WENDOVER AIRPORT

ENVIRONMENTAL ASSESSMENT

Improvements to Runway 12/30

WENDOVER AIRPORT

Wendover, Tooele County, Utah

DRAFT REPORT

June 2020

Prepared for:

Federal Aviation Administration

This Environmental Assessment becomes a federal document when evaluated, signed, and dated by Responsible FAA Official.

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Responsible Official

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1. INTRODUCTION

The City of Wendover is located approximately 120 miles west of Salt Lake City, Utah, just off I-80 at the western edge of the Great Salt Lake Desert (see **Figure 1-1**). The Wendover Airport (ENV or Airport) sits on the southern edge of the City and adjacent to the Utah/Nevada state line. The region is primarily desert land and salt flats, including the famous Bonneville Salt Flats northeast of Wendover. Owned by Tooele County (the sponsor), ENV consists of 1,960 acres, and sits at an elevation of 4,237 feet.

ENV is a general aviation airport and supports operations consisting of recreational, business and flight training activity conducted by small single- and multi-engine piston, turboprop and small to large jet aircraft. General aviation activity makes up an estimated 75 percent of the Airport's total annual operations while 21 percent is attributed to air carrier and four percent military. Air carrier activity is conducted by one operator, Swift Air, which serves the casino industry in Wendover, Nevada, by offering charter flights on Boeing 737 aircraft with over 51,000 enplanements annually at ENV (nearly 1,000 passengers weekly).

Airport amenities include fueling, courtesy transportation, hangar and tiedown rental, pilot lounge, passenger terminal, baggage handling, passenger processing and passenger screening.

Uniquely, ENV is also a historic site. Most notably, it was the training base during World War II for the 509th Composite Group, the unit that carried out the atomic bombing of Japan. All 15 of the "atomic planes" including the Enola Gay B-29 aircraft, which carried the atomic bomb dropped over Hiroshima, were based at Wendover. With many of the original buildings still standing at Wendover, the Airport was placed on the National Register of Historic Places in 1975.

FIGURE 1-1: LOCATION MAP

Source: Jviation

2. PROPOSED ACTION

The Airport is proposing to rehabilitate Runway 12/30, which includes grading, drainage, and electrical improvements. The project has been broken into two schedules; Schedule I the Rehabilitation of Runway 12/30

with Grading and Drainage improvements, and Schedule II Runway 12/30 Electrical Improvements (**see Figure 2-1**). Details of the schedules include:

- **Schedule I - Rehabilitate Runway 12/30 with Grading and Drainage Improvements**. Runway 12/30 consists of asphalt overlaying Portland cement concrete pavement which was last rehabilitated in 2003. The asphalt pavement has reached the end of its useful life and has developed significant longitudinal and transverse cracking, creating foreign object debris (FOD) and allowing water to infiltrate underneath the pavement section. The proposed rehabilitation will consist of a nominal profile mill and overlay of the existing asphalt pavement.

  Improvements to the drainage at the intersection of Taxiway A and Taxiway B, and Taxiway B1 will be completed as substantial ponding occurs in both locations during and after storm events.

  Grading will also be included in the extended safety areas and west of Taxiway A1 at Runway 12/30 as these safety areas do not meet FAA specifications.

- **Schedule II - Runway 12/30 Electrical Improvements**. The electrical system for Runway 12/30 is approaching the end of its useful life. The existing runway edge lights consist of direct earth buried cable, stake mounted lighting fixtures, and outdated signage. The proposed project will install new conduit, cans, cable, runway edge lights and signs within the Runway 12/30 complex. Additionally, the precision approach path indicator's (PAPIs) on the Runway 30 end will be replaced with new PAPIs as they were installed approximately 15 to 20 years ago.

  Furthermore, new edge lighting and signs will be installed at the teacup or bypass taxiway at the approach end of Runway 30 as the existing taxiway edge lights are retroreflective markers.

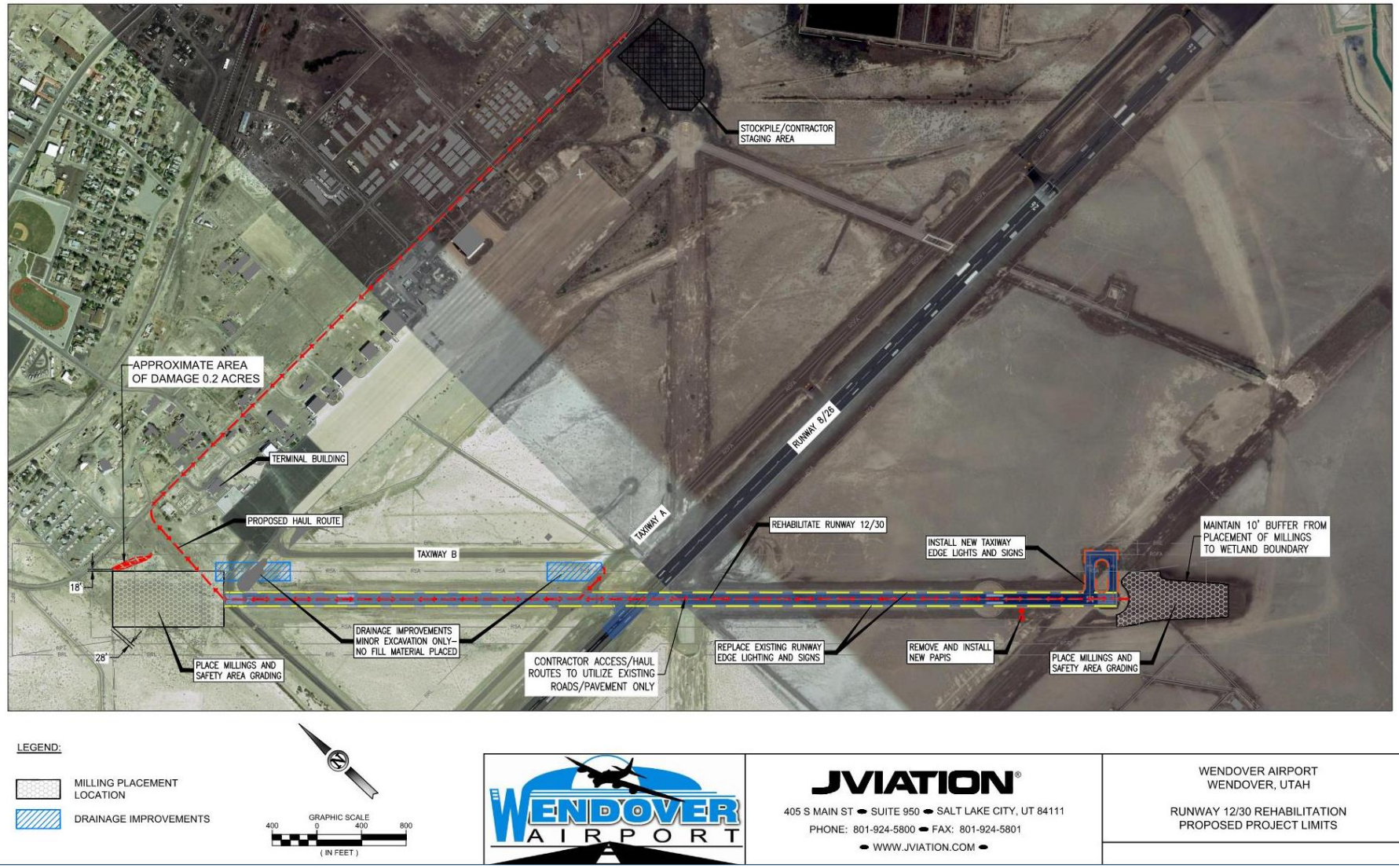
This Environmental Assessment (EA) is prepared in accordance with Council on Environmental Quality (CEQ) regulations implementing NEPA, FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures,* and FAA Order 5050.4B, *National Environmental Policy Act (NEPA) Implementing Instructions for Airport Actions*, as well as applicable Executive Orders, and other applicable federal, state, and local requirements. The FAA is the lead federal agency.

There have been two actions taken at ENV that were not covered by previous NEPA documents: the construction of a haul road (see **Figure 2-2**) and a monster truck show. The construction of the haul road occurred as part of the Taxiway A1 Rehabilitation project (Airport Improvement Project Number 26) but was not included in the 2013 documented CATEX for the project; therefore, the impacts associated with the construction were never determined nor disclosed. The construction of the haul road resulted in impacts to a portion of archaeological Site 27EK16689 as well as wetlands. Additionally, in 2019, the haul road was used by contractors hired by Magilla Entertainment for site preparation work associated with a monster truck show. The haul road was not able to accommodate the heavy trucks and failed, resulting in trucks driving through an area that included archaeological Site 27EK16689 and a wetland. This EA discloses the impacts of those actions and completes the appropriate consultation process between the FAA, Utah and Nevada State Historic Preservation Office, and the U.S. Army Corp of Engineers as part of the Cumulative Impact Analysis.

2.1 Federal Action

The federal action to be undertaken by the FAA is federal funding for the proposed action under the Airport Improvement Program (AIP).

FIGURE 2-1: PROPOSED ACTION



Source: Jviation

FIGURE 2-2: HAUL ROUTE LOCATION

Source: Jviation

3. PURPOSE AND NEED

This section briefly describes the underlying purpose and need for the Proposed Action. The Purpose and Need identifies the problem being addressed and describes goals and objectives associated with the project. It also provides the parameters for defining a reasonable range of alternatives to be considered.

The purpose and need of the proposed project is to enhance safety for aircraft operating at ENV. As discussed in Chapter 2, Runway 12/30's pavement has reached the end of its life, creating FOD; ponding occurs at the intersection of Taxiway A and Taxiway B, and Taxiway B1; the extended runway safety areas do not meet FAA requirements; the electrical system has reached the end of its useful life; the PAPI system is outdated; and the "teacup" at the approach end of Runway 30 is currently unlit. The proposed improvements will resolve the noted issues and enhance safety at ENV.

The Airport proposes to commence construction in the summer of 2021.

4. ALTERNATIVES

The consideration of alternatives allows for an objective decision process and is crucial for the completion of the NEPA process. Two alternatives were identified for the improvements of Runway 12/30 and carried forward in this EA: the "No Action" alternative and the proposed action (Proposed Action) alternative.

4.1 Alternative 1: No Action Alternative

Alternative 1, the No Action alternative, would not rehabilitate Runway 12/30's asphalt pavement; the drainage issues at the intersection of Taxiway A and Taxiway B, and Taxiway B1 would remain; the extended runway safety areas would continue to not meet FAA requirements; the electrical and PAPI systems would remain outdated; and the "teacup" at the approach end of Runway 30 would remain unlit. The No Action alternative would result in an operating environment that if left would soon become less safe for aircraft operating at ENV.

Although the No Action alternative would not meet the Purpose and Need for the Proposed Action, this alternative was retained for further analysis in this EA. The No Action alternative is kept in the analysis for environmental baseline comparative purposes, to fulfill CEQ regulations (40 CFR Part 1502) implementing NEPA, and to comply with FAA Order 5050.4B,[1] FAA Order 1050.1F.[2]

4.2 Alternative 2: Proposed Action

Alternative 2, the Proposed Action, proposes to:

- Rehabilitate the asphalt pavement of Runway 12/30 to include a nominal profile mill and overlay of the existing pavement.
- Improve the drainage at the intersection of Taxiway A and Taxiway B, and Taxiway B1 to eliminate ponding after storm events.

[1] Federal Aviation Administration, Order 5050.4B, National Environmental Policy Act (NEPA) Implementing Instructions for Airport Actions, April 26, 2006

[2] Federal Aviation Administration, Order 1050.1F, *Environmental Impacts: Policies and Procedures,* July 16, 2015.

- Grade the extended runway safety areas west of Taxiway A1 at Runway 12/30 to meet FAA requirements.
- Improve Runway 12/30 electrical system to include installing new conduit, cans, cable, runway edge lights and signs within the Runway 12/30 complex.
- Replace the PAPI's on the Runway 30 end.
- Install new edge lighting and signs at the "teacup" at the approach end of Runway 30.

Alternative 2 supports the Purpose and Need of this EA by allowing the proposed rehabilitation and airfield improvements, which ultimately promotes a safer operating environment at ENV.

5. AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

ENV is a public-use facility owned and operated by Tooele County. The Airport is located on the southern edge of the City of Wendover in Tooele County and adjacent to the Utah/Nevada state line. ENV is a general aviation airport and supports operations consisting of recreational, business and flight training activity conducted by small single- and multi-engine piston, turboprop and small to large jet aircraft.

The proposed project occurs entirely on land owned by the Airport and is located within Section 15, Township 33N, and Range 70E in Nevada, and Sections 15, 19, 20, and 29 of Township 1S, and Range 19W in Utah. The project area includes all of Runway 12/30; the drainage area at the intersection of Taxiway A and Taxiway B, and Taxiway B1; the extended runway 12/30 safety areas west of Taxiway A1; and the "teacup" at the approach end of Runway 30.

5.1 Air Quality

5.1.1 Affected Environment

Through the Clean Air Act (CAA), the U.S. Environmental Protection Agency (EPA) established the National Ambient Air Quality Standards (NAAQS) for pollutants considered harmful to public health and/or the environment. The EPA established NAAQS for six criteria pollutants that they use as indicators of air quality. The six criteria pollutants include: carbon monoxide (CO), nitrogen dioxide (NO2), ozone (O3), particulate matter (PM2.5 and PM10), sulfur dioxide (SO2), and lead (Pb). Areas found to be in violation of one or more NAAQS for these pollutants are classified as a nonattainment area.

ENV is located in Tooele County; of which, portions of the County are listed by the EPA as being in nonattainment for 8-Hour Ozone, PM2.5, and SO2. The nonattainment areas located in Tooele County are located in the eastern portion of the County surrounding the Salt Lake City area. The portion of the County where ENV is located is not located within the nonattainment areas.[3]

5.1.2 No Action Alternative Environmental Consequences

The No Action alternative would not change the air quality conditions at ENV.

[3] Environmental Protection Agency, https://www3.epa.gov/airquality/greenbook/anayo_ut.html, Accessed July 2019

5.1.3 Proposed Action Alternative Environmental Consequences

The air quality conditions at ENV would experience a short-term increase due to the construction impacts resulting from the Proposed Action alternative. The emissions would be short-term, temporary, and localized to airport property. Because ENV is located in an area designated as "attainment," General Conformity requirements outlined under the CAA do not apply, and accordingly, a General Conformity Applicability Analysis was not performed. However, construction-related emissions resulting from the Proposed Action alternative were calculated using the Airport Construction Emissions Inventory Tool (ACEIT). **Table 5-1** shows the results of the analysis, which would not cause an exceedance of the NAAQS.

TABLE 5-1: ACEIT RESULTS

Year	CO	NOx	SO2	PM10	PM2.5
2021	3.098	2.092	0.031	0.614	0.085

Source: Jviation

5.2 Biological Resources

5.2.1 Affected Environment

According to the FAA's 1050.1F Desk Reference, biological resources are valued for their intrinsic, aesthetic, economic and recreational qualities and include fish, wildlife, plants, and their respective habitats. Biological resources most often include:

- terrestrial and aquatic plant and animal species;
- game and non-game species;
- special status species (state or federally-listed threatened or endangered species, marine mammals, or species of concern, such as species proposed for listing or migratory birds); and
- environmentally-sensitive or critical habitats

A wildlife hazard assessment (WHA) was completed for ENV in 2015. According to the WHA, the habitat at ENV is comprised largely of salt flats and residential/indistrial properties. The salt flats are located throughout the airfield and airport property. Those located to the south of the airfield are mostly barren with little plant life and those to the west have occasional shrubs and short tress. Areas on the north side of the Airport are largely developed with residential and industrail properties. The Airport does not have any permanent water bodies that could serve as wildlife habitat; however, an old waste water treatment facility located on the west edge of the airport temporarily holds water after heavy precipitation events. Also, as there is no water detention system at ENV, water often ponds throughout the airfield following heavy rains.

Although there is a limited vegetation at ENV, the Airport still supports a diverse array of wildlife. Species observed include amphibians, birds (aerial foragers, blackbirds, columbids, corvids, fringillids, gull, insectivorous, raptors, shorebirds, waterfowls), mammals (canid, equus, hooved, lagomorph, rodent, skunks), and reptiles.

According to the U.S. Fish and Wildlife Services's (USFWS) Information for Planning and Consultation (IPaC) resource list, two threatened or endangered species have the potential to occur within the area (see **Appendix A**). These species include the Jones Cycladenia and the Ute Ladies'-tresses. The region surrounding ENV is predominantly salt flats with little vegetation present. The runway safety areas have asphalt millings spread throughout, making it difficult for vegetation to grow.

A habitat assessment for migratory birds within the project site was completed by Wetland Resources in January 2019 (see **Appendix B**). The assessment found that five of the playa nesting species included in the Utah Partners in Flight List of Migratory Birds may occur at ENV and within the project area.

5.2.2 No Action Alternative Environmental Consequences

The No Action alternative would not impact biological resources.

5.2.3 Proposed Action Alternative Environmental Consequences

As stated above, according the USFWS IPaC, threatened and endangered species may occur in proximity to ENV. However, due to the lack of vegetation and placement of millings in portions of the project area, it is unlikely that the species occur within the project area. Additionally, coordination with the USFWS indicated that impacts to threatened and endangered species were not anticiapted and a biological assessment was not requested. See **Appendix G** for USFWS coorespondance.

To comply with the Migratory Bird Treaty Act (MBTA), it is suggested that ground disturbance/vegetation removal be avoided during the breeding season, which extends from January to August. If construction will take place during this time frame, a pre-construction nest survey will be conducted by a qualified biologist, as a subconsultant to Jviation, seven to 10 days prior to the onset of construction. If nests are found, appropriate coordination with the USFWS will be completed to develop measures to prevent nest disturbance.

Based on the above information, the FAA determined that a finding of “no effect” is appropriate for the project.

5.3 Climate

5.3.1 Affected Environment

The scientific community is continuing its efforts to better understand the impact of aviation emissions on the global atmosphere. In particular, the FAA is leading and participating in a number of initiatives intended to clarify the role that aviation plays in greenhouse gas (GHG) emissions and climate. Importantly, actions are underway within the U.S. and by other nations to reduce aviation's contribution of GHGs through such measures as new aircraft technologies to reduce emissions and improve fuel efficiency, renewable alternative fuels with lower carbon footprints, more efficient air traffic management, market-based measures, and environmental regulations including an aircraft CO2 standard.

Although there are no federal standards for aviation-related GHG emissions, it is well-established that GHG emissions can affect climate.[4] The CEQ has indicated that climate should be considered in NEPA analyses.

Airport development has the potential to both affect climate change and to be affected by it. Changes in resource categories such as air quality, natural resources, and energy supply can potentially contribute to climate change by increasing the amount of greenhouse gases emitted. Conversely, some airport projects may be impacted by the potential effects of climate change, such as increased temperature, increased number of extreme hot days, changes in seasonal precipitation, and increased heavy precipitation.

[4] See Massachusetts v EPA, 549 US 497, 508-10, 521-23, 2007.

5.3.2 No Action Alternative Environmental Consequences

The No Action alternative would not change the existing number, type, or operational patterns of aircraft or surface vehicles at the ENV. Therefore, no changes to the air quality or climate at ENV would result.

5.3.3 Proposed Action Alternative Environmental Consequences

The proposed project would not increase the operational capacity of ENV, and as such is not expected to result in an incremental change in GHG emissions from aviation activity over what would occur under the no build alternative.

5.4 Coastal Resources

The Coastal Barriers Resources Act of 1982 prohibits federal financial assistance for development located within a Coast Barrier Resource System that contains undeveloped coastal barriers along the Atlantic and Gulf coasts and the Great Lakes. The Airport is located in Utah, a state that does not contain any coastal resources. As such, this environmental resource category will not be evaluated further in this EA.

5.5 Department of Transportation Act, Section 4(f)

5.5.1 Affected Environment

The Department of Transportation (DOT) Act Section 4(f), recodified and renumbered as Section 303(c) of 49 U.S.C., provides that the Secretary of Transportation will not approve any program or project that requires the use of any public park, recreation area, or wildlife and waterfowl refuge of national, state, or local significance, or land from a historic site of national, state, or local significance, as determined by the officials having jurisdiction thereof, unless there is no feasible and prudent alternative to the use of such land and such program, and the project includes all possible planning to minimize harm resulting from the use.

Section 4(f) properties located within a 15-mile radius of ENV are listed in **Table 5-2**. The Airport itself is listed as a historic resource. The remaining properties are located within the cities of Wendover or West Wendover.

TABLE 5-2: 4(F) PROPERTIES

Site	Type	Distance to Airport (miles)
Wendover Airport	Historic	On-site
The Church of Jesus Christ of Latter-Day Saints	Church	0.5
Wendover Highschool	School	0.5
Kingdom Hall of Jehovah's Witnesses	Church	0.5
Scobie Park	Park	1.0
Lacombe Baseball/Softball Fields	Park	1.1
West Wendover Recreation District	Park	1.2
West Wendover Equestrian Park	Park	1.3
San Felipe Catholic Church	Church	1.3
Anna Smith Elementary School	School	1.3
Danger Cave	Historic	1.7
West Wendover Elementary School	School	2.1
West Wendover Junior/Senior School	School	2.2
Toana Vista Golf Course	Golf Course	2.2
Bonneville Salt Flats Race Track	Historic	11

Bonneville Salt Flats State Park	Park	11

Source: Google Earth, 2019

5.5.2 No Action Alternative Environmental Consequences

The No Action alternative would not impact DOT Act Section 4(f) resources.

5.5.3 Proposed Action Alternative Environmental Consequences

The Proposed Action alternative would occur at the Historic Wendover Air Force Base; however, it would not occur in an area where facilities contributing to the historic designation of the Base are located. A Cultural Resource Survey of the entire airport property was completed in 2019. The survey found one National Register of Historic Places (NRHP) eligible site within the project area, Site 27EK16689. It was determined that the Site cannot be tied to any specific event (criterion A), or person (criterion B), nor is this Site of a distinct type (criterion C). However, the Site does contain valuable information regarding the human past and is therefore eligible for the NRHP under criterion D.

Section 4(f) applies to archeological sites that are on or eligible for listing on the NRHP, except when the resource is important chiefly because of what can be learned by data recovery and has minimal value for preservation in place. Section 4(f) does not apply to Site 27EK16689 as the site is important by what can be learned through data recovery and does not need to be preserved in place.

The Proposed Action would not occur within or near any other Section 4(f) resources and therefore would not result in any impacts to Section 4(f) resources.

5.6 Farmlands

5.6.1 Affected Environment

Farmlands are lands that are considered to have national significance in terms of being prime or unique or to be of significance from a state or local perspective. Soil quality and type(s) generally determine if farmland falls into any of these classifications. According to the Natural Resources Conservations Services (NRCS) the entire study area is composed of soils classified as “not prime farmland”. See **Appendix C** for soil map.

5.6.2 No Action Alternative Environmental Consequences

The No Action alternative would not impact and farmlands.

5.6.3 Proposed Action Alternative Environmental Consequences

The Proposed Action alternative would not impact any lands that are considered to have national or state significance as all land within the project area is classified as “not prime farmland” by the NRCS. Additionally, the entire project will occur on airport-owned and operated land, none of which is currently being farmed.

5.7 Hazardous Materials, Solid Waste, and Pollution Prevention

5.7.1 Affected Environment

Hazardous materials are any solid, liquid, or gas that can harm people, other living organisms, property or the environment. These materials may be radioactive, flammable, explosive, toxic, corrosive, a

biohazard, an oxidizer, an asphyxiate, a pathogen, an allergen or may have other properties or characteristics that deem it hazardous in specific circumstances. The Environmental Protection Agency (EPA) keeps detailed information on businesses dealing with hazardous materials, water discharge, Superfund sites, toxic releases and air emissions. Handling and disposal of hazardous materials is strictly regulated by federal, state and local agencies. Solid Waste is generally defined as any discarded material, and can include such items as refuse and scrap metal, spent materials, chemical by-products, and sludge from industrial and municipal waste water and water treatment plants (see 40 CFR § 261.2 for the full regulatory definition). Pollution prevention describes methods used to avoid, prevent, or reduce pollutant discharges or emissions through strategies such as using fewer toxic inputs, redesigning products, altering manufacturing and maintenance processes, and conserving energy. The Pollution Prevention Act (42 U.S.C. §§13101-13109) requires pollution prevention and source reduction to reduce the impact waste has on the environment while in use and after disposal.

The National Priority List (NPL) was evaluated for properties that occur on or around ENV. It was found that there are 13 sites located in Utah, as shown in **Table 5-3**, none of which occur near Wendover and the study area.

TABLE 5-3: NPL LIST

Site Name	City
700 South 1600 East PCE Plume	Salt Lake City
Bountiful/Woods Cross 5th South PCE Plume	Bountiful, Woods Cross
Five Points PCE Plume	Woods Cross
Hill Air Force Base	Ogden
Intermountain Waste Oil Refinery	Bountiful
Jacobs Smelter	Stockton
Monticello Mill Tailings (USDOE)	Monticello
Ogden Defense Depot (DLA)	Ogden
Portland Cement (Kiln Dust 2 & 3)	Salt Lake City
Tooele Army Depot (North Area)	Tooele
U.S. Magnesium	Tooele County
Utah Power & Light/American Barrel Co.	Salt Lake City
Wasatch Chemical Co. (Lot 6)	Salt Lake City

Source: Environmental Protection Agency, https://www.epa.gov/superfund/national-priorities-list-npl-sites-state#UT, Accessed July 2019

The Airport's fuel farm is located on the north side of the airport and not in proximity to the study area.

No other known hazardous sites are located in the study area.

5.7.2 No Action Alternative Environmental Consequences

The No Action alternative would not result in any impacts to hazardous material, solid waste, or an increase in pollution.

5.7.3 Proposed Action Alternative Environmental Consequences

The Proposed Action alternative would produce minimal solid waste during construction as well as asphalt millings through the rehabilitation of Runway 12/30. The millings will either be placed in the runway safety areas as part of the grading component of the project, on an existing stockpile on airport property, or will be hauled off-site by the contractor; any other waste generated will be disposed of off-site by the contractor. Additionally, no hazardous materials will be used during construction. No impacts to hazardous materials will occur as none are located in the project area. An increase in pollution will not result from the project as Airport operations will not change as a result of the Proposed Action alternative.

5.8 Historic, Architectural, Archaeological, and Cultural Resources

5.8.1 Affected Environment

The Airport is a historic icon in the region. It was, at one time, the largest military reserve in the world and served as the training facility for thousands of soldiers in World War II. With many of the original buildings still standing, the Airport was placed on the NRHP in 1975. A revision of the National Register nomination for Wendover Airfield is currently being completed. The 1975 National Register nomination will be updated to current standards and reflect changes that have occurred on the site during the past several decades.

An analysis of the NRHP listed properties in Tooele County, Utah and Elko County, Nevada, as depicted in **Table 5-4**. Three properties are within a 15-mile radius of ENV. The nearest property to ENV is the Wendover Air Force Base as it is located at the Airport.

TABLE 5-4: TOOELE AND ELKO COUNTY - NRHP LISTED PROPERTIES

Property Name	Address	Date Added to Registry	Distance to Airport
Wendover Air Force Base	S of Wendover off U.S. 40	1975	On Site
Danger Cave	Address Restricted, Wendover	1966	1.7 miles
Bonneville Salt Flats Race Track	3 mi. E of Wendover off U.S. 40	1975	11 miles

*No NRHP listed properties in Elko County are within 15 miles of the Wendover Airport.
Source: National Register of Historic Places, Utah – Tooele County, Nevada – Elko County, 2020

As part of the Airport's most recent master plan update, the entire Airport was included in a Class III Cultural Resource Inventory completed in 2019 by Canon Heritage Consultants Inc. (CHC). See **Appendix D** for the redacted Cultural Resource inventory. Fieldwork entailed an intensive inventory of the 1,509-acre airport, updates to National Register eligible sites 42TO708 and 42TO855, and the recording of any new cultural resources encountered. Three previously unrecorded sites were documented in Nevada (26EK16689, 26EK16690 and 26EK16691).

Area of Potential Effects

The Area of Potential Effects (APE) is the area within which an undertaking may directly or indirectly affect 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 area the project may visually impact). The APE was determined to be the same as the area of disturbance as depicted in **Figure 5-1**.

FIGURE 5-1: AREA OF POTENTIAL EFECTS

Source: FAA and Google Earth, 2019

5.8.2 No Action Alternative Environmental Consequences

The No Action alternative would not change the existing conditions or operations of ENV, and therefore, would not result in any impacts to historic, architectural, archaeological, and cultural resources. The mitigation for the impacts that occurred during the monster truck show would still proceed as explained in the Cumulative Impacts section.

5.8.3 Proposed Action Alternative Environmental Consequences

The Proposed Action includes the grading of Runway 12/30's runway safety areas, which would result in impacts to Site 26EK16689. No other direct or indirect impacts to NRHP listed or eligible resources, specifically to structures associated with the Wendover Air Force Base would occur. As a result of the impacts, the FAA in conjunction with the Nevada and Utah State Historic Preservation Offices (SHPO) have determined that a Section 106 finding of Adverse Effect is applicable for the Proposed Action and a Memorandum of Agreement (MOA) will be required. The FAA initiated the MOA process in March 2020. The MOA will outline mitigation and other actions required before construction can begin.

5.9 Land Use

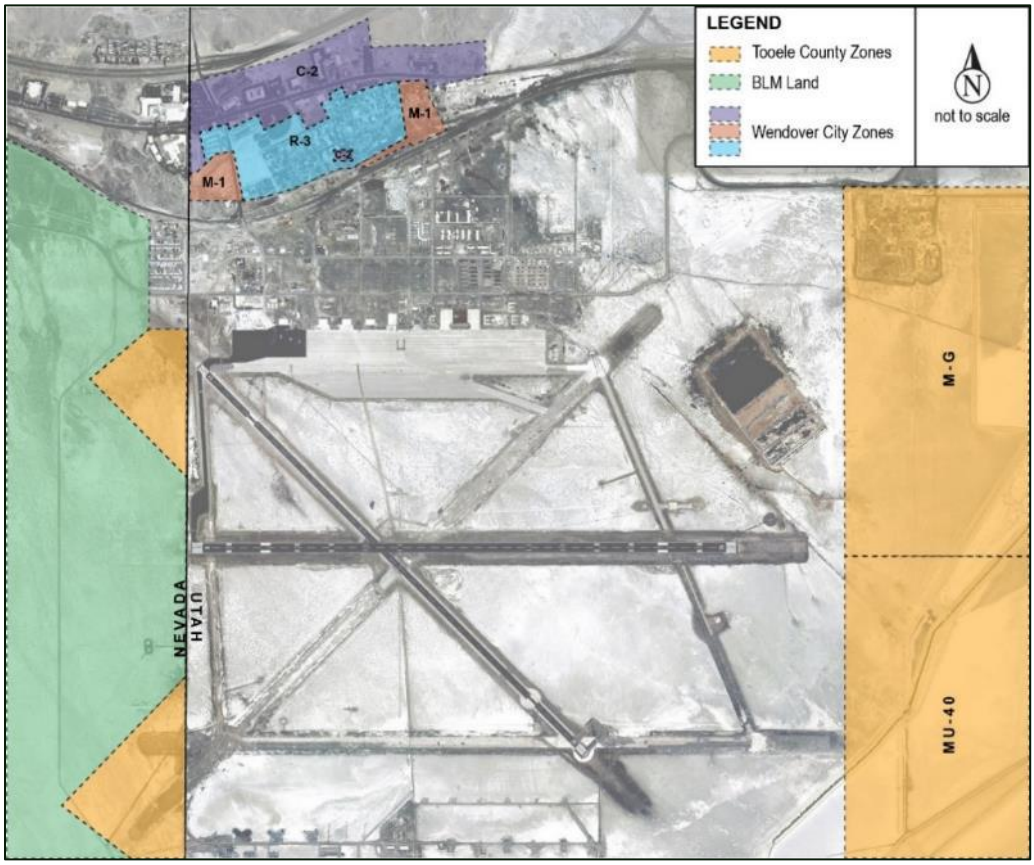
5.9.1 Affected Environment

The Airport is owned by Tooele County; however, it is within the Wendover City limits. The City of Wendover has zoned only a portion of the city limits and has not zoned the airport property. Land to the north of the Airport is zoned by the City as R-3 Multiple Family Residential Zone; C-2 Commercial Zone; and M-1 Manufacturing Zone. The area between the north side of the Airport and the City's zoned area is not zoned and includes a mix of uses.

Tooele County has zoned areas to the east of the Airport as M-G Manufacturing General, and MU-40 Multiple Use Districts. Land to the west of the Airport is primarily owned by the Air Force, within several different parcels, and is within Elko County, Nevada limits. These parcels are in the process of being transferred to ENV.

Currently, land surrounding ENV is zoned for uses that are compatible with the activities at the Airport and in the vicinity. The Airport vicinity zoning map is shown in **Figure 5-2**.

FIGURE 5-2: ENV VICINITY ZONING



Source: Jviation

5.9.2 No Action Alternative Environmental Consequences

The No Action alternative would not change the existing conditions at ENV, and therefore, would not result in any changes to the existing zoning designations or use of land.

5.9.3 Proposed Action Alternative Environmental Consequences

The Proposed Action alternative would not result in a change to the existing zoning or use of land within or adjacent to the study area. The proposed projects would occur on Airport-owned property that is currently zoned for aviation uses.

5.10 Natural Resources and Energy Supply

5.10.1 Affected Environment

Executive Order 13123, Greening the Government through Efficient Energy Management, supports the expansion and use of renewable energy within facilities and activities. It also requires federal agencies to reduce the use of petroleum, total energy use and associated air emissions, and water consumption in facilities.

ENV's effects on natural resources and energy supply are primarily related to the amount of energy and resources required for aircraft, ground support vehicles, airport and airfield lighting, terminal and hangar buildings, motor vehicle traffic, and construction/development.

5.10.2 No Action Alternative Environmental Consequences

The No Action alternative would not change the existing conditions at ENV, and therefore, would not result in any impacts to natural resources or the supply of energy.

5.10.3 Proposed Action Alternative Environmental Consequences

The Proposed Action alternative would temporarily increase natural resources and energy consumption through the use of water, fuel, and construction material. There is an adequate existing supply of water, fuel and construction material such as aggregate to meet the needs of this alternative. Therefore, the temporary increase in consumption would not result in a significant impact in the use of energy supply or natural resources. Once complete, the Proposed Action alternative would likely not change the energy consumption of ENV from its current state. If any change is noticed, it would be a decrease in consumption as the new electrical system may operate more efficiently than the existing system, resulting in a decrease in energy consumption. From this, it is found that the Proposed Action alternative would not increase the use of natural resources or change the energy supply consumption.

5.11 Noise and Compatible Land Use

5.11.1 Affected Environment

Noise associated with airport activity is of specific importance to the FAA in examining a proposed action. Airport development projects that have the potential to change the airport runway configuration(s); aircraft operations, movements, and types; or aircraft flight characteristics can change the future airport-related noise levels. The FAA considers a noise impact would be significant if an action would cause noise sensitive areas to experience an increase in noise of Day-Night Average Sound Level (DNL) 1.5 dB or more at or above the DNL 65 dB noise contour when compared to the No Action alternative.

5.11.2 No Action Alternative Environmental Consequences

The No Action alternative would not change the existing conditions or operations of ENV, and therefore, would not result in any changes to the existing noise conditions.

5.11.3 Proposed Action Alternative Environmental Consequences

The Proposed Action alternative would not result in any permanent changes to the airport runway configuration(s); aircraft operations, movements, and types; or aircraft flight characteristics. During the rehabilitation of Runway 12/30, the runway will be closed, and aircraft will be required to use Runway 8/26.

Runway 8/26 is the primary runway and used most often on a normal basis. Therefore, the Proposed Action alternative would not result in any noticeable changes to the existing noise conditions.

The Proposed Action alternative would result in short-term and a temporary increase in noise emissions as result of the construction phase of the project. However, there are no noise-sensitive areas within the vicinity of the Airport and the increase would be minimal. The project will not result in any new incompatible land uses.

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

5.12.1 Affected Environment

49 CFR Part 24, Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, E.O. 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, and E.O. 13045, Protection of Children from Environmental Health Risks and Safety Risks regulate development actions that have the potential to create social impacts, health and safety risks to children, and socioeconomic impacts to include moving homes or businesses; dividing or disrupting established communities; changing surface transportation patterns; disrupting orderly, planned development; and creating a notable change in employment.

According to the U.S. Census Bureau, in 2017:

- Approximately 78.4 percent of the population (over 16 years of age) were part of the civilian labor force
- Unemployment rate was 1.7 percent, which is significantly lower than the state average of 3.1 percent and the national average of 3.9 percent
- The population of Wendover was 1,243, a decrease of 2 percent from 2010
- Approximately 39.6 percent of Wendover residents are under the age of 18
- Approximately 37.9 percent of the population was considered to be "White," 0.3 percent "Black or African American," and 61.8 percent "some other race." Approximately 81.7 percent of the population was considered "Hispanic or Latino (of any race)."
- Approximately 32.3 percent of the population lives below the poverty level.

The nearest school to the study area is Wendover High School, located approximately 0.5 miles north of ENV. The nearest daycare facility is the Kids are People Too Daycare located approximately 0.5 miles north of ENV. There are numerous residents located to the north of ENV and within the city limits of Wendover. The demographics of these homes varies and some likely include families with children.

5.12.2 No Action Alternative Environmental Consequences

The No Action alternative would not change the existing conditions of ENV, and therefore, would not result in any impacts on socioeconomics, environmental justice, or children's environmental health and safety risks.

5.12.3 Proposed Action Alternative Environmental Consequences

The Proposed Action alternative would occur in an area that contains few homes and businesses (none within or adjacent to the study area). As such, it is not anticipated that the Proposed Action alternative would result in impacts to specific population groups or local businesses, or result in impacts on socioeconomics, environmental justice, or children's environmental health and safety risks.

5.13 Visual Effects

5.13.1 Affected Environment

The visual setting of the study area comprises approximately a 100-acre area with portions located both in Utah and Nevada and sits at an elevation of 4,237 feet above sea level. The area is located in a largely rural area with few residences in proximity to the study area and Airport.

The Airport's existing light sources include:

- Runway/Taxiway Lighting: lights outlining the runway and taxiways; classified by the intensity or brightness the lights are capable of producing.
- Runway End Identifier Lights (REILs): two synchronized flashing lights located one on each corner of the runway landing threshold.
- Precision Approach Path Indicators (PAPIs): system of lights on the side of an airport runway threshold that provides visual descent guidance information during approach.
- Airport Beacon: a rotating light used to locate the airport.
- Apron/Parking Lights: pole lighting on aprons and parking areas.

All sources of light aid in the safety of operations at the Airport and produce an insignificant amount of light on the surrounding area.

5.13.2 No Action Alternative Environmental Consequences

The No Action alternative would not change the existing conditions or operations at ENV, and therefore, would not result in any visual, aesthetic, and light impacts.

5.13.3 Proposed Action Alternative Environmental Consequences

The Proposed Action alternative does not include any vertical construction that would result in a change in the existing visual setting at ENV. The existing PAPI system will be replaced with a like-kind system with similar light intensity. The runway edge lights will be replaced with LED lights with the same medium intensity as the existing lighting system. As such, the Proposed Action alternative would not result in any visual, aesthetic, and light impacts.

5.14 Water Resources

5.14.1 Affected Environment

Water resources include all surface waters and groundwaters - wetlands, floodplains, surface waters, groundwater, and wild and scenic rivers. These resources are crucial in providing drinking water and in supporting recreation, transportation and commerce, industry, agriculture, and aquatic ecosystems.

A Wetland Delineation was completed for the proposed project area in 2018 by Wetland Resources (see **Appendix E**). The delineation found that vegetated mudflat LUS wetlands and unvegetated mudflat waters of the U.S. are located in and within proximity to the project area, see **Figure 5-3**.

The portion of the Airport that has been mapped (northern half of the Airport), depicts Flood Zone D, which are areas in which flood hazards are undetermined, but possible. The southern portion of the Airport has not been mapped and is shown on the Flood Insurance Rate Map (FIRM) as "Panel Not Printed – No Special Flood Hazard Areas". The portion of the Airport located in Nevada has flood areas designated as AO and X. Zone AO is a special flood hazard area subject to inundation by the 1% annual chance flood with flood depths of 1 to 3 feet. Zone X is an area of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood. The proposed project will not change the overall drainage or flow of water from the Airport. See **Appendix F** for flood maps.

Wendover is located in the Basin and Range aquifers which extend through approximately 200,000 square miles of the southwestern U.S. and are a principal source of groundwater for this region. Recharge is primarily derived from precipitations in the surrounding mountains.[5]

The Virgin River and its tributaries, located in the State of Utah, are listed in the National Wild and Scenic Rivers System. Of these, none of the included portions are located within 100 miles of ENV.

5.14.2 No Action Alternative Environmental Consequences

The No Action alternative would not change the existing conditions at ENV, and therefore, would not result in any impacts to water resources.

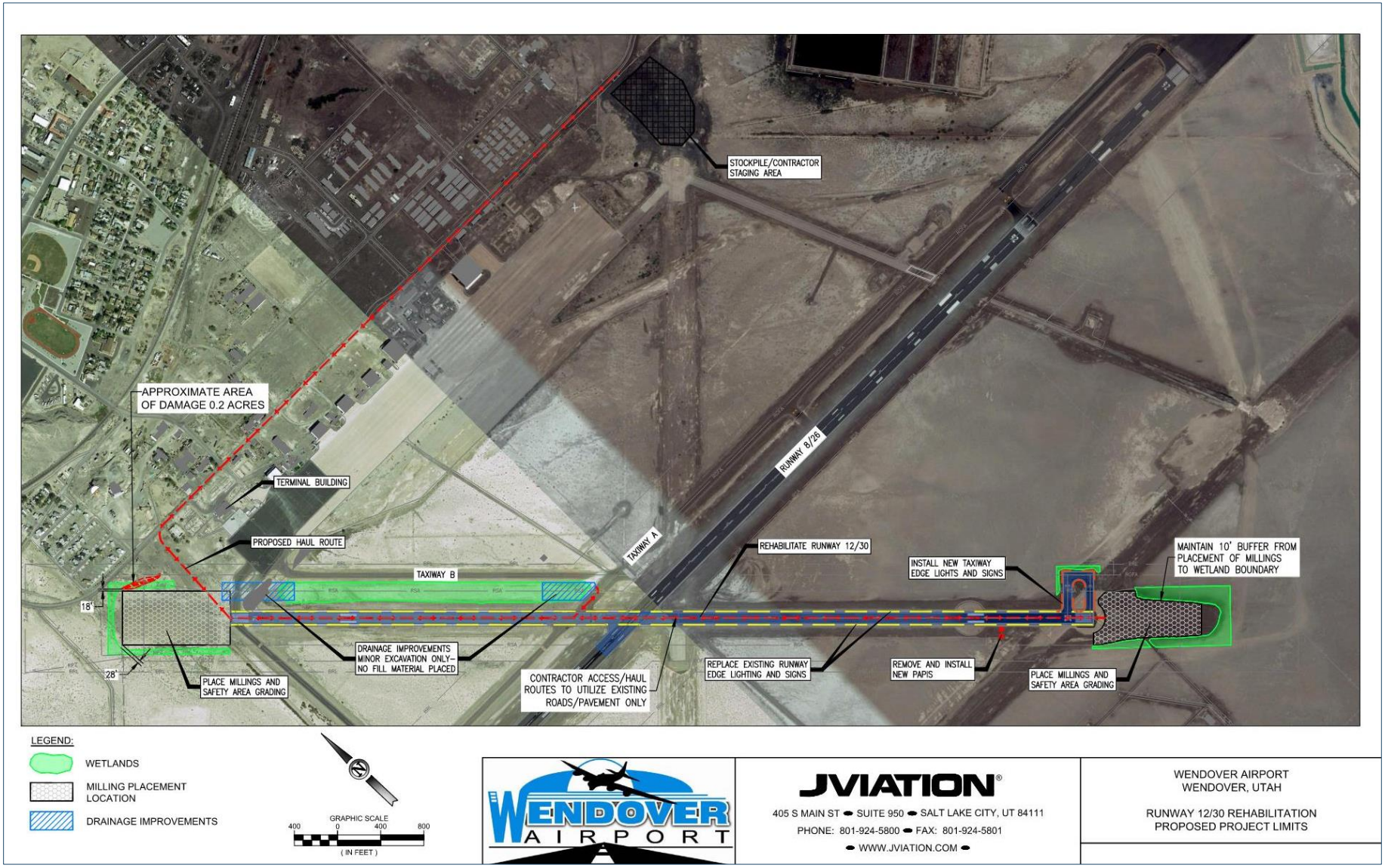
5.14.3 Proposed Action Alternative Environmental Consequences

The improvements to the drainage at the intersection of Taxiway A and Taxiway B, and Taxiway B1 will improve the drainage of this area as substantial ponding occurs in both locations during and after storm events. However, this drainage area is a vegetated mudflat and considered a wetland. Additionally, the extended grading areas off the end of both runway ends contain wetlands and waters of the U.S. It is anticipated that approximately 14.373 acres of wetlands and 6.007 acres of water of the U.S. will be impacted by the Proposed Action alternative. With more than 1 acre of wetlands/waters of the U.S. being impacted, a Section 404 permit, specifically an individual permit will be required. Mitigation will be determined during the permitting process with the U.S. Army Corp of Engineers (USACE). Due to the lack of available wetland credits for this area, on-site wetland creation would likely be proposed at a 2:1 ratio. This may result in ENV creating approximately 35 acres of wetlands on airport property; most likely through the removal of existing fill, in non-historic areas, and allowing the natural wetlands to reestablish. Final plans would be determined by the USACE.

The project will not result in changes to the amount of runoff from ENV as it includes rehabilitating existing pavement. Nor will a change to the floodplain of the area result from the Proposed Action alternative. Lastly, the Proposed Action alternative would not result in any impacts to Wild and Scenic Rivers as they are not located within the study area.

[5] U.S. Geological Survey, https://pubs.usgs.gov/ha/ha730/ch_c/C-text3.html, Accessed July 2019

FIGURE 5-3: WETLAND LOCATIONS



Source: Jviation

5.15 Cumulative Impacts

5.15.1 Affected Environment

Cumulative impacts are impacts a proposed action may have on resources when added to impacts on a resource due to past, present, and reasonably foreseeable actions within a defined time and geographic area. The CEQ, under NEPA regulations (40 CFR 1508.7) defines a cumulative impact as an "impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonable foreseeable future actions, regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over time."

The cumulative impact analysis will follow the guidance provided in FAA Order 1050.1F Desk Reference. Past, present, and reasonably future actions with impacts that may have a significant cause and-effect relationship with the direct and indirect impacts of the proposed action will be included. Past actions are actions that occurred in the past. Present actions are those that are occurring in the same general time frame. Reasonably foreseeable projects include actions that are not speculative and are currently included on the Airport Capital Improvement Program (as of 2020).

Direct and indirect impacts of the Proposed Action with the greatest potential for cumulative impacts include impacts to: an archaeological Site 26EK16689, 14.373 acres of wetlands, and 6.007 acres of waters of the US. Past, present, and reasonably foreseeable future actions that have caused or may cause impacts similar to Proposed Action or may interact with impacts caused by the Proposed Action will be included. Relevant past, present, and reasonably foreseeable future projects at ENV include:

- **Past**
  - 1999-2000: Construction of Runway 8/26. This project resulted in impacts to 92.9 acres of mudflats, 1.19 acres of salt grass, and historic Runways 07/25 and 03/21. Mitigation included the creation of 92.9 acres of mudflats on airport property, enhancement to 3.57 acres of mudflats to create a salt grass meadow, and the documentation of Runways 07/25 and 03/21. All other historical/archaeological resources were preserved in place.
  - 2014-2015: Runway 8/26 Extension and Taxiway A1 and Electrical System Rehabilitation. The haul road, as discussed in Section 2, was constructed as part of these projects. The construction of the haul road resulted in impacts to archaeological Site 26EK16689 and a water of the US/wetland. The amount of water of the US/wetland impacts are not known since the haul road was not included in the environmental review of either project. At the time the road was constructed, a 2012 non-jurisdictional determination had been made by the USACE, which expired in 2017. The construction of the road would have fallen under this non-jurisdictional determination.
  - 2019: Monster Truck Event. Discussed in Section 2. The project resulted in impacts to archaeological Site 26EK16689 and to a wetland. The wetland will be restored to pre-project conditions once archaeological Site 26EK16689 is excavated.
- **Present**
  - 2020: Construction of Wildlife Fence. The project will impact approximately 0.07 acres of jurisdictional wetlands and non-wetland WUS. A Nationwide Permit 39 - Commercial and Institutional Developments was obtained.
  - 2021: Proposed Action. The project will impact an archaeological site, 14.373 acres of wetlands, and 6.007 acres of waters of the US.
- **Future –** there are no reasonably foreseeable future projects that will result in impacts to wetlands or historical/archaeological resources.

5.15.2 No Action Alternative Environmental Consequences

The No Action alternative would not change the existing conditions or include any construction at ENV, and therefore, would not result in any cumulative impacts.

5.15.3 Proposed Action Alternative Environmental Consequences

The Proposed Action alternative will impact archaeological Site 26EK16689, 14.373 acres of wetlands, and 6.007 acres of waters of the US. Mitigation of previous and current impacts to archaeological Site 26EK1668 is expected to include excavation of the site to recover resources and document the information contained within the Site. Details of the mitigation will be documented in the MOA. All previous wetland impacts have been mitigated to offset the impacts. The wetland impacted during the monster truck event will be restored to pre-disturbance conditions. The impacts associated with the Proposed Action will be mitigated as determined by the USACE. Due to the lack of available wetland credits for this area, on-site wetland creation would likely be proposed at a 2:1 ratio. This may result in ENV creating approximately 35 acres of wetlands on airport property; most likely through the removal of existing fill, in non-historic areas, and allowing the natural wetlands to reestablish. Final plans would be determined by the USACE.

When combined with the previously mentioned projects, the Proposed Action alternative would have a negligible cumulative environmental impact given the mitigation completed or expected to be completed. No single impact, even when considered with past, present, and reasonably future actions, represents a substantial impact that cannot be mitigated. Therefore, the Proposed Action is not expected to result in any significant cumulative impact.

6. PUBLIC INVOLVEMENT

6.1 Draft EA Notification and Distribution

The Draft EA was released for public comment on June 2, 2020 through a Public Notice in the Tooele Transcript. The Notice included the opportunity for the public to submit written comments on the proposed project and request a public hearing. Comments will be accepted through July 2th, 2020. The Draft EA is also available for review online at https://tooeleco.org/tooele-county-government/county-departments/tooele-county-wendover-airport/.

7. LIST OF PREPARERS

7.1 Lead Agency

The Federal Aviation Administration (FAA) is the lead agency for the preparation of this Environmental Assessment (EA).

7.2 Principal Reviewers

Responsibility for review of this EA rests with the FAA. The following persons are the principal FAA individuals responsible for the review of EA in accordance with Council on Environmental Quality (CEQ) Regulations Section 1502.7 and Paragraph 1007j of FAA Order 5050.4B, *National Environmental Policy Act (NEPA) Implementing Instructions for Airport Actions*.[6]

- Kandice Krull, Environmental Protection Specialist

7.3 Principal Preparers

ENV retained Jviation Inc. to prepare this EA; the following staff were involved in its preparation:

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[6] Federal Aviation Administration, Order 5050.4B, National Environmental Policy (NEPA) Implementing Instructions for Airport Actions, April 26, 2006.

8. LIST OF AGENCIES CONSULTED

The following agencies were consulted to determine the presence or absence of environmental resources within the study area. The consultations were largely completed through online resources. See **Appendix G** for agency coordination letters.

- Tooele County, Utah
- Wendover, Utah
- Utah State Historic Preservation Office
- Nevada State Historic Preservation Office
- U.S. Army Corps of Engineers
- U.S. Environmental Protection Agency
- U.S. Department of Agriculture, Natural Resource Conservation Service
- U.S. Department of the Interior, U.S. Fish and Wildlife Service
- U.S. Federal Emergency Management Agency
- U.S. Census Bureau

9. REFERENCES CITED

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Wetland Resources, Migratory Bird Habitat Assessment for ENV, 2019

Wetland Resources, Wetland Delineation for ENV, 2018

10. APPENDICES

Appendix A: USFWS IPaC Resource List

Appendix B: Migratory Bird Habitat Assessment

Appendix C: NRCS Soil Map

Appendix D: Class III Cultural Resource Inventory Abstract

Appendix E: 2018 Wetlands Delineation

Appendix F: Flood Insurance Rate Maps

Appendix G: Agency Coordination Letters