construction. After construction, a FEMA Letter of Map Revision will be completed and submitted.

Construction activities would include grading and removal of surfaces through activities such as excavation, and placement of fill. The contractor will implement BMPs and a SWPPP through the UDWQ General Construction Permit that would minimize construction runoff, erosion, and sedimentation.

Mitigation for groundwater impacts would include obtaining a construction dewatering permit with the UDWQ prior to any construction activities. The contractor will implement BMPs during construction to avoid spills, leaks, and other harmful materials from seeping into the ground and impacting groundwater.

Because there are unavoidable impacts to wetlands, mitigation will be required for the Proposed Action to avoid reasonably foreseeable significant impacts. The conceptual mitigation plan is to use wetland banking to mitigate for these identified impacts. The FAA allows wetland banking as a mitigation tool for projects that must occur in wetlands. Wetland banking allows the Airport Authority to purchase wetland bank credits from an approved wetland mitigation bank. The purchase of wetland bank credits serves as a payment to the wetland banker for the wetland mitigation services that the bank provides. The purchase of credits from an approved bank can also be used to satisfy the permit required mitigation. A determination of the exact mitigation banks and the final required credits will be determined in the permitting process for potentially jurisdictional wetlands.

3.12 Mitigation Summary

3.12.1 Permits, Licenses, Other Approvals, or Reviews

The following is a preliminary list of potential permits required for implementation of the Proposed Action:

- **Federal:**
 - USACE: Section 404 Permit for discharge into Waters of the U.S.
 - USACE: Section 408 Permit for alteration of a civil works project
 - FEMA Letter of Map Revision
- **State of Utah:**
 - Utah Department of Environmental Quality (UDEQ), Division of Water Quality: Utah Pollution Discharge Elimination System (UPDES) General Permit for Storm Water Discharges Associated with Construction Activities

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- UDEQ, Division of Air Quality: Fugitive Dust Control Plan for disturbance of an area greater than 1 acre
- Utah Department of Natural Resources, Division of Water Rights: Stream Alteration Permit for all projects that propose to alter the bed and/or banks of a natural stream in the State of Utah

CHAPTER 4: AGENCY AND PUBLIC INVOLVEMENT

4.1 Introduction

Agency coordination and public involvement needed to meet federal review requirements under NEPA and related federal regulations applicable to the Proposed Action include the following:

- FAA consultation with SHPO
- FAA consultation with Native American tribes
- Distribution of a Draft EA for agency and public review
- Preparation of a Final EA, after completion of the prior elements, that includes responses to comments received on the Draft EA

Appropriate notification ensures that information is provided to the general public and regulatory agencies.

4.2 Public Involvement

The Public Interaction Summary Report is contained in Appendix G. This report includes a discussion of the public comment period, notifications, public meeting, and comments received. Copies of notification materials, public meeting materials, comments received and responses to comments are part of the summary report.

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CHAPTER 5: LIST OF PREPARERS

5.1 List of Preparers

This chapter identifies the individuals providing direction and assisting in the preparation and review of this EA. Table 5-1 provides a brief synopsis of the roles of those individuals from the FAA, Salt Lake Department of Airports, and the consultant team responsible for preparation of the document.

Table 5-1. List of Preparers

Name	Title	Role
FAA - Denver Airports District Office		
Kandice Krull	Environmental Protection Specialist	NEPA Oversight and EA Review
Salt Lake City Department of Airports		
Brady Fredrickson	Director of Planning and Environmental	EA Review
Patty Nelis	Assistant Director of Planning and Environmental	EA Review / NEPA Compliance
Sean Nelson	Planning Manager	EA Review
Kevin Staples	Environmental Manager	EA Review
James Barron	Project Manager	EA Review / Project Description Development
HNTB Corporation		
Brian Bangerter, PE	Project Manager	EA Review / Project Description Development
Staci L. Hill, PE	Environmental Lead	Resource analysis / EA Preparation
Buffie Chournos	Sr Scientist	EA Preparation, Hazardous Materials, Water Resources
Chris Haskell, PE	Project Engineer	Water Resources
Stephanie Holzkamp, PE	Project Engineer	
Kate Ades	GIS Analyst	Exhibit preparation / GIS Analysis
Kimberly C. Hughes, PE	Sr Project Engineer	Quality Assurance / Quality Control
Caroline Pinegar, AICP	Project Planner	
Carrol Fowler (CMT)	Project Environmental Specialist II	Air quality and greenhouse gas analysis.
Jamie Tsandes (Bowen Collins)	Environmental Planning & Design	Aquatic Resources (Wetland delineation) and Biological Resources
Merissa Davis (Bowen Collins)	Sr Biologist	
Cara Glabau (Bowen-Collins)	Landscape Architect	