

FRIEDMAN MEMORIAL AIRPORT

LAND ACQUISITION AND OBSTRUCTION REMOVAL
ENVIRONMENTAL ASSESSMENT AND DOT SECTION 4(f) EVALUATION

MAY 2019

AIP # 3-16-0016-044-2017

Prepared for the Friedman
Memorial Airport (SUN) and the
Federal Aviation Administration

Prepared by T-O Engineers



T-O ENGINEERS

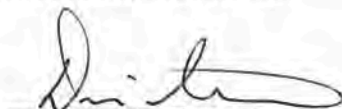
Friedman Memorial Airport

Land Acquisition and Obstruction Removal

Environmental Assessment and DOT Section 4(f) Evaluation

(AIP # 3-16-0016-044-2017)

This Environmental Assessment becomes a Federal document when evaluated and signed by the responsible FAA official.



Responsible FAA Official

May 24, 2019

Date

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ACRONYMS AND ABBREVIATIONS

AC	Advisory Circular
AEDT	Airport Environmental Design Tool
ALP	Airport Layout Plan
APE	Area of Potential Effect
ARC	Airport Reference Code
ARFF	Aircraft Rescue and Firefighting
BCHA	Blaine County Housing Authority
BGEPA	Bald and Golden Eagle Protection Act
BMPs	Best Management Practices
CEQ	Council of Environmental Quality
CO ₂	Carbon dioxide
CFR	Code of Federal Regulations
CFS	Cubic feet per second
CREC	Controlled Recognized Environmental Condition
CWA	Clean Water Act
DNL	Day-night average sound level
DOT	Department of Transportation
DWG	Dual-wheel gear
DWT	Dual-wheel tandem
EA	Environmental Assessment
EO	Executive Order
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
FAA	Federal Aviation Administration
FBO	Fixed-Base Operator
FEMA	Federal Emergency Management Agency
FMAA	Friedman Memorial Airport Authority
FPPA	Farmland Policy Protection Act
GHG	Greenhouse Gas
HABS	Historic American Building Survey
HREC	Historic Recognized Environmental Condition
IDAPA	Idaho Administrative Code
IDEQ	Idaho Department of Environmental Quality
IDFG	Idaho Department of Fish and Game
IFWIS	Idaho Fish and Wildlife Information System
IHSI	Idaho Historic Sites Inventory
ITD	Idaho Transportation Department
LUST	Leaking underground storage tank
MBTA	Migratory Bird Treaty Act
MOA	Memorandum of Agreement
MOS	Modifications of Standards
MPU	Master Plan Update

NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NPDES	National Pollutant Discharge Elimination System
NPIAS	National Plan of Integrated Airport Systems
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
PEM	Palustrine Emergent
PFO	Palustrine Forested
PSS	Palustrine Scrub-Shrub
RECs	Recognized Environmental Conditions
RPZ	Runway Protection Zone
RSA	Runway Safety Area
SGCN	Species of Greatest Conservation Need
SHPO	State Historic Preservation Office
SIP	State Implementation Plan
SRE	Snow removal equipment
SUN	Friedman Memorial Airport
SWG	Single-wheel gear
UIC	Underground injection well
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
UST	Underground storage tank

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Chapter 1 BACKGROUND AND PROPOSED ACTION

1.1 INTRODUCTION

The Friedman Memorial Airport (Airport or SUN) is located in Blaine County in the City of Hailey, Idaho (**Figure 1-1**), within the Wood River Valley. The Friedman Memorial Airport Authority (FMAA or Sponsor), formed through a Joint Powers Agreement between the City and County, currently operates and manages the Airport.

The Airport is a commercial service airport, serving several airlines and a wide variety of general aviation traffic. The Airport currently does not meet all design standards per Federal Aviation Administration (FAA) guidance and regulations and hence, there are non-standard conditions that exist at the Airport. Several non-standard conditions at the Airport are currently allowed via approved FAA Modifications of Standards (MOS); however, the approved MOSs do not address several other non-standard conditions related to land on the south end of the Airport. The Proposed Action is endorsed by the Sponsor to fix deficiencies on the south end of the Airport that were identified during the 2018 Master Plan Update (MPU)¹. The Proposed Action includes land acquisition, removal of trees, and the extension of part of the Airport's perimeter fence. MOSs that are already approved will remain in place after the Proposed Action is implemented, as these relate to non-standard conditions that will not be addressed under the Proposed Action.

This Environmental Assessment (EA) was prepared to identify the potential environmental impacts associated with the Proposed Action, as well as how any identified impacts can be avoided, minimized, or mitigated. The EA was prepared pursuant to Section 102(2)(c) of the National Environmental Policy Act (NEPA) and the President's Council on Environmental Quality (CEQ) Regulations Title 40 CFR §§ 1500-1508, the implementing regulations for NEPA and in accordance with FAA Order 1050.1F *Environmental Impacts: Policies and Procedures*² and FAA Order 5050.4B *National Environmental Policy Act (NEPA) Implementing Instructions for Airport Actions*³.

1.2 BACKGROUND AND EXISTING FACILITIES

SUN is classified as a primary non-hub commercial service airport by the FAA's National Plan of Integrated Airport Systems (NPIAS). Similarly, the Idaho Transportation Department's (ITD) 2010 State Aviation System Plan⁴ identifies SUN as a commercial service airport needed to accommodate scheduled commercial air carrier service in addition to air cargo, business aviation and all types of general aviation. The Airport property includes approximately 209 acres

¹ SUN. 2018. Friedman Memorial Airport (SUN) Master Plan Update. Accessed April 25, 2018 at <http://iflysun.com/master-plan/>

² FAA. 2015. Order 1050.1F. U.S. Department of Transportation, Federal Aviation Administration. Accessed May 3, 2018 at https://www.faa.gov/documentLibrary/media/Order/FAA_Order_1050_1F.pdf

³ FAA. 2006. Order 5050.4B. U.S. Department of Transportation, Federal Aviation Administration. Accessed May 9, 2018 at https://www.faa.gov/airports/resources/publications/orders/environmental_5050_4/

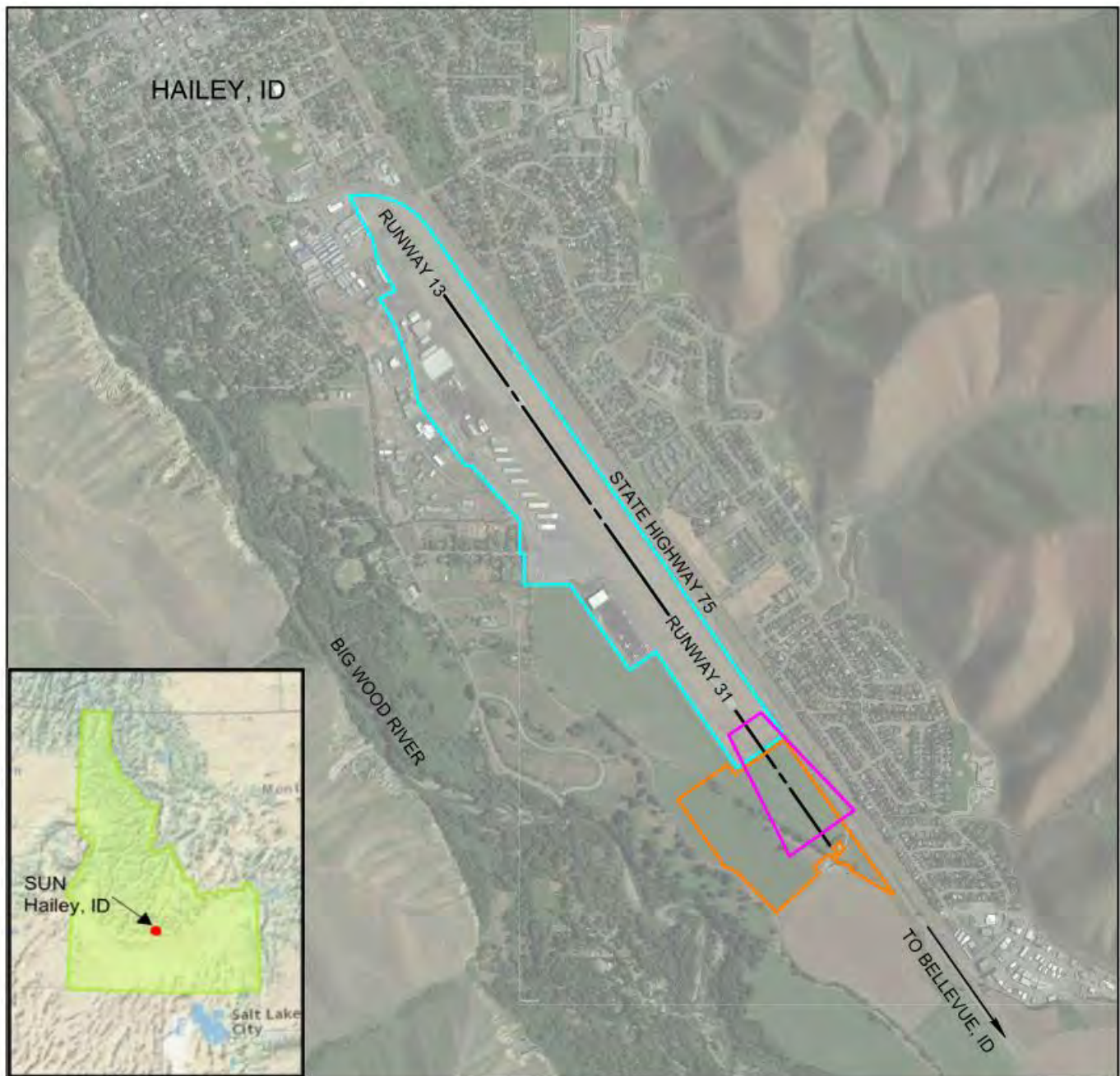
⁴ ITD. 2010. Idaho Airport System Plan. Idaho Transportation Department. Accessed May 9, 2018 at [http://apps.itd.idaho.gov/apps/aero/Executive_Summary/IASP_ES-FINAL\(LowRes\).pdf](http://apps.itd.idaho.gov/apps/aero/Executive_Summary/IASP_ES-FINAL(LowRes).pdf)

of land and is situated in a very geographically confined location: it is located directly south of the City of Hailey's urban core, west of State Highway 75, east of the Wood River, and less than 2 miles north of the City of Bellevue as shown in the Vicinity Map, **Figure 1-1**.

The Airport has a single runway, Runway 13/31, which is 7,550 feet long with a general north-south heading. The Airport also has a full parallel taxiway (Taxiway B) on the west side of the runway. The runway is 100 feet wide and its asphalt pavement is designed for aircraft with weight bearing capacities of single-wheel gear (SWG) of 65,000 pounds, dual-wheel gear (DWG) of 95,000 pounds and dual-wheel tandem (DWT) of 150,000 pounds.

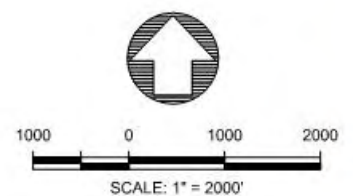
There are seven taxiway connectors providing access to/from the runway: one at each end as well as five connectors in between. Four connectors on the north end of the runway and one at the south end are designed to accommodate larger aircraft, while the remaining two connectors are for use by smaller aircraft only. A total of four aprons are available for parking and maneuvering aircraft: one at the north end of the airport; one at approximately midfield, serving the terminal; and, two at the southern end of the airfield. The terminal is located approximately 2,800 feet from the northern end of the runway, along the western side. Additional airport facilities include an air traffic control tower; an airport operations building that houses aircraft rescue and firefighting (ARFF), snow removal equipment (SRE) and airport administration; fixed-base operator (FBO) hangars; general aviation hangars; automobile parking; and, two fuel facilities. The existing Airport layout is illustrated in **Figure 1-2**.

The geographic constraints of the Airport lead to a variety of conditions that result in the Airport being unable to meet full design standards of an ARC C-III (see **Section 1.3** for an explanation of this term). Several non-standard conditions at the Airport are currently allowed via approved FAA Modifications of Standards (MOS); however, the approved MOSs do not address several non-standard conditions related to land on the south end of the Airport. Based on the physical constraints of the Airport's airspace due to mountainous terrain, predominant departures at the Airport are to the south on Runway 13 and arrivals are from the south on Runway 31. This predominant "one-way-in/one-way-out" operation is utilized by all commercial (airline) aircraft and a majority of the large general aviation aircraft fleet, including corporate jets. As a result, the land on the south end of the Airport experiences more airport operations and represents one of the most critical areas to protect from a safety and land use compatibility standpoint.



LEGEND

- AIRPORT PROPERTY BOUNDARY
- - - RUNWAY 13-31 CENTERLINE
- RUNWAY PROTECTION ZONE [RPZ]
- PROPOSED ACQUISITION AREA [64.6 ACRES]

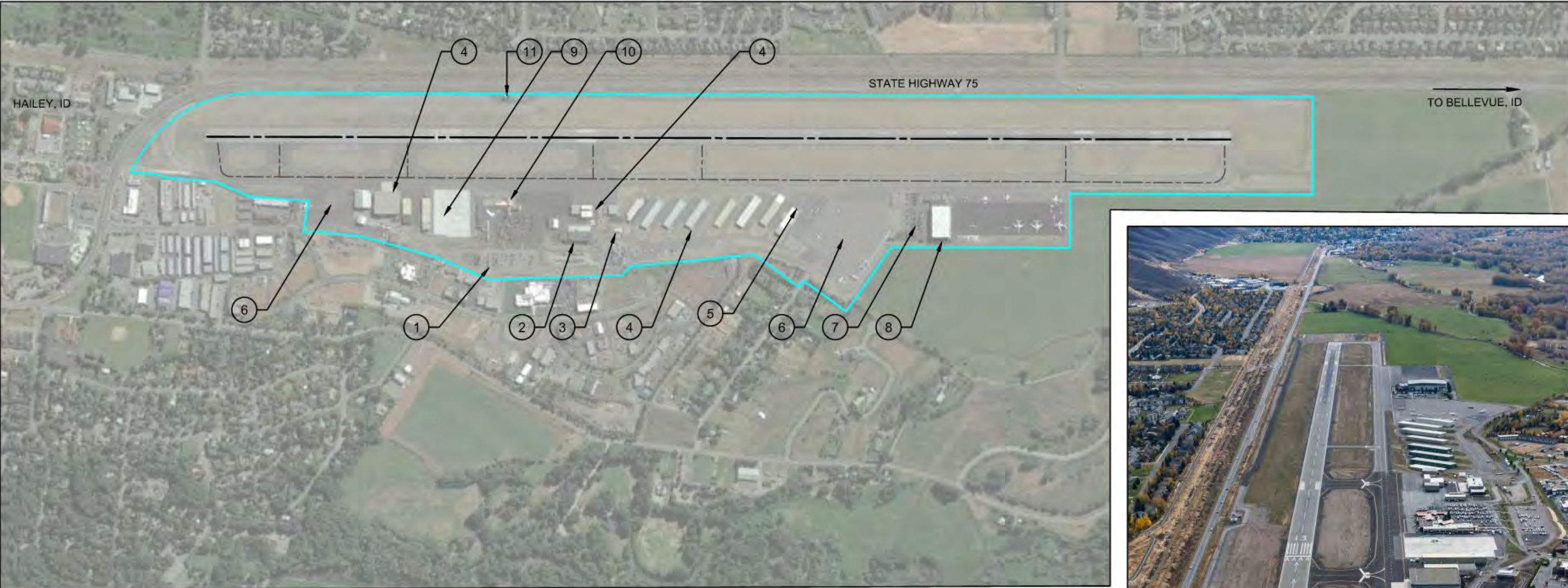


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FIGURE 1-1: VICINITY MAP





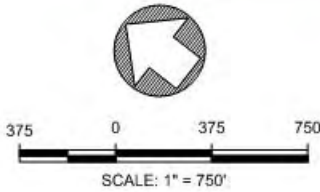
BUILDINGS AND FACILITIES	
1	PUBLIC PARKING
2	ARFF/SRE/ADMINISTRATION
3	FUEL FARM
4	GENERAL AVIATION HANGARS
5	GENERAL AVIATION FUEL
6	GENERAL AVIATION APRON
7	PILOT/FBO PARKING
8	ATLANTIC AVIATION (FBO)
9	AIR CARRIER APRON
10	TERMINAL BUILDING
11	AIR TRAFFIC CONTROL TOWER

LEGEND

— AIRPORT PROPERTY BOUNDARY

--- RUNWAY 13-31 CENTERLINE

... PARALLEL TAXIWAY B CENTERLINE



AERIAL IMAGE OF SUN AIRPORT LOOKING SOUTH AT THE RUNWAY AND PARALLEL TAXIWAY

FIGURE 1-2: EXISTING AIRPORT LAYOUT



1.3 AIRPORT LAYOUT PLAN AND AIRPORT PLANNING

The Airport Layout Plan (ALP) is a set of drawings and an associated report that the FAA, State of Idaho, and Sponsor use to plan for future improvements. In coordination with the Sponsor, the ALP for the Airport was most recently conditionally approved by the FAA on August 23, 2018, as part of the MPU. Together, these documents provide the framework needed to guide future airport development based on forecast aviation demand. The Airport currently faces numerous design and operational constraints, including but not limited to: non-compliance with several FAA design standards for ARC C-III; surrounding mountainous terrain that limits aircraft approaches and departures; and, an Airport property footprint that restricts its ability to meet current and long-term needs. FAA MOSs are in place to address several of these non-standard conditions at the Airport as shown in **Table 1-1**.

TABLE 1-1: CURRENT MODIFICATIONS OF STANDARDS AT SUN.

	Title	Description	FAA Approval Date
MOS 1	Runway Centerline to Parallel Taxiway Centerline	Allows a Runway Centerline to Parallel Taxiway Centerline of 320 feet, while the standard is 400 feet, due to man-made constraints including hangars, the Terminal Building, and airplane parking.	November 2013
MOS 2	Parallel Taxiway Object Free Area (TOFA) Width	Allows a TOFA width of 160 feet, while the standard is 186 feet, due to man-made constraints including hangars, the Terminal Building, and airplane parking.	November 2013
MOS 3	Runway Object Free Area (ROFA) Width	Allows the following structures to remain in the ROFA: State Highway 75, Perimeter Fence, and Off Airport Buildings.	November 2013
MOS 4	Runway Safety Area (RSA) Grading	Allows the existing RSA transverse grades of 0% to 1%, while the standard is 1.5% to 3%.	November 2013
MOS 5	Runway Centerline to Aircraft Parking Area	Allows a Runway Centerline to Aircraft Parking Area separation of 400 feet, while the standard is 500 feet.	November 2013
MOS 6	Taxiway Width	Allows a parallel taxiway width of 50 feet plus 10-foot paved shoulders, while the standard for width is 75 feet with taxiway edge safety margin of 15 feet. Intersections and fillets are designed to accommodate Taxiway Design Group (TDG) 5 aircraft so that the required taxiway edge safety margin is provided for all aircraft operating at SUN.	November 2013

Source: 2018 MPU, Table C1.

A critical step in the airport planning process is to identify the type of aircraft using the airport and number of associated operations. This is necessary in order to plan and design the facility in order to safely accommodate the aircraft that are using the Airport, both now and through the MPU planning horizon (through the year 2034). As part of the 2018 MPU, the existing traffic using the Airport was evaluated, and aviation activity forecasts were developed for both the

number of based aircraft and total annual aircraft operations at the Airport through the planning horizon (2034). The forecasts were used as a planning tool to project future facility needs, some of which are planned for development within the next few years and are being analyzed in this EA. Since the planning documentation was conditionally approved in 2018, no additional evaluations of aviation forecasts were developed for this EA.

FAA airport design parameters are driven by the size and speed of aircraft using the airport. Per FAA guidance (see FAA Order 5090.3C), the most demanding aircraft based on regular use at the airport is considered the design aircraft. Regular use means 500 or more annual operations (an operation being a take-off or landing). Designation of a design aircraft drives airport design and planning decisions including what airport dimensional standards (such as runway width, separation standards, surface gradients, etc.) are appropriate for the airport. Based on the design aircraft, the FAA uses an airport coding system referred to as the Airport Reference Code (ARC) that establishes the specific design criteria for facility development.

The 2018 MPU and ALP identified the Bombardier Q-400 as the design aircraft at SUN. In 2018, the Bombardier Q-400 had 1,020 annual operations⁵ at the Airport. The Q-400 is a commercial air carrier passenger aircraft currently operated by Alaska Airlines at SUN. It should be noted that since the completion of the MPU, the Embraer E-175 commercial air carrier passenger regional jet has replaced the CJR700 regional jet as the primary air carrier regional jet with regular use at SUN. The E-175 is operated by Delta and United Airlines and had 1,734 annual operations⁶ in 2018. The Q-400 and E-175 are depicted in **Figure 1-3**. SUN also serves a wide variety of large corporate jets, such as the Gulfstream and Global families of aircraft.

⁵ FAA Operations and Performance Data from Traffic Flow Management System Counts. Accessed online on January 30, 2019 at <https://aspm.faa.gov/tfms/sys/Airport.asp>

⁶ Personal communications with Chris Pomeroy (SUN Airport Manager) dated February 4, 2019.

FIGURE 1-3: DESIGN AIRCRAFT



The E-175 photo (left photo) was obtained from www.flickr.com; and, the Q-400 photo (right photo) was obtained from www.wingsmagazine.com.

According to the 2018 MPU, the Q-400 has an approach speed in the “C” category with a wingspan in Group III. The EMB-175 is also a C-III aircraft based on wingspan and approach speed. As a result, SUN is classified as an ARC C-III facility. Although the Q-400 and EMB-175 commercial aircraft are identified as the most demanding aircraft based on regular use at SUN, there is also regular use by corporate jets with the C-III classification. The Airport is expected to remain ARC C-III throughout the MPU planning horizon (2034).

According to the 2018 MPU, the Airport does not meet full design standards for an ARC C-III facility due to its constrained location and development that has occurred and is ongoing. Over the past 15 years, the Airport has attempted to identify and correct these deficiencies in standards, including temporarily addressing some non-standard issues with FAA approved MOSs (see **Table 1-1**).

Even with some FAA-approved MOSs in place, the Airport does not meet all operational standards per FAA guidance and regulation. The following sections provide an explanation of identified deficiencies that are relevant to the Proposed Action in this EA and are not covered by an FAA approved MOS. Further detail regarding the operational deficiencies can be found in the 2018 MPU and in the attached Alternatives Analysis Report in **Appendix A**.

1.3.1 Runway Safety Area and Runway Object Free Area

The Runway Safety Area (RSA) is a defined area that is suitable for reducing the risk of damage to airplanes in the event of an undershoot, overshoot, or excursion from the runway. The Runway Object Free Area (ROFA) is a two-dimensional area on the ground surrounding the runway that is clear of objects except for items fixed by their function (e.g. airfield lighting). The dimensions of the RSA and ROFA are based on the ARC. At SUN, the RSA is centered on the runway and is 500 feet wide. The ROFA is centered on the runway and is 800 feet wide. The RSA and ROFA both extend 1,000 feet beyond the runway ends for take-off operations and 600 feet beyond the runway ends for landing operations.

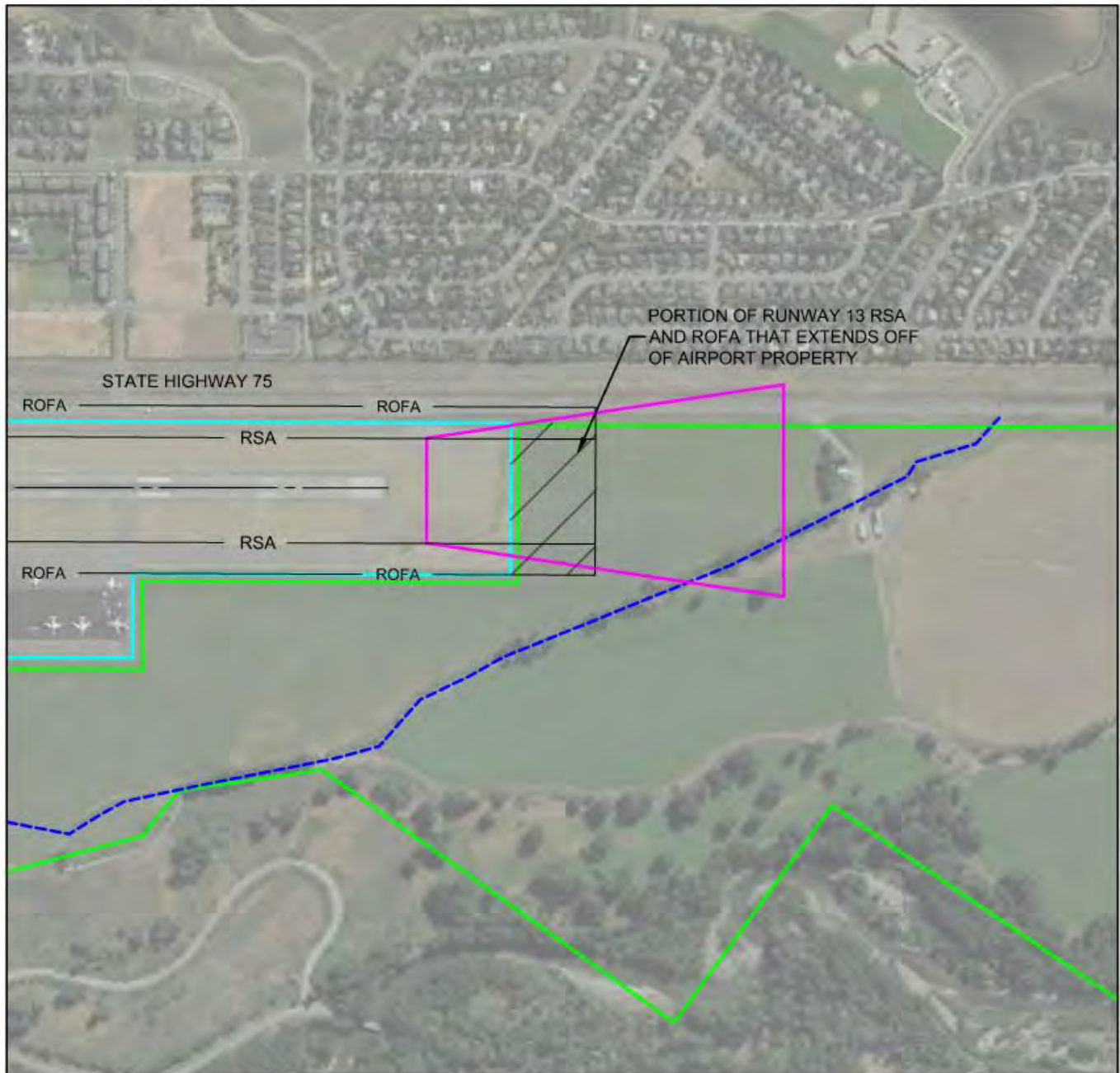
The Airport does not control the property containing the full RSA or full length of the ROFA that would typically continue beyond the end of the runway. The existing Airport property line and fence are located only 600 feet south of the runway end. Therefore, declared distances are published for aborted takeoffs from Runway 13 (departure to the south) and for landings on Runway 13 (landing from the north) in order to meet FAA design standards since the full RSA and ROFA extends off of airport property (see **Figure 1-4**). Declared distances must be used, rather than the runway's physical length for aircraft performance calculations prior to departure or arrival. However, an aircraft is not prohibited from operating beyond a declared distance limit during departure, arrival, or taxi operation provided the runway surface is appropriately marked as usable runway. The entire length of runway at SUN is marked as usable runway.

The use of declared distances impacts commercial airline operations. Especially when the air temperature is high, the airlines must reduce their take-off weight. This limits the number of passengers, baggage and fuel they can carry, meaning passengers are often bumped from flights and/or there is limited range due to reduced fuel load for the airline in those conditions. This is a regular occurrence for airline flights at SUN during summer months.

1.3.2 Runway Protection Zone

As stated in the previous subsection, the RSA and ROFA are areas intended to reduce the risk of damage to airplanes in the event of an incident near the runway. The Runway Protection Zone (RPZ) is an area off the end of the runway intended to enhance the protection of people and property on the ground. The Runway 31 RPZ starts 200 feet off the runway end and extends 1,700 feet. The inner and outer widths of the Runway 31 RPZ are 500 feet and 1,010 feet, respectively (see **Figure 1-4**).

The RPZ off the Runway 31 end is located only partially on property owned or permanently controlled by the Airport. Sponsor control over RPZ land is emphasized by the FAA to achieve the desired protection of people and property on the ground. The lack of control of an RPZ creates the potential for the introduction of safety hazards and land use compatibility issues. The majority of the southern RPZ and part of the RSA and ROFA at the southern end of the runway are on land owned by the adjacent landowner (Eccles Flying Hat Ranch). This situation is complicated by the fact that the Ranch is a designated Historic District (see **Sections 4.5 and 4.8** for more information). A segment of Cove Canal, which is an irrigation ditch, also traverses the RPZ (see **Sections 4.5, 4.8, and 4.14** for more information about the Cove Canal).



LEGEND

- AIRPORT PROPERTY BOUNDARY
- - - RUNWAY 13-31 CENTERLINE
- RUNWAY PROTECTION ZONE [RPZ]
- RSA — RUNWAY SAFETY AREA [RSA]
- ROFA — RUNWAY OBJECT FREE AREA [ROFA]
- - - COVE CANAL
- ECCLES FLYING HAT RANCH

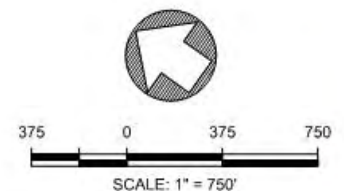


FIGURE 1-4: RUNWAY 13-31 RSA, ROFA, AND RPZ EXHIBIT



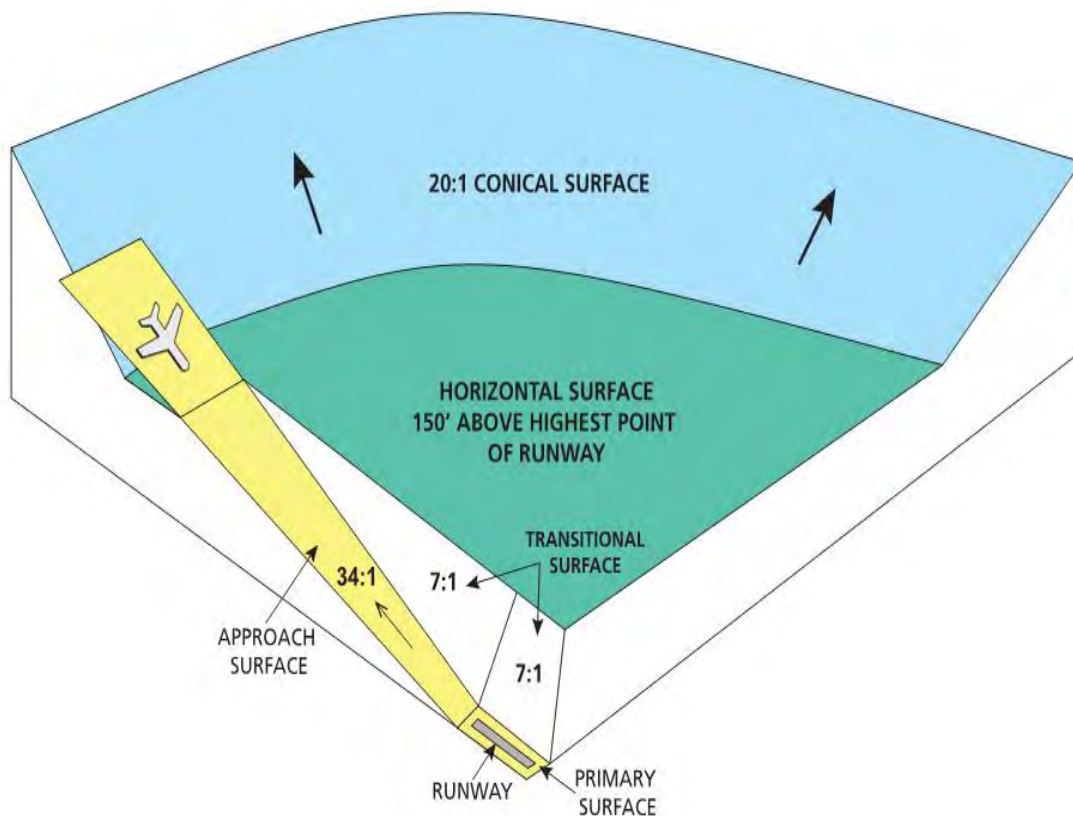
1.3.3 14 Code of Federal Regulations Part 77 Surfaces (14 CFR Part 77) and AC 150/5300-13A Departure Surface

Title 14 CFR Part 77 (14 CFR Part 77), “Safe, Efficient Use, and Preservation of the Navigable Airspace,” establishes descriptions for determining obstructions in navigable airspace. It describes imaginary surfaces that surround each airport and are defined relative to the specific airport and each runway in order to protect the safety of aircraft operating in the airport environment. Any objects (trees, buildings, towers, terrain, etc.) that penetrate these airspace surfaces are known as obstructions.

There are five surfaces associated with 14 CFR Part 77:

1. Primary Surface;
2. Approach Surface (referred to as “Part 77 Approach Surface” in this EA);
3. Horizontal Surface;
4. Conical Surface; and,
5. Transitional Surface.

Figure 1-5: 14 CFR Part 77 Surfaces



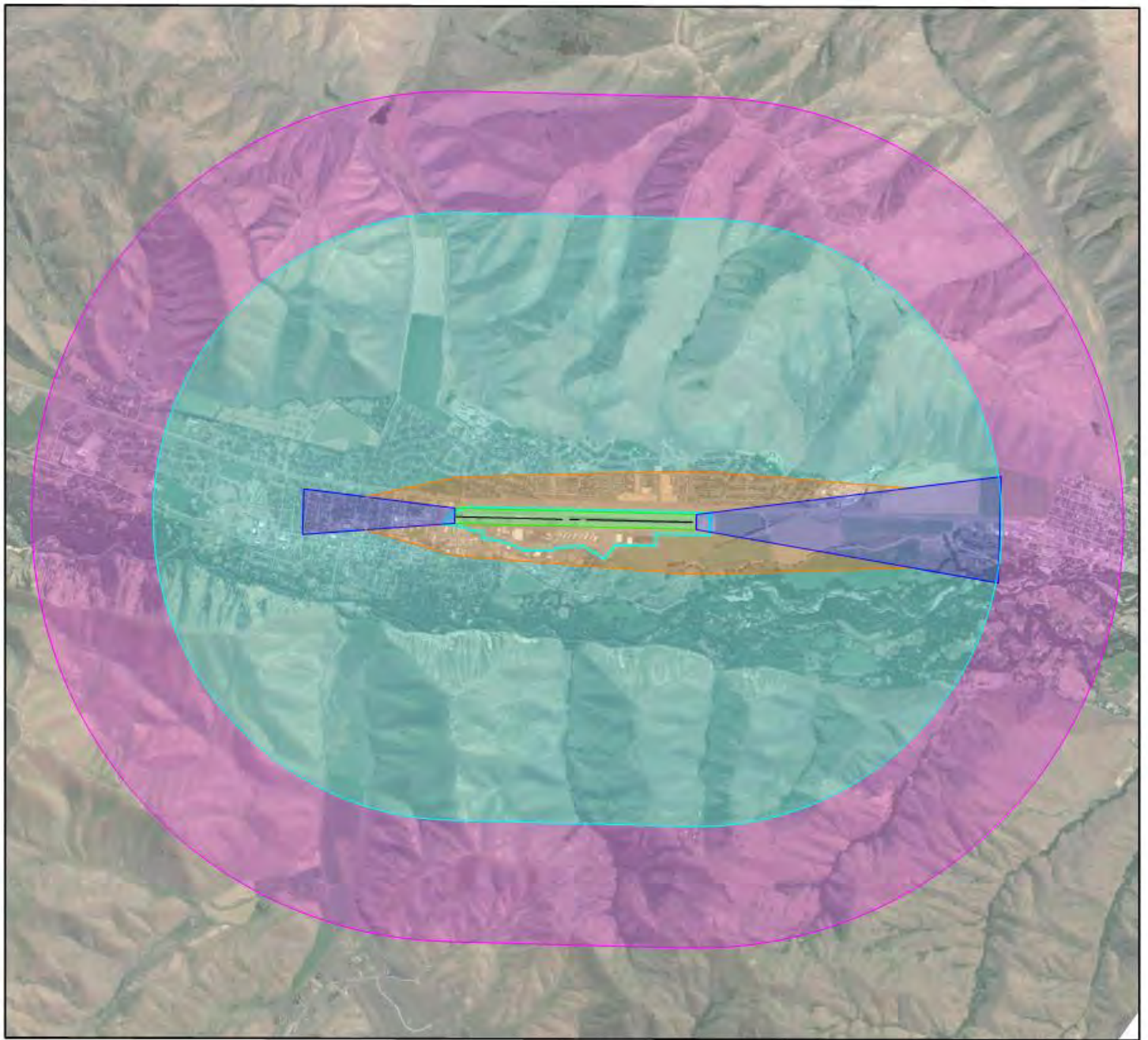
Graphic provided by T-O Engineers

In addition to 14 CFR Part 77, the FAA provides additional airport planning guidance in Advisory Circular (AC) 150/5300-13A, *Airport Design*. This design guidance is mandatory for airports that receive federal grants (including SUN). This document includes the definition of the Departure Surface (referred to as “AC 5300-13A Departure Surface” in this EA), which is designed to allow aircraft to follow standard departure procedures when departing an airport. This surface is much larger than the Part 77 Approach Surface. Obstructions to this surface can affect the safety of departure operations. The map for the Airport’s 14 CFR Part 77 surfaces and airspace is shown in **Figure 1-6**.

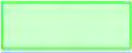






At SUN, there are up to 200 individual trees (primarily cottonwoods) directly south of the Airport, many of which are obstructions to the Part 77 Approach Surface and AC 5300-13A Departure Surface used by aircraft departing on Runway 13 (to the south) and aircraft arriving on Runway 31 (from the south).

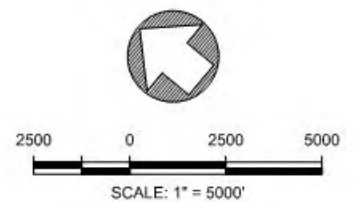
In order to achieve an acceptable level of safety for aircraft operations, obstructions in the Part 77 Approach Surface and AC 5300-13A Departure Surface must be removed or lighted, airport layouts modified (e.g. relocate the runway end), or operating procedures developed (e.g. climb gradients). An existing easement with the Eccles Flying Hat Ranch was in place to light trees, which have been documented as obstructions to air navigation, but this agreement expired in December of 2018. A new agreement allows the lights to remain up until the end of September 2020; however, the landowner has stated he does not want another long-term easement.

Because of the lights in the trees identified as Part 77 approach surface obstructions, as allowed by the easement, the trees are not considered a hazard to air navigation. The trees are identified in the FAA’s published departure procedure for SUN in the Takeoff Minimums, (Obstacle) Departure procedures, and Diverse Vector Area (Radar Vectors) section of the U.S. Terminal Procedures Publication. The FAA’s flight procedures office has advised the Airport in the past that If the easement were to expire, the lights removed, and the trees remain, the instrument approach procedures would be noted as not available after dark. This means all aircraft attempting to land after dark would have to make a visual approach. Additionally, due to the terrain around the airport, the Airport’s commercial operators always use the instrument procedure. Based on the current airline schedule, the loss of instrument approach procedures after dark could impact weekly commercial operations during winter months. Loss of the instrument approach procedures after dark could also impact private and business jet operations since these operators could choose not to operate after dark without an instrument approach.



LEGEND

	PRIMARY SURFACE
	APPROACH SURFACE
	HORIZONTAL SURFACE
	CONICAL SURFACE
	TRANSITIONAL SURFACE
	RUNWAY 13-31 CENTERLINE
	AIRPORT PROPERTY BOUNDARY



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**FIGURE 1-6: 14 CFR PART 77
SURFACES**

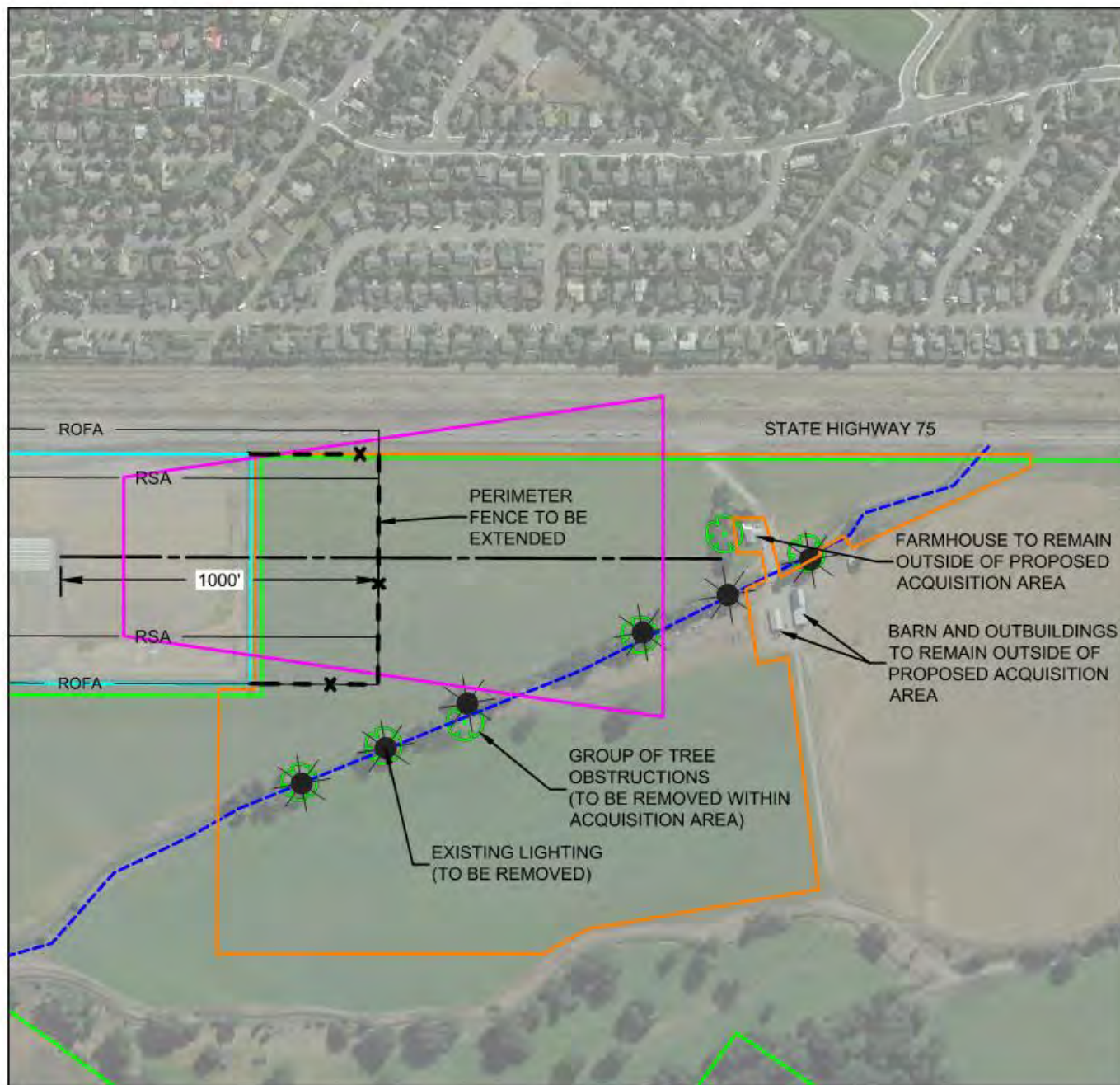


1.4 PROPOSED ACTION

The Proposed Action is intended to correct the non-standard conditions discussed in the previous section and thus improve the safety of the Airport. The other non-standard conditions currently addressed by MOSs would remain. Specifically, the Proposed Action will allow the Airport to meet FAA's emphasis on owner control of the RPZ by fee acquisition, the requirement to provide full RSA and full length ROFA for arrivals from and departures to the south, and the removal of obstructions.

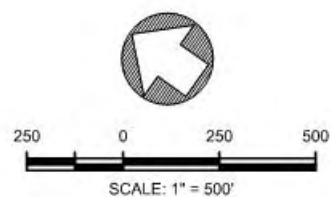
The Proposed Action includes the following components, shown in **Figure 1-7**:

1. Acquisition of 64.6 acres of property at the southern end of Runway 31 to gain full control of the land encompassing the RSA, full length of the ROFA, and most of the RPZ, as well as maintain the areas where the obstructions (trees located along the Cove Canal and near the farmstead) are located within the approach/departure surfaces. Note: The Proposed action does not acquire the segment of the RPZ that covers State Highway 75 and does not acquire the portion of the ROFA associated with State Highway 75 as allowed by MOS 3 (See **Table 1-1**).
2. Removal of all trees (including obstruction lights currently placed in the trees) on the south end of the runway that penetrate, or could penetrate in the future, the Airport's Part 77 Approach Surface and AC 5300-13A Departure Surface. Up to 200 trees may be removed. Once the obstructions have been removed, FAA would amend the departure procedure for Runway 13 to remove the takeoff notes related to those obstructions.
3. Extending the Airport perimeter fence to provide fencing for the full length of the ROFA, which extends 1,000-feet beyond the Runway 31 end. The perimeter fence will be extended approximately 400 feet south of its current location to encompass 6.5 additional acres and contain the full RSA and full length of the ROFA. Note: As allowed by MOS 3 (see **Table 1-1**), a portion of the width of the ROFA associated with State Highway 75 will remain outside of the Airport fence.



LEGEND

- AIRPORT PROPERTY BOUNDARY
- - - RUNWAY 13-31 CENTERLINE
- RUNWAY PROTECTION ZONE [RPZ]
- RSA — RUNWAY SAFETY AREA [RSA]
- ROFA — RUNWAY OBJECT FREE AREA [ROFA]
- - - COVE CANAL
- ECCLES FLYING HAT RANCH
- PROPOSED ACQUISITION AREA [64.6 AC]



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FIGURE 1-7: PROPOSED ACTION



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Chapter 2 PURPOSE AND NEED

2.1 PURPOSE

The purpose of the project is to improve safety by addressing deficiencies to bring safety areas at the south end of the Airport into compliance with FAA standards and recommendations and by removing obstructions to the airspace south of the Airport. MOSs that are already approved will remain in place after the Proposed Action is implemented, as these relate to non-standard conditions that will not be addressed under the Proposed Action.

2.2 NEED

The Proposed Action is needed because the 2018 MPU identified deficiencies at the south end of the Airport, which included deficiencies correlated to the RSA, ROFA and RPZ, as well as obstructions in the Part 77 Approach Surface and AC 150/5300-13A Departure Surface. The need is in accordance with FAA guidance to ensure Airport control of surfaces and designated safety areas surrounding the runway. The Proposed Action will improve safety for aircraft, people, and property on the ground, and will acquire additional rights and property to maintain clear airspace in accordance with FAA AC 150/5300-13A and FAA Order 5100.38D.

2.2.1 Need for Acquisition of Land

The acquisition of land will ultimately accomplish the following:

- Provide Sponsor ownership of the full RSA and the length of the ROFA meeting FAA dimensional standards on the south end of the Airport through fee simple ownership. (As noted in **Section 1.4**, the portion of the ROFA associated with State Highway 75 is not included for acquisition, as allowed by MOS 3 (see **Table 1-1**)).
- Control property and airspace at the south end of Airport, which encompasses the departure end of Runway 13 and the approach end of Runway 31 (including the RSA, full length of ROFA, and most of the RPZ) through fee simple ownership. (As noted in **Section 1.4**, the portions of the ROFA and RPZ associated with State Highway 75 will not be acquired).
- Acquire property to maintain the area south of the runway clear of obstructions, both man-made and natural; and to control and protect the area from future incompatible land uses.

As discussed in **Section 1.3.1**, the Airport does not control the property containing the full RSA or full length of the ROFA that would typically continue beyond the end of the runway, and declared distances are utilized at SUN because of this situation. For SUN, the RSA and ROFA both extend 1,000 feet beyond the runway ends for departures and 600 feet beyond the runway ends for arrivals; however, the existing Airport property line and fence are located only 600 feet south of the runway end.

According to FAA AC 150/5300-13A, Modifications of Standards for an RSA are not allowed; therefore, to meet standards, the RSA at SUN must extend the full 1,000 feet beyond the end of the runway for departures to the south. The FAA allows declared distances to be used to obtain

additional RSA and/or ROFA only when it is impractical to meet these standards. The Proposed Action will bring the Airport into compliance with FAA design standards for RSA at the south end of the runway without the use of declared distances. For the ROFA, MOS 3 (see **Table 1-1**) is in place to allow State Highway 75, the perimeter fence, and off airport buildings to remain in the ROFA as it is impractical to move or remove them. With MOS 3 in place, the declared distances can be removed at SUN once the Airport controls the full 1,000-foot length of the RSA and the perimeter fence is relocated as proposed.

In addition to not having control of the full RSA, one of the non-standard conditions that the proposed land acquisition will correct is the fact that the RPZ on the south end of the Airport is not entirely located on property owned or permanently controlled by the Airport. Airport control over the land in the RPZ is encouraged by the FAA to achieve the desired protection of people and property on the ground. Although the FAA recognizes that in certain situations the Sponsor may not fully control land within the RPZ, the FAA encourages Sponsors to take all possible measures to protect against and remove or mitigate incompatible land uses. The majority of the southern RPZ at SUN is owned by the adjacent landowner and protected by an easement that expired in December of 2018. A new agreement is in place until the end of September 2020; however, the landowner has stated he does not want another long-term easement.

In addition to protecting the majority of the southern RPZ, this easement had also allowed the placement and maintenance of obstruction lights in the trees identified as obstructions to the Part 77 Approach Surface and AC 150/5300-13A Departure Surface. Acquisition of this property will provide the Airport the ability to remove the trees identified as obstructions, which is further discussed in **Section 2.2.2**.

The RPZ and the AC 5300-13A Departure surface and Part 77 imaginary surfaces, exist for the safety of those on the ground and to provide for the safe navigation of aircraft. FAA guidance encourages airport sponsors to have control over property containing these surfaces around their airports. The acquisition of the property in the Proposed Action at SUN will provide the Airport control over these surfaces, the ability to prevent incompatible land uses from encroaching into these areas, and the ability to remove the trees identified as obstructions. Although as noted previously, the Proposed Action does not acquire the segment of the RPZ and ROFA that covers State Highway 75.

2.2.2 Need for Removal of Obstructions

The AC 5300-13A Departure Surface and Part 77 surfaces are imaginary surfaces that exist primarily to prevent obstructions from extending upward into navigable airspace, thereby reducing the likelihood of accidents to aircraft. The FAA has identified that a natural growth penetration to the Part 77 Approach Surface is an obstruction⁷ and is presumed to be a hazard to air navigation⁸ unless further aeronautical study concludes the object is not a hazard. The Airport Sponsor is required to clear, remove, lower, relocate, mark, or light the hazard, per FAA

⁷ 14 CFR Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace, Section 77.13(a). Accessed May 10, 2018 at http://dot.ca.gov/hq/planning/aeronaut/documents/regulations/faa_far_part77.pdf

⁸ 14 CFR Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace, Section 77.15(b). Accessed May 10, 2018 at http://dot.ca.gov/hq/planning/aeronaut/documents/regulations/faa_far_part77.pdf

Order 5190.6 Airport Compliance Order, Section 7.13 Hazards and Mitigation⁹, and FAA Grant Assurance #20, Hazard Removal and Mitigation¹⁰.

Penetrations in the Part 77 Approach Surface and AC 5300-13A Departure Surface at SUN consist of approximately 200 trees (primarily cottonwoods) along the Cove Canal and on the Eccles Flying Hat Ranch farmstead, which have grown up to 100 feet tall and are identified as obstructions on the Airport's ALP. Any trees that penetrate one of the Part 77 Approach Surfaces and/or AC 5300-13A Departure Surface, or that have the potential to penetrate these surfaces, will be removed under the Proposed Action after the acquisition of the land. Secondary to the trees existing as obstructions, they also provide wildlife habitat. Commercial service airports like SUN are required by the FAA under 14 CFR Part 139¹¹ to minimize wildlife hazards and attractants, especially in the RPZ.

In addition to providing protection to the majority of the southern RPZ, the easement with the Eccles Flying Hat Ranch had also allowed the placement and maintenance of obstruction lights in the trees that have been identified as obstructions. Because of the lights, the trees are not considered a hazard to navigation; although they are identified in the FAA's published departure procedure in the Takeoff Minimums, (Obstacle) Departure procedures, and Diverse Vector Area (Radar Vectors) section of the U.S. Terminal Procedures Publication. If the trees are removed, the FAA would amend the departure procedure for Runway 13 to remove the takeoff notes related to those obstructions.

Without the lights, and if the trees were to remain in place, the FAA's flight procedures office has advised the Airport in the past that the instrument approach procedures would be noted as not available after dark. This means all aircraft attempting to land after dark would have to make a visual approach and would constitute a major operational restriction if the easement was allowed to expire, the obstruction lights were removed, and the trees remained in place. This conflicts with FAA guidance and increase the safety risks to air traffic and people on the ground as well as reduces the utility of a public use airport.

The landowner of the Eccles Flying Hat Ranch has stated he does not want another long-term easement. As a result, the landowner and Sponsor agree that acquisition of property is necessary to control the RPZ, which would allow removal of the trees. In the interim, the new agreement allows the lights in the trees to remain in place until end of September 2020.

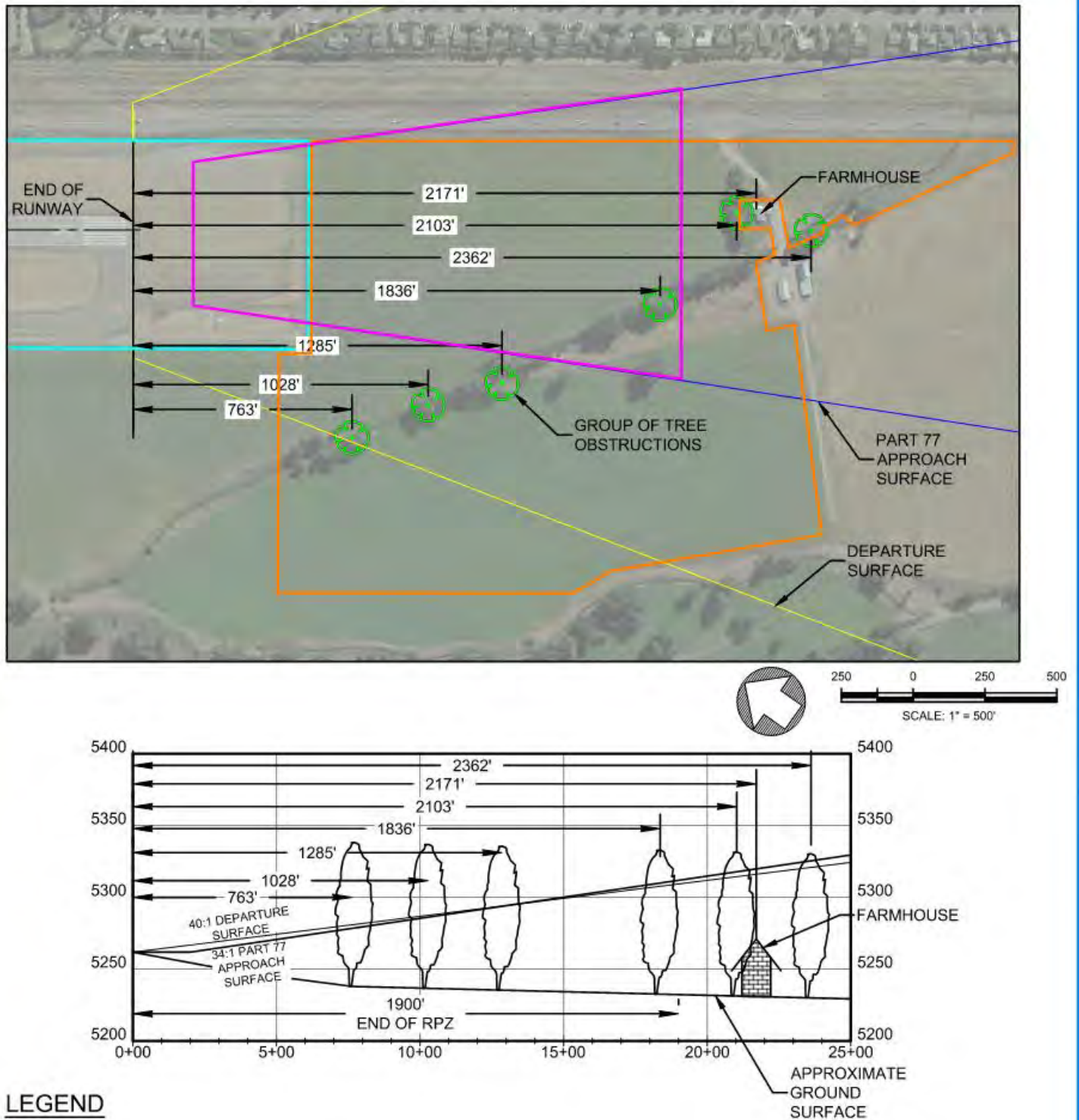
Tree removal includes all existing mature trees as well as younger trees not yet penetrating the protected surfaces, as they will eventually grow and penetrate the surfaces. Complete removal is needed to prevent re-growth of the trees and for mowing and ease of maintenance. Trimming or topping of the trees would remove the obstructions only temporarily, and then would require continuous maintenance to remain obstruction free.

⁹ FAA. 2009. Order 5190.6B, FAA Airport Compliance Manual. Accessed May 10, 2018 at https://www.faa.gov/documentLibrary/media/Order/5190_6b.pdf

¹⁰ FAA. 2015. Reminder of Responsibilities for FAA Personnel and Airport Sponsors for Protecting Approach and Departure Surfaces. Accessed May 10, 2018 at <https://www.faa.gov/airports/engineering/media/Policy-Reminder-Protecting-Approach-and-Departure-Surfaces.pdf>

¹¹ 14 CFR Part 139 Certification of Airports. Accessed May 10, 2018 at <https://www.law.cornell.edu/cfr/text/14/part-139>

Figure 2-1 depicts the documented obstructions to the Part 77 Approach Surface and AC 5300-13A Departure Surface. Obstructions exist within these surfaces within and beyond the RPZ. Trees are shown as obstructions as far as 2,362-feet off the end of Runway 31. Distances from the Runway 31 end to the documented obstructions are illustrated in both the plan and profile views in **Figure 2-1**. Removal of the trees is necessary for the operational safety of pilots and passengers and for meeting the grant obligations of the Sponsor. The purpose of the Proposed Action is not to increase aircraft operations beyond current and forecasted demand in the foreseeable future or directly affect economic activity.



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FIGURE 2-1: DOCUMENTED OBSTRUCTIONS TO APPROACH & DEPARTURE SURFACES



2.2.3 Need to Extend the Airport Perimeter Fence

As stated previously, the RSA and ROFA at SUN are required to extend 1,000 feet beyond the end of the runway for departures to the south. However, the Airport does not control the property for the full 1,000 feet from the actual end of Runway 31 and the Airport fence lies at the existing property boundary (currently 600 feet from the runway end). If the land is acquired according to the Proposed Action, the Airport perimeter fence will be extended to contain the RSA and full length of the ROFA as shown in **Figure 1-7**. The fence will extend to approximately 1,000 feet south of the end of Runway 31, which is approximately 400 feet south of its current location. The width of the existing fence extends from the Airport boundary on the east to the ROFA on the west. The width of the perimeter fence (in relation to the distances from the Runway centerline) will remain unchanged. The extended perimeter fencing will total approximately 1,524 linear feet (approximately 400 feet south on each side of the runway and 724 feet east/west) and encompass 6.5 additional acres.

Control of the full 1,000-foot length of the RSA, relocation of the Airport's perimeter fence, and continued used of MOS 3 (see **Table 1-1**) are necessary for the Airport to cease the use of declared distances for landings on Runway 13 (landings from the north) and for aborted takeoffs from Runway 13 (departure to the south).

2.3 REQUESTED FEDERAL ACTIONS

The FAA actions being requested by the Sponsor include:

- Unconditional Approval of the Proposed Action as shown on the ALP.
- Determination that Environmental Analysis Prerequisites associated with any future Airport Improvement Program (AIP) funding application have been fulfilled pursuant to 49 United States Code § 47101.
- Once the obstructions have been removed, FAA would amend the departure procedure for Runway 13 to remove the takeoff notes related to those obstructions.

2.4 PROPOSED TIMELINE

If approved, the Sponsor would initiate project engineering design immediately after completion of the environmental review process. The land acquisition, fence extension, and obstruction removal are tentatively scheduled to be completed in 2019.

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Chapter 3 ALTERNATIVES

3.1 OVERVIEW AND 2018 MASTER PLAN UPDATE

The process to update SUN's Master Plan began in early 2014 and the FAA accepted the Master Plan Update (MPU) in August of 2018. The 2018 MPU identified deficiencies at the south end of the Airport, which included deficiencies related to the RSA, ROFA and RPZ, as well as obstructions in the Part 77 Approach Surface and AC 150/5300-13A Departure Surface. The 2018 MPU recommended land acquisition for the area south of the Airport to control the RPZ and protect the Airport from potential encroachment by incompatible land uses and approach/departure obstructions. The removal of tree obstructions contained within the approach and departure surfaces was also detailed in the MPU.

As recommended in the 2018 MPU, alternatives were developed to correct the identified deficiencies near the southern end of Runway 31. A total of six alternatives were established during the 2018 MPU and development of this EA. Four alternatives were developed initially, which included a No-Action alternative (Alternative 1) and three alternatives (Alternatives 2 through 4) to meet the Purpose and Need as described in **Chapter 2**.

The preliminary action alternatives (Alternatives 2 through 4) were developed in May of 2017. At the FMAA Board meeting on July 7, 2017, these alternatives and preliminary environmental evaluation criteria for the alternatives were presented and discussed. The Board accepted the evaluation criteria and scheduled a public meeting to request feedback on Alternatives 1 through 4. Prior to the public meeting, the preliminary environmental evaluation criteria were summarized based on the discussion at the July 2017 Board meeting and a bulleted pros and cons description of each alternative was developed. Alternatives 1 through 4, along with the resulting pros and cons, were then presented to the public at a formal public meeting held on August 8, 2017 in Hailey, Idaho. Stakeholders, invitees, sign-in sheets, and the information presented at the meeting is included in **Appendix H**.

Following FMAA Board review of the four initial alternatives, the Board determined none of the alternatives completely met the FAA's, Airport's, and landowner's needs. This caused the FMAA Board to meet with the landowner and through discussions, developed two subsequent alternatives meeting the Purpose and Need and the FAA, Airport, and landowner's needs. Descriptions of the six alternatives are provided in **Section 3.2**. Additional information on the alternatives carried forward for environmental analysis in this EA are provided in **Appendix A**.

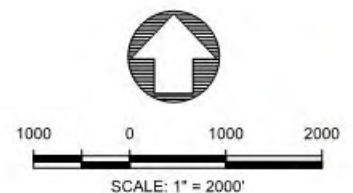
3.1.1 Background

The property to the south of the Airport, where the acquisition would occur, is a part of a larger Historic District known as the "Eccles Flying Hat Ranch" (also known as the "Halfway Ranch"). The ranch property spans approximately 750-acres, of which approximately 615 acres west of Highway 75 form the historic core of the ranch. Much of the main farmstead of the Historic District lies on the extended centerline of the Airport's Runway 13/31. A layout of the Historic District and its relation to the Airport is shown in **Figure 3-1**.



LEGEND

- AIRPORT PROPERTY BOUNDARY
- - - RUNWAY 13-31 CENTERLINE
- RUNWAY PROTECTION ZONE [RPZ]
- PROPOSED ACQUISITION AREA [64.6 ACRES]
- - - COVE CANAL
- ECCLES FLYING HAT RANCH



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**FIGURE 3-1: ECCLES FLYING
HAT RANCH HISTORIC DISTRICT**



The ranch property on the west side of State Highway 75 is eligible for listing in the National Register of Historic Places (NRHP) as it retains sufficient integrity to communicate its historic associations with the agricultural development of the Wood River Valley. The ranch is a relatively rare surviving example in the Wood River Valley of an early twentieth century large-acreage ranch district, complete with the key, character-defining historic elements of open pastureland, tree lines, and a nucleus of farmstead buildings that clearly convey a sense of past time and place.

The farmstead, which lies on the extended centerline of Runway 13/31, encompasses several individual resources (e.g. farmhouse, barn (**Photo 4-3**), grain bins, animal sheds, utility buildings, canals, a corral, equipment shed, well, and outhouse) dating from 1884 to 2006, of which, seven (**Table 4-6**) comprise the main farmstead area. Although the house and garage have been altered, the remaining farm structures and general setting retain their historic integrity. Further discussion of the Ranch is provided in **Sections 4.5 and 4.8** and the Cultural Resources Report that is provided in **Appendix C**.

In order for the Airport to control the RSA, ROFA, RPZ, and remove obstructions to meet FAA standards and recommendations described in **Chapter 2**, acquisition of approximately 64.6 acres of the Eccles Flying Hat Ranch would be necessary. The impact of the acquisition on the Historic District was an important consideration in the development of alternatives. Acquisition of buildings and structures that are considered contributing elements to the Historic District would have an adverse effect to Department of Transportation Section 4(f) historic resources in addition to Section 106 resources (See **Section 4.8**). Use of a Section 4(f) resource as part of a transportation project requires further evaluation to explore if there are any practicable alternatives to avoid use of the resource. Section 4(f) resources are discussed in **Section 4.5**. The Section 4(f) evaluation (see **Appendix G**) influenced the development and consideration of alternatives.

3.2 EVALUATION OF DEVELOPMENT ALTERNATIVES

FAA Orders 1050.1F *Environmental Impacts: Policies and Procedures* and 5050.4B¹² *National Environmental Policy Act (NEPA) Implementing Instructions for Airport Actions*, require the consideration of all reasonable alternatives, the No Action alternative, and the Proposed Action. This section describes the alternatives and the process of evaluating each of them.

¹² FAA. 2006. Order 5050.4B. U.S. Department of Transportation, Federal Aviation Administration. Accessed May 9, 2018 at https://www.faa.gov/airports/resources/publications/orders/environmental_5050_4/

3.2.1 Alternative 1

For the No Action Alternative, the Airport would not acquire any land and therefore would not have control of the RSA and the full length of the ROFA at the southern end of the runway. Without the land acquisition, the Airport would be forced to control these surfaces, the RPZ, and approach/departure areas (including maintenance of obstruction lights in the trees) through an easement with the Eccles Flying Hat Ranch. No changes would be made to the Cove Canal or to the Eccles Flying Hat Ranch under this alternative.

Without control of these surfaces and the ability to remove obstructions, the deficiencies at the south end of the Airport identified in the 2018 MPU will remain. Also, under this alternative, without ownership and control over the RSA and full length of the ROFA, the Airport would not be able to move the perimeter fence; and therefore, would have to continue the use of declared distances. Additionally, the landowner of the Eccles Flying Hat Ranch has stated that he is not agreeable to another long-term easement for lighting the trees. If the easement was allowed to expire, the FAA's flight procedures office has advised that the instrument approach procedures for SUN would be noted as unavailable after dark since the obstruction lights in the trees would have to be removed and the trees (obstructions) would remain. This would result in severe restrictions to the operational capability of the airport.

Although the No Action Alternative does not meet the Purpose and Need, CEQ and NEPA regulations require evaluation of a No Action Alternative. When compared with the Proposed Action, the No Action Alternative serves as a reference point.

3.2.2 Alternative 2








Alternative 2, shown in **Figure 3-2**, is the minimum acreage which would be required to gain perpetual control of the RSA, full length of the ROFA, RPZ, and clear the documented obstructions, with two exceptions. The land acquisition in this alternative encompasses almost the entire RPZ and ROFA, except for the areas overlapping Highway 75 and a small segment of land in the southwestern corner of the RPZ. Avoiding irrigation infrastructure (specifically irrigation controls and electrical supply) was incorporated into Alternative 2 in order to minimize modifications to irrigation equipment housed in the southwestern corner of the RPZ.

This alternative would acquire 34.3 acres of land, consisting of 30.2 acres of active pasture, 3.1 acres attributed to the Cove Canal, and 1 acre of farmstead. This alternative would acquire 2,274 feet of Cove Canal to remove tree obstructions and prevent tree obstruction regrowth. Alternative 2 did not include the segment of Cove Canal (approximately 417 linear feet of canal) that stems between the farmstead and Highway 75 to the east. The Eccles Flying Hat Ranch farmhouse would be acquired but left intact.

This alternative fails to acquire the entire RPZ, does not result in full ownership of the Cove Canal extending to the Highway 75 right-of-way (R-O-W), and does not acquire the entire approach and departure surfaces that are of concern. This would provide the Airport limited control of the Cove Canal that may lead to regrowth of trees that are obstructions in sections not owned by the Airport. Alternative 2 was ultimately not carried forward for further analysis due to its failure to address the Purpose and Need and the potential adverse effect to Section 4(f) resources linked to the farmstead.



LEGEND

-  ALTERNATIVE ACQUISITION AREA
-  AIRPORT PROPERTY BOUNDARY
-  RUNWAY 13-31 CENTERLINE
-  RUNWAY PROTECTION ZONE
-  COVE CANAL
-  GROUP OF TREE OBSTRUCTIONS (TO BE REMOVED WITHIN ACQUISITION AREA)
-  OBSTRUCTION LIGHTING
-  FARMHOUSE AND OUTBUILDINGS

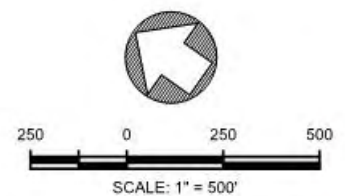


FIGURE 3-2: ALTERNATIVE 2

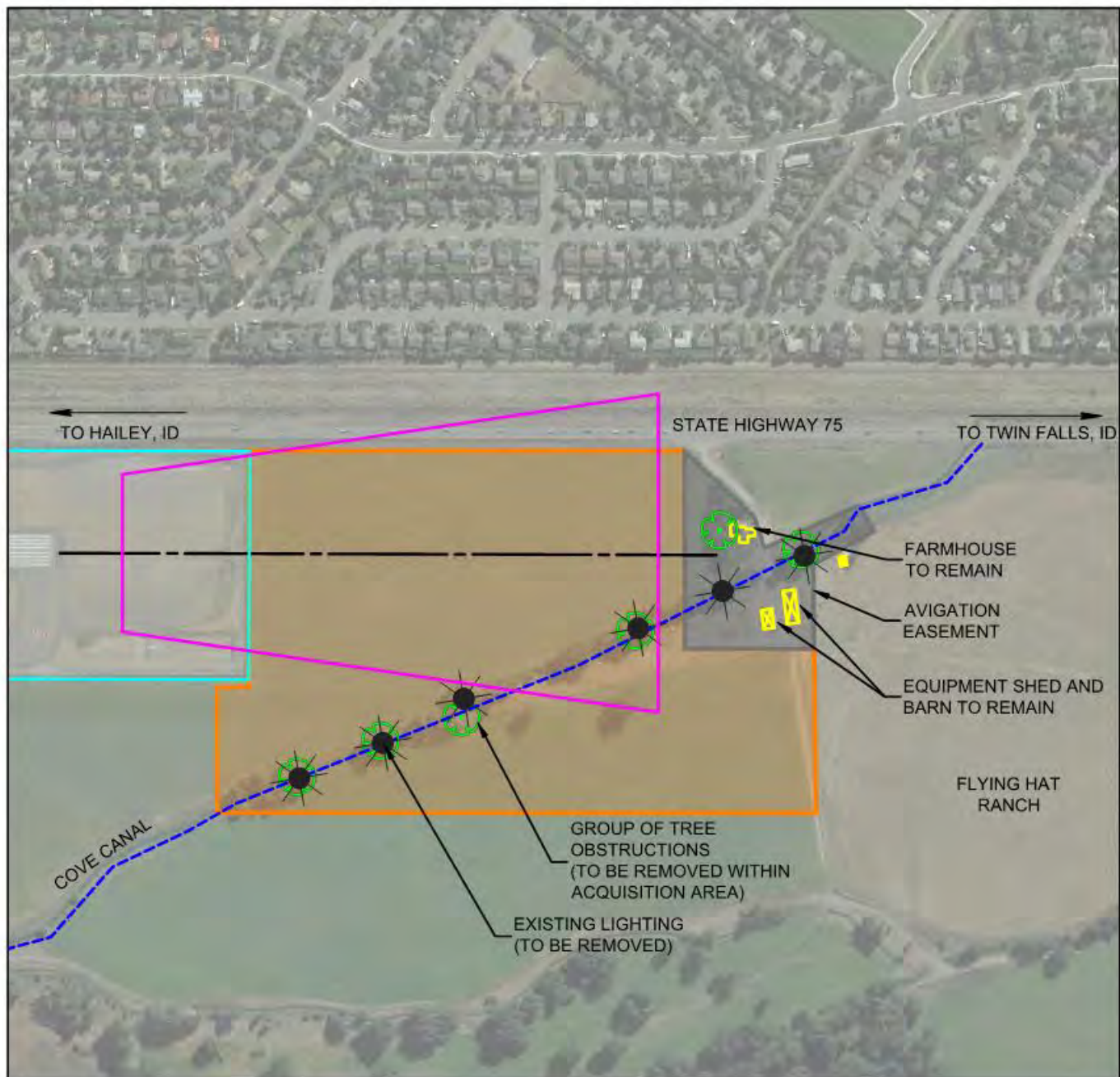


3.2.3 Alternative 3

Alternative 3, shown in **Figure 3-3**, expands the total area of acquisition toward the southwest compared to Alternative 2. Compared to Alternative 2, Alternative 3 would gain control over 12.7 additional acres for a total of 47 acres. The land acquisition would consist of 41 acres of active pasture, 3.1 acres attributed to the Cove Canal, and 2.9 acres of farmstead. Moreover, the acquisition of the 47 acres includes 4.7 acres in avigation easement and 42.3 acres in fee simple acquisition. Distinctly different than Alternative 2, the Alternative 3 westerly boundary line of the acquisition stems approximately 800' parallel of the extended runway centerline, which aids to clear transitional surfaces.

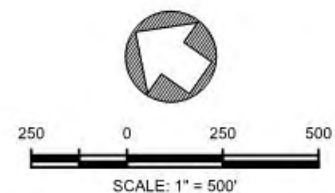
Alternative 3 encumbers the entire farmstead by placing approximately 4.7 acres into an avigation easement for the maintenance of the obstructions. Similar to Alternative 2, Alternative 3 would acquire 2,274 feet of Cove Canal to remove tree obstructions and prevent tree obstruction regrowth. Alternative 3 did not include the segment of Cove Canal (approximately 417 linear feet) that stems between the farmstead and Highway 75 to the east.

Alternative 3 does not result in full ownership of the Cove Canal extending to the Highway 75 right-of-way (R-O-W) and provided the Airport limited control of the Cove Canal that may lead to regrowth of trees that are obstructions in sections not owned by the Airport. This alternative was not acceptable to both the landowner and the FMAA Board who objected to using easements to achieve the Purpose and Need. Using fee simple property acquisition to gain control of the RPZ and required airspace is preferred by the Sponsor and landowner over the use of avigation easements to meet FAA standards. Alternative 3 was ultimately not carried forward for further analysis due to its failure to address the Purpose and Need and the potential adverse effect to Section 4(f) resources linked to the farmstead.



LEGEND

-  ALTERNATIVE ACQUISITION AREA
-  AIRPORT PROPERTY BOUNDARY
-  RUNWAY 13-31 CENTERLINE
-  RUNWAY PROTECTION ZONE
-  COVE CANAL
-  GROUP OF TREE OBSTRUCTIONS (TO BE REMOVED WITHIN ACQUISITION AREA)
-  OBSTRUCTION LIGHTING
-  FARMHOUSE AND OUTBUILDINGS











3.2.4 Alternative 4

Alternative 4, shown in **Figure 3-4**, expands the total area of acquisition toward the east compared to Alternative 3. Compared to Alternative 3, Alternative 4 would gain control over 5 additional acres for a total of 52 acres. The land acquisition would consist of 44.3 acres of active pasture, 3.7 acres attributed to the Cove Canal, and 4 acres of farmstead. The easterly boundary of the acquisition extends to include approximately 417 feet of Cove Canal up to the Highway 75 R-O-W and includes all the Halfway Ranch buildings. The additional acreage would provide greater ownership of the Cove Canal for ongoing maintenance.

Although this alternative met the Purpose and Need, the impacts to the historic farmstead are the greatest with this alternative. Alternative 4 was eliminated due to the potential adverse effect to Section 4(f) resources linked to the farmstead buildings.



LEGEND

-  ALTERNATIVE ACQUISITION AREA
-  AIRPORT PROPERTY BOUNDARY
-  RUNWAY 13-31 CENTERLINE
-  RUNWAY PROTECTION ZONE
-  COVE CANAL
-  GROUP OF TREE OBSTRUCTIONS (TO BE REMOVED WITHIN ACQUISITION AREA)
-  OBSTRUCTION LIGHTING
-  FARMHOUSE AND OUTBUILDINGS

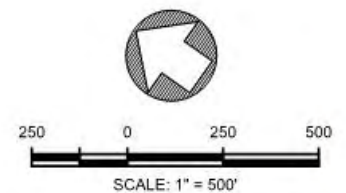


FIGURE 3-4: ALTERNATIVE 4

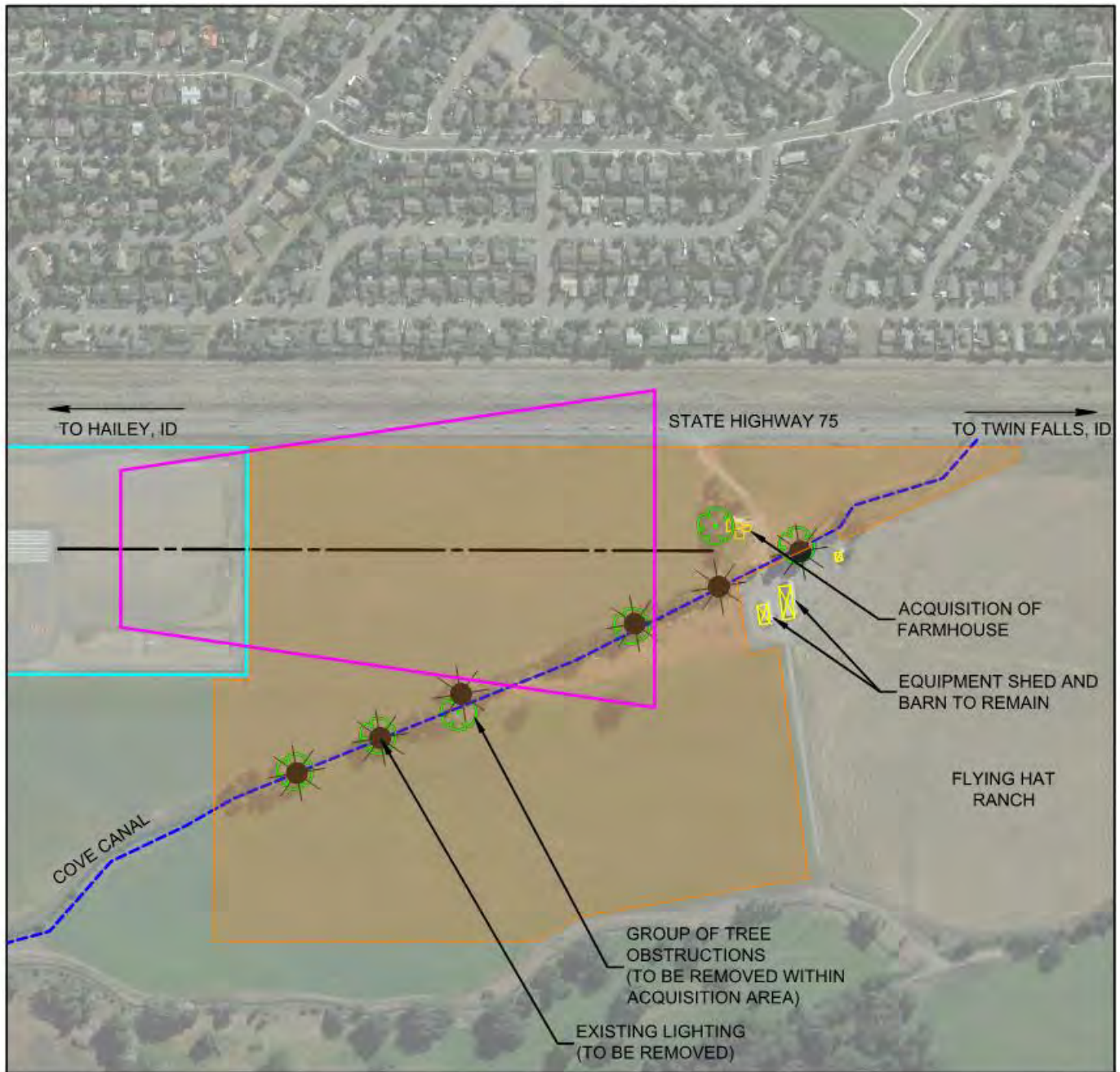


3.2.5 Alternative 5









Alternative 5 was developed during discussions with the FMAA Board as they determined Alternatives 2, 3, and 4 did not meet all of the Airport's, FAA's, and landowner's needs. Alternative 5 was created using parts and concepts of Alternatives 2, 3, and 4.

Figure 3-5 shows Alternative 5 as approved by the FMAA Board. Alternative 5 expands the total area of acquisition toward the southwest compared to Alternative 4. Compared to Alternative 4, Alternative 5 would gain control over 12.8 additional acres for a total of 64.8 acres. The land acquisition would consist of 59.8 acres of active pasture, 3.7 acres attributed to the Cove Canal, and 1.3 acres of farmstead. The westerly boundary of the acquisition extends approximately 1,250 feet from the runway centerline. Notably, Alternative 5 would include acquisition of the farmhouse for future removal but would avoid the remaining farmstead buildings, namely the equipment shed, historic barn, and irrigation infrastructure.

Alternative 5 was presented to the Board and public at the FMAA board meeting held on September 5, 2017. The Board was unanimously in favor of Alternative 5 becoming the Proposed Action Alternative. While Alternative 5 meets the Purpose and Need, the potential impacts to 4(f) resources, namely the acquisition of the farmhouse, led to the development of Alternative 6 and the removal of Alternative 5 from further consideration.



LEGEND

-  ALTERNATIVE ACQUISITION AREA
-  AIRPORT PROPERTY BOUNDARY
-  RUNWAY 13-31 CENTERLINE
-  RUNWAY PROTECTION ZONE
-  COVE CANAL
-  GROUP OF TREE OBSTRUCTIONS (TO BE REMOVED WITHIN ACQUISITION AREA)
-  OBSTRUCTION LIGHTING
-  FARMHOUSE AND OUTBUILDINGS

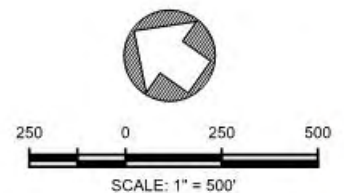


FIGURE 3-5: ALTERNATIVE 5



3.2.6 Alternative 6 – Proposed Action

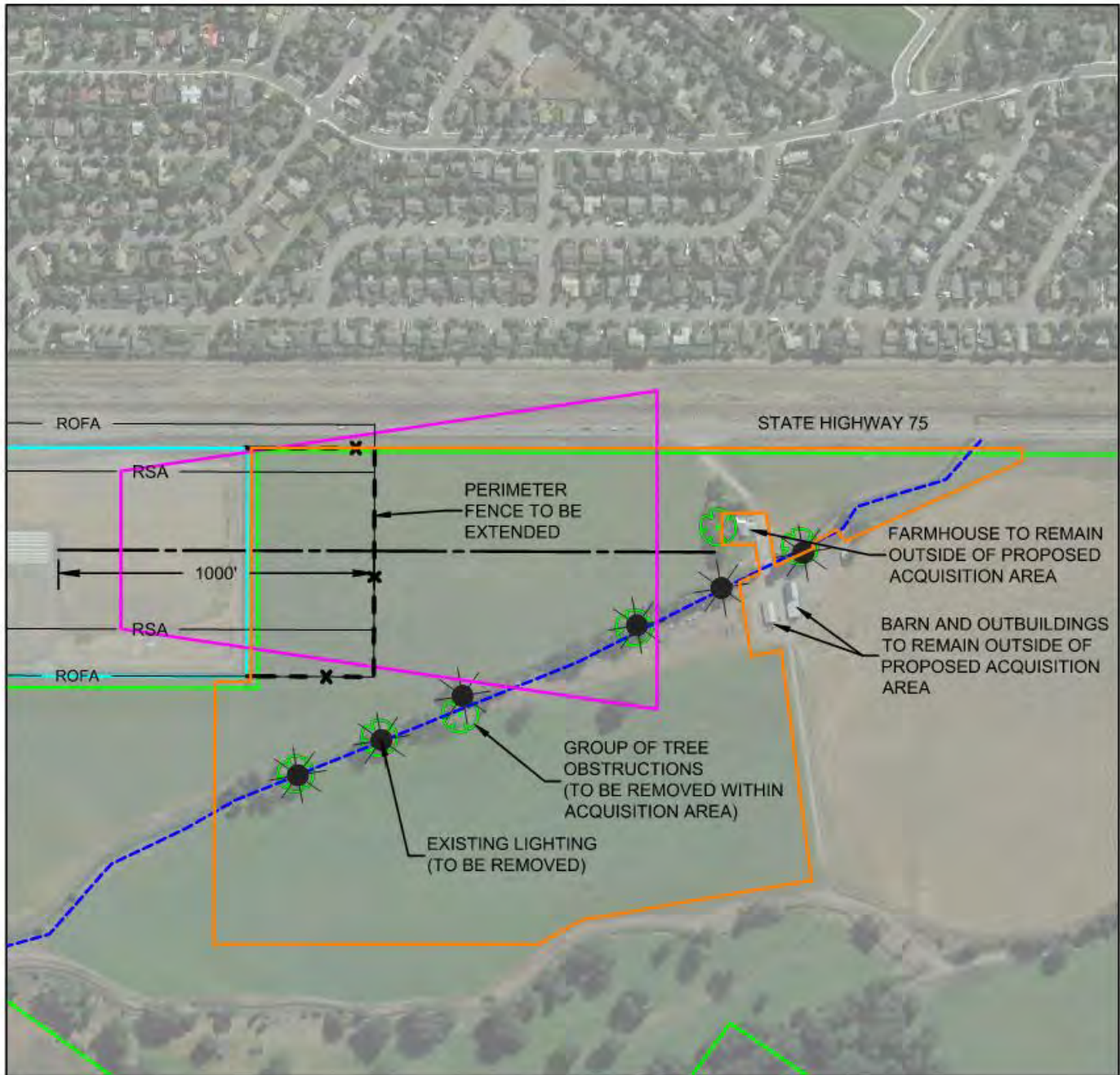
During initial environmental evaluation of Alternative 5 and through active discussion with the FAA, State Historic Preservation Office (SHPO), and the Airport, it was determined that the acquisition of the farmhouse proposed in Alternative 5 would be an “adverse effect”, as defined by Section 106 of the National Historic Preservation Act (NHPA)¹³ (see **Section 4.8**) and therefore also a Section 4(f) use (see **Section 4.5**). Due to this determination and through the Section 4(f) evaluation process, Alternative 6 was developed to avoid acquisition of the farmhouse. Alternative 6 thereby reduces the total area of acquisition compared to Alternative 5. Alternative 6 would reduce the acquisition area by 0.2 acres for a total of approximately 64.6 acres. The land acquisition consists of 59.8 acres of active pasture, 3.7 acres attributed to the Cove Canal, and 1.1 acres of farmstead.

Alternative 6 was presented at the FMAA Board meeting on March 6, 2018 and approved as the Proposed Action as shown in **Figure 3-6**.

The Proposed Action components include:

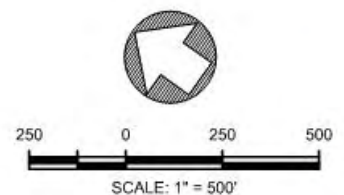
1. Acquisition of 64.6 acres of property at the southern end of Runway 31 to gain full control of the land encompassing the RSA, full length of the ROFA, and most of the RPZ, as well as maintain the areas where the obstructions (trees located along the Cove Canal and near the farmstead) are located within the approach/departure surfaces. Note: The Proposed action does not acquire the segment of the RPZ that covers State Highway 75 and does not acquire the portion of the ROFA associated with State Highway 75 as allowed by MOS 3 (See **Table 1-1**).
2. Removal of all trees (including obstruction lights currently placed in the trees) on the south end of the runway that penetrate, or could penetrate in the future, the Airport’s Part 77 Approach Surface and AC 5300-13A Departure Surface. Up to 200 trees may be removed. Once the obstructions have been removed, FAA would amend the departure procedure for Runway 13 to remove the takeoff notes related to those obstructions.
3. Extending the Airport perimeter fence to provide fencing for the full length of the ROFA, which extends 1,000-feet beyond the Runway 31 end. The perimeter fence will be extended approximately 400 feet south of its current location to encompass 6.5 additional acres and contain the full RSA and full length of the ROFA. Note: As allowed by MOS 3 (see **Table 1-1**), a portion of the width of the ROFA associated with State Highway 75 will remain outside of the Airport fence.

¹³ 36 CFR Part 800 Protection of Historic Properties, Section 106. Accessed April 23, 2018 at <http://www.achp.gov/regs-rev04.pdf>



LEGEND

- AIRPORT PROPERTY BOUNDARY
- - - RUNWAY 13-31 CENTERLINE
- RUNWAY PROTECTION ZONE [RPZ]
- RSA — RUNWAY SAFETY AREA [RSA]
- ROFA — RUNWAY OBJECT FREE AREA [ROFA]
- - - COVE CANAL
- ECCLES FLYING HAT RANCH
- PROPOSED ACQUISITION AREA [64.6 AC]



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FIGURE 3-6: PROPOSED ACTION



3.3 ALTERNATIVES BEING EVALUATED

Two alternatives carried forward for evaluation in this EA are:

- Alternative 1 – No Action; and,
- Alternative 6 – Proposed Action.

3.3.1 Alternative 1 – No Action

The No Action Alternative would maintain the existing condition, with control of the southern ends of the RSA and ROFA, RPZ, and approach area including maintenance of obstruction lights only through an easement. Although the landowner has stated he has no interest in renewing the existing easement, (expired in December 2018), he has agreed upon extending the easement until 2020. If the easement would have expired (or is allowed to expire in 2020), the Airport would have lost the ability to control airspace in the critical approach and departure surfaces and RPZ. Additionally, if the easement were to expire, the obstruction lights were removed, and the trees remained in place, the FAA's flight procedures office has advised that the instrument approach procedures for SUN would be noted as unavailable after dark, which would pose a major operational restriction on the Airport. Additionally, without control of the full RSA and full length of the ROFA, the Airport will have to continue to publish declared distances for landings on Runway 13 (landings from the north) and for aborted takeoffs from Runway 31 (departure to the south).

This alternative does not meet the Purpose and Need. Although this alternative does not meet the Purpose and Need, CEQ and NEPA regulations require consideration of a No Action Alternative. When compared to the Proposed Action, the No Action Alternative serves as a reference point to evaluate impacts of the Proposed Action.

3.3.2 Alternative 6 - Proposed Action

Section 3.2 describes the development of all the action alternatives and the reasons for elimination of Alternatives 2 through 5. Alternative 6 was selected as the Proposed Action as it meets the Purpose and Need and minimizes use of 4(f) resources (as discussed in **Section 4.5**).

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Chapter 4 **AFFECTED ENVIRONMENT, ENVIRONMENTAL CONSEQUENCES, AND MITIGATION**

This chapter evaluates potential impacts related to the Proposed Action on each of the Environmental Impact Categories defined by FAA Order 1050.1F. The evaluation of each Environmental Impact Category includes: (1) the Affected Environment, which describes the existing natural, ecological, cultural, social, and economic conditions that could be impacted by the Proposed Action; (2) the Environmental Consequences, which evaluates the human and environmental consequences of the Proposed Action for each environmental resource; (3) Mitigation Measures related to anticipated Proposed Action impacts; and, (4) Findings and Conclusions, which evaluates the human and environmental consequences of the No Action Alternative and the Proposed Action for each environmental resource.

Baseline data used to determine the affected environment were collected by reviewing existing documentation and databases, consulting with various individuals and agencies, and conducting field investigations.

For comparison purposes, the No Action Alternative is evaluated alongside of the Proposed Action. Although the No Action Alternative does not address any of the existing issues or meet the Purpose and Need as explained in **Chapter 2**, CEQ and NEPA regulations require evaluation of a No Action Alternative. When compared with the Proposed Action, the No Action Alternative serves as a reference point. The project area associated with the No Action Alternative correlates to the 64.6-acre acquisition area (**Figure 3-6**). The project area for the Proposed Action is generally defined as the 64.6-acre acquisition area under the Proposed Action (**Figure 3-6**), however, some Environmental Impact Categories require an expanded project area to encompass all areas directly or indirectly affected by the Proposed Action.

4.1 AIR QUALITY

The U.S. Environmental Protection Agency (EPA) has established National Ambient Air Quality Standards (NAAQS)¹⁴ for ambient outdoor concentrations of the following criteria pollutants to protect public health, welfare, and the environment:

- carbon monoxide (CO),
- nitrogen dioxide (NO₂),
- ozone (O₃),
- sulfur dioxide (SO₂),
- lead (Pb),
- particulate matter with a diameter of 10 microns or less (coarse or PM₁₀), and
- particulate matter with a diameter of 2.5 microns or less (fine or PM_{2.5}).

Nitrogen oxides (NO_x) and volatile organic compound (VOC) emissions are precursors to ozone formation. Idaho incorporates the NAAQS into its air quality rules by reference but has not promulgated state-specific criteria pollutant standards.

¹⁴ EPA. 2018. NAAQS Criteria Air Pollutants. Environmental Protection Agency. Accessed May 3, 2018 at <https://www.epa.gov/criteria-air-pollutants/naaqs-table>

The General Conformity Rule¹⁵ of the federal Clean Air Act prohibits federal agencies (including the FAA) from permitting or funding projects that do not conform to an applicable State Implementation Plan (SIP). If the emissions exceed the thresholds, a formal Conformity Determination is required to demonstrate that the action conforms to the applicable SIP. Under the General Conformity Rule, project-related emissions of the applicable nonattainment/maintenance pollutants are compared to de minimis level thresholds.

According to the 40 CFR Part 93 Rule as cited in the Federal Presumed to Conform Actions Under General Conformity, “federal agencies must meet the criteria for establishing activities that are presumed to conform by either: (1) Clearly demonstrating that the total of direct and indirect emissions from the type of activities that would be presumed to conform would not: (i) Cause or contribute to any new violation of any standard in any area; (ii) Interfere with provisions in the applicable SIP for maintenance of any standard; (iii) Increase the frequency or severity of any existing violation of any standard in any area; or (iv) Delay timely attainment of any standard or any required interim emission reductions or other milestones in any area including emission levels specified in the applicable SIP; or (2) Providing documentation that emissions from the types of actions that would be presumed to conform are below the applicable de minimis levels established in 40 CFR § 93.153(b)(1) and (b)(2).” Under this same rule¹⁶, some airport-related actions and activities, such as rulemaking, routine maintenance, and land acquisition, qualify for exemption from general conformity requirements since these actions and activities “result in no emissions increase or increases in emissions are clearly de minimis.” In addition, the FAA Environmental Desk Reference, Chapter 1.3.5¹⁷, “The General Conformity Rule” is only considered when a federal action is proposed to occur in an EPA-designated nonattainment or maintenance area;” thus, in “attainment” areas that meet air quality standards the General Conformity Rule does not apply.

4.1.1 Affected Environment

The project area is in attainment for all of the NAAQS; therefore, the General Conformity Rule does not apply. The closest nonattainment/maintenance areas are the Fort Hall nonattainment area and the Portneuf Valley maintenance area for PM₁₀ near Pocatello, Idaho, approximately 100 miles southeast of the Airport. Blaine County is in attainment for all criteria pollutants. The Idaho Department of Environmental Quality (IDEQ) monitors PM_{2.5} at Ketchum, Idaho, which is representative of regional conditions. Recent and historic monitoring over the past year show that Ketchum is well within PM_{2.5} thresholds, with the latest pollution levels at 5.4 µg/m³ with an

¹⁵ Federal Presumed to Conform Actions Under General Conformity, 72 Federal Register, July 30, 2007, https://www.faa.gov/airports/resources/publications/federal_register_notices/media/environmental_72fr41576.pdf

¹⁶ Federal Presumed to Conform Actions Under General Conformity, 72 Federal Register, July 30, 2007, https://www.faa.gov/airports/resources/publications/federal_register_notices/media/environmental_72fr41576.pdf

¹⁷ FAA. 2015. 1050.1F Desk Reference, Air Quality Chapter. Accessed April 16, 2018 at https://www.faa.gov/about/office_org/headquarters_offices/apl/enviro_policy_guidance/policy/faq_nepa_order/desk_ref/media/1-air-quality.pdf

index value of 19, rated as “Good.”¹⁸ PM_{2.5} emissions are generally caused by smoke and wood burning in the region.

4.1.2 Environmental Consequences

Given that Blaine County (and the entire project) is in attainment for all criteria pollutants, the General Conformity Rule does not apply. The Proposed Action will not result in any operational changes at the Airport; therefore, there is no increase in aircraft emissions associated with the project.

However, temporary emissions, including CO, VOC, NO₂, SO₂, PM₁₀ and PM_{2.5}, are expected from equipment used to remove the tree obstructions and to extend the Airport perimeter fence. The tree removal and perimeter fence extension are anticipated to take approximately 20 working days, as up to 200 trees require complete removal, and the Airport’s perimeter fence requires extension around the RSA and full length of the ROFA. Each day of construction activities would presumably consist of one, 10-hour shift. As most of the trees are cottonwood or other riparian softwoods, equipment such as chainsaws, chippers, and tracked diesel-powered vehicles are anticipated to be used. For this analysis, the assumption is that a construction fleet of approximately 5 pieces of equipment would be running continuously (to capture the perceived extreme construction equipment usage) at the same time throughout the entire 10-hour shift. Emission levels were estimated for CO, Volatile Organic Compounds (VOCs), NO₂, SO₂, PM-10, PM-2.5, and Pb. VOCs were included because of the role they play in contributing to overall O₃ levels (caused by chemical reactions between nitrogen oxides and VOCs). Lead emissions are no longer a factor because of EPA requirements regarding the use of unleaded fuel. **Tables 4-1** and **4-2** highlight emission levels for primary construction equipment likely associated with the Proposed Action.

TABLE 4-1: EMISSIONS LEVELS ASSOCIATED WITH PRIMARY CONSTRUCTION EQUIPMENT.

Pollutant Type	Loader/ Backhoe (g/hr.)	Skid Steer (g/hr.)	Bucket Truck (g/hr.)	Chipper (g/hr.)	Chainsaw (g/hr.)
CO	399	311	751	141	152
VOCs	75	60	154	29	21
NO ₂	426	289	1,945	333	270
SO ₂	0	0	0	0	0
PM-10	63	47	84	26	21
PM-2.5	61	46	82	25	21
Pb*	N/A	N/A	N/A	N/A	N/A

*Lead is no longer a factor because of EPA requirements to use unleaded fuels. Emissions levels presented above in Table 4-1 are estimates based upon the EPA AP42 database. <https://www.epa.gov/air-emissions-factors-and-quantification/ap-42-compilation-air-emission-factors>.

¹⁸ IDEQ. 2018. Real-time air monitoring, Ketchum (PM2.5). Accessed April 23, 2018 at http://airquality.deq.idaho.gov/StationInfo1.aspx?ST_ID=28

Table 4-2 represents a combined total of 1,000 equipment operating hours and assumes that each of the primary pieces of construction equipment would run continuously for the entire 10-hour shift for each day of the tree removal and extension of the Airport's perimeter fence. It is estimated that each piece of equipment will be utilized for a maximum of 200 hours each. For the duration of the construction, estimates of each pollutant were low with the highest predicted emissions being NO₂ and CO at 0.653 and 0.350 metric tons, respectively. Given the estimated construction fleet size and construction schedule, the project is not expected to result in and exceedance in the NAAQS.

TABLE 4-2. ESTIMATED NET EMISSIONS LEVELS FOR 20 CONSTRUCTION DAYS.

Vehicle	Estimated Running Hours	Net Emissions Per Criteria Pollutant for 20 Construction Days (Metric Tons)					
		CO	VOCs	NO ₂	SO ₂	PM-10	PM-2.5
Loader/Backhoe	200	0.080	0.015	0.085	0	0.013	0.012
Skid Steer	200	0.062	0.012	0.058	0	0.009	0.009
Bucket Truck	200	0.150	0.031	0.389	0	0.017	0.016
Chipper	200	0.028	0.006	0.067	0	0.005	0.005
Chainsaw	200	0.030	0.004	0.054	0	0.004	0.004
Totals:	1,000	0.350	0.068	0.653	0	0.048	0.046

4.1.3 Mitigation

No specific mitigation is required as the Proposed Action would not result in exceedance of the NAAQS.

During construction activities, emission reduction can be achieved by implementing Best Management Practices (BMPs) and by incorporating the provisions of FAA AC 150/5370-10G, Standards for Specifying Construction of Airports.¹⁹ These measures may include, but are not limited to, the following:

- Limiting unnecessary idling times on diesel-powered engines.
- Project specifications will include temporary erosion control measures to minimize the impacts to air quality during construction.

4.1.4 Findings and Conclusions

As the non-development alternative, the No Action Alternative will have **no effect** on air quality, as no changes will occur in the project area.

The Proposed Action will not result in any operational changes at the Airport. The acquisition of land will have no effect on air quality. The removal of declared distances will not lead to an increase in emissions. Declared distances must be used rather than a runway's physical length

¹⁹FAA, Circular 150/5370-10G - Standards for Specifying Construction of Airports, July 21, 2014, http://www.faa.gov/airports/resources/advisory_circulars/index.cfm/go/document.current/documentnumber/150_5370-10

for aircraft performance calculations prior to takeoff and landing. However, aircraft are not prohibited from operating beyond a declared distance limit, provided the runway surface is appropriately marked as usable runway, which is the case at SUN. Therefore, use of the usable runway is not expected to change as a result of the removal of the declared distances, and no increases in emissions are expected. Furthermore, since the project area is in attainment, the General Conformity Rule does not apply. Temporary air quality impacts for the six criteria air pollutants (NAAQS) during construction will be short-term and of local impact. Emission reduction strategies will be employed to minimize these air quality impacts as appropriate. Therefore, no significant, adverse, nor long term impacts to air quality are anticipated that could lead to a violation of the NAAQS and therefore, the Proposed Action will have **no significant effect** on air quality.

4.2 BIOLOGICAL RESOURCES

To satisfy the Endangered Species Act (ESA)²⁰, the FAA must determine whether the Proposed Action would affect a federally listed species or habitat critical to that species. Federally listed species include those that have been designated as threatened, endangered, or candidate species by the U.S. Fish and Wildlife Service (USFWS). Designated critical habitat is an area formally designated by the USFWS as having physical and biological features essential to the survival of listed species. The FAA must also assess impacts of the Proposed Action on Idaho State-listed endangered, threatened and State sensitive species.

4.2.1 Affected Environment

Threatened and Endangered Species

Endangered species are defined as any native species in danger of extinction throughout all or a significant portion of its range. Threatened species are defined as any native species likely to be classified as endangered within the foreseeable future throughout all or a significant portion of its range. The USFWS Information for Planning and Consultation (IPaC) database²¹ for endangered, threatened, proposed, and candidate species with associated proposed and critical habitats was reviewed for potential occurrence in Blaine County. Information was also obtained from the Idaho Fish and Wildlife Information System (IFWIS)²² occurrence data and the Blaine County species list²³ of occupied and estimated range. Three species were identified for possible presence within the project area: Canada lynx (*Lynx canadensis*; *Threatened*), yellow-billed cuckoo (*Coccyzus americanus*; *Threatened*), and North American wolverine (*Gulo gulo luscus*; *Proposed Threatened*) (**Table 4-3**). No designated or proposed critical habitat was identified within the project area.

²⁰ USFWS. Endangered Species Act of 1973 as Amended through the 103rd Congress, April 16, 2018, <https://www.fws.gov/endangered/esa-library/pdf/ESAall.pdf>

²¹ U.S. Fish and Wildlife Service (USFWS). 2017a. Information for Planning and Conservation (IPaC), May 2017, <http://ecos.fws.gov/ipac/>

²² IDFG. 2017. Idaho Fish & Wildlife Information System (IFWIS), August 2017, <https://idfg.idaho.gov/data>

²³ IDFG. 2017. Blaine County species list, May 3, 2017, <https://idfg.idaho.gov/species/taxa/county-lists>

TABLE 4-3: SUMMARY OF ENDANGERED, THREATENED, AND PROPOSED SPECIES.

Species	Status	Habitat Requirements
Canada lynx (<i>Lynx canadensis</i>)	Threatened	Boreal forest of typically sub-alpine fir and Engelmann spruce above 4,000 feet in elevation with snowy winters.
North American wolverine (<i>Gulo gulo luscus</i>)	Proposed Threatened	Alpine/boreal forests of typically whitebark pine, Douglas fir or lodgepole pine, and tundra with heavy snowpack above 7,000 feet in elevation.
Yellow-billed cuckoo (<i>Coccyzus americanus</i>)	Threatened	Thick, closed canopy riparian forest of mostly cottonwood-willow with dense shrub understory

State Sensitive Species

A review of potential State sensitive species from the IFWIS occurrences within a three-mile²² buffer of the project area found two Bureau of Land Management (BLM) State sensitive and Species of Greatest Conservation Need (SGCN) designated migratory birds: long-billed curlew (*Numenius americanus*) and olive-sided flycatcher (*Contopus cooperi*). Red-tailed hawk (*Buteo jamaicensis*) is a species of interest and was observed during the biological resources field survey (**Table 4-4**). All three birds are also protected under the Migratory Bird Treaty Act (MBTA), discussed later in this section.

TABLE 4-4: SUMMARY OF STATE SENSITIVE SPECIES.

Species	State Rank	BLM Sensitive	Species of Greatest Conservation Need
Red-tailed hawk (<i>Buteo jamaicensis</i>)	S4 (apparently secure)	–	–
Long-billed curlew (<i>Numenius americanus</i>)	S2M (imperiled, migratory)	Type 2 (range-wide imperiled)	Tier 2 (high conservation need)
Olive-sided flycatcher (<i>Contopus cooperi</i>)	S3B (uncommon, breeding population)	Type 2 (range-wide imperiled)	Tier 3 (moderate conservation need)

General Wildlife and Vegetation

A variety of wildlife exists in Blaine County. Examples of common large mammals in the County include: elk (*Cervus canadensis*), mule deer (*Odocoileus hemionus*), whitetail deer (*Odocoileus virginianus*), moose (*Alces alces*), mountain lion (*Puma concolor*), and black bear (*Ursus americanus*). Common small mammals include: foxes (*Vulpes* sp.), coyotes (*Canis latrans*), raccoons (*Procyon lotor*), porcupines (*Erethizon dorsatum*), beavers (*Castor canadensis*), otters (*Lontra canadensis*), white-tailed jackrabbits (*Lepus townsendii*), and skunks (*Mephitis mephitis*). Various songbirds can be found in the County, as well as larger birds like: mallards (*Anas platyrhynchos*), Canada geese (*Branta canadensis*), sandhill cranes (*Grus canadensis*), turkeys (*Meleagris* sp.), ring-necked pheasants (*Phasianus colchicus*), and grouse (*Tetraoninae* spp.). As detailed in the Biological Memorandum, both coyote and white-tailed jackrabbit were observed during the biological resources field surveys (**Appendix B**). The abundance of rangeland, the Big Wood River and associated wetland/riparian habitat, and open space surrounding Hailey, Idaho, provides ample habitat for waterfowl and other wildlife.

The Cove Canal originates at the Big Wood River approximately 1.77 miles northwest of the project area. Although the Cove Canal is present, no fish species are present due to multiple diversions and gates for managing irrigation water. The canal is also seasonally dry outside of

irrigation season. Aquatic life is limited within the proposed project area because of the lack of available habitats and natural waterways.

The vegetation communities within the project area are predominantly associated with two cover types: managed areas of irrigated pasture and a 30-foot wide riparian corridor associated with Cove Canal that flows southeast diagonally across the site. Native vegetation is limited in the project area due to agriculture and land management activities. Vegetation observed during the biological survey includes: black cottonwood (*Populus balsamifera* ssp. *trichocarpa*), Wood's rose (*Rosa woodsii*), red-osier dogwood (*Cornus sericea*), western chokecherry (*Prunus virginiana*), smooth brome (*Bromus inermis*), goldenrod (*Solidago* spp.), stinging nettle (*Urtica dioica*), bull thistle (*Cirsium vulgare*), houndstongue (*Hieracium cynoglossoides*), barnyard grass (*Dactylis glomerata*), rabbitbrush (*Chrysothamnus viscidiflorus*), tall sagebrush (*Artemisia tridentata*), bluebunch wheatgrass (*Agropyron spicatum*), alkali mallow (*Malvella leprosa*), common canary grass (*Phalaris canariensis*), Italian thistle (*Caardus pycnocephalus*), milk thistle (*Silybum marianum*), and curly dock (*Rumex crispus*). A separate survey of wetlands (see **Appendix F** and **Section 4.14.1**) delineated 1.93 acres of palustrine emergent (PEM) wetlands, 2.22 acres of palustrine forested (PFO) wetlands, and 0.29 acres of palustrine scrub-shrub (PSS) wetlands within the project area. Common wetlands species identified include: black cottonwood, buckthorn (*Rhamnus catharica*), Russian olive (*Elaeagnus angustifolia*), cascara buckthorn (*Rhamnus purshiana*), reed canarygrass (*Phalaris arundinacea*), yellow sedge (*Carex flava*), beaked sedge (*Carex rostrata*), creeping thistle (*Cirsium arvense*) and stinging nettle (*Urtica dioica*).

Migratory Birds

Federal agencies must comply with the MBTA of 1918²⁴ that prohibits the “take” of any migratory bird, their eggs, or nests without a permit pursuant to 50 CFR 21. “Take” is defined by the MBTA as to “pursue, hunt, shoot, wound, kill, trap, capture, or collect.” Bald eagles (*Haliaeetus leucocephalus*) and golden eagles (*Aquila chrysaetos*) are further protected under the Bald and Golden Eagle Protection Act (BGEPA)²⁵, enacted in 1940 and amended since, which prohibits anyone without a permit issued by the Secretary of the Interior from “taking” bald eagles or golden eagles, including their parts, nests, or eggs. The BGEPA defines “take” as to “pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb.” The term “disturb” means to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, 1) injury to an eagle, 2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or 3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior. The areas within and adjacent to SUN provide potential foraging and nesting habitat for many bird species that are protected by the MBTA.

²⁴ USFWS. Digest of Federal Resource Laws of Interest to the U.S. Fish and Wildlife Service Migratory Bird Treaty Act of 1918, April 16, 2018, <https://www.fws.gov/laws/lawsdigest/migtrea.html>

²⁵ USFWS. 6 USC 668-668d Bald and Golden Eagle Protection Act. Accessed May 3, 2018 at <https://www.fws.gov/le/USStatutes/BEPA.pdf>

Migratory and resident bird species that have been identified within a three-mile buffer²⁶ of the project area include: dark-eyed junco (*Junco hyemalis*), black-billed magpie (*Pica hudsonia*), red-winged blackbird (*Agelaius phoeniceus*), song sparrow (*Melospiza melodia*), house sparrow (*Passer domesticus*), Eurasian collared-dove (*Streptopelia decaocto*), European starling (*Sturnus vulgaris*), downy woodpecker (*Picoides pubescens*), mountain chickadee (*Poecile gambeli*), and red-breasted nuthatch (*Sitta canadensis*). The USFWS IPaC list²⁷ identified six migratory birds that may be found at or near the project area: black rosy-finch (*Leucosticte atrata*), Cassin's finch (*Haemorhous cassinii*), lesser yellowlegs (*Tringa flavipes*), long-billed curlew (*Numenius americanus*), marbled godwit (*Limosa fedoa*), olive-sided flycatcher (*Contopus cooperi*), and rufous hummingbird (*Selasphorus rufus*). Lastly, the following birds were documented on-site during the 2017 field survey: red-winged blackbird, great blue heron (*Ardea herodias*), common merganser (*Mergus merganser*), red-tailed hawk, Steller's jay (*Cyanocitta stelleri*), northern flicker (*Colaptes auratus*), American kestrel (*Falco sparverius*), cliff swallow (*Petrochelidon pyrrhonota*), and American robin (*Turdus migratorius*). Numerous other migratory birds that may occur at or near the project area are listed in the Blaine County species list of occupied and estimated range, located in **Appendix B**.

4.2.2 Environmental Consequences

This section addresses the potential impacts of the Proposed Action implementation to fish, wildlife, and plant resources, including federally listed species and Idaho State sensitive species. According to FAA Order 1050.1F, a proposed action would have significant impacts on fish, wildlife, or plant resources when the USFWS or 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. Adverse effects may include long term or permanent loss of unlisted plant and wildlife species; impacts to special status species or their habitats; a substantial loss, reduction degradation, disturbance or fragmentation of native species' habitats or populations; or adverse impacts on species' reproductive success rates, natural mortality rates, non-natural mortality, or ability to sustain the minimum population levels required for maintenance. A biologic resource survey and habitat assessment of the project area was completed to satisfy the IDFG and USFWS regulatory requirements and to determine the presence of and potential impacts to fish, wildlife, and plants associated with the Proposed Action (**Appendix B**). The project area as it pertains to Biological Resources includes all areas to be affected directly (i.e. habitat impacts within the acquisition area) and indirectly (i.e. lighting, noise, changes to water quality) by the Proposed Action. Emphasis was placed on species listed as threatened, endangered, or candidate under the ESA and species with a special conservation status specified by the State of Idaho. Information about fish, wildlife, and plants found on and adjacent to the Airport was obtained by conducting a desktop review, literature search, field investigation, and coordination with IDFG and USFWS. The desktop review included publicly available geospatial data for vegetation, wildlife, and fish resources.

²⁶ IDFG. 2017. Idaho Fish & Wildlife Information System (IFWIS). Accessed August 2017, <https://idfg.idaho.gov/data>

²⁷ U.S. Fish and Wildlife Service (USFWS). 2017a. Information for Planning and Conservation (IPaC). Accessed May 2017 at <http://ecos.fws.gov/ipac/>

Threatened and Endangered Species

Canada Lynx

Lynx are medium-sized cats (18–23 pounds) with color that varies seasonally. They are specialized predators that are highly dependent on snowshoe hares for food, and as a result, their distribution is linked to its habitat²⁸. Lynx habitat can generally be described as boreal forest above 4,000 feet in elevation with cold, snowy winters²⁹. While predicted lynx habitat was identified within the general vicinity³⁰, the project area is located in a valley of mostly grasses, pasture and agricultural areas with very little forested habitat and no subalpine fir or Engelmann spruce associated with Canada lynx. Further, current urban development and agricultural use are prevalent in the project area, including proximity to the city of Hailey, Idaho, which is not conducive to Canada lynx habitation. The Proposed Action activities will have **no effect** on the Canada lynx identified as a federally listed threatened species because neither the species nor its habitat are found in the project area.

North American Wolverine

The wolverine is the largest species in the family *Mustelidae* (17–40 pounds) with a broad head, short, rounded ears, small eyes, and a bushy tail. Wolverines are known as solitary animals that are difficult to study due to their secretive nature and relatively low densities³¹. Their habitat is closely associated with heavy snowpack persisting into the late spring and they have adapted to denning in the deep snow^{32,33}. They occupy boreal forests and tundra; preferred habitat is generally not proximal to areas with human infrastructure or use^{34,35}. However, juvenile wolverines are known to wander long distances in search of undisturbed areas free of other wolverines, being found in habitats not suitable for their long-term needs.

Suitable conditions do not exist within or adjacent to the project area, most notably because the project area is well below the general elevation where North American wolverine are known to occur (above 7,000 feet in elevation). No alpine forest or boreal forest habitat is present in the vicinity. Further, current urban development and agricultural use are prevalent in the project area, including close proximity to the city of Hailey, Idaho, which is not conducive to wolverine

²⁸ USFWS. 2013. Canada lynx, *Lynx canadensis*. U.S. Fish and Wildlife Service. Accessed May 3, 2018 at https://www.fws.gov/mountain-prairie/es/species/mammals/lynx/CandaLynxFactSheet_091613.pdf

²⁹ Quinn, N.W.S., and G. Parker., 1987. Pages 683–694 in M. Novak, J.A. Barber, M.E. Obbard, B. Malloch (eds.). *Lynx. Wild furbearer management and conservation in North America*. Ontario Ministry of Natural Resources.

³⁰ IDFG. 2017. Blaine County species list of occupied and estimated range. Idaho Department of Fish and Game. Accessed May 3, 2017 at <https://idfg.idaho.gov/species/taxa/county-lists>

³¹ Lofroth, E. C., and J. Krebs., 2007. The abundance and distribution of wolverines in British Columbia, Canada. *Journal of Wildlife Management* 71:2159–2169

³² Copeland, J. P.; McKelvey, K. S.; Aubry, K. B.; Landa, A.; Persson, J.; Inman, R. M.; Krebs, J.; Lofroth, E.; Golden, H.; Squires, J. R.; Magoun, A.; Schwartz, M. K.; Wilmot, J.; Copeland, C. L.; Yates, R. E.; Kojola, I.; May, R., 2010. The bioclimatic envelope of the wolverine (*Gulo gulo*): do climatic constraints limit its geographic distribution? *Canadian Journal of Zoology* 88:233–246

³³ Aubry, K.B., K.S. McKelvey, and J.P. Copeland, 2007. Geographic distribution and broad-scale habitat relations of the wolverine in the contiguous United States. *Journal of Wildlife Management* 71:2147–2158

³⁴ Copeland, J. P., J. M. Peek, C. R. Groves, W. E. Melquist, K. S. McKelvey, G. W. McDaniel, C.D. Long, and C. E. Harris, 2007. Seasonal habitat associations of the wolverine in central Idaho. *Journal of Wildlife Management* 71:2201–2212.

³⁵ May, R., A. Landa, J. van Dijk, and R. Andersen., 2006. Impact of infrastructure on habitat selection of wolverines. *Wildlife Biology* 12:285–295

habitation. Occurrence of North American wolverine is highly unlikely within the project area. The Proposed Action activities will have **no effect** on the North American wolverine identified as a federally listed proposed threatened species because neither the species nor its habitat are found in the project area.

Yellow-billed Cuckoo

The yellow-billed cuckoo (or YBCC) is a long, slim bird with a flat head, long tail and large yellow bill. The upper body is grey-brown and the underside is white; the tail also has white spots at the end of the central tail feathers³⁶. This neotropical migrant historically occupied riparian ecosystems across the western United States, including the Wood River Valley. Yellow-billed cuckoos arrive in the United States in late May or early June and breed in late June through July. Cuckoos typically start their southerly migration by late August or early September³⁷. The YBCC requires thick, closed canopy riparian forest with an understory of dense brush at a minimum of 50 acres in size^{38,39}. These riparian forests are usually composed of various species of willows and cottonwoods.

Due to the presence of riparian cottonwood canopy along the Cove Canal and Big Wood River, a presence/absence survey for YBCC using USFWS protocol⁴⁰ was performed in June, July and August 2017 (**Appendix B**). Following USFWS protocols, call back surveys did not identify YBCC presence. The wetland survey (**Appendix F**) delineated 2.22 acres of PFO wetlands of mostly cottonwood located along the Cove Canal. However, this small, linear habitat does not meet minimum acreage, dense understory, or closed-canopy habitat preferences of YBCC. Therefore, suitable habitat to support this species is not present within the project area. Suitable habitat exists along the Big Wood River, approximately 1,000 feet west of the project area. Occurrence of YBCC within the project area is unlikely, thus the Proposed Action that includes land acquisition, obstruction removal, and fence extension will have **no effect** on this species.

USFWS and IDFG were contacted several times over the course of this EA and made aware of FAA's planned no effect determination (on YBCC). Frank Edelman, Regional Biologist with IDFG and Greg Bujak, USFWS were engaged via e-mails and discussions regarding the yellow-billed cuckoo (YBCC) in May to June 2017, prior to field surveys due to the sensitive status of YBCC and its identification as a SGCN in Idaho. In June, July, and August 2017,

³⁶ Halterman, M.D. Johnson, M.J., Holmes, J.A. and Laymon, S.A. 2016. A Natural History Summary and Survey Protocol for the Western Distinct Population Segment of the Yellow-billed Cuckoo. US Fish and Wildlife Service, Draft. Colorado Plateau Research Station, Northern Arizona University, Flagstaff, Arizona and Sacramento Fish and Wildlife Office, US Fish and Wildlife Service, Sacramento, California

³⁷ Parrish, J.R., F.P. Howe, and R. E. Norvell. 1999. Utah Partners in Flight draft conservation strategy. UDWR publication number 99-40. Utah Partners in Flight Program, Utah Division of Wildlife Resources, Salt Lake City.

³⁸ Hughes, J.M. 1999. Yellow billed Cuckoo (*Coccyzus americanus*). In *The Birds of North America*, No. 148 (A. Poole and F. Gill, eds.). The Birds of North America, Inc., Philadelphia, Pennsylvania

³⁹ USFWS. Determination of Threatened Status for the Western Distinct Population Segment of the Yellow-billed Cuckoo (*Coccyzus americanus*) Final Rule, October 3, 2014, <https://www.gpo.gov/fdsys/pkg/FR-2014-10-03/pdf/2014-23640.pdf>

⁴⁰ Halterman, M., Johnson, M.J., Holmes, J.A., and Laymon, S. 2015. A Natural History Summary and Survey Protocol for the Western Distinct Population Segment of the Yellow-billed Cuckoo. U.S. Fish and Wildlife Techniques and Methods, 45 p.

presence/absence surveys for YBCC were conducted using USFWS protocol⁴¹. Potential YBCC habitat may exist in association with the cottonwood trees lining the Cove Canal and the larger cottonwood stands adjacent to the Big Wood River located west of the Airport. In July 2018, Bob Kibler with the USFWS-Ecological Services Division was contacted regarding YBCC and completed ESA survey. The USFWS confirmed that the nearest documented YBCC nests in relation to the Airport are located at the Magic Valley Reservoir (approximately 20 miles south of the Airport) and north of Ketchum (approximately 18 miles north of the Airport), both of which are in areas primarily owned by the United States Forest Service (USFS). USFWS had no siting or nesting information for YBCC for the area between Bellevue and Ketchum, as YBCC are not tolerant to urban areas (see **Appendix B**).

Follow-up coordination with Frank Edelmann, Regional Biologist with IDFG, and Bob Kibler with USFWS, was conducted in December 2018 regarding the complete Biological Memorandum (**Appendix B**) and agencies did not provide opinions contrary to the "no effects" finding. **Appendix B Supplement** contains a Timeline of Evaluation and Agency Coordination pertaining to the YBCC. USFWS concurrence on a Federal Agency's no effect determination is not required.

State Sensitive Species

Red-tailed Hawk

The red-tailed hawk is a large raptor with a dark head and upper body, broad wings, light underside, and reddish fan-shaped tail⁴². Red-tailed hawk populations are abundant and secure in Idaho⁴³. They are widely distributed and can be found wherever there are prey and nesting sites, from forests to deserts to agricultural lands. Some red-tailed hawks are resident birds, but most are partial migrants, migrating south in the winter⁴⁴. Red-tailed hawks nest in March and April near the top of tall trees and are extremely sensitive to disturbance from human interference during nest building and may even abandon the nest.

A red-tailed hawk was observed perched in a cottonwood tree adjacent to the Cove Canal within the project area during the field survey (**Appendix B**), however, no nest was observed. Red-tailed hawks are sit-and-wait hunters⁴⁵ and are often found at a tall perch watching the ground for prey. The project area provides numerous large trees for perching and the adjacent irrigated pasture and riparian areas likely support small mammals, such as voles, mice, rats, gophers, ground squirrels, rabbits and hares. Under the Proposed Action, up to 200 individual trees (primarily cottonwoods) will be removed. Low-growing shrubs (under 15 feet in height) will be planted near the farmhouse once the larger trees are removed. The removal of trees will

⁴¹ Halterman, M, Johnson, M.J., Holmes, J.A., and Laymon, S. 2015. A Natural History Summary and Survey Protocol for the Western Distinct Population Segment of the Yellow-billed Cuckoo. U.S. Fish and Wildlife Techniques and Methods, 45 p.

⁴² Idaho Department of Fish and Game. no date. Idaho's Birds of Prey. April 17, 2018, <https://idfg.idaho.gov/old-web/docs/wildlife/nongame/leafletBirdsPrey.pdf>

⁴³ Idaho Department of Fish and Game. no date. Idaho's Birds of Prey. April 17, 2018, <https://idfg.idaho.gov/old-web/docs/wildlife/nongame/leafletBirdsPrey.pdf>

⁴⁴ Idaho Department of Fish and Game. no date. Idaho's Birds of Prey. April 17, 2018, <https://idfg.idaho.gov/old-web/docs/wildlife/nongame/leafletBirdsPrey.pdf>

⁴⁵ Idaho Department of Fish and Game. 2015. Red-tailed hawk. Wildlife Express 29: 3. April 17, 2018, <https://idfg.idaho.gov/old-web/docs/wildlifeExpress/2015nov.pdf>

permanently remove potential nesting and perching/foraging habitat for red-tailed hawk. However, adequate habitat exists offsite along the Big Wood River riparian corridor, approximately 1,000 feet west of the project area. The Proposed Action construction activities and tree removal will not occur during nesting season unless authorized by a qualified biologist (see Mitigation section below).

Multiple coordination attempts with IDFG⁴⁶ occurred from 2017 to 2018 and are outlined in **Chapter 5**. In June of 2017, Frank Edelmann (IDFG) was contacted over the phone to receive baseline information about the project area to be used in the biological surveys. In October of 2018, the final report (Biological Memorandum, **Appendix B**) was sent to IDFG to quantify impacts to migratory birds and the red-tailed hawk; IDFG acknowledged receipt of the Technical Memorandum. Communication with IDFG in December 2018 indicates they neither support nor oppose the project. Therefore, the Proposed Action **may impact but will not likely contribute to a trend towards federal listing or loss of viability** for red-tailed hawk.

Long-billed Curlew

The long-billed curlew is a large, long-legged shorebird with a distinctive long, decurved bill and pale cinnamon-colored plumage⁴⁷. In Idaho, long-billed curlews use grassland, wet meadow and shrub steppe habitats during breeding, nesting and migrating periods from March through November. Breeding occurs in early April and nests are built in mostly open habitats void of large trees and shrubs, while brood rearing occurs in denser cover in proximity to water⁴⁸. The greatest threat to long-billed curlew is loss of habitat, such as conversion of grasslands to residential or commercial development.

Although no long-billed curlews were observed during field surveys, the project area is predominantly irrigated pasture which is often used and sometimes preferred by long-billed curlew⁴⁹. The project area is also located in a suspected breeding region. The Cove Canal provides water throughout the irrigation season which may also be utilized by curlew. The removal of up to 200 trees under the Proposed Action may temporarily impact underlying wetland areas. In addition, the wetlands will be converted from PFO and PSS wetlands to PEM wetlands. It is well documented that long-billed curlew choose nesting locations void of large trees and that large blocks of trees, such as those along the Cove Canal, can render grassland habitat unsuitable for nesting⁵⁰. Therefore, the removal of riparian tree canopy may benefit

⁴⁶ Edelmann, Frank (Regional Biologist, Idaho Department of Fish and Game). Personal Communications. June 2017, October and December 2018.

⁴⁷ USFWS. 2009. Status Assessment and Conservation Action Plan for the Long-billed Curlew (*Numenius americanus*), Biological technical publication BTP-R6012-2009. USFWS Nongame Migratory Bird Coordinator's office, Denver, Colorado. Accessed April 17, 2018 at <https://www.fws.gov/migratorybirds/pdf/management/focal-species/Long-billedCurlew.pdf>

⁴⁸ Cavallaro, R. 2006. Conservation and management of Long-billed Curlews and waterbirds in the Foster's Slough wetland complex, Teton Valley, Idaho. *Wader Study Group Bulletin* 109:32.

⁴⁹ USFWS. 2009. Status Assessment and Conservation Action Plan for the Long-billed Curlew (*Numenius americanus*), Biological technical publication BTP-R6012-2009. USFWS Nongame Migratory Bird Coordinator's office, Denver, Colorado. Accessed April 17, 2018 at <https://www.fws.gov/migratorybirds/pdf/management/focal-species/Long-billedCurlew.pdf>

⁵⁰ USFWS. 2009. Status Assessment and Conservation Action Plan for the Long-billed Curlew (*Numenius americanus*), Biological technical publication BTP-R6012-2009. USFWS Nongame Migratory Bird

breeding and nesting habitat for long-billed curlew within the project vicinity. The Proposed Action is expected to have **no effect** on long-billed curlew as grassland and irrigated pasture habitat will be maintained.

Olive-sided Flycatcher

The olive-sided flycatcher is an upright-perching flycatcher with a large head, wide bill, and short tail; it is olive-gray overall with a white patch down the breast. Olive-sided flycatchers migrate to Idaho from April to September for breeding and nesting⁵¹. Their primary breeding habitat is high elevation mixed conifer that includes whitebark pine (*Pinus albicaulis*), mountain hemlock (*Tsuga mertensiana*), grand fir (*Abies grandis*), subalpine fir (*Abies lasiocarpa*), and Engelmann spruce (*Picea engelmannii*); secondary habitat is low elevation mixed conifer consisting of western larch (*Larix occidentalis*) and Douglas fir (*Pseudotsuga menziesii*)⁵².

The IFWIS database indicate that no sightings of olive-sided flycatcher have been documented in the vicinity of the project area nor were any identified during field surveys. The project area contains no high elevation mixed conifer habitat nor low elevation mixed conifer habitat associated with the olive-sided flycatcher. As occurrence of the olive-sided flycatcher within the project area is unlikely and discountable, the Proposed Action is expected to have **no effect** on the olive-sided flycatcher because neither the species nor its habitat is found in the project area.

General Wildlife and Vegetation

The project area provides irrigated pasture and a 30-foot wide riparian corridor of mostly cottonwood with a shrub understory as potential habitat. Several cavity nests were observed in standing dead trees adjacent to the Cove Canal during the field surveys. The Proposed Action will remove up to 200 individual trees (primarily cottonwoods) along the Cove Canal, which will permanently remove potential nesting and foraging habitat for bird and wildlife species. However, the removal of riparian forest habitat is not significant (2.2 acres) when compared to alternative riparian forest habitat that exists along the Big Wood River, approximately 1,000 feet west of the project area. In addition, it is important to note that the Airport does not wish to promote the use of trees within the Airport boundaries because the presence of birds within the bounds of the Airport increases the risk of aircraft-bird strikes, which increases the risk of harm to both humans and bird species. The Proposed Action also includes a 400-foot extension of the fence, which will transfer 6.5 acres from agricultural production into non-irrigated grassland. The fence will alleviate wildlife incursions, such as mule deer, from entering the RSA, which increases risk of harm to both humans and wildlife. All construction activities will occur outside of the nesting season unless authorized by a qualified biologist (see Mitigation section below). Pasture, grassland, and emergent wetland habitat within the acquired area will remain and will be protected from future development. Therefore, the Proposed Action **may impact but will not likely contribute to a trend towards federal listing or loss of viability** for any general wildlife and vegetation species.

Coordinator's office, Denver, Colorado. Accessed April 17, 2018 at <https://www.fws.gov/migratorybirds/pdf/management/focal-species/Long-billedCurlew.pdf>

⁵¹ Kotliar, N.B. 2007. Olive-sided Flycatcher (*Contopus cooperi*): a technical conservation assessment. USDA Forest Service, Rocky Mountain Region. Accessed April 18, 2018 at <http://www.fs.fed.us/r2/projects/scp/assessments/olivesidedflycatcher.pdf>

⁵² Ritter, S. 2000. Idaho Bird Conservation Plan, Version 1.0. January 2000. Idaho Partners in Flight.

Migratory Birds

Suitable nesting habitat for birds subject to the MBTA, including red-tailed hawk, is present within the project area that includes: irrigated pasture; trees near the ranch outbuildings; the riparian corridor along the Cove Canal; and cavity nests in trees adjacent to the Cove Canal. Under the Proposed Action, approximately 64.6 acres of the Eccles Flying Hat Ranch will be acquired, including 59.8 acres of active pasture, 3.7 acres attributed to the Cove Canal (or approximately 2,691 linear feet of the Cove Canal), and 1.1 acres of farmstead. The pasture will be leased for continued agricultural use and will continue to provide habitat for many species. Up to 200 individual trees (primarily cottonwoods) will be removed along the Cove Canal, which will permanently remove potential nesting and foraging habitat for bird species that utilize riparian trees and for those purposes. However, the removal of riparian forest habitat is not significant (2.2 acres) when compared to alternative riparian forest habitat that exists along the Big Wood River, approximately 1,000 feet west of the project area. The removal of 6.5 acres from agricultural production into non-irrigated grassland is unlikely to impact migratory birds since most local species utilize non-irrigated grassland habitat. All construction activities will occur outside of the nesting season unless authorized by a qualified biologist (see Mitigation section below). Pasture, grassland, and emergent wetland habitat within the acquired area will remain intact. Therefore, the Proposed Action **may impact but will not likely contribute to a trend towards federal listing or loss of viability** for any migratory bird species.

Multiple coordination attempts with IDFG were conducted in 2017-2018 for concurrence on “no effects” determinations (as listed in **Chapter 5**). In December of 2018, IDFG neither supported, nor opposed the project and deferred to the USFWS to assess the project effects determination.

4.2.3 Mitigation

The following measures are recommended to avoid or minimize effects on the special status and migratory birds. **Table 4-5** summarizes survey requirements, avoidance buffers, and construction windows for special status bird species and birds protected under the MBTA.

If construction will occur during the nesting season (February 1 through September 15), a qualified biologist will conduct a pre-construction nesting bird survey within 7 days prior to construction or land disturbance. Survey protocol should include specific tasks to address the potential presence and breeding activity of red-tailed hawk and cavity nesters. Due to the high potential for nesting birds to be present and to utilize the site, the following Best Management Practices (BMPs) are recommended to reduce or eliminate impacts to nesting birds:

- Prior to nesting season, remove suitable nesting habitat features from the project area/construction footprint. Management activity should include vegetation removal to minimize nesting habitat including mowing, grubbing, tree, and shrub removal. Habitat removal should be conducted during nonbreeding season (October 1-January 31), if practicable.
- During nesting season, if construction must occur during the nesting season, minimize vegetation removal to the maximum extent possible. Conduct nesting season preconstruction nest surveys 7 days before disturbance or vegetation removal to identify and protect any nesting birds that may be affected by project activities.

TABLE 4-5: SURVEY REQUIREMENTS AND WORK WINDOWS FOR BIRD SPECIES.

Biological Resource	Pre-construction Survey Information
Special status bird species and birds protected under the Migratory Bird Treaty Act	Nest survey to be conducted 7 days prior to ground disturbance or construction during nesting (Feb 1 – Sept 30)

4.2.4 Findings and Conclusions

As the non-development alternative, the No Action Alternative will have **no effect** on threatened and endangered species, State sensitive species, general wildlife and vegetation, or migratory birds. The project area will continue to provide habitat for many species, including undesirable bird species that increase the risk of aircraft-bird strikes.

Threatened and Endangered Species

The Proposed Action will have **no effect** on federally-listed Canada lynx and North American wolverine, as neither the species nor their habitats are found in the project area. The Proposed Action will also have **no effect** on the YBCC. The project area does not contain suitable YBCC habitat as the Cove Canal riparian is too fragmented and lacks the required tree density/understory, minimum size (50-acre minimum), and riparian width (50-meter width minimum). In addition, the species was not identified during call-back surveys and coordination with IDFG and USFWS indicated that the YBCC do not occur within the Airport project area and/or urban areas (Between Bellevue and Ketchum) of the Wood River Valley.

State Sensitive Species

The Proposed Action **may impact but will not likely contribute to a trend towards federal listing or loss of viability** to red-tailed hawk, as the removal of the cottonwood trees along the Cove Canal will reduce potential nesting and perching habitat. However, the number of cottonwood trees removed is insignificant when compared to available habitat along the Big Wood River and adequate replacement habitat is readily available. The Proposed Action will have **no effect** on State sensitive olive-sided flycatcher as neither the species nor its habitat is found in the project area. The Proposed Action will have **no effect** on State sensitive long-billed curlew because grassland and irrigation pasture will remain intact.

General Wildlife and Vegetation

The Proposed Action **may impact but will not likely contribute to a trend towards federal listing or loss of viability** for general wildlife and vegetation species, as the removal of the cottonwood trees along the Cove Canal will reduce potential perching and nesting habitat. However, the number of cottonwood trees removed is insignificant when compared to available habitat along the Big Wood River. Pasture, grassland, and emergent wetland habitat within the acquired area will remain intact.

Migratory Birds

The Proposed Action **may impact but will not likely contribute to a trend towards federal listing or loss of viability** to some migratory birds, including red-tailed hawk, as the removal of the cottonwood trees along the Cove Canal will reduce potential nesting and perching habitat for bird species. However, the number of cottonwood trees removed is insignificant when compared

to available habitat along the Big Wood River and adequate replacement habitat is readily available. Pasture, grassland, and emergent wetland habitat within the acquired area will remain intact.

4.3 CLIMATE

4.3.1 Affected Environment

Research has shown there is a direct correlation between fuel combustion and greenhouse gas (GHG) emissions⁵³. GHGs are gases that trap heat in the atmosphere and are primarily a result of burning fossil fuels, such as carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), and perfluorocarbons (PFCs). EPA data indicate that CO₂ emissions from domestic aviation account for approximately three percent of total U.S. CO₂ emissions⁵⁴. The International Civil Aviation Organization estimates that GHG emissions from aircraft account for roughly three percent of all anthropogenic GHG emissions globally⁵⁵. Climate change due to GHG emissions is a global phenomenon, so the affected environment is the global climate⁵⁶.

The scientific community is continuing efforts to better understand the impact of aviation emissions on the global atmosphere. The FAA is leading and participating in a number of initiatives intended to clarify the role that commercial aviation plays in GHG emissions and climate. The FAA, with support from the U.S. Global Change Research Program and its participating federal agencies (National Aeronautics and Space Administration, National Oceanic and Atmospheric Administration, EPA and Department of Energy), has developed the Aviation Climate Change Research Initiative to advance scientific understanding of regional and global climate impacts of aircraft emissions⁵⁷. FAA also funds the Partnership for Air Transportation Noise & Emissions Reduction Center of Excellence research initiative to quantify the effects of aircraft exhaust and contrails on global and U.S climate and atmospheric composition. Similar research topics are being examined at the international level by the International Civil Aviation Organization⁵⁸.

⁵³Documentation for Aircraft Component of the National Emissions Inventory Methodology. EPA, April, 2010. Prepared by Eastern Research Group, ERG No. 0245.02.302.001, Contract No. EP-D-07-097.

⁵⁴Aviation and Climate Change. GAO Report to Congressional Committees, 2009, <http://www.gao.gov/new.items/d09554.pdf>.

⁵⁵Melrose, Alan. 2010. *European ATM and Climate Adaptation: A Scoping Study* in International Civil Aviation Organization Environmental Report.

⁵⁶As explained by the EPA, "greenhouse gases, once emitted, become well mixed in the atmosphere, meaning U.S. emissions can affect not only the U.S. population and environment but other regions of the world as well; likewise, emissions in other countries can affect the United States." Climate Change Division, Office of Atmospheric Programs, EPA, Technical Support Document for Endangerment and Cause or Contribute Findings for Greenhouse Gases under Section 202(a) of the Clean Air Act 2-3, 2009, <http://epa.gov/climatechange/endangerment.html>.

⁵⁷Brown, N., et. al. 2010. The U.S. Strategy for Tackling Aviation Climate Impacts, 27th International Congress of the Aeronautical Sciences, http://www.icas.org/ICAS_ARCHIVE/ICAS2010/PAPERS/690.pdf

⁵⁸Lourdes Q. Maurice and David S. Lee. *Chapter 5: Aviation Impacts on Climate. Final Report of the International Civil Aviation Organization Committee on Aviation and Environmental Protection Workshop*, 2007, http://www.icao.int/icaonett/cnfrst/CAEP/CAEP_SG_20082/docs/Caep8_SG2_WPI0.pdf.

FAA Order 1050.1F states that GHGs and climate change should be considered and evaluated as an impact category in FAA environmental documents, including both Environmental Assessments and Environmental Impact Statements. However, there are currently no federal standards for aviation-related GHG emissions and, as noted by the CEQ, “it is not currently useful for the NEPA analysis to attempt to link specific climatological changes, or the environmental impacts thereof, to the particular project or emissions; as such direct linkage is difficult to isolate and to understand⁵⁹.”

4.3.2 Environmental Consequences

The removal of declared distances after the Airport gains control of the full length of the RSA and ROFA and moves the fence, will not lead to an increase in emissions. Declared distances must be used rather than a runway’s physical length for aircraft performance calculations prior to takeoff and landing. However, aircraft are not prohibited from operating beyond a declared distance limit, provided the runway surface is appropriately marked as usable runway, which is the case at SUN. Therefore, use of the usable runway is not expected to change as a result of the removal of the declared distances, and no increase in emissions are expected.

The Proposed Action will not cause or create an increase in aircraft operations at the Airport. Therefore, the Proposed Action will not lead to an increase in operational GHG emissions beyond current projected growth.

4.3.3 Mitigation

No mitigation is required as there are no federal standards for aviation-related GHG emissions that are required to be met at this time for both the No Action Alternative and the Proposed Action.

4.3.4 Findings and Conclusions

As the on-development alternative, the No Action Alternative will result in no additional GHG emissions beyond normal projected growth. Therefore, the No Action Alternative will have **no effect** on climate.

The Proposed Action will not cause or create an increase in aircraft operations at the Airport. Therefore, the Proposed Action will have **no significant effect** on climate.

4.4 COASTAL RESOURCES

4.4.1 Affected Environment

The Airport is not located within the Coastal Barrier Resources System⁶⁰, as delineated by the USFWS or Federal Emergency Management Agency (FEMA) coastal barrier maps. Neither the

⁵⁹ *Draft NEPA Guidance on Consideration of the Effects of Climate Change and Greenhouse Gas Emissions*, December 24, 2014, <http://energy.gov/nepa/downloads/revised-draft-guidance-consideration-greenhouse-gas-emissions-and-climate-change-nepa>

⁶⁰ USFWS. 2018. Coastal Barrier Resources System - Overview. U.S. Fish and Wildlife Service. Accessed May 3, 2018 at <https://www.fws.gov/CBRA/>

Proposed Action or the No Action Alternative would affect a coastal zone as the state of Idaho is located entirely inland and does not contain any marine coastal barriers or coral reefs. Therefore, actions involving the Airport are not applicable to these regulations and are not considered for further evaluation.

4.5 DEPARTMENT OF TRANSPORTATION, SECTION 4(F)

Section 4(f) was initially codified in Title 49 of the United States Code (USC) § 1653(f) (Section 4(f) of the USDOT Act of 1966). In 1983, § 1653(f) was reworded and recodified as Title 49 USC § 303⁶¹, but still commonly referred to as Section 4(f). Congress amended Section 4(f) in 2005 when it enacted the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU).

Section 4(f) lands are defined as “any publicly owned land from a public park, recreation area, or wildlife and waterfowl refuge of national, state, or local significance or land from an historic site of national, state, or local significance⁶².”

Section 4(f) prohibits the use of land of significant publicly owned public parks, recreation areas, wildlife and waterfowl refuges, and land of a historic site for transportation projects unless the Administration determines that there are no feasible and prudent avoidance alternatives and that all possible planning to minimize harm has occurred.

Any actions that may affect Section 4(f) properties must be identified as early as practicable in the planning process if the Section 4(f) properties include historic sites of national, state, or local significance in public or private ownership regardless of whether they are open to the public or use of a public recreational resource. The term “use” occurs when land is permanently incorporated into a transportation facility, when there is a temporary occupancy of land that has an adverse effect, or when the proximity of the project substantially impairs the attributes that qualify the resource for protection under Section 4(f)⁶³. De minimis impacts on publicly owned parks, recreation areas, and wildlife and waterfowl refuges are defined as those that do not “adversely affect the activities, features and attributes” of the Section 4(f) resource. The SAFETEA-LU amendment to Section 4(f)⁶⁴ allows different de minimis impact criteria for historic sites; de minimis impacts to historic sites are defined as the determination of either “no adverse effect” or “no historic properties effected” in compliance with Section 106 of the NHPA⁶⁵.

⁶¹ 49 U.S.C. §303 - Policy on lands, wildlife and waterfowl refuges, and historic sites. Accessed April 23, 2018 at <https://www.gpo.gov/fdsys/pkg/USCODE-2011-title49/html/USCODE-2011-title49-subtitleI-chap3-subchapl-sec303.htm>

⁶² 23 U.S. Code § 138 - Preservation of parklands. Accessed April 23, 2018 at https://www.ecfr.gov/cgi-bin/text-idx?tpl=/ecfrbrowse/Title23/23cfr774_main_02.tpl

⁶³ Federal Highway Administration (FHWA) Sec. 771.135 Section 4(f). Accessed April 23, 2018 at <https://www.fhwa.dot.gov/legregs/directives/fapg/cfr0771.htm>

⁶⁴ Guidance for Determining De Minimis Impacts to Section 4(f). Accessed April 23, 2018 at https://environment.transportation.org/pdf/FHWA-FTA_De_Minimis_Guidance_12-13-05.pdf

⁶⁵ 36 CFR Part 800 Protection of Historic Properties, Section 106. Accessed April 23, 2018 at <http://www.achp.gov/regs-rev04.pdf>

4.5.1 Affected Environment

In July of 2017, the City of Hailey and Blaine County were contacted to identify land use resources, including recreational resources. Three Section 4(f) recreational resources were identified within the project vicinity: the Wood River Trail (0.1 miles), Wertheimer Park (0.3 miles), and Toe of the Hill Trail Heads (0.5 miles) as shown in **Figure 4-1**. All of the resources are located within the City of Hailey and are located east of SH-75 (the Proposed Action is located west of SH-75).

To identify potential historic sites, a Cultural Resources Survey (**Appendix C**) per Section 106 of the NHPA, was conducted in the summer of 2017 (approved in April 2018) to identify and evaluate resources at and abutting the Airport properties and areas proposed for acquisition. A 970-acre area was surveyed (see **Appendix C**). Section 106 cultural resources were identified in the Area of Potential Effect (APE) and the full extent of Airport property (FMA-01) was documented for FAA's future planning purposes. The Section 4(f) Evaluation prepared for potential impacts to historic resources is located in **Appendix G**, and includes recreational resources identified by the City of Hailey.

The Cultural Resources Survey reviewed two large properties — Eccles Flying Hat Ranch (13-16207) and the Friedman Memorial Airport (FMA-01) — which had previously been surveyed, at least minimally or partially, and which were resurveyed to current SHPO and FAA standards as part of this project.

The Friedman Memorial Airport (FMA-01), which included its twenty-five resources, was determined to be ineligible for the NRHP by the FAA in a letter dated April 5, 2018. SHPO concurred with this determination in a letter dated May 1, 2018 (see **Appendix C**). Therefore, it is not considered a 4(f) resource.

State Highway 75 (13-16171) was also identified in the Cultural Resources Survey; which abuts the project area, is outside the APE and was determined to be an NRHP-eligible Section 4(f) Resource. State Highway 75 is a two-lane historic highway that travels north-south along the eastern side of the Airport.

Within the APE, the following historic resources were determined to be NRHP-eligible Section 4(f) Resources (**Figure 4-1**):

1. Cove Canal (10BN1126)
2. Eccles Flying Hat Ranch (13-16207) (west of Highway 75)
3. Barn (NRHP- Individually Eligible) (Previously recorded as a part of the SH-75 EIS)

The **Cove Canal (10BN1126)** is an historic irrigation feature established in 1882. It originates from the Big Wood River approximately 1.77 miles northwest from the project area. The Canal generally flows southeasterly, diagonally across the project area. After flowing for a total of approximately 7.65 miles, the Canal terminates southeast of the Town of Bellevue. The Cove Canal is associated with significant trends in local history and retains sufficient integrity to communicate its historic associations with the agricultural development of the Wood River Valley.

Given its location directly off of the end of Runway 13/31, there are no practical measures to entirely avoid the Canal. Approximately 3.7 acres (approximately 2,691 linear feet) of the Cove Canal will be within the acquisition area.

The **Eccles Flying Hat Ranch (13-16207)** spans approximately 750 acres to the east and west of State Highway 75, south of Hailey, Idaho, and south of the Airport. The pasture on the east side of Highway 75 was acquired into the larger property in 1997; thus, it has no historic association with the Eccles Flying Hat Ranch and on its own, does not adequately communicate historical significance. The 615 acres on the west side of State Highway 75 is eligible for listing in the NRHP as it retains sufficient integrity to communicate its historic associations with the agricultural development of the Wood River Valley and because it embodies distinctive characteristics of the settlement period methods of construction during the early twentieth century. The ranch is a relatively rare surviving example in the Wood River Valley of an early twentieth century large-acreage ranch district, complete with the key, character-defining historic elements of open pastureland, tree lines, and a nucleus of farmstead buildings that clearly convey a sense of past time and place. Though few resources on the ranch appear to be individually eligible, the ranch as-a-whole appears to be eligible for listing in the NRHP as a Historic District made up of its contributing resources and landscape elements.

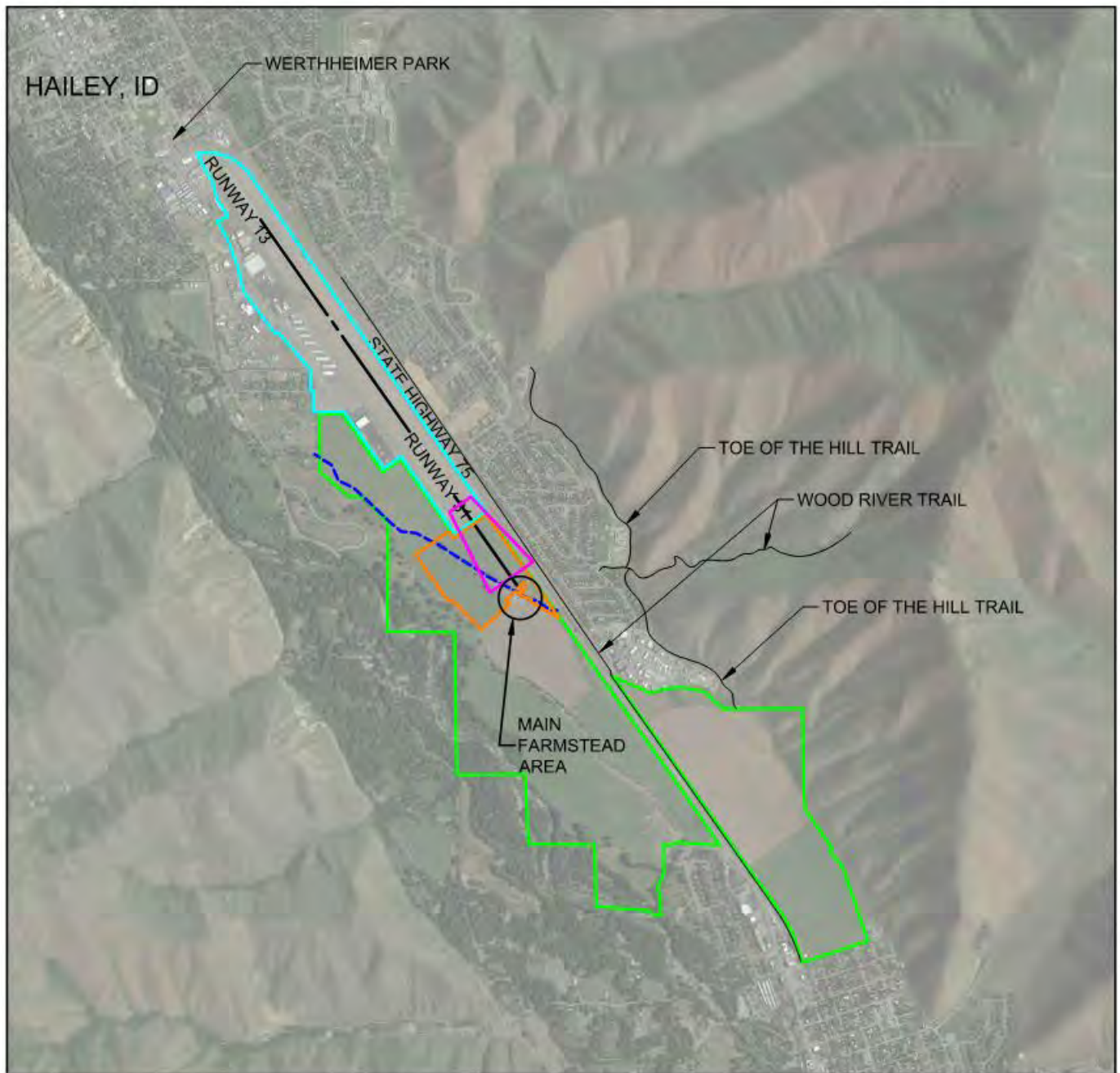
The farmstead, which lies on the extended centerline of the Airport's Runway 13/31 (see **Figure 3-1**), encompasses several individual resources (e.g. farmhouse, barn, grain bins, animal sheds, utility buildings, canals, a corral, equipment shed, well, and outhouse) dating from 1884 to 2006, of which, seven (resources illustrated within **Table 4-6**) comprise the main farmstead area. Although the house and garage have been altered, the remaining farm structures and general setting retain their historic integrity. On May 1, 2018, the Idaho SHPO added the windrow of trees surrounding the main farmstead area as a contributing element to the Eccles Flying Hat Ranch (**Appendix C**). The "Windrow" is made up of the trees on the east and north side of the farmhouse, which were planted in association with the main farmstead. The windrow is a combination of ornamental, deciduous, and pine trees.

As it is eligible for listing on the NRHP, the Eccles Flying Hat Ranch is also considered a Section 4(f) historic resource. Given the location of the Eccles Flying Hat Ranch directly off the end of Runway 13/31, there are no practicable measures to entirely avoid the Ranch; thus, the Eccles Flying Hat Ranch could be impacted by the proposed project.

The **barn (NRHP- Individually Eligible)** is an excellent example of an early twentieth century ground-level stable barn (**Photo 4-3** on page 75). It has a large wood-frame and a steeply pitched gambrel roof with the following features: open eaves with exposed rafter tails; corner boards; large, hinged door/ramp centered in the top of the east gable; and a row of square, four-light wood windows illuminating stalls. The barn communicates strong associations with development of the ranch and agriculture in the Wood River Valley, as-a-whole.

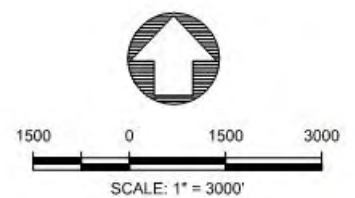
As it is eligible for listing on the NRHP, the barn is also considered a Section 4(f) historic resource. Given its location within the Eccles Flying Hat Ranch, the barn could be impacted by the proposed project.

For more information on these historical resources, please refer to **Appendices C and G and Section 4.8**.



LEGEND

- AIRPORT PROPERTY BOUNDARY (FMA-01)
- - - RUNWAY 13-31 CENTERLINE
- RUNWAY PROTECTION ZONE (RPZ)
- PROPOSED ACQUISITION AREA [64.6 ACRES]
- - - COVE CANAL (10BN1126)
- ECCLES FLYING HAT RANCH (13-16207)



NOTE:
REFERENCE NAMES/NUMBERS PRESENTED IN "()"
ABOVE ARE ASSIGNED BY THE IDAHO STATE HISTORIC
PRESERVATION OFFICE (SHPO).

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FIGURE 4-1:
DOT SECTION 4(F) PROPERTIES



TABLE 4-6: MAIN FARMSTEAD AREA RESOURCES.

Resource Name	Construction Date; Alteration Date(s)	Eligibility Status	Justification
Farmhouse	c. 1900; c. 1920; c. 1955; c. 1991	Contributing	Integrity of design, materials, workmanship lost; Integrity of location, setting, feeling and association intact.
Well	c. 1955	Contributing	Integrity of location, setting, design, materials, workmanship, feeling, and association all intact.
Barn	c. 1925; c. 1950	Individually eligible; Contributing	Criterion A* for Agriculture; Integrity of location, setting, design, materials, workmanship, feeling, and association all intact.
Equipment Shed	c. 1950	Contributing	Integrity of location, setting, design, materials, workmanship, feeling, and association all intact.
Outhouse	c. 1965	Noncontributing	Integrity of materials, workmanship, and feeling lost; Integrity of location, setting, design, and association intact.
Irrigation Shed	c. 2000	Noncontributing	Constructed after period of significance; not historic.
Windrow**	N/A	Contributing	Integrity of location, setting, design, materials, workmanship, feeling, and association intact.

*Sites and/or structures associated with events that have made a significant contribution to broad patterns in history.

Windrow was included as a main farmstead resource per SHPO concurrence letter dated May 1, 2018 (Appendix C**).

4.5.2 Environmental Consequences

Recreation resources

The Wood River Trail, Wertheimer Park, and Toe of the Hill trail heads are well outside of the project area and will not be affected by the land acquisition, obstruction removal, or fence extension. The Proposed Action does not change flight patterns or operations of the Airport; and therefore, no constructive use would occur as a result of the Proposed Action.

State Highway 75 (13-16171)

State Highway 75 is adjacent to, but not within the area of impact for the Proposed Action. Therefore, the Proposed Action, which includes land acquisition, obstruction removal, and fence extension, will have “no use” of State Highway 75.

Cove Canal (10BN1126)

Approximately 3.7 acres (approximately 2,691 linear feet) of the Cove Canal will be within the acquisition area under the Proposed Action. Within this area, trees (primarily cottonwoods) that have reached heights of as much as 80 to 100 feet would be removed. Tree removal would include cutting them at ground level and the removing the stumps. Wetlands associated with the canal would transition from a forested canopy to shrub or emergent complex. The removal of trees along the Cove Canal does not affect the vital water conveyance function of the Canal itself; thereby, the direct impacts associated with the removal of the trees along Cove Canal do not cause an “adverse effect” under Section 106 and are “no use” under Section 4(f). SHPO has concurred that the Proposed Action will have “no adverse effect” on the Cove Canal (see **Appendix C**).

Eccles Flying Hat Ranch Historic District (13-16207)

Under the Proposed Action, approximately 64.6 acres of the Eccles Flying Hat Ranch will be acquired. The land acquisition will not diminish the overall historical integrity of the property and will not include the main farmstead resources, which include the farmhouse, well, barn, equipment shed, outhouse, and irrigation equipment shed. The irrigation shed, equipment shed, and on-site utility cabinets will be retained so that irrigation features, pastures, and fields can continue to operate as a farm. The land change will reduce the overall acreage of the Eccles Flying Hat Ranch from approximately 750 acres to approximately 685 acres. However, the reduction is small, representing about 9% of the total Ranch area. Overall, the character-defining historic elements and the distinctive characteristics of the settlement period will be retained.

One component of the Proposed Action would remove all trees identified as airspace obstructions. Per SHPO concurrence (**Appendix C**), the removal of the majority of the windrow, a character defining feature of the historic farmstead associated with 13-16207, diminishes both the setting and feeling of the farmstead. The “windrow” is made up of the trees on the east and north side of the farmhouse, these trees were planted in association with the main farmstead. The windrow is a combination of ornamental, deciduous, and pine trees. Given the location of the windrow near the main farmstead and the Purpose and Need of the Proposed Action, there is no prudent and feasible Action Alternative that could avoid the Eccles Flying Hat Ranch without use of Section 4(f) resources. Removal of the obstructions along the Cove Canal (primarily cottonwood trees) and near the main farmstead (primarily the windrow pines) are needed to meet Runway 13-31 safety parameters.

The Proposed Action will have an “adverse effect” on the Eccles Flying Hat Ranch Historic District through the removal of the windrow trees; therefore, the Proposed Action will result in “direct use” of the Eccles Flying Hat Ranch. A Section 4(f) Evaluation (See **Appendix G**) was prepared to evaluate alternatives and make the required findings. The Proposed Action was found to be both reasonable and feasible under the Section 4(f) Evaluation. The location of the windrow places it in an unavoidable position in respect to the Airport safety needs identified in **Chapter 2** as it is both a contributing historic resource and contains obstructions to airspace. Based on the Section 4(f) Evaluation and coordination with FAA, SHPO, the Airport, and the landowner, a finalized Memorandum of Agreement (MOA) has been signed and is attached to the Section 4(f) Evaluation in **Appendix G**.

Barn (NRHP eligible)

The barn will not be included as part of the property acquisition under the Proposed Action and will continue to operate as an agricultural asset. The Proposed Action, which includes land acquisition, obstruction removal, and the fence extension, will have “no use” of the NRHP-eligible barn located on the Eccles Flying Hat Ranch (13-16207).

4.5.3 Mitigation

Section 4(f) properties will result in “no use” under the No Action Alternative but will result in “a direct use” of the Eccles Flying Hat Ranch under the Proposed Action.

Mitigation of potential adverse impacts to historic sites usually consists of measures necessary to preserve the historic integrity of the site and agreed to in accordance with 36 CFR Part 800 (Protection of Historic Properties). The Proposed Action was selected to minimize harm to the Eccles Flying Hat Ranch by limiting the acquisition of the farmstead resources, identified in **Table 4-6**, and by keeping farming operations intact. Consultation between FAA and SHPO took place during the development of a Memorandum of Agreement (MOA) regarding the proposed removal of the trees resulting in an adverse effect to the Eccles Flying Hat Ranch under Section 106. Stipulations in the signed and finalized MOA (**Appendix G**) include providing displays/interpretive panels at the Airport in a public area. The displays/panels will provide information about the agricultural history of the Wood River Valley. Idaho SHPO will be given the opportunity to review the content of the displays before they are finalized. Additionally, replanting the windrow with low growing/airport compatible shrub species will be negotiated during the land acquisition process.

4.5.4 Findings and Conclusions

Under the No Action Alternative, Section 4(f) resources will remain as they presently exist and will result in **no use** of Section 4(f) properties. However, the No Action Alternative does not satisfy the Purpose and Need of the project.

The Proposed Action will result in **no use** of recreational resources, State Highway 75, or the NRHP-eligible barn, as none of these resources are within the area of impact. The Proposed Action will not change Airport flight patterns or operations and no constructive use will occur. SHPO has concurred that the land acquisition, obstruction removal along the Cove Canal, and fence line extension will result in “no adverse effect” to six identified components of the main farmstead area and subsequently **no use** of these historic resources.

The removal of windrow trees surrounding the main farmstead area would constitute an “adverse effect” to contributing elements of the Historic District under Section 106 for impacting the setting of the farmstead area, which contain contributing elements to the Eccles Flying Hat Ranch. The character-defining historic elements and the distinctive characteristics of the settlement period methods of construction during the early 20th century will be retained, although the setting will be altered by removing the windrow trees.

After careful and thorough consideration, the FAA determined that there are no feasible and prudent alternatives to the use of Section 4(f) resources. As demonstrated in **Chapter 3** of this EA, the Proposed Action includes efforts to minimize impacts to Section 4(f) resources by limiting the acquisition of the Eccles Flying Hat Ranch farmstead resources and by keeping farming operations intact. Consultations between the FAA and SHPO resulted in the signing of the MOA (**Appendix G**), which details conditions to preserve the historic integrity of the Eccles Flying Hat Ranch, which include: the installation of a display/panels at the Airport that provide information about the agricultural history of the Wood River Valley and the replanting of low growing/airport compatible shrub species near the farmhouse as mitigation under Section 106.

4.6 FARMLANDS

The Farmland Policy Protection Act (FPPA)⁶⁶ requires special consideration be given to soils considered “Important Farmland” by the Natural Resources Conservation Service (NRCS)⁶⁷. Important Farmland includes soils designated as: “Prime Farmland,” “Unique Farmland,” or farmland of “Statewide Importance” or “Local Importance.” Any airport development action funded under the Airport Improvement Program or subject to FAA approval that would permanently convert areas designated as Important Farmland to a non-agricultural use is subject to FPPA coordination. The FPPA does not apply to land already committed to “urban development or water storage⁶⁸” (i.e. airport developed areas). Therefore, only areas designated as “Important” in active agricultural use or not yet developed need to be evaluated.

4.6.1 Affected Environment

The NRCS Web Soil Survey⁶⁹ website was accessed to determine the classification of soils within the project area, defined as the Airport property and areas proposed for acquisition. All lands within existing Airport boundaries and within the parcels proposed for acquisition are classified as Balaam-Adamson complex and Gimlett very gravely sandy loam. These soils are considered “Prime Farmland” if irrigated. The ranch has an extensive irrigation system; and therefore, all soils are considered “Prime Farmland.” Farmland soil classifications are shown in **Figure 4-2**. The entire proposed acquisition area is mapped as “Prime Farmland” if irrigated.

⁶⁶ 49 FR 27724, July 5, 1984. Part 658 – Farmland Protection Policy Act. Accessed April 18, 2018 at https://www.nrcs.usda.gov/wps/PA_NRCSCConsumption/download?cid=stelprdb1042433&ext=pdf

⁶⁷ NRCS. 2012. Part 523 – Farmland Protection Policy Act Manual, April 12, 2018, https://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb1049284.pdf

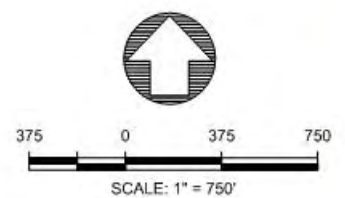
⁶⁸ 49 FR 27724, July 5, 1984. Part 658 – Farmland Protection Policy Act. Accessed April 18, 2018 at https://www.nrcs.usda.gov/wps/PA_NRCSCConsumption/download?cid=stelprdb1042433&ext=pdf

⁶⁹ NRCS. 2018. Web Soil Survey. U.S. Department of Agriculture, Natural Resources Conservation Service, April 12, 2018, <https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>



LEGEND

- AIRPORT PROPERTY BOUNDARY
- RUNWAY 13-31 CENTERLINE
- RUNWAY PROTECTION ZONE [RPZ]
- PROPOSED ACQUISITION AREA [64.6 ACRES]
- COVE CANAL
- PRIME FARMLAND IF IRRIGATED
- NOT PRIME FARMLAND



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FIGURE 4-2:
NRCS SOILS CLASSIFICATIONS



4.6.2 Environmental Consequences

Since the FPPA does not apply to land already committed to "urban development or water storage", such as the existing Airport property, only the proposed acquisition area is subject to FPPA requirements. Under the Proposed Action, approximately 64.6 acres of land will be acquired, of which 58.1 acres will remain in agricultural use/irrigated pasture; these acres will continue to be irrigated and will remain "Prime Farmland." The remaining 6.5 acres will be fenced and no longer irrigated, converting these acres from "Prime Farmland" to "Not Prime Farmland." This removal is unavoidable to meet FAA safety standards in order to move the perimeter fence outside of the RSA and extend the fence for the full length of the ROFA. The 6.5 acres converting to "Not Prime Farmland" represents less than 1% of the total farm acreage (750 acres). A Farmland Conversion Impact Form was completed for the Proposed Action to determine the level of impact to Prime Farmland and the NRCS was consulted in November 2017 (**Appendix D**). Based on the current location of the farmland to be converted (off of the end of Runway 31), and the small percentage of the area being converted, among other factors, the site scored 144 points out of 260 points. According to the desk reference to FAA Order 1050.1F *Environmental Impacts: Policies and Procedures*, sites receiving a total score of less than 160 need not be given further consideration for protection and no further evaluation is needed. Based on the results of the Farmland Conversion Impact Form and consultation with the NRCS, the Proposed Action will have no significant effect on Prime Farmland.

4.6.3 Mitigation

Farmland areas protected under the FPPA will have no impact under the No Action Alternative and have no significant effect under the Proposed Action. Therefore, no mitigation is required.

4.6.4 Findings and Conclusions

The No Action Alternative will have **no effect** on "Important Farmland" resources under the FPPA because it is a non-development alternative.

Under the Proposed Action, 58.1 acres of land acquired will continue to be irrigated and used for agriculture and remain as "Prime Farmland." The 6.5 acres of additional fenced area will no longer be irrigated and will convert to "Not Prime Farmland." The removal of 6.5 acres is unavoidable to meet FAA safety standards, represents less than 1% of the total farm acreage, and is below the significance threshold per the Farmland Conversion Impact Form. Therefore, the Proposed Action will result in **no significant effect** to "Important Farmland."

4.7 HAZARDOUS MATERIALS, POLLUTION PREVENTION, AND SOLID WASTE

Hazardous materials are products or waste regulated by the EPA and IDEQ. These include substances regulated under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA)⁷⁰, the Resource Conservation and Recovery Act (RCRA)⁷¹, and regulations for solid waste management, above ground storage tanks and underground storage tanks (USTs).

4.7.1 Affected Environment

For this assessment, a Hazardous Materials Evaluation - Phase 1 Report was prepared (**Appendix E**). As a part of the Phase 1 Report, Environmental Data Resources, Inc. (EDR) was contracted to perform a search of hazardous material sites within ½ mile of the Airport which includes the acquisition area. Numerous databases were searched, and research was conducted in accordance with 40 CFR Part 312, Standards and Practices for All Appropriate Inquiries⁷² and ASTM E1527-13, Standard Practice for Environmental Site Assessments⁷³.

For the Phase 1 survey, the “assessment area” was defined as the Eccles Flying Hat Ranch adjacent to the Airport, that includes one farmhouse, three barns, one equipment shed, an historic animal barn, an irrigation control shed, and the Cove Canal, for a total of approximately 615 acres. The historical use of the Eccles Flying Hat Ranch property is agricultural and residential. While historical records indicate that the Cove Canal was constructed in 1882 and the farmhouse in 1900, historical aerial photos show the adjoining properties as primarily undeveloped in 1954. Historical aerial photo review also indicated that development in the vicinity began after 1954 (see **Appendix E – Table 4.1**) which included: farmland parcel development (irrigation structures built, outhouse built, etc.), development/enhancements of the Airport (i.e. paving of the runway, construction of hangars, etc.), and subdividing and development of nearby residential neighborhoods.

The site assessment was performed on July 26, 2017 and the following potential hazardous sources or petroleum products were identified:

- An individual sewer treatment system and an aboveground storage tank for propane/heating oil for the Farmhouse, as shown in **Photo 4-1**.
- Two additional above ground storage tanks are used to store agricultural chemicals, as shown in **Photo 4-2**.

The individual sewer system and above ground storage tanks appeared in good working order. Active use of fuel, pesticides, herbicides, fertilizers, and other chemicals were also observed as a part of normal agricultural operations. A review of environmental database records for the

⁷⁰ 42 U.S.C. §103 Comprehensive Environmental Response, Compensation and Liability Act. Accessed April 24, 2018 at <https://www.law.cornell.edu/uscode/text/42/chapter-103>

⁷¹ EPA. 2018. Summary of the Resource Conservation and Recovery Act. Accessed April 24, 2018 at <https://www.epa.gov/laws-regulations/summary-resource-conservation-and-recovery-act>

⁷² 40 CFR Part 312, <https://www.gpo.gov/fdsys/pkg/CFR-2011-title40-vol28/pdf/CFR-2011-title40-vol28-part312.pdf>

⁷³ ASTM E1527-13, https://elibrary.gsfc.nasa.gov/_assets/doclibBidder/tech_docs/ASTM%20E1527-13.pdf

assessment area found five active underground injection wells (UIC)⁷⁴ and one closed underground storage tank (UST) within ¼ mile of the Airport (**Table 4-7** and **Figure 4-3**).

PHOTO 4-1: FARMHOUSE SHOWING PROPANE TANK.



PHOTO 4-2: AGRICULTURAL CHEMICAL ABOVE GROUND STORAGE TANKS.



TABLE 4-7: HAZARDOUS MATERIAL SITES WITHIN ¼ MILE OF THE AIRPORT.

Site Name	Database	Distance & Direction from Airport	Comments
Friedman Memorial Airport	UIC, UST, ALLSITES*	Target Property	Five UIC wells active. UST status is closed.
Woodside Elementary	UIC	0.0125 miles north	One UIC. At elevation 1 foot higher than site
Jay Smith Inc.	EDR exclusive records	0.094 miles east	Historical Carpet and Upholstery Cleaning from 1998-2004. At elevation lower than project site.

*ALLSITES = Idaho's remediation database. Source: EDR, Inc., 2017.

⁷⁴ An underground injection well is used to place fluid underground into porous geologic formations. Injected fluids may include water, wastewater, brine (salt water), or water mixed with chemicals.

The assessment area is not listed in any regulatory databases for leaking underground storage tanks (LUST) and Recovered Government Archive (LUST database), air pollution point sources (AIRS database), or facilitates monitoring by the EPA (FINDS database). No facilities or sites listed under the RCRA or CERCLA were identified within ¼ mile of the assessment area. Only the Airport and two other hazardous materials users are located within ¼ mile of the assessment area (**Table 4-7, Figure 4-3**). Based on the distance, status and location of Woodside Elementary and Jay Smith, Inc., these sites would not be expected to present a high environmental risk to the assessment area.

The current and historic agricultural materials used during routine activities include fuel, oil, herbicides, pesticides, and fertilizers. When used per the manufacturer's instructions and for their intended use, these chemicals are not known to be hazardous when correctly applied with the appropriate protective measures. The Hazardous Materials Evaluation - Phase 1 Report found no evidence of an existing release, past release, or material threat of a release of any hazardous substances or petroleum products, which would qualify as a recognized environmental condition (REC) or an historic recognized environmental condition (HREC). Likewise, the assessment found no evidence of controlled recognized environmental conditions (CRECs), in which hazardous substances or petroleum products were released but allowed to remain in place, subject to implementation of the required controls by the applicable regulatory authority.

4.7.2 Environmental Consequences

The land to be acquired under the Proposed Action includes wells used to irrigate the property. The wells are currently in good condition and will continue to be utilized for agricultural irrigation purposes. The Proposed Action does not include acquisition of the farmhouse or equipment shed, which contain the above ground storage tanks and sewer treatment system. Both current and historic use of fuel, pesticides, herbicides, fertilizers, and other chemicals are used as part of the agricultural operation. When used per the manufacturer's instructions and for their intended use, these chemicals are not known to be hazardous. If hazardous materials or petroleum products are encountered, though unlikely, the appropriate agencies will be notified, and the materials will be properly disposed of by certified personnel at an appropriately permitted facility. Additionally, the proposed project will generate very little solid waste as it includes the extension and installation of perimeter fencing and the removal of trees and obstructions. If any of the existing fencing cannot be utilized during the extension, it will be recycled. The removed lighting beacons will also be recycled or utilized offsite and the trees (a raw material) will be cut, removed, and used as firewood or chipped and utilized offsite.

Equipment such as chainsaws, chippers and tracked vehicles are anticipated to be used over several weeks to remove trees that are obstructions. Proper use, storage, inspection, and maintenance of equipment will minimize potential releases of petroleum or other hazardous materials, while onsite. Spill or waste materials will be disposed of at an appropriately permitted facility.

4.7.3 Mitigation

While no specific mitigation is required, the following BMPs may be employed to prevent, minimize and control the potential release of petroleum materials:

- Schedule tree removal and grading activities for dry weather periods.
- Designate a contained area for equipment storage, short-term maintenance, and refueling. Ensure it is located at least 100 feet from waterbodies.
- Inspect vehicles and equipment for leaks and repair immediately.
- Use of approved spill response kit, as necessary.
- Clean up leaks, drips and other spills immediately to avoid soil or groundwater contamination.
- Conduct major vehicle maintenance and washing off site.
- Ensure that all spent fluids including motor oil, radiator coolant, or other fluids and used vehicle batteries are collected, stored, and recycled as hazardous waste off site.
- Ensure that all construction debris are taken to appropriate landfills (as necessary) and all sediment disposed of in approved upland areas or off-site.
- If necessary for dust control, use only a minimal amount of water.

4.7.4 Findings and Conclusions

The No Action Alternative will have **no effect** on hazardous materials, solid waste, or pollution prevention activities because it is a non-development alternative. Any hazardous materials, solid waste, or pollution prevention activities would remain as they presently exist.

The Proposed Action is expected to have **no significant effect** on hazardous materials, solid waste, or pollution prevention activities. The Hazardous Materials Evaluation - Phase 1 Report found no evidence of RECs, HRECs, or CRECs. Proper use, storage, inspection, and maintenance of equipment used to remove trees that are obstructions will prevent potential releases of petroleum materials or other hazardous materials.

4.8 HISTORICAL, ARCHITECTURAL, ARCHAEOLOGICAL, AND CULTURAL RESOURCES

Cultural resources are locations of human activity, occupation, or use identifiable through field inventory, historical documentation, or oral evidence. The term “cultural resources” includes archaeological, historical, or architectural sites, structures, or places with important public and scientific uses and may include definite locations (sites or places) of traditional cultural or religious importance to specified social and/or cultural groups.

Regulations were promulgated to protect archaeological and historical resources. Section 106 of the NHPA⁷⁵ requires federal agencies to consider the effects of their actions on historic properties. Section 106 also requires federal agencies to consult with State and Tribal Historic Preservation Offices and other appropriate parties regarding the identification and evaluation of

⁷⁵ 36 CFR Part 800 Protection of Historic Properties, Section 106. Accessed April 23, 2018 at <http://www.achp.gov/regs-rev04.pdf>

historic properties, assessment of effects on historic properties, and the resolution of adverse effects, and consult with appropriate Native American tribes.

For the purposes of Section 106, historic properties are defined as prehistoric and historic sites, buildings, structures, districts, landscapes, and objects that are either eligible for or listed in the NRHP, as well as artifacts, records, and remains related to such properties⁷⁶. Historic properties can also include those cultural resources that are associated with the cultural practices or beliefs of a living community⁷⁷. Historic properties must demonstrate importance in history, architecture, archaeology, engineering, or culture and meet one or more of the significance criteria identified under Section 106:

- Criterion A – Sites and/or structures associated with events that have made a significant contribution to broad patterns in history.
- Criterion B – Sites and/or structures associated with the lives of persons significant in our past.
- Criterion C – Sites and/or structures that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.

In addition to demonstrating significance, an historic property must demonstrate integrity. The seven aspects of integrity include: location, setting, design, materials, workmanship, feeling, and association.

4.8.1 Affected Environment

To identify potential historic sites, a Cultural Resources Survey (**Appendix C**) per Section 106 of the NHPA, was conducted in the summer of 2017 (approved in April 2018) to identify and evaluate historic, architectural, archaeological, and cultural resources at and abutting the Airport properties and areas proposed for acquisition; a 970-acre area was surveyed (see **Appendix C**). Section 106 cultural resources were identified in the Area of Potential Effect (APE) and further evaluated for impacts by the Proposed Action. The full extent of Airport property (FMA-01) was documented for FAA's future planning purposes.

As part of the Cultural Resources Survey (Survey), an intensive-level pedestrian survey of approximately 206 acres of the Airport was conducted. It was determined that soils have been previously disturbed as the airport was leveled, irrigated, and farmed before being expanded to its current configuration. As such, the Survey concluded that the probability of archaeological resources being present is minimal. Additionally, the Survey included a similar pedestrian survey of approximately fifty-three acres on land currently occupied by the Eccles Flying Hat Ranch abutting the south end of SUN. The Survey noted that aside from the ground occupied by and surrounding the ranch buildings, the fields have been tilled regularly. No archaeological resources were noted in any of the property surveyed.

⁷⁶ National Register Bulletin 36. Guidelines for Evaluating and Registering Archeological Properties. Accessed April 24, 2018 at <https://www.nps.gov/nr/publications/bulletins/pdfs/nrb36.pdf>

⁷⁷ National Register Bulletin 38. Guidelines for Evaluating and Documenting Traditional Cultural Properties. Accessed April 24, 2018 at <https://www.nps.gov/nr/publications/bulletins/pdfs/nrb38.pdf>

The FAA sent a letter with the Cultural Resources Survey to the Shoshone Bannock Tribes inviting Government-to-Government consultation on the Proposed Action (**Appendix C**). The letter was dated January 15, 2019 and was sent to initiate consultation to seek input on properties of cultural or religious significance that may be affected by the undertaking. No additional properties or sites were identified by the Tribes.

The Cultural Resources Survey reviewed two large properties—Eccles Flying Hat Ranch (13-16207) and the Friedman Memorial Airport (FMA-01)— which had previously been surveyed, at least minimally or partially, and which were resurveyed to current SHPO and FAA standards as part of this project.

The Friedman Memorial Airport (FMA-01), which included its twenty-five resources, was determined to be ineligible for the NRHP by the FAA in a letter dated April 5, 2018. SHPO concurred with this determination in a letter dated May 1, 2018 (see **Appendix C**).

State Highway 75 (13-16171) was also identified in the Cultural Resources Survey; which abuts the project area, is outside the APE and is eligible for listing in the NRHP.

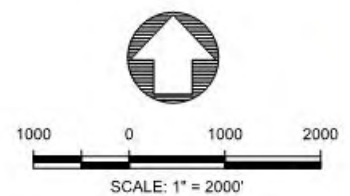
Within the APE, the following historic resources were determined to be NRHP-eligible Resources (**Figure 4-4**):

1. Cove Canal (10BN1126)
2. Eccles Flying Hat Ranch (13-16207) (west of Highway 75)
3. Barn (NRHP- Individually Eligible) (Previously recorded as a part of the SH-75 EIS)



LEGEND

- AIRPORT PROPERTY BOUNDARY (FMA-01)
- - - RUNWAY 13-31 CENTERLINE
- RUNWAY PROTECTION ZONE [RPZ]
- PROPOSED ACQUISITION AREA [64.6 ACRES]
- - - COVE CANAL (10BN1126)
- ECCLES FLYING HAT RANCH (13-16207)



NOTE:
REFERENCE NAMES/NUMBERS PRESENTED IN "()"
ABOVE ARE ASSIGNED BY THE IDAHO STATE HISTORIC
PRESERVATION OFFICE (SHPO).

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FIGURE 4-4: HISTORIC RESOURCES



State Highway 75 (13-16171)

State Highway 75 is a two-lane historic highway that travels north-south along the eastern side of the Airport and abuts the project area.

Cove Canal (10BN1126)

The Cove Canal, an irrigation feature established in 1882, originates at the Big Wood River, approximately 1.77 miles northwest from the project area, and generally flows southeasterly, diagonally across the project area. The Cove Canal is associated with significant trends in local history and retains sufficient integrity to communicate its historic associations with the agricultural development of the Wood River Valley (Criterion A).

Eccles Flying Hat Ranch Historic District (13-16207)

The Eccles Flying Hat Ranch spans approximately 750 acres to the east and west of State Highway 75, south of Hailey, and south of the Airport. The pasture on the east side of Highway 75 was acquired into the larger property in 1997; thus, it has no historic association with the Eccles Flying Hat Ranch and on its own does not adequately communicate historical significance. The 615 acres on the west side of State Highway 75 is eligible for listing in the NRHP as it retains sufficient integrity to communicate its historic associations with the agricultural development of the Wood River Valley (Criterion A) and because it embodies distinctive characteristics of the settlement period methods of construction during the early twentieth century (Criterion C). The Eccles Flying Hat Ranch is a relatively rare surviving example in the Wood River Valley of an early twentieth century large-acreage ranch district, complete with the key, character-defining historic elements of open pastureland, tree lines, and a nucleus of farmstead buildings that clearly convey a sense of past time and place. Though few resources on the ranch appear to be individually eligible, the ranch as-a-whole appears to be eligible for listing in the NRHP as an Historic District made up of its contributing resources and landscape elements.

The farmstead, which lies on the extended centerline of the Airport's Runway 13/31 (see **Figure 3-1**), encompasses several individual resources (e.g. farmhouse, barn, grain bins, animal sheds, utility buildings, canals, a corral, equipment shed, well, and outhouse) dating from 1884 to 2006, of which, seven (resources illustrated within **Table 4-6**) comprise the main farmstead area. Although the house and garage have been altered, the remaining farm structures and general setting retain their historic integrity. On May 1, 2018, the Idaho SHPO added the windrow of trees surrounding the main farmstead area as a contributing element to the Eccles Flying Hat Ranch (**Appendix C**). The "windrow" is made up of the trees on the east and north side of the farmhouse, which were planted in association with the main farmstead. The windrow is a combination of ornamental, deciduous, and pine trees.

Barn (NRHP eligible)

The barn is an excellent example of an early twentieth century ground-level stable barn (Criterion C; **Photo 4-3**). It has a large wood-frame and a steeply-pitched gambrel roof with the following features: open eaves with exposed rafter tails; corner boards; large, hinged door/ramp centered in the top of the east gable; and a row of square, four-light wood windows illuminating

stalls within. The barn communicates strong associations with development of the ranch and agriculture in the Wood River Valley (Criterion A).

PHOTO 4-3: FARMSTEAD BARN.



4.8.2 Environmental Consequences

Due to the absence of any archaeological or cultural resources being identified by the Cultural Resources Survey, the disturbance of ground due to the extension of the fence or removal of obstructions is unlikely to affect these resources.

In accordance with Executive Order 13175, Consultation and Coordination with Indian and Tribal Governments and FAA Order 1210.20, American Indian and Alaska Native Tribal Consultation Policy and Procedures, the FAA sent a letter to the Shoshone Bannock Tribes inviting Government-to-Government consultation on the Proposed Action (**Appendix C**). The letter was dated January 15, 2019 and was sent to initiate consultation in accordance with Section 106 of the National Historic Preservation Act of 1966 and implementing regulations 36 CFR Part 800 to seek input on properties of cultural or religious significance that may be affected by the undertaking. The Tribes did not respond with any comments or concerns about the Proposed Action or identify any properties of cultural or religious significance.

The following discussion outlines the Section 106 process for assessing the effects the Proposed Action would have on historic properties. Resources that are listed in or eligible for the NRHP are considered in the Section 106 process by a qualified professional. Ultimately, FAA officials make the Section 106 effect determination and coordinate with the Idaho SHPO. The effects determination will consider both direct and indirect impacts from construction and operation activities. Effects determinations make one of the following conclusions:

- No effects, historic properties are not present in the area of potential impact or the project does not impact resources – Section 106 of the NRHP is not applicable.
- No adverse effect on historic properties – Section 106 of the NRHP applies but the project does not have a negative effect on the historic property.

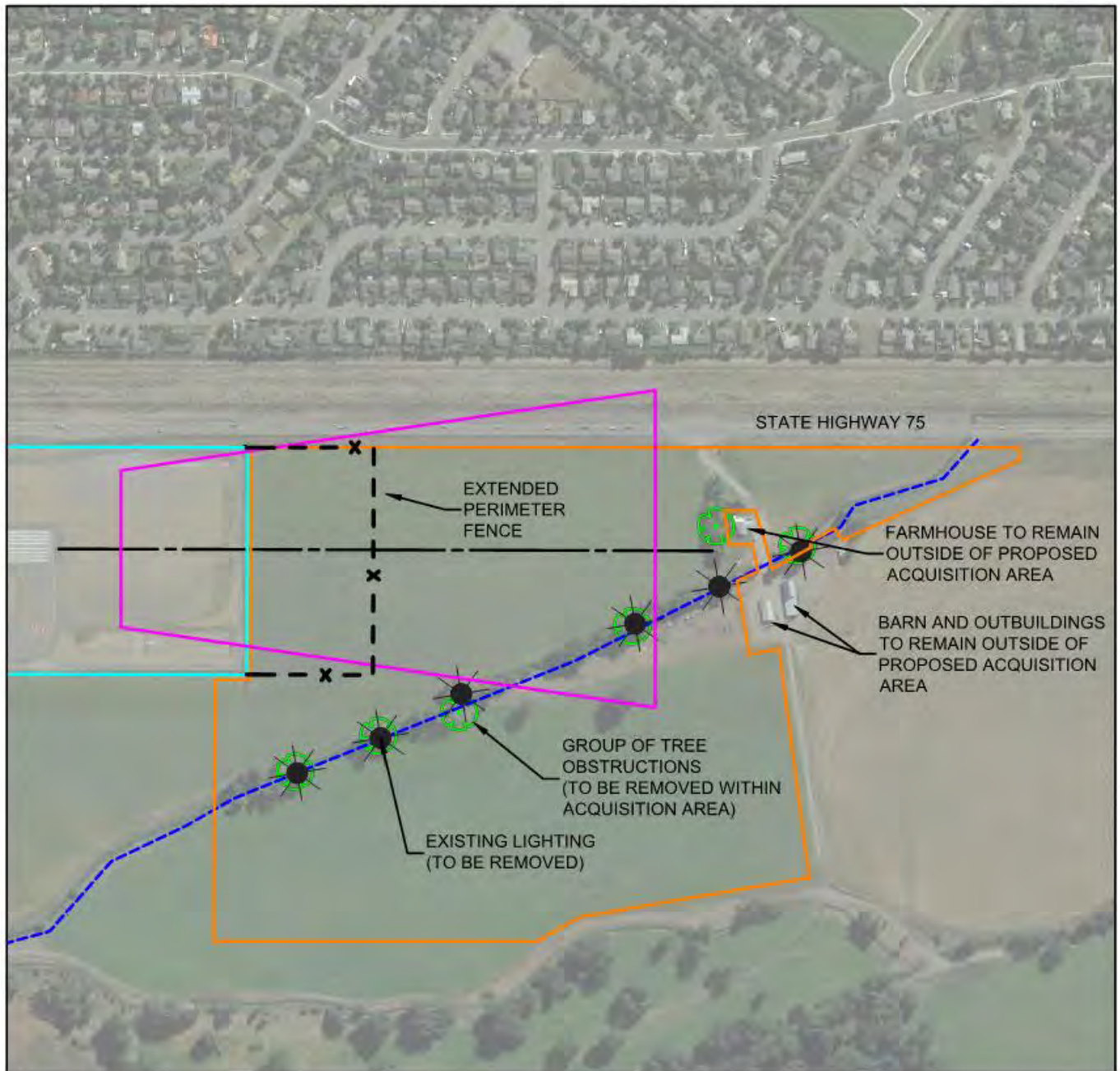
- Adverse effect on historic properties. – Section 106 of the NRHP applies and evaluations of measures to avoid, minimize, or mitigate impacts to the historic property will need to be considered.

On May 1, 2018, SHPO concurred with the FAA determination that the Proposed Action will have an “adverse effect” to historic resources inventoried as a part of this study. Specifically, the removal of the windrow, a character defining feature of the historic farmstead associated with 13-16207, diminishes both the setting and feeling of the farmstead, which are two aspects of integrity that qualify the property for inclusion on the NRHP. See **Appendix C** for the complete historic survey report and correspondence between the FAA and SHPO.

Specific impacts on identified resources described in the previous section (**Section 4.8.1**) are as follows:

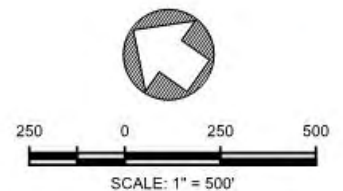
State Highway 75 (13-16171)

State Highway 75 is adjacent to, but not within the area of impact for the Proposed Action. Therefore, the Proposed Action - which includes land acquisition, obstruction removal, and fence extension - will have “no effect” on State Highway 75.



LEGEND

- AIRPORT PROPERTY BOUNDARY (FMA-01)
- - - RUNWAY 13-31 CENTERLINE
- RUNWAY PROTECTION ZONE [RPZ]
- PROPOSED ACQUISITION AREA [64.6 ACRES]
- - - COVE CANAL (10BN1126)



NOTE:
REFERENCE NAMES/NUMBERS PRESENTED IN "()"
ABOVE ARE ASSIGNED BY THE IDAHO STATE HISTORIC
PRESERVATION OFFICE (SHPO).

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FIGURE 4-5: PROPOSED ACTION



Cove Canal (10BN1126)

Approximately 3.7 acres attributed to the Cove Canal (approximately 2,691 linear feet) will be within the acquisition area under the Proposed Action. Within this area, trees (primarily cottonwoods) that have reached heights of as much as 80 to 100 feet would be removed. Tree removal would include cutting them at ground level and the removing the stumps. Wetlands associated with the canal would transition from a forested canopy to shrub or emergent complex. The removal of trees along the Cove Canal does not affect the vital water conveyance function of the Canal itself; thereby, the direct impacts associated with the removal of the trees along Cove Canal do not cause an “adverse effect” under Section 106 (see **Appendix C**).

Eccles Flying Hat Ranch Historic District (13-16207)

Given the location of the Eccles Flying Hat Ranch Historic District directly off the end of Runway 13/31, there are no practicable measures to entirely avoid land surrounding the farmstead. Under the Proposed Action, approximately 64.6 acres of the Historic District will be acquired (see **Figure 4-5** on the previous page).

The land acquisition will not diminish the overall historical integrity of the property and will not include the main farmstead resources, which include the farmhouse, well, barn, equipment shed, outhouse, and irrigation shed. The irrigation shed, equipment shed, and on-site utility cabinets will be retained so that irrigation features, pastures, and fields can continue to operate as a farm. The land acquisition will reduce the overall acreage of the Eccles Flying Hat Ranch from approximately 750 acres to approximately 685 acres. However, the reduction is small, representing about 9% of the total ranch area. Overall, the character-defining historic elements (Criterion A) and the distinctive characteristics of the settlement period (Criterion C) will be retained.

One component of the Proposed Action would remove all trees identified as airspace obstructions. Per SHPO concurrence (**Appendix C**), the removal of the majority of the windrow - a character defining feature of the historic farmstead associated with 13-16207 - diminishes both the setting and feeling of the farmstead. The “windrow” is made up of the trees on the east and north side of the farmhouse, these trees were planted in association with the main farmstead. As previously mentioned, the windrow is a combination of ornamental, deciduous, and pine trees. Given the location of the windrow near the main farmstead and the Purpose and Need of the Proposed Action, there is no prudent and feasible Action Alternative that could avoid the Eccles Flying Hat Ranch. Removal of the obstructions along the Cove Canal (primarily cottonwood trees) and near the main farmstead (primarily the windrow pines) are needed to meet Runway 13-31 safety parameters.

The Proposed Action will therefore, have an “adverse effect” on the Eccles Flying Hat Ranch Historic District under Section 106.

Barn (NRHP eligible)

The barn will not be included as part of the property acquisition under the Proposed Action and will continue to operate as an agricultural asset. Therefore, the Proposed Action, which includes land acquisition, obstruction removal, and fence extension, will have “no effect” on the NRHP-eligible barn located on the Eccles Flying Hat Ranch.

4.8.3 Mitigation

In the event that construction activities encounter any previously unrecorded archaeological or cultural deposits, the contractor shall terminate all operation in that immediate area (100-foot radius [30 meters]) until the FAA notifies the SHPO. Any unanticipated discoveries will be left in place pending further evaluation and consultation with the SHPO and interested Native American tribes (if appropriate).

Mitigation of potential adverse impacts to historic sites usually consists of measures necessary to preserve the historic integrity of the site and agreed to in accordance with 36 CFR Part 800 (Protection of Historic Properties). The Proposed Action was selected to minimize harm to the Eccles Flying Hat Ranch by limiting the acquisition of the farmstead resources, identified in **Table 4-6**, and by keeping farming operations intact. Consultation between FAA and SHPO took place during the development of a Memorandum of Agreement (MOA) under Section 106 regarding the proposed removal of the trees resulting in an adverse effect to the Eccles Flying Hat Ranch.

The finalized MOA was signed on November 15, 2018 by the FAA and Idaho SHPO, with the Airport and the Eccles Flying Hat Ranch signing as concurring signatories. The MOA documents the agreement to mitigate the effects of removing the windrow trees near the farmstead. Mitigation measures are outlined in the finalized MOA (**Appendix G**) and include:

- Provide a display/interpretive panels, which will be displayed at the Airport in a public area. The displays/panels will provide information about the agricultural history of the Wood River Valley. Idaho SHPO will be given the opportunity to review and provide comment on the content and design of the displays prior to them being finalized; and,
- Replant low growing shrubs near the farmhouse to replace the trees that will be removed between the farmhouse and the end of the runway at the Airport. Low growing shrubs are to be approved by the owner prior to installation.

4.8.4 Findings and Conclusions

As the non-development alternative, the No Action Alternative will have **no effect** on historical, architectural, archeological, or cultural resources.

The Proposed Action will have **no effect** on State Highway 75 or the NRHP-eligible barn, as these resources will not be acquired or impacted.

The Proposed Action will have **no adverse effect** on the Cove Canal, as the acquisition will retain use and continued maintenance of the Canal and neither the land acquisition nor removal of trees will markedly diminish its overall historical integrity.

The land acquisition will reduce the Eccles Flying Hat Ranch Historic District by approximately 9%, from roughly 750 acres to 685 acres, but the character-defining historic elements and the distinctive characteristics of the settlement period methods of construction during the early 20th century will be retained. FAA has determined that the obstruction removal of the windrow of trees will result in an **adverse effect** to the Eccles Flying Hat Ranch Historic District by

diminishing the setting and feeling of the farmstead. An MOA under Section 106 has been established to mitigate the adverse effect.

4.9 LAND USE

4.9.1 Affected Environment

Airport property encompasses 209 acres of land and is owned by the City of Hailey, located in Blaine County, Idaho. The City of Hailey has zoned⁷⁸ the land immediately to the west and north of the Airport as industrial and business. Land to the east, on the other side of Highway 75, is zoned as “Recreational Green Belt,” followed by zoned residential and business (**Figure 4-6**). The area south of the Airport is privately owned (Eccles Flying Hat Ranch) and is zoned Agriculture/Residential.

The City of Hailey Zoning Ordinance Article 4, Section 4.11⁷⁹ establishes Airport property as the “Airport District” for the purpose of allowing “regularly scheduled commercial passenger aircraft services to be used by the general public” and “other general aviation services for private aircraft and private aircraft charter only in conjunction with regularly scheduled commercial passenger aircraft services.” Article 5⁸⁰ prohibits other zoning districts, such as recreational, residential, business, or industry from use within the Airport District, except where State or Federal law otherwise preempts local land use regulation.

Blaine County zoning regulations established the Airport Vicinity Overlay District⁸¹ for land adjacent to the Airport to prevent encroachment on airspace within the runway proper and is comprised of two zones: the Primary and Secondary Zones. The Airport Vicinity Overlay District restricts land use to agricultural, recreational uses without structures, parks, golf courses, cemeteries or water impoundments, within the primary zone; and agricultural, recreational and residential within the secondary zone. Additional restrictions within the Airport Vicinity Overlay District apply to lighting, glare and electromagnetic influences. The ordinance created the Airport Vicinity Overlay District to correspond with the CFR Part 77 airspaces and compatible land uses. A single-family farmhouse on the Eccles Flying Hat Ranch was constructed prior to establishment of the Airport Vicinity Overlay Primary Zone and is located within the boundary of the zone, as shown in **Figure 4-6**.

The City of Hailey and Blaine County have joint jurisdictional authority to regulate future land use in Blaine County outside of the city limits through an Area of City Impact Agreement approved and adopted in 1994⁸². Both jurisdictions have recognized that Airport activity and future growth of the Airport need to be protected in terms of public safety.

⁷⁸ City of Hailey Zoning Map. October 2017. Accessed April 20, 2018, <https://www.haileycityhall.org/planning/documents/CityofHaileyZoningMap2018.pdf>

⁷⁹ City of Hailey Zoning Ordinance, Article 4, Section 4.11 Airport District. Accessed April 19, 2018, https://www.haileycityhall.org/Codes_Plans/documents/Article4.11Airport-1128.pdf

⁸⁰ City of Hailey Zoning Ordinance, Article 5 Official Zoning Map and District Use Matrix, April 19, 2018, https://www.haileycityhall.org/Codes_Plans/documents/Article5ZoningMapandDistrictUseMatrix-1169.pdf

⁸¹ Blaine County, Idaho, County Code, Chapter 18 Airport Vicinity Overlay District. Accessed April 20, 2018 at http://www.sterlingcodifiers.com/codebook/index.php?book_id=450

⁸² Blaine County Area of City Impact (AOI) Agreement. Accessed April 20, 2018 at <http://webpages.uidaho.edu/webteam/law/aoi/Blaine-County-AOI-Agreements.pdf>



LEGEND

- AIRPORT PROPERTY BOUNDARY
- - - RUNWAY 13-31 CENTERLINE
- RUNWAY PROTECTION ZONE [RPZ]
- PROPOSED ACQUISITION AREA [64.6 ACRES]
- AIRPORT VICINITY OVERLAY PRIMARY ZONE
- BLAINE COUNTY AG/RESIDENTIAL ZONE
- CITY OF HAILEY INDUSTRIAL ZONE
- CITY OF HAILEY RESIDENTIAL AND BUSINESS ZONES
- CITY OF HAILEY GREEN BELT

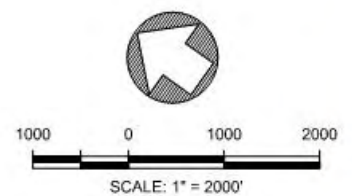


FIGURE 4-6: LAND USE AND ZONING



The Blaine County Comprehensive Plan is in the process of being updated; the latest draft is dated March 8, 2018⁸³. The latest draft emphasizes the need to ensure that the Airport is considered in City of Impact planning, and that zoning within the Airport vicinity follow Blaine County zoning regulations for the Airport Vicinity Overlay District⁸⁴.

4.9.2 Environmental Consequences

Upon land acquisition, the majority of the pasture will be leased for continued agricultural use, which is a permitted use within the City of Hailey's Airport District and Blaine County's Airport Vicinity Overlay District. The Proposed Action also involves the removal of trees along the Cove Canal and near the farmstead of the Eccles Flying Hat Ranch and an approximate 400-foot extension of fence line to protect 6.5 acres of the RSA and length of the ROFA. The obstruction removal and protection of the RSA and ROFA will not result in a change of land use and are congruent with zoning ordinances that specify the need to prevent encroachment on airspace and to meet FAA regulations.

4.9.3 Mitigation

The Proposed Action aligns with current land use planning and zoning requirements; therefore, no mitigation is required.

4.9.4 Findings and Conclusions

As the non-development alternative, the No Action Alternative will have **no effect** on land use. Current obstructions would not be removed, which does not comply with FAA standards and land use ordinances. Land use would remain as it presently exists.

Under the Proposed Action, the Airport will acquire land currently used for agriculture and pasture. Only 6.5 acres would change from agriculture to Airport use, which is compatible with the City of Hailey and Blaine County zoning regulations. The removal of obstructions and extension of the fence will not change the land use within the area and will prevent encroachment on airspace, consistent with zoning ordinances. Therefore, the Proposed Action will have **no significant effect** on land use within the vicinity of the Airport.

4.10 NATURAL RESOURCES AND ENERGY SUPPLIES

4.10.1 Affected Environment

This section provides an evaluation of a project's consumption of natural resources (such as water, asphalt, aggregate, wood, etc.) and use of energy supplies (such as coal for electricity; natural gas for heating; and, fuel for aircraft, commercial space, launch vehicles, or other ground vehicles). The Airport requires water and fuel for general operations, aircraft fueling and maintenance, and Airport vehicles.

⁸³ Blaine County Comprehensive Plan, Draft Land Use Chapter as recommended by PZ 3-18-18. Accessed April 20, 2018 at http://www.co.blaine.id.us/vertical/sites/%7BBB2A7BCF-1E38-4DB2-AE8E-3A22829A1987%7D/uploads/DRAFT_Land_Use_Chapter_as_recommended_by_PZ_3-8-18.pdf

⁸⁴ Blaine County, Idaho, County Code, Chapter 18 Airport Vicinity Overlay District. Accessed April 20, 2018 at http://www.sterlingcodifiers.com/codebook/index.php?book_id=450

The area around the Airport is a well-developed urban and suburban area with adequate access to natural resources for facility operation, aircraft operations, and construction projects, so energy sources are not in short supply in the Wood River Valley from Bellevue to Sun Valley. The facilities at the Airport require electricity and propane gas for lighting, cooling, and heating. These energy supplies are provided by Idaho Power and local propane providers. In above average water years, hydropower accounts for nearly 50% of Idaho Power's electricity supply⁸⁵. However, Idaho Power uses a wide variety of electric generation to meet its variable needs, such as from coal, wind, natural gas, and solar. Approximately 25 miles south, hydropower is also supplied by an independent company from Magic Dam, located on the Big Wood River⁸⁶.

4.10.2 Environmental Consequences

There are no known natural resource or energy resource shortages for the Airport. Land acquisition under the Proposed Action is not expected to result in any operational changes at the Airport.

However, temporary energy supply resources will be needed to remove obstructions (trees). Up to 200 trees will need to be removed, which is anticipated to take several weeks. As most of the trees are cottonwood or other riparian softwoods, equipment such as chainsaws, chippers, and tracked vehicles are anticipated to be used. These types of two-stroke engines typically require gasoline fuel sources, which is readily available within the Wood River Valley. Extending the fence by approximately 400 feet will also require natural resources and fuel resources for construction. The fence will likely be constructed from chain link, which is readily available in the Wood River Valley. Temporary fuel needs, coupled with BMPs employed during construction to reduce energy consumption, will result in de minimis impacts to natural resources and energy supplies.

4.10.3 Mitigation

There is no specific mitigation required, as the Proposed Action would not result in a notable consumption of natural resources. BMPs employed during construction will be employed where applicable. In order to reduce already insignificant energy consumption associated with the temporary use of chainsaws, chippers, and tracked vehicles for the Proposed Action, construction equipment should be in good working order to ensure the most efficient use of fuel. All vehicles and equipment should be checked for leaks and repaired immediately. In addition, construction equipment should not be kept idling more than necessary.

4.10.4 Findings and Conclusions

As the non-development alternative, the No Action Alternative will result in no additional natural resource or energy supply requirements. Therefore, the No Action Alternative will have **no effect** on natural resources and energy supplies.

⁸⁵ Idaho Power. 2017. Energy Sources. Accessed April 20, 2018 at <https://www.idahopower.com/energy/delivering-power/energy-sources/>

⁸⁶ Magic Reservoir Hydro Inc., Accessed April 20, 2018 at <http://fwee.org/magic-dam-big-wood-river-id/>

The Proposed Action is not likely to cause or create an increase in aircraft operations at the Airport. Construction materials for the fence (i.e. chain link) are readily available in the region. Temporary fuel needs for the fence construction and to remove obstructions will be required over a period of approximately 20 days. These fuel sources are readily available in the region. BMPs will be carried out to reduce energy consumption. As the Proposed Action does not cause demand to exceed available or future supplies of natural resources and energy supplies, the Proposed Action will have **no significant effect** on natural resources and energy supplies.

4.11 NOISE AND NOISE-COMPATIBLE LAND USE

Noise is measured in decibels on a logarithmic scale. For every 10-decibel increase, a sound is 10 times more powerful. Long-term exposure to noise at 65 decibels or higher begin to affect physiological functions and permanent hearing loss can occur with long or repeated exposure to sounds in excess of 85 decibels⁸⁷. Airports are recognized as a common contributor of noise.

Aviation noise primarily results from the operation of aircraft, such as departures, arrivals, overflights, taxiing, and engine run-ups. Noise is often the predominant aviation environmental concern of the public. The FAA Airport Noise Compatibility Planning Final Rule⁸⁸ established noise contour maps as a tool to measure and assess noise effects near airports and to determine if noise-sensitive land uses near airports would be affected by changes in airport operations. The FAA has developed a prediction model, the Airport Environmental Design Tool (AEDT), which uses inputs such as runway use, aircraft operations, and flight track geometry to produce noise contour maps. The Final Rule also established guidelines for land use compatibility that identify what land uses are normally considered compatible (e.g. agricultural, commercial, and industrial) and those that are normally considered incompatible (e.g. residential areas, schools, and churches).

Day-Night Average Sound Level (DNL) is the metric used to quantify noise levels and represents the 365-day average, in decibels, of the day and night average sound level. Sixty-five (65) DNL is considered a significant threshold because all land uses are considered compatible with noise levels below 65 DNL.

4.11.1 Affected Environment

A noise analysis was prepared for the 2018 MPU and applied to this environmental evaluation using the FAA's AEDT process. Aviation forecasts from the MPU were used as input into the model and are shown in **Table 4-8**. Noise contours were developed for the base year (2014), to show the configuration of the existing day-night average sound level (DNL) 65 db noise contour. AEDT output and resulting noise contours included in the 2018 MPU assume full use of existing pavement for departures to and arrivals from the south. Declared distances are not considered in the AEDT output since aircraft are not prohibited from operating beyond a declared distance

⁸⁷ National Institute of Health. 2015. Noise Induced Hearing Loss. Accessed July 10, 2018 at <http://www.nidcd.nih.gov/health/hearing/pages/noise.asp>

⁸⁸ 14 CFR Part 150 Airport Noise Compatibility Planning; Final Rule. Accessed April 24, 2018 at https://www.faa.gov/airports/resources/publications/federal_register_notices/media/environmental_69fr57622.pdf

limit, provided the runway surface is appropriately marked as usable runway, which is the case at SUN.

TABLE 4-8: AVIATION FORECASTS.

Year	Total Projected Annual Operations	FAA Terminal Area Forecast (TAF)
2014	28,480	29,738
2024	32,918	33,565
2034	37,612	37,995

Source: Mead & Hunt analysis presented in the 2018 MPU⁸⁹.

Figure 4-7 illustrates the modeled DNL 65 db noise contour from the 2018 MPU. The DNL 65 db noise contour extends beyond the existing Airport property and includes and includes a small portion of pasture/agricultural land and a small segment of Highway 75. These are compatible land uses within the DNL 65 db noise contour. While DNL represents average sound levels, approaching or departing aircraft can exceed the 65 decibels outside the Airport property, which include the farmstead, irrigated pasture within the RPZ area, as well as residential uses further to the south.

Current land use within the vicinity of the Airport is mostly agricultural, a segment of Highway 75, and residential around the farmstead of the Eccles Flying Hat Ranch (see **Figure 4-6** on page 81).

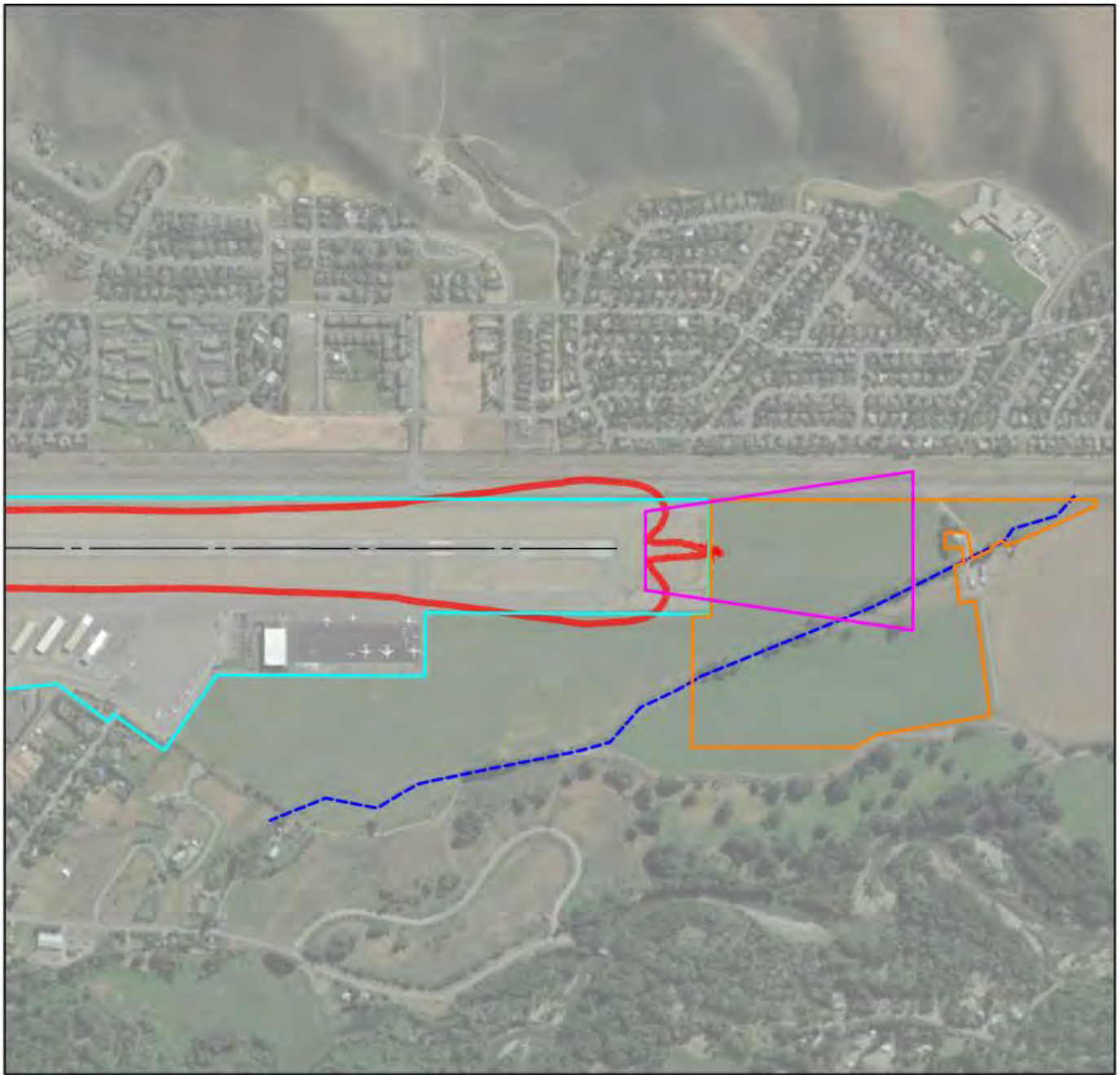
4.11.2 Environmental Consequences

According to the FAA's Environmental Desk Reference Chapter 17⁹⁰, environmental analysis of potential noise impacts from aviation development is typically performed for projects such as new or extended runways and taxiways, land purchases for airport-related uses, substantial amounts of airport construction or demolition activities, substantial changes in aircraft operations, or new or relocated airport access roadways.

While noise levels are expected to increase in the future due to projected increases in air traffic, the Proposed Action itself is not likely to cause or create an increase in aircraft operations or result in changed flight patterns. Land acquisition will not result in a change of land use or increase in noise and will serve to protect the area from incompatible development. The removal of trees will likely lead to a slight increase in noise and vibrations to the farmhouse and surrounding property, as the trees will no longer act as a buffer to noise. However, as shown in **Figure 4-7**, the trees identified as known obstructions lie outside the DNL 65 db noise contour; and therefore, removal of the trees will not change the DNL 65 db noise contour.

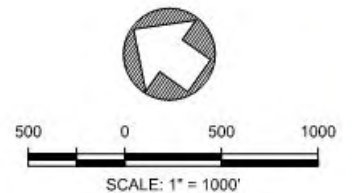
⁸⁹ SUN. 2018. Friedman Memorial Airport (SUN) Master Plan Update. Accessed December 26, 2018 at <http://iflysun.com/master-plan/>

⁹⁰ FAA. 2015. 1050.1F Environmental Desk Reference, Chapter 17, Noise. Accessed April 24, 2018 at https://www.faa.gov/about/office_org/headquarters_offices/apl/enviro_policy_guidance/policy/faa_nepa_order/desk_ref/media/11-noise.pdf



LEGEND

- AIRPORT PROPERTY BOUNDARY
- - - RUNWAY 13-31 CENTERLINE
- RUNWAY PROTECTION ZONE [RPZ]
- PROPOSED ACQUISITION AREA [64.6 ACRES]
- - - COVE CANAL
- 65DNL NOISE CONTOUR



**FIGURE 4-7: 65 DNL NOISE CONTOUR
FROM 2018 MASTER PLAN UPDATE**



Temporary increases in noise are expected from equipment used to remove the obstructions (trees). As most of the trees requiring maintenance are cottonwood or other riparian softwoods, equipment such as chainsaws, chippers, and tracked vehicles are anticipated to be used. These types of equipment can produce noise levels anywhere from 85 to 110 decibels⁹¹. Prolonged or repeated exposure to sounds louder than 85 decibels can damage hearing and accelerate hearing loss, while sounds softer than 75 decibels are unlikely to damage hearing⁹². However, proximity to construction equipment also matters; a 20-foot distance from equipment producing 110 decibels of noise will result in only 74 decibels at the 20-foot threshold⁹³. For noise levels below the regulatory level of 65 decibels would require a distance of 60-feet from equipment producing 100 decibels⁹⁴. The tree removal is anticipated to take several weeks, as up to 200 trees require complete removal. Construction activities to extend the fence line by 400 feet will also lead to a temporary increase in noise. While these actions will cause an increase in noise levels during construction, the duration will be temporary and outside of the 60-foot buffer. Construction-related noise cannot be avoided but impacts can be minimized through BMPs outlined below.

4.11.3 Mitigation

While specific mitigation linked to noise is not required, the following BMPs may be implemented to minimize or reduce noise levels:

- Proper maintenance of equipment to reduce noise caused from faulty or damaged mufflers and loose engine parts such as screws, bolts, or metal plates.
- Use of proper mufflers and sound-absorbing materials for construction equipment.
- Equipment operation training and proper hearing protection for construction workers.

4.11.4 Findings and Conclusions

The No Action Alternative will have **no effect** on noise levels or noise-compatible land use, as it is the non-development alternative. Current noise and land use would remain as they presently exist.

The Proposed Action is not likely to cause or create an increase in aircraft operations or flight patterns. The 65-decibel DNL noise contours (**Figure 4-7**) produced during the MPU and used for this analysis is based on the full existing and usable runway length and is consistent with the Proposed Action. The removal of the published declared distances resulting from the Proposed Action will not alter the analysis presented in this section.

⁹¹ U.S. Forest Service. 2010. Preventing noise-induced hearing loss: safety measures for field employees. Accessed April 25, 2018 at <https://www.fs.fed.us/t-d/pubs/pdfpubs/pdf10672321/pdf10672321dpi72.pdf>

⁹² US. Forest Service. 2010. Preventing noise-induced hearing loss: safety measures for field employees. Accessed April 25, 2018 at <https://www.fs.fed.us/t-d/pubs/pdfpubs/pdf10672321/pdf10672321dpi72.pdf>

⁹³ Estimating sound levels with the inverse square law. Accessed April 25, 2018 at <http://hyperphysics.phy-astr.gsu.edu/hbase/Acoustic/isprob2.html>.

⁹⁴ Estimating sound levels with the inverse square law. Accessed April 25, 2018 at <http://hyperphysics.phy-astr.gsu.edu/hbase/Acoustic/isprob2.html>.

Land acquisition under the Proposed Action will maintain compatible land uses into the future. The removal of trees may slightly increase noise and vibrations to the farmhouse and surrounding property (as the trees currently act as a noise and vibration buffer). However, the trees identified as known obstructions lie outside the DNL 65 db noise contour; and therefore, removal of the trees will not change the DNL 65 db noise contour. Temporary increases in noise are expected during construction but will be short-term and within a 60-foot buffer of the construction area.

To conclude, the Proposed Action will have **no significant effect** on the DNL 65 db noise contour or introduce noise sensitive areas within the contour and will maintain noise-compatible land uses in proximity to the Airport.

4.12 SOCIOECONOMIC IMPACTS, ENVIRONMENTAL JUSTICE, AND CHILDREN'S ENVIRONMENTAL HEALTH AND SAFETY RISKS

Title VI of the US Civil Rights Act of 1964, as amended⁹⁵, Executive Order 12898⁹⁶; and, DOT Environmental Justice Order 5610.2(a)⁹⁷ require that no minority or low-income person shall be disproportionately adversely affected by any project receiving federal funds. For transportation projects, this means that no particular minority or low-income person may be disproportionately isolated, displaced, or otherwise subjected to adverse effects. Potential impacts are assessed in terms of property acquisitions or relocations, changes in access to employment areas, and other changes in low-income and minority communities/neighborhoods. To determine whether an environmental justice population is present, federal agencies must refer to US Census data to establish the demographic and socioeconomic baseline.

DOT Order 5610.2(a) defines minorities as Black, Hispanic, Asian-American, Native American and Alaskan Native, and Native Hawaiian and Other Pacific Islander individuals. The order also identifies a low-income individual as a person having a median household income at or below the poverty threshold established by the Department of Health and Human Services.

Executive Order 13045⁹⁸, Protection of Children from Environmental Health Risks and Safety Risks, requires federal agencies to identify disproportionately high impacts and adverse impacts to children. Environmental health risks and safety risks include any product or substance that a child is likely to come in contact with or ingest, such as air, food, drinking water, recreational waters, soil, or products they might use or be exposed to. According to the FAA's Environmental Desk Reference Chapter 12⁹⁹, impacts to children's health and safety should be considered as

⁹⁵ Title VI of the Civil Rights Act of 1964 statutes and regulations overview. Accessed April 25, 2018 at <https://www.justice.gov/crt/fcs/TitleVI-Overview>

⁹⁶ Executive Order 12898 of February 11, 1994 – Federal Actions to Address Environmental Justice in Minority Populations and Low-income Populations. Accessed April 25, 2018 at <https://www.archives.gov/files/federal-register/executive-orders/pdf/12898.pdf>

⁹⁷ DOT Environmental Justice Order 5610.2(a). Accessed April 25, 2018 at https://www.fhwa.dot.gov/environment/environmental_justice/ej_at_dot/orders/order_56102a/dot56102a.pdf

⁹⁸ Executive Order 13045 of April 21, 1997 – Protection of Children from Environmental Health Risks and Safety Risks. Accessed April 25, 2018 at <https://www.gpo.gov/fdsys/pkg/FR-1997-04-23/pdf/97-10695.pdf>

⁹⁹ FAA. 2015. 1050.1F Environmental Desk Reference, Chapter 12, Socioeconomics, Environmental Justice, and Children's Environmental Health and Safety Risks. Accessed April 25, 2018 at https://www.faa.gov/about/office_org/headquarters_offices/apl/enviro_policy_guidance/policy/faq_nepa_order/desk_ref/media/12-socioecon-enviro.pdf

they relate to the affected environment of other impact categories, such as air quality, water quality, noise, and hazardous materials.

The FAA has not established significance thresholds for socioeconomics, environmental justice, or children's environmental health and safety risks¹⁰⁰.

4.12.1 Affected Environment

Population and Race

The U.S. Census Bureau estimates the base population of the City of Hailey at 8,058¹⁰¹ and Blaine County at 21,427¹⁰² in 2016. Since the 2010 census, the population has increased by an estimated 3.2%¹⁰³ for the City of Hailey and 3%¹⁰⁴ for Blaine County, which is low compared to the overall population increase of 9.5% for Idaho. The City of Hailey is predominately white (69.2%), followed by Hispanic (29.2%), Multiethnic (0.66%), Asian (0.56%) and Hawaiian (0.2%) ethnicities. Hailey's Hispanic population is well above the State of Idaho average of 12.3%. Blaine County is also predominately white (76.9%), followed by Hispanic (20.7%), Asian (1.13%), multiethnic (0.97%) and Black (0.12%).

Employment and Income

The local economy is driven by recreation and tourism, with primary employment occupations in Hailey being Cleaning & Maintenance (16.2%) and Administrative (12.2%). The primary employment industries are Administration, Support & Waste Management Services (13.4%) and Accommodation & Food Service (13.3%). Median household income is \$56,522 per year, approximately \$4,715 higher than the statewide average. The unemployment rate in December 2016 was 2.7%.

The poverty level for a family of four in 2016 was \$24,300¹⁰⁵. In 2016, an estimated 12.7% of Hailey's population was below the poverty line, the majority of which were children under 11 years old and females over 65 years old. Of those living below the poverty line, 65% were white, 32.7% were Hispanic, and 2.3% were Asian. However, less people live below the poverty line in Hailey than compared to the state as-a-whole (14.4%).

The Airport and parcels proposed for acquisition lie in Census Tract 9601 Block Group 3¹⁰⁶; within this block approximately 48.1% of people live below the 50% income level¹⁰⁷ for the County. Blaine County provides low income housing through the Blaine County Housing

¹⁰⁰ FAA. 2015. Order 10501.F Environmental Impacts, Policies and Procedures. Accessed April 25, 2018 at https://www.faa.gov/documentLibrary/media/Order/FAA_Order_1050_1F.pdf

¹⁰¹ US Census Data – Hailey, Idaho. Accessed April 25, 2018 at <https://datausa.io/profile/geo/hailey-id/#intro>

¹⁰² US Census Data – Blaine County, Idaho. Accessed April 25, 2018 at <https://datausa.io/profile/geo/blaine-county-id/>

¹⁰³ US Census – Quick Facts: Hailey, Idaho. Accessed April 25, 2018 at <https://www.census.gov/quickfacts/fact/table/haileycityidaho/PST040216>

¹⁰⁴ US Census – Quick Facts: Blaine County, Idaho. Accessed April 25, 2018 at <https://www.census.gov/quickfacts/fact/table/blainecountyidaho,ID/PST045216>

¹⁰⁵ 2016 Federal Poverty Level (FPL) Guidelines. Accessed April 26, 2018 at <https://www.peoplekeep.com/blog/2016-federal-poverty-level-fpl-guidelines>

¹⁰⁶ Idaho Commerce. 2006 Census Tract Data. Accessed April 26, 2018 at <https://commerce.idaho.gov/site-selection/demographics-and-business-information/>

¹⁰⁷ Note that this is *not* equivalent to the poverty line threshold.

Authority (BCHA) located in Ketchum, Idaho. BCHA is not a governmental entity but was authorized by Blaine County as a housing authority pursuant to Title 31, Chapter 42 and Title 50, Chapter 19 of Idaho Code. Two low income BCHA housing apartments are located across Highway 75 about 0.15 miles east of the Airport; Balmoral Apartments and Snow Mountain Apartments. There are no indicators of concentrations of low income or poverty populations, or concentrations of high minority, non-English speaking, or foreign-born populations within the immediate vicinity of the Airport.

Children's Environment

According to the 2010 Census¹⁰⁸, there are 2,432 children aged 19 and younger living in the City of Hailey, representing 30.6% of the population (**Table 4-9**). Children under 5, representing 8.6% of the population, are most vulnerable to environmental hazards¹⁰⁹.

TABLE 4-9: CITY OF HAILEY POPULATION DEMOGRAPHICS FOR CHILDREN BY AGE.

Age	Number	Percent of Total Population
Under 5	683	8.6
5 to 9 years	661	8.3
10 to 14 years	588	7.4
15 to 19 years	500	6.3
Total	2,432	30.6%

Hailey Elementary School, Wood River Christian School, and Little River Preschool are located about 0.3 miles north of the Airport and within the Primary Safety Zone of the runway¹¹⁰. The Sage School is in close proximity to the Airport, less than 0.1 miles to the west, but outside of Primary and Secondary Safety Zones and the DNL 65 db noise contour (**Figure 4-7**)¹¹⁰. Other elementary and preschools schools within the vicinity of the Airport include: Alturas Elementary, Syringa Mountain School, Sweet Clover School, Head Start Preschool, and All About Kids Preschool.

There are eight parks within the greater vicinity of the Airport, three of which are considered 4(f) resources including: the Wood River Trail (0.1 miles), Wertheimer Park (0.3 miles), and Toe of the Hill Trail Heads (0.5 miles) as shown in **Figure 4-1** and discussed as 4(f) resources in **Section 4.5**.

4.12.2 Environmental Consequences

The land acquisition, obstruction removal, and fence extension are not likely to cause or create an increase in aircraft operations at the Airport beyond normal projections. The Proposed Action will also have no significant effect on noise, vibrations or fuel consumption, which are of

¹⁰⁸ U.S. Census. American Fact Finder. City of Hailey, Idaho. Accessed April 26, 2018 at <https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=CF>

¹⁰⁹ FAA. 2015. 1050.1F Environmental Desk Reference, Chapter 12, Socioeconomics, Environmental Justice, and Children's Environmental Health and Safety Risks. Accessed April 25, 2018 at https://www.faa.gov/about/office_org/headquarters_offices/apl/environ_policy_guidance/policy/faa_nepa_order/desk_ref/media/12-socioecon-enviro.pdf

¹¹⁰ SUN. 2018. Friedman Memorial Airport (SUN) Master Plan Update. Accessed April 25, 2018 at <http://iflysun.com/master-plan/>

socioeconomic and environmental concern. The Proposed Action activities are limited to the land within and immediately surrounding the Airport, and will have no effect on economic activity, employment, income, housing, public services, social conditions, or low income or minority populations in the vicinity of the Airport. The Proposed Action is also expected to have no adverse impacts on air quality, climate, hazardous materials, noise, and water resources that could lead to significant individual or cumulative human health or environmental effects to low income and minority populations. Likewise, the Proposed Action will have no effect on children's environmental health and safety as the proposed activities are limited to land acquisition, obstruction removal, and fence extension and will take place at the southern end of the Airport on what is now property of the Eccles Flying Hat Ranch.

4.12.3 Mitigation

The No Action Alternative and the Proposed Action will have no effect on socioeconomics, environmental justice, or children's environmental health and safety. Therefore, no mitigation is required.

4.12.4 Findings and Conclusions

The No Action Alternative will have **no effect** on socioeconomics, environmental justice, or children's environmental health and safety, as it is the non-development alternative.

The Proposed Action is not likely to cause or create an increase in aircraft operations beyond normal projections. Land use will remain largely the same following acquisition, and project activities, including obstruction removal and the fence line extension, and will not have significant effects on air quality, climate, hazardous materials, noise, and water resources. The Proposed Action will have **no effect** on economic activity, employment, income, housing, public services, social conditions, or low income or minority populations in the vicinity of the Airport. Likewise, the Proposed Action will have **no effect** on the individual or cumulative environmental health of low income and minority populations, or children's environmental health and safety.

4.13 VISUAL EFFECTS

Although there are no special purpose laws or requirements specific to light emissions or visual effects, some visual resources are protected under Federal, state, or local regulations. Some of these protected visual resources include, but are not limited to: scenic roadways, Wild and Scenic Rivers, National Scenic Areas, scenic easements, trails protected under the National Trails System Act, and biological resources (impacts to sensitive wildlife species)¹¹¹. Additional laws protecting resources that may be affected by visual effects include Section 106 of the NHPA, Section 4(f) of the DOT Act, and the Coastal Zone Management Act.

Broadly defined, visual effects are the extent to which the Proposed Action or alternative(s) would either: 1) produce light emissions that create annoyance or interfere with activities; or 2) contrast with, or detract from, the visual resources and/or the visual character of the existing

¹¹¹ FAA. 2015. 1050.1F Environmental Desk Reference, Chapter 13, Visual Effects. Accessed April 26, 2018 at https://www.faa.gov/about/office_org/headquarters_offices/apl/enviro_policy_guidance/policy/faq_nepa_order/desk_ref/media/13-visual-effects.pdf

environment. Light emission effects and visual resources/visual character effects are generally assessed separately. Reference will be made to any visual resources and/or visual character discussed in other NEPA chapters (i.e. Section 106 and Section 4(f) resources).

4.13.1 Affected Environment

Airport facilities and operations cause light emissions that can affect light sensitive land uses such as homes, parks, or recreational areas near an airport. Typical sources of disturbing light emissions include airfield and apron lighting, visual navigational aids, terminal lighting, employee/customer parking lighting, airborne and ground-based aircraft operations, and roadway lighting. Visual effects are measured by the extent to which the Proposed Action and alternative(s) contrast with the existing environment, architecture, historic or cultural setting, or land use planning. Visual effects are subjective, and their significance is typically defined by the community or a jurisdictional agency.

Light Emissions

City of Hailey Ordinance 812¹¹² addresses light pollution; however, lighting required for the Airport is specifically excluded from these regulations as lights are needed for safe operations. Existing light emissions from the Airport include lighting to airfield components (runway, taxiways, and ramp entrances) and airside facilities, located west of the runway and include the commercial passenger terminal, the FBO, general aviation hangars and apron, and other services. Specifically, the runway is equipped with High Intensity Runway Lights and a four-light Precision Approach Path Indicator lights¹¹³. There are also six lighted beacons, which illuminate obstructions to the Airport's airspace, that operate from the tree line along the Cove Canal in mature vegetation (trees) shown in **Figure 4-5**.

Visual Resources and Visual Character

The Airport is located in a shallow valley surrounded by mountains on either side. Highway 75 runs along the eastern side of the Airport, with land on the other side of the Highway consisting of an open space greenbelt and residential and business development. Land to the south and southwest is mostly agricultural and open space with some residential neighborhoods. Land to the west and north of the Airport is industrial and business. The Big Wood River flows south along the edge of the valley to the west of the Airport. The terrain of the valley is mostly flat with little topographical relief.

The Eccles Flying Hat Ranch and the Cove Canal, as described in **Section 4.8**, are located south of the Airport and within the Proposed Action's project area. Both are eligible for listing on the NRHP for their character-defining historic elements and/or the distinctive characteristics of the settlement period methods of construction during the early 20th century. Important visual components to the Eccles Flying Hat Ranch include: the open pastureland, tree lines, and a nucleus of farmstead buildings. The barn within the farmstead is also individually eligible for listing on the NRHP.

¹¹² City of Hailey. 2002. Ordinance Number 812 – Outdoor Lighting Ordinance. Accessed April 26, 2018 at https://www.haileycityhall.org/planning/ordinance/light_ord_812.pdf

¹¹³ SUN. 2018. Friedman Memorial Airport (SUN) Master Plan Update. Accessed April 25, 2018 at <http://iflysun.com/master-plan/>

4.13.2 Environmental Consequences

Light Emissions

The Proposed Action does not include the installation of new lighting and is not likely to cause or create an increase in aircraft operations at the Airport beyond normal projections. The land acquisition and fence extension will have no effect on light emissions. As part of the obstruction removal, six lighted beacons at the top of the trees will be removed, thus decreasing nighttime light emissions. The Proposed Action is in compliance with the City of Hailey outdoor lighting ordinance.

Visual Resources and Visual Character

The primary visual resources of interest are associated with the Eccles Flying Hat Ranch and Cove Canal (discussed in **Section 4.8**). Under the Proposed Action, the main farmstead resources, including the farmhouse, well, barn, equipment shed, outhouse, and irrigation equipment shed, will not be acquired or removed. The visual character of these resources will remain intact. The irrigation shed, equipment shed, and on-site utility cabinets will be retained so that irrigation features, pastures, and fields can continue to operate as a farm. However, as noted in **Section 4.8**, the Proposed Action will have an “adverse effect” on the Eccles Flying Hat Ranch Historic District under Section 106 through the removal of the windrow trees near the farmstead, which is a character defining feature of the farmstead, and would diminish both the setting and feel of the farmstead.

Extension of the Airport’s perimeter fence is not expected to have a significant impact, as the fence will be extended only 400 feet further south of the runway and will be made of similar materials as what is currently in place.

4.13.3 Mitigation

The Proposed Action will remove obstruction lights and up to 200 cottonwood trees. Based on the visual character of the trees linked to the Eccles Flying Hat Ranch farmhouse, replacement of the removed trees with low growing shrubs will be replanted consistent with the signed MOA (**Appendix G**) as described in **Section 4.5** and **Section 4.8**.

4.13.4 Findings and Conclusions

The No Action Alternative does not remove the trees that contain the obstruction lighting, but illumination of the obstruction lighting is contingent upon a long-term lease that may not be renewed. If the obstruction lighting is removed, light emissions would slightly decrease, thereby, the No Action Alternative will have **no effect** on light emissions, visual resources or visual character.

The Proposed Action does not include the installation of new lighting facilities and is not likely to cause or create an increase in aircraft operations at the Airport beyond normal projections that may result in increased light emissions. The removal of six lighted beacons as part of the obstruction removal will slightly decrease light emissions. Therefore, the Proposed Action will have **no effect** on light emissions.

Under the Proposed Action, the farmhouse, well, barn, equipment shed, outhouse, and irrigation equipment shed, will not be acquired or removed. Thus, the visual character of these resources will remain intact. However, the removal of trees near the farmhouse will diminish the visual character of the setting of the farmstead. Therefore, the Proposed Action will have an **adverse effect** on visual resources and visual character within the project area and general vicinity. Coordination with the landowner resulted in the inclusion of planting low-growing shrubs into the MOA that resulted from the Section 106 process (**Appendix G**, Attachment 3), which will replace the trees that will be removed between the farmhouse and the end of the runway. These shrubs will be approved by the landowner prior to installation. The landowner was a concurring signatory on the MOA.

4.14 WATER RESOURCES

Due to the interrelationship between surface water, groundwater, floodplains, and wetlands, these resource categories and their analysis is conducted under the all-encompassing impact category of “water resources.” Impacts to any part of the system can have negative consequences to the functioning of the entire system. Wild and Scenic Rivers are included in this category because impacts to Wild and Scenic Rivers closely resembles impacts to water resources, such as altering free-flowing characteristics and impacts to water quality.

The project area, unless otherwise defined, as it pertains to Water Resources includes all areas to be affected directly (i.e. water resources impacts within the acquisition area) and indirectly (i.e. downstream effects to water resources) by the Proposed Action.

Wetlands

Jurisdictional wetlands are protected under Section 404 of the Clean Water Act (CWA)¹¹⁴, which regulates the discharge of dredge or fill material into Waters of the United States, including wetlands. Section 401 of the CWA¹¹⁵ requires water quality certification to ensure that a project does not violate State or Tribal water quality regulations. Under the CWA, the term wetlands are defined as areas that, under normal circumstances, support a prevalence of vegetation typically adapted for life in saturated soil conditions. The U.S. Army Corps of Engineers (USACE) delineation manual¹¹⁶ requires that positive indicators of a wetland be present for the following three parameters to meet the definition of a wetland: (1) hydrophytic vegetation, (2) hydric soil, and (3) hydrology.

Executive Order (EO) 11990¹¹⁷, Protection of Wetlands, requires federal agencies to “avoid to the extent possible the long and short-term adverse impacts associated with the destruction or modification of wetlands and to avoid direct or indirect support of new construction in wetlands wherever there is a practicable alternative.”

¹¹⁴ Environmental Protection Agency (EPA). Clean Water Act, Section 404. Accessed April 27, 2018 at <https://www.epa.gov/cwa-404/clean-water-act-section-404>

¹¹⁵ EPA. Clean Water Act, Section 401. Accessed April 27, 2018 at <https://www.epa.gov/cwa-404/clean-water-act-section-401-certification>

¹¹⁶ USACE. 1987. Corp of Engineers Wetland Delineation Manual. Accessed April 27, 2018 at <http://www.lrh.usace.army.mil/Portals/38/docs/USACE%2087%20Wetland%20Delineation%20Manual.pdf>

¹¹⁷ Executive Order 11990 – Protection of Wetlands. Accessed April 27, 2018 at https://www.energy.gov/sites/prod/files/nepapub/nepa_documents/RedDont/Req-EO11990wetlands.pdf

Floodplains

Development in floodplains is regulated by EO 11988¹¹⁸, Floodplain Management, and DOT Order 5650.2¹¹⁹, Floodplain Management and Protection. EO 11988 requires federal agencies to avoid long and short-term adverse impacts to the 100-year floodplain if practicable alternatives exist, such as occupancy, modification or development. DOT Order 5650.2 directs DOT agencies to ensure proper consideration is given to avoid and mitigate adverse floodplain impacts.

According to the FAA 1050.1F Desk Reference Chapter 14¹²⁰, floodplains are lowland areas adjoining inland and coastal waters which are periodically inundated by flood waters. Floodplains are often discussed and identified in terms of the 100-year floodplain, which is land that has a 1% chance of flooding in any given year. Floodplains are valued for their natural flood and erosion control, enhancement of biological productivity, and socioeconomic benefits and functions.

Surface Waters

The CWA¹²¹ establishes the basic structure for regulating the discharge of pollutants into waters of the United States, specific sections include Section 303(d), Section 404 and 401 (refer to wetland section), and Section 402, which establishes the National Pollutant Discharge Elimination System (NPDES) permitting program¹²². Section 303(d) sets forth the process to identify impaired waters and to establish the maximum amount of pollutant allowed in a waterbody, known as the total maximum daily load¹²³, necessary to assess current conditions and project impacts. If project activities have the potential to discharge pollutants into Waters of the United States through a point source, a NPDES permit will likely be required.

Groundwater

Federal activities affecting groundwater are primarily governed by the Safe Drinking Water Act¹²⁴, also applicable to surface waters when relevant, which prohibits contamination of EPA-designated sole source aquifers or their recharge areas. Groundwater is defined as subsurface water that occupies the space between sand, clay, and rock, while aquifers are the geologic layers that store or transmit groundwater, such as to wells, springs, and other water sources.

¹¹⁸ Executive Order 11988 – Floodplain Management. Accessed April 27, 2018 at https://www.fws.gov/r9esnepa/NEPA_Handbook/EO_11988.pdf

¹¹⁹ DOT Order 5650.2 – Floodplain Management and Protection. Accessed April 27, 2018 at <https://www.fhwa.dot.gov/engineering/hydraulics/policymemo/order56502.pdf>

¹²⁰ FAA. 2015. 1050.1F Environmental Desk Reference, Chapter 14, Water Resources. April 27, 2018 at https://www.faa.gov/about/office_org/headquarters_offices/apl/enviro_n_policy_guidance/policy/faa_nepa_order/desk_ref/media/14-water-resources.pdf

¹²¹ EPA. Federal Water Pollution Control Act (Clean Water Act), as amended through P.L. 107-303, November 27, 2002. Accessed April 27, 2018 at <https://www.epa.gov/sites/production/files/2017-08/documents/federal-water-pollution-control-act-508full.pdf>

¹²² 40 CFR part 122 – EPA Administered Permit Programs: The National Pollutant Discharge Elimination System. Accessed April 27, 2018 at <https://www.gpo.gov/fdsys/pkg/CFR-2015-title40-vol22/pdf/CFR-2015-title40-vol22-part122.pdf>

¹²³ 40 CFR Part 130.7 – Total Maximum Daily Loads (TMDL) and individual water quality-based effluent limitations. Accessed April 27, 2018 at <https://www.gpo.gov/fdsys/pkg/CFR-2013-title40-vol23/pdf/CFR-2013-title40-vol23-sec130-7.pdf>

¹²⁴ Title XIV of The Public Health Service Act: Safety of Public Water Systems (Safe Drinking Water Act). Accessed April 27, 2018 at <https://www.gpo.gov/fdsys/pkg/USCODE-2010-title42/pdf/USCODE-2010-title42-chap6A-subchapXII.pdf>

Wild and Scenic Rivers

Wild and Scenic Rivers are those rivers having remarkable scenic, recreational, geologic, fish, wildlife, historic, or cultural values as defined by the Wild and Scenic Rivers Act¹²⁵, with the purpose to “...preserve certain rivers with outstanding natural, cultural, and recreational values in a free-flowing condition for the enjoyment of present and future generation.” The Act requires special planning and consultation requirements for actions that may physically impact resources covered in the Act, such as modification by construction or development that effect the river’s free-flowing condition or an activity that affects the river’s outstanding remarkable values.

4.14.1 Affected Environment

Wetlands

A Wetland Delineation was completed in July 2017 within the wetland survey boundary area (**Figure 4-8**). A series of paired test plots were sampled for hydrophytic vegetation, hydric soils, and hydrology in accordance with the methods outlined in the USACE Wetland Delineation Manual¹²⁶ and the Regional Supplement for the Arid West Region¹²⁷. The survey area encompassed approximately 90 acres and included the agricultural fields and Cove Canal immediately south and west of Runway 13/31 and west of Highway 75. The field investigation delineated the following jurisdictional wetlands:

- Palustrine Emergent (PEM) – 1.93 acres (Wetland 1 & 4)
- Palustrine Scrub-Shrub (PSS) – 0.29 acres (Wetland 3)
- Palustrine Forested (PFO) – 2.215 acres (Wetland 2)

A functional assessment found most of the wetlands in low to moderate condition, as the Canal receives pollution and sediment from agricultural and urban runoff. Several wetlands obtained a high rating for organic matter and plant richness, and moderate rating for wildlife habitat.

Floodplains

The FEMA Flood Insurance Rate Map Panel #16013C0856E¹²⁸ indicates that the south side of the Airport and the areas proposed for acquisition are not within a floodplain or regulated floodway as shown in **Figure 4-9**. The Big Wood River, 0.3 mile west of the project, is the nearest feature with a regulated floodplain. The Cove Canal is not contained in a floodplain; nor, is the Cove Canal identified as a floodway.

¹²⁵ The Wild and Scenic Rivers act of 1968. Accessed April 27, 2018 at https://www.nps.gov/parkhistory/online_books/anps/anps_6f.htm

¹²⁶ USACE. 1987. Corps of Engineers Wetlands Delineation Manual, final report. United States Army Corps of Engineers, Vicksburg, Mississippi

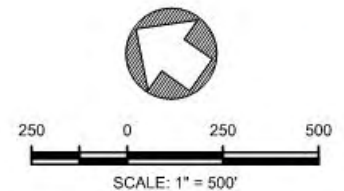
¹²⁷ USACE. 2008. Regional Supplement to the Corp of Engineers Wetland Delineation Manual: Arid West Region, version 2. United States Army Corp of Engineers, Washington DC

¹²⁸ FEMA. 2017. FIRM #16013C0856E. April 30, 2018 at <http://maps.co.blaine.id.us/jsapi/LandUseInfoMap.html>



LEGEND

- RUNWAY 13-31 CENTERLINE
- RUNWAY PROTECTION ZONE [RPZ]
- PROPOSED ACQUISITION AREA [64.6 ACRES]
- COVE CANAL
- WETLAND
- WETLAND SURVEY BOUNDARY

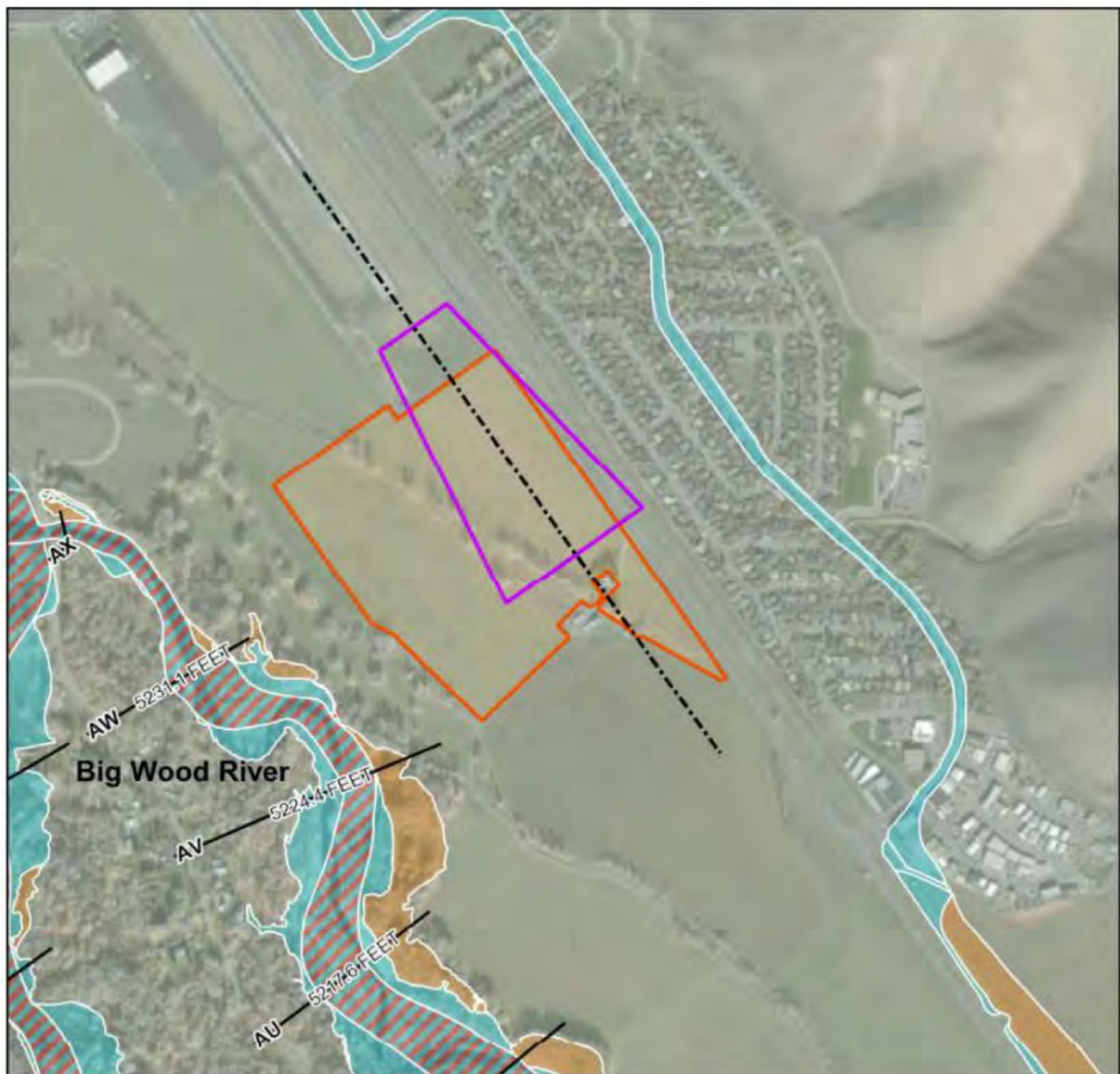


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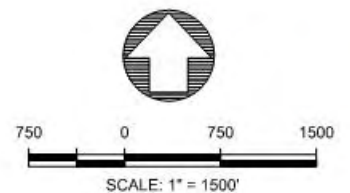
FIGURE 4-8: JURISDICTIONAL WETLANDS





LEGEND

- 500-YEAR FLOODPLAIN
- 100-YEAR FLOODPLAIN
- REGULATORY FLOODWAY
- RUNWAY 13-31 EXTENDED CENTERLINE
- RUNWAY PROTECTION ZONE
- PROPOSED ACQUISITION AREA [64.6 AC]



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FIGURE 4-9: FEMA FLOOD ZONES



Surface Waters

The Cove Canal is the only water body within the project area; it receives approximately 14 cubic feet per second (cfs)¹²⁹ of diverted water from the Big Wood River during the irrigation season, which is then diverted to agriculture users downstream. While not within the project area, the Big Wood River is 0.3 miles to the west. Flows in the Big Wood River at Hailey, Idaho, range from 150 to 1,650 cfs, measured at the U.S. Geological Survey (USGS) stream gage (#13139510) for the 100-year record¹³⁰. IDEQ currently lists the Big Wood River near the project area as impaired. Recent monitoring shows exceedances in total phosphorus and total suspended sediment¹³¹.

Groundwater

A three-dimensional groundwater model was recently developed by the USGS and Idaho Department of Water Resources for the Wood River Valley Aquifer System¹³². The Wood River Valley Aquifer is approximately 106 square miles in size and comprised of a single unconfined aquifer that underlies two distinct areas: 1) the upper valley from Galena Summit (about 20 miles north of Ketchum) south to Bellevue, and 2) the lower valley south of Bellevue that opens into a triangular alluvial fan, known as the Bellevue fan, about 9 miles wide at its southern end. The project area is in the upper valley, which is narrow and broadens downstream to a maximum of 2-miles in width and has a depth-to-groundwater ranging from 10 to 90 feet. Simulated flows found that, in general, groundwater moves down valley into the Bellevue fan, at which point the flow splits eastwards and westwards. The model indicates that while the Big Wood River is well connected to the unconfined aquifer, from Hailey to Glendale; the depth-to-groundwater is high.

Wild and Scenic Rivers

The nearest Wild and Scenic River is the Middle Fork of the Salmon River¹³³, located approximately 75 miles north of the Airport. The only water body within the Proposed Action project area is the Cove Canal, which receives water during the irrigation season from the Big Wood River and is diverted into agriculture downstream of the project area. The Big Wood River is a tributary to the Malad River, which flows into the Snake River. Neither of these rivers are classified as Wild and Scenic.

4.14.2 Environmental Consequences

Wetlands

Under the Proposed Action, approximately 3.7 acres attributed to the Cove Canal (approximately 2,691 linear feet) will be acquired and up to 200 individual trees along the Canal

¹²⁹ USGS. 2014. Stream seepage and groundwater levels, Wood River Valley, South-Central Idaho 2012-2013. Scientific Investigations Report 2014–5151. U.S. Geological Survey, Reston, Virginia

¹³⁰ USGS 13139510 Big Wood River at Hailey Idaho, Total Flow. Accessed April 30, 2018 at https://waterdata.usgs.gov/nwis/dv?referred_module=sw&site_no=13139510

¹³¹ IDEQ. 2017. Big Wood River Watershed Management Plan: TMDL Five Year Review. Idaho Department of Environmental Quality, Boise, Idaho. Accessed April 2018 at <http://www.deq.idaho.gov/media/60180970/big-wood-river-watershed-management-plan-tmdl-five-year-review.pdf>

¹³² Fisher, J.C., Bartolino, J.R., Wylie, A.H., Sukow, Jennifer, and McVay, Michael. 2016. Groundwater-flow model of the Wood River Valley aquifer system, south-central Idaho: U.S. Geological Survey Scientific Investigations Report 2016–5080. Accessed April 30, 2018 at <http://dx.doi.org/10.3133/sir20165080>

¹³³ National Wild and Scenic River System. 2018. Salmon River (Middle Fork), Idaho. Accessed April 30, 2018 at <https://www.rivers.gov/rivers/salmon-mf-id.php>

will be removed. Woody stems and trunks will be cut at the ground surface and the stumps removed. All remaining herbaceous plants will be left intact to the greatest extent possible. This will result in a conversion of PFO wetlands and PSS to PEM wetlands. In general, PFO, PSS and PEM wetlands all provide soil stabilization, flood retention, nutrient removal/transformation, wildlife habitat, among other functions to varying degrees¹³⁴. Conversion of one type of wetland for another may lead to reduction in some functions and gains in other functions.

Consultation with the USACE Idaho Falls Regional Office occurred on August 30, 2017 (**Appendix F**), in which they determined conversion from one wetland type to another, specifically the removal of trees which converts the wetland from a PFO wetland to a PEM wetland, is not considered a wetland impact under the CWA. This conclusion was reached as removal of the trees: 1) does not impact below ground activities within the wetlands, and 2) does not impact Waters of the United States; a CWA Section 404 permit is not required nor a Jurisdictional Determination. Standard construction BMPs will be utilized to minimize impacts to existing wetlands during the obstruction removal (see **Section 4.14.3**). The Proposed Action will convert PFO and PSS wetlands to PEM wetlands, resulting in no net loss of wetlands, and therefore, will have no adverse effect on wetland resources.

In accordance with EO 11990, there are no practicable measures to avoid acquiring part of the Cove Canal and removing the trees identified as obstructions, given its location directly off of the end of Runway 13/31. An existing easement with the Eccles Flying Hat Ranch was in place to light trees, which have been documented as obstructions to air navigation on their property, but this agreement expired in December of 2018. A new agreement allows the lights to remain up until the end of September 2020; however, the landowner has stated he does not want another long-term easement. The Proposed Action will result in no net loss to wetlands and will have no adverse effect on wetland resources. The Proposed Action is necessary to provide safe, navigable airspace in the vicinity of the Airport.

Floodplains

As shown in the FEMA Flood Zones map (**Figure 4-9**), the south side of the Airport and the areas proposed for acquisition and obstruction removal are not within a floodplain. Therefore, the Proposed Action will have no effect on floodplains.

Surface Waters

Land use within the project area will remain largely the same following land acquisition, as the majority of the land will be leased for continued pasture and agricultural use. The Cove Canal will continue to be used for irrigation delivery. Water quantity within the Cove Canal will be unaffected with implementation of BMPs to minimize the sediment that enters the Cove Canal during removal of the trees. The removal of trees will result in a conversion of PFO and PSS wetlands to PEM wetlands. PFO, PSS and PEM wetlands all provide water quality benefits, such as streambank anchoring, soil stabilization, erosion control, and nutrient storage functions to varying degrees depending on the density, diversity and structure of the wetland's vegetation¹³⁴. Conversion of one type of wetland for another may lead to reduction in some functions and gains in other functions. For example, conversion of PFO wetlands to PEM wetlands may lead to a reduction in streambank anchoring functions, but an increase in

¹³⁴ Mitsch, W.J. and J.G. Gosselink. 2000. Wetlands, third edition. John Wiley and Sons, Inc. New York, NY

sediment retention¹³⁵. Therefore, the effects of converting one wetland type to another is difficult to analyze but conversion is unlikely to result in significant changes to water quality, as long as BMPs are in place to accelerate the establishment of desired species and control the spread of invasive species (see **Section 4.14.3**). Equipment such as chainsaws, chippers, and tracked vehicles are anticipated to be used. To minimize water quality impacts, proper use, storage, inspection, and maintenance of equipment will be employed.

Groundwater

The Proposed Action will not involve any permanent construction (i.e. structures, impervious surfaces) or excavation activities that would have a potential to affect groundwater. Groundwater modeling shows that while the Big Wood River is connected to the underlying unconfined aquifer, the specific reach in the proximity of the project area is a losing reach, indicating that depth-to-groundwater is higher at this location¹³⁶. The Proposed Action does not involve any groundwater withdrawals or construction activities associated with new or existing wells. Overall, none of the Proposed Action activities are likely to affect groundwater. Construction impacts to groundwater are also unlikely due to the high depth-to-groundwater within the project area, type of equipment being used, and the implementation of BMPs to prevent potential releases of petroleum materials, including proper use, storage, inspection, and maintenance of equipment.

Wild and Scenic Rivers

The Airport is located approximately 75 miles south and outside of the watershed of the nearest Wild and Scenic River, the Middle Fork of the Salmon River¹³⁷. Since this resource does not exist in the project area, the Proposed Action will have no effect on Wild and Scenic Rivers.

4.14.3 Mitigation

Wetlands

While no specific mitigation is required, the following BMPs may be employed to prevent and minimize impacts to wetlands:

- Schedule construction activities for dry weather periods.
- Designate a contained area for equipment storage, short-term maintenance, and refueling. Ensure it is located at least 100 feet from wetland areas.
- Inspect vehicles and equipment for leaks and repair immediately.
- Inspect all vehicles and equipment that may have come in contact with invasive plants, or the seeds of these plants, and carefully clean vehicles and equipment before arriving on-site.
- Conduct major vehicle maintenance and washing off site.

¹³⁵ Schmid & Company, Inc. 2014. The effects of converting forest or scrub wetlands into herbaceous wetlands in Pennsylvania. Media, PA. Accessed May 1, 2018 at <http://www.delawareriverkeeper.org/sites/default/files/resources/Reports/Wetland%20Conversion%20Report.pdf>

¹³⁶ Fisher, J.C., Bartolino, J.R., Wylie, A.H., Sukow, Jennifer, and McVay, Michael. 2016. Groundwater-flow model of the Wood River Valley aquifer system, south-central Idaho: U.S. Geological Survey Scientific Investigations Report 2016–5080. Accessed April 30, 2018 at <http://dx.doi.org/10.3133/sir20165080>

¹³⁷ National Wild and Scenic River System. 2018. Salmon River (Middle Fork), Idaho. Accessed April 30, 2018 at <https://www.rivers.gov/rivers/salmon-mf-id.php>

- Avoid or minimize disturbance to existing herbaceous vegetation to the fullest extent possible
- Replace any herbaceous vegetation that has been disturbed to a pre-project density with herbaceous species appropriate to the site.
- Prevent construction debris from falling into the Cove Canal. Any material that does fall into the irrigation canal during construction should be immediately removed in a manner that has minimal impact to the channel bed and water quality.
- Clean up leaks, drips and other spills immediately to avoid soil or surface water contamination.
- Ensure that all spent fluids including motor oil, radiator coolant, or other fluids and used vehicle batteries are collected, stored, and recycled as hazardous waste off site.
- Ensure that all construction debris is taken to appropriate landfills and all sediment disposed of in upland areas or off-site.
- If necessary for dust control, use only a minimal amount of water.

Floodplains

The Proposed Action's project area is not located in a floodplain; therefore, no mitigation is required.

Surface Waters

No mitigation is required; however, BMPs outlined in the wetlands section above may be employed to prevent and minimize impacts to water quality.

Groundwater

No mitigation is required; however, BMPs outlined in the wetlands section above may be employed to prevent and minimize impacts to groundwater.

Wild and Scenic Rivers

The Proposed Action project area does not reach any Wild and Scenic Rivers; therefore, no mitigation is required.

4.14.4 Findings and Conclusions

Wetlands

The No Action Alternative will have **no effect** on wetlands because it is a non-development alternative. All wetlands would remain as they presently exist.

Under the Proposed Action, approximately 3.7 acres attributed to the Cove Canal (approximately 2,691 linear feet) will be acquired and maintained for water delivery. Given its location directly off of the end of Runway 13/31, there are no practicable measures to avoid acquiring part of the Cove Canal and the removal of trees that have been identified as obstructions. The removal of up to 200 trees will result in the conversion of PFO and PSS wetlands to PEM wetlands. The conversion of wetland types does not qualify as a wetland impact as determined by the USACE under the CWA. BMPs during construction will prevent and minimize wetland impacts. The Proposed Action is in accordance with EO 11990 and will result in no net loss to wetlands and will have **no adverse effect** on wetland resources.

Floodplains

As the project area is not located within the floodplain, the No Action Alternative and the Proposed Action will have **no effect** on floodplains. As no floodplains are located within the project area, requirements under EO 11988 do not apply.

Surface Waters

The No Action Alternative will have **no effect** on surface waters because it is a non-development alternative. All surface water quantity and quality will remain as they presently exist.

Under the Proposed Action, water quantity in the Cove Canal will be unaffected. The conversion of PFO and PSS wetlands to PEM wetlands is unlikely to affect water quality over the long term. With implementation of BMPs during construction to prevent and minimize water quality impacts, the Proposed Action will have **no significant effect** on surface water resources.

Groundwater

The No Action Alternative will have **no effect** on groundwater because it is a non-development alternative. All groundwater quantity and quality will remain as they presently exist.

The Proposed Action does not involve any permanent construction (i.e. structures, impervious surfaces) or excavation activities that would have a potential to affect groundwater. Groundwater modeling indicates that the depth-to-groundwater is high within the general vicinity of the project area. Therefore, the land acquisition, obstruction removal (approximately 200 trees), and perimeter fence line extension under the Proposed Action is unlikely to encounter or affect groundwater. With implementation of BMPs during construction to prevent and minimize spills that could reach groundwater through infiltration, the Proposed Action will have **no significant effect** on groundwater resources.

Wild and Scenic Rivers

The nearest Wild and Scenic River is 75 miles to the north and water from the project area does not reach any Wild and Scenic Rivers; therefore, both the No Action Alternative and the Proposed Action will have **no effect** on Wild and Scenic Rivers.

4.15 CUMULATIVE IMPACTS

According to the CEQ¹³⁸, cumulative impacts are “impacts on the environment which result from incremental impacts of the action when added to other past, present, and reasonably foreseeable future actions” and that “can result from individually minor but collectively significant actions taking place over a period of time.”

A cumulative impact analysis provides information on impacts resulting from other actions that have occurred or that will occur within a defined time and geographic area. Cumulative impacts are evaluated on past actions, present actions, and reasonably foreseeable future actions. Airport actions are considered along with actions of tribes, private developers, the FAA, or others. This information is used to decide whether a proposed project’s impact to a specific resource would cause a significant impact on that resource when added to past, present, and

¹³⁸ 40 CFR 1508.7 Cumulative impacts. Accessed May 1, 2018 at <https://www.gpo.gov/fdsys/pkg/CFR-2012-title40-vol34/pdf/CFR-2012-title40-vol34-sec1508-7.pdf>

reasonably foreseeable future actions within a specific geographic area or designated time frame.

4.15.1 Past, Present, and Future Project Listing

To properly assess cumulative impacts, this section identifies all projects in the recent past, present, and reasonably foreseeable future actions. The recent past includes projects implemented within the past five years. Current projects include those which have been publicly funded, privately permitted, or under construction during development of this EA (2017-2019). Future projects include those for which funding has been earmarked or a needs assessment has identified the project for consideration in the reasonably foreseeable future.

Projects considered for this analysis include: other projects using Federal-Aid money, such as the FAA Airport Improvement Program or other federally-funded projects in the general vicinity; Airport capital improvement projects; Idaho Transportation Department Statewide Transportation Implementation Plan, which identifies future transportation projects; and proposed private developments within the local jurisdictions.

The City of Hailey and Blaine County were contacted in July 2017 and again in January of 2019 for information on recent development projects; no private development projects have been implemented in the past five years, currently or in the reasonably foreseeable future within ¼ mile of the Airport.

Based on a review of projects in the vicinity of the Airport, the following projects were identified and evaluated for cumulative impacts:

Past Projects (occurring within the past five years)

1. Relocate Hangar Taxi Lanes/Apron Improvements (2013-14) at the Airport. This project overlaid the General Aviation apron to strengthen pavement and construct new taxi lanes to access hangars for the west rather than the east.
2. Relocated Taxiway B, Grade RSA and Remove Taxiway A (South) (2014) at the Airport. This project relocated and extended Taxiway B while removing Taxiway A, graded the RSA and construction of three new connector taxiways. The total duration of the project was 60 days, but the bulk of the work was completed during a 25-day Airport closure.
3. Terminal Expansion and Remodel (2014-2015) at the Airport. The project moved the terminal aircraft parking to the north side of the terminal to place it outside of the ROFA. The terminal was not configured to move passengers to the north end of the building, so a 14,000-square foot addition to the building was constructed and the existing area of the building was remodeled.
4. Airport Operations Building (2014-2015) at the Airport. The Airport's existing administration office and ARFF/Snow Removal Equipment building needed to be relocated. This project constructed a new facility to house these functions in one building. The new facility is more efficient and suited to the needs of Airport operations staff, especially for snow removal equipment storage and maintenance.
5. Construct Terminal Apron (2014) at the Airport. A new apron for terminal aircraft parking was constructed on the north side of the terminal. This apron was constructed with Portland cement concrete pavement. Due to the confined site, significant analysis of

aircraft movements on the apron was required. T-O Engineers completed this analysis as part of the project design.

6. Relocate Taxiway B, Grade RSA and Remove Taxiway A (North) (2015) at the Airport. This project relocated the remainder of Taxiway B and removed the remainder of Taxiway A, while grading the RSA on the north half of the Airport. The project also reconstructed all of the connecting taxiways in this area and constructed a new apron and hangar access taxi lane at the north end of the airfield. Also included was the demolition of five hangar buildings.
7. Central Bypass Taxiway/Facility Demolition (2015) at the Airport. Due to the constrained site and operational patterns at the Airport, bypass taxiways are necessary to allow aircraft to pass each other head-to-head on the parallel taxiway. The last project in the program removed the Airport administration and ARFF/SRE buildings and constructed a new bypass taxiway in this location.

Current Projects (2017-2019)

8. Terminal Apron Expansion and Access Road Realignment at the Airport (\$3.06 million). This project expands the terminal aircraft parking apron at the Airport to accommodate one additional aircraft on the ground, while also realigning the access road and vehicle parking lots for the Airport. The project was designed and bid in 2017 and the majority was constructed in 2018. The remaining items to be constructed will be completed in 2019.

Future Projects (have been earmarked or identified for consideration in the reasonable future by the Friedman Memorial Airport Capital Improvement Program)

9. Rehabilitate Aprons, Sections 1, 2 and 4. Mill and overlay, crack seal and seal coat aircraft parking aprons on the Airport (2020).
10. Terminal Expansion – Security Checkpoint and Concourse (2020).
11. Construct Tower. Construct a new aircraft control tower and remove the existing tower at the Airport (2021).
12. Rehabilitate Taxiway B and Section 3 Apron. Crack seal and seal coat Taxiway B and aircraft parking apron Section 3 (2022).
13. Rehabilitate Runway 13-31. Mill and overlay the Airport's runway (2022).
14. General Aviation Apron Expansion and New Hangar Area (2023).

4.15.2 Environmental Impact Category Analysis

The following subsections analyze the potential cumulative impacts for each environmental resource category in which the implementation of the Proposed Action might contribute to cumulative impacts when considered with other past, present, and reasonably foreseeable future actions. The Proposed Action in conjunction with other implemented or proposed projects, identified in **Section 4.15.1**, may together yield significant impacts, even though the direct and indirect impacts from the Proposed Action alone are not significant¹³⁹.

¹³⁹ FAA. 2015. 1050.1F Environmental Desk Reference, Chapter 15, Cumulative Impacts. May 2, 2018 at https://www.faa.gov/about/office_org/headquarters_offices/apl/enviro_n_policy_guidance/policy/faq_nepa_ord_er/desk_ref/media/15-cumulative-impacts.pdf

As detailed earlier in this chapter, the following resources are not present in the project area and will not be affected by the Proposed Action and, therefore, would not contribute to significant cumulative impacts, and will not be addressed further:

- Coastal Resources
- Floodplains
- Wild and Scenic Rivers

Air Quality

A significant impact to air quality could occur if the Proposed Action, when considered with past, present, and reasonably foreseeable future actions, caused an exceedance of one or more NAAQS. Currently, all of Blaine County is in attainment for NAAQS criteria pollutants. The Proposed Action is not likely to cause or create an increase in aircraft operations at the Airport, and therefore will result in no long-term emissions increases. Temporary air quality impacts during construction will be short-term and determined to be de minimis. In addition, none of the past, present, and reasonably foreseeable future projects examined are anticipated to have substantial long-term impacts on air quality.

Most of the projects listed are short-term construction projects designed to improve operational traffic flow, meet FAA safety requirements, and perform general maintenance. While the construction of one new apron and expansion of a second apron will accommodate additional aircraft, the construction of apron space at SUN may actually result in a reduction of operations. During peak times of the season, aprons are full, and aircraft arrive at SUN, drop off passengers, and then return at a later time to pick them up. With additional apron space, the need to leave and return could be eliminated. This could result in a slight reduction in operations and less impact to air quality. Overall, implementation of the Proposed Action in addition to other reasonably foreseeable projects would result in **no significant cumulative impacts** to air quality.

Biological Resources

Threatened and Endangered Species

A literature review of species listed as threatened, endangered, or candidate under the ESA in conjunction with information obtained from the USFWS and the field investigation found that no suitable habitat exists for Canada lynx, North American wolverine or YBCC within the project area or general vicinity. Therefore, there are **no significant cumulative impacts** regarding threatened, endangered, or candidate species when considered with other past, present, and reasonably foreseeable future actions.

State Sensitive Species

The literature review and analysis for species listed as sensitive found that no suitable habitat exists for the olive-sided flycatcher in the project area. Therefore, there are **no significant cumulative impacts** to the olive-sided flycatcher or their habitat when considered with other past, present, and reasonably foreseeable future actions.

Suitable habitat does exist for the long-billed curlew in the form of irrigation pasture. Under the Proposed Action, the acquired irrigated pasture will be leased for continued use and the

removal of trees that are obstructions may benefit long-billed curlew, as they choose nesting locations void of trees. Disturbance from construction is expected but will be temporary and ample habitat exists within the vicinity of the project area. All projects examined are short-term, limited to the current Airport property, and unlikely to significantly impact long-billed curlew. Therefore, the Proposed Action will result in **no significant cumulative impacts** to the long-billed curlew or their habitat when considered with other past, present, and reasonably foreseeable future actions. (The analysis for red-tailed hawk is included in the Migratory Bird section below).

General wildlife and vegetation

Tree removal under the Proposed Action will permanently remove potential nesting and foraging habitat for some bird and wildlife species but is small compared available habitat along the Big Wood River. Pasture, grassland, and emergent wetland habitat will remain intact following the obstruction removal. Temporary disturbance from construction is expected but is planned outside the nesting season. Overall, the Proposed Action may impact individuals, but will not likely contribute to a trend towards federal listing for any species or loss of viability for general wildlife and vegetation. All projects examined are short-term, limited to the current Airport property, and unlikely to significantly impact general wildlife and vegetation. Therefore, the Proposed Action will result in **no significant cumulative impacts** to general wildlife or vegetation when considered with other past, present, and reasonably foreseeable future actions.

Migratory Birds

Suitable nesting habitat for migratory birds, including red-tailed hawk, is present within the project area. Tree removal under the Proposed Action will permanently remove potential nesting and foraging habitat for some bird and wildlife species, but the loss of habitat is small when compared available habitat along the Big Wood River. Pasture, grassland, and emergent wetland habitat will remain and will be protected from future development. Temporary disturbance from construction is expected but is planned outside the nesting season. Overall, the Proposed Action may impact individuals, but will not likely contribute to a trend towards federal listing or loss of viability for migratory bird species. All projects examined are short-term, limited to the current Airport property, and are unlikely to significantly impact migratory birds. Therefore, the Proposed Action will result in **no significant cumulative impacts** to migratory birds when considered with other past, present, and reasonably foreseeable future actions.

Climate

The Proposed Action is not likely to cause or create an increase in aircraft operations at the Airport, and thus will result in no long-term increase in greenhouse gas emissions. Some temporary emissions are expected from equipment used during construction; BMPs will be implemented to minimize emissions. In addition, none of the projects examined are anticipated to result in a significant long-term increase in emissions.

The projects listed for the Airport are all short-term construction projects designed to improve operational traffic flow, meet FAA safety requirements, and perform general maintenance. While the construction of one new apron and expansion of a second apron will accommodate additional aircraft, the construction of apron space at SUN may actually result in a reduction of operations. During peak times of the season, aprons are full, and aircraft arrive at SUN, drop off

passengers, and then return at a later time to pick them up. With additional apron space, the need to leave and return could be eliminated. This could result in a slight reduction in operations and less impact to air quality and climate at SUN. Therefore, the Proposed Action will result in **no significant cumulative impact** on climate when considered with other past, present, and reasonably foreseeable future actions.

Department of Transportation Act, Section 4(f)

Development in the Wood River Valley, including those projects listed in **Section 4.15.1**, continues to change the landscape of the area. The Proposed Action includes the removal of the windrow tree line, which is a contributing element to the Eccles Flying Hat Historic District, resulting in an “adverse effect” to the historical setting and “direct use” of Section 4(f) resource.

While the Proposed Action will adversely affect the Eccles Flying Hat Ranch Historic District, all of the past, present and reasonably foreseeable future projects listed will occur on Airport property and are not anticipated to affect Section 4(f) resources. The Proposed Action will result in **no significant cumulative uses** to Section 4(f) resources.

Farmlands

Incremental acquisitions and conversions of farmland to urban has occurred over the past 20 years since the housing and commercial development on the east side of State Highway 75 was incorporated into the City of Hailey. The agricultural region has slowly been eroded by urban development and has shifted its center to south of the City of Bellevue where open ranching becomes more prevalent. Under the Proposed Action, 58.1 acres of land acquired will continue to be irrigated and used for agriculture, remaining “Prime Farmland”. The 6.5 acres fenced to protect the RSA and ROFA will no longer be irrigated and will convert to “Not Prime Farmland”. All past, present and reasonably foreseeable future projects examined are short-term and limited to the current Airport property, having no impact on farmland. While the Proposed Action will remove 6.5 acres within the RSA and ROFA, it will preserve 58.1 acres of farmland for continued use for agriculture. Therefore, there will be **no significant cumulative impacts** to farmlands from this project.

Hazardous Materials, Pollution Prevention, and Solid Waste

Within the project area, the Hazardous Materials Evaluation – Phase 1 Report found no evidence of RECs, HRECs, or CRECs; all historic agricultural materials were determined de minimis and incidental. Proper use, storage, inspection, and maintenance of equipment used to remove obstructions under the Proposed Action will prevent potential releases of petroleum or other hazardous materials.

In addition, none of the projects examined are likely to encounter or affect hazardous materials, solid waste, and pollution prevention activities. The projects listed for the Airport are all short-term construction projects in which BMPs are in place to prevent spills and ensure proper care of hazardous materials, such as petroleum products. There are no known risks of encountering hazardous materials other than materials used during normal agricultural or Airport operations that would contribute to present or future cumulative effects. Therefore, it is anticipated that the Proposed Action will result in **no significant cumulative impacts** to hazardous materials, pollution prevention, or solid waste when considered with other past, present, and reasonably foreseeable future actions.

Historical, Architectural, Archaeological and Cultural Resources

The Proposed Action involves the removal of the windrow tree line which is a contributing element to the Eccles Flying Hat Historic District resulting in an “adverse effect” to the historical setting of the District. Additionally, there will be a reduction in acreage of the Historic District by approximately 64.6 acres. Most of the character-defining historic elements and the distinctive characteristics of the settlement period during the early 20th century will be retained.

All of the past, present, and reasonably foreseeable future projects listed take place on Airport property and are not anticipated to affect NRHP-listed or eligible properties/buildings. With the reduction of total acreage of the Historic District by approximately 64.6 acres, the Proposed Action will cause impacts to Section 106 historic resources, but when viewed with all past, present, and reasonably foreseeable future projects, **no significant cumulative impacts** are expected.

Land Use

Under the Proposed Action, the Airport will acquire land currently used for agriculture and pasture and lease the majority of that land for continued agricultural use, which is compatible with City of Hailey and Blaine County zoning regulations. The removal of obstructions and extension of the fence will not change the land use within the area and is also compatible with zoning ordinances that specify the need to prevent encroachment on airspace.

All of the projects examined will be implemented on Airport property and are compatible with zoning ordinances. Therefore, the Proposed Action will result in **no significant cumulative impacts** to land use when considered with other past, present, and reasonably foreseeable future actions.

Natural Resources and Energy Supplies

The Proposed Action is not likely to cause or create an increase in aircraft operations. The removal of declared distances will allow airlines to use the runway’s full useable length in performance calculations and may result in the airlines ability to stop reducing their take-off weight during hot summer days at SUN due to the declared distances and potentially take on additional fuel. However, fuel resources are not in short supply in Blaine County, and no significant effect on natural resource and energy supplies is expected. Construction materials for the fence line, temporary fuel requirements for construction of fence extension, and tree removal will be required over a period of approximately 20 days; these resources are readily available in the region. BMPs will be implemented to reduce energy consumption.

All of the projects examined will require natural resources for construction materials and increase short-term energy consumption. There are no known natural resource or energy resource shortages in the region. When considered cumulatively these projects would result in minor increases to energy consumption, but these increases would have very little impact on local supplies and would be insignificant when considered on a local or regional scale. Therefore, the Proposed Action will result in **no significant cumulative impacts** to natural resources and energy supplies when considered with other past, present, and reasonably foreseeable future actions.

Noise and Noise-Compatible Land Use

The Proposed Action is not likely to cause or create an increase in aircraft operations, and thus noise, at the Airport beyond normal projections. The removal of trees will likely lead to a slight increase in noise and vibrations to the farmhouse and surrounding property, as the trees will no longer act as a buffer to noise. However, as shown in **Figure 4-7**, the trees identified as known obstructions lie outside the DNL 65 db noise contour; and therefore, removal of the trees will not change the DNL 65 db noise contour. Temporary increases in noise are expected during construction but will be short-term and within a 60-foot buffer of the construction area.

Most of the projects listed are short-term construction projects designed to improve operational traffic flow, meet FAA safety requirements, and perform general maintenance, which are not modeled with the FAA noise software and are not the type of projects that create louder conditions (i.e. takeoff of aircraft). While the construction of one new apron and expansion of a second apron will accommodate additional aircraft, the construction of apron space at SUN may actually result in a reduction of operations. During peak times of the season, aprons are full, and aircraft arrive at SUN, drop off passengers, and then return at a later time to pick them up. With additional apron space, the need to leave and return could be eliminated. This could result in a slight reduction in operations and less impact to noise at SUN. Therefore, it is anticipated that the Proposed Action will result in **no significant cumulative increases** in aircraft-related noise over noise sensitive areas when considered with other past, present, and reasonably foreseeable future actions.

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

The Proposed Action is not likely to cause or create an increase in aircraft operations beyond normal projections and land use will remain largely the same following acquisition, and will therefore have no effect on economic activity, employment, income, housing, public services, social conditions, or low income or minority populations in the vicinity of the Airport. The obstruction removal and fence line extension will not have a significant effect on air quality, climate, hazardous materials, noise, and water resources, and will therefore have no effect on the individual or cumulative environmental health of low income and minority populations, or children's environmental health and safety.

All of the projects listed are short term construction projects limited to the Airport property designed to improve operational traffic flow, meet FAA safety requirements, perform general maintenance, and accommodate additional aircraft, which are unlikely to affect socioeconomics, environmental justice, or children's environmental health and safety. Therefore, the Proposed Action will result in **no cumulative impacts** to socioeconomics, environmental justice, or children's health and safety when considered with other past, present, and reasonably foreseeable future actions.

Visual Effects

The Proposed Action does not include the installation of new lighting facilities and is not likely to cause or create an increase in aircraft operations that may result in increased light emissions. The removal of six lighted beacons as part of the obstruction removal will slightly decrease light emissions. The Proposed Action includes the removal of the windrow tree line, which is a contributing element to the Eccles Flying Hat Historic District, leading to an adverse effect on

the Historic District under Section 106. However, the landowner was a concurring signatory on the Section 106 MOA, which was developed to mitigate these effects through 4(f) considerations and the Section 106 process that were discussed in **Section 4.5** and **Section 4.8**, respectively. Coordination with the landowner resulted in the inclusion of planting low-growing shrubs into the MOA, which will replace the trees that will be removed between the farmhouse and the end of the runway.

All the projects listed are short-term construction projects located on Airport property designed to improve operational traffic flow, meet FAA safety requirements, perform general maintenance, and/or accommodate additional aircraft. Increases in light emissions from these projects are anticipated to be minor and limited to Airport property. The visual impacts of these projects are also limited to the Airport and consistent with current land use within the Airport. Therefore, the Proposed Action will result in **no significant cumulative impacts** to visual effects when considered with other past, present, and reasonably foreseeable future actions.

Water Resources

Wetlands

The Proposed Action will acquire approximately 3.7 acres attributed to the Cove Canal (approximately 2,691 linear feet) and remove of up to 200 trees along the canal, which will result in the conversion of PFO and PSS wetlands to PEM wetlands. The conversion of wetland types does not qualify as a wetland impact as determined by the USACE under the CWA and the remaining PEM wetlands will be preserved.

All of the projects examined will be implemented on Airport property where wetlands are not present. Therefore, the Proposed Action will result in **no significant cumulative impacts** to wetlands when considered with other past, present, and reasonably foreseeable future actions.

Surface Waters

Under the Proposed Action, the majority of the acquired land will be leased for continued pasture and agricultural use, along with water rights to the Cove Canal. The removal of up to 200 trees will result in the conversion of PFO and PSS wetlands to PEM wetlands, which is unlikely to affect water quality over the long term. Implementation of BMPs during construction to prevent and minimize water quality impacts.

All of the projects listed are short-term construction projects located on Airport property that are designed with BMPs to prevent spills and minimize water quality impacts. Therefore, it is anticipated that the Proposed Action will result in **no significant cumulative impacts** to surface waters when considered with other past, present, and reasonably foreseeable future actions.

Groundwater

The Proposed Action does not involve any permanent construction (i.e. structures, impervious surfaces) or excavation activities that would have a potential to affect groundwater. Groundwater modeling indicates that the depth-to-groundwater is high within the general vicinity of the project area, making it unlikely for the Proposed Action's activities to encounter or affect groundwater. BMPs implemented during construction will prevent and minimize spills that could reach groundwater through infiltration.

All of the projects listed are short-term construction projects that are designed with BMPs to prevent spills and minimize water quality impacts. The construction of one new apron and expansion of a second apron will increase impervious surfaces at the Airport but are unlikely to significantly affect groundwater. Therefore, the Proposed Action will result in **no significant cumulative impacts** to groundwater when considered with other past, present, and reasonably foreseeable future actions.

4.15.3 Conclusion

Based on the review and findings of known ongoing, planned and proposed projects in the vicinity of the Airport, it is concluded that the Proposed Action when added to past, present, and reasonably foreseeable future projects will result in **no significant cumulative impacts** to the following resources: air quality; biological resources; climate; coastal resources; Department of Transportation, Section 4(f) resources; hazardous materials, pollution prevention and solid waste; land use; natural resources and energy supply; noise and noise-compatible land use; socioeconomic impacts, environmental justice, and children's environmental health and safety; visual effects; and water resources. This conclusion was reached because:

- These projects are being implemented on Airport property and do not affect lands in the immediate vicinity of the Airport;
- The projects result in no effects or de-minimis (so small as to be negligible or insignificant) effects;
- The impacts associated with the construction activity of the projects is temporary in nature; and/or
- Mitigation measures are proposed for the projects that, when implemented, will result in no cumulative impacts.

The Proposed Action when added to past, present, and reasonably foreseeable future projects will contribute to cumulative impacts on farmland resources by removing 6.5 acres within the RSA and on historic resources by reducing total acreage of the Eccles Flying Hat Ranch Historic District by approximately 64.6 acres. While there may be cumulative impacts on farmland resources, **no substantial cumulative impacts** are anticipated. Given the location of the Eccles Flying Hat Ranch Historic District and associated farmland directly off the end of Runway 13/31, there are no practicable measures to entirely avoid these resources. The Proposed Action is necessary to provide safe, navigable airspace in the vicinity of the Airport and to remove and prevent incompatible land uses per FAA regulations and policies.

Future federal projects will be subject to review under NEPA to determine whether significant environmental impacts are likely and to identify mitigation measures for any identified adverse effects. Through the land use planning process and associated regulations, the City of Hailey and Blaine County are able to control many potential cumulative effects associated with any new growth and development.

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Chapter 5 RECORD OF AGENCY COORDINATION AND PUBLIC INVOLVEMENT

5.1 AGENCY COORDINATION

Agency coordination occurred over the course of a year and a half period from June of 2017 – December of 2018. **Table 5-1** documents agency coordination over that period.

TABLE 5-1: AGENCY COORDINATION FROM JUNE 2017 THROUGH DECEMBER OF 2018.

Name/Agency	Date of Coordination	Reference Section
Frank Edelmann, Idaho Department of Fish and Game, Magic Valley Office	June 2017, October 2018 December 2018	Section 4.2. Coordination regarding yellow-billed cuckoo, red-tailed hawk and migratory birds.
Public Notice of Meeting regarding project alternatives	July 2017	All Sections. Public notice postcard was sent to 168 residents and 32 agencies and business that have a vested interest in the airport and are within 1,000 feet of the project area.
Bob Kibler, U.S. Fish and Wildlife Service	July 2018, October 2018 December 2018	Section 4.2. Coordination regarding yellow-billed cuckoo “no effect” determination.
Greg Burak, U.S. Fish and Wildlife Service	May 2017	ESA Survey Permit Application and background information YBCC.
Patti Hurley, U.S. Department of Agriculture	November 2017	Section 4.6. Farmland conversion impact rating consultation.
Mathew Halitsky, Idaho State Historic Preservation Office (SHPO)	May 2018, November 2018	Section 4.8. SHPO concurred with the recommended determinations of eligibility of the Cove Canal, Eccles Flying Hat Ranch, and individually-eligible barn. SHPO considers the windrow trees that grow near the main farmstead as a contributing element of the Eccles Flying Hat Ranch. SHPO was a signature on the MOA (Appendix G).
Advisory Council on Historic Preservation (ACHP)	May 2018	Section 4.8. FAA notices ACHP to provide information and an invitation to participate in the Section 106 consultation. Invitation declined in letter dated June 12, 2018 unless circumstances change.
James Joyner, U.S. Army Corp of Engineers	August 2017	Section 4.14. Consultation regarding jurisdictional wetland determinations and impacts.

5.2 PUBLIC INVOLVEMENT AND EA REVIEW

Public involvement is a vital component of the NEPA process. Public and agency coordination has been conducted during the NEPA process; the public has been previously contacted and involved throughout the process which is documented in **Appendix H**.

The Draft EA and 4(f) Evaluation were made available for public review for a period of 45 days (starting on March 20th, 2019). Notice of availability of the Draft EA was advertised in the legal section of the Idaho Mountain Express on March 20, 2019 and April 10, 2019. Copies of the Draft EA and 4(f) Evaluation were available to the public electronically on the Airport website at

<http://www.iflysun.com>. Hard copies were made available during regular business hours (between March 20th and May 3rd, 2019) at the following locations:

1. FAA, Helena Airports District Office
2725 Skyway Drive, Suite 2
Helena, MT 59602
2. Friedman Memorial Airport Manager's Office
1616 Airport Circle
Hailey, ID 83333
3. Hailey Public Library
7 W Croy Street
Hailey, ID 83333
4. Hailey City Hall
115 South Main Street
Hailey, ID 83333
5. Blaine County Clerk's Office
206 South 1st Avenue
Hailey, ID 83333

The FMAA held a public hearing that was facilitated on April 23, 2019 at 5:30 PM at the Blaine County Courthouse Meeting Room (Addressed at 206 South 1st Avenue, Hailey, ID 83333). This event provided an overview of the Draft EA (including the 4(f) Evaluation) and provided information to the public about the Proposed Action and potential economic, social, and environmental impacts of the Proposed Action. It also provided an opportunity for the public to comment on the Draft EA. A stenographer was present during the public hearing to record a transcript of the hearing (see **Appendix H**). Appendix H also contains the PowerPoint presentation shown during the Public Hearing, supporting exhibits, and the Public Hearing sign-up sheet, along with comments provided via email during the comment period.

Comments regarding the Draft EA and Section 4(f) Evaluation were accepted for a 45-day period as follows:

- Postmarked by May 3, 2019 if mailed to Vince Barthels at T-O Engineers, 121 W. Pacific Avenue, Suite 200, Spokane, WA 99201; or,
- Emailed by 5:00 p.m. PST on May 3, 2019 to ybarthels@to-engineers.com (a confirmation reply will be sent).

It should be noted that the 45-day comment period included 10 days following the public hearing.

Agency and public comments received during the 45-day comment period were considered in the development of the Final Environmental Assessment. During the public hearing, comments from four (4) parties/individuals were received, and an additional three (3) comments were received during the comment period following the public hearing. Thereby, a total of seven (7) parties/individuals provided comments.

Responses to all of the verbal and written comments received are provided in the Final EA in the Public Comment & Response Matrix contained in **Appendix J**.

As a result of final editing and response to public comments, the following changes were made to the Final EA as compared to the draft EA released for public review:

- The title of the EA was changed from “Environmental Assessment” to “Environmental Assessment and DOT Section 4(f) Evaluation”.
- The following sentence was added to Section 2.2.2: “The purpose of the Proposed Action is not to increase aircraft operations beyond current and forecasted demand in the foreseeable future or directly affect economic activity.”
- A typo was corrected in the last paragraph of Section 2.2.3 to change the sentence “...and for aborted takeoffs from Runway 31 (departure to the south)” to a corrected version: “...and for aborted takeoffs from Runway 13 (departure to the south).”
- Section 5.2 and Appendices J and H were updated to reflect the public comment period after the draft EA was released.

APPENDIX A
ALTERNATIVES ANALYSIS
LAND ACQUISITION & OBSTRUCTION REMOVAL
FRIEDMAN MEMORIAL AIRPORT EA SUPPLEMENT

**ALTERNATIVES ANALYSIS
REPORT**

Prepared for Friedman
Memorial Airport and the
Federal Aviation
Administration



T·O ENGINEERS

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1. INTRODUCTION

This report serves as a supplement to Chapter 3 Alternatives from the Land Acquisition & Obstruction Removal Environmental Assessment (EA). This supplemental report provides greater detail regarding the established alternatives and describes the evaluation and analysis of the six alternatives described herein.

1.1 BACKGROUND

The Friedman Memorial Airport (Airport or SUN) is located in Blaine County in the City of Hailey, Idaho, within the Wood River Valley. The Friedman Memorial Airport Authority (FMAA or Sponsor), formed through a Joint Powers Agreement between the City and County, currently operates and manages the Airport.

The Airport is a commercial service airport, serving several airlines and a wide variety of general aviation traffic. The Airport currently does not meet all design standards per Federal Aviation Administration (FAA) guidance and regulations and hence, there are non-standard conditions that exist at the Airport. Several non-standard conditions at the Airport are currently allowed via approved FAA Modifications of Standards; however, the approved Modifications of Standards do not address several non-standard conditions related to land on the south end of the Airport.

1.2 OVERVIEW AND 2018 MASTER PLAN UPDATE

The Sponsor completed the 2018 Master Plan Update (MPU)¹ in part to identify deficiencies on the south end of the Airport (i.e. the Runway 31 end) and progressively work toward solutions to these non-standard conditions. The 2018 MPU recommended land acquisition for the area south of the Airport to: control the Runway Protection Zone, provide the full Runway Safety Area and full-length Runway Object Free Area for departures to the south, and protect the Airport from potential encroachment by incompatible land uses and approach/departure obstructions. The removal of tree obstructions contained within the approach and departure surfaces was also detailed in the MPU.

As recommended in the 2018 MPU, alternatives were developed to correct the identified deficiencies near the southern end of Runway 31. A total of six alternatives were established during the 2018 MPU and development of the EA. Four alternatives were developed initially, one to function as the

¹ SUN. 2018. Friedman Memorial Airport (SUN) Master Plan Update. Accessed April 25, 2018 at <http://iflysun.com/master-plan/>

No-Action alternative (for comparison purposes) and three alternatives to meet the Purpose and Need as described in Chapter 2 of the EA. Following FMAA Board review of the four initial alternatives, the Board determined none of the alternatives met the FAA's, Airport's, or landowner's needs. The FMAA Board in discussions with the landowner and FAA developed two subsequent alternatives meeting the Purpose and Need. In summary, this analysis will evaluate the established alternatives developed to address the aforementioned deficiencies linked to the southern end of the Airport (or the Runway 31 end).

2. EVALUATION CRITERIA

Evaluation criteria were developed to help analyze which alternative would best meet the Airport's needs. Each alternative was scored using the five criteria listed below.

1. Ability to Meet FAA Safety and Design Standards;
2. Cost;
3. Impacts to 4(f) Resources;
4. Environmental Impacts to Resources Other than 4(f) Resources; and,
5. Political and Administrative Feasibility.

The following subsections further describe the five criteria used to analyze and rank the alternatives.

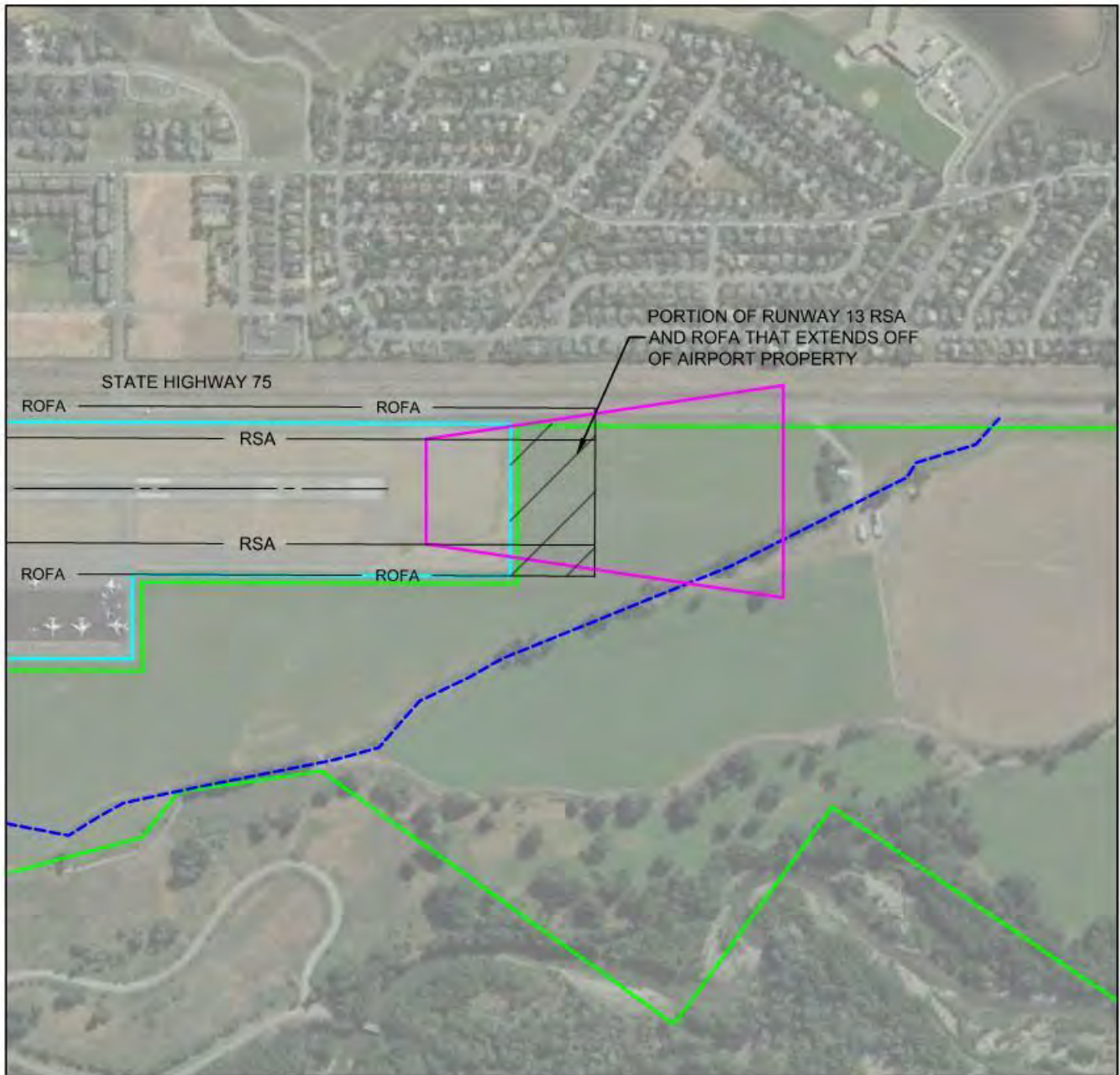
2.1 ABILITY TO MEET FAA SAFETY AND DESIGN STANDARDS

The first criterion is one of the main drivers for the project. This criterion evaluates each alternative's effectiveness at addressing the documented deficiencies related to FAA safety and design standards detailed in the subsequent sections.

2.1.1 Design Standards and Facility Requirements

According to the 2018 MPU, the design aircrafts (Q-400 and EMB-175) have an approach speed in the "C" category with a wingspan in Group III. As a result, SUN is classified as an ARC (Airport Reference Code) C-III facility (Section 1.3 of the EA). Although the Q-400 and EMB-175 commercial aircraft are identified as the most demanding aircraft based on regular use at SUN, there is also regular use of corporate jets with the C-III classification. The Airport is expected to remain ARC C-III throughout the forecasted period (2034).

According to the 2018 MPU, the Airport does not meet full design standards for an ARC C-III facility due to its constrained location and development that has occurred and is ongoing. Over the past 15 years, the Airport has attempted to identify and correct these deficiencies in standards, including



LEGEND

- AIRPORT PROPERTY BOUNDARY
- - - RUNWAY 13-31 CENTERLINE
- RUNWAY PROTECTION ZONE [RPZ]
- RSA — RUNWAY SAFETY AREA [RSA]
- ROFA — RUNWAY OBJECT FREE AREA [ROFA]
- - - COVE CANAL
- ECCLES FLYING HAT RANCH

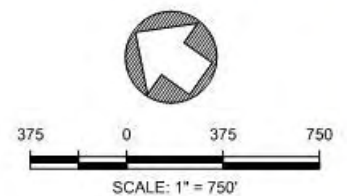


FIGURE 1-1: RUNWAY 13-31 RSA, ROFA, AND RPZ EXHIBIT



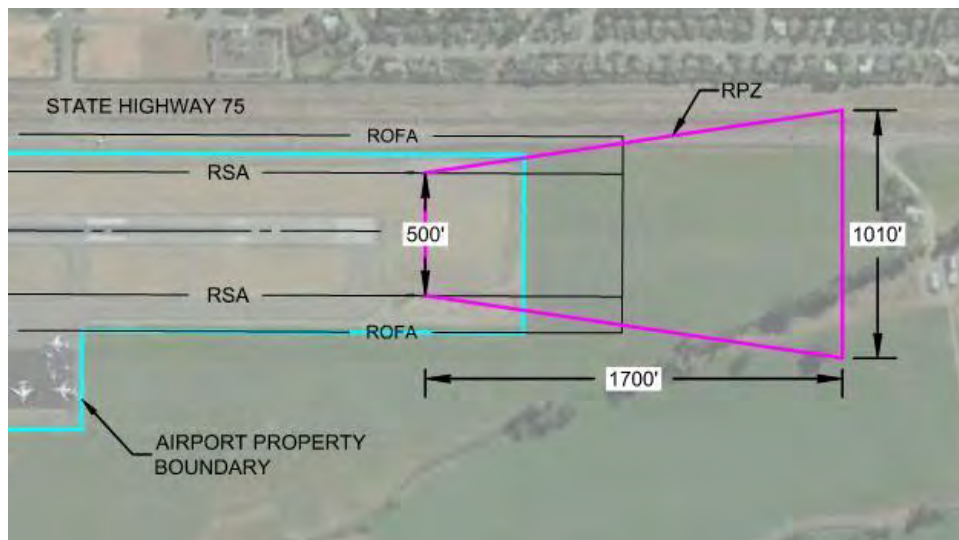
The shortened available runway impacts commercial airline operations. To safely operate off a shortened runway, especially when the air temperature is high, the airlines must reduce their take-off weight. This limits the number of passengers, baggage and fuel they can carry, meaning passengers are often bumped from flights and/or there is limited range for the airline in those conditions. This is a regular occurrence for airline flights at SUN during summer months.

2.1.3 Runway Protection Zone

As stated in the previous subsection, the RSA and ROFA are areas intended to reduce the risk of damage to airplanes in the event of an incident near the runway. The Runway Protection Zone (RPZ) is an area off the end of the runway intended to enhance the protection of people and property on the ground.

The entire RPZ off the Runway 31 end is not located on property owned or permanently controlled by the Airport. Not having control of these areas creates potential safety hazards and future land use compatibility issues. The majority of the southern RPZ and part of the RSA are owned by the adjacent landowner (Eccles Flying Hat Ranch or Ranch). This situation is complicated by the fact that the Ranch is a designated Historic District (see Section 4.8 of the EA for more information). A segment of Cove Canal, which is an irrigation ditch, also traverses the RPZ (see Section 4.2 of the EA for more information). The Runway 31 RPZ starts 200 feet off the runway end and extends 1,700 feet. The inner and outer widths of the Runway 31 RPZ are 500 feet and 1,010 feet, respectively (**Figure 1-2**).

FIGURE 1-2: RPZ Layout and Dimensions.



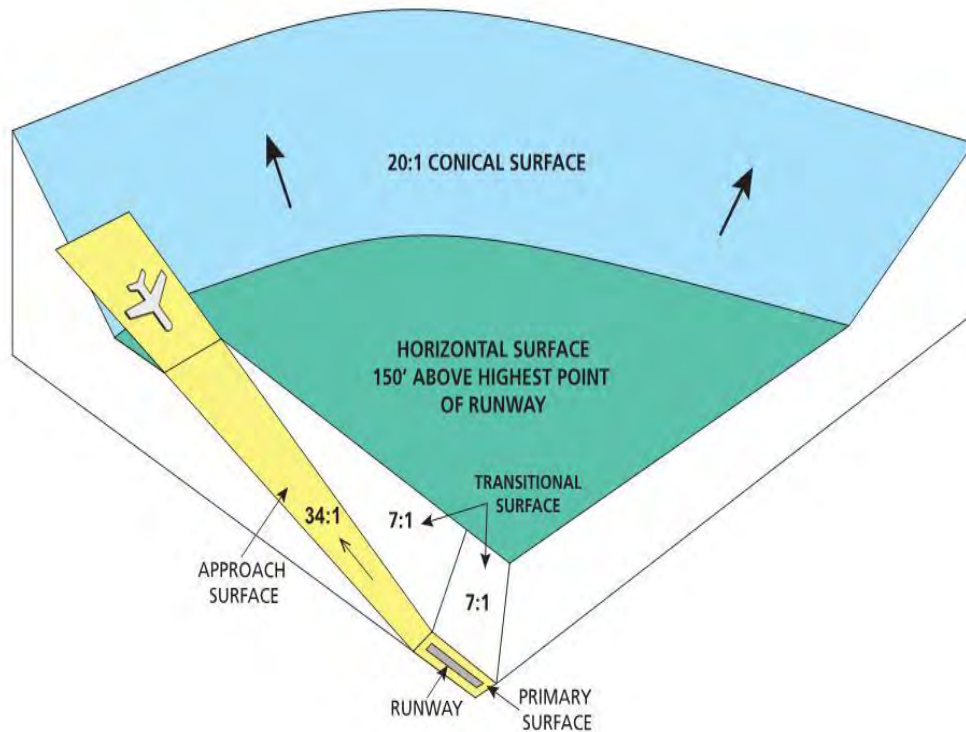
2.1.4 14 Code of Federal Regulations Part 77 Surfaces (14 CFR Part 77) and AC 150/5300-13A Departure Surface

14 CFR Part 77, “Safe, Efficient Use, and Preservation of the Navigable Airspace,” establishes descriptions for determining obstructions in navigable airspace. 14 CFR Part 77 describes imaginary surfaces that surround each airport and are defined relative to the specific airport and each runway in order to protect the safety of aircraft operating in the airport environment. Any objects (trees, buildings, towers, terrain, etc.) that penetrate these airspace surfaces are known as obstructions.

There are five surfaces associated with 14 CFR Part 77:

1. Primary Surface;
2. Approach Surface (referred to as “Part 77 Approach Surface”);
3. Horizontal Surface;
4. Conical Surface; and,
5. Transitional Surface.

Figure 1-3: 14 CFR Part 77 Surfaces

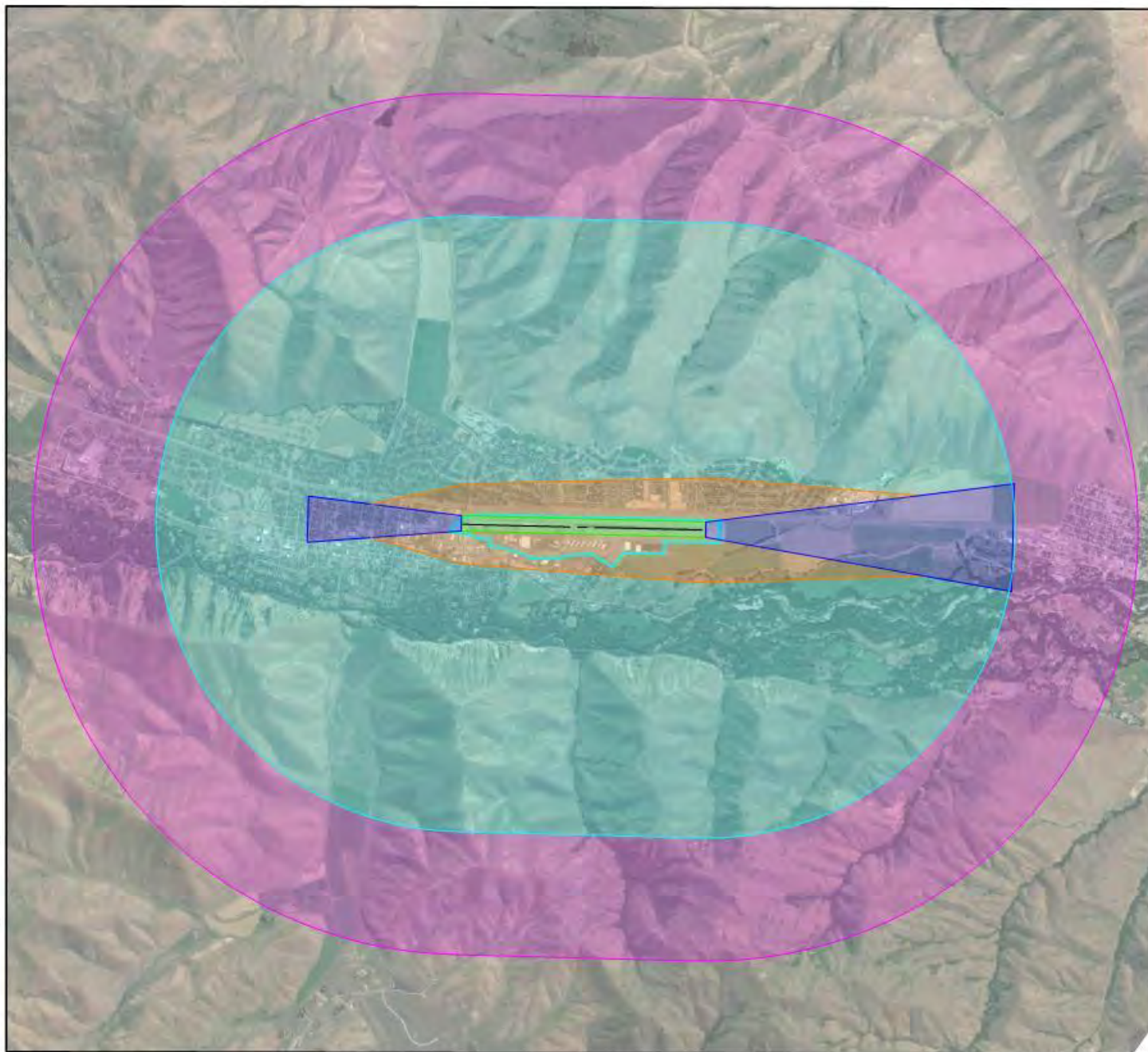


Graphic provided by T-O Engineers

In addition to 14 CFR Part 77, the FAA provides additional airport planning guidance in Advisory Circular (AC) 150/5300-13A, Airport Design. This design guidance is mandatory for airports that receive federal grants (including SUN). This document includes the definition of the Departure Surface (referred to as “AC 5300-13A Departure Surface” in this EA), which is designed to allow aircraft to follow standard departure procedures when departing an airport. This surface is much larger than the Part 77 Approach Surface. Obstructions to this surface can affect the safety of departure operations. The map for the Airport’s 14 CFR Part 77 surfaces and airspace is shown in **Figure 1-4**.

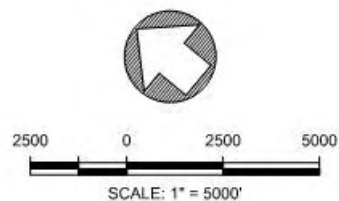
At SUN, there are approximately 200 individual trees (primarily cottonwoods) directly south of the airport, many of which are obstructions to the Part 77 Approach Surface and AC 5300-13A Departure Surface (herein referred to as Approach and Departure surfaces) used by aircraft taking off on Runway 13 (to the south) and aircraft landing on Runway 31 (from the south).

In order to achieve an acceptable level of safety for aircraft operations, obstructions in the Part 77 Approach Surface and AC 5300-13A Departure Surface must be removed or lighted, airport layouts modified (e.g., relocate the runway end), or operating procedures developed (e.g. climb gradients). An existing easement with the Eccles Flying Hat Ranch is in place to light trees which have been documented as obstructions to air navigation on their property, but this agreement expired in December of 2018. A new agreement allows the lights to remain up until the end of September 2020; however, the landowner has stated he does not want another long-term easement. See **Table 2-1** for a summary of the FAA Design Standards described in **Sections 2.1.2, 2.1.3, and 2.1.4**.



LEGEND

	PRIMARY SURFACE
	APPROACH SURFACE
	HORIZONTAL SURFACE
	CONICAL SURFACE
	TRANSITIONAL SURFACE
	RUNWAY 13-31 CENTERLINE
	AIRPORT PROPERTY BOUNDARY



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FIGURE 1-4 : 14 CFR PART 77
SURFACES



TABLE 2-1 – FAA DESIGN STANDARDS AT SUN			
FAA Design Standard	Definition	Status	Recommendation
Runway Safety Area (RSA)	A defined surface surrounding the runway, prepared or suitable for reducing the risk of damage to airplanes in the event of an undershoot, overshoot or an excursion from the runway.	Meets dimensional standards with use of Declared Distances.	Needs 1,000-foot length beyond runway. RSA is located on property not controlled by the Airport (see Figure 1-1).
Runway Free Object Area (ROFA)	An area on the ground centered on the runway centerline provided to enhance the safety of aircraft operations. No aboveground objects are permitted in the ROFA, except for objects that need to be located in the ROFA for air navigation or aircraft ground maneuvering purposes.	Meets dimensional standards with use of Declared Distances.	Supports safety measures for RSA and RPZ land acquisitions.
Runway Protection Zone (RPZ)	An area off the runway end to enhance the protection of people and property on the ground.	Non-compliant.	Acquire land or easements to protect RPZ.
Part 77 Approach Surfaces and AC 5300-13A Departure Surface	Part 77 surfaces are intended to establish standards for determining obstructions in navigable airspace that include the following surfaces: primary, transitional, approach, horizontal and conical. The AC 5300-13A Departure Surface is designed to allow aircraft to follow standard departure procedures when departing an airport. This surface is even larger than the Part 77 Approach Surface (see Figure 1-4).	Non-compliant.	Remove trees that are obstructions in the Part 77 Approach Surface and AC 5300-13A Departure Surface.

Source: T-O Engineers

As shown in **Table 2-1**, the RSA and ROFA only meet dimensional standards with the use of Declared Distances. Additionally, the RPZ, Part 77 Approach Surfaces and AC 5300-13A Departure Surfaces are non-compliant. The alternatives detailed in **Section 3** mitigate these deficiencies in variable manners and address the non-standard conditions by acquiring land to control the RPZ, removing tree obstructions within the Approach and Departure surfaces, and extending the Airport perimeter fence around the RSA. Additionally, if a proposed alternative eliminates the need for Declared Distances, the Airport will be able to utilize the full length of the existing runway pavement. The elimination of Declared Distances would not yield the need for any new pavement.

2.2 COST

The total project costs for each alternative were estimated and include the line items described below.

2.2.1 Land Acquisition (Fee Simple)

Land acquisition cost was estimated at \$20,000 per acre.

2.2.2 Permanent Avigation Easement

The total cost for maintaining a permanent avigation easement was estimated at \$10,000 per acre. This line item only applies to Alternative 3.

2.2.3 Perimeter Fencing

The cost of perimeter fencing is the same for each alternative, except for Alternative 1 – No Action Alternative. The Airport perimeter fence will be extended approximately 1,525 feet around the RSA. The unit price per linear foot (LF) of perimeter fence is estimated at \$40 based on bid prices in the region.

2.2.4 Demolition of Farmstead Structures

The demolition of farmstead structures was estimated based on bid prices in the region. The largest cost associated with the demolition of farmstead structures is found in Alternative 4, with complete removal of all farmstead structures.

2.2.5 Mitigate Loss of Active Pasture

The conversion of active pasture to land controlled by the Airport requires mitigation. The cost of mitigating the loss of active pasture was estimated at \$1,000 per acre.

2.2.6 Tree Obstruction Removal

Tree obstruction removal includes removing the obstruction lighting, cutting down all the trees, and removing debris, as well as restoring the Cove Canal after construction. Based on local preliminary bid prices, tree obstruction removal was estimated at \$100,000 for Alternatives 2 and 3, (pertaining to approximately 2,274 LF of Cove Canal) and \$120,000 for Alternatives 4, 5, and 6 (pertaining to approximately 2,691 LF of Cove Canal).

2.3 IMPACTS TO 4(F) RESOURCES

In order for the Airport to control the RSA, full length ROFA, RPZ, and remove obstructions to meet FAA standards and recommendations described in **Section 1**, acquisition of a portion of the Eccles Flying Hat Ranch would be necessary. Notably, the impact of the acquisition on the Historic District was an important consideration in the development of alternatives. Acquisition of buildings and structures that are considered contributing elements to the Historic District would be determined to have an adverse effect to a Department of Transportation, Section 4(f) historic resource. The impacts to Section 4(f) resources guided much of the development and analysis of the alternatives.

2.4 ENVIRONMENTAL IMPACTS TO RESOURCES OTHER THAN 4(F) RESOURCES

Other environmental impacts including, but not limited to: noise, farmland, biological habitat, and wetland alterations were evaluated. The removal of trees will likely lead to a slight increase in noise and vibrations to the farmhouse and surrounding property, as the trees will no longer act as a buffer to noise. The alternatives which keep the farmhouse intact would see a greater noise impact as a result of the tree removal. Farmland impacts consider the amount of active pasture that would be converted to Airport operations and the impact to existing irrigation infrastructure on the Eccles Flying Hat Ranch. Biological habitat considers the impacts to fish, wildlife, and plants associated with each alternative. Lastly, wetland alterations were also considered for each alternative and vary depending on overall Cove Canal length acquired. In summary, this criterion looks at and characterizes potential environmental resource impacts (other than 4(f) resources) of each alternative.

2.5 POLITICAL AND ADMINISTRATIVE FEASIBILITY

The preferred development alternative must be politically and administratively feasible. The political feasibility considers whether the appropriate decision makers (i.e. FAA, FMAA, landowner) approve of the alternative. The administrative feasibility considers the ease of implementation. The alternatives should not be overly disruptive or troublesome to incorporate or implement. This factor also considers the impacts to adjacent property (i.e. access and management of remaining resources). Generally speaking, alternatives that may see greater opposition or are difficult to implement will be discounted under this criterion.

3. ALTERNATIVES

This section summarizes the alternatives identified in the EA and provides a detailed analysis of the criteria presented in **Section 2**. There are six overall alternatives that will be described (one No-Action

Alternative and five Action Alternatives). In addition to the alternative description, the following criteria are addressed for each alternative:

1. Ability to Meet FAA Safety and Design Standards;
2. Cost;
3. Impacts to 4(f) Resources;
4. Environmental Impacts to Resources Other than 4(f) Resources; and,
5. Political and Administrative Feasibility.

Scores were assigned on a 7-level scoring system to score each alternative on the criteria and are defined as: High (6 points), Moderate-High (5 points), Moderate (4 points), Moderate-Low (3 points), Low (2 points), Low-Unacceptable (1 point), and Unacceptable (0 points). Each alternative was scored individually and is illustrated in its respective alternative section. Alternative scores were then compiled and compared in a composite scoring matrix (see **Attachment 1**).

3.1 ALTERNATIVE 1

3.1.1 DESCRIPTION

Alternative 1 presents a No-Action Alternative, which maintains the existing conditions. Existing conditions of the Runway 31 end does not allow for full Airport control of the RPZ and Approach and Departure surfaces, including maintenance of obstruction lights. Implementation of the No-Action Alternative would allow the current issues to persist and would not give the Airport control of the RPZ or the Approach and Departure surfaces. Additionally, the Airport would continue to utilize Declared Distances, which shortens the usable length of the runway.

While there may be no initial and/or construction costs associated with the No-Action Alternative, in the long-term, the No-Action Alternative is economically unsustainable, as the FAA will not fund future projects that do not meet current standards. After the aviation easement expires and the property is no longer controlled by the Airport, future projects may be harder to approve and fund. Likewise, the annual expense of the easement is costly. Additionally, the landowner of the Eccles Flying Hat Ranch has stated that he is not agreeable to another long-term easement for lighting the trees. If the easement was allowed to expire, the FAA's flight procedures office has advised that the instrument approach procedures for SUN would be noted as unavailable after dark since the obstruction lights in the trees would have to be removed and the trees (obstructions) would remain. This would result in severe restrictions to the operational capability of the airport.

Based on the design standards shown in **Table 2-1** (on page 9), the No-Action Alternative is inconsistent with the management and development policies of the FAA, as well as the FAA's design standards to ensure safe and efficient public air transportation facilities that are socially, environmentally, and economically sustainable.

This alternative does not meet the Purpose and Need as described in Chapter 2 of the EA. Although this alternative does not meet the Purpose and Need, the Council of Environmental Quality (CEQ) and National Environmental Policy Act (NEPA) regulations require consideration of a No-Action Alternative.

3.1.2 ABILITY TO MEET FAA SAFETY AND DESIGN STANDARDS

As Alternative 1 is a No-Action Alternative, it fails to meet FAA safety and design standards. This would not give the Airport control of the RPZ or the Approach and Departure surfaces. Additionally, the Airport would continue to utilize Declared Distances, which shortens the usable length of the runway. These factors result in a score of Unacceptable.

3.1.3 COST

Alternative 1 estimated costs are summarized as follows:

Land Acquisition (Fee Simple):	N/A
Permanent Avigation Easement:	N/A
Perimeter Fencing:	N/A
Demolition of Farmstead Structures:	N/A
Mitigate Loss of Active Pasture Land:	N/A
Tree Obstruction Removal:	N/A
Total	\$0.00

As Alternative 1 is the No-Action Alternative, there is no upfront cost, resulting in a score of High.

3.1.4 SECTION 4(F) RESOURCE IMPACTS

As Alternative 1 is the No-Action Alternative, no 4(f) resources will be impacted, resulting in a score of High.

3.1.5 ENVIRONMENTAL RESOURCE IMPACTS OTHER THAN 4(F) RESOURCES

As Alternative 1 is the No-Action Alternative, no environmental resources will be impacted, resulting in a score of High.

3.1.6 POLITICAL AND ADMINISTRATIVE FEASIBILITY

The No-Action Alternative will result in continued incompatible land uses, Declared Distances, and the eventual expiration of the aviation easement. The landowner is not agreeable to another long-term easement, so the existing obstructions would remain, without means to maintain the obstruction lighting. Additionally, the FAA will not continue to provide funding to projects that do not meet current standards.

Due to the continued incompatible land use, Declared Distances, lack of access to obstruction lighting (and lack of obstruction removal), discontinued FAA funding, and lack of landowner willingness in renewing the easement, Alternative 1 has a score of Low-Unacceptable.

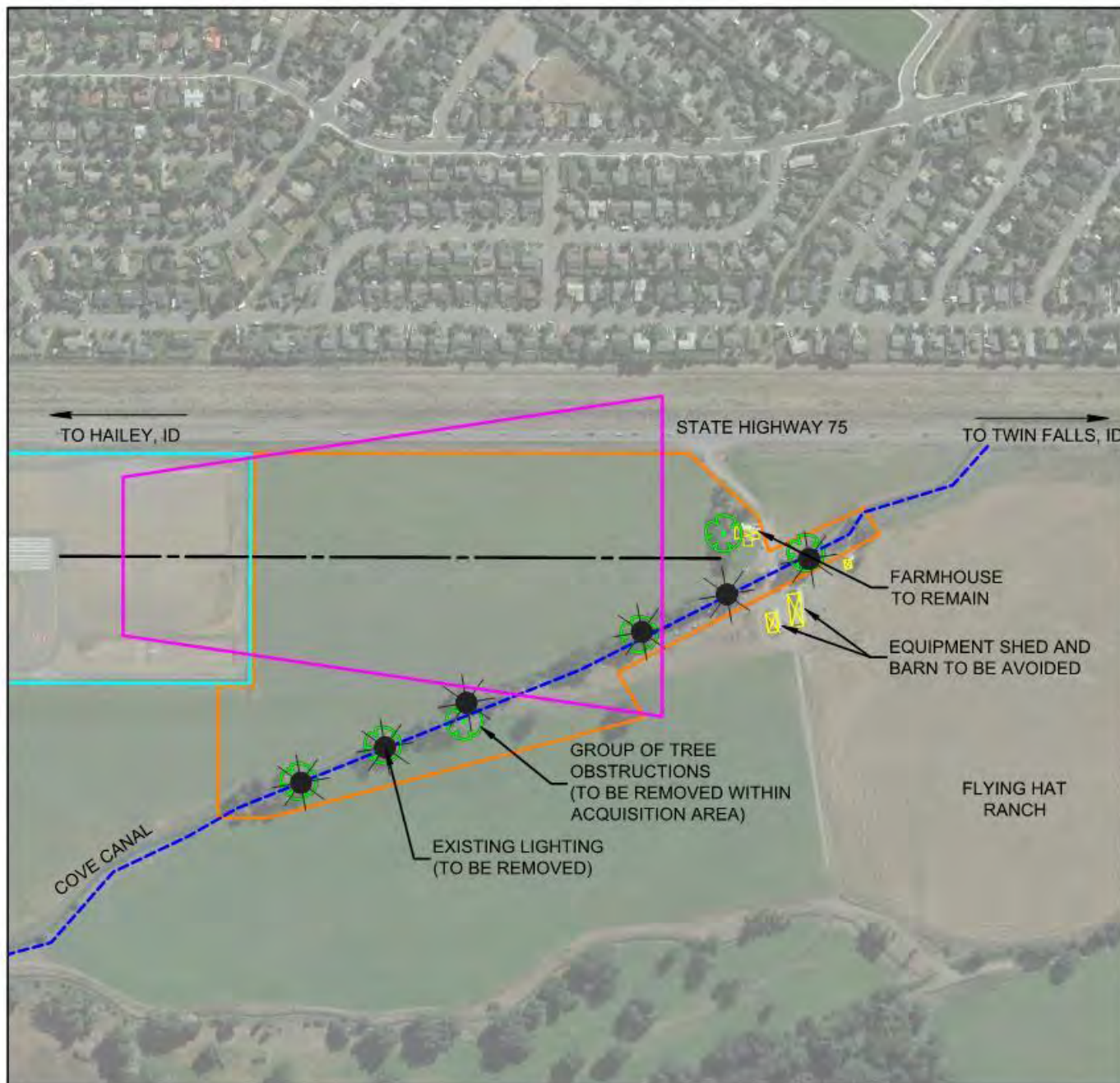
Table 3-1 provides a summary of the evaluation criteria used to determine the feasibility of Alternative 1.

TABLE 3-1: ALTERNATIVE 1 - SCORED CRITERIA		
Criteria	Explanation	Score
Ability to Meet FAA Safety and Design Standards	Fails to meet FAA safety and design standards. This would not give the Airport control of the RPZ or the Approach and Departure surfaces. Additionally, the Airport would continue to utilize Declared Distances, which shortens the usable length of the runway. These factors result in a score of Unacceptable.	0
Cost	As Alternative 1 is the No-Action Alternative, there is no upfront cost, resulting in a score of High.	6
4(f) Resource Impacts	As Alternative 1 is the No-Action Alternative, no 4(f) resources will be impacted, resulting in a score of High.	6
Environmental Impacts (Non-4(f) Resource Impacts)	As Alternative 1 is the No-Action Alternative, no environmental resources will be impacted, resulting in a score of High.	6
Political and Administrative Feasibility	Due to continued incompatible land use, Declared Distances, lack of access to obstruction lighting (and lack of obstruction removal), discontinued FAA funding, and lack of landowner willingness, Alternative 1 has a score of Low-Unacceptable.	1
Total (of 30)		19

3.2 ALTERNATIVE 2

3.2.1 DESCRIPTION

Alternative 2, shown in **Figure 3-1**, provides the minimum acreage which would be required to gain perpetual control of the RPZ and clear the documented obstructions, with two exceptions. The land acquisition in this alternative encompasses almost the entire RPZ, except for the areas overlapping Highway 75 and a small segment of land in the southwestern corner of the RPZ. Alternative 2 is met without the use of easements. This alternative would acquire 34.3 acres of land, consisting of 30.2 acres of active pasture, 3.1 acres attributed to the Cove Canal, and 1 acre of farmstead. Avoiding irrigation infrastructure (specifically irrigation controls and electrical supply) was incorporated into Alternative 2 in order to minimize modifications to irrigation equipment housed in the southwestern corner of the RPZ.



LEGEND

- ALTERNATIVE ACQUISITION AREA (34.3 ACRES)
- AIRPORT PROPERTY BOUNDARY
- - - RUNWAY 13-31 CENTERLINE
- RUNWAY PROTECTION ZONE
- - - COVE CANAL
- ⊗ GROUP OF TREE OBSTRUCTIONS (TO BE REMOVED WITHIN ACQUISITION AREA)
- ⊗ OBSTRUCTION LIGHTING
- ⊗ FARMHOUSE AND OUTBUILDINGS

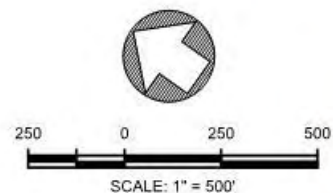


FIGURE 3-1 : ALTERNATIVE 2



3.2.2 ABILITY TO MEET FAA SAFETY AND DESIGN STANDARDS

Alternative 2 acquires the minimum acreage required to meet FAA Standards. This alternative would eliminate the need for Declared Distances, thereby extending the use of Runway 31 by 400 feet. This option removes incompatible land uses from the Runway 31 RPZ, with exception of those areas overlapping Highway 75. There would be no aviation easements in place and all of the land would be owned by the Airport, with exception to a small portion of land (avoiding irrigation infrastructure) that will still be owned by the Eccles Hat Flying Ranch. Alternative 2 also provides a high compatibility with future needs, however it does not acquire all acreage necessary to fully protect the Approach and Departure surfaces.

Alternative 2 provides a fully compliant RSA, full length ROFA, and eliminates the Declared Distances, but does not give the Airport full control of the RPZ due to land in the southwest corner of the RPZ still being owned by the Ranch. Thereby, Alternative 2 scores Moderate in terms of the overall ability to meet FAA safety and design standards.

3.2.3 COST

Alternative 2 estimated costs are summarized as follows:

Land Acquisition (Fee Simple):	\$686,000
Permanent Aviation Easement:	N/A
Perimeter Fencing:	\$61,000
Demolition of Farmstead Structures:	N/A
Mitigate Loss of Active Pasture Land:	\$30,200
Tree Obstruction Removal:	\$100,000
Total	\$877,200

Alternative 2 has the lowest cost relative to the action alternatives resulting in an overall score of Moderate-High.

3.2.4 SECTION 4(F) RESOURCE IMPACTS

In the vicinity of the Runway 31 end Section 4(f) resources include: the Eccles Flying Hat Ranch, the Cove Canal, windrow of trees around the farmhouse, the equipment shed, barn, and the farmhouse. Alternative 2 would acquire 34.3 acres of the Ranch and 2,274 feet of Cove Canal to remove tree obstructions and prevent tree obstruction regrowth. Alternative 2 did not include the segment of Cove Canal (approximately 417 linear feet of canal) that stems between the farmstead and Highway 75 to the east. The Eccles Flying Hat Ranch farmhouse would be acquired but left intact.

Alternative 2 acquires 34.3 acres from the 4(f) Ranch, including the farmhouse (to be left intact) and 2,274' of the Cove Canal, which correlates to a Moderate score due to the anticipated 4(f) resource impacts.

3.2.5 ENVIRONMENTAL IMPACTS TO RESOURCES OTHER THAN 4(F) RESOURCES

Sections of the Ranch are within the 65-decibel Day-Night Average Sound Level (DNL) noise contour threshold² and is known to have issues with vibration and noise during take-off and landings. The removal of trees would likely lead to a slight increase in noise and vibrations to the farmhouse and surrounding property, though the farmhouse is outside of the 65-decibel DNL noise contour. As the 20-year forecasts indicate, impacts from noise and lighting would increase with the additional air traffic and with the larger aircraft planned for the Airport.

Alternative 2 has a slight impact to the farm by reducing overall farm acreage (30.2 acres of pasture), however the impact is slight and does not impact overall farm operations. Alternative 2 subsequently has the lowest effect of the action alternatives on habitat and wetland alterations as it is affected by tree removal along 2,274' of Cove Canal.

Alternative 2 will have a slight increase in noise, will reduce pasture by 30.2 acres (but will not affect farm operations), and will affect wildlife and wetlands through tree removal of 2,274' of the Cove Canal, which results in a Moderate score.

3.2.6 POLITICAL AND ADMINISTRATIVE FEASIBILITY

The property between the Cove Canal and the farmhouse would be isolated without access and without enough acreage to be an economical parcel. Further, this prevents full access to and management of the Cove Canal. Alternative 2 is relatively feasible but creates uneconomical parcels, does not remove all incompatible uses, and does not retain full control of the Cove Canal. Without control over the Cove Canal up to Highway 75 there is a high possibility for new trees to grow on property not controlled by the Airport that may become obstructions. Alternative 2 also had a high feasibility due to having the lowest costs of the action alternatives but had a moderate to low amount of public support due to the fact that the public expressed support for fiscal conservation. Alternative

² Day-Night Average Sound Level (DNL) is the metric used to quantify noise levels and represents the 365-day average, in decibels, of the day and night average sound level. Sixty-five (65) DNL is considered a significant threshold because all land uses are considered compatible with noise levels below 65 DNL.

2 also had low political support in the form of acceptance by the decision makers (FAA, FMAA, landowner).

Because of the creation of uneconomical parcels, remaining incompatible land uses, lack of full Cove Canal control, and low overall support by the decision makers, Alternative 2 has a score of Low.

Table 3-2 provides a summary of the evaluation criteria and scoring used to evaluate Alternative 2.

TABLE 3-2: ALTERNATIVE 2 - SCORED CRITERIA		
Criteria	Explanation	Score
Ability to Meet FAA Safety and Design Standards	Provides a fully compliant RSA, full length ROFA, and eliminates the Declared Distances, but does not give the Airport full control of the RPZ due to land in the southwest corner of the RPZ still being owned by the Ranch. Thereby, Alternative 2 results in an overall score of Moderate.	4
Cost	Provides the lowest overall cost for the action alternatives resulting in a score of Moderate-High.	5
4(f) Resource Impacts	Acquires 34.3 acres from the 4(f) Ranch, including the farmhouse (to be left intact) and 2,274' of the Cove Canal, which correlates to a Moderate score due to the anticipated 4(f) resource impacts.	4
Environmental Impacts (Non-4(f) Resource Impacts)	Slight increase in noise, will reduce pasture by 30.2 acres (but will not affect farm operations), and will affect wildlife and wetlands through tree removal of 2,274' of the Cove Canal and results in a Moderate score.	4
Political and Administrative Feasibility	Creation of uneconomical parcels, remaining incompatible land uses, lack of full Cove Canal control, and low overall support by the decision makers, Alternative 2 has a score of Low.	2
Total (of 30)		19

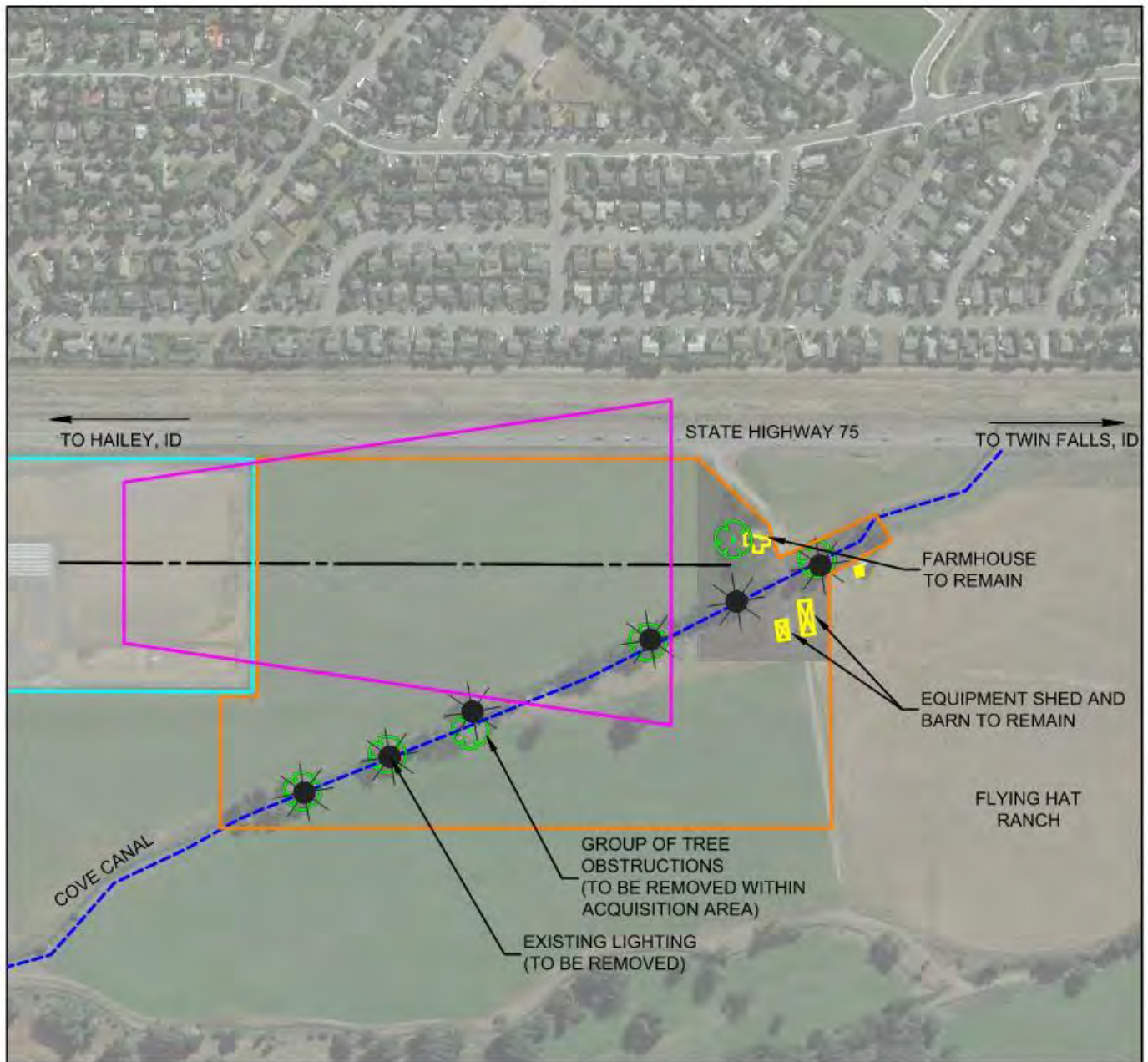
Source: T-O Engineers

3.3 ALTERNATIVE 3

3.3.1 DESCRIPTION

Alternative 3, shown in **Figure 3-2**, expands the total area of acquisition toward the southwest compared to Alternative 2. Compared to Alternative 2, Alternative 3 would gain control over 12.7 additional acres for a total of 47 acres. The land acquisition would consist of 41 acres of active pasture, 3.1 acres attributed to the Cove Canal, and 2.9 acres of farmstead. Moreover, the acquisition of the 47 acres includes: 4.7 acres in avigation easement and 42.3 acres in fee simple acquisition. Distinctly different than Alternative 2, the Alternative 3 westerly boundary line of the acquisition stems approximately 800' parallel of the extended runway centerline, which aids to clear transitional surfaces.

Alternative 3 encumbers the entire farmstead by placing approximately 4.7 acres into an avigation easement for the maintenance of the obstructions. Similar to Alternative 2, Alternative 3 would acquire 2,274 feet of Cove Canal to remove tree obstructions and prevent tree obstruction regrowth. Alternative 3 did not include the segment of Cove Canal (approximately 417 linear feet) that stems between the farmstead and Highway 75 to the east.



LEGEND

- AVIGATION EASEMENT (4.7 ACRES)
- ALTERNATIVE ACQUISITION AREA (TOTAL OF 47 ACRES)
- AIRPORT PROPERTY BOUNDARY
- RUNWAY 13-31 CENTERLINE
- RUNWAY PROTECTION ZONE
- COVE CANAL
- GROUP OF TREE OBSTRUCTIONS (TO BE REMOVED WITHIN ACQUISITION AREA)
- OBSTRUCTION LIGHTING
- FARMHOUSE AND OUTBUILDINGS

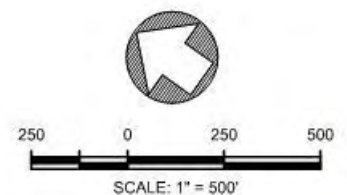


FIGURE 3-2 : ALTERNATIVE 3



3.3.2 ABILITY TO MEET FAA SAFETY AND DESIGN STANDARDS

Alternative 3 would remove all incompatible land use from the RPZ, with exception to those areas overlapping Highway 75. This alternative would eliminate the need for Declared Distances, thereby extending the use of Runway 31 by 400 feet.

Alternative 3 provides a fully compliant RSA, full length ROFA, eliminates the Declared Distances, and gives the Airport full control of the RPZ, but does so through the use of an avigation easement. Thereby, Alternative 3 scores Moderate-High in terms of the overall ability to meet FAA safety and design standards.

3.3.3 COST

Alternative 3 estimated costs are summarized as follows:

Land Acquisition:	\$846,000
Permanent Avigation Easement:	\$47,000
Perimeter Fencing:	\$61,000
Demolition of Farmstead Structures:	N/A
Mitigate Loss of Active Pasture Land:	\$41,000
Tree Obstruction Removal:	\$100,000
Total	\$1,095,000

After Alternative 2, Alternative 3 has the next lowest cost relative to the action alternatives resulting in an overall score of Moderate-High.

3.3.4 SECTION 4(F) RESOURCE IMPACTS

In the vicinity of the Runway 31 end Section 4(f) resources include: the Eccles Flying Hat Ranch, the Cove Canal, windrow of trees around the farmhouse, the equipment shed, barn, and the farmhouse. Alternative 3 would acquire 47 acres of the Ranch and 2,274 feet of Cove Canal to remove tree obstructions and prevent tree obstruction regrowth. Alternative 3 did not include the segment of Cove Canal (approximately 417 linear feet of canal) that stems between the farmstead and Highway 75 to the east. The Eccles Flying Hat Ranch farmhouse would be acquired but left intact.

Alternative 3 acquires 47 acres from the 4(f) Ranch, including the farmhouse (to be left intact) and 2,274' of the Cove Canal, which correlates to a Moderate score due to the anticipated 4(f) resource impacts.

3.3.5 ENVIRONMENTAL IMPACTS OTHER THAN 4(F) RESOURCES

The removal of trees would likely lead to a slight increase in noise and vibrations to the farmhouse and surrounding property, though the farmhouse is outside of the 65-decibel DNL noise contour.

Alternative 3 has a slight impact to the farm by reducing overall farm acreage (41 acres of pasture), however the impact is slight and does not impact overall farm operations. The avigation easement would allow the continued use of the farmhouse, barn and outbuildings so that the property can continue to function as a farm. Alternative 3 has an impact on habitat and wetland alterations linked to the tree removal along 2,274' of Cove Canal.

Alternative 3 will have a slight increase in noise, will reduce pasture by 41 acres (but will not affect farm operations), and will affect wildlife and wetlands through tree removal of 2,274' of the Cove Canal and results in a Moderate score.

3.3.6 POLITICAL AND ADMINISTRATIVE FEASIBILITY

Alternative 3 provides a moderate amount of land acquisition and uses an avigation easement to meet FAA Standards. This alternative would eliminate the need for Declared Distances, thereby extending the use of Runway 13 by 400 feet (or an additional 1,525' of perimeter fencing). Alternative 3 removes incompatible land uses from the Runway 31 end RPZ, with exception to those areas overlapping Highway 75.

Like Alternative 2, Alternative 3 does not result in full ownership of the Cove Canal extending to the Highway 75 right-of-way (ROW). Costs to implement Alternative 3 are slightly higher than Alternative 2 due to additional acreage acquired. The use of an avigation easement to control the RPZ is not preferred by the decision makers and results in a Low score.

Table 3-3 provides a summary of the evaluation criteria and scoring used to evaluate Alternative 3.

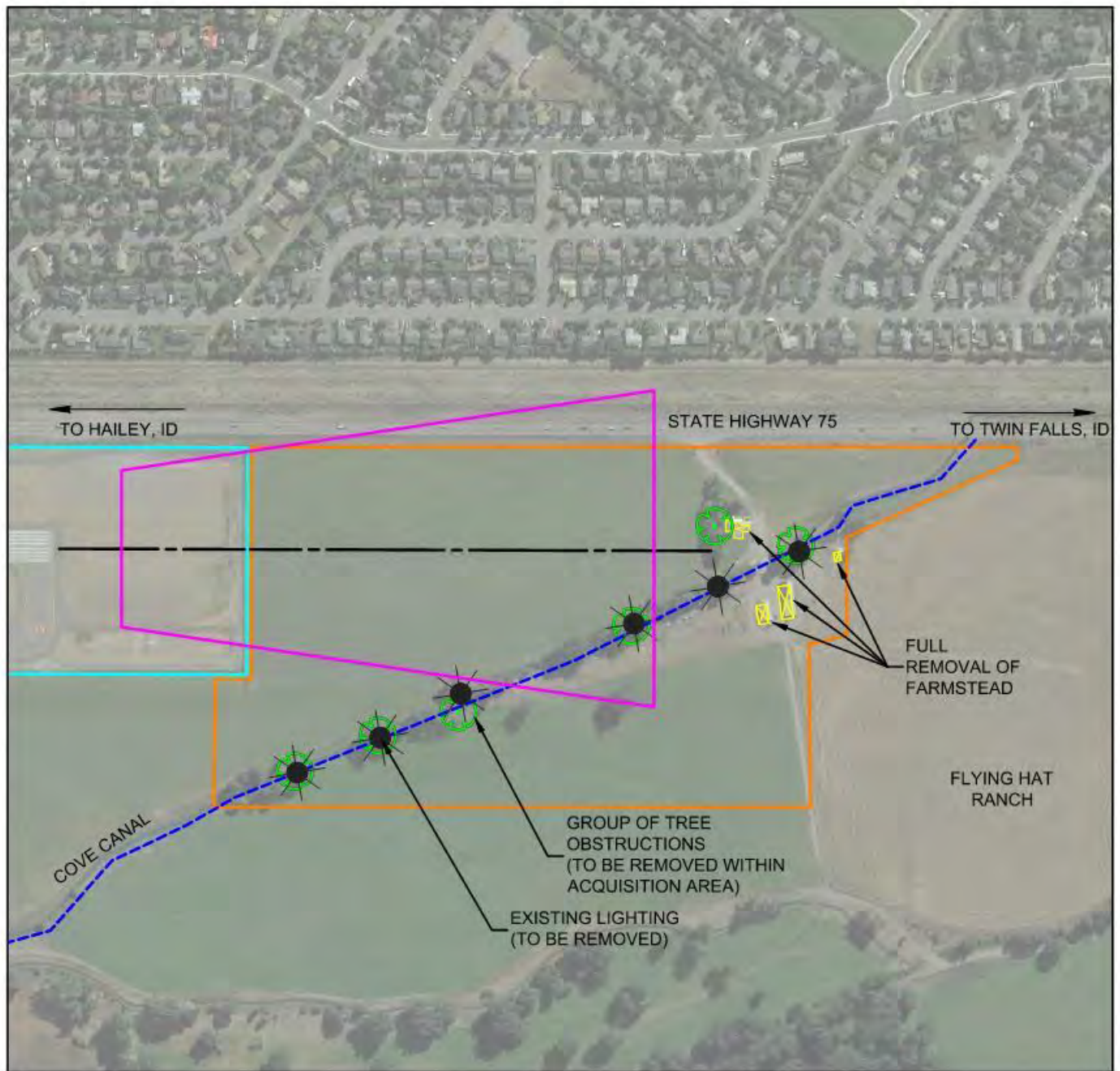
TABLE 3-3: ALTERNATIVE 3 - SCORED CRITERIA		
Criteria	Explanation	Score
Ability to Meet FAA Safety and Design Standards	Provides a fully compliant RSA, full length ROFA, eliminates the Declared Distances, and gives the Airport full control of the RPZ, but does so using an avigation easement, resulting in a Moderate-High score.	5
Cost	Provides the second lowest overall cost for the action alternatives resulting in a score of Moderate-High.	5
4(f) Resource Impacts	Acquires 41 acres from the 4(f) Ranch, including the farmhouse (to be left intact) and 2,274' of the Cove Canal, which correlates to a Moderate score due to the anticipated 4(f) resource impacts.	4
Environmental Impacts (Non-4(f) Resource Impacts)	Slight increase in noise, will reduce pasture by 41 acres (but will not affect farm operations), and will affect wildlife and wetlands through tree removal of 2,274' of the Cove Canal and results in a Moderate score.	4
Political and Administrative Feasibility	Does not result in full ownership of the Cove Canal, costs to implement this alternative are slightly higher than Alternative 2, and Alternative 3 also uses an avigation easement, which is not preferred by any of the decision makers. These factors led to Alternative 3 receiving a Low score.	2
Total (of 30)		20

Source: T-O Engineers

3.4 ALTERNATIVE 4

3.4.1 DESCRIPTION

Alternative 4, shown in **Figure 3-3**, expands the total area of acquisition toward the east. Compared to Alternative 3, Alternative 4 would gain control over 5 additional acres for a total of 52 acres. The land acquisition would consist of 44.3 acres of active pasture, 3.7 acres attributed to the Cove Canal, and 4 acres of farmstead. The easterly boundary of the acquisition extends to include approximately 417 feet of Cove Canal up to the Highway 75 R-O-W and includes all the Eccles Flying Hat Ranch buildings. The additional acreage would provide greater ownership of the Cove Canal for ongoing maintenance. The impacts to the historic farmstead are the greatest with this alternative.



LEGEND

- ALTERNATIVE ACQUISITION AREA (52 ACRES)
- AIRPORT PROPERTY BOUNDARY
- - - RUNWAY 13-31 CENTERLINE
- RUNWAY PROTECTION ZONE
- - - COVE CANAL
- ⊗ GROUP OF TREE OBSTRUCTIONS (TO BE REMOVED WITHIN ACQUISITION AREA)
- ⊗ OBSTRUCTION LIGHTING
- ⊗ FARMHOUSE AND OUTBUILDINGS

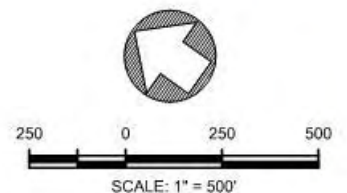


FIGURE 3-3 : ALTERNATIVE 4



3.4.2 ABILITY TO MEET FAA SAFETY AND DESIGN

Alternative 4 acquires a moderate amount of acreage required to meet FAA Standards. This alternative would eliminate the need for Declared Distances, thereby extending the use of Runway 31 by 400 feet. This option removes incompatible land uses from the Runway 31 RPZ, with exception of those areas overlapping Highway 75. There would be no aviation easements in place and all of the land would be owned by the Airport. Alternative 4 acquires all acreage necessary to fully protect the Approach and Departure surfaces.

Alternative 4 provides a fully compliant RSA, full length ROFA, eliminates the Declared Distances, and gives the Airport full control of the RPZ. Thereby, Alternative 4 scores High in terms of the overall ability to meet FAA safety and design standards.

3.4.3 COST

The costs shown below, in addition to costs common to all alternatives, include the increase in costs due to the farmstead removal:

Alternative 4 estimated costs are summarized as follows:

Land Acquisition:	\$1,040,000
Permanent Aviation Easement:	N/A
Perimeter Fencing:	\$61,000
Demolition of Farmstead Structures:	\$75,000
Mitigate Loss of Active Pasture Land:	\$44,300
Tree Obstruction Removal:	\$120,000
Total	\$1,340,300

Alternative 4 exhibits an increase in total cost over Alternative 3 due to the increase in land acquisition and the costs associated with demolition of the farmstead structures. Due to the increased costs, Alternative 4 received a Moderate score.

3.4.4 SECTION 4(F) RESOURCE IMPACTS

Alternative 4 would acquire a total of 52 acres of the 4(f) Ranch and consists of 44.3 acres of active pasture, 3.7 acres attributed to the Cove Canal, and 4 acres of farmstead. This alternative acquires the original 2,274' of Cove Canal plus an additional 417' to the east to include the portion remaining to the highway ROW (for a total of 2,691' of canal) to remove tree obstructions and prevent tree

obstruction regrowth. Alternative 4 includes full removal of the farmstead, including the demolition of the equipment shed, barn, farmhouse, and well house.

Alternative 4 acquires 52 acres from the 4(f) Ranch, including the farmhouse (to be demolished) and 2,691' of the Cove Canal. This alternative received a Low score due to the increased anticipated 4(f) resource impacts.

3.4.5 ENVIRONMENTAL IMPACTS OTHER THAN 4(F) RESOURCES

The removal of trees would likely lead to a slight increase in noise and vibrations to the farmhouse and surrounding property. However, by removing the farmhouse, Alternative 4 eliminates the noise, vibration and light issues described in Alternatives 2 and 3.

Alternative 4 has an increased impact to the farm by reducing overall farm acreage (44.3 acres of pasture). The acquisition may impact overall farm operations as the land to be acquired includes the pump and irrigation structures. Alternative 4 also has an increased impact on habitat and wetland as it is affected by tree removal along 2,691' of Cove Canal.

Alternative 4 will reduce pasture by 44.3 acres, may affect farm operations, and will affect wildlife and wetlands through tree removal of 2,691' of the Cove Canal, which results in a Moderate-Low score.

3.4.6 POLITICAL AND ADMINISTRATIVE FEASIBILITY

Alternative 4 includes the largest area of the Cove Canal up to Highway 75. This option removes all incompatible land uses from the Runway 31 RPZ, with exception to those overlapping Highway 75; common to Alternatives 2 through 4. This alternative would eliminate the need for Declared Distances, thereby extending the use of Runway 13 by 400 feet (or 1,525' of additional perimeter fence). Alternative 4 includes full removal of the farmstead, resulting in an increase in 4(f) impacts and thus, reduces the appeal of this alternative to the decision makers.

One of the main concerns with this alternative would be the voluntary vacancy of the farmhouse occupant. Through initial conversations with the Ranch manager and landowner, it seems likely that the relocation is feasible. Conversely, the landowner was not in favor to include the pump house in the acquisition as it controls the water for all 615 acres of property, resulting in reduced support of Alternative 4.

In summary, Alternative 4 removes all incompatible land uses and gives the Airport full control of the RSA, full length ROFA, and RPZ, while eliminating the need for Declared Distances. However, the increased impacts on 4(f) resources, the displacement of the farmhouse occupants, and the resistance of the landowner to include the pump house and irrigation controls with the land acquisition, led to Alternative 4 receiving a score of Moderate-Low.

Table 3-4 provides a summary of the evaluation criteria and scoring used to evaluate Alternative 4.

TABLE 3-4: ALTERNATIVE 4 - SCORED CRITERIA		
Criteria	Explanation	Score
Ability to Meet FAA Safety and Design Standards	Provides a fully compliant RSA, full length ROFA, eliminates the Declared Distances, and gives the Airport full control of the RPZ. Thereby, Alternative 4 results in an overall score of High.	6
Cost	Due to the increased costs of land acquisition and farmstead demolition, Alternative 4 received a Moderate score.	4
4(f) Resource Impacts	Alternative 4 acquires 52 acres from the 4(f) Ranch, including the farmhouse (to be demolished) and 2,691' of the Cove Canal. This alternative received a Low score due to the increased anticipated 4(f) resource impacts.	2
Environmental Impacts (Non-4(f) Resource Impacts)	Alternative 4 will reduce pasture by 44.3 acres, may affect farm operations, and will affect wildlife and wetlands through tree removal of 2,691' of the Cove Canal, which results in a Moderate-Low score.	3
Political and Administrative Feasibility	The increased impacts on 4(f) resources, the displacement of the farmhouse occupants, and the resistance of the landowner to include the pump house and irrigation controls with the land acquisition, led to Alternative 4 receiving a score of Moderate-Low.	3
Total (of 30)		18

Source: T-O Engineers

3.5 ALTERNATIVE 5

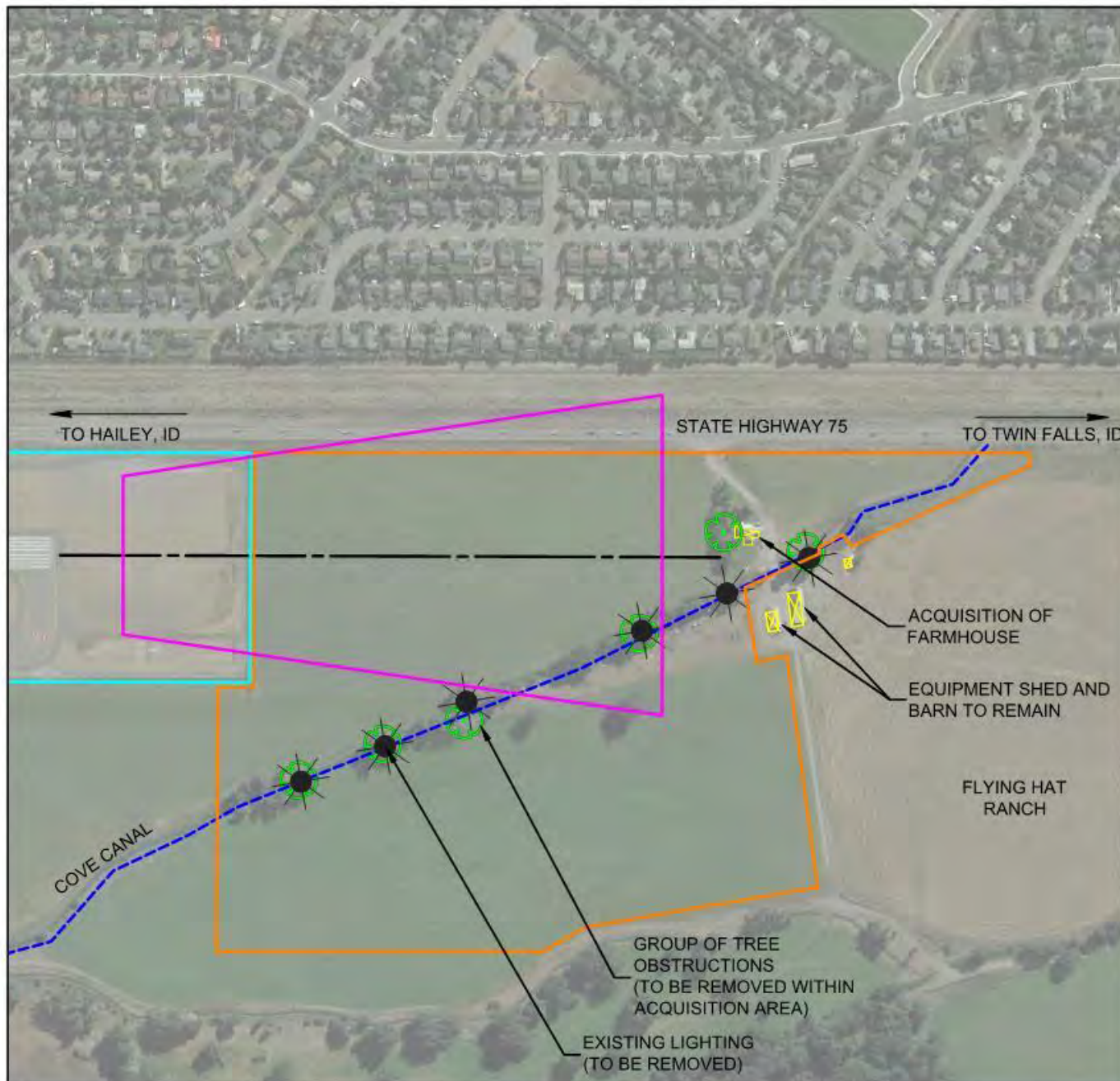
3.5.1 DESCRIPTION

The preliminary action alternatives (Alternatives 2 through 4) were developed in May of 2017. At the FMAA Board meeting on July 7, 2017, these alternatives and preliminary environmental evaluation criteria for the alternatives were presented and discussed. The Board accepted the evaluation criteria and scheduled a public meeting to request feedback on Alternatives 1 through 4. Prior to the public meeting, the preliminary environmental evaluation criteria were summarized based on the discussion at the July 2017 Board meeting and a bulleted pros and cons description of each alternative was developed. Alternatives 1 through 4, along with the resulting pros and cons, were then presented to the public at a formal public meeting held on August 8, 2017 in Hailey, Idaho. Stakeholders, invitees, sign-in sheets, and the information presented during the meeting is included in Appendix H of the EA.

Following the formal public meeting on August 8th, the Alternatives, along with the resulting pros and cons, were presented to the FMAA Board at a regularly scheduled meeting. The FMAA Board agreed that none of the preliminary action alternatives (Alternatives 2 through 4) met all of the Airport's, FAA's, or property owner's needs. Based on discussions at this meeting, Alternative 5 was created using parts and concepts of Alternatives 2, 3, and 4.

Alternative 5 was formally presented to the FMAA Board at a regularly scheduled meeting, held on September 5, 2017. The Board was unanimously in favor of Alternative 5 becoming the Proposed Action Alternative.

Figure 3-4 shows Alternative 5 as approved by the FMAA Board. Alternative 5 expands the total area of acquisition toward the southwest compared to Alternative 4. Compared to Alternative 4, Alternative 5 would gain control over 12.8 additional acres for a total of 64.8 acres. The land acquisition would consist of 59.8 acres of active pasture, 3.7 acres attributed to the Cove Canal, and 1.3 acres of farmstead. The westerly boundary of the acquisition extends approximately 1,250 feet from the runway centerline. Notably, Alternative 5 would include acquisition of the farmhouse for future removal but would avoid the remaining farmstead buildings, namely the equipment shed, historic barn, and irrigation infrastructure.



LEGEND

- ALTERNATIVE ACQUISITION AREA (64.8 ACRES)
- AIRPORT PROPERTY BOUNDARY
- - - RUNWAY 13-31 CENTERLINE
- RUNWAY PROTECTION ZONE
- - - COVE CANAL
- ⊗ GROUP OF TREE OBSTRUCTIONS (TO BE REMOVED WITHIN ACQUISITION AREA)
- ⊗ OBSTRUCTION LIGHTING
- FARMHOUSE AND OUTBUILDINGS

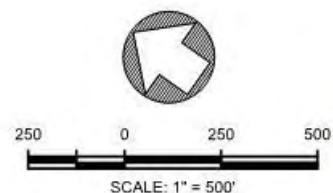


FIGURE 3-4 : ALTERNATIVE 5



3.5.2 ABILITY TO MEET FAA SAFETY AND DESIGN STANDARDS

Alternative 5 acquires a moderate amount of acreage required to meet FAA Standards. This alternative would eliminate the need for Declared Distances, thereby extending the use of Runway 31 by 400 feet. This option removes incompatible land uses from the Runway 31 RPZ, with exception of those areas overlapping Highway 75. There would be no aviation easements in place and all of the land would be owned by the Airport. Alternative 5 acquires all acreage necessary to fully protect the Approach and Departure surfaces.

Alternative 5 provides a fully compliant RSA, full length ROFA, eliminates the Declared Distances, and gives the Airport full control of the RPZ. Thereby, Alternative 5 scores High in terms of the overall ability to meet FAA safety and design standards.

3.5.3 COST

The Alternative 5 costs are summarized as follows:

Land Acquisition:	\$1,296,000
Permanent Avigation Easement:	N/A
Perimeter Fencing:	\$61,000
Demolition of Farmstead Structures:	\$10,000
Mitigate Loss of Active Pasture Land:	\$59,800
Tree Obstruction Removal:	\$120,000
Total	\$1,546,800

Alternative 5 has a moderate cost relative to the action alternatives resulting in an overall score of Moderate.

3.5.4 SECTION 4(F) RESOURCE IMPACTS

In the vicinity of the Runway 31 end Section 4(f) resources include: the Eccles Flying Hat Ranch, the Cove Canal, windrow of trees around the farmhouse, the equipment shed, barn, and the farmhouse. Alternative 5 would acquire 64.8 acres of the Ranch and 2,691 feet of Cove Canal to remove tree obstructions and prevent tree obstruction regrowth. Alternative 5 includes the segment of Cove Canal (approximately 417 linear feet of canal) that stems between the farmstead and Highway 75 to the east. The Eccles Flying Hat Ranch farmhouse would be acquired and would require eventual demolition as its condition is degrading and it would provide little reuse option for the Airport.

Alternative 5 acquires 64.8 acres from the 4(f) Ranch, including the farmhouse and 2,691' of the Cove Canal, which correlates to a Moderate-Low score due to the anticipated 4(f) resource impacts.

3.5.5 ENVIRONMENTAL IMPACTS TO RESOURCES OTHER THAN 4(F) RESOURCES

The noise and vibration affect caused by the removal of trees would not impact the farmhouse long-term, as the farmhouse would be demolished.

Alternative 5 has a moderate impact to the farm by reducing overall farm acreage (59.8 acres of pasture), however the impact does not impact overall farm operations. Alternative 5 has an impact on habitat and wetland impacts as it is affected by tree removal along 2,691' of Cove Canal.

Alternative 5 will have an increase in noise, but it would not affect the farmhouse long-term. Alternative 5 will reduce pasture by 59.8 acres and will affect wildlife and wetlands through tree removal of 2,691' of the Cove Canal and results in a Moderate-Low score.

3.5.6 POLITICAL AND ADMINISTRATIVE FEASIBILITY

In contrast to Alternative 4, Alternative 5 eliminates the acquisition of some of the farmstead outbuildings (they retain the ability to water all 615 acres of the property with the pond and pump house as well as use the barn for storage), resulting in an option that is preferable by the landowner. The acquisition of the farmhouse in this alternative is a potential issue, as it is a 4(f) resource and it would also require the voluntary departure of the homeowner. Compared to Alternative 4, Alternative 5 would be easier to implement.

Ultimately, these factors make Alternative 5 feasible. By having control over the Cove Canal up to Highway 75, there is a better chance to control all new trees that may grow on the property and become future obstructions. Alternative 5 does acquire the farmhouse and other Section 106 and 4(f) resources, which the decision makers were initially in support of. However, the anticipated 4(f) impacts led to Alternative 5 receiving a score of Moderate.

Table 3-5 provides a summary of the evaluation criteria and scoring used to evaluate Alternative 5.

TABLE 3-5: ALTERNATIVE 5 - SCORED CRITERIA		
Criteria	Explanation	Score
Ability to Meet FAA Safety and Design Standards	Provides a fully compliant RSA, full length ROFA, eliminates the Declared Distances, and gives the Airport full control of the RPZ. Thereby, Alternative 5 results in an overall score of High.	6
Cost	Provides a moderate overall cost for the action alternatives resulting in a Moderate score.	4
4(f) Resource Impacts	Alternative 5 acquires 64.8 acres and 2,691' of the Cove Canal from the 4(f) Ranch, and includes acquisition of the farmhouse, which correlates to a Moderate-Low score.	3
Environmental Impacts (Non-4(f) Resource Impacts)	Will reduce pasture by 59.8 and will affect wildlife and wetlands through tree removal of 2,691' of the Cove Canal and results in a Moderate-Low score.	3
Political and Administrative Feasibility	As compared to Alternative 4, Alternative 5 is easier to implement as it eliminates the acquisition of some of the farmstead outbuildings. The acquisition of the farmhouse in this alternative is a potential issue. Alternative 5 has a score of Moderate.	4
Total (of 30)		20

Source: T-O Engineers

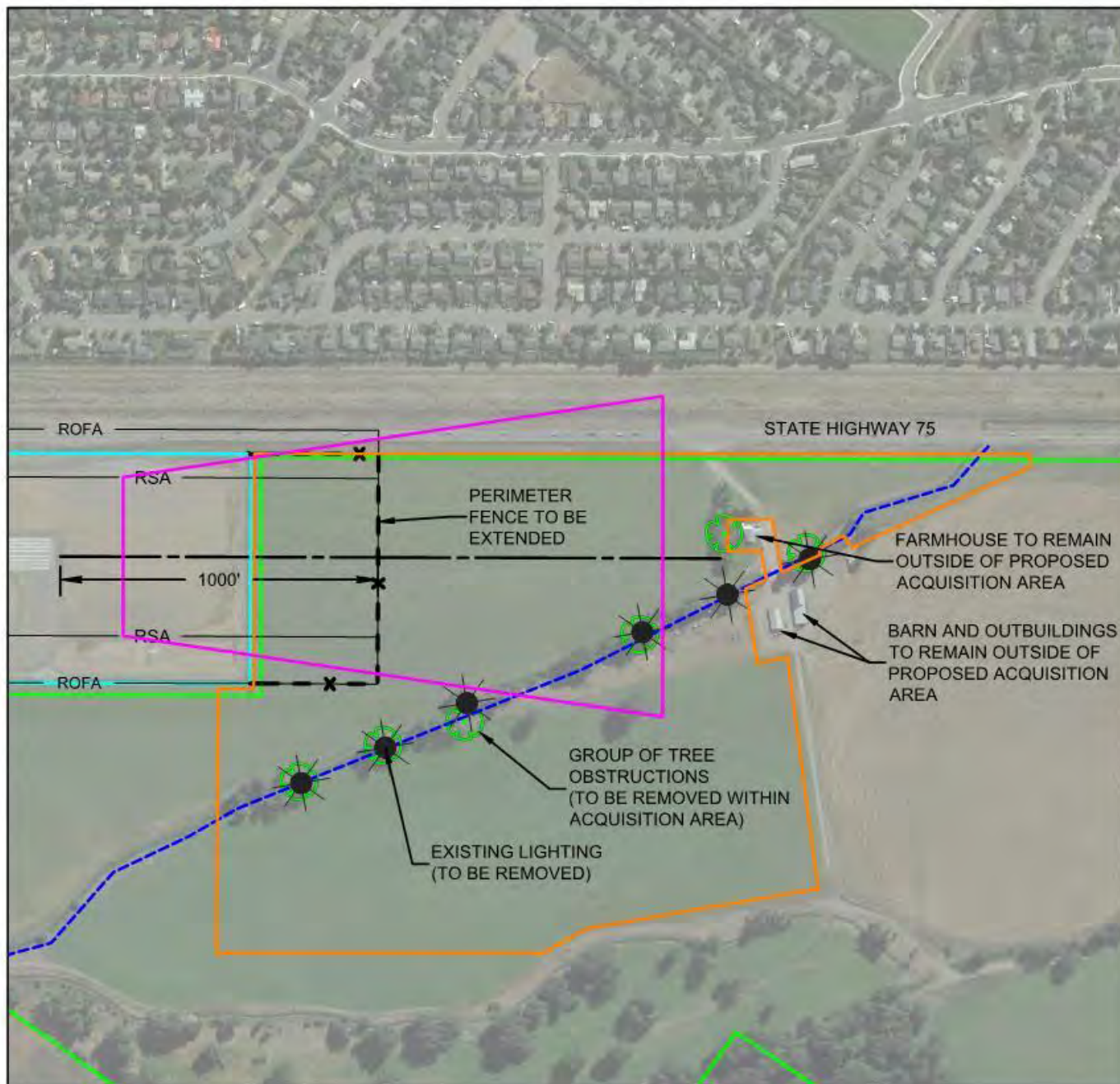
3.6 ALTERNATIVE 6

3.6.1 DESCRIPTION

During initial environmental evaluation of Alternative 5 and through active discussion with the FAA, SHPO, and the Airport, it was determined that the acquisition of the farmhouse proposed in Alternative 5 would be an “adverse effect”, as defined by Section 106 of the National Historic Preservation Act (NHPA)³ (see Section 4.8 of the EA) and therefore also a Section 4(f) use (see Section 4.5 of the EA). Due to this determination and through the Section 4(f) evaluation process, Alternative 6 was developed to avoid acquisition of the farmhouse. Alternative 6 thereby reduces the total area of acquisition compared to Alternative 5. Alternative 6 would reduce the acquisition area by 0.2 acres for a total of approximately 64.6 acres. The land acquisition consists of 59.8 acres of active pasture, 3.7 acres attributed to the Cove Canal, and 1.1 acres of farmstead (**Figure 3-5**).

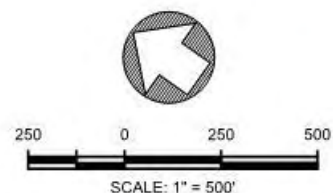
Like Alternative 5, Alternative 6 would remove all incompatible land use from the RPZ, with exception of the area overlapping Highway 75. There would be no avigation easements in place and all of the land would be owned by the Airport. The land acquisition extends west 1,250-feet from the centerline of the runway which is likewise a recommendation from the FAA.

³ 36 CFR Part 800 Protection of Historic Properties, Section 106. Accessed April 23, 2018 at <http://www.achp.gov/regs-rev04.pdf>



LEGEND

- AIRPORT PROPERTY BOUNDARY
- RUNWAY 13-31 CENTERLINE
- RUNWAY PROTECTION ZONE [RPZ]
- RSA — RUNWAY SAFETY AREA [RSA]
- ROFA — RUNWAY OBJECT FREE AREA [ROFA]
- COVE CANAL
- ECCLES FLYING HAT RANCH
- PROPOSED ACQUISITION AREA (64.6 AC)



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FIGURE 3-5 : PROPOSED ACTION



3.6.2 ABILITY TO MEET FAA SAFETY AND DESIGN STANDARDS

Alternative 6 acquires a moderate amount of acreage required to meet FAA Standards. This alternative would eliminate the need for Declared Distances, thereby extending the use of Runway 31 by 400 feet. This option removes incompatible land uses from the Runway 31 RPZ, with exception of those areas overlapping Highway 75. There would be no aviation easements in place and all of the land would be owned by the Airport. Alternative 6 acquires all acreage necessary to fully protect the Approach and Departure surfaces.

Alternative 6 provides a fully compliant RSA, full length ROFA, eliminates the Declared Distances, and gives the Airport full control of the RPZ. Thereby, Alternative 6 scores High in terms of the overall ability to meet FAA safety and design standards.

3.6.3 COST

Alternative 6 estimated costs are summarized as follows:

Land Acquisition:	\$1,292,000
Permanent Aviation Easement:	N/A
Perimeter Fencing:	\$61,000
Demolition of Farmstead Structures:	\$10,000
Mitigate Loss of Active Pasture Land:	\$59,800
Tree Obstruction Removal:	\$120,000
Total	\$1,542,800

Alternative 6 has a moderate cost relative to the action alternatives resulting in an overall score of Moderate.

3.6.4 SECTION 4(F) RESOURCE IMPACTS

Alternative 6 will avoid adverse impacts to the farmhouse, resulting in a Section 106 finding of “No Adverse Effect” to the farmhouse and therefore “No Use” under Section 4(f), as well as avoid unnecessary impacts to agricultural infrastructure to reduce farmland impacts and acquisition costs. While the farmhouse is avoided, the tree obstructions still need to be removed in order to meet the Purpose and Need of the project. The adjacent windrow trees common to the main farmstead area were determined by SHPO to be a part of the historic setting. While all Section 106 and Section 4(f) resources were not acquired, it is unavoidable and not feasible to avoid the historic windrow with any alternative. Alternative 6 results in an overall score of Moderate.

3.6.5 ENVIRONMENTAL IMPACTS TO RESOURCES OTHER THAN 4(F) RESOURCES

The removal of trees would likely lead to a slight increase in noise and vibrations to the farmhouse and surrounding property, though the farmhouse is outside of the 65-decibel DNL noise contour.

Alternative 6 has an impact to the farm by reducing overall farm acreage (59.8 acres of pasture), however the impact does not impact overall farm operations. Alternative 6 has a moderate effect on habitat and wetland impacts as it is affected by tree removal along 2,691' of Cove Canal.

Alternative 6 will have an increase in noise, will reduce pasture by 59.8 acres (but will not affect farm operations), and will affect wildlife and wetlands through tree removal of 2,691' of the Cove Canal and results in a Moderate-Low score.

3.6.6 POLITICAL AND ADMINISTRATIVE FEASIBILITY

Alternative 6 is very similar to Alternative 5, with the exception being Alternative 6 will not acquire the farmhouse in order to avoid an adverse effect on Section 106 historic properties and/or use of Section 4(f) properties. The avoidance of the farmhouse was preferred by the decision makers and results in a more feasible alternative for the Airport. While Section 106 and Section 4(f) resources went into the planning and design, it was not feasible to completely avoid them entirely (namely the historic windrow) with any proposed alternative.

Alternative 6 is viewed as the most feasible option, given it minimizes the potential adverse effects to historic and Section 4(f) resources and thereby results in a score of Moderate-High.

Table 3-6 provides a summary of the evaluation criteria and scoring used to evaluate Alternative 6.

TABLE 3-6: ALTERNATIVE 6 - SCORED CRITERIA		
Criteria	Explanation	Score
Ability to Meet FAA Safety and Design Standards	Provides a fully compliant RSA, full length ROFA, eliminates the Declared Distances, and gives the Airport full control of the RPZ. Thereby, Alternative 6 results in an overall score of High.	6
Cost	Provides a moderate overall cost for the action alternatives resulting in a score of Moderate.	4
4(f) Resource Impacts	Alternative 6 acquires 64.6 acres and 2,691' of the Cove Canal from the 4(f) Ranch, but eliminates acquisition of the farmhouse, which correlates to a Moderate score.	4
Environmental Impacts (Non-4(f) Resource Impacts)	Increase in noise, will reduce pasture by 59.8 acres (but will not affect farm operations), and will affect wildlife and wetlands through tree removal of 2,691' of the Cove Canal and results in a Moderate-Low score.	3
Political and Administrative Feasibility	Most feasible option as it eliminates acquisition of the farmhouse. Decision makers support this alternative. Alternative 6 has a score of Moderate-High.	5
Total (of 30)		22

Source: T-O Engineers

ATTACHMENT 1: ALTERNATIVES ANALYSIS SCORING MATRIX

	Alternative 1 - No Action Alternative		Alternative 2		Alternative 3		Alternative 4		Alternative 5		Alternative 6	
Criteria:												
Ability to Meet FAA Safety and Design Standards	Unacceptable	0	Moderate	4	Moderate-High	5	High	6	High	6	High	6
Cost	High	6	Moderate-High	5	Moderate-High	5	Moderate	4	Moderate	4	Moderate	4
Impacts to 4(f) Resources	High	6	Moderate	4	Moderate	4	Low	2	Moderate-Low	3	Moderate	4
Environmental Impacts to Resources other than 4(f) Resources	High	6	Moderate	4	Moderate	4	Moderate-Low	3	Moderate-Low	3	Moderate-Low	3
Political and Administrative Feasibility	Low-Unacceptable	1	Low	2	Low	2	Moderate-Low	3	Moderate	4	Moderate-High	5
Total Score (Out of 30)	19		19		20		18		20		22	

APPENDIX B
BIOLOGICAL MEMORANDUM
LAND ACQUISITION AND OBSTRUCTION REMOVAL
ENVIRONMENTAL ASSESSMENT

AIP # 3-16-0016-044-2017

Prepared for the Friedman Memorial
Airport (SUN) and the Federal Aviation
Administration

Biological Resources and Habitat Assessment for SUN Airport Runway Protection Zone Project, Blaine County, Idaho

PREPARED FOR: T-O Engineers
PREPARED BY: NatureScope
DATE: September 29, 2017

Introduction

This technical memorandum (TM) documents the desktop review, biological reconnaissance survey, and presence/absence surveys for yellow-billed cuckoo (YBCC) (*Coccyzus americanus occidentalis*) conducted on the Flying Hat Ranch, south of Friedman Memorial Airport (SUN) in Blaine County, Idaho. The project survey area (Attachment 1, Figure 1) is located directly south of the SUN airport, in the Wood River Valley of Idaho. The project survey area includes a portion of the active cattle ranch, Cove Canal, several ranch outbuildings and storage areas, and all areas of proposed project disturbance.

This TM identifies on site suitable habitat and biological resources (Attachment 1- Figure 2), results from protocol YBCC surveys, and construction best management practices (BMPs) for avoiding impacts to biological resources resulting from SUN airports proposed runway expansion and tree removal activity.

Attachments to this technical memorandum include the following:

- Attachment 1 – Figures
 - Figure 1. Location Map
 - Figure 2. Idaho Department of Fish and Wildlife Species Occurrence
 - Figure 3. Project Description
 - Figure 4. Habitat Map and Cuckoo Survey Point Locations
- Attachment 2 – Special-status Species and Biological Resources Summary Tables and Reports
 - Table 2a. Species Identified from Idaho Fish and Wildlife Species Occurrence Database and U.S. Fish and Wildlife Service, Records Searches for Sun Airport Runway Extension Project
 - Table 2b. Species Observed within the Runway Extension Survey Area
 - Table 2c. Blaine County species list of occupied and estimated range
 - Attachment 2d. IPaC species and critical habitat mapper from U.S. Fish and Wildlife Service
- Attachment 3 –Photographs
- Attachment 4- Yellow-billed Cuckoo Survey Data Sheets

Project Description

SUN airport in Hailey, Idaho (Attachment 1, Figure 1) proposes to increase aircraft protections according to FAA Part 77 surfaces policies. The project is to acquire an adjacent property parcel, remove and maintain obstructions, and provide direct ownership of the Part 77 Surfaces as shown in Attachment 1,

Figure 3. The project is located in the U.S. Geological Survey (USGS) 7.5-minute Bellevue quadrangle, in the northwest ¼ of the southwest ¼ of Section 23 Township 2N Range 18E (latitude 43.491169°/longitude -114.281998°).

The project area (encompassing approximately 65 acres) extends from the SUN airport southern property line approximately 2,685 feet to the south and includes the Cove Canal and grazed pastures (Attachment 1, Figure 1). The work area is private land under one ownership and will be accessed from Idaho State Highway 75.

Methods

To assess potential impacts of the proposed project on federally listed fish, wildlife, and plants in the vicinity of the project, in accordance with the Endangered Species Act (ESA) of 1973, Fish and Wildlife Coordination Act, Executive Order 13112-Invasive Species, and the Migratory Bird Treaty Act (MBTA) of 1918; NatureScope biologists conducted the following desktop and field activities:

- Obtained current species lists for Blaine County of proposed, threatened, and endangered species from the US Fish and Wildlife Service (USFWS; IPaC, 2017 and IDFW 2017).
- Reviewed existing data sources such as agency technical reports and databases.
- Conducted site visits to determine the potential presence or absence of listed species and critical habitat in the area. Performed call back surveys (presence/absence) for YBCC, a federally Threatened species.
- Assessed potential impacts on species of concern within the project area.
- Submitted an information request to the Idaho Fish and Game Conservation Data Center (IDFW-CDC, 2017) and StreamNet (or similar) for occurrences or known ranges of sensitive species which may occur in the vicinity of the proposed project.
- Conducted a site visit to determine the potential presence or absence of sensitive species in the project area. The results and information collected during the field survey are presented in this TM.

Desktop Review. NatureScope conducted a desktop review of publicly available data pertaining to special-status species including federally listed species (endangered, threatened, candidate, or proposed), MBTA species, and Idaho special-status species. This review also included a query for designated or proposed critical habitat for federally listed species (Attachment 1, Figure 2, and Attachment 2). This task included the review of the following resources:

- Publicly available data sets for identifying the potential presence of sensitive biological resources including the Idaho Department of Fish and Wildlife (IDFW) special status species occurrence data (IDFW, 2017) (Attachment 1, Figure 2), Blaine County species list of occupied and estimated range (Attachment 2), and the U.S. Fish and Wildlife Service (USFWS) critical habitat mapper and species data (IPaC; USFWS, 2017a; Attachment 2) for the survey area.
- USGS topographic maps, National Hydrography Dataset (USGS, 2017), and National Wetlands Inventory (USFWS, 2017b) maps in the vicinity for assessing presence of mapped aquatic resources.

Onsite Field Assessment. NatureScope biologists, conducted four field evaluations of the survey area between June and August, 2017, to assess biological resources including the presence of suitable habitat and/or special-status species, and to conduct protocol level YBCC presence/absence surveys. Field assessment and surveys included the following activities:

- Onsite biological reconnaissance surveys documenting habitat characteristics and any observed special status species. To assess the potential presence of biological resources onsite, biologists

utilized spotting scopes, aerial imagery, and onsite observations including YBCC presence/absence surveys. Representative site photographs were also taken and are included in Attachment 3.

- YBCC presence/absence surveys were conducted using USFWS protocol (Halterman et al 2015) on June 23; July 9; July 21; and August 3, 2017. All YBCC presence/absence survey events were conducted at the site during the nesting season. During each survey event, YBCC calls were played at 1 minute intervals at each of the eight survey points (Figure 4). Recognition of YBCC return vocalizations or movement was used to indicate presence at the site. All required documentation (i.e., location, time, environmental condition, and YBCC sightings/vocalization) was recorded on project datasheets, included in Attachment 4.

Information on YBCC protocol survey methods can be found in the *Natural History Summary and Survey Protocol for the Western Distinct Populations Segment of the Yellow-billed Cuckoo* (Halterman et al 2015).

Landscape Setting and Existing Conditions

The project area is located in what is known regionally as the Camas Prairie (Level IV ecoregion 12c) a subsection of the Idaho Snake River Plain (Level III ecoregion; 12) (U.S. EPA 2017). The low hills of Snake River Plain are part of the xeric intermontane West. Vegetation is characterized as mostly sagebrush steppe but barren lava fields and saltbush–greasewood also occur. Streams generally have lower gradients, are warmer, and have finer grained substrates than do streams in the montane ecoregions. The Camas Prairie ecoregion is a sub-region of the Snake River Plain and is characterized as a cold, wet valley used for small grain and alfalfa farming, pasture, range, and wildlife refuge. The prairie is strongly influenced by flanking foothills that trap mountain surface water and storm water runoff. The confined and concentrated surface waters result in wet soils and seasonal localized flooding. Wet bottomlands support meadow grasses and sedges. Alluvial fans and terraces are covered by grasses and sagebrush.

Topography in the survey area is flat but confined by offsite steep foothills that concentrate surface water flows toward the Big Wood River (Hydrologic Unit Code 17040219). Regional drainage is to the Big Wood River through a network of constructed (irrigation features) and natural watercourses. An excavated irrigation canal (Cove Canal) transports surface water diagonally across the site from the Big Wood River in northwest to irrigators in the southeast.

The vegetation communities within the survey area are predominantly associated with 2 cover types: managed areas of irrigated pasture and a 30-foot wide riparian corridor associated with Cove Canal. Cove Canal a managed irrigation feature that flows southeast diagonally across the site. The Big Wood River riparian corridor is 1,000 feet west of the survey area, the eastern survey boundary directly abuts Interstate 75. Vegetation onsite is disturbed by routine ranching activity and maintenance. Observed onsite vegetation includes black cottonwood (*Populus sp.*), Wood's rose (*Rosa woodsii*), red osier dogwood (*Cornus sericea*), Western chokecherry (*Prunus virginiana*), smooth brome (*Bromus inermis*), goldenrod (*Solidago spp.*), stinging nettle (*Urtica dioica*), bull thistle (*Cirsium vulgare*), houndstongue (*Hieracium cynoglossoides*), barnyard grass (*Dactylis glomerata*), rabbit brush (*Chrysothamnus viscidiflorus*), tall sagebrush (*Artemisia tridentata*), bluebunch wheatgrass (*Agropyron spicatum*), alkali mallow (*Malvella leprosa*), common canary grass (*Phalaris canariensis*), Italian thistle (*Caardus pycnocephalus*), milk thistle (*Silybum marianum*), and curly dock (*Rumex crispus*).

Results

Desktop Review. No designated or proposed critical habitat (USFWS, 2017a) was identified within the survey area. No watercourses with the potential to support fish species of concern were identified within the survey area (IDFW-CDC-2017). National Wetlands Inventory (USFW, 2017b) and National Hydrography Dataset identify Cove Canal (constructed watercourse) crossing through the survey area (USGS, 2017).

The desktop review identified one state or federal special status species (wolverine, *Gulo gulo luscus*, Proposed Threatened; USFWS 2017a) with some potential to occur within or adjacent to the project area.

State occurrence data reported numerous bird species protected under the MBTA within the 2-mile radius of the project area (Attachment 1, Figure 2; IDFW-CDC, 2017). No occurrences data of state or federal special status species were identified within the survey area or within a 2-mile buffer of the site (IDFW-CDC, 2017). A summary of the desktop review identified state or federally endangered, threatened (wolverine), candidate, and species of interest (red-tailed hawk and yellow-billed cuckoo), their habitat requirements, and their potential to occur onsite is described in Attachment 2, Table 2a.

Field Results. Onsite field assessment for biological resources suitable habitat and potential to occur was conducted during four site visits between June and August 2017. Habitats identified on site include Irrigated Agriculture- Pasture, Riparian, and Disturbed-Rural (Attachment 1, Figure 4). No federally or state listed species were observed during any of the field visits. One red-tailed hawk (*Buteo jamaicensis*; a state S2 ranked species-widespread) was observed perched in a cottonwood tree adjacent to Cove Canal near survey point 6 (Attachment 1, Figure 4). In addition, several cavity nests were observed in standing dead trees adjacent to Cove Canal. One or more juvenile coyote(s) (*Canus latrans*) were observed adjacent to Cove Canal on most survey events. A summary table of wildlife observed during the field assessments is provided in Attachment 2, Table 2b.

Protocol level presence/absence surveys conducted for YBCC did not identify any individuals within the riparian habitat adjacent to Cove Creek (see Figure 4 and Attachment 4, YBCC survey data sheets). Habitat suitability of the Cove Creek riparian corridor is low and considered unsuitable for YBCC nesting. The riparian corridor is less than 30 feet wide in most areas and lacks minimum size and dense understory preferred by YBCC. YBCC breed almost exclusively in riparian woodlands with native broadleaf trees and shrub that are 50 acres or more in size within arid or semi-arid landscapes (Halterman et al., 2015).

Suitable habitats for the following special-status species were observed within and adjacent to the survey area (Attachment 1, Figure 4):

- Suitable nesting habitat for birds subject to the MBTA, including red-tailed hawk, is present within and adjacent to the survey area. Suitable nesting habitat includes the ranch outbuildings (Disturbed-Rural), trees and standing snags adjacent to Cove Canal (Riparian), adjacent irrigated pasture, and the offsite Big Wood River riparian corridor (1,000 feet west of the survey area). Nesting birds identified near the survey area are expected to be acclimated to disturbance from the airport, highway, and ranch activities. Impacts to MBTA protected species can be avoided by utilizing BMPs included in the Recommendations section below.

Recommendations

The following measures are recommended to avoid or minimize effects on the special status biological resources identified in the Results section. Table 1 summarizes survey requirements, avoidance buffers, and work windows for each species.

Special-status Bird Species. If construction will occur during the nesting season (February 1 through September 15), a qualified biologist will conduct a preconstruction nesting bird survey within 14 days prior to construction or land disturbance. Survey protocol should include specific tasks to address the potential presence and breeding activity of red-tailed hawk and cavity nesters. Due to the high potential for nesting birds to be present and to utilize the site, the following BMPs are recommended to reduce or eliminate impacts to nesting birds:

- **Prior to nesting season,** remove suitable nesting habitat features from the project area/construction footprint. Management activity should include vegetation removal to

minimize nesting habitat including mowing, grubbing, tree, and shrub removal. Habitat removal should be conducted only during nonbreeding season (October 1-January 31).

- **During nesting season**, if construction must occur during the nesting season, minimize vegetation removal to the maximum extent possible. Conduct nesting season preconstruction nest surveys 14 days before disturbance or vegetation removal to identify and protect any nesting birds that may be affected by project activities.

Table 1. Survey Requirements, Avoidance Buffers, and Work Windows for Species

Biological Resources and Habitat Assessment for SUN Airport Runway Extension Project, Hailey, Idaho, Blaine County.

Biological Resource	Avoidance Buffer	Preconstruction Survey Information	Published Avoidance and Minimization Measures
Special-status Bird Species (e.g., Migratory Bird Treaty Act, red tailed hawk)	Minimum 50 feet	Nest survey to be conducted 14 days prior to ground disturbance or construction during nesting season (February 1 – September 15)	Yes

References

eBird. 2017. Blaine County Species Occurrence Data 1900-2017. Accessed August 2017.

<http://ebird.org/ebird/barchart?byr=1900&eyr=2017&bmo=1&emo=12&r=US-ID-013>

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Idaho Fish and Wildlife Conservation Data Center (IDFW-CDC). 2017. Species Occurrence Data for SUN Airport Runway Extension Project. Data includes information on occurrences of fish, plants, birds, special status species, mammals, and critical habitats. Accessed August 2017. jim.strickland@idfg.idaho.gov.

U.S. EPA. 2017. Ecoregions of Idaho (poster): U.S. Geological Survey Open-File Report 2016–1021, with map, scale 1:1,100,000, ftp://newftp.epa.gov/EPADDataCommons/ORD/Ecoregions/id/id_front.pdf

U.S. Fish and Wildlife Service (USFWS). 2017a. Information for Planning and Conservation (IPaC). Accessed May 2017. <http://ecos.fws.gov/ipac/>.

U.S. Fish and Wildlife Service (USFWS). 2017b. National Wetlands Inventory Data, May 2, 2017. Accessed May 3, 2017. <https://www.fws.gov/wetlands/data/data-download.html>.

U.S. Geological Survey (USGS). 2017. National Hydrography Dataset. Accessed May 2, 2017. <http://nhd.usgs.gov/>.

Attachment 1

Figures

Figure 1. Location Map

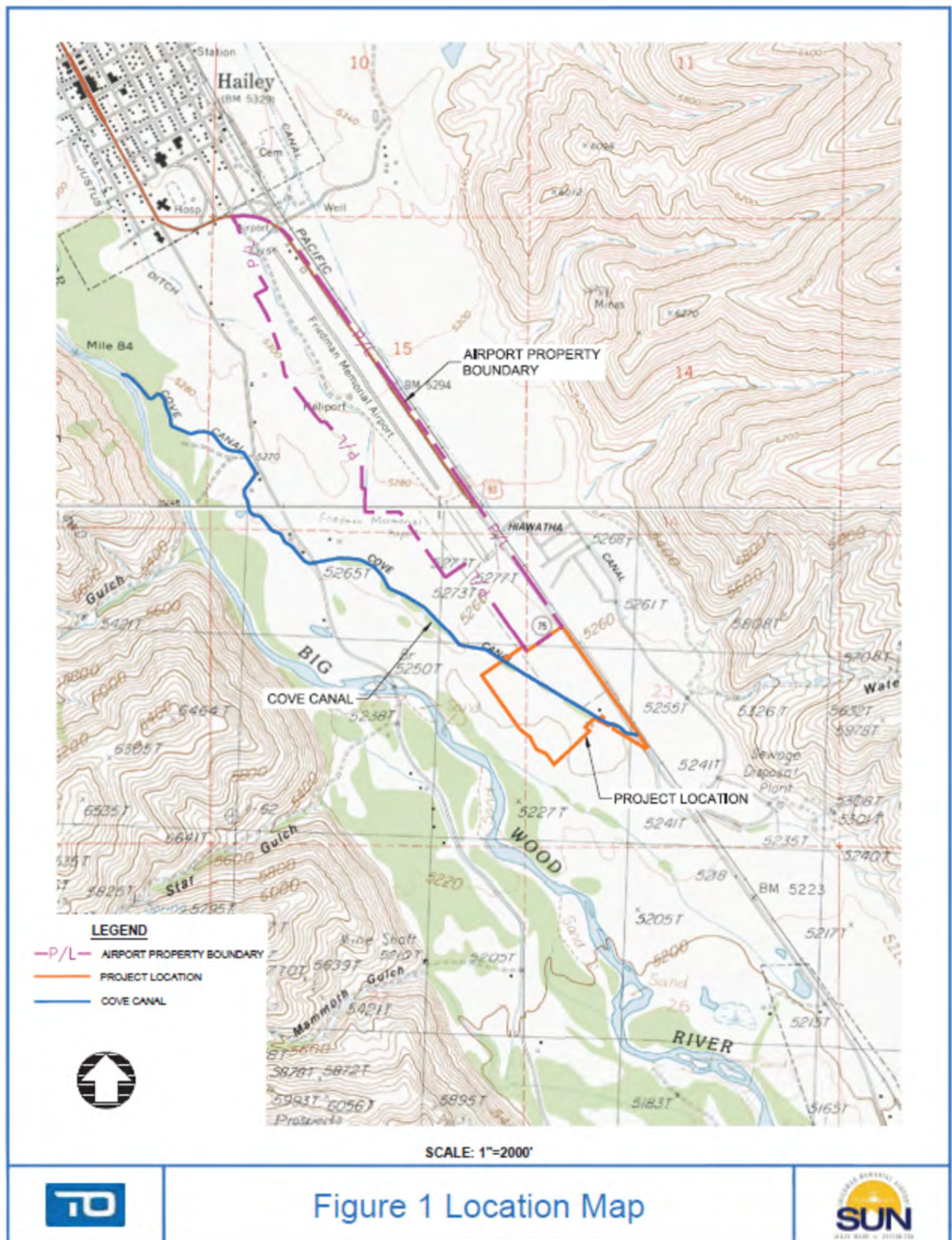
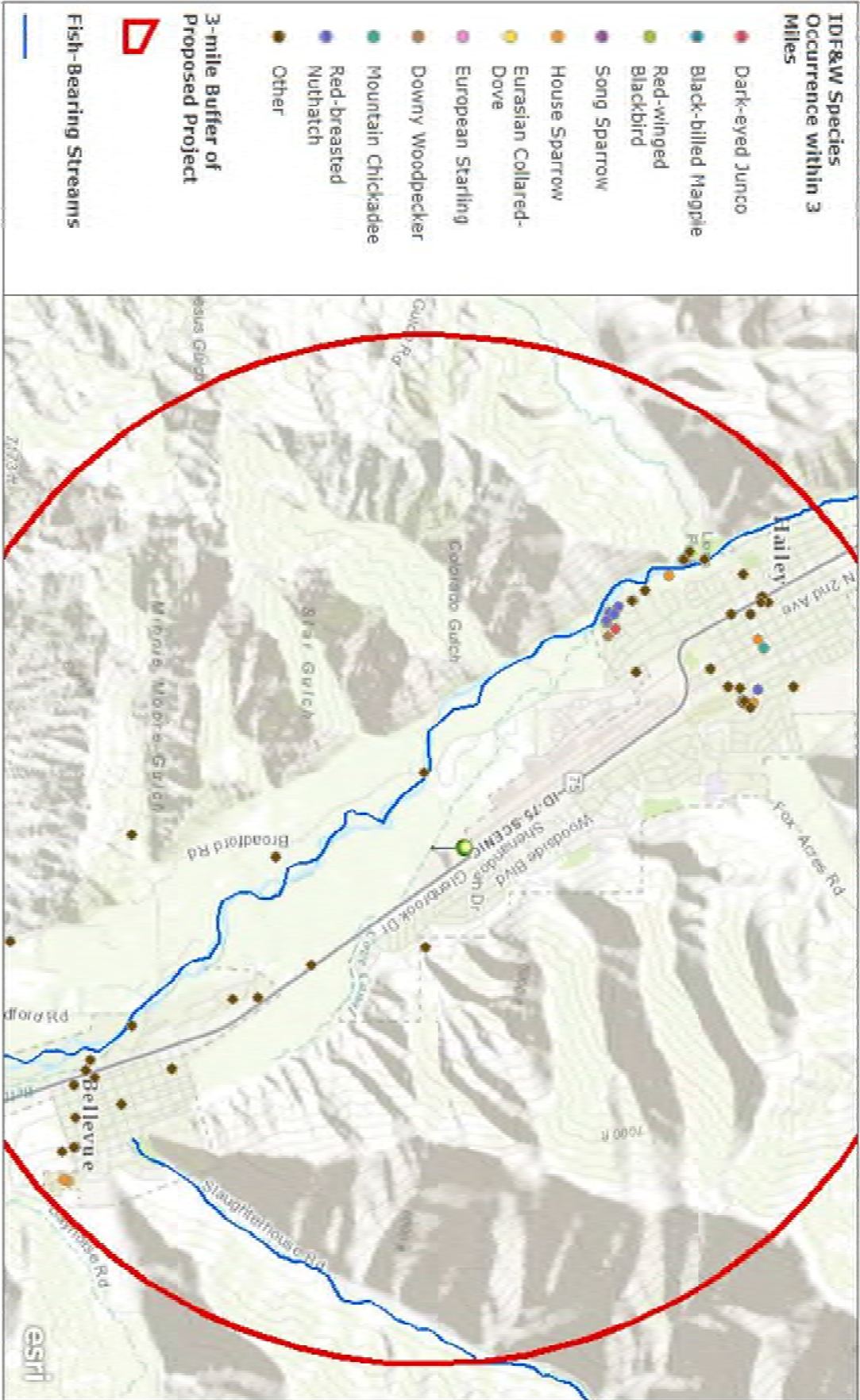


Figure 2. Idaho Department of Fish and Wildlife Species Occurrence



Bureau of Land Management, Esri, HERE, Garmin, INCREMENT P, USGS, METI/NASA, NGA, EPA, USDA

Figure 3. Project Description

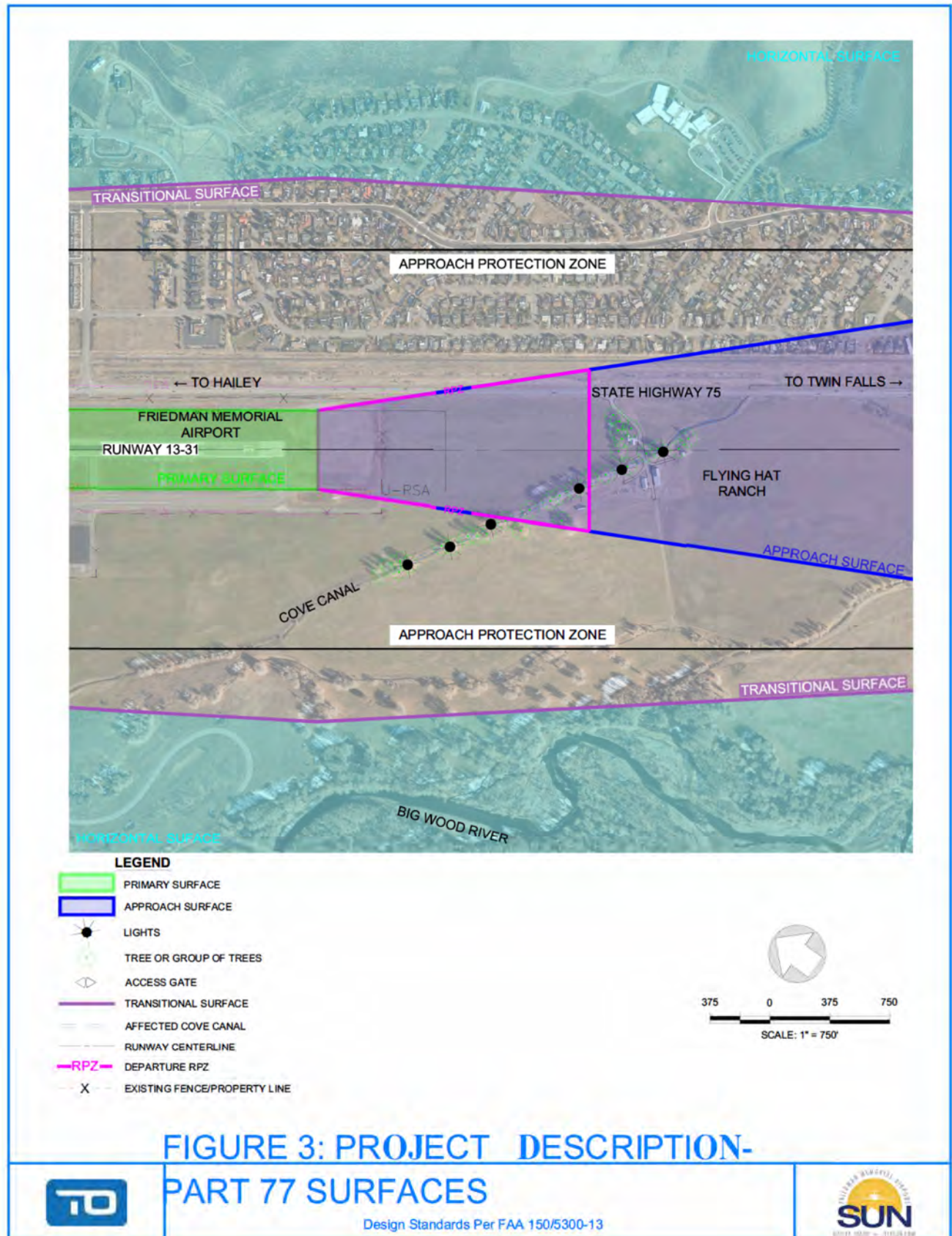


Figure 4. Habitat Map and Cuckoo Survey Point Locations



Attachment 2
Special-status Species and Biological
Resources Summary Tables

Table 2a. Species Identified from Idaho Fish and Wildlife Species Occurrence Database and U.S. Fish and Wildlife Service, Records Searches for Sun Airport Runway Extension Project*.

Biological Resources and Habitat Assessment for SUN Airport Runway Extension Project, Hailey, Idaho, Blaine County.

Scientific Name	Common Name	Status		Habitat Requirements	Potential for Occurrence
		Federal	State		
Mammals					
<i>Gulo gulo luscus</i>	North American wolverine	PT	S2 (Imperiled)	Alpine, Forest - Conifer, Grassland/herbaceous, Shrubland/chaparral, Tundra, Woodland - Conifer Special Habitat Factors: Burrowing in or using soil, Fallen log/debris	Low. No suitable habitat is located within the survey area. Therefore, occurrence for this species is unlikely and proposed project activities are not expected to impact this species.
Birds					
<i>*Buteo jamaicensis</i>	Red-tailed hawk	-	S5 (widespread)	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural ranchlands.	High. Suitable nesting habitat is located within the survey area. Potential foraging habitat is located within the survey area. One individual was observed during June-August field visits. Project activity should follow BMPs provided in Recommendations section to avoid impacts to this species during raptor nesting season.
<i>*Coccyzus erythrophthalmus</i>	Yellow-billed cuckoo (YBC)	T	S1	Thick, closed canopy riparian forest with an understory of dense brush (50 acres minimum patch size). These riparian forests are usually composed of various species of willows and cottonwoods.	Low. No potentially suitable habitat to support this species is present within the survey area or within the riparian community adjacent to Cove Canal. Call back surveys did not identify YBC presence. Therefore, occurrence for this species is unlikely and the proposed project activities are not expected to impact this species.

Notes:

Table excludes bird species protected under the Migratory Bird Treaty Act (MBTA), a list of MBTA species with some potential to occur is provided at the end of Attachment 2-IPaC data.

* Species of Interest. Those species not identified by USFWS as having the potential to occur onsite, but were specifically surveyed for, or observed onsite.

Status:

PT= federally proposed threatened, T=federally threatened.

S = State rank indicator; denotes rank based on status within Idaho.

1 = Critically imperiled because of extreme rarity or because some factor of its biology makes it especially vulnerable to extinction (typically 5 or fewer occurrences).

2 = Imperiled because of rarity or because other factors demonstrably make it very vulnerable to extinction (typically 6 to 20 occurrences).

3 = Rare or uncommon but not imperiled (typically 21 to 100 occurrences).

4 = Not rare and apparently secure, but with cause for long-term concern (usually more than 100 occurrences).

5 = Demonstrably widespread, abundant, and secure

Hammerson, G.A. 2007. *Gambelia sila*. The IUCN Red List of Threatened Species 2007: e.T40690A10336468. <http://dx.doi.org/10.2305/IUCN.UK.2007.RLTS.T40690A10336468.en>.

Hammerson, Geoffrey. 2008. *Rana draytonii*. The IUCN Red List of Threatened Species 2008: e.T136113A4240307. <http://dx.doi.org/10.2305/IUCN.UK.2008.RLTS.T136113A4240307.en>.

U.S. Fish and Wildlife Service. 2017. Information for Planning and Consultation. <https://ecos.fws.gov/ipac/>.

Table 2b. Wildlife Species Observed within the Runway Extension Survey Area

Biological Resources and Habitat Assessment for SUN Airport Runway Extension Project, Hailey, Idaho, Blaine County.

Scientific Name	Common Name
<i>Agelaius phoeniceus</i>	Red-winged blackbird
<i>Ardea herodias</i>	Great blue heron
<i>Mergus merganser</i>	Common merganser
<i>Buteo jamaicensis</i>	Red-tailed hawk
<i>Cyanocitta stelleri</i>	Steller's jay
<i>Colaptes auratus</i>	Northern flicker
<i>Canis latrans</i>	coyote
<i>Falco sparverius</i>	American kestrel
<i>Lepus townsendii</i>	white-tailed jackrabbit
<i>Petrochelidon pyrrhonota</i>	cliff swallow
<i>Turdus migratorius</i>	American robin

Table 2c. Blaine County species list of occupied and estimated range

County	Scientific Name	Common Name	Global Rank	State Rank	Federally Listed	SWAP, SCGN, CWCS	USFS Reg 1	USFS Reg 4	BLM	IDAPA State Protection Status	INPS	INPS Threat
Blaine	<i>Accipiter gentilis</i>	Northern Goshawk	G5	S4				Sensitive	Sensitive	TYPE 3		idapa-protection-nongame
Blaine	<i>Actitis macularia</i>	Spotted Sandpiper	G5	S5B								idapa-protection-nongame
Blaine	<i>Aechmophorus clarkii</i>	Clark's Grebe	G5	S2B		Yes						idapa-protection-nongame
Blaine	<i>Aechmophorus occidentalis</i>	Western Grebe	G5	S2B		Yes						idapa-protection-nongame
Blaine	<i>Aegolius funereus</i>	Boreal Owl	G5	S2		Yes		Sensitive	TYPE 5			idapa-protection-nongame
Blaine	<i>Agelaius phoeniceus</i>	Red-winged Blackbird	G5	S5B,S3N								idapa-protection-nongame
Blaine	<i>Ambystoma macrodactylum</i>	Long-toed Salamander	G5	S5								idapa-protection-nongame
Blaine	<i>Ameletus sparsatus</i>	A Mayfly	G3G4	S2		Yes						
Blaine	<i>Amphispiza belli</i>	Sage Sparrow	G5	S4B					TYPE 3			idapa-protection-nongame
Blaine	<i>Amphispiza bilineata</i>	Black-throated Sparrow	G5	S2B					TYPE 4			idapa-protection-nongame
Blaine	<i>Anas acuta</i>	Northern Pintail	G5	S5B,S2N		Yes						idapa-protection-nongame
Blaine	<i>Archilochus alexandri</i>	Black-chinned Hummingbird	G5	S5B								idapa-protection-nongame
Blaine	<i>Ardea alba</i>	Great Egret	G5	S1B		Yes						idapa-protection-nongame
Blaine	<i>Ardea herodias</i>	Great Blue Heron	G5	S5B,S5N								idapa-protection-nongame
Blaine	<i>Argemone militaris</i>	A Grasshopper	G3G4	S2		Yes						
Blaine	<i>Asaphus montanus</i>	Inland Tailed Frog	G4	S3								idapa-protection-nongame
Blaine	<i>Auro flaviventris</i>	Short-eared Owl	G5	S4		Yes			TYPE 5			idapa-protection-nongame
Blaine	<i>Astragalinus atratus var. inexpectus</i>	Mourning Milkweed	G4G5T3	S3					TYPE 3			
Blaine	<i>Athene cunicularia hypugaeae</i>	Western Burrowing Owl	G4T4	S5S4		Yes			TYPE 5			idapa-protection-nongame
Blaine	<i>Aythya affinis</i>	Lesser Scaup	G5	S3		Yes						idapa-protection-nongame
Blaine	<i>Bolshhegnia milami</i>	A Stonefly	G3	S1		Yes						
Blaine	<i>Bombus ciliatorum</i>	Cedar Waxwing	G5	S5B,S3N								idapa-protection-nongame
Blaine	<i>Botaurus lentiginosus</i>	American Bittern	G4	S4B								idapa-protection-nongame
Blaine	<i>Brachylagus idahoensis</i>	Pygmy Rabbit	G4	S2		Yes		Sensitive	TYPE 2			idapa-protection-nongame
Blaine	<i>Bucephala islandica</i>	Barrow's Goldeneye	G5	S5B,S3N					TYPE 5			idapa-protection-nongame
Blaine	<i>Bufo boreas</i>	Western Toad	G4	S4				Sensitive	TYPE 2/TV			idapa-protection-nongame
Blaine	<i>Buteo jamaicensis</i>	Red-tailed Hawk	G5	S5B,S5N								idapa-protection-nongame
Blaine	<i>Buteo regalis</i>	Ferruginous Hawk	G4	S3B		Yes			TYPE 3			idapa-protection-nongame
Blaine	<i>Buteo swainsoni</i>	Swainson's Hawk	G5	S3B		Yes			TYPE 5			idapa-protection-nongame
Blaine	<i>Calamospiza melanocorys</i>	Lark Bunting	G5	S17B								idapa-protection-nongame
Blaine	<i>Calidris bairdi</i>	Baird's Sandpiper	G5	S2N								idapa-protection-nongame
Blaine	<i>Calidris mauri</i>	Western Sandpiper	G5	S2N								idapa-protection-nongame
Blaine	<i>Canis lupus</i>	Gray Wolf	G4	S3	XN	Yes			Endanger	TYPE 1		idapa-protection-nongame
Blaine	<i>Carduelis tristis</i>	American Goldfinch	G5	S5								idapa-protection-nongame
Blaine	<i>Cathartes aura</i>	Turkey Vulture	G5	S4B								idapa-protection-nongame
Blaine	<i>Catoprophorus semipalmatus</i>	Willie	G5	S4B								idapa-protection-nongame
Blaine	<i>Centrocercus urophasianus</i>	Greater Sage Grouse	G4	S2	C	Yes		Sensitive	TYPE 2			idapa-protection-nongame
Blaine	<i>Centropus selanderorum</i>	A Mayfly	G5	S1		Yes						idapa-protection-nongame
Blaine	<i>Ceryle alcyon</i>	Belted Kingfisher	G5	S5								idapa-protection-nongame
Blaine	<i>Charadrius vociferus</i>	Killdeer	G5	S5B,S3N								idapa-protection-nongame
Blaine	<i>Charina bottae</i>	Rubber Boa	G5	S5								idapa-protection-nongame
Blaine	<i>Chiroptera</i>	Unclassified Bat										idapa-protection-nongame
Blaine	<i>Chlidonias niger</i>	Black Tern	G4	S1B		Yes			TYPE 3			idapa-protection-nongame
Blaine	<i>Chordeiles minor</i>	Common Nighthawk	G5	S5B								idapa-protection-nongame
Blaine	<i>Cicindela arenicola</i>	Idaho Dunes Tiger Beetle	G1G2	S2		Yes			TYPE 2			idapa-protection-nongame
Blaine	<i>Circus cyaneus</i>	Northern Harrier	G5	S5B,S5N								idapa-protection-nongame
Blaine	<i>Coccyzus americanus</i>	Yellow-billed Cuckoo	G5	S2B	C	Yes			TYPE 1			idapa-protection-nongame
Blaine	<i>Coccyzus erythrophthalmus</i>	Black-billed Cuckoo	G5	S1B								idapa-protection-nongame
Blaine	<i>Colaptes auratus</i>	Northern Flicker	G5	S5								idapa-protection-nongame
Blaine	<i>Coluber constrictor</i>	Racer	G5	S5								idapa-protection-nongame
Blaine	<i>Contopus sordidulus</i>	Western Wood-Pewee	G5	S5B								idapa-protection-nongame
Blaine	<i>Corvus corax</i>	Common Raven	G5	S5								idapa-protection-nongame
Blaine	<i>Corynorhinus townsendi</i>	Townsend's big-eared Bat	G4	S3		Yes		Sensitive	Sensitive	TYPE 3		idapa-protection-nongame
Blaine	<i>Crotalus viridis</i>	Prairie Rattlesnake	G5	S5								idapa-protection-nongame
Blaine	<i>Cygnus buccinator</i>	Trumpeter Swan	G4	S1B,S2N		Yes		Sensitive	TYPE 3			idapa-protection-nongame
Blaine	<i>Dendroica petechia</i>	Yellow Warbler	G5	S5B								idapa-protection-nongame
Blaine	<i>Dumetella carolinensis</i>	Gray Catbird	G5	S5B								idapa-protection-nongame
Blaine	<i>Egretta thula</i>	Snowy Egret	G5	S2B		Yes						idapa-protection-nongame
Blaine	<i>Empidonax minimus</i>	Least Flycatcher	G5	SNA								idapa-protection-nongame
Blaine	<i>Empidonax traillii</i>	Willow Flycatcher	G5	S5B					TYPE 3			idapa-protection-nongame
Blaine	<i>Eptesicus fuscus</i>	Big Brown Bat	G5	S47								idapa-protection-nongame
Blaine	<i>Eremophila alpestris</i>	Horned Lark	G5	S5								idapa-protection-nongame
Blaine	<i>Eumeces skiltonianus</i>	Western Skink	G5	S5								idapa-protection-nongame
Blaine	<i>Falco columbarius</i>	Merlin	G5	S2B,S2N								idapa-protection-nongame
Blaine	<i>Falco peregrinus anatum</i>	Peregrine Falcon	G4T4	S2B		Yes		Sensitive	Sensitive	TYPE 3		idapa-protection-nongame
Blaine	<i>Falco sparverius</i>	American Kestrel	G5	S5B,S5N								idapa-protection-nongame
Blaine	<i>Fluminicola coloradoensis</i>	Green River Pebblesnail	G2G3	S2		Yes						idapa-protection-nongame
Blaine	<i>Fluminicola fuscus</i>	Columbia Pebblesnail	G2	S1					TYPE 3			idapa-protection-nongame
Blaine	<i>Gambelia wislizenii</i>	Longnose Leopard Lizard	G5	S5								idapa-protection-nongame
Blaine	<i>Gavia immer</i>	Common Loon	G5	S1B,S2N		Yes		Sensitive	Sensitive			idapa-protection-nongame
Blaine	<i>Geothlypis trichas</i>	Common Yellowthroat	G5	S5B								idapa-protection-nongame
Blaine	<i>Glaucomys sabrinus</i>	Northern Flying Squirrel	G5	S4								idapa-protection-nongame
Blaine	<i>Grus canadensis</i>	Sandhill Crane	G5	S3B		Yes						idapa-protection-nongame
Blaine	<i>Gulo gulo luscus</i>	North American Wolverine	G4T4	S2	C	Yes		Sensitive	Sensitive	TYPE 3		idapa-protection-nongame
Blaine	<i>Haliaeetus leucocephalus</i>	Bald Eagle	G5	S3B,S4N		Yes			Threatened	TYPE 1		idapa-protection-nongame
Blaine	<i>Himantopus mexicanus</i>	Black-necked Stilt	G5	S3B		Yes						idapa-protection-nongame
Blaine	<i>Hirundo rustica</i>	Barn Swallow	G5	S5B								idapa-protection-nongame
Blaine	<i>Hypsiglena torquata</i>	Night Snake	G5	S3					TYPE 5			idapa-protection-nongame
Blaine	<i>Icterus bullockii</i>	Bullock's Oriole	G5	S5B								idapa-protection-nongame
Blaine	<i>Isoptera bifurcata</i>	A Stonefly	G3	S1		Yes						idapa-protection-nongame
Blaine	<i>Larus argentatus</i>	Herring Gull	G5	S2N								idapa-protection-nongame
Blaine	<i>Larus californicus</i>	California Gull	G5	S2B,S3N		Yes						idapa-protection-nongame
Blaine	<i>Larus delawarensis</i>	Ring-billed Gull	G5	S2S3B,S3N								idapa-protection-nongame
Blaine	<i>Larus pipixcan</i>	Franklin's Gull	G4G5	S2B		Yes						idapa-protection-nongame
Blaine	<i>Limnodromus scolopaceus</i>	Long-billed Dowitcher	G5	S2N								idapa-protection-nongame
Blaine	<i>Limosa fedoa</i>	Marbled Godwit	G5	S2N								idapa-protection-nongame
Blaine	<i>Lophodytes cucullatus</i>	Hooded Merganser	G5	S2B,S3N		Yes						idapa-protection-nongame
Blaine	<i>Lynx canadensis</i>	Lynx	G5	S1	LT	Yes		Sensitive	TYPE 1			idapa-protection-nongame
Blaine	<i>Malenka tina</i>	A Spring Stonefly	G3	S2		Yes						
Blaine	<i>Martes pennanti</i>	Fisher	G5	S1		Yes		Sensitive	Sensitive	TYPE 3		idapa-protection-nongame
Blaine	<i>Masticophis taeniatus</i>	Striped Whipsnake	G5	S4								idapa-protection-nongame
Blaine	<i>Melospiza melodia</i>	Song Sparrow	G5	S5B,S5N								idapa-protection-nongame
Blaine	<i>Mimus polyglottos</i>	Northern Mockingbird	G5	S1B								idapa-protection-nongame
Blaine	<i>Molothrus ater</i>	Brown-headed Cowbird	G5	S5B								idapa-protection-nongame
Blaine	<i>Myotis ciliolabrum</i>	Western Small-footed Myotis	G5	S47					TYPE 5			idapa-protection-nongame
Blaine	<i>Myotis evotis</i>	Long-eared Myotis	G5	S37					TYPE 5			idapa-protection-nongame
Blaine	<i>Myotis lucifugus</i>	Little Brown Myotis	G5	S5								idapa-protection-nongame
Blaine	<i>Myotis volans</i>	Long-legged Myotis	G5	S37					TYPE 5			idapa-protection-nongame
Blaine	<i>Neotamias minimus</i>	Least Chipmunk	G5	S5								idapa-protection-nongame
Blaine	<i>Neotamias amoenus</i>	Yellow-pine Chipmunk	G5	S5								idapa-protection-nongame
Blaine	<i>Nucifraga columbiana</i>	Clark's Nutcracker	G5	S5								idapa-protection-nongame
Blaine	<i>Numenius americanus</i>	Long-billed Curlew	G5	S2B		Yes			TYPE 5			idapa-protection-nongame
Blaine	<i>Nycticorax nycticorax</i>	Black-crowned Night-Heron	G5	S2B		Yes						idapa-protection-nongame
Blaine	<i>Ochotona princeps</i>	American Pika	G5	S5								idapa-protection-nongame
Blaine	<i>Oporornis tolmiei</i>	MacGillivray's Warbler	G5	S5B								idapa-protection-nongame
Blaine	<i>Oreoscoptes montanus</i>	Sage Thrasher	G5	S5B					TYPE 5			idapa-protection-nongame
Blaine	<i>Otus flammeolus</i>	Flammulated Owl	G4	S3B		Yes		Sensitive	Sensitive	TYPE 3		idapa-protection-nongame

State Monitor
Global Priority 3 INPS Threats: 11

Blaine	Pandion haliaetus	Osprey	G5	55B				idapa-protection-nongame	
Blaine	Parameletus columbae	A Mayfly	G2	5NR	Yes				
Blaine	Passerculus sandwichensis	Savannah Sparrow	G5	55B				idapa-protection-nongame	
Blaine	Passerina amoena	Lazuli Bunting	G5	55B				idapa-protection-nongame	
Blaine	Pelecanus erythrorhynchos	American White Pelican	G3	51B	Yes		TYPE 2	idapa-protection-nongame	
Blaine	Petrochelidon pyrrhonota	Gulf Swallow	G5	55B				idapa-protection-nongame	
Blaine	Phacelia inconspicua	Obscure Phacelia	G2	51			TYPE 2		Global Priority 1 INPS Threats: 5
Blaine	Phalacrocorax auritus	Double-crested Cormorant	G5	52B				idapa-protection-nongame	
Blaine	Phalaropus tricolor	Wilson's Phalarope	G5	53B	Yes		TYPE 5	idapa-protection-nongame	
Blaine	Pheucticus melanocephalus	Black-headed Grosbeak	G5	55B				idapa-protection-nongame	
Blaine	Pica hudsonia	Black-billed Magpie	G5	55				idapa-protection-nongame	
Blaine	Picoides dorsalis	Three-toed Woodpecker	G5	52	Yes		Sensitive	idapa-protection-nongame	
Blaine	Picoides pubescens	Downy Woodpecker	G5	55				idapa-protection-nongame	
Blaine	Picoides villosus	Hairy Woodpecker	G5	55				idapa-protection-nongame	
Blaine	Pictetiella expansa	A Stonefly	G3	52	Yes				
Blaine	Pituophis catenifer	Gopher Snake	G5	55				idapa-protection-nongame	
Blaine	Plegadis chihi	White-faced Ibis	G5	52B	Yes		TYPE 4	idapa-protection-nongame	
Blaine	Pluvialis squatarola	Black-bellied Plover	G5	52N				idapa-protection-nongame	
Blaine	Poa abbreviata ssp. marshii	Marsh's Bluegrass	G5T2	51			Sensitive		Global Priority 2 INPS Threats: 12
Blaine	Podiceps griseigena	Red-necked Grebe	G5	52B	Yes			idapa-protection-nongame	
Blaine	Podiceps nigricollis	Eared Grebe	G5	54B				idapa-protection-nongame	
Blaine	Podilymbus podiceps	Pied-billed Grebe	G5	54B,53N				idapa-protection-nongame	
Blaine	Poecile atricapilla	Black-capped Chickadee	G5	55				idapa-protection-nongame	
Blaine	Porzana carolina	Sora	G5	55B				idapa-protection-nongame	
Blaine	Pseudacris maculata	Boreal Chorus Frog	G5	54				idapa-protection-nongame	
Blaine	Pseudacris regilla	Pacific Chorus Frog	G5	55				idapa-protection-nongame	
Blaine	Pyrocoma insecticruris	Bugleg Goldenweed	G3	53			Sensitive TYPE 3		Global Priority 3 INPS Threats: 11
Blaine	Rallus limicola	Virginia Rail	G5	55B				idapa-protection-nongame	
Blaine	Rana luteiventris	Columbia Spotted Frog	G4	5354			Sensitive TYPE 1	idapa-protection-nongame	
Blaine	Rana pipiens	Northern Leopard Frog	G5	52	Yes		TYPE 2	idapa-protection-nongame	
Blaine	Recurvirostra americana	American Avocet	G5	55B	Yes			idapa-protection-nongame	
Blaine	Salix pseudomonticola	False Mountain Willow	G4G5	51			TYPE 3		State Priority 2
Blaine	Sceloporus graciosus	Sagebrush Lizard	G5	55				idapa-protection-nongame	
Blaine	Seiurus noveboracensis	Northern Waterthrush	G5	537				idapa-protection-nongame	
Blaine	Selasphorus rufus	Rufous Hummingbird	G5	55B				idapa-protection-nongame	
Blaine	Sitta canadensis	Red-breasted Nuthatch	G5	55				idapa-protection-nongame	
Blaine	Spea intermontana	Great Basin Spadefoot	G5	54				idapa-protection-nongame	
Blaine	Spermophilus lateralis	Golden-mantled Ground Squirrel	G5	55				idapa-protection-nongame	
Blaine	Spermophilus mollis	Purple Ground Squirrel	G5	52	Yes		TYPE 3	idapa-protection-nongame	
Blaine	Spizella breweri	Brewer's Sparrow	G5	53B	Yes		TYPE 3	idapa-protection-nongame	
Blaine	Stagnicola hinkleyi	Rustic Pondsnail	G2	51	Yes				
Blaine	Sterna caspia	Caspian Tern	G5	52B	Yes			idapa-protection-nongame	
Blaine	Sterna forsteri	Forster's Tern	G5	51B	Yes			idapa-protection-nongame	
Blaine	Sterna hirundo	Common Tern	G5	51B				idapa-protection-nongame	
Blaine	Sturnella neglecta	Western Meadowlark	G5	55B,53N				idapa-protection-nongame	
Blaine	Tamiasciurus hudsonicus	Red Squirrel	G5	55				idapa-protection-nongame	
Blaine	Thamnophis elegans	Western Terrestrial Garter Snake	G5	55				idapa-protection-nongame	
Blaine	Thamnophis sirtalis	Common Garter Snake	G5	55			TYPE 3	idapa-protection-nongame	
Blaine	Tringa flavipes	Lesser Yellowlegs	G5	52N				idapa-protection-nongame	
Blaine	Tringa melanoleuca	Greater Yellowlegs	G5	52N				idapa-protection-nongame	
Blaine	Tringa solitaria	Solitary Sandpiper	G5	5NA				idapa-protection-nongame	
Blaine	Turdus migratorius	American Robin	G5	55B,53N				idapa-protection-nongame	
Blaine	Tympanuchus phasianellus columbianus	Columbian Sharp-tailed Grouse	G4T3	51	YES		Sensitive TYPE 3	idapa-protection-upland-game-bird	
Blaine	Tyrannus tyrannus	Eastern Kingbird	G5	54B				idapa-protection-nongame	
Blaine	Valvata utahensis	Desert Valvata	G1	51	Yes		TYPE 1		
Blaine	Vermivora celata	Orange-crowned Warbler	G5	55B				idapa-protection-nongame	
Blaine	Vireo gilvus	Warbling Vireo	G5	55B				idapa-protection-nongame	
Blaine	Vireo olivaceus	Red-eyed Vireo	G5	55B				idapa-protection-nongame	
Blaine	Vireo solitarius	Solitary Vireo	G5	5NA				idapa-protection-nongame	
Blaine	Vulpes macrotis	Kit Fox	G4	51	Yes		TYPE 4	idapa-protection-nongame	
Blaine	Xanthocephalus xanthocephalus	Yellow-headed Blackbird	G5	55B				idapa-protection-nongame	

KEY to 'Rare and Sensitive Species Table, by County':

County

Idaho counties (Ada, Adams, Bannock, Bear Lake, Benewah, Bingham, Blaine, Boise, Bonner, Bonneville, Boundary, Butte, Camas, Canyon, Caribou, Cassia, Clark, Clearwater, Custer, Elmore, Franklin, Fremont, Gem, Gooding, Idaho, Jefferson, Jerome, Kootenai, Latah, Lemhi, Lewis, Lincoln, Madison, Minidoka, Nez Perce, Oneida, Owyhee, Payette, Power, Shoshone, Teton, Twin Falls, Valley, Washington)

Scientific Name

Scientific name uses formal Latin name in binomial/trinomial nomenclature. Species or Intraspecific species name include: genus, specific epithet, and variety, if applicable.

Common Name

Common name uses an accepted, local common name.

Global Conservation Rank (NatureServe)

G	Global rank indicator; denotes rank based on range wide status.
T	Trinomial rank indicator; denotes range wide status of variety or subspecies.
GX	Believed to be extinct throughout its range.
G1	Critically imperiled: at very high risk of extinction due to extreme rarity (often 5 or fewer populations), very steep declines, or other factors.
G2	Imperiled: at high risk of extinction or elimination due to very restricted range, very few populations, steep declines, or other factors.
G3	Vulnerable: at moderate risk of extinction or elimination due to a restricted range, relatively few populations, recent and widespread declines, or other factors.
G4	Apparently Secure: uncommon, but not rare; some cause for long-term concern due to declines or other factors.
G5	Secure: Common, widespread, and abundant

State Conservation Rank (Idaho Natural Heritage Program)

S	State rank indicator; denotes rank based on state wide status.
SX	Believed to be extinct throughout its range with in State.
S1	Critically imperiled: at very high risk of extinction due to extreme rarity (often 5 or fewer populations), very steep declines, or other factors.
S2	Imperiled: at high risk of extinction or elimination due to very restricted range, very few populations, steep declines, or other factors.
S3	Vulnerable: at moderate risk of extinction or elimination due to a restricted range, relatively few populations, recent and widespread declines, or other factors.
S4	Apparently Secure: uncommon, but not rare; some cause for long-term concern due to declines or other factors.
S5	Secure: Common, widespread, and abundant

Variant Conservation Status Rank (NatureServe & Natural Heritage)

G#G# S#S#	Range Rank – a numeric range rank used to indicate a range of uncertainty about the status of the species.
GU or SU	Unrankable – currently unrankable due to lack of information
GNR or SNR	Not Ranked – rank level not yet assessed

Rank Qualifiers (NatureServe & Natural Heritage)

?	Inexact Numeric Rank
i	Introduced
r	Reintroduced/restored

Breeding Status Qualifier

B	Breeding
N	Non-breeding
M	Migratory

Federally Listed

US Fish and Wildlife Service listed species, per Endangered Species Act

SWAP

State Wildlife Action Plan

SCGN

Species of Greatest Conservation Need

CWCS

Comprehensive Wildlife Conservation Strategy (see: <http://fishandgame.idaho.gov/public/wildlife/cwcs/>)

USFSreg1 (US Forest Service - Northern Region)

Listing status based on federal status under the Endangered Species Act: Endangered, Threatened, Proposed, and Candidate

USFSreg4 (US Forest Service - Intermountain Region)

Listing status based on federal status under the Endangered Species Act: Endangered, Threatened, Proposed, and Candidate

BLM (Bureau of Land Management) Status

Type 1	Threatened, Endangered, Proposed, and Candidate species.
Type 2	Rangewide/globally imperiled species-high endangerment.
Type 3	Rangewide/globally imperiled species-moderate endangerment (plants) or Regional/state imperiled species (animals).
Type 4	Species of Concern (plants) or Peripheral Species (animals).
Type 5	Watch list (plants and animals).

IDAPA State Protection Status

Idaho Administrative Procedures Act: Designation 13 Title 01 Chapter 06 (IDAPA 13.01.06) -Rules Governing Classification and Protection of Wildlife

INPS (Idaho Native Plant Society) State Rare Species Definitions

Possibly Extirpated	Taxa known in Idaho only from historical (pre-1920) records or otherwise believed to be extirpated from the state.
State Priority 1	Taxa in danger of becoming extinct or extirpated from Idaho in the foreseeable future if identifiable factors contributing to their decline continue to operate. These are taxa whose populations are present only at critically low levels or whose habitats have been degraded or depleted to a significant degree.
State Priority 2	Taxa likely to be classified as Priority 1 within the foreseeable future in Idaho, if factors contributing to their population decline or habitat degradation or loss continue.
Sensitive	Taxa with small populations or localized distributions within Idaho that presently do not meet the criteria for classification as Priority 1 or 2, but whose populations and habitats may be jeopardized without active management or removal of threats.
Monitor	Taxa common within a limited range in Idaho, as well as those which are uncommon, but have no identifiable threats (e.g., certain alpine taxa).

INPS (Idaho Native Plant Society) Threat Priority:

Priority	Taxonomy	Threat Magnitude	Threat Immediacy
1	Monotypic genus	High	Imminent
2	Species	High	Imminent
3	Subspecies/Variety	High	Imminent
4	Monotypic genus	High	Non-imminent
5	Species	High	Non-imminent
6	Subspecies/Variety	High	Non-imminent
7	Monotypic genus	Low	Imminent
8	Species	Low	Imminent
9	Subspecies/Variety	Low	Imminent
10	Monotypic genus	Low	Non-imminent
11	Species	Low	Non-imminent
12	Subspecies/Variety	Low	Non-imminent

IPaC Information for Planning and Consultation U.S. Fish & Wildlife Service

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

Blaine County, Idaho



Local office

Idaho Fish And Wildlife Office

☎ (208) 378-5243

📠 (208) 378-5262

1387 South Vinnell Way, Suite 368
Boise, ID 83709-1657

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species

¹ are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service.

1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information.

The following species are potentially affected by activities in this location:

Mammals

NAME	STATUS
North American Wolverine <i>Gulo gulo luscus</i> No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/5123	Proposed Threatened

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act

¹ and the Bald and Golden Eagle Protection Act².

Any activity that results in the take (to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct) of migratory birds or eagles is prohibited unless authorized by the U.S. Fish and Wildlife Service

³. There are no provisions for allowing the take of migratory birds that are unintentionally killed or injured. Any person or organization who plans or conducts activities that may result in the take of migratory birds is responsible for complying with the appropriate regulations and implementing appropriate conservation measures, as described below.

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

Additional information can be found using the following links:

- Birds of Conservation Concern <http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>
- Measures for avoiding and minimizing impacts to birds <http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php>
- Nationwide conservation measures for birds <http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf>

The birds listed below are USFWS Birds of Conservation Concern that might be affected by activities in this location. The list does not contain every bird you may find in this location, nor is it guaranteed that all of the birds on the list will be found on or near this location. To get a better idea of the specific locations where certain species have been reported and their level of occurrence, please refer to resources such as the E-bird data mapping tool (year-round bird sightings by birders and the general public) and Breeding Bird Survey (relative abundance maps for breeding birds). Although it is important to try to avoid and minimize impacts to all birds, special attention should be given to the birds on the list below. To get a list of all birds potentially present in your project area, visit the E-bird Explore Data Tool.

NAME	BREEDING SEASON
Black Rosy-finch <i>Leucosticte atrata</i> https://ecos.fws.gov/ecp/species/9460	Breeds Jun 15 to Aug 31

Cassin's Finch <i>Carpodacus cassinii</i> https://ecos.fws.gov/ecp/species/9462	Breeds May 15 to Jul 15
Lesser Yellowlegs <i>Tringa flavipes</i> https://ecos.fws.gov/ecp/species/9679	Breeds elsewhere
Long-billed Curlew <i>Numenius americanus</i> https://ecos.fws.gov/ecp/species/5511	Breeds Apr 1 to Jul 31
Marbled Godwit <i>Limosa fedoa</i> https://ecos.fws.gov/ecp/species/9481	Breeds May 1 to Jul 31
Olive-sided Flycatcher <i>Contopus cooperi</i> https://ecos.fws.gov/ecp/species/3914	Breeds May 20 to Aug 31
Rufous Hummingbird <i>selasphorus rufus</i> https://ecos.fws.gov/ecp/species/8002	Breeds Apr 15 to Jul 15

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in your project's counties during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is $0.25/0.25 = 1$; at week 20 it is $0.05/0.25 = 0.2$.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (■)

Yellow bars denote when the bird breeds in the Bird Conservation Region(s) in which your project lies. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the counties of your project area. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

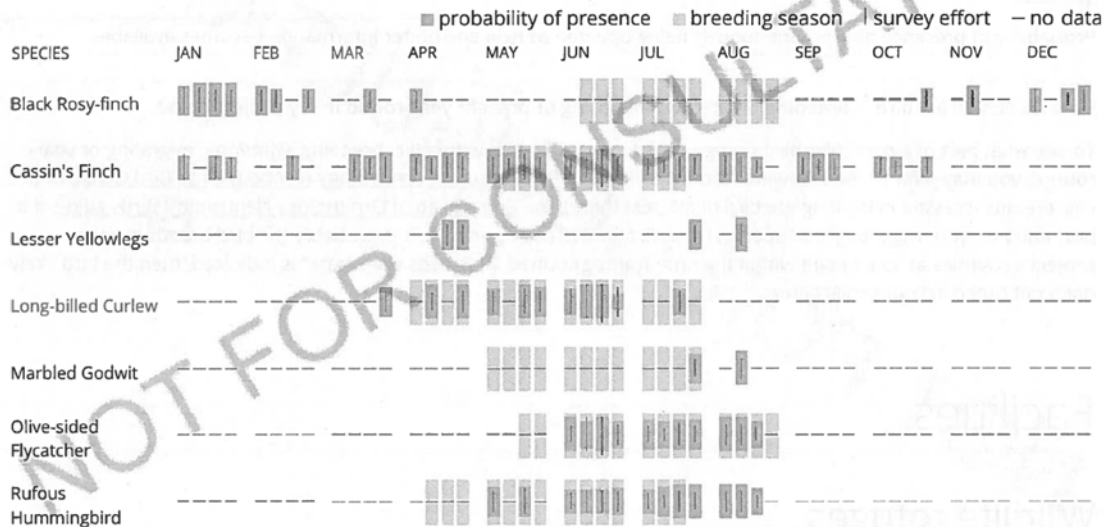
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (—)

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information.



Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Such measures are particularly important when birds are most likely to occur in the project area.

To see when birds are most likely to occur in your project area, view the Probability of Presence Summary. Special attention should be made to look for nests and avoid nest destruction during the breeding season. The best information about when birds are breeding can be found in Birds of North America (BNA) Online under the "Breeding Phenology" section of each species profile. Note that accessing this information may require a subscription. Additional measures and/or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) that might be affected by activities in your project location. These birds are of priority concern because it has been determined that without additional conservation actions, they are likely to become candidates for listing under the [Endangered Species Act \(ESA\)](#).

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#). The AKN list represents all birds reported to be occurring at some level throughout the year in the counties in which your project lies. That list is then narrowed to only the Birds of Conservation Concern for your project area.

Again, the Migratory Bird Resource list only includes species of particular priority concern, and is not representative of all birds that may occur in your project area. Although it is important to try to avoid and minimize impacts to all birds, special attention should be made to avoid and minimize impacts to birds of priority concern. To get a list of all birds potentially present in your project area, please visit the [E-bird Explore Data Tool](#).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: The [The Cornell Lab of Ornithology All About Birds Bird Guide](#), or (if you are unsuccessful in locating the bird of interest there), the [Cornell Lab of Ornithology Neotropical Birds guide](#). If a bird entry on your migratory bird species list indicates a breeding season, it is probable the bird breeds in your project's counties at some point within the time-frame specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

Facilities

Wildlife refuges

Any activity proposed on [National Wildlife Refuge](#) lands must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGES AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

This location overlaps the following wetlands:

FRESHWATER FORESTED/SHRUB WETLAND

PSSC

A full description for each wetland code can be found at the National Wetlands Inventory website:

<https://ecos.fws.gov/ipac/wetlands/decoder>

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

Attachment 3

Photographs



Photograph 1: YBCC callback survey data point 1, South end of project area.



Photograph 2: YBCC callback survey data point 2.



Photograph 3: YBCC callback survey data point 3.



Photograph 4: YBCC callback survey data point 4.



Photograph 5: YBCC callback survey data point 5.



Photograph 6: YBCC Callback survey data point 6.



Photograph 7: YBCC Callback survey data point 7.



Photograph 8: YBCC Callback survey data point 8.



Photograph 9: Agricultural lands west of the survey area, with Big Wood River riparian corridor in the background.



Photograph 10. Ranch Property outbuildings at the southern end of the project area.



Photograph 11. Western edge of survey area with isolated cottonwood stand and Big Wood riparian corridor in the background.



Photograph 12: Friedman Memorial Airport Northeast of the project area.

Attachment 4
Yellow-Billed Cuckoo Survey Data
Sheets

Yellow Billed Cuckoo Survey Summary Form

Site Name: Flying Hat Ranch County: Blaine State: ID
 USGS Quad Name: Bellevue Elevation: 9,000
 Creek, River, Wetland, or Lake Name: Cave Canyon
 Site Coordinates: Start: E 43.489899 N -114.281703 UTM Zone:
 Stop: E 43.492821 N -114.288602 Datum:
 Ownership: BLM Reclamation NPS USFWS USFS Tribal State Private Other (Municipal/County)
 Was site surveyed in previous year? Yes NO Unknown If yes, what site name was used?

Survey # Observer(s) (Last Name, First Initial)	Date (m/d/y) Survey, Time, Total Hours	Total Number of YBCUs detected.	Time Detected (AM):	Detect Type: I=Incidental P=Playback A=aural V=visual B=both	Voc. Type: CN=Contact CO=coo AL=alarm OT=other (describe)	Playback #: Number of times Kowli' call played before YBCU responded	Behavior code	Surveyor Detection Coordinates		Distance (m)	Bearing	C u c k o o #	Corrected Coordinates	
								UTM E	UTM N				UTM E	UTM N
Survey Period #1	Date: <u>6/23/17</u>	<u>2</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
Observer(s):	Start:													
<u>G. Heron</u>	<u>5:38</u>													
<u>D. Fernandez</u>	Stop:													
<u>7:05</u>	Total hrs:													
	<u>1.5</u>	Total:												
Survey Period #2	Date: <u>7/9/17</u>	<u>2</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	
Observer(s):	Start:													
<u>G. Heron</u>	<u>5:35</u>													
<u>D. Fernandez</u>	Stop:													
<u>7:00</u>	Total hrs:													
	<u>1.5</u>	Total:												
Survey Period #3	Date: <u>8/3/17</u>	<u>2</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	
Observer(s):	Start:													
<u>G. Heron</u>	<u>6:30</u>													
<u>D. Fernandez</u>	Stop:													
<u>7:45</u>	Total hrs:													
	<u>1.25h</u>	Total:												
Survey Period #4	Date: <u>7/21/17</u>	<u>2</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	
Observer(s):	Start:													
<u>G. Heron</u>	<u>5:45</u>													
<u>D. Fernandez</u>	Stop:													
<u>7:15</u>	Total hrs:													
	<u>1.5</u>	Total:												
Survey Period #5	Date:													
Observer(s):	Start:													
	Stop:													
	Total hrs:													
			Total:											
Survey Summary:	# Det	# PO	# PR	# CO	# Nests found	Total Survey Hours:								
Total YBCUs*	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>5.75</u>								
Notes (refer to Cuckoo # associated with individual detections)	<u>NA</u>												*Include justification for these designations.	

VOCALIZATION	CODE	BEHAVIOR	CODE	BEHAVIOR	CODE	BREEDING	CODE
Contact	CON	No visual	NV	Catches Prey	CP	Copulation	COP
Coo	COO	Sitting	ST	Carry Food	CF	Feeds Mate	FM
Knock/Alarm	ALA	Foraging	FO	Eats Food	EF	Carry Nest Material	CN
Juvenile Calls	JUVC	Preening	PRE	At Nest	AN	Brooding/Incubating	BI
Other Vocalization	OV	Flying	FLY	Juvenile	JUV	Feeds Nestling	FN
		Distraction Display	DD	Vocal Exchange	VEX	Feeds Fledgling	FF

NB = nest building, NE = active nest with unbroken eggs in it, NY = nest with young seen or heard in it, ON = occupied nest, US = used, inactive nest with blue-green eggshells.

Fill in the following information completely

Name of Reporting Individual G. Herron Date Report completed Sept. 29 - 2017
 Affiliation self ^{range} 208 297-8613 Email gretchen.herron@yahoo.com

USFWS Permit # TE36166C-0 State Permit # —

Site Name Flying Hat Ranch

Length of area surveyed _____ (in kilometers = km)

Did you survey the same general area during each visit to this site this year? ☒ Yes ☐ No If no, summarize in comments below _____

If site was surveyed last year, did you survey the same general area this year? NA Yes / No If no, summarize in comments below _____

Overall Vegetation Characteristics Overall, are the species in tree/shrub layer at this site comprised predominantly of (check one)

Native broadleaf plants (>75% native)	<input checked="" type="checkbox"/>	Mixed native and exotic plants (mostly native)	<input type="checkbox"/>
Exotic/introduced plants (>75% exotic)	<input type="checkbox"/>	Mixed native and exotic plants (mostly exotic)	<input type="checkbox"/>

Average height of canopy (m) 10m (specify units) _____

Estimated Canopy Cover (percent) 50%

Overstory Vegetation (provide percent estimate of the following dominant species) Use <1%, 10%, 25%, 50%, 75%, 90%, 100%.

<u>90</u>	Cottonwood		Goodding's Willow	<u>10</u>	Coyote Willow		Other (specify)
	Tamarisk		Russian Olive		Other (specify)		Other (specify)

Average height of understory canopy (m) 4m (specify units) _____

Estimated Understory Cover (percent) 20%

Understory Vegetation (provide percent estimate of the following dominant species) Use <1%, 10%, 25%, 50%, 75%, 90%, 100%.

<u>40</u>	Cottonwood		Goodding's Willow	<u>40</u>	Coyote Willow	<u>10</u>	Other (specify)	<u>rose</u>
	Tamarisk		Russian Olive		Other (specify)	<u>10</u>	Other (specify)	<u>dogwood</u>
	Baccharis		New Mexico Olive					

Was surface water or saturated soil present at or adjacent to site within 300 meters? ☒ Yes ☐ No (circle one) Cove Canal
 Was surface water or saturated soil present at or adjacent to all patches surveyed? ☒ Yes ☐ No (circle one) Cove Canal

Comments. Please provide comments regarding differences between the survey patches within the site. For example, if the average canopy for this site is 30% cover, but within one patch it is 60% cover - please note. Also, please note significant differences between dominant overstory and understory vegetation among the patches. Document these differences with photographs whenever possible. Make sure to reference comments to photo number whenever available.

Please provide USGS 7.5 minute quad (or similar) showing survey area to each survey form Bellevue Quad S. of airport

Attachment 5
Executive Summary for Project
Impacts

EXECUTIVE SUMMARY

BACKGROUND

Friedman Memorial Airport (SUN) is located in Blaine County and the City of Hailey, Idaho, in an area generally known as the Wood River Valley. The Airport is sponsored by the City and County through the Friedman Memorial Airport Authority (FMAA), formed by a Joint Powers Agreement between the two entities. The Airport is a “commercial service” airport, serving several airlines and a wide variety of general aviation traffic.

The Airport property includes approximately 209 acres of land and is located in a very confined location; south of the city of Hailey urban core, west of State Highway 75, and east of the Wood River. The airport has one north/south oriented runway, Runway 13/31. The geographic constraints of the airport lead to a variety of conditions that result in the airport being unable to meet full design standards of the Federal Aviation Administration (FAA). Based on physical constraints of the airport’s airspace due to mountainous terrain and airport noise impacts on the City of Hailey, predominant take-off and landing operations at the airport are take-offs to the south on Runway 13, and landings from the south on Runway 31. This predominant “one way in/one way” out operation is utilized by all commercial (airline) aircraft and a majority of the large general aviation aircraft fleet, including corporate jets. As a result, the land on the south end of the airport is the most impacted by airport operations and represents one of the most critical areas to protect from a safety and land use compatibility standpoint.

One of the non-standard conditions related to the runway is the fact that the Runway Protection Zone (RPZ)¹ on the south end of the airport is not located on property owned or permanently controlled by the airport, creating potential safety and future land use compatibility issues (see Figure 1). The majority of the southern RPZ at SUN is owned by the adjacent landowner, with the existing RPZ protected by an easement which is set to expire in June of 2018. The landowner has stated that he has no interest in renewing the easement. As a result, both the landowner and FMAA believe acquisition of the property is in both party’s best interest to permanently resolve the issue. . When the easement expires, the Airport will lose the ability to control airspace and land uses in the critical RPZ. This is in conflict with FAA guidance and increases the safety risks to air traffic and to people on the ground.

¹ An RPZ is defined by the FAA as “An area at ground level prior to the threshold or beyond the runway end to enhance the safety and protection of people and property on the ground.” This area is critical to the safety of the public near the airport and, for this reason, the FAA emphasizes that airports have complete control of RPZs, preferably through fee simple ownership.

FIGURE 1 - SUN AIRPORT VICINITY, PROPOSED ACQUISITION (EA), AND HISTORIC DISTRICT



Another non-standard condition at the airport is the presence of “obstructions” within the airspace used by aircraft taking off on Runway 13 (to the south) and aircraft landing on Runway 31 (from the south). 14 Code of Federal Regulation Part 77 (14 CFR Part 77²) defines airspace surfaces around airports to protect the safety of aircraft operating in the airport environment. Any objects (trees, buildings, towers, terrain, etc.) that penetrate these airspace surfaces are known as obstructions. Of critical importance at SUN related to this project is the 14 CFR Part 77 Approach Surface, which is designed to protect aircraft as they land at the airport. Obstructions in the Approach Surface must be removed, lighted (beacon lights are placed on top of the trees), or airport layouts modified (e.g., relocate the runway end) in order to achieve an acceptable level of safety for aircraft operations.

In addition to 14 CFR Part 77, the FAA provides additional airport planning guidance in Advisory Circular (AC) 150/5300-13A, *Airport Design*. This design guidance is mandatory for airports that receive federal grants (including SUN). This document includes the definition of the Departure Surface, which is designed to allow aircraft to follow standard departure procedures when departing an airport. This surface is even larger than the 14 CFR Part 77 Approach Surface and obstructions to this surface can affect the safety of departure operations.

At SUN, there are between 110 and 140 individual trees (primarily cottonwoods) directly south of the airport, many of which are obstructions to the 14 CFR Part 77 Approach Surface and/or the Departure Surface off the south end of the airfield on property owned by the Eccles Flying Hat Ranch shown in Figure 1. The trees and farmhouse can be seen in Photo #1. The trees that are obstructions are currently lighted, and the lights and their maintenance are provided through an easement with the landowner. However, as previously stated, the easement is set to expire in June of 2018, and the landowner has stated that he has no interest in renewing the easement. Again, acquisition of the property has been determined to be the best course of

² This portion of federal law defines these surfaces to protect air traffic in the national aviation system.

action by both FMAA and the landowner to permanently resolve the issue. The obstructions need to be removed in order to provide safe aircraft operations at SUN airport. See Figures 2 and 3 for graphical depictions of these surfaces and the obstructions.

The final non-standard condition at the airport applicable to this proposed action is that the full Runway Safety Area for aircraft departing to the south extends off of airport property (see Figure 2). The Runway Safety Area (RSA) is a defined area intended to protect the safety of aircraft that overshoot, overrun or otherwise depart a runway surface. The extension of the RSA off of the property on the south end is currently mitigated through the implementation of “Declared Distances”. Declared Distances effectively shorten the runway available for use on takeoffs to the south on Runway 13 in order to meet FAA safety standards. The shortened available runway is particularly impactful on commercial airline operations. To safely operate off of a shortened runway, especially when the air temperature is high, the airlines must reduce their takeoff weight. This limits the amount of passengers, baggage and fuel they can carry, meaning passengers “bumped” from flights and/or limited range for the airline in those conditions. This is a regular occurrence for airline flights at the Airport during summer months. If the Airport owned additional property to the south, these Declared Distances would not be necessary, and therefore, would increase safety and enhance aircraft performance allowances at SUN.

PROJECT DESCRIPTION

The proposed project consists of the acquisition of up to approximately 64.75 acres of land at the south end of Runway 31 and removal of all trees that are or have the potential to become obstructions to landing and takeoff operations at the Airport. The project will allow the airport to control land use in this critical area, which will provide an increased level of safety and land use compatibility at SUN. The project is illustrated in the included Figures 2-4. Figure 2 shows the Ultimate Runway Safety Area (U-RSA) for Runway 13 departures. After acquisition, the airport boundary fence will be extended to provide a clear U-RSA for Runway 13. This will allow use of the full runway length for departures on Runway 13 and the removal of existing declared distances, which will enhance safety and aircraft performance capabilities, and prevent wildlife from entering the airport.

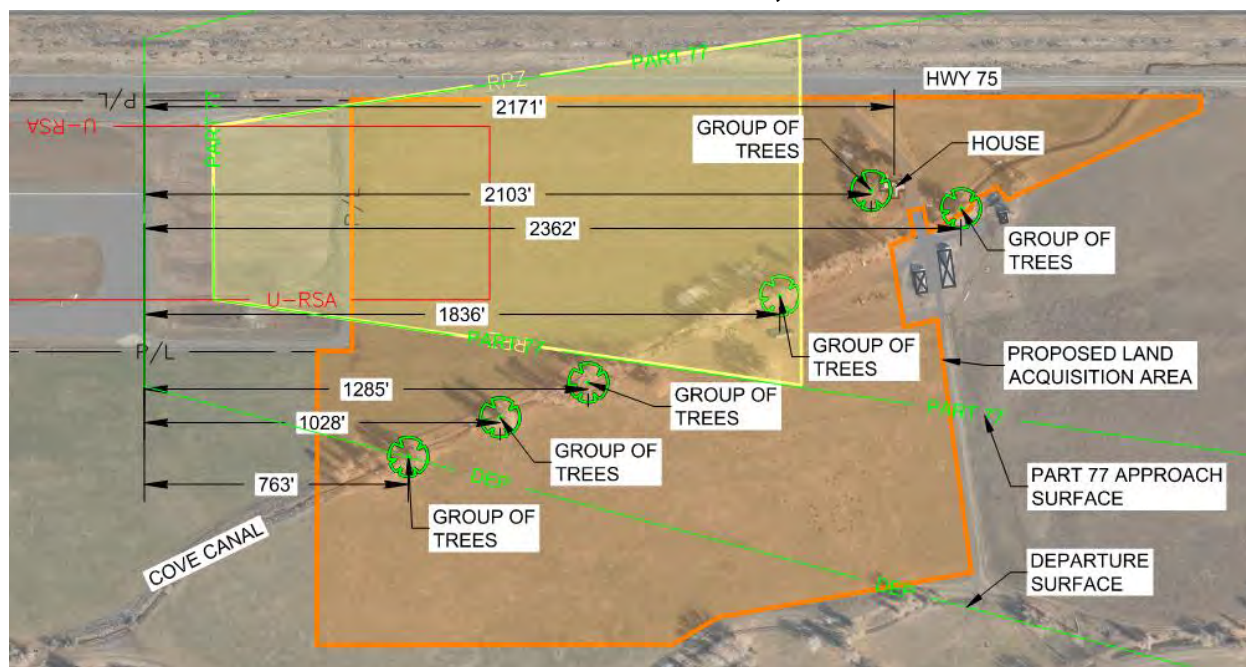
The property acquisition includes the entire portion of the Runway Protection Zone on private property³ and Runway Safety Area, along with the area⁴ of the Approach and Departure Surfaces to a distance of approximately 2,150 feet from the runway end. The property acquisition includes additional land outside of these surfaces to prevent uneconomical remnants of property resulting from the acquisition and provide control to the airport of the areas where trees have been allowed to grow in the past to prevent growth of new future obstructions. Initial conversations with the landowner indicate that simply buying the limits of the surfaces will leave areas that are not useable for the ranch; therefore this additional land is included in the proposed acquisition. This additional land to prevent uneconomical remnants includes the

³ A small portion of the Runway Protection Zone is within the Highway 75 Right of Way and is not part of this acquisition.

⁴ Note: This includes only the areas of land under the Approach and Departure Surfaces owned by the adjacent landowner. The portions of these surfaces that encompass the State Highway 75 right of way and property to the east of the highway are not included in this proposed project.

existing ranch house and adjacent property adjacent to State Highway 75 and west of the Cove Canal.

FIGURE 2 - APPROACH AND DEPARTURE SURFACES AT SUN, WITH PROPOSED ACQUISITION



The other element of the proposed project is the removal of the trees which have grown up to 100 feet tall and are identified as obstructions on the airport's Airport Layout Plan. Any trees that penetrate one of the 14 CFR Part 77 Approach or AC 150/5300-13A Departure surfaces, or that have the potential to penetrate these surfaces will be removed. Tree removal includes all existing mature trees as well as younger trees not yet penetrating the protected surfaces. As shown in Photo 1, if the younger trees are not removed they will quickly grow and penetrate the protected surfaces. Complete removal is needed to prevent re-growth of the trees and for mowing and ease of maintenance. Trimming or topping of the trees would remove the obstructions only temporarily, and then would require continuous maintenance to remain obstruction free. Additionally, the trees represent wildlife habitat. Commercial service airports like SUN are required by the FAA under 14 CFR Part 139 to alleviate wildlife hazards. This includes removal of wildlife attractants in the vicinity of the airport, especially in the Runway Protection Zones. Following acquisition and removal of the obstructions, the property will remain open space and portions of it will likely continue to be irrigated for pasture land and agricultural use, which are airport compatible uses as shown in Photo 2. No developments are planned on the property.

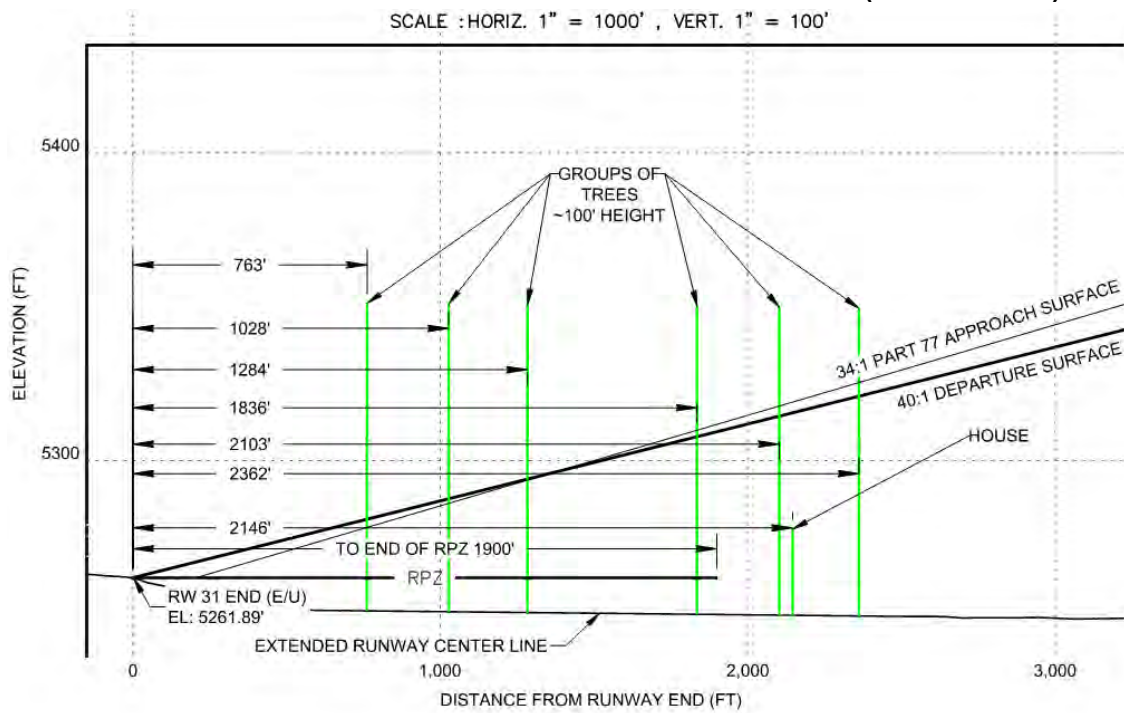
PHOTO 1 –OBSTRUCTIONS TO BE REMOVED– (TREE BELOW AIRCRAFT HAS A LIGHTING BEACON)



PHOTO 2 – COVE CANAL IN PASTURE – (SHOWS OBJECT FREE CONDITION MAINTAINED CANAL)

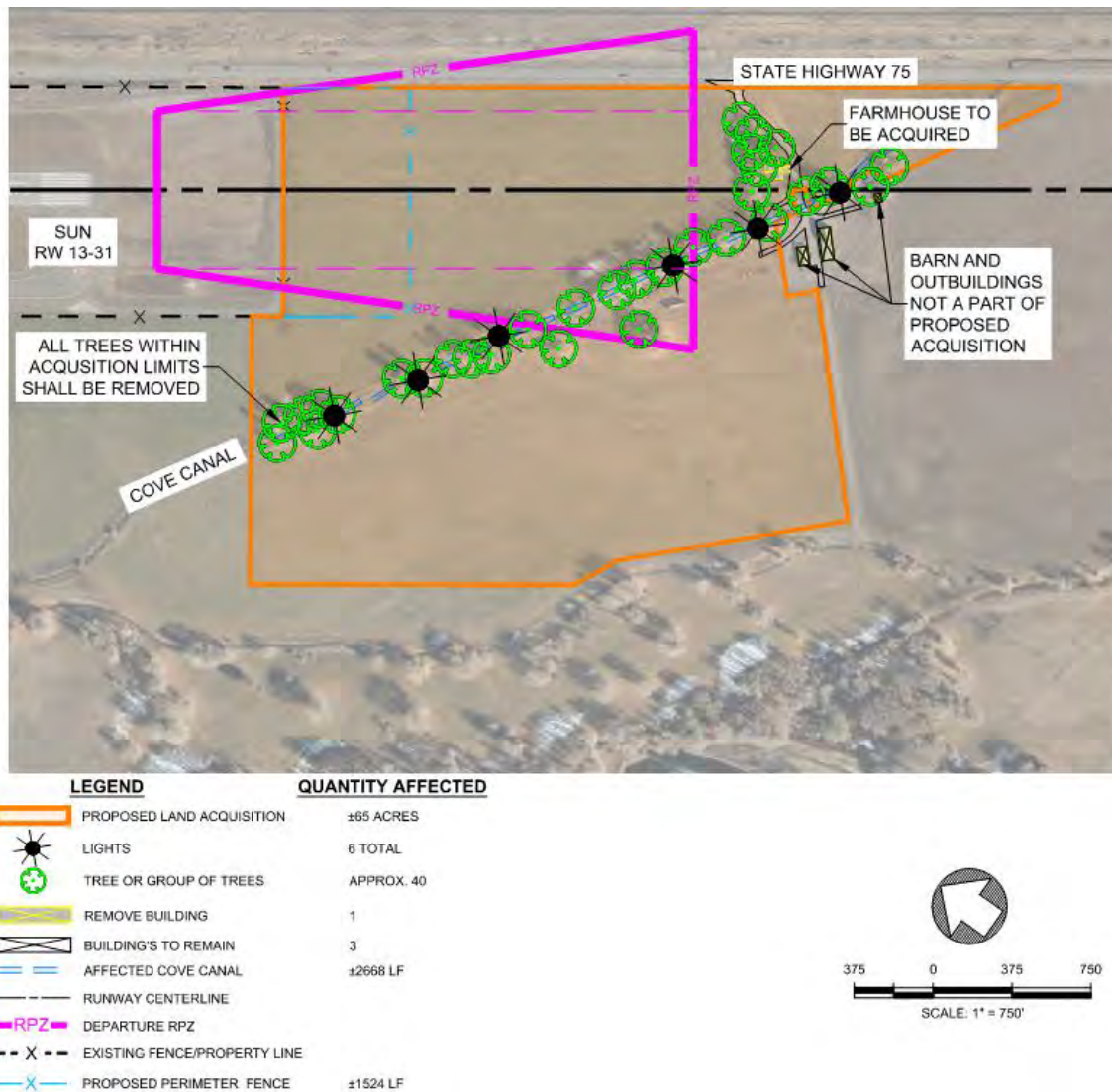


FIGURE 3 – OBSTRUCTIONS WITHIN APPROACH SURFACES AT SUN (PROFILE VIEW)



Source: T-O Engineers/Draft Airport Layout Plan

FIGURE 4– PROPOSED PROJECT ACTION



PROJECT JUSTIFICATION

The purpose of this project is to continue to ensure safe airport operations by bringing the airport into compliance with FAA standards and recommendations. The project is necessary to provide safe, navigable airspace in the vicinity of the airport and to remove and prevent incompatible land uses. The project will accomplish this by:

- Providing permanent control of the Runway Protection Zone through fee simple acquisition. This will ensure that the land uses of the RPZ will be compatible with safe air navigation and therefore protect the public on the ground adjacent to the airport.
- Controlling land to provide full Runway Safety Area off the south end of the runway, so that Declared Distances can be eliminated.
- Permanently removing obstructions in and near the Approach and Departure Surfaces and the associated wildlife hazards of these trees in close proximity to the airport.

These actions are justified, as 14 CFR Part 77, AC 150/5300-13A, and other FAA guidance require that airport sponsors take all reasonable actions to protect airspace by removing and mitigating hazards and prevent incompatible land uses in the vicinity of the airport in order to protect aircraft operators as well as people and property on the ground. Acquisition of this property will ensure that FMAA can comply with these requirements. Further, removal of existing obstructions and preventing trees from becoming future obstructions will improve the approach and departure safety for aircraft.

Required aspects of the project for Purpose and Need

- Acquisition of property that lies within the Historic District of the Halfway Ranch/Eccles Flying Hat Ranch and a portion of the Cove Canal. This is needed in order to:
 - Provide permanent control of the Runway Protection Zone through fee simple acquisition. This will ensure that the land uses of the RPZ will be compatible with safe air navigation and therefore protect the public on the ground adjacent to the airport.
 - Control land to provide full Runway Safety Area off the south end of the runway, so that Declared Distances on Runway 13/31 at SUN can be eliminated.
- Removal of Trees along the Cove Canal and at the farmstead. This is needed to:
 - Permanently remove obstructions in the vicinity of the Approach and Departure Surfaces and the associated wildlife hazards of these trees in close proximity to the airport.
- A perimeter fence must be installed around the Runway Safety Area. This is needed as:
 - This will allow full use of the runway pavement for takeoffs on Runway 13 and the removal of declared distances and operational restrictions for takeoffs to the south.
 - FAA under 14 CFR Part 139 requires a perimeter fence to exclude to alleviate wildlife incursions In accordance with its Airport Certification Manual and the requirements of 14 CFR Part 139, each certificate holder must take immediate action to alleviate wildlife hazards whenever they are detected.
 - The area surrounding SUN Airport has known migrating wildlife. The Airport has had documented encounters with wildlife hazards. Approximately 1,524 foot of fencing must be installed to satisfy 14 CFR Part 139.

Appendix B Supplement – Timeline of Evaluation and Agency Coordination Pertaining to the Yellow-billed Cuckoo (*Coccyzus americanus*)

August 2014	Designation of critical habitat for the Western Distinct Population Segment (DPS) of the Yellow-billed Cuckoo (YBCC) is proposed ¹ .
October 2014	YBCC are listed as Threatened for the Western DPS that includes the State of Idaho ² .
May 2017	Prior to conducting field surveys, NatureScope completed initial coordination over the phone with the U.S. Fish and Wildlife Service (USFWS). Communications obtained background information ³ associated with the YBCC. The official IPaC Species List was obtained from the USFWS database.
June 2017	NatureScope conducted initial coordination over the phone with Idaho Department of Fish and Game (IDFG) to acquire YBCC habitat requirements. Communication included: identifying locations of YBCC sitings, known YBCC habitat locations, and discussed the presence/ absence survey protocol.
June-August 2017	Call back surveys ³ were conducted by NatureScope using USFWS protocol to assess habitat and presence/absence.
September 2017	A Biological Resources Report ³ was compiled by NatureScope and attached as Appendix B. The report was presented to the FAA in the Draft EA.
June-Oct 2018	Personal communication (June 2018) and follow-up phone conversations were conducted over the summer of 2018 between TO-Engineers and the USFWS. Email correspondence (including submitting the Biological Resources Report) with USFWS and TO-Engineers occurred in October 2018.
December 2018	Email correspondence (including submitting the Biological Resources Report) between TO-Engineers and IDFG occurred (Attachment A).
December 2018	Follow-up email correspondence between TO-Engineers and the USFWS occurred (Attachment A).

1 Proposed Designation of Critical Habitat for the Western Distinct Population Segment of the Yellow-billed Cuckoo (*Coccyzus americanus*): Proposed rule. Federal Register, Vol. 79, No. 158, August 15, 2014. <https://www.govinfo.gov/content/pkg/FR-2014-08-15/pdf/2014-19178.pdf>

2 Determination of Threatened Status for the Western Distinct Population Segment of the Yellow-billed Cuckoo (*Coccyzus americanus*): Final rule. Federal Register, Vol. 79., No. 172, October 3, 2014. <https://www.govinfo.gov/content/pkg/FR-2014-10-03/pdf/2014-23640.pdf>

3 Scope of Work (SOW) Task 4.2.2 (protocol survey and impact assessment) efforts compiled as Appendix B (Technical Memorandum – Biological Resources and Habitat Assessment for SUN Airport Runway Protection Zone Project, Blaine County, Idaho). Appendix B satisfies Deliverable – Draft and Final Biological Evaluation technical memo per SOW.

Attachment A – Recent Agency Correspondence

U.S. Fish and Wildlife Service

Binggeli, Tamsen

From: Guenther, Joe
Sent: Wednesday, December 12, 2018 2:13 PM
To: Binggeli, Tamsen
Subject: Fwd: [EXTERNAL] SUN Airport, Land Acquisition Environmental Assessment

Sent from my Verizon, Samsung Galaxy smartphone

----- Original message -----

From: "Kibler, Bob" <bob_kibler@fws.gov>
Date: 12/12/18 2:06 PM (GMT-07:00)
To: "Guenther, Joe" <jguenther@to-engineers.com>
Subject: Re: [EXTERNAL] SUN Airport, Land Acquisition Environmental Assessment

Greetings Joe:

Per our conversation today, you understand that the Fish and Wildlife Service (Service) does not require consultation for projects that have been determined to have no effect by FAA for listed species or their critical habitats. However per your conversation, FAA continues to demand some form of documentation from the Service for this action. I will call FAA to ask them not to send no effect determinations to the Service, as we do not anticipate responding to such requests in the future.

For your records today, I am acknowledging receipt of the no effect determination prepared by TO Engineers for the Federal Aviation Administration. This does not indicate a review of, nor provide concurrence for the determination. I will update our records accordingly. I have no additional comments or recommendations to provide regarding trust resources of conservation concern for the Service.

Thank you for your call. Please contact me in the future if you have any questions or need additional information.

On Thu, Oct 11, 2018 at 11:04 AM Guenther, Joe <jguenther@to-engineers.com> wrote:

Bob –

As we discussed this past summer, the FAA has requested concurrence with the USFWS for the “no effect” determination for the land acquisition and obstruction removal project at the Sun Valley Airport in Hailey. If you can please review the attached memorandum and provide your opinion, we believe this will satisfy the required Agency to Agency coordination.

The Project Action will remove 100+ cottonwood trees which act as obstructions to the general aviation (safety issues). These trees were found to be isolated from the Big Wood River and not provide the dense canopy required for the

Yellow-billed Cuckoo. Furthermore, Call-back surveys returned no results from either the project site nor the riparian areas adjacent to the Big Wood River which is approximately ¼ mile west of the project site. Therefore, due to the absence of both Habitat and Species, a “no effects” determination was prepared.

Please let me know if you have any comments. The FAA request from Diane Stilson follows my request.

Thank you

JG

JOE GUENTHER, AICP | *Environmental Project Manager*



2471 S. Titanium Place | Meridian, Idaho 83642

D 208.602.7958

O 208.323.2288

www.to-engineers.com



Joe,

I've been going through the EA, and have noticed that there are no references to agency coordination (as you know, required by NEPA), nor are there any letters/responses in the appendix. I believe we talked about the necessity to make these contacts months ago (especially USFWS).

Please send me the contact letters and responses. These will need to be added to the appendix as well.

Thanks,

Diane Stilson, P.E.
Civil Engineer
Environmental Protection Specialist
FAA, Helena Airports District Office
2725 Skyway Drive, Suite 2
Helena, MT 59602
Ph: (406) 441-5411
Fax: (406) 449-5274

--
Bob Kibler
U.S. Fish and Wildlife Service-Ecological Services
Idaho Fish and Wildlife Office
1387 South Vinnell Way, Room 368
Boise, Idaho 83709

(208) 378-5255 Phone
(208) 378-5262 Fax
Bob_Kibler@FWS.GOV Email
<http://www.fws.gov/Idaho/>

Binggeli, Tamsen

To: Edelmann, Frank
Subject: RE: No effects determination for YBCC for SUN airport EA

From: Edelmann, Frank <frank.edelmann@idfg.idaho.gov>
Sent: Monday, December 17, 2018 2:28 PM
To: Binggeli, Tamsen <tbinggeli@to-engineers.com>
Subject: RE: No effects determination for YBCC for SUN airport EA

Dear Tamsen,

Thank you for the opportunity to review the attached Technical Memo (i.e., Biological Resources and Habitat Assessment for SUN Airport Runway Protection Zone Project, Blaine County, Idaho) for Hailey's Friedman Memorial Airport project. Please note that IDFG's mission is to protect, preserve, and manage Idaho's fish and wildlife resources for the public interest (Idaho Code 36-103), and the subject project is neither supported nor opposed.

IDFG defers to the USFWS to assess project effects determinations for species federally protected under the Endangered Species Act, such as the subject Threatened yellow-billed cuckoo.

I hope this will be adequate for the FAA-requested documentation from IDFG.

Thanks again,

Frank

Frank Edelmann
Environmental Staff Biologist
Idaho Department of Fish and Game
324 South 417 East, Suite 1
Jerome, Idaho 83338
(208) 324-4359



<https://idfg.idaho.gov/>

From: Binggeli, Tamsen [<mailto:tbinggeli@to-engineers.com>]
Sent: Monday, December 17, 2018 9:11 AM
To: Edelmann, Frank
Subject: FW: No effects determination for YBCC for SUN airport EA

Hi Frank,

I just noticed I got an error message, so I am sending this email again in case it didn't go through the first time. Please feel free to call or email if you have any questions. I appreciate your help this time of year!

Tamsen

TAMSEN BINGGELI | Environmental Planner



T-O ENGINEERS

2471 S. Titanium Place | Meridian, Idaho 83642

☎ 208.323.2288

www.to-engineers.com



From: Binggeli, Tamsen
Sent: Thursday, December 13, 2018 9:00 AM
To: 'frank.edelmann@idfg.idaho.gov' <frank.edelmann@idfg.idaho.gov>
Subject: No effects determination for YBCC for SUN airport EA

Good morning Frank Edelmann,

I am reaching out to you about a land acquisition and obstruction removal project at the Friedman Memorial Airport (SUN) in Hailey, Idaho. You may recall this project as our subconsultant, NatureScope LLC, reached out to you in summer 2017 regarding the YBCC survey they conducted and conclusions (attached).

The project involves the removal of 140-200 cottonwood trees that were growing along the Cove Canal near the Airport. In anticipation of potential Federal listing of YBCC at the time, NatureScope performed presence/absence surveys for yellow-billed cuckoo using USFWS protocol from June-August 2017. The call back surveys did not identify yellow-billed cuckoo presence. It was determined that the project would have **no effect** on YBCC based on the absence of YBCC in the area and the lack of suitable habitat. The small, linear habitat provided by the cottonwood trees do not meet minimum acreage, dense understory, or closed-canopy habitat preferences of yellow-billed cuckoo. Further, ample suitable habitat exists along the Big Wood River, approximately 1,000 feet west of the project area.

While you have already provided comments on this project via conversations with NatureServe and my manager, Joe Guenther, the FAA is requesting written correspondence from the agencies. Bob Kibler, USFWS, was also contacted about the project – his email is below. The USFWS does not provide consultation on “no effects” determinations. Would you be able to comment on this project regarding the no effect determination so that we have it in our records?

I appreciate your expertise regarding potential impacts to YBCC and your attention to this project.

Thank you,
Tamsen

TAMSEN BINGGELI | Environmental Planner



T-O ENGINEERS

2471 S. Titanium Place | Meridian, Idaho 83642

☎ 208.323.2288

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From: Guenther, Joe
Sent: Wednesday, December 12, 2018 2:13 PM
To: Binggeli, Tamsen <tbinggeli@to-engineers.com>
Subject: Fwd: [EXTERNAL] SUN Airport, Land Acquisition Environmental Assessment

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Please let me know if you have any comments. The FAA request from Diane Stilson follows my request.

Thank you
JG

JOE GUENTHER, AICP | Environmental Project Manager



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Thanks,

Diane Stilson, P.E.
Civil Engineer
Environmental Protection Specialist
FAA, Helena Airports District Office
2725 Skyway Drive, Suite 2
Helena, MT 59602
Ph: (406) 441-5411
Fax: (406) 449-5274

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Bob Kibler
U.S. Fish and Wildlife Service-Ecological Services
Idaho Fish and Wildlife Office
1387 South Vinnell Way, Room 368
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(208) 378-5255 Phone
(208) 378-5262 Fax
Bob_Kibler@FWS.GOV Email
<http://www.fws.gov/idaho/>

APPENDIX C

CULTURAL RESOURCES REPORT AND SUPPORTING CORRESPONDENCE

LAND ACQUISITION AND OBSTRUCTION REMOVAL
ENVIRONMENTAL ASSESSMENT

AIP # 3-16-0016-044-2017

Prepared for the Friedman Memorial
Airport (SUN) and the Federal Aviation
Administration

Friedman Memorial Airport Land Acquisition and Obstruction Removal



AIP#3-16-0016-044-2017

March 2018

By: Kerry Davis, M.S., Architectural Historian

Preservation Solutions LLC — Boise, ID

and

Jeanne Wright, M.A., R.P.A., Archaeologist

Wright Consulting Services — Boise, ID

Abstract

This report documents the results of a cultural resources survey conducted to identify and evaluate resources at and abutting the Friedman Memorial Airport, at the south edge of Hailey, Blaine County, Idaho. This effort is part of a larger land acquisition (59.1 acres acquisition; 5.6 acres easement) by Friedman Memorial Airport Authority (FMAA) and includes resource identification and documentation under both Section 106 and Section 110 of the National Historic Preservation Act (NHPA), as amended.

Under Section 106, cultural resources were identified and evaluated that may be impacted by the removal of trees currently within the runway approach surface at the end of Runway 13-31 of the Friedman Memorial Airport (airport code: SUN). The proposed project action is an undertaking of the Friedman Memorial Airport Authority (FMAA) under the jurisdiction of the Federal Aviation Administration (FAA). Under Section 110, the full extent of the Friedman Memorial Airport property (FMA-01) was documented for FAA's future planning purposes.

Section 106 Project Description

More specifically, the proposed project action consists of the removal of several dozen trees lining Cove Canal (10BN1126) on the Halfway Ranch/Eccles Flying Hat Ranch (13-16207) which have been deemed obstructions to airspace at Friedman Memorial Airport (FMA-01). The trees are primarily cottonwoods that have reached a height of as much as 80 feet to 100 feet in-height. Six pole-mounted lights have been affixed to the treetops to light the obstructions as an interim solution deemed insufficient by FAA guidelines. To meet FAA-recommended safety standards, approximately 1,600 feet of obstructing tree line will be removed to allow for an unobstructed airspace at the south end of the airport. Tree removal will include cutting them at ground level and remaining stumps treated with a pre-emergent to restrict regrowth. The banks of the canal will transition from a forested canopy to shrub or grassland complex.

Results of Cultural Resource Study

A total of three historic properties were identified and documented as part of this survey effort, all of which had been previously documented at least minimally or partially. Friedman Memorial Airport (FMA-01) was documented per Section 110; this included the separate documentation of two of its twenty-five resources: a runway (FMA-02) and a hangar (FMA-03). Per Section 106, Cove Canal (10BN1126) and Halfway Ranch/Eccles Flying Hat Ranch (13-16207) were documented as they are within the APE. Each of these three properties were resurveyed to meet the State Historic Preservation Office (SHPO) and FAA standards for cultural review of airport-related projects. Of the three properties documented, two properties appear to be NRHP-eligible: Cove Canal (10BN1126) and part of Halfway Ranch/Eccles Flying Hat Ranch (13-16207).

More specifically, and per the pending project action, the trees lining Cove Canal warranted additional evaluation. Located on what was originally unirrigated land categorized as 'desert' at the time of initial development, the trees lining Cove Canal are not original to the site and no evidence is apparent suggesting they were intentionally planted (such as for a wind break). Instead, they appear to be the de facto result of ongoing lack of canal maintenance, which typically included prevention of vegetation maturation along canal banks by means of mowing, burning, cutting, and so forth. Review of a birdseye view (1884), quadrangle maps (since 1895), and historic aerials (since 1954) shows trees along the canal either nonexistent or varying considerably in density and location(s) over time. Due to

the lack of evidence from either the historic record or on-site investigation, the trees were not found to be a historically significant component of the canal or ranch setting(s).

Although the project APE falls within a prehistoric and historic travel corridor between the Sawtooth Basin to the north and the Camas Prairie to the south, no archaeological findings were made during this investigation. The proposed undertaking will have no adverse effect on archaeological sites or isolates.

Determination of Effect(s)

Overall, the undertaking, as described, will have NO ADVERSE EFFECT on the NRHP eligibility of historic properties as a result of the project actions.

CERTIFICATION OF RESULTS

I certify that this investigation was conducted and documented according to Secretary of Interior's Standards and guidelines and that the report is complete and accurate to the best of my knowledge.



Signature of Principle Investigator

03/18/18

Date

Key Information

PROJECT NAME

Friedman Memorial Airport (SUN) Obstruction Removal

LOCATION

Blaine County

USGS QUAD(S)

Hailey, 7.5'

LEGAL LOCATION OF PROJECT

T2N, R18E, Sections 22, 23

PROJECT AREA

~ 2 acres direct impact, within total acquisition/easement 64.7 acres

AREA SURVEYED

~ 970 Acres Intensive Survey

0 Acres Reconnaissance Survey

PROJECT DATA

3 Previously recorded cultural properties (comprised of 42 total resources)

2 Newly recorded resources (located within a larger, previously recorded property)

AUTHOR(S)

Kerry Davis, Architectural Historian

FEDERAL AGENCY

FAA

REPORT PREPARED FOR

T.O. Engineers

REPOSITORY

Idaho SHPO

PRINCIPLE INVESTIGATORS

Kerry Davis, M.S., and Jeanne Wright, M.A., R.P.A.,

DATE

3/18/2018

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Project Description

T.O. Engineers, contracted Preservation Solutions LLC (PSLLC) in Spring 2017 to complete a cultural resource investigation of the Friedman Memorial Airport (FMA-01; SUN) and two abutting resources—Cove Canal (10BN1126) and Halfway Ranch/Eccles Flying Hat Ranch (13-16207)—at the south edge of Hailey, Blaine County, Idaho. The purpose of this survey effort was to identify and evaluate cultural resources under both Section 106 and Section 110 of the National Historic Preservation Act (NHPA), as amended, as part of a larger land acquisition and easement (64.7 acres) by FMAA.

Under Section 106, cultural resources were identified and evaluated that may be impacted by the removal of trees currently within the runway approach surface at the end of Runway 13-31 of the Friedman Memorial Airport (airport code: SUN). The proposed project action is an undertaking of the FMAA under the jurisdiction of the FAA.

Under Section 110, the full extent of the Friedman Memorial Airport property (FMA-01) was documented for FAA's future planning purposes.

More specifically, the proposed project action consists of the removal of several dozen trees lining Cove Canal (10BN1126) on the Halfway Ranch/Eccles Flying Hat Ranch (13-16207) that are a potential hazard to air traffic at Friedman Memorial Airport. The trees are primarily cottonwoods that have reached a height of as much as 80 feet to 100 feet in-height.¹ Six pole-mounted lights have been affixed to treetops to light the obstructions as an interim solution that has been deemed insufficient by FAA-recommended guidelines. To meet FAA safety standards, approximately 1,600 feet of tree line will be removed to allow for an unobstructed RPZ. Tree removal activities will include ground disturbance of the banks of the canal as part of stump removal, the banks of which will be restored and seeded.

Project Area of Potential Effect (APE)

The APE is restricted to the direct effects to the Cove Canal (10BN1126) and the indirect visual effects in the immediate vicinity of the Main Farmstead area of the Halfway Ranch/Eccles Flying Hat Ranch (13-16207). (See APE map below).

Environmental Setting

The project area is at the south edge of the city limits of Hailey, Idaho, along the northwest-southeast alignment of State Highway 75. At an elevation of approximately 5,250 feet above sea level, the area is characterized by open, generally level grassy fields used for grazing of cattle. The entire ground surface of the APE (outside of building footprints) has been regularly tilled, planted, and grazed. Natural soils for

¹ Cottonwoods are commonly found along wet areas in the Big Wood River Valley. Though possible, there is no evidence nor did the primary sources reveal any indication the trees pending removal along the canal were intentionally planted as a windbreak or 'shelter-belt.'

the area include the Little Wood-Ballam-Adamson group. These soils are very deep on alluvial plains and are well drained.

Historically, the valley floor was predominantly sagebrush steppe at upper elevations and riparian/wetland along the Big Wood River. Trees such as cottonwood were and are commonly found along these wet areas including along the Cove Canal (10BN1126). Current and serviceberry were historically also part of the sage steppe landscape.

Several types of wildlife are readily found in the APE. Mammals found in the area surrounding the APE include black bear, elk, mule deer, moose, and cottontail rabbit. Typical non-game mammals include badgers, coyotes, gophers, and racoons. Mountain lions are also known to be found in the area. The nearby river and its tributaries have populations of rainbow, brown, and brook trout.

Ranch-related resources dating from c.1900 to c.1965 form the nucleus of the Main Farmstead area of Halfway Ranch/Eccles Flying Hat Ranch (13-16207), through which runs c.1883 Cove Canal (10BN1126). Open grazing pastures and their associated fencing and tree lines extend in all directions, with SH 75 forming the project boundary to the east-northeast.

Figure 1: Location

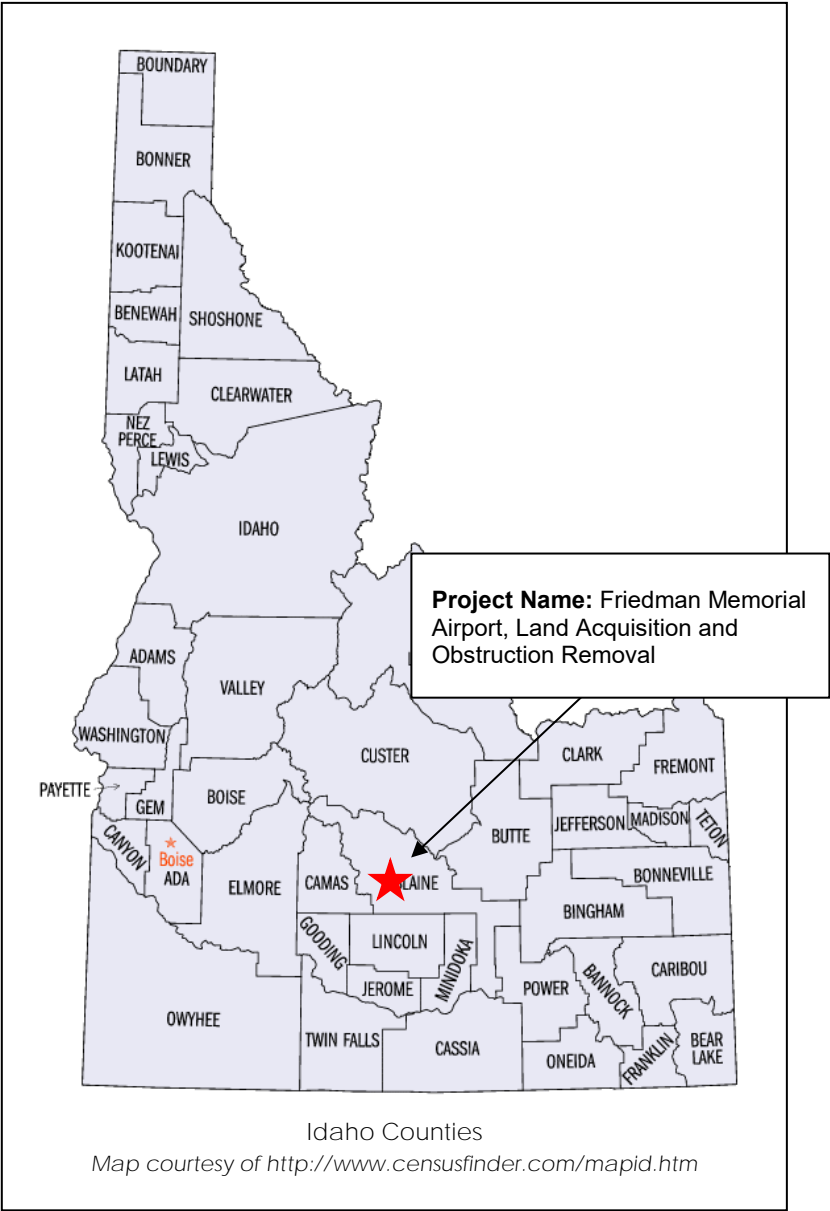


Figure 2: Project Area

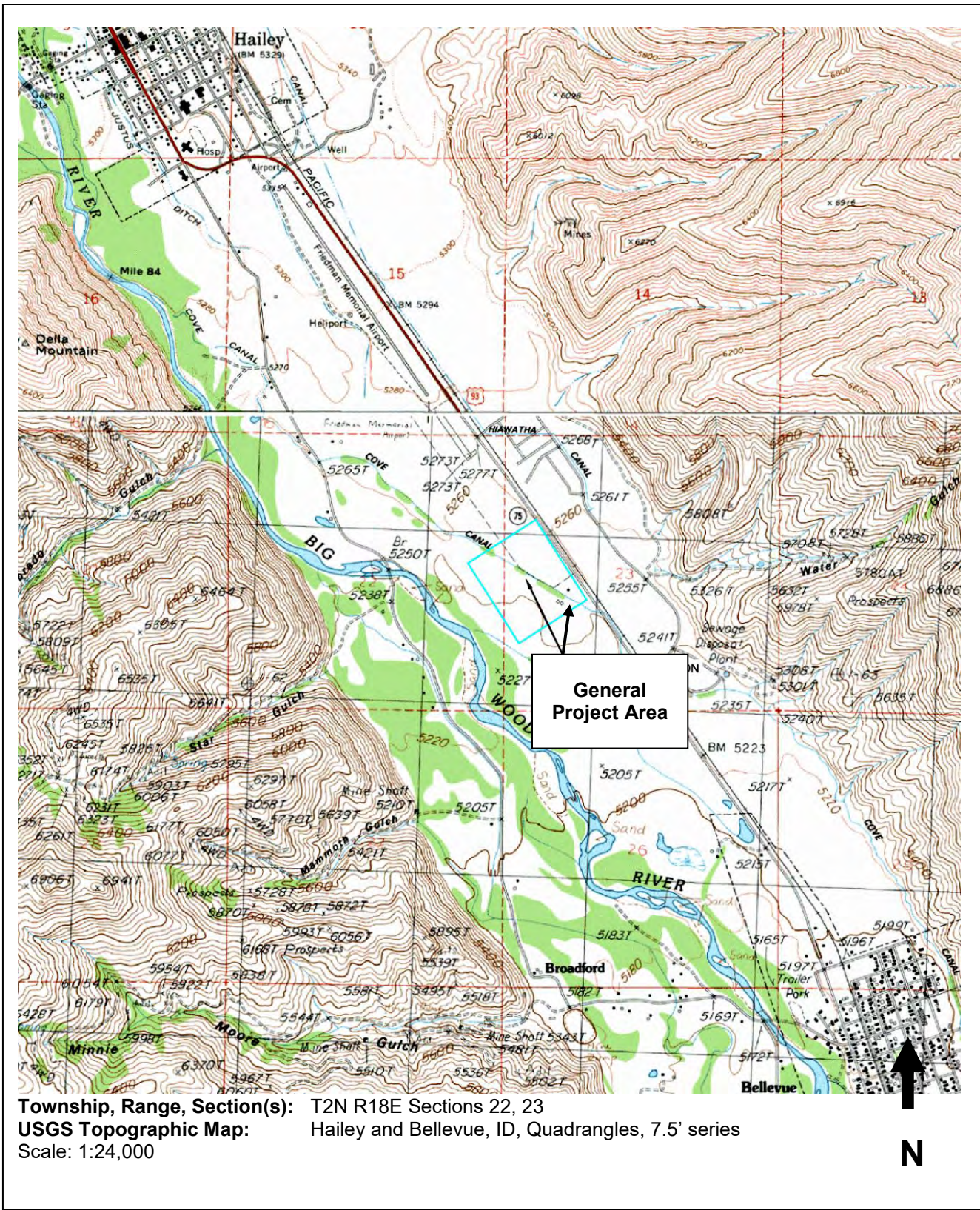
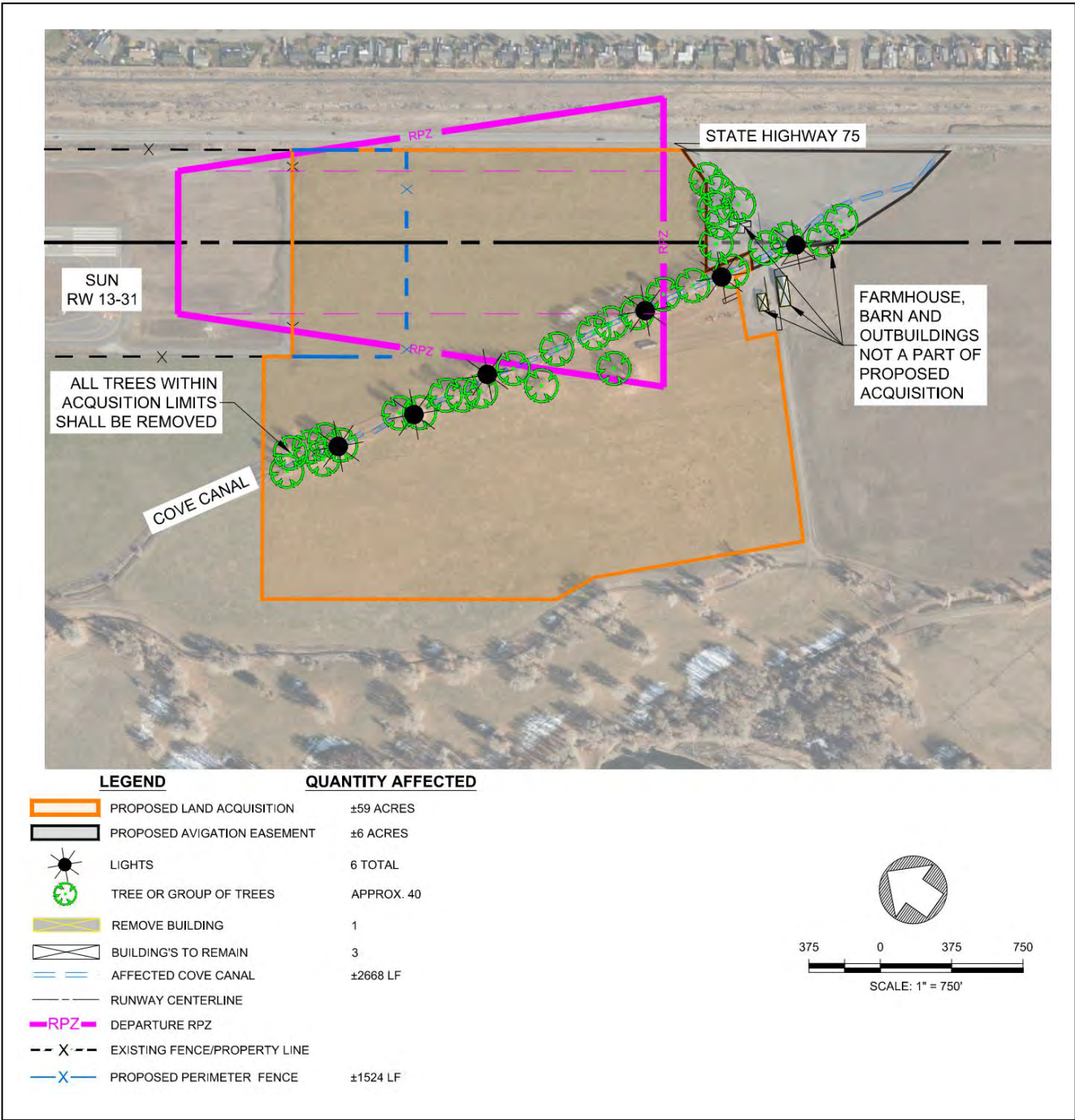


Figure 3: Area of Potential Effect (APE)



Cultural Setting

Prehistorically and historically, the Wood River Valley has been used as a travel corridor between the Sawtooth Basin to the north and the Snake River to the south. Both the Northern Shoshone and Bannock peoples had traditional food gathering areas near the project APE. Though there were few Euroamericans in the area prior to 1850, trade between indigenous people and Euroamericans (e.g. fur trade for horses and firearms) was common whenever contact occurred. However, during the 1850s conflicts mounted and in 1878 tensions escalated and between May and July the Bannock people clashed with US troops and eventually moved out of the area with restricted movement to and from the Fort Hall reservation. Having lost many resources, the Bannock people proceeded to concentrate on healing their community at Fort Hall.

The area around present-day Hailey and Bellevue was first settled by non-indigenous people in 1879 as mining boomed in the vicinity. Concurrently, agriculture and sheep ranching heavily impacted the **valley's development**. By 1881, sufficient settlement had taken place that the Bellevue and Hailey townsites had both been surveyed, platted, and settled, with Hailey designated the following year as county seat of Alturas County (later reorganized to create Blaine County). Increased settlement also pressed the Government Land Office (GLO) to contract for a subdivisional survey of the area – Township 2 North, Range 18 East, containing both Bellevue and Hailey – which was completed in 1882. The mining boom and rapid settlement also spurred the Union Pacific to extend a branch off the Oregon Short Line up to Hailey and Ketchum, which were completed in 1883 and 1884, respectively.

Agricultural Development

Around the same time, the US Congress passed the Desert Land Act in March 1877 as an amendment to the Homestead Act in an attempt to incent settlement and development of the arid and semiarid **public lands of the West**. The Act enabled individuals to purchase 'desert lands' at a price of \$1.25 per acre on the promise that the land would be irrigated within three years. A married couple could claim up to 640 acres while a single man could only claim half that. Unlike the Homestead Act, there was no residency requirement and title to the land was transferred once proof of irrigation was documented.

The APE and surrounding ranch property originated with two, separate, early 1880s Desert Lands Act claims filed by J.B. Oldham (north part of ranch in sections 22, 23) and J.R. Wilson (south part of ranch in sections 23, 25). Though the 1882 subdivisional survey shows no canal feature in the area, in 1888, these claims were certified and ownership transferred to the claimants, indicating the land had been irrigated.²

According to a 1952 US Department of the Interior Geological Survey Circular, Cove Canal (10BN1126) was established in 1882. Previous survey stated Cove Canal dates to 1883-1884 and is one of the earliest irrigation structures in Blaine County. Secondary sources indicate brothers John, Joseph, and Michael Brown, along with neighboring land owner, Marcus A. Miner, developed the canal. Review of **Government Land Office (GLO) records confirms Miner's involvement; he took ownership of land in the south half of Section 23 and the north half of Section 26 in May 1888, via Desert Lands Certificate #6.**

² Marcus Miner took over the Wilson's claim and received the official Desert Land Claims certificate of ownership. See Halfway Ranch/Eccles Flying Hat Ranch IHSI Form for additional history details not pertinent to Section 106 or Section 110 evaluation.

This historic record shows that the present-day Eccles Flying Hat Ranch property was known as Halfway Ranch as early as 1910, at which time the property spanned 600-640 acres (accounts vary) on the west side of what is now SH 75. It has operated as a ranch since. The Eccles Family has maintained ownership since 1969 and has expanded the ranch land holdings to the south and east (including land across SH 75) to its current property boundary.

Aviation Development

In the mid-to-late 1920s Idaho, and places nationwide truly caught 'airport fever.' As municipalities anticipated the benefit of accommodating airplanes, they promptly bought up land and leveled it for landing strips. Around this time, in 1931, the Friedman family donated seventy-six acres of farmland just south of Hailey to the City of Hailey for the purposes of developing an airport. Opening in May the following year, the airport featured a 0.75-mile dirt airstrip aligned northwest-southeast between the Big Wood River and U.S. Highway 93 (now SH 75). *The Hailey Times* reported on the opening and naming of the airport for early area resident, Simon M. Friedman (1853-1926), a native of Germany and early homesteader in the area. The grand opening boasted the presence of five airplanes, which was remarkable as it "was the first time that more than one airplane was in the valley and the unexpected arrival of so many birdmen aroused the greatest enthusiasm."

The new airport's earth and grass landing strip had been created under the oversight of the state highway department by the labor of local Boy Scouts and area citizens, who had "[cleared] off the rocks, [filled] the ditches, [removed] trees and [leveled] the field of wonderful beauty and exceptional adaptability to the intended purpose." In addition to the dirt runway, the airport boasted a "great compass 100 feet in diameter with a fine flag pole in the center and with arrows on the ground to give the birdmen the exact directions." Rocks gathered in the leveling of the field were whitewashed and laid into the shape of a compass and compass arrows, as well as formed into the word "HAILEY" set within a separate half-circle. In addition, a native stone monument attributed to John Bonin stood just northwest of the compass and at the time of dedication still awaited the installment of a bronze tablet. A 1932 photo shows the grass field and the only other improvements being that of these vernacular ground features (See historic photos below).

Though shown on the 1939 Metsker map of Blaine County as the Hailey "City Airport," the Friedman Memorial Airport was not yet considered 'developed' as it still had no buildings or beacon or paved runway. Airport improvements were slow and steady, with regrading and improving of the airfield in 1941, construction of the first hangar by 1945 (nonextant; see historic photos below), and the initiation of flying service—Wood River Flying Service—and a flying school by 1947.

With the onset of World War II, federal programs such as the Development of Landing Areas for National Defense (DLAND) received large allocations of funding, which were administered by the Civil Aeronautics Administration (CAA) for both civil and defense purposes. Airport traffic control, airport construction, and other associated activities became the purview of this federal agency. Following World War II was a period of focused expansion of the nation's civil airports. The Civil Aeronautics Administration (CAA) promoted this expansion through a federal aid program, proposing work to more than 120 airports in Idaho in the late 1940s, which included the field at Hailey. The final, 1949 allocation for improvements at Friedman Memorial Airport was \$18,629, with an expected local match of \$33,500. By the end of 1949, the CAA reported a net gain of twenty-eight new airports of all types in the Rocky Mountain states.

In 1959, the new Federal Aviation Agency recommended a \$5.9 million airport program for Idaho, which included acquisition of land and general improvements such as runway paving, lighting, automobile parking areas, and operational buildings at fourteen airports. Though this program did not specify allocations for Friedman Airport, Hailey's municipal airport road this wave of midcentury expansion and experienced major improvements in the 1960s. Though still featuring just a grass landing strip and a single hangar, in 1960 the Blaine County Airport Commission formed and the first commercial airline—West Coast Airlines—began using the airport. In June that year, the *Statesman* reported on the Idaho State Board of Examiners' approval of the Idaho Aeronautics department's request for funds to construct a terminal at Friedman Memorial Airport. Anticipated to cost \$6,000, the terminal was to accommodate the approximately four flights each day—typically two each from Boise and Salt Lake City—a 1962 photo shows the terminal in place, adjacent to the original 1945 hangar (see historic photos below). Culminating the 1960s improvements, the runway was paved and widened to one hundred feet in 1968.

As with most forms of travel, transportation infrastructure has always responded to technological developments in the various modes of travel. As planes got larger, heavier, faster, airports were, and still are, required to expand to accommodate for safety and efficiency of operation. As a result, the history of the airport in general, and Friedman Memorial Airport specifically, is one of constant change and evolution, with expansions occurring in one form or another every few years. Between 1974 and 1976, the FAA invested \$600,000 into the Friedman Airport, resulting in resurfacing of the then approximately 4,600-foot runway, construction of a new turn-around section at the south end of the airport, installation of a new sprinkler system, and access road development, as well as installation of runway lights.

A 1976 article in the *Statesman* reported the airport was nearing capacity and new airport sites were being investigated that could handle larger jets. At the time, the airport handled almost 25,000 take-offs and landings annually, which was expected to jump to 32,000 in 1977. As a result, an Airport Master Plan was developed and in place by September 1978. At this time, the airport featured a paved runway and only five or six hangar buildings (two on the northeast side of the runway along SH 75, and only one of which is still extant (resource #2)).

The aviation industry and airport infrastructure nationwide underwent drastic changes in the late 1970s, particularly due to the Airline Deregulation Act of 1978, which, according to Idaho historian, Arthur Hart, “had an immediate and drastic impact on the aviation industry...[and] especially felt in Idaho, with a population less than a million people. Without strict Civil Aeronautics Board regulation, airlines were free to pull out of small town service that was unprofitable.”

Late twentieth century changes at the airport changed the appearance of the site considerably. The airport received a terminal building in 1985 and an air traffic control tower around the same time. The terminal was expanded in 1991 and between 1984 and 1992 the runway was extended about over 1,750 feet at its southeast end, all as a result of increased traffic. In 1993-1994, several buildings were demolished as the airport was, again, expanded and improved upon. Additional expansions between 1998 and 2003, and again between 2004 and 2009 added another 1,150 feet to the length of the runway at the southeast end. Between 2004 and 2009, the hangars and plane parking previously located on the east edge of the airport property, between the runway and SH 75, were relocated, consolidating all taxiing traffic to the west edge of the airport. Most recently, around 2013, the current taxiway was constructed and connections to the runway realigned to their current appearance.

The project area under Section 106 now reflects late nineteenth through twentieth century agricultural ranch development. The survey area under Section 110 reflects late twentieth and early twenty-first century aviation-related development.

Figure 4: Aerial View of Project Area and Vicinity



Pre-Field Research

Results from Idaho Record Search #17280 were received on May 5, 2017.

Previous Cultural Resources Studies

Several cultural resources studies have taken place in the vicinity over the years, primarily triggered by proposed Idaho Transportation Department (ITD) road-related actions dating from 1984 through 2008. Two previous Idaho Historic Sites Inventory forms are on file within the project area – Cove Canal (10BN1126) and Halfway Ranch/Eccles Flying Hat Ranch (13-16207)—both of which were found to be NRHP eligible.

Neither of the archaeological studies in the APE identified cultural resources. More specifically, in 2004 archaeologist Susan Leary conducted the “SH 75 Timmerman to Ketchum” Archaeological and Historical Survey Report for the Archaeological Survey of Idaho (2004/499), which included the section of SH 75 parallel and abutting Friedman Memorial Airport. The survey included 150 feet on either side of the highway and overlaps part of this project APE. Additionally, Claudia Walsworth conducted a survey in 1993 of the Friedman Memorial Airport. Both **Leary's and Walsworth's studies** included portions of the Halfway Ranch/Eccles Flying Hat Ranch and Cove Canal. No archaeological resources were found within the areas studied on the Eccles Flying Hat Ranch/Halfway Ranch.

Summary of previous studies in this area (within one mile of the survey area).

Report#	Author	Date	Title
1993/50	Henrikson, S.	1992	RO Fire Rehab Project (BLM)
1989/1994	Gaston, J.	1984	Annual Report of Archaeological Investigations, 1983 (ITD)
1989/1995	Gaston, J.	1984	Annual Report of Archaeological Investigations, 1984 (ITD)
2004/449	Leary, S.	2004	SH-75 Timmerman to Ketchum (ITD)
2008/514	Walsworth, C.	2008	Elm Street Sidewalks, Safe Route to School (ITD)
1993/734139	Walsworth, C.	1993	Cultural Resource Survey of Friedman Memorial Airport
1996/851	Gallagher, J.	1995	Archaeological Survey of 3 USPS proposed office locations
2002/429	Walsworth, C.	2001	Syringa Fiber Optics Project

Expected Cultural Resources

Archaeological

The only known prehistoric site in the vicinity of the APE is the Elkhorn Springs site (10-BN-23) thirteen miles north of Hailey. Due to the nature of the Wood River valley being a travel corridor between the Snake River plain and the central mountains from prehistory through the current era, sites associated with prehistoric indigenous peoples, early exploration, mining, and agriculture/ranching resources are possible within the APE.

The Bannock and Northern Shoshone people had ancestral food gathering areas at nearby Camas Prairie to the south and the Sawtooth Basin to the north. Due to the proximity of the Wood River to the west of the APE and probable resource procurement sites, prehistoric sites may be encountered.

Since the APE lies within the boundary of the Eccles Flying Hat Ranch, encountering historic artifacts/sites is likely to occur. Other historic sites likely to be encountered would be those associated with mining and historic settlement in and near the valley.

Above-Ground

Per Section 106, the project site is on the National Register-eligible Halfway Ranch/Eccles Flying Hat Ranch (13-16207), along a section of the NRHP-eligible Cove Canal (10BN1126). No other properties within the APE are on record as having been previously documented.

Under Section 110, the full extent of the Friedman Memorial Airport property (FMA-01) was documented for FAA's future planning purposes. The airport was previously partially recorded in 1993, at which time five buildings pending demolition and no longer extant were the only specific resources documented.

Listed below are all properties previously documented within the vicinity, as shown on the Record Search provided by SHPO in early May 2017.

Site #	Site/Feature Type	NR Status	Distance to APE
13-05154	Big Wood River Bridge	none given	~0.6mi
13-08183	Broadford Rd. Log House	none given	~1.71mi
13-08184	Broadford Farm	none given	~1.69mi
13-08185	none given	none given	~1.45mi
13-16156	Sun Valley Aviation Hangar No. 1	Nonextant	N/A
13-16157	Sun Valley Aviation Inc. Office	Nonextant	N/A
13-16158	Sun Valley Aviation Hangar No. 2	Nonextant	N/A
13-16159	Friedman Airport County Shop Building	Nonextant	N/A
13-16160	Sinclair Hangar	Nonextant	N/A
13-16207	Eccles Flying Hat Ranch/Halfway Ranch	NR Eligible	Inside APE
10BN1117	Hiawatha Canal	NR Eligible	~0.34mi
10BN1191	Rockwell-White Power Plant Canal	NR Eligible	~0.25mi
10BN1126	Cove Canal	NR Eligible	Inside APE
13-16171	Galena Toll Road (SH 75)	NR Eligible	Abutting
13-16172	Oregon Short Line RR	NR Eligible	~0.13mi

Since their founding in the 1880s, Hailey and Bellevue have both been commercial hubs in the Wood River Valley. As such, the project site and vicinity are in an area characterized by the strong historic influences of mining and the surrounding agricultural economy. The project site and vicinity is characterized by late nineteenth and early twentieth century agricultural resources, with nonhistoric residential development abutting in each direction. Historic late nineteenth through late twentieth century agricultural resources and landscape features are expected throughout the vicinity and within the current APE.

Methodology

Regulatory Framework

The National Historic Preservation Act of 1966 (NHPA) was enacted to preserve cultural resources, both historic and prehistoric. Section 106 of the NHPA requires federal agencies to take into account the effects of their undertakings (i.e. permitting, licensing, funding) on properties listed in or eligible for inclusion in the National Register of Historic Places (NRHP). Compliance with Section 106 requires consultation with the Advisory Council on Historic Preservation (ACHP), the State Historic Preservation

Officer (SHPO), and/or and the Tribal Historic Preservation Officer (THPO) if there is a potential adverse effect to NRHP-eligible properties.

Section 110 of NHPA requires Federal agencies to establish a historic preservation program providing for the identification and protection of the historic properties under agency ownership, management, or oversight. This program must ensure such properties are maintained and managed with due consideration for preservation of their historic values, and must contain procedures to implement Section 106, which must be consistent with the ACHP's regulations. Section 106, Section 110, and various other statutes listed in FAA Order 1050 require that impacts to cultural resources (i.e. historic, architectural, archaeological) be considered.

Per Section 106, identification, documentation, and evaluation of cultural resources was completed throughout the current Area of Potential Effect (APE). This consisted of the resurvey and updating of documentation of Halfway Ranch/Eccles Flying Hat Ranch (13-16207) and Cove Canal (10BN1126). Determination of effect(s) included assessment of both potential direct and indirect effects to NRHP-eligible resources.

Concurrently Section 110 identification, documentation, and evaluation was completed for Friedman Memorial Airport (FMA-01; SUN) as part of the FAA's obligation to give consideration to cultural resources in project planning and/or when considering approval of any action potentially affecting NRHP-eligible resources.

Personnel and Research

Preservation Solutions architectural historian, Kerry Davis, M.S., served as project manager, field photographer, researcher, and cultural resource assessment author. WCS archaeologist, Jeanne Wright, M.A., R.P.A. completed the archaeological assessment. T.O. Engineers facilitated fieldwork and research, as well as provided project description and airport planning documentation. Davis completed the necessary research at Idaho SHPO in Boise. Additional research included review of Blaine County Assessor records, utilization of the online collections including those of USGS, BLM GLO, and the *Idaho Statesman* Historical Archive (available through the Boise Public Library).

Archaeological Methodology

Per Section 106 evaluation, archaeologist, Jeanne Wright of Wright Consulting Services LLC (WCS), conducted an intensive-level pedestrian survey of approximately fifty-three acres in the APE on May 21-22, 2017. This survey took place on land currently occupied by the Eccles Flying Hat Ranch abutting the south end of the Friedman Memorial Airport. Wright covered the entire area at fifteen-meter intervals and conducted three subsurface shovel tests near the canal where tall cottonwood trees are to be removed. Visibility of the ground ranged from twenty to fifty percent. Aside from the ground occupied and surrounding ranch buildings, the fields have been tilled regularly. Also many gopher and badger holes were encountered and associated mounds closely inspected.

As part of the Section 110 evaluation, Wright also assessed approximately 206 acres of the Friedman Memorial Airport (FMA-01). It was determined that soils have been previously disturbed as the airport was leveled, irrigated, and farmed before being expanded to its current configuration. As such, the probability of archaeological resources being present is minimal.

Contact with tribes with affiliations with the project area will be initiated by FAA.

Above-Ground Methodology

Fieldwork

The field survey to document each resource took place on May 21, 2017, and included photographic documentation of each above-ground resource in the APE sufficient to determine National Register of Historic Places (NRHP) eligibility. The resource-by-resource analysis included field investigation and documentation of the exterior of each of the three properties, comprised of a total of forty-two resources located in and abutting the project area.

This fieldwork consisted of on-site integrity assessments and photographic documentation of all properties. Field analysis led to the identification of potentially eligible and ineligible resources in accordance with *National Register Bulletin 15: How to Apply the National Register Criteria for Evaluation*. Photographic documentation complied with National Register and Idaho SHPO photography policies and included at least two views of each resource regardless of age.

Compilation and Analysis of Data

Preservation Solutions used Idaho SHPO's Microsoft Access database template to compile the survey information based upon the information required by the IHSI Form. The completed database includes data fields for each building's historic and current functional use; physical features (e.g., principal materials, roof type, number of stories); architect and/or builder, if known; estimated or documented date of construction; presence of historic outbuildings; source(s) of historic information; parcel identification numbers; and assessments of eligibility.

In order to accurately evaluate the eligibility of each resource and/or group of resources according to the criteria established by the Secretary of the Interior and Idaho SHPO, the consultant analyzed the following four categories of data to identify contiguous districts, discontiguous thematic resources, and individual properties that are potentially eligible for National Register listing.

- Architectural Integrity
- Date of Construction
- Original Building Use/Function
- Building Form/Architectural Style

Evaluation and Analysis

Significance Requirements

In addition to retaining integrity of historic architectural design, properties eligible for listing in the National Register must meet certain criteria of historic significance. Historic significance is the importance of a property to the history, architecture, archaeology, engineering, or culture of a community, a state, or the nation. To be listed, properties must have significance in at least one of the following areas:

Criterion A: Association with events, activities, or broad patterns of history.

Criterion B: Association with the lives of persons significant in our past.

Criterion C: Embody distinctive characteristics of construction, or represent the work of a master, or possess high artistic values; or represent a significant and distinguishable entity whose components may lack individual distinction.

Criterion D: Have yielded, or be likely to yield, information important in prehistory or history.

Integrity Requirements

In addition to historic significance, a property must also retain integrity. As defined by the National Register of Historic Places, "historic integrity is the authenticity of a property's historic identity, evidenced by the survival of physical characteristics that existed during the property's historic period."³ Thus, all properties eligible for listing in the National Register of Historic Places and/or for local designation, whether for individual significance or as contributing elements to a district,⁴ must retain sufficient historic architectural integrity to convey the period of time for which they are significant.⁵

The consultant visually inspected the exterior of all resources (i.e. buildings, sites, structures, and objects) to determine the retention of integrity of each resource in the survey area. The National Register defines seven physical aspects of integrity against which a property or district must be evaluated:

- | | |
|-------------|---------------|
| ▪ Location | ▪ Workmanship |
| ▪ Design | ▪ Feeling |
| ▪ Setting | ▪ Association |
| ▪ Materials | |

To maintain integrity, a property must possess at least several of these aspects, enough so that the essential physical features that enable it to convey its historic significance remain intact. Determining which aspects are important to integrity requires knowledge of why, when, and where the property is significant.

Archaeological Results

Pedestrian Survey Results

Although the Halfway Ranch/Eccles Flying Hat Ranch has been in operation for well over a century, the usual historic trash scatters were not encountered during survey. The ranch is well-cared for and appears to be soundly operated. The only field survey findings were a modern plastic motor oil jug and

³ National Park Service, *National Register Bulletin: How to Complete the National Register Registration Form* (Washington D.C.: U.S. Department of Interior, 1997), 4.

⁴ A contributing property to a historic district does not have to meet the threshold for individual significance, but it must contribute to the district's area of significance. Properties contributing to a district's significance for architecture must retain a higher degree of architectural integrity than in a district significant for associations with an important individual or with historical events or patterns of history.

⁵ Historic architectural integrity should not be confused with the physical condition of a building or structure. A building may be in excellent physical and structural condition, but may have lost its historical character-defining elements. Conversely, a building may retain all of its historical architectural features, but may be structurally unsound and, therefore, in poor condition.

Above-Ground Results

A total of approximately 970 acres were intensively surveyed and reviewed against NRHP eligibility criteria (i.e. approximately fifty years of age, significance, integrity, etc.) as a part of this investigation. Under Section 106, cultural resources were identified and evaluated that may be impacted by the removal of trees currently within the runway approach surface at the end of Runway 13-31 of the Friedman Memorial Airport (airport code: SUN). Under Section 110, the full extent of the Friedman Memorial Airport property (FMA-01) was documented for FAA's future planning purposes.

The survey area consisted of three large properties— Halfway Ranch/Eccles Flying Hat Ranch (13-16207), Cove Canal (10BN1126), and Friedman Memorial Airport (FMA-01)—all of which had previously been surveyed, at least minimally or partially, and which were resurveyed to current SHPO and FAA standards as part of this project. A total of two properties— Cove Canal (10BN1126), and part of Halfway Ranch/Eccles Flying Hat Ranch (13-16207)—were found to be NRHP-eligible.

Though established in the early 1930s, Friedman Memorial Airport (FMA-01) retains no integrity from that period. The overall character of the airport is that of late twentieth and early twenty-first century aviation development. No resource appears to be individually eligible for listing in the National Register of Historic Places (NRHP) and there is currently no district potential. Though not NRHP-eligible, two specific airport resources received intensive-level documentation—the Friedman Memorial Airport Runway (FMA-02) and a c.1974 Friedman Memorial Airport Hangar—per FAA preference for documentation of airport resources less than or nearing fifty years of age. For further information please see the attached Idaho Historic Sites Inventory (IHSI) forms. All cultural resources recorded and pre-recorded in the survey area:

Table 1. Recorded properties

IHSI# or Field #	Property/Resource	NRHP Eligibility	Distance to APE	Project Effect
13-16207	Halfway Ranch/Eccles Flying Hat Ranch	Eligible, Historic District	Within APE	No Adverse Effect
10BN1126	Cove Canal	Eligible, Individually	Within APE	No Adverse Effect
FMA-01	Friedman Memorial Airport	Ineligible	0.35 mi	No Effect
FMA-02	Friedman Memorial Airport Runway	Ineligible	0.24mi	No Effect
FMA-03	Friedman Memorial Airport Hangar	Ineligible	1.55mi	No Effect

13-16207 – Halfway Ranch/Eccles Flying Hat Ranch

The Halfway Ranch/Eccles Flying Hat Ranch is a very large property spanning approximately 750 acres on both sides of SH 75. The property is comprised of three general areas: the Main Farmstead Area; the Corral Area; and the Southeast Pasture Area. (See Figure 6 below.)

A subset of the ranch encompassing about 615 acres on the west side of SH is eligible for listing in the NRHP as a historic district. The Main Farmstead Area and Corral Area are within the NRHP-eligible historic district boundaries. The Southeast Pasture Area was added to the overall ranch property in the 1990s and is not eligible as part of the historic district.

For the sake of discussion and clarity, a few definitions and items of note:

Farmstead: This term refers to the collection of buildings that form the nucleus of the much larger ranch and anchor the property. At the Halfway Ranch/Eccles Flying Hat Ranch these include the farmhouse, well, barn, equipment shed, outhouse, and irrigation equipment shed. (See Table 2 below.) This term is meant to be referential and descriptive and should not be confused with NRHP terminology.

Historic District: NRHP guidelines dictate that large ranches, such as Halfway Ranch/Eccles Flying Hat Ranch, be categorized as Historic Districts (See NRHP Bulletin 16A, page 15). Per National Register guidelines for including historically associated landscapes, as well as recent National Park Service guidance regarding boundary justification, the NRHP-eligible Historic District boundary of the Halfway Ranch/Eccles Flying Hat Ranch includes the surrounding pastures and features (i.e. canals, tree lines, fence rows, etc.) for their historic setting associations. More specifically, per National Register Bulletin 16A: *How to Complete the National Register Registration Form*, boundary instructions dictate that one "include any surrounding land historically associated with [a] resource that retains its historic integrity and contributes to the property's historic significance." At Halfway Ranch/Eccles Flying Hat Ranch, this includes the approximately 615 acres known to have been historically associated with the ranch.

Halfway Ranch/Eccles Flying Hat Ranch Property Name: When previously documented, the ranch was recorded only with its current name "Eccles Flying Hat Ranch" on the Idaho SHPO IHSI form. Per NRHP guidelines, properties should be documented with their original or historic name. As such, this survey effort elaborated on the research and updated the recorded name to reflect the historic name of "Halfway Ranch."

This approximately 750-acre ranch property spans the distance between the city limits of Hailey and Bellevue, in Blaine County, Idaho. Comprised of eight separate parcels varying between 1.6 and 615 acres on the both sides of State Highway (SH) 75 (13-16171), the core of the property is anchored on the west side of SH 75, between the Big Wood River and the highway, where about 615 acres form the historic core of the ranch. Overwhelmingly characterized by open pastureland, the ranch property encompasses sixteen resources dating from 1884 to c.2006, of which nine are buildings (farmhouse, barn, outhouse, and six various ancillary ranch buildings), seven are structures (well, corral, three grain bins, two canals). Among them are two historic canals—the Cove Canal (10BN1126) and the Rockwell-White Power Plant Canal (10BN1191)—both of which cross the property along a northwest-southeast alignment from the Big Wood River. Aside from the canals, resources are generally located in three separate clusters at the Main Farmstead, the Corral Area, and the Southeast Pasture area.

At the north end of the property is the Main Farmstead, a cluster of historic farmstead buildings consisting of a farmhouse, a well, a barn, an equipment shed, an outhouse, and a nonhistoric irrigation equipment shed. The Corral Area is a group of nonhistoric ancillary ranch buildings and structures at the south end of the ranch, just west of SH 75, and is comprised of a worker's shack, a grain bin, a utility building, and a corral. The Southeast Pasture Area is on the east side of SH 75, at the southeast edge of the ranch property, and contains a cluster of ancillary buildings and structures (two grain bins, a shed, and an equipment garage building) adjacent to the north of intersection of N 2nd and E Spruce streets at the north edge of Bellevue.

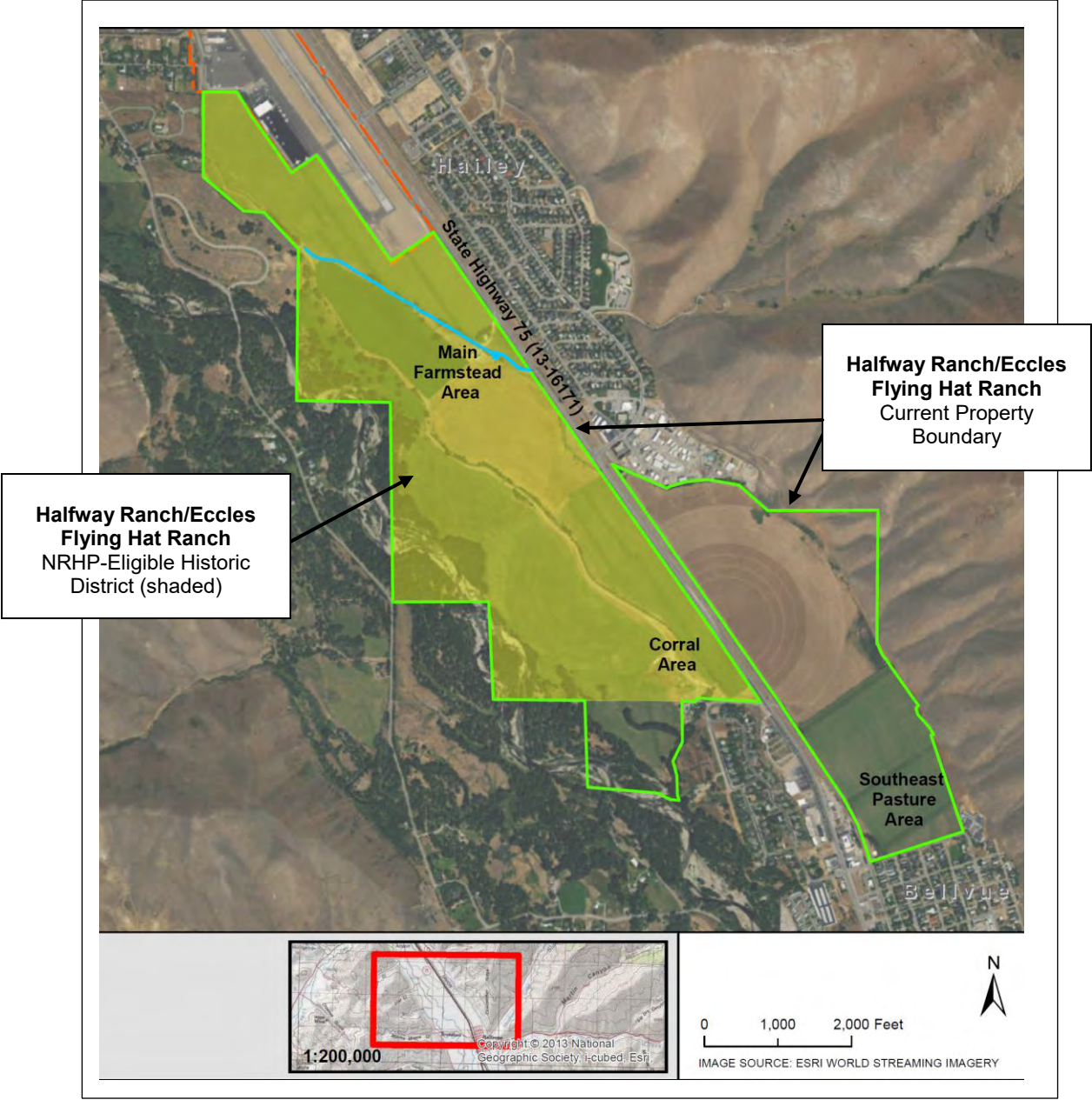
Other features not separately counted, per NRHP guidelines for elements of setting and feeling, include farm fuel tank stand structures, fencing, ranch access roadways, pivot irrigation structures, open pasturelands, and tree lines.

This ranch district contains historic resources dating from c.1883 to c.2006. The ranch originated with two, separate, early 1880s Desert Lands Act claims, certificates of which were transferred in 1888. The historic core of this ranch property was known as the Halfway Ranch as early as 1910 and historically encompassed about 640 acres primarily on the west side of present-day SH 75, as it does today.

Halfway Ranch/Eccles Flying Hat Ranch appears to be eligible for listing in the National Register of Historic Places as a historic district comprised of eight potentially contributing resources under Criteria A. This district is associated with significant trends in local history (Criterion A) and it retains sufficient integrity to communicate its historic associations with the agricultural development of the Wood River Valley.

This property possesses the following aspects of integrity: location, setting, design, materials, workmanship, feeling, and association. It retains sufficient integrity to be NRHP eligible as a historic ranch district.

Figure 6: Halfway Ranch/Eccles Flying Hat Ranch





13-16207, May 2017
View SE from north end of property; Cove Canal (10BN1126) at right



13-16207, May 2017
View SW of Barn (Resource #3) and Equipment Shed (Resource #4)

Table 2A. Resources documented as part of 13-16207 – Main Farmstead

IHSI Resource #	IHSI Photo #	Resource Name	Construction Date; Alteration Date(s)	Eligibility Status	Justification
Main Farmstead					
1	1, 6-9	Farmhouse	c. 1900; c.1920; c.1955; c.1991	Contributing	Integrity of design, materials, workmanship lost; Integrity of location, setting, feeling, and association intact
2	6	Well	c.1955	Contributing	Integrity of location, setting, design, materials, workmanship, feeling, and association all intact
3	5, 12-16, 24	Barn	c.1925; c.1950	Individually Eligible/ Contributing	Criterion A for Agriculture; Integrity of location, setting, design, materials, workmanship, feeling, and association all intact
4	5, 13, 17, 18, 24	Equipment Shed	c.1950	Contributing	Integrity of location, setting, design, materials, workmanship, feeling, and association all intact
5	19, 20	Outhouse	c.1965	Noncontributing	Integrity of materials, workmanship, and feeling lost; Integrity of location, setting, design, and association intact
6	21	Irrigation Equipment Shed	c.2000	Noncontributing	Constructed after period of significance; not historic

Main Farmstead – Elaboration

Resource #1. Farmhouse, c.1920; c.1955; c.1991 - Contributing

The original c.1900 section of this one-story house is at the north end and has a side-gabled roof and a hall-and-parlor form. A c.1920 gabled addition to the west half of the south elevation created an intersecting gable roof and an L-plan. A third, midcentury gabled wing addition projects from the northwest elevation. A nonhistoric, gabled, open carport extends from the west end of the south elevation. Additional features include: the steep roof pitch of the original section; the moderate roof pitch of the c.1920 addition; the shallow roof pitch of the midcentury addition; the variety of wood siding; corner boards and fascia trim under the eaves of the original section; the open eaves with exposed rafter tails on the c.1920 section; and the overall irregular footprint. Alterations include the incompatible application of vertical wood siding on some walls, replacement fixed-sash windows, metal roofing, and introduction of a sliding glass door in the center of the north elevation.

Despite alterations that prevent this building from being individually eligible, this farmhouse retains sufficient integrity to clearly communicate its historic associations with the agricultural development of the property. In a rural historic landscape such as this ranch, integrity aspects of location, setting, feeling, and association are particularly important in evaluating NRHP-eligibility, each of which this building retains. Though hindered by later and/or nonhistoric alterations, integrity of materials, design, and workmanship are sufficiently present communicate important information about the ranch's history and significance.

Resource #2. Well, c.1955 - Contributing

This well is located adjacent to the south of the farmhouse. Painted concrete block forms the square base perimeter wall and wood planks create a well cover, over which two steel pipe posts support the pyramidal roof clad with wood shingles. This structure is a good example of water source infrastructure development. It exemplifies its resource type and continues to convey its significant historic associations. The precise date of the well is undetermined; however, it is known to predate 1960.

Resource #3. Barn, c.1922 – Contributing/Individually Eligible

This large barn consists is a wood-frame building with a steeply pitched gambrel roof and a rectangular footprint oriented to face east toward the barnyard. Three utility doors, one at each end of the primary (east) elevation and one at the west end of the south elevation provide interior access. The walls are covered in tongue-in-groove wood siding and the roof is covered with corrugated metal sheeting over the historic wood shingles (visible at the west end of the south roof slope). Additional character-defining features include the: open eaves with exposed rafter tails; corner boards; large, hinged door/ramp centered in the top of the east gable allowing access to the interior hay loft; and the row of square, four-light wood windows illuminating stalls within. This building functioned as both shelter for livestock and storage for hay and grain. An open equipment shed extends from the rear (west) elevation. Its shed roof shelters five, open vehicular bays in the south elevation.

This barn is an excellent example of an early twentieth century ground-level stable barn. Likely built to replace an earlier, main barn that burned down, it communicates strong associations with the development of the ranch and agriculture in the Wood River Valley, as a whole.

Resource #4. Equipment Shed, c.1950 - Contributing

This one-story building has a rectangular footprint and a shallow-pitched, side-gable roof aligned generally east-west (parallel to the main barn). White painted concrete block forms the walls and the roof is covered with corrugated metal sheeting. The primary (south) elevation is defined by four vehicular bays facing the gravel barnyard roadway, the east three of which are open and the westernmost one containing a metal overhead door. Additional historic features include the: open eaves with exposed rafter tails; three, four-light steel sash windows at the south end of the west side elevation; and the vertical wood plank siding on each gable wall.

This building historically functioned as shelter for the ranch's tractors, equipment, and machinery, as well as providing an enclosed shop space within which to service machinery. It is an excellent example of its property type and retains the character-defining shallow side-gabled roof and series of vehicular bays. It clearly communicates its historic associations with the operation of the ranch.

Resource #5. Outhouse, c.1965 - Noncontributing

Though potentially of sufficient age, this building no longer retains sufficient integrity to clearly communicate its historic associations with the Main Farmstead. With no historic materials visible, it cannot readily convey its potential significance. If the secondary plywood siding were removed and historic siding found intact below, the building could be reevaluated for potential eligibility.

Resource #6. Irrigation Equipment Shed, c.2000 - Noncontributing

This building is not of sufficient age or significance to be eligible for listing in the National Register.

Figure 7: Halfway Ranch/Eccles Flying Hat Ranch – Main Farmstead

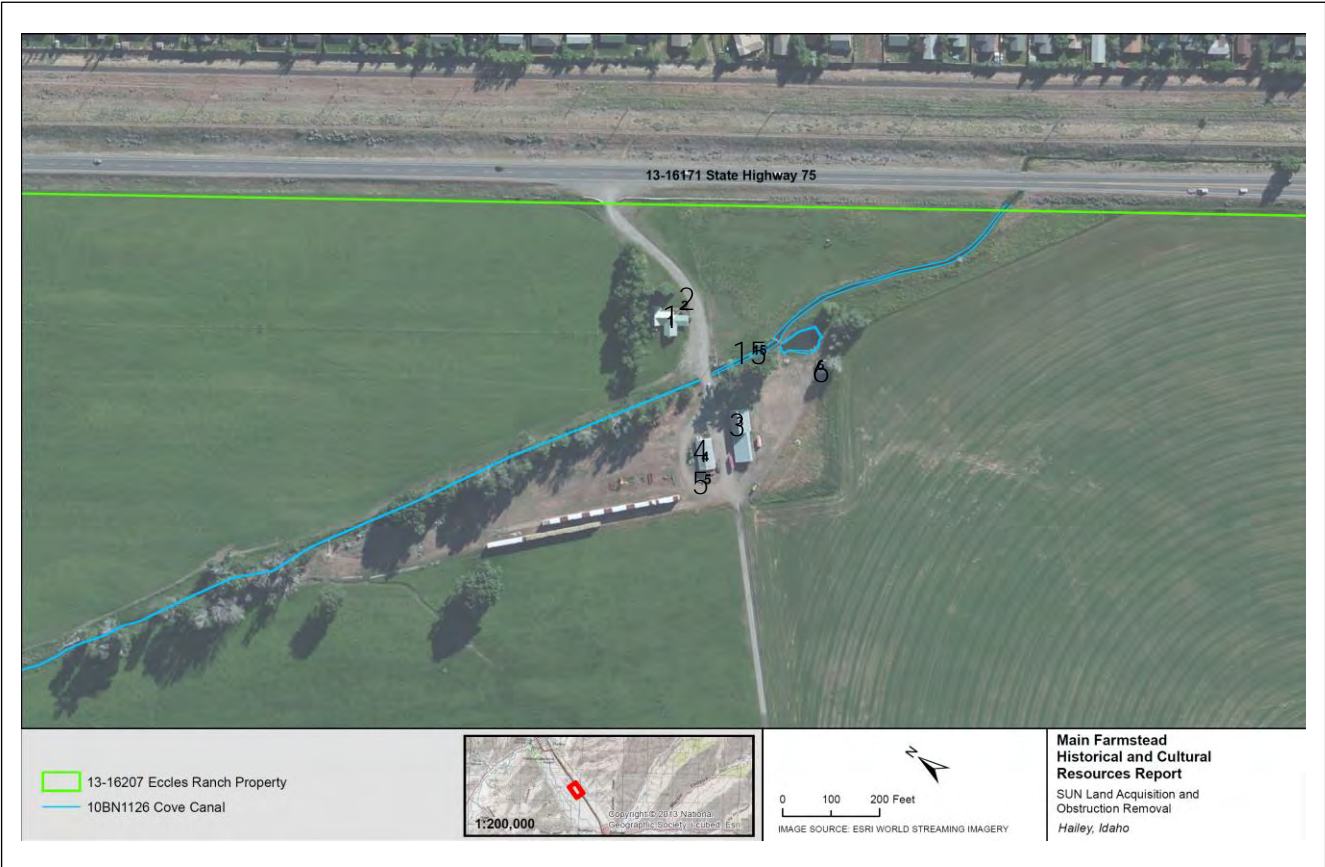


Table 2B. Resources documented as part of 13-16207 – Corral Area

IHSI Resource #	IHSI Photo #	Resource Name	Construction Date; Alteration Date(s)	Eligibility Status	Justification
Corral Area⁶					
7	35, 36	Worker's Shack	c.2006	Noncontributing	Constructed after period of significance; not historic
8	35, 37	Grain Bin	c.1960	Contributing	Integrity of location, setting, design, materials, workmanship, feeling, and association all intact
9	35, 37, 38	Utility Building	c.1955; c.1995	Contributing	Though moved to this location, this building retains sufficient integrity of; integrity of setting, design, materials, workmanship, feeling, and association to contribute to the overall significance of the ranch property
10	35, 39	Corral	c.1995	Ineligible	Constructed after period of significance; not historic

Corral Area - Elaboration

Resource #7. **Worker's Shack**, c.2006 - Noncontributing

This building is not of sufficient age or significance to be eligible for listing in the National Register.

Resource #8. Grain Bin, c.1960 – Contributing

Corrugated steel panels form the walls of this cylindrical structure. The conical roof is standing seam metal and the foundation is concrete. A single, sheet-metal-clad door is in the southeast side. Stenciled letters on the northeast side read, "BUTLER." Companies like Butler Manufacturing and Columbian Steel Tank Company fabricated easy-to-assemble grain bins like this beginning in the first years of the twentieth century, selling them worldwide for agricultural purposes well into the mid-to-late twentieth century. Nearly ubiquitous on working farms nationwide, these structures were commonly relocated based on farm operation logistics. Though a precise construction date of this bin has yet to be determined, historic aerial views indicate it at least predates 1965. It is a good example of the variety of ancillary agricultural resources that historically characterized working farms and ranches.

Resource #9. Utility Building, c.1955; c.1995 – Contributing

This side-gabled building has two primary elevations—southeast and northeast. A small vehicular bay at the west end of the southeast elevation and a single-leaf quarter-light wood paneled door at the north end of the northeast elevation allow access into the building. Shed roof extensions span the northwest and southwest, secondary elevations. Other features include: corrugated metal roof sheathing; tight eaves; tongue-in-groove wood siding; two window openings in the southeast elevation—a single

⁶ Available records for the Corral Area resulted were conflicting. Review of the 1957, 1973, and 1986 quad maps, as well as aerial photos from the same period were inconclusive. More in-depth research beyond the scope of this project is recommended should NRHP listing be pursued.

window and a paired window—both of which have been replaced with nonhistoric fixed sashes and new casing; corner boards; and a concrete foundation.

Review of available maps and historic photos, as well as the building itself, suggests this building dates to the mid-twentieth century and may have been moved to its current location in the 1990s. Relocation of farm utility buildings was a historically common practice and does not compromise the building's overall integrity and ability to communicate its associations with the agricultural development of this ranch property.

Resource #10. Corral, c.1995 - Ineligible

This structure is not of sufficient age or significance to be eligible for listing in the National Register.

Figure 8: Halfway Ranch/Eccles Flying Hat Ranch – Corral Area



Table 2C. Resources documented as part of 13-16207 – Southeast Pasture Area

IHSI Resource #	IHSI Photo #	Resource Name	Construction Date; Alteration Date(s)	Eligibility Status	Justification
Southeast Pasture Area (NOTE: this area incorporated into ranch property c.1997)					
11	47	Grain Bin	c.1950	Ineligible	Sufficient integrity and significance to contribute, however no district potential due to loss of original farmstead association; insufficient significance to be individually eligible
12	47	Grain Bin	c.1950	Ineligible	Sufficient integrity and significance to contribute, however no district potential due to loss of original farmstead association; insufficient significance to be individually eligible
13	47, 48	Shed	c.1935	Ineligible	Sufficient integrity and significance to contribute, however no district potential due to loss of original farmstead association; insufficient significance to be individually eligible
14	49	Equipment Garage	c.1965	Ineligible	Sufficient integrity and significance to contribute, however no district potential due to loss of original farmstead association; insufficient significance to be individually eligible

Southeast Pasture Area - Elaboration

Resources #11-#14. Grain Bins (c.1950), Shed (c.1935), Equipment Garage (c.1965) - Ineligible

The Southeast Pasture Area is currently part of the Halfway Ranch/Eccles Flying Hat Ranch property, having been acquired into the larger property around 1997. Though not historically associated with the Halfway Ranch/Eccles Flying Hat Ranch, per NRHP guidelines, the full extent of the current ranch property is documented herein.

Because the Southeast Pasture Area has no historic association with the Halfway Ranch/Eccles Flying Hat Ranch, NRHP guidelines require that it be evaluated for its own historic associations apart from the Halfway Ranch/Eccles Flying Hat Ranch.

When evaluated on its own, survey revealed the Southeast Pasture Area was historically associated with a separate ranch that has since been subdivided and lost to residential development (see aerial photo below). Though each of the ancillary buildings in the Southeast Pasture Area are potentially of sufficient age to meet NRHP criteria, they no longer retain the integrity of association with their original ranch, and thus do not adequately communicate historic significance. By their very nature, ancillary buildings and structures require integrity of association with their original primary resource(s) in order to be eligible. In the case of the Southeast Pasture Area, the lack of the original farmhouse, barn(s), and so forth that once anchored the ranch of which Resources #11-#14 were a part, compromises integrity of association; the loss of this aspect of integrity surpasses the presence of any other aspects of integrity that might be retained.

Figure 9: Halfway Ranch/Eccles Flying Hat Ranch – Southeast Pasture Area

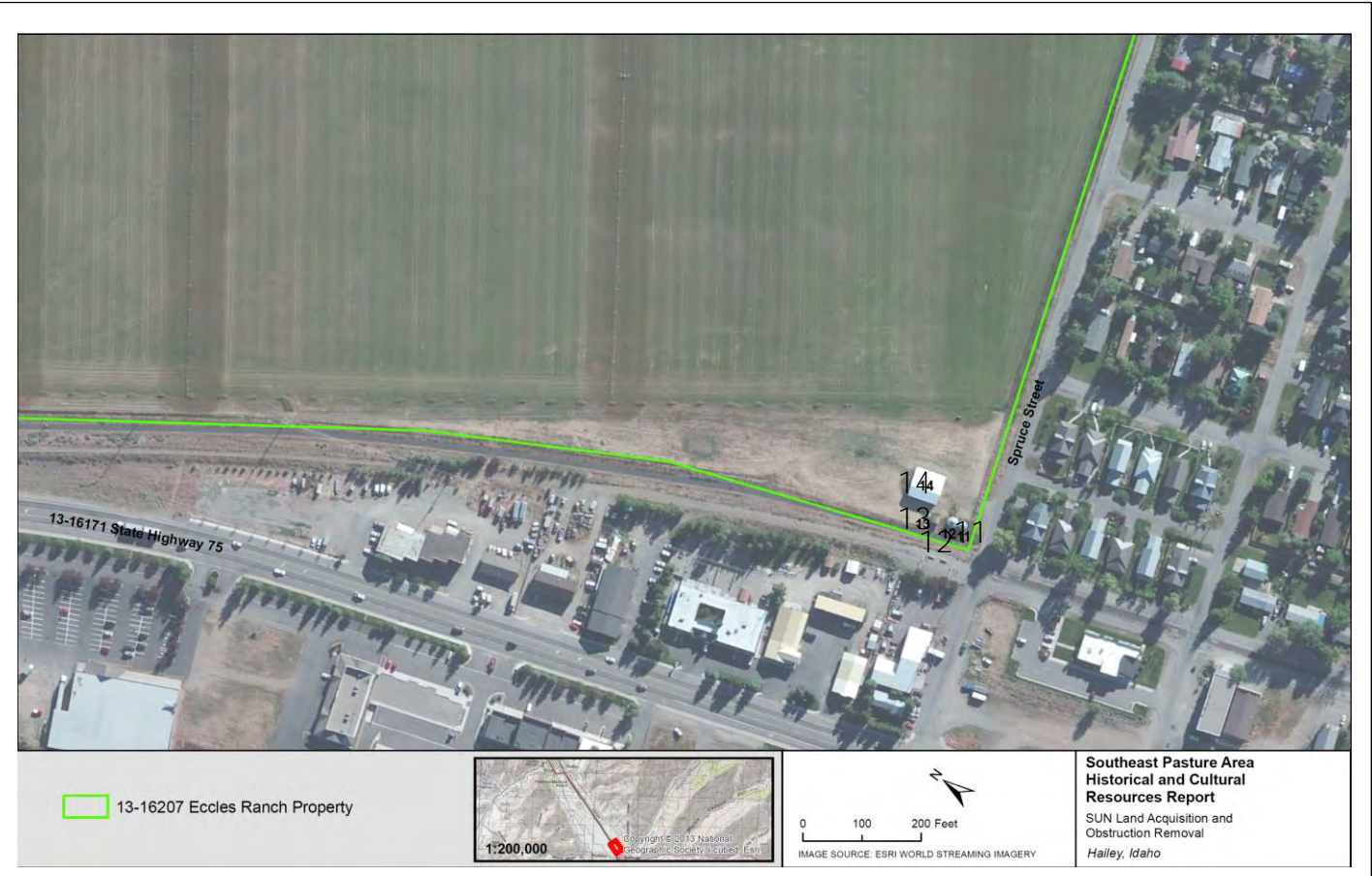


Table 2D. Resources documented as part of 13-16207 - Canals

IHSI Resource #	IHSI Photo #	Resource Name	Construction Date; Alteration Date(s)	Eligibility Status	Justification
Canals					
15	2, 10, 11, 22-24	Cove Canal (10BN1126)	c.1883	Individually Eligible/Contributing	Criterion A for Agriculture; Integrity of location, setting, design, materials, workmanship, feeling, and association all intact
16	25-29, 31, 40-42	Rockwell-White Power Plant Canal (10BN1191)	1907	Individually Eligible/Contributing	Criterion A for Industry; Integrity of location, setting, design, materials, workmanship, feeling, and association all intact

Canals - Elaboration

Resource #15. Cove Canal (10BN1126), c.1883 - Contributing/Individually Eligible

See below for full description, history, and eligibility assessment.

Resource #16. Rockwell-White Power Plant Canal (10BN1191), 1907 - Contributing/Individually Eligible

This canal carries water from the Big Wood River to the site of the former Rockwell-White Power Plant. Its point of diversion (POD) is NE¼ SE¼ Section 22, T2N R18E from left bank of the Big Wood River. It travels a path to the southeast across the ranch and ends near SH 75, where it leads into the former power plant tail race structure and is then diverted into the Kohler Ditch and Arkoosh Canal. The canal supplied water for electricity for mining and the community of Bellevue until it was decommissioned for industry in 1945. Additional history discussed below.

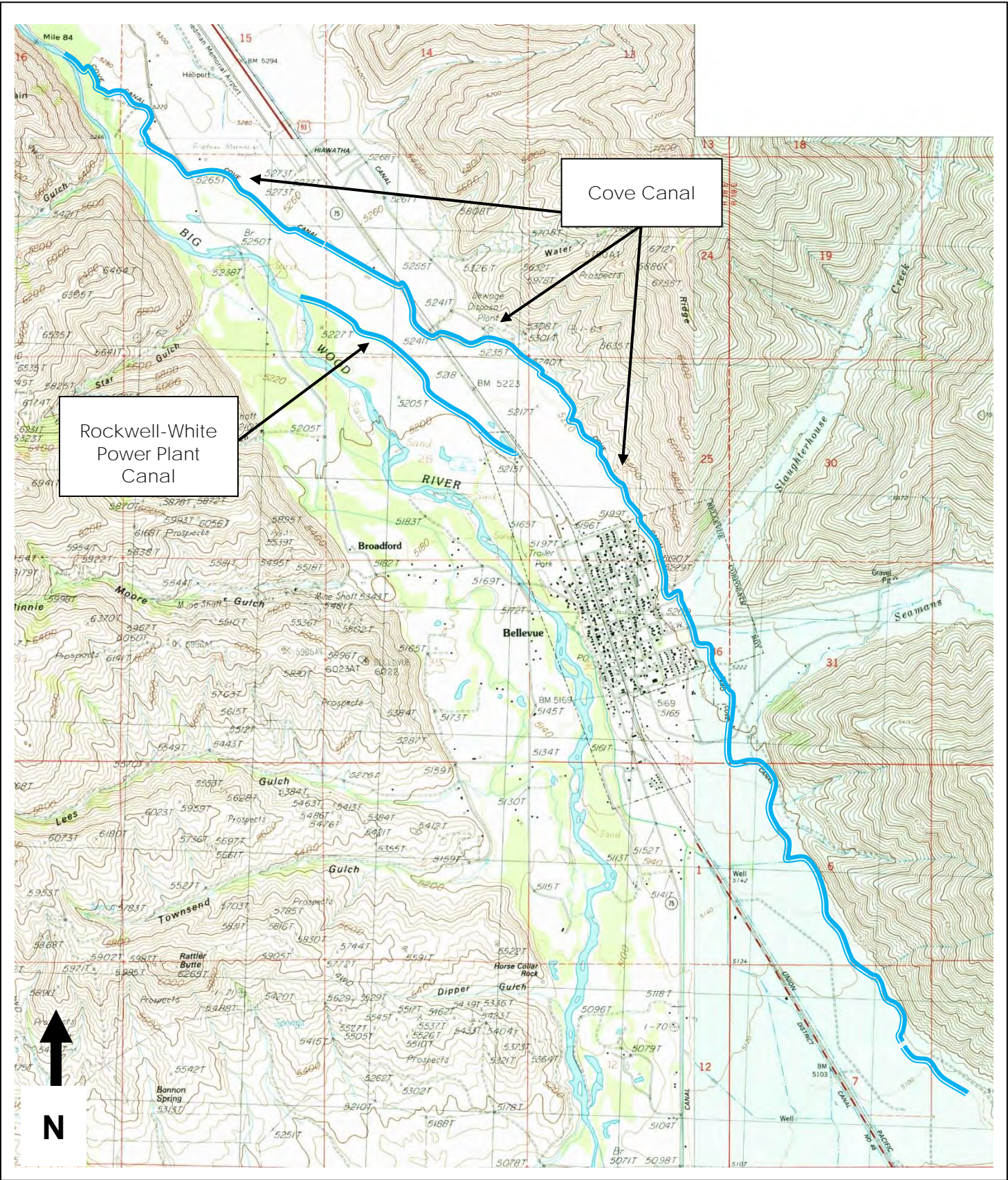
10BN1126 – Cove Canal

The Cove Canal meanders southeast from its origin on the left (east) bank of the Big Wood River, traveling approximately 7.65 miles to its terminus southeast of Bellevue. Cove Canal receives its water from the Big Wood River and follows a curvilinear path across the Halfway Ranch/Eccles Flying Hat Ranch (13-16207), under SH 75 (13-16171), and extends generally southeast its full length to its terminus southeast of Bellevue off Gannet Road. It is listed as beginning from the Big Wood River at Point of Diversion (POD) No. 33, which is in the NE ¼ SE ¼ Section 16, T2N, R18E. Along its route, the canal varies in width from about five feet to twenty-two feet. About six miles from its source and southeast of the southeast edge of Bellevue, it intersects with a branch of the Bellevue Canal. At the time of site visit in May 2017, the Big Wood River was flooded and verification of features at the canal source was not possible. At that time, the canal carried water for about three miles to a point just east of its intersection with State Highway (SH) 75.

The 1882 subdivisional survey of T2N R18E, the location of the upper part of Cove Canal, shows no canal feature but does show it now crosses what were indicated as the Desert Land claims of E.S. Chase (Section 15), J.B. Oldham (Section 22, 23), and J.R. Wilson (Section 22, 23) at that time. According to a 1952 US Department of the Interior Geological Survey Circular, this canal was established in 1882. Previous survey states Cove Canal dates to 1883-1884 and is one of the earliest irrigation structures in Blaine County. Previous documentation indicated brothers John, Joseph, and Michael Brown, along with neighboring land owner, Marcus A. Miner, developed the canal. In 1952, the canal's water rights were listed as 26.05 cubic feet per second (cfs) for irrigation purposes on 960 acres in parts of Sections 22, 23, 25, 26, 36 T2N R18E, Section 1 T1N R18E, and Section 6 T1N R19E. Around 2002-2003, the canal structure was altered and upgraded at its crossings with SH 75.

The Cove Canal appears to be individually eligible for listing in the National Register of Historic Places under Criteria A. This structure is associated with significant trends in local history (Criterion A) and it retains sufficient integrity to communicate its historic associations with the agricultural development of the Wood River Valley. This property possesses the following aspects of integrity: location, setting, design, materials, workmanship, feeling, and association. It retains sufficient integrity to be individually NRHP eligible.

Figure 10: Cove Canal and Rockwell-White Power Plant Canal





10BN1126, May 2017

Cove Canal, view NW, Main Farmstead area of Halfway Ranch/Eccles Ranch property



10BN1126, May 2017

Cove Canal, view SE, just E of Marina Drive, at NW edge of Eccles Ranch property

FMA-01 – Friedman Memorial Airport

The Friedman Memorial Airport spans approximately 209 acres abutting the south edge of Hailey, Blaine County, Idaho. Aligned parallel to the west of State Highway 75, the airport property encompasses twenty-five resources constructed between 1968 and c.2015, of which twenty-three are buildings (eighteen hangars, control tower, two terminals, office building, garage) and two are structures (taxiway, runway). The Friedman Memorial Airport is characterized by its single runway (and associated parallel taxiway) aligned northwest-southeast amidst open grassy ground. Additional landscape features that are not counted separately include perimeter fencing, driveways, parking lot, small nonhistoric utility sheds, plantings and trees, flagpoles, and runway lights, as well miscellaneous service roadways along the airport perimeter.

Overall, the airport conveys the character of aviation-related resources (hangars, runways, air traffic control, and so forth) from the late twentieth and early twenty-first century. Of the twenty-five resources on the airport property, all but four date to the 1980s and into the early twenty-first century, or reflect extensive alterations from the era. None of these airport resources meet NRHP Criteria Consideration G for exceptional importance of resources less than fifty years of age; fifty years being the NRHP's "general estimate of the time needed to develop historical perspective and to evaluate significance."⁷ As such, if integrity is maintained, these resources will need to be reevaluated for potential NRHP eligibility around 2032, when enough time will have passed to accurately ascertain significance.

Though established in the early 1930s, the historic portions of the airport are either nonextant, do not retain sufficient integrity to communicate their historic associations sufficiently to be eligible for listing in the National Register as a historic district. As stated above, the overall character of the airport is that of 1980s through early twenty-first century aviation resources and as such, there is no NRHP-eligible district potential, and no resource appears to be individually eligible for NRHP listing.

Table 3. Resources documented as part of FMA-01

Resource #	Photo #	Resource Name	Construction Date(s)	Eligibility Status	Justification
1	1	Air Traffic Control Tower	c.1985	Ineligible	Constructed after period of significance; not historic
2	2, 3	Large Single-bay Hangar (FMA-03)	c.1974	Ineligible	Constructed after period of significance; not historic
3	2, 4	Large Single-bay Hangar	c.1995	Ineligible	Constructed after period of significance; not historic
4	7	Single-bay Hangar	c.2015	Ineligible	Constructed after period of significance; not historic
5	8	Single-bay Hangar	c.2015	Ineligible	Constructed after period of significance; not historic
6	2, 5	Three-bay Hangar	c.1985	Ineligible	Constructed after period of significance; not historic
7	2, 6	Four-bay Hangar	c.1985	Ineligible	Constructed after period of significance; not historic
8	9	Terminal	c.1985; c.2015	Ineligible	Constructed after period of significance; not historic
9	10	Equipment Garage	c.1985; c.2003	Ineligible	Constructed after period of significance; not historic

⁷ National Register Bulletin *How to Apply the National Register Criteria for Evaluation* (Washington, D.C.: Dept. of Interior, National Park Service, 1998), 41.

Friedman Memorial Airport
Land Acquisition and Obstruction Removal

10	11	Todd C. Combs Management & Operations Center	c.2015	Ineligible	Constructed after period of significance; not historic
11	12, 13	Single-bay Hangar	c.1985	Ineligible	Constructed after period of significance; not historic
12	12, 13	Single-bay Hangar	c.1985	Ineligible	Constructed after period of significance; not historic
13	12, 14	Single-bay Hangar	c.1985	Ineligible	Constructed after period of significance; not historic
14	15	Three-bay Hangar	c.1985	Ineligible	Constructed after period of significance; not historic
15	16	Multi-bay Hangar	c.1979	Ineligible	Constructed after period of significance; not historic
16	17	Multi-bay Hangar	c.1979	Ineligible	Constructed after period of significance; not historic
17	18	Multi-bay Hangar	c.1979	Ineligible	Constructed after period of significance; not historic
18	19	Multi-bay Hangar	c.1980	Ineligible	Constructed after period of significance; not historic
19	20	Multi-bay Hangar	c.1985	Ineligible	Constructed after period of significance; not historic
20	21	Multi-bay Hangar	c.1985	Ineligible	Constructed after period of significance; not historic
21	22	Multi-bay Hangar	c.1985	Ineligible	Constructed after period of significance; not historic
22	23	Large Single-bay Hangar	c.2003	Ineligible	Constructed after period of significance; not historic
23	24	Atlantic Aviation Terminal	c.2015	Ineligible	Constructed after period of significance; not historic
24	25, 26	Runway 13-31 (FMA-02)	1968; c.1975; c.1988; c.2006	Ineligible	Integrity lost due to extensive alterations/additions; original materials and alignment indiscernible
25	27, 28	Taxiway	c.2013	Ineligible	Constructed after period of significance; not historic
13-16156	n/a	Sun Valley Aviation Hangar No. 1	undetermined	Nonextant	Demolished c.1994
13-16157	n/a	Sun Valley Aviation Inc. Office	undetermined	Nonextant	Demolished c.1994
13-16158	n/a	Sun Valley Aviation Hangar #2	undetermined	Nonextant	Demolished c.1994
13-16159	n/a	Friedman Airport County Shop Building	undetermined	Nonextant	Demolished c.1994
13-16160	n/a	Sinclair Hangar	undetermined	Nonextant	Demolished c.1994



Resource #1: Air Traffic Control Tower, view S-SW
May 2017



Resource #8. Terminal, view W-NW
May 2017

Figure 11: Friedman Memorial Airport



FMA-02 – Friedman Memorial Airport Runway

The Friedman Memorial Airport Runway (FMA-02), also known as Runway 13-31, is aligned parallel to the west of State Highway (SH) 75 (13-16171). The runway is one of twenty-five resources constructed between 1968 and c.2015 on the airport and is the only runway on the airport. It and its associated parallel taxiway are aligned northwest-southeast amidst open grassy ground. The asphalt-paved runway has a rectangular footprint measuring approximately 115 feet by 7,550 feet. The runway structure dates to 1968, with various alterations, widenings, and lengthening projects dating to c.1975, c.1988, c.2006, and c.2013.

Previously a grass and dirt landing strip, the Friedman Memorial Airport Runway was paved and widened to one hundred feet in 1968. Between 1974 and 1976, the FAA invested \$600,000 into the Friedman Airport, resulting in resurfacing of the then approximately 4,600-foot runway, construction of a new turn-around section at the south end of the airport, installation of a new sprinkler system, and access road development, as well as installation of runway lights. Between 1984 and 1992 the runway was extended about over 1,750 feet at its southeast end, all as a result of increased traffic. Additional expansions between 1998 and 2003, and again between 2004 and 2009 added another 1,150 feet to the length of the runway at the southeast end. Most recently, around 2013, the current taxiway was constructed and connections to the runway realigned to their current appearance.

FMA-02 is not eligible for listing in the National Register of Historic Places due to a loss of integrity. The cumulative effect of a series of extensive late-twentieth century changes compromises the runway structure's integrity of design, materials, workmanship, feeling, and association. It is not eligible for National Register of Historic Places listing.



FMA-02. Runway 13-31, view NW
May 2017

FMA-03 – Friedman Memorial Airport Hangar

The Friedman Memorial Airport Hangar (FMA-03) is one of twenty-five resources constructed between 1968 and c.2015 located on the Friedman Memorial Airport (FMA-01).

This large, gable-front hangar is a tall, one-story, gable-front hangar with a single, full-width airplane bay defining the primary (NE) elevation. A metal, bi-parting, eight-leaf (four each side), sliding door system occupies the bay. Other features include: very shallow roof pitch; vertical seam metal siding; and very shallow eaves. The rear (SW) elevation features: four, high-set fixed sash windows; a single vehicular bay at the north end; and a small, single-cell, shed roofed projection at the south end.

The hangar dates to c.1974 and first appears in a 1978 photograph.

Though this building retains integrity of location, setting, design, materials, workmanship, feeling, and association, it does not meet NRHP eligibility Criteria Consideration G for buildings less than fifty years of age. Furthermore, when it does become fifty years of age, it does not present sufficient significance to be considered individually eligible and would likely only be eligible as a contributing resource to a larger historic district. Based on the character and construction dates of all other airport resources, historic district potential will not be possible until about 2032.



FMA-03, view W
May 2017

Determination of Effects

Based on the materials provided, research, and field verification, PSLLC finds the proposed project will have No Adverse Effect, either directly and indirectly, on historic resources in the APE.

Project Background

Located in a narrow valley, Friedman Memorial Airport maintains a single runway in the confined space between the Wood River to the west, State Highway 75 to the east, and the city limits of Hailey to the north. These geographic constraints not only prevent the airport from fully meeting FAA-recommended design standards but force the vast majority of take-offs and landings to be to and from the south, respectively. As such, the property to the south – Halfway Ranch/Eccles Flying Hat Ranch (13-16207) – is the abutting land most impacted by airport activity and of most concern in terms of land use compatibility and safety aspects thereof.

Outside the ownership and only under temporary easement control of the airport authority, the Halfway Ranch/Eccles Flying Hat Ranch property is a nonstandard airport condition and creates potential safety issues for land use compatibility in the Runway Protection Zone (RPZ). With the easement expiration pending, and the ranch owner having indicated no interest in renewing it, the airport authority is seeking to purchase the land area in question in order to ensure permanent land use compatibility with FAA recommendations and safety standards.

Furthermore, the north part of the ranch property contains obstructions (as defined by FAA regulations and planning guidance) in the form of over one hundred trees. The trees are primarily cottonwoods that have reached a height of as much as 80 feet to 100 feet in-height. Six pole-mounted lights have been affixed to the treetops to light the obstructions as an interim solution deemed insufficient by FAA recommendations.

Project Description

The proposed project action consists of acquisition and easement of 64.7 acres of the Halfway Ranch/Eccles Flying Hat Ranch and subsequent removal of several dozen trees lining Cove Canal (10BN1126) on the Halfway Ranch/Eccles Flying Hat Ranch (13-16207), which have been deemed obstructions to airspace at Friedman Memorial Airport (FMA-01). To meet FAA-recommended safety standards, approximately 1,600 feet of obstructing tree line will be removed to allow for an unobstructed airspace at the south end of the airport. Tree removal will include cutting them at ground level and remaining stumps treated with a pre-emergent to restrict regrowth. The banks of the canal will transition from a forested canopy to shrub or grassland complex.

Potential Impacts on NRHP-eligible Resources

The proposed tree removal along a small percentage (less than four percent) of the approximately 7.65 mile-long NRHP-eligible Cove Canal will not markedly diminish the overall integrity of the irrigation structure. The proposed tree removal will impact some aspects of the current setting of the NRHP-eligible Halfway Ranch/Eccles Flying Hat Ranch, however the presence of the trees cannot be

confirmed to have been an original or historic aspect to the ranch and thus their elimination does not present a substantial loss of integrity of setting and does not meet the threshold of a finding of adverse effect.

More specifically, the trees lining Cove Canal are on what was originally unirrigated land categorized as 'desert' at the time of initial development, the trees lining Cove Canal are not original to the site and no evidence is apparent suggesting they were intentionally planted (such as for a wind break). Instead, they appear to be the de facto result of ongoing lack of canal maintenance, which typically included prevention of vegetation maturation along canal banks by means of mowing, burning, cutting, and so forth. Review of a birdseye view (1884), quadrangle maps (since 1895), and historic aerials (since 1954) shows trees along the canal either nonexistent or varying considerably in density and location(s) over time. Due to the lack of evidence from either the historic record or on-site investigation, the trees were not found to be a historically significant component of the canal or ranch setting(s).

Properties Identified as Potentially NRHP-Eligible

Site #	Site/Feature Type	NR Status	Distance to APE	Project Effect
13-16207	Halfway Ranch/Eccles Flying Hat Ranch	NR Eligible District	Inside APE	No Adverse Effect
10BN1126	Cove Canal	NR Eligible	Inside APE	No Adverse Effect

Management Recommendations

The proposed project will have NO ADVERSE EFFECT on NRHP-eligible resources. Thorough investigation of avoidance and minimization, as well as public engagement, has been completed. Based on the lack of public opposition and the hazard of leaving the trees in the approach area, project approval is recommended.

Avoidance, Minimization, or Mitigation Options

Based on the Determination of Effects above for the proposed project, no avoidance, minimization, or mitigation options are warranted.

Though no archaeological sites or isolates were found, if future projects arise in this APE, it may be necessary to contact the Idaho SHPO if artifacts are encountered during any ground breaking activity. If any additional cultural resources are encountered during the course of this or any future project, all ground disturbing activities will cease until a qualified FAA or SHPO cultural resource specialist is consulted.

Conclusions

This report documents the results of a cultural resources survey conducted to identify and evaluate resources at and abutting the Friedman Memorial Airport, at the south edge of Hailey, Blaine County, Idaho. This effort is part of a larger land acquisition and easement (64.7 acres) endeavor of Friedman Memorial Airport Authority (FMAA) to address runway approach obstructions and includes resource identification and documentation under both Section 106 and Section 110 of the National Historic Preservation Act (NHPA), as amended.

Under Section 110, the full extent of the Friedman Memorial Airport property (FMA-01) was documented **for FAA's future planning purposes**; Section 106 evaluation was restricted to the actual project impact area.

Section 106 Project Description

The proposed project action consists of the removal of several dozen trees lining Cove Canal (10BN1126) on the Halfway Ranch/Eccles Flying Hat Ranch (13-16207), which have been deemed obstructions to airspace at Friedman Memorial Airport (FMA-01). The trees are primarily cottonwoods that have reached a height of as much as 80 feet to 100 feet in-height.⁸ Six pole-mounted lights have been affixed to the treetops to light the obstructions as an interim solution deemed insufficient by FAA guidelines. To meet FAA-recommended safety standards, approximately 1,600 feet of obstructing tree line will be removed to allow for an unobstructed airspace at the south end of the airport. Tree removal will include cutting them at ground level and remaining stumps treated with a pre-emergent to restrict regrowth. The banks of the canal will transition from a forested canopy to shrub or grassland complex.

Results of Cultural Resource Study

A total of three historic properties were identified and documented as part of this survey effort, all of which had been previously documented at least minimally or partially. Friedman Memorial Airport (FMA-01) was documented per Section 110, which included the separate documentation of two of its twenty-five resources: a runway (FMA-02) and a hangar (FMA-03). Per Section 106, Cove Canal (10BN1126) and Halfway Ranch/Eccles Flying Hat Ranch (13-16207) were documented as they are within the APE. Each of these three properties were resurveyed to meet the State Historic Preservation Office (SHPO) and FAA standards for cultural review of airport-related projects. Of the three properties documented, two properties appear to be NRHP-eligible: Cove Canal (10BN1126) and part of Halfway Ranch/Eccles Flying Hat Ranch (13-16207).

Although the project APE falls within a prehistoric and historic travel corridor between the Sawtooth Basin to the north and the Camas Prairie to the south, no archaeological findings were made during this investigation. The proposed undertaking will have no adverse effect on archaeological sites or isolates.

Overall, the undertaking, as described, will have NO ADVERSE EFFECT on the NRHP eligibility of historic properties as a result of the project actions.

⁸ Cottonwoods are commonly found along wet areas in the Big Wood River Valley. Though possible, there is no evidence nor did the primary sources reveal any indication the trees pending removal along the canal were intentionally planted as a windbreak or 'shelter-belt.'

References

Airport Map of Idaho Showing Airports and Landing Fields 1939. Boise, Idaho: Department of Public Works, Aeronautics Division, 1939.

Blaine County (Idaho) Assessor's Records.

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Hart, Arthur A. *Wings Over Idaho: An Aviation History*. Caxton Press/Historic Boise, Inc., 2008.

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<https://www.archives.gov>

<https://www.findagrave.com>

<https://glorerecords.blm.gov/search/>

Jones, R.P. "Evaluation of Streamflow Records in Big Wood River Basin, Idaho." US Department of the Interior Geological Survey Circular 129 (1952).

Metsker, Charles F. *Metsker's Atlas of Blaine County State of Idaho*. Seattle, Washington: Metsker Map Company, 1939.

Milbrooke, Anne. *Guidelines for Evaluating and Documenting Historic Aviation Properties*. National Register Bulletin. U.S. Department of the Interior, National Park Service, National Register of Historic Places, 1998.

Morris McFarland. "Plat of the Exterior Boundaries of the Townsite of Bellevue, Alturas County, Idaho." March 16, 1882. Government Land Office. Available from <https://glorerecords.blm.gov>.

Walsworth, Claudia. "A Cultural Resource Survey of the Friedman Memorial Airport." 1993.

Idaho Historic Sites Inventory Forms

PROPERTY NAME	Cove Canal	FIELD#	10BN1126
STREET	SH 75 b/wn Hailey and Bellevue; parallel & intersecting		RESTRICT <input type="checkbox"/>
CITY	Hailey	VICINITY <input checked="" type="checkbox"/>	COUNTY CD 13 COUNTY NAME Blaine
SUBNAME		BLOCK	SUBLOT ACRES 15 LESS THAN <input checked="" type="checkbox"/>
TAX PARCEL		UTMZ 11	EASTING 717236 NORTHING 4820512
TOWNSHIP	2 N_S N	RANGE 18	E_W E SECTION 16 1/4, 1/4 1/4
QUADRANGLE	Hailey & Bellevue Quads, 7.5'	OTHERMAP	
SANBORN MAP		SANBORN MAP#	PHOTO# Digital

ASSOCIATED FEATURES	irrigation ditch	TOTAL # FEATURES	1
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NR REF #		NPS CERT		ACTIONDATE		FUTURE ELIG DATE	
DIST/MPLNAME1				DIST/MPLNAME2			

CRITERIA A ☒ B ☐ C ☐ D ☐ CRITERIA CONSIDERATION A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐

COMMENTS	DESCRIPTION
	The Cove Canal structure meanders southeast from its origin on the left (east) bank of the Big Wood River, traveling approximately 7.65 miles to its terminus southeast of Bellevue. Cove Canal receives its water from the Big Wood River and follows a curvilinear path across the Halfway Ranch/Eagles Flying Hat Ranch (12-16207) under SH 75 (12-16171) and extends

RECORDED BY	Kerry Davis, PSLLC	PH	816-225-5605	ADDRESS	1007 E. Jefferson Street, Boise, ID 83712
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SVY RPT # ***** FOR ISHPO USE ONLY ***** IHSI#

MS RPT # SITS#

IHPR # HABS NO. ID- HAER NO. ID- REV#

CS #		IHS# REF		NR REF# 2		REV# REF		RI	SI	IH
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SVY RPT# 1 SVY RPT# 2 SVY RPT# 3 MS RPT# 1 MS RPT# 2 #V #S #IS

ADD'L NOTES Also sections 15, 22, 23, 25, 26, 36. Also Seamans Creek Quadrangle. UTM Ref 5: 11/720267/4817056.
UTM Ref 6: 11/7193964817793.

MORE DATA ☒

ATTACH ☒

OF PHOTOS NEGBOX# # OF SLIDES SHPO DETER DETER DATE

INITIALED		ENTRY DATE		REVISE		REVISE		REVISE	
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IHSI#

SITS#

REV#

IDAHO HISTORIC SITES INVENTORY FORM

PROPERTY NAME	Cove Canal	IHSI#	10BN1126
FIELD#	10BN1126	COUNTY NAME	Blaine
OTHER NAME Brown Brothers' Ditch; Brown and Miner Ditch			
COUNTY CD	13	CITY	Hailey
		VICINITY	<input checked="" type="checkbox"/>
UTM REF2	11/719949/4818757	UTM REF3	11/721937/4816903
		UTM REF4	11/724676/4812494

OTHER MATERIAL2		CULTAFFIL		AGENCYCERT	Local
SIGNIFDATE		SIGNIFPERIOD		SIGNIFPERSON	
ARCH/BUILD		ARCHPLANS	<input type="checkbox"/>	TAXEASE	<input type="checkbox"/>
OWNERSHIP	Private	PROPOWN	VARIOUS		
MORE DATA	<input checked="" type="checkbox"/>	ATTACH	<input checked="" type="checkbox"/>		

DOCSOURCE	Blaine Co. Assessor; SHPO Records
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ADD'L NOTES	Also sections 15, 22, 23, 25, 26, 36. Also Seamans Creek Quadrangle. UTM Ref 5: 11/720267/4817056. UTM Ref 6: 11/7193964817793.
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COMMENTS	<p>DESCRIPTION</p> <p>The Cove Canal structure meanders southeast from its origin on the left (east) bank of the Big Wood River, traveling approximately 7.65 miles to its terminus southeast of Bellevue. Cove Canal receives its water from the Big Wood River and follows a curvilinear path across the Halfway Ranch/Eccles Flying Hat Ranch (13-16207), under SH 75 (13-16171), and extends generally southeast its full length to its terminus southeast of Bellevue off Gannet Road. It is listed as beginning from the Big Wood River at Point of Diversion (POD) No. 33, which his in the NE ¼ SE ¼ Section 16, T2N, R18E. Along its route, the canal varies in width from about 5 feet to 22 feet. About 6 miles from its source and southeast of the southeast edge of Bellevue, it intersects with a branch of the Bellevue Canal. At the time of site visit in May 2017, the Big Wood River was flooded and verification of features at the canal source was not possible. At that time, the canal carried water for about 3 miles</p>
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PHOTO LOG	<input type="checkbox"/>	IHSI# REF		INITIALED		DATEENTERED	
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SKETCH ☒

IHSI#	SITS#	REV#

IDAHO HISTORIC SITES INVENTORY FORM

PROPERTY NAME	Cove Canal	IHSI#	10BN1126
FIELD#	10BN1126	COUNTY NAME	Blaine

COMMENTS:

DESCRIPTION

The Cove Canal structure meanders southeast from its origin on the left (east) bank of the Big Wood River, traveling approximately 7.65 miles to its terminus southeast of Bellevue. Cove Canal receives its water from the Big Wood River and follows a curvilinear path across the Halfway Ranch/Eccles Flying Hat Ranch (13-16207), under SH 75 (13-16171), and extends generally southeast its full length to its terminus southeast of Bellevue off Gannet Road. It is listed as beginning from the Big Wood River at Point of Diversion (POD) No. 33, which is in the NE ¼ SE ¼ Section 16, T2N, R18E. Along its route, the canal varies in width from about 5 feet to 22 feet. About 6 miles from its source and southeast of the southeast edge of Bellevue, it intersects with a branch of the Bellevue Canal. At the time of site visit in May 2017, the Big Wood River was flooded and verification of features at the canal source was not possible. At that time, the canal carried water for about 3 miles to a point just east of its intersection with State Highway (SH) 75.

ATTACH ☒

HISTORY

The 1882 subdivisional survey of T2N R18E, the location of the upper part of Cove Canal, shows no canal feature but does show it now crosses what were indicated as the Desert Land claims of E.S. Chase (Section 15), J.B. Oldham (Section 22, 23), and J.R. Wilson (Section 22, 23) at that time.

According to a 1952 US Department of the Interior Geological Survey Circular, this canal was established in 1882. Previous survey states Cove Canal dates to 1883-1884 and is one of the earliest irrigation structures in Blaine County. Previous documentation indicated brothers John, Joseph, and Michael Brown, along with neighboring land owner, Marcus A. Miner, developed the canal. Review of Government Land Office (GLO) records confirms Miner's involvement; he took ownership of land in the south half of Section 23 and the north half of Section 26 in May 1888, via Desert Lands Certificate #6.

The US Congress passed the Desert Land Act in March 1877 as an amendment to the Homestead Act in an attempt to incent settlement and development of the arid and semiarid public lands of the West. The Act enabled individuals to purchase 'desert lands' at a price of \$1.25 per acre on the promise that the land would be irrigated within three years. A married couple could claim up to 640 acres while a single man could only claim 320 acres. Unlike the Homestead Act, there was no residency requirement and title to the land was transferred once proof of irrigation was documented.

In 1952, the canal's water rights were listed as 26.05 cubic feet per second (cfs) for irrigation purposes on 960 acres in parts of Sections 22, 23, 25, 26, 36 T2N R18E, Section 1 T1N R18E, and Section 6 T1N R19E. Around 2002-2003, the canal structure was altered and upgraded at its crossings with SH 75.

INTEGRITY & ELIGIBILITY

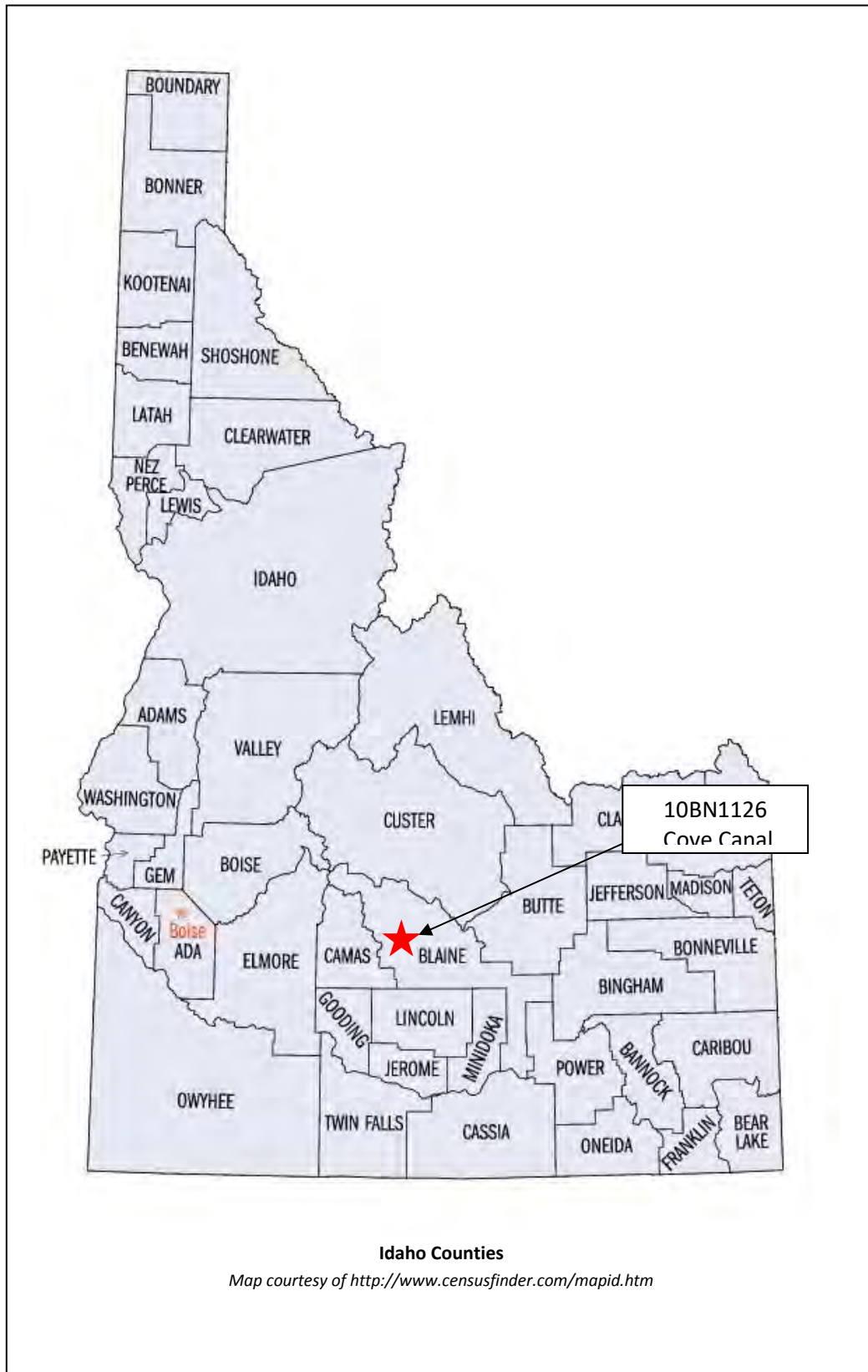
Documented and determined eligible in 2004, the canal was re-recorded in 2013, at which time it was found to still be NRHP-eligible. Though the more distant parts of the canal no longer convey water, overall the canal structure appears to retain sufficient integrity and continues to clearly convey important information about the early development of the Wood River Valley. While drains and associated mechanical features may have been replaced over time, the structure continues to clearly communicate its associations with the historic settlement of the area. To determine if the ditch and its branches are individually eligible, or more appropriately counted as contributing resources to a larger district of irrigation structures, more research is recommended to document the full system of irrigation ditches and diversions across the Big Wood River Valley.

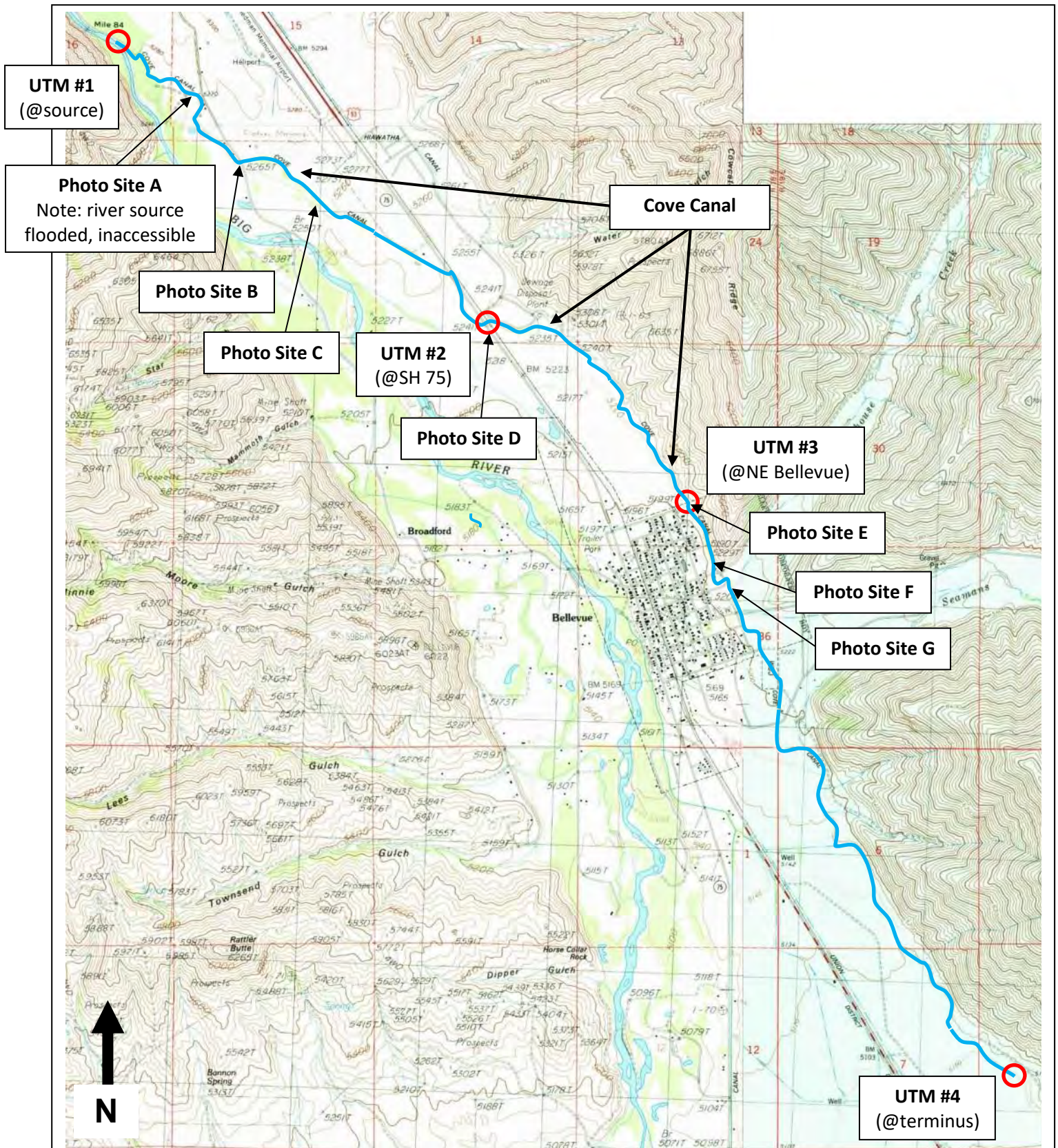
ADDITIONAL SOURCES

Jones, R.P. "Evaluation of Streamflow Records in Big Wood River Basin, Idaho." US Department of the Interior Geological Survey Circular 129 (1952).

Lundin, John. "Early Water Issues and Conflicts in the Wood River Valley." Power Point Presentation. Available from <https://www.slideshare.net/CommunityLibrary/early-water-issues-and-conflicts-in-the-wood-river-valley>.

IHSI#	SITS#	REV#





HAILEY, BELLEVUE, and SEAMANS CREEK QUADRANGLES, 7.5' Series
BLAINE COUNTY, IDAHO



10BN1126, May 2017
Cove Canal, view SE from Colorado Gulch Road (Photo Site A)



10BN1126, May 2017
Cove Canal, view NE of crossing under Colorado Gulch Road (Photo Site A)



10BN1126, May 2017
Cove Canal, view W at crossing with Broadford Road (Photo Site B)



10BN1126, May 2017
Diversion view SE of crossing under Broadford Road (Photo Site B)



10BN1126, May 2017

Cove Canal, view SE, just E of Marina Drive, at NW edge of Eccles Ranch property (13-16207) (Photo Site C)



10BN1126, May 2017

Cove Canal, view SE, just E of Marina Drive, at NW edge of Eccles Ranch property (13-16207) (Photo Site C)



10BN1126, May 2017
Cove Canal, view SW just east of crossing under SH 75 (Photo Site D)



10BN1126, May 2017
Cove Canal, view SE just east of crossing under SH 75 (Photo Site D)



10BN1126, May 2017

Cove Canal, view N-NW, just above the intersection of E Spruce and N 6th streets in Bellevue (Photo Site E)



10BN1126, May 2017

Cove Canal, view NW just above the intersection of E Spruce and N 6th streets in Bellevue (Photo Site E)



10BN1126, May 2017

Cove Canal, view NW just above the intersection of E Spruce and N 6th streets in Bellevue (Photo Site F)



10BN1126, May 2017

Cove Canal, view SE just above the intersection of E Cottonwood and N 7th streets in Bellevue (Photo Site F)

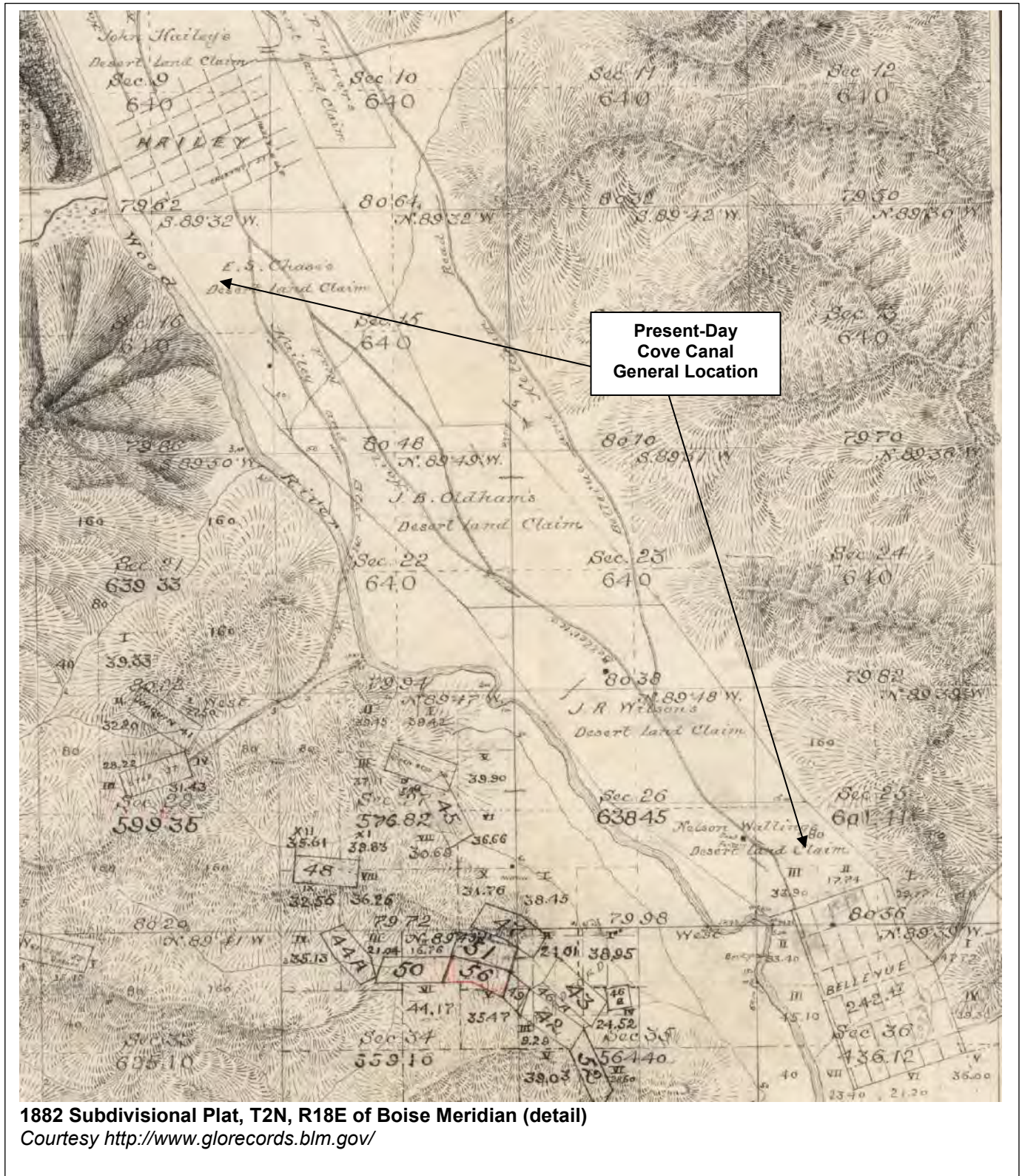


10BN1126, May 2017

Cove Canal, view W-SW at intersection of Elm and 8th streets, Bellevue (Photo Site G)

Note how almost indiscernable

HISTORIC MAP(S)



1882 Subdivisional Plat, T2N, R18E of Boise Meridian (detail)

Courtesy <http://www.glorerecords.blm.gov/>

PROPERTY NAME	Halfway Ranch	FIELD#	13-16207
STREET	11378 STATE HIGHWAY 75		RESTRICT <input type="checkbox"/>
CITY	Hailey	VICINITY <input checked="" type="checkbox"/>	COUNTY CD 13 COUNTY NAME Blaine
SUBNAME		BLOCK	SUBLOT ACRES 749 LESS THAN <input checked="" type="checkbox"/>
TAX PARCEL	RP02N18026366C	UTMZ 11	EASTING 718530 NORTHING 4819852
TOWNSHIP	2 N_S N	RANGE 18	E_W E SECTION 22 1/4, 1/4 1/4
QUADRANGLE	Hailey & Bellevue Quads, 7.5'	OTHERMAP	
SANBORN MAP		SANBORN MAP#	PHOTO# Digital

ORIGINAL USE	Agriculture/Subsistence	WALL MATERIAL	WOOD:Weatherboard
ORIGSUBUSE	Agricultural field	FOUND. MATERIAL	CONCRETE
CURRENT USE	Agriculture/Subsistence	ROOF MATERIAL	METAL
CURSUBUSE	Agricultural field	OTHER MATERIAL	
ARCHSTYLE	No Style	PLAN	Irregular
		CONDITION	Good

Individually Eligible ☒ Contributing in a potential district ☒ Noncontributing ☐ Future eligibility ☐
Not Eligible ☐ Multiple Property Study ☐ Not evaluated ☐

AREA OF SIGNIF	Agriculture	AREA OF SIGNIF	
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PROJ/RPT TITLE	Friedman Memorial Airport Land Acquisition and Obstruction Removal	SVY DATE	5/21/17	SVY LEVEL	Intensive
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RECORDED BY	Kerry Davis, PSLLC	PH	816-225-5605	ADDRESS	1007 E. Jefferson Street, Boise, ID 83712
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SUBMITTED PHOTOS ☒ NEGS ☐ SLIDES ☐ SKETCH MAP ☒

SVY RPT # ***** FOR ISHPO USE ONLY ***** IHSI# 13-16207

MS RPT # SITS#

IHPR # HABS NO. ID- HAER NO. ID- REV#

CS #		IHSI# REF	10BN1191; 10BN1126	NR REF# 2		REV# REF		RE	ST	IH
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SVY RPT# 1	SVY RPT# 2	SVY RPT# 3	MS RPT# 1	MS RPT# 2	#	#	#
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ADD'L NOTES	Also sections 23, 25, 26. Also parcel #s RP02N18023367B, RPB2N18026027A, RP02N18026378D, RP02N18015345A, RP02N180253710, RPB2N180260280, RP02N18026366E
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MORE DATA ☒

[illegible]

OF PHOTOS NEGBOX# # OF SLIDES SHPO DETER DETER DATE

INITIALED ENTRY DATE REVISE REVISE REVISE

IHS# _____

SITS# _____

REV# _____

IDAHO HISTORIC SITES INVENTORY FORM

PROPERTY NAME	Halfway Ranch	IHSI#	13-16207
FIELD#	13-16207	COUNTY NAME	Blaine
OTHER NAME Eccles Flying Hat Ranch			
COUNTY CD	13	CITY	Hailey
		VICINITY	<input checked="" type="checkbox"/>
UTM REF2	11/719509/4819313	UTM REF3	11/721246/4818158
		UTM REF4	11/721801/4816913

OTHER MATERIAL2		CULTAFFIL		AGENCYCERT	Local
SIGNIFDATE		SIGNIFPERIOD		SIGNIFPERSON	
ARCH/BUILD		ARCHPLANS	<input type="checkbox"/>	TAXEASE	<input type="checkbox"/>
		TAXCERT	<input type="checkbox"/>		
OWNERSHIP	Private	PROPOWN	ECCLES FLYING HAT RANCH, BOX 3028 SALT LAKE CITY UT 84110-000		
MORE DATA	<input checked="" type="checkbox"/>	ATTACH	<input checked="" type="checkbox"/>		

DOCSOURCE	Blaine Co. Assessor; SHPO Records
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ADD'L NOTES	Also sections 23, 25, 26. Also parcel #s RP02N18023367B, RPB2N18026027A, RP02N18026378D, RP02N18015345A, RP02N180253710, RPB2N180260280, RP02N18026366E
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COMMENTS	See continuation sheets for Description, Resource Inventory, History, and so forth.
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PHOTO LOG	<input type="checkbox"/>	IHSI# REF	10BN1191; 10BN1126	INITIALED		DATEENTERED	
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SKETCH ☒

IHSI#	SITS#	REV#

IDAHO HISTORIC SITES INVENTORY FORM

PROPERTY NAME IHSI#
FIELD# COUNTY NAME

COMMENTS:

See continuation sheets for Description, Resource Inventory, History, and so forth.

ATTACH ☒

IHSI#	_____
SITS#	_____
REV#	_____

ELIGIBILITY SUMMARY

Approximately 615 acres of the 750-acre Halfway Ranch/Eccles Flying Hat Ranch (13-16207) appears to meet the National Register of Historic Places (NRHP) eligibility thresholds outlined in NRHP Bulletin 30, *Guidelines for Evaluating and Documenting Rural Historic Landscapes*. A relatively rare surviving example in the Wood River Valley of a large-acreage ranch district, complete with the key, character-defining historic elements—open pastureland, tree lines, and nucleus of farmstead buildings—clearly conveys a sense of past time and place. Though few resources on the ranch appear to be individually eligible, the ranch, as a whole, appears to be eligible for listing in the NRHP as a historic district made up of its contributing resources and landscape elements.

Previous documentation in 2003 was generally restricted to the farmstead buildings and found the property NRHP-eligible. This updated documentation expands on that report to include the full extent of the ranch property.

ARCHITECTURAL DESCRIPTION

The Halfway Ranch/Eccles Flying Hat Ranch is a very large property spanning approximately 750 acres on both sides of SH 75. The property is comprised of three general areas: the Main Farmstead Area; the Corral Area; and the Southeast Pasture Area. (See Figure 6 below.)

A subset of the ranch encompassing about 615 acres on the west side of SH is eligible for listing in the NRHP as a historic district. The Main Farmstead Area and Corral Area are within the NRHP-eligible historic district boundaries. The Southeast Pasture Area was added to the overall ranch property in the 1990s and is not eligible as part of the historic district.

For the sake of discussion and clarity, a few definitions and items of note:

Farmstead: This term refers to the collection of buildings that form the nucleus of the much larger ranch and anchor the property. At the Halfway Ranch/Eccles Flying Hat Ranch these include the farmhouse, well, barn, equipment shed, outhouse, and irrigation equipment shed. (See Table 2 below.) This term is meant to be referential and descriptive and should not be confused with NRHP terminology.

Historic District: NRHP guidelines dictate that large ranches, such as Halfway Ranch/Eccles Flying Hat Ranch, be categorized as Historic Districts (See NRHP Bulletin 16A, page 15). Per National Register guidelines for including historically associated landscapes, as well as recent National Park Service guidance regarding boundary justification, the NRHP-eligible Historic District boundary of the Halfway Ranch/Eccles Flying Hat Ranch includes the surrounding pastures and features (i.e. canals, tree lines, fence rows, etc.) for their historic setting associations. More specifically, per National Register Bulletin 16A: *How to Complete the National Register Registration Form*, boundary instructions dictate that one "include any surrounding land historically associated with [a] resource that retains its historic integrity and contributes to the property's historic significance." At Halfway Ranch/Eccles Flying Hat Ranch, this includes the ~615 acres known to have been historically associated with the ranch.

Halfway Ranch/Eccles Flying Hat Ranch Property Name: When previously documented, the ranch was recorded only with its current name "Eccles Flying Hat Ranch" on the Idaho SHPO IHSI form. Per NRHP guidelines, properties should be documented with their original or historic name. As such, this survey effort elaborated on the research and updated the recorded name to reflect the historic name of "Halfway Ranch."

This approximately 750-acre ranch property spans the distance between the city limits of Hailey and Bellevue, in Blaine County, Idaho. Comprised of eight separate parcels varying between 1.6 and 615 acres on the both sides of State Highway (SH) 75 (13-16171), the core of the property is anchored on the west side of SH 75, between the

13-16207 – Halfway Ranch; Eccles Flying Hat Ranch

Big Wood River and the highway, where about 615 acres form the historic core of the ranch. Overwhelmingly characterized by open pastureland, the ranch property encompasses sixteen (16) resources dating from 1884 to c.2006, of which nine (9) are buildings (farmhouse, barn, outhouse, and 6 various ancillary ranch buildings), seven (7) are structures (well, corral, 3 grain bins, 2 canals). Among them are two historic canals—the Cove Canal (10BN1126) and the Rockwell-White Power Plant Canal (10BN1191)—both of which cross the property along a northwest-southeast alignment from the Big Wood River. Aside from the canals, resources are generally located in three separate clusters at the Main Farmstead, the Corral Area, and the Southeast Pasture area.

At the north end of the property is the Main Farmstead, a cluster of historic farmstead buildings consisting of a farmhouse, a well, a barn, an equipment shed, an outhouse, and a nonhistoric irrigation equipment shed. The Corral Area is a group of nonhistoric ancillary ranch buildings and structures at the south end of the ranch, just west of SH 75, and is comprised of a worker's shack, a grain bin, a utility building, and a corral. The Southeast Pasture Area is on the east side of SH 75, at the southeast edge of the ranch property, and contains a cluster of ancillary buildings and structures (two grain bins, a shed, and an equipment garage building) adjacent to the north of intersection of N 2nd and E Spruce streets at the north edge of Bellevue.

Other features not separately counted include farm fuel tank stand structures, fencing, ranch access roadways, pivot irrigation structures, open pasturelands, and tree lines.

Resource Inventory

The following list provides information specific to each resource located within the ranch property. Those specific resources that are potentially NRHP-eligible are described in more detail below or in separate IHSI Forms.

13-16207 – Halfway Ranch; Eccles Flying Hat Ranch

Resource #	Photo #	Resource Name	Construction Date; Alteration Date(s)	Eligibility Status	Justification
Main Farmstead					
1	1, 6-9	Farmhouse	c. 1900; c.1920; c.1955; c.1991	Contributing	Integrity of design, materials, workmanship lost; Integrity of location, setting, feeling, and association intact
2	6	Well	c.1955	Contributing	Integrity of location, setting, design, materials, workmanship, feeling, and association all intact
3	5, 12-16, 24	Barn	c.1925; c.1950	Individually Eligible/ Contributing	Criterion A for Agriculture; Integrity of location, setting, design, materials, workmanship, feeling, and association all intact
4	5, 13, 17, 18, 24	Equipment Shed	c.1950	Contributing	Integrity of location, setting, design, materials, workmanship, feeling, and association all intact
5	19, 20	Outhouse	c.1965	Noncontributing	Integrity of materials and workmanship lost; Integrity of location, setting, design, feeling, and association intact
6	21	Irrigation Equipment Shed	c.2000	Noncontributing	Constructed after period of significance; not historic

Corral Area¹					
7	35, 36	Worker's Shack	c.2006	Noncontributing	Constructed after period of significance; not historic
8	35, 37	Grain Bin	c.1960	Contributing	Integrity of location, setting, design, materials, workmanship, feeling, and association all intact
9	35, 37, 38	Utility Building	c.1955; c.1995	Contributing	Though moved to this location, this building retains sufficient integrity of; integrity of setting, design, materials, workmanship, feeling, and association to contribute to the overall significance of the ranch property
10	35, 39	Corral	c.1995	Ineligible	Constructed after period of significance; not historic

¹ Available records for the Corral Area resulted were conflicting. Review of the 1957, 1973, and 1986 quad maps, as well as aerial photos from the same period were inconclusive. More in-depth research beyond the scope of this project is recommended should NRHP listing be pursued.

13-16207 – Halfway Ranch; Eccles Flying Hat Ranch

Southeast Pasture Area (NOTE: this area incorporated into ranch property c.1997)					
11	47	Grain Bin	c.1950	Ineligible	Sufficient integrity and significance to contribute, however no district potential due to loss of original farmstead association; insufficient significance to be individually eligible
12	47	Grain Bin	c.1950	Ineligible	Sufficient integrity and significance to contribute, however no district potential due to loss of original farmstead association; insufficient significance to be individually eligible
13	47, 48	Shed	c.1935	Ineligible	Sufficient integrity and significance to contribute, however no district potential due to loss of original farmstead association; insufficient significance to be individually eligible
14	49	Equipment Garage	c.1965	Ineligible	Sufficient integrity and significance to contribute, however no district potential due to loss of original farmstead association; insufficient significance to be individually eligible

Canals					
15	2, 10, 11, 22-24	Cove Canal (10BN1126)	c.1883	Individually Eligible/Contributing	Criterion A for Agriculture; Integrity of location, setting, design, materials, workmanship, feeling, and association all intact
16	25-29, 31, 40-42	Rockwell-White Power Plant Canal (10BN1191)	1907	Individually Eligible/Contributing	Criterion A for Industry; Integrity of location, setting, design, materials, workmanship, feeling, and association all intact

Resource Inventory Elaboration

Resource #1. Farmhouse, c.1920; c.1955; c.1991

The original c.1900 section of this one-story house is at the north end and has a side-gabled roof and a hall-and-parlor form. A c.1920 gabled addition to the west half of the south elevation created an intersecting gable roof and an L-plan. A third, midcentury gabled wing addition projects from the northwest elevation. A nonhistoric, gabled, open carport extends from the west end of the south elevation. Additional features include: the steep roof pitch of the original section; the moderate roof pitch of the c.1920 addition; the shallow roof pitch of the midcentury addition; the variety of wood siding; corner boards and fascia trim under the eaves of the original section; the open eaves with exposed rafter tails on the c.1920 section; and the overall irregular footprint. Alterations include the incompatible application of vertical wood siding on some walls, replacement fixed-sash windows, metal roofing, and introduction of a sliding glass door in the center of the north elevation.

13-16207 – Halfway Ranch; Eccles Flying Hat Ranch

Despite alterations that prevent this building from being individually eligible, this farmhouse retains sufficient integrity to clearly communicate its historic associations with the agricultural development of the property. In a rural historic landscape such as this ranch, integrity aspects of location, setting, feeling, and association are particularly important in evaluating NRHP-eligibility, each of which this building retains. Though hindered by later and/or nonhistoric alterations, integrity of materials, design, and workmanship are sufficiently present to communicate important information about the ranch's history and significance.

Resource #2. Well, c.1955

This well is located adjacent to the south of the farmhouse. Painted concrete block forms the square base perimeter wall and wood planks create a well cover, over which two steel pipe posts support the pyramidal roof clad with wood shingles. This structure is a good example of water source infrastructure development. It exemplifies its resource type and continues to convey its significant historic associations. The precise date of the well is undetermined; however it is known to predate 1960.

Resource #3. Barn, c.1922

This large barn consists of a wood-frame building with a steeply pitched gambrel roof and a rectangular footprint oriented to face east toward the barnyard. Three utility doors, one at each end of the primary (east) elevation and one at the west end of the south elevation provide interior access. The walls are covered in tongue-in-groove wood siding and the roof is covered with corrugated metal sheeting over the historic wood shingles (visible at the west end of the south roof slope). Additional character-defining features include the: open eaves with exposed rafter tails; corner boards; large, hinged door/ramp centered in the top of the east gable allowing access to the interior hay loft; and the row of square, four-light wood windows illuminating stalls within. This building functioned as both shelter for livestock and storage for hay and grain. An open equipment shed extends from the rear (west) elevation. Its shed roof shelters five, open vehicular bays in the south elevation.

This barn is an excellent example of an early twentieth century ground-level stable barn. Likely built to replace an earlier, main barn that burned down, it communicates strong associations with the development of the ranch and agriculture in the Wood River Valley, as a whole.

Resource #4. Equipment Shed, c.1950

This one-story building has a rectangular footprint and a shallow-pitched, side-gable roof aligned generally east-west (parallel to the main barn). White painted concrete block forms the walls and the roof is covered with corrugated metal sheeting. The primary (south) elevation is defined by four vehicular bays facing the gravel barnyard roadway, the east three of which are open and the westernmost one containing a metal overhead door. Additional historic features include the: open eaves with exposed rafter tails; three, four-light steel sash windows at the south end of the west side elevation; and the vertical wood plank siding on each gable wall.

This building historically functioned as shelter for the ranch's tractors, equipment, and machinery, as well as providing an enclosed shop space within which to service machinery. It is an excellent example of its property type and retains the character-defining shallow side-gabled roof and series of vehicular bays. It clearly communicates its historic associations with the operation of the ranch.

Resource #5. Outhouse, c.1965 - Noncontributing

Though potentially of sufficient age, this building no longer retains sufficient integrity to clearly communicate its historic associations with the Main Farmstead. With no historic materials visible, it cannot readily convey its potential significance. If the secondary plywood siding were removed and historic siding found intact below, the building could be reevaluated for potential eligibility.

Resource #6. Irrigation Equipment Shed, c.2000 - Noncontributing

This building is not of sufficient age or significance to be eligible for listing in the National Register.

13-16207 – Halfway Ranch; Eccles Flying Hat Ranch

Resource #7. Worker's Shack, c.2006 - Noncontributing

This building is not of sufficient age or significance to be eligible for listing in the National Register.

Resource #8. Grain Bin, c.1960

Corrugated steel panels form the walls of this cylindrical structure. The conical roof is standing seam metal and the foundation is concrete. A single, sheet-metal-clad door is in the southeast side. Stenciled letters on the northeast side read, "BUTLER." Companies like Butler Manufacturing and Columbian Steel Tank Company fabricated easy-to-assemble grain bins like this beginning in the first years of the twentieth century, selling them worldwide for agricultural purposes well into the mid-to-late twentieth century. Nearly ubiquitous on working farms nationwide, these structures were commonly relocated based on farm operation logistics. Though a precise construction date of this bin has yet to be determined, historic aerial views indicate it at least predates 1965. It is a good example of the variety of ancillary agricultural resources that historically characterized working farms and ranches.

Resource #9. Utility Building, c.1955; c.1995

This side-gabled building has two primary elevations—southeast and northeast. A small vehicular bay at the west end of the southeast elevation and a single-leaf quarter-light wood paneled door at the north end of the northeast elevation allow access into the building. Shed roof extensions span the northwest and southwest, secondary elevations. Other features include: corrugated metal roof sheathing; tight eaves; tongue-in-groove wood siding; two window openings in the southeast elevation—a single window and a paired window—both of which have been replaced with nonhistoric fixed sashes and new casing; corner boards; and a concrete foundation.

Review of available maps and historic photos, as well as the building itself, suggests this building dates to the mid-twentieth century and may have been moved to its current location in the 1990s. Relocation of farm utility buildings was a historically common practice and does not compromise the building's overall integrity and ability to communicate its associations with the agricultural development of this ranch property.

Resource #10. Corral, c.1995 - Ineligible

This structure is not of sufficient age or significance to be eligible for listing in the National Register.

Resources #11-#14. Grain Bins (c.1950), Shed (c.1935), Equipment Garage (c.1965) - Ineligible

The Southeast Pasture Area is currently part of the Halfway Ranch/Eccles Flying Hat Ranch property, having been acquired into the larger property around 1997. Though not historically associated with the Halfway Ranch/Eccles Flying Hat Ranch, per NRHP guidelines, the full extent of the current ranch property is documented herein. Because the Southeast Pasture Area has no historic association with the Halfway Ranch/Eccles Flying Hat Ranch, NRHP guidelines require that it be evaluated for its own historic associations apart from the Halfway Ranch/Eccles Flying Hat Ranch.

When evaluated on its own, survey revealed the Southeast Pasture Area was historically associated with a separate ranch that has since been subdivided and lost to residential development (see aerial photo below). Though each of the ancillary buildings in the Southeast Pasture Area are potentially of sufficient age to meet NRHP criteria, they no longer retain the integrity of association with their original ranch, and thus do not adequately communicate historic significance. By their very nature, ancillary buildings and structures require integrity of association with their original primary resource(s) in order to be eligible. In the case of the Southeast Pasture Area, the lack of the original farmhouse, barn(s), and so forth that once anchored the ranch of which Resources #11-#14 were a part, compromises integrity of association; the loss of this aspect of integrity surpasses the presence of any other aspects of integrity that might be retained.

Resource #15. Cove Canal (10BN1126), c.1883.

This canal carries water from the Big Wood River, where its point of diversion (POD) is No. 33 NE $\frac{1}{4}$ SE $\frac{1}{4}$ Section 16, T2N R18E. It travels a meandering path to the southeast across the ranch, traveling approximately 7.65 miles to its terminus southeast of Bellevue. Established c.1883 by brothers John, Joseph, and Michael Brown, and a neighboring land owner, Marcus A. Miner, it is one of the earliest irrigation structures in Blaine County. A 1952 report listed the canal's water rights as 26.05 cubic feet per second (cfs) for irrigation purposes on 960 acres in

13-16207 – Halfway Ranch; Eccles Flying Hat Ranch

parts of Sections 22, 23, 25, 26, 36 T2N R18E, Section 1 T1N R18E, and Section 6 T1N R19E. See its associated IHSI form and below for additional history.

Resource #16. Rockwell-White Power Plant Canal (10BN1191), 1907.

This canal carries water from the Big Wood River to the site of the former Rockwell-White Power Plant. Its point of diversion (POD) is NE¼ SE¼ Section 22, T2N R18E from left bank of the Big Wood River. It travels a path to the southeast across the ranch and ends near SH 75, where it leads into the former power plant tail race structure and is then diverted into the Kohler Ditch and Arkoosh Canal. The canal supplied water for electricity for mining and the community of Bellevue until it was decommissioned for industry in 1945. Additional history discussed below.

HISTORY and SIGNIFICANCE

The area around the Halfway Ranch/Eccles Flying Hat Ranch was first settled by non-indigenous people in 1879 as mining boomed in the vicinity. Concurrently, agriculture and sheep ranching heavily impacted the valley's development. By 1881, sufficient settlement had taken place that the Bellevue and Hailey townsites had both been surveyed, platted, and settled, with Hailey designated the following year as county seat of Alturas County (later reorganized to create Blaine County). Increased settlement also pressed the Government Land Office (GLO) to contract for a subdivisional survey of the area – Township 2 North, Range 18 East, containing both Bellevue and Hailey – which was completed in 1882. The mining boom and rapid settlement also spurred the Union Pacific to extend a branch off the Oregon Short Line up to Hailey and Ketchum, which were completed in 1883 and 1884, respectively.

Around the same time, the US Congress passed the Desert Land Act in March 1877 as an amendment to the Homestead Act in an attempt to incent settlement and development of the arid and semiarid public lands of the West. The Act enabled individuals to purchase 'desert lands' at a price of \$1.25 per acre on the promise that the land would be irrigated within three years. A married couple could claim up to 640 acres while a single man could only claim half that. Unlike the Homestead Act, there was no residency requirement and title to the land was transferred once proof of irrigation was documented.

The historic core of this ranch property was known as the Halfway Ranch by the early twentieth century and historically encompassed about 640 acres primarily on the west side of SH 75, as it does today. The ranch originated with two, separate, early 1880s Desert Lands Act claims filed by J.B. Oldham (north part of ranch in sections 22, 23) and J.R. Wilson (south part of ranch in sections 23, 25). At this time, a building (presumed dwelling/farmstead) is shown in the SE¼ SW¼ of Section 23, on the west side of what is identified as the Bellevue and Hailey Road (today this site just open pasture).

A native of Kentucky, **Joel B. Oldham** (1832-1896) went west in the 1849 California Gold Rush before coming to Idaho in the 1860s gold rush. The historic record indicates he resided in Boise and worked as a saloon keeper (1870 census) prior to becoming Ada County Sheriff from at least 1880 through the early 1890s. The 1882 sectional plat of the area between Hailey and Bellevue show he held a Desert Lands Claim to large portions of sections 22 and 23, to which he received his ownership certificate in 1888, an indication the land had been irrigated. Though he is known to have lived in the Wood River valley for undefined periods, all sources indicate these were temporary stays and that Boise was his primary residence until his commitment to the state asylum in Blackfoot in 1894, where he spent the last two years of his life.

A native of Illinois, **Marcus A. Miner** (1838-1901) came to Idaho in the late 1870s by way of Michigan. By 1880, he was working as a farmer in Ada County. Though the 1882 plat of the area between Hailey and Bellevue shows a J.R. Wilson as having the Desert Land Claim, Miner is who received the Desert Lands Certificate conveying ownership of the large portions of sections 23 and 26 comprising the south half of the present-day ranch. By 1900,

13-16207 – Halfway Ranch; Eccles Flying Hat Ranch

Miner was in California working as a day laborer, suggesting his land claim was likely a short-term land investment and not a personal homestead settlement.²

In 1907, the **Rockwell-White Power Plant** went up on the north edge of Bellevue (at the south edge of the ranch property) to supply electricity to area mining operations and the town of Bellevue. In order to power the plant, a canal was constructed to carry water from the Big Wood River, across the ranch property, and to the plant. Later the Rockwell-White Power Plant Canal became known as Bellevue Light and Power Co. Canal (aka Tail Race Canal).³ The water rights license indicates the canal was allowed to carry 220 cubic feet per second (cfs) for power and milling purposes. According to a 1952 streamflow report, the canal was “used nonconsumptively as a source of power for Bellevue and surrounding area. Operation of power plant discontinued in 1945, however canal is still used to supply two diversions for irrigation canals Nos. 43 and 44.”⁴

This historic record shows that the present-day Eccles Flying Hat Ranch property was known as Halfway Ranch as early as 1910, at which time the property spanned 600-640 acres (accounts vary). Around this time, the property became entangled in successive waves of litigation regarding unpaid mortgage notes through at least 1922. As a result, there were often multiple owners (i.e. various lenders) and the historic record shows ownership changed numerous times in a short period. Among the owners between 1910 and 1920 were: Silas Allred (1910); Cove Ranch Land and Livestock Company of Salt Lake City (1911); the Kilker Family (1913); R.T. Forbes (1918); and Phil Dittoe (1919). In 1920, Dittoe sold the ranch to Mrs. Emma Ashton for \$35,000 and the ranch was to be managed by her son, J.J. Mulville.

By 1922, Agnes Mulville owned the property and leased it to Walter C. Williams, who lived on the property with his family. That year, the ranch’s large barn burned.⁵ Two years later, the Burlington Savings Bank took over ownership of the north half of the ranch, which it maintained until 1940. At that time, two main landowners held the ranch—Burlington Savings Bank (north portion, parts of sections 22, 23) and F.G. Perry and Marie Howes (south portion, parts of sections 23, 26). From 1946 to 1959, the Don Spencer family owned the ranch, after which Edward and Anne Gage held the property for ten years. In 1969, Spence F. and Cleone P. Eccles purchased the property and it has been in their ownership since.

The southernmost and easternmost parcels date to late 1990s purchases. These areas are fractional portions of what were historically the much larger ranches and farmsteads of R.B. King (NW¼ SE¼ Section 26), Joseph W. Fuld and Leon Friedman (parts of NE¼ Section 26 and NW¼ Section 25), and Hannah Kohler (SW¼ Section 25).⁶

² The historic record has little ownership and occupant information readily available for the ranch during the 1890s and first part of the 1900s, and the initial occupants of the property are not yet known. Deed and title research beyond the scope of this survey is recommended should National Register listing be pursued.

³ The canal’s point of diversion (POD) is NE¼ SE¼ Section 22, T2N R18E from Big Wood River.

⁴ Canal No. 43 is the Arkoosh Canal that began from the tailrace of the power plant. Canal No. 44 is the Kohler Ditch, which dates to 1883 and started from the Bellevue Power Plant storage pond. It was constructed for agricultural use on about 310 acres in sections 25, 26, and 33 (T2N, R18E).

⁵ Likely replaced with the existing barn shortly thereafter.

⁶ Per 1939 Metsker map.

INTEGRITY and ELIGIBILITY

This ranch property retains integrity of location, setting, design, materials, workmanship, feeling, and associations. The property continues to clearly communicate its significant historic associations with the development of agriculture in the Hailey-Bellevue area, and the Wood River Valley, in general. Once common, intact ranches such as this, retaining their original large tracts of pastureland and without various nonhistoric intrusions are increasingly rare. The Halfway Ranch/Eccles Flying Hat Ranch is eligible at the local level as a historic ranch district under the NRHP guidelines for evaluation and documentation for Rural Historic Landscapes as outlined in NRHP Bulletin 30.

ADDITIONAL SOURCES

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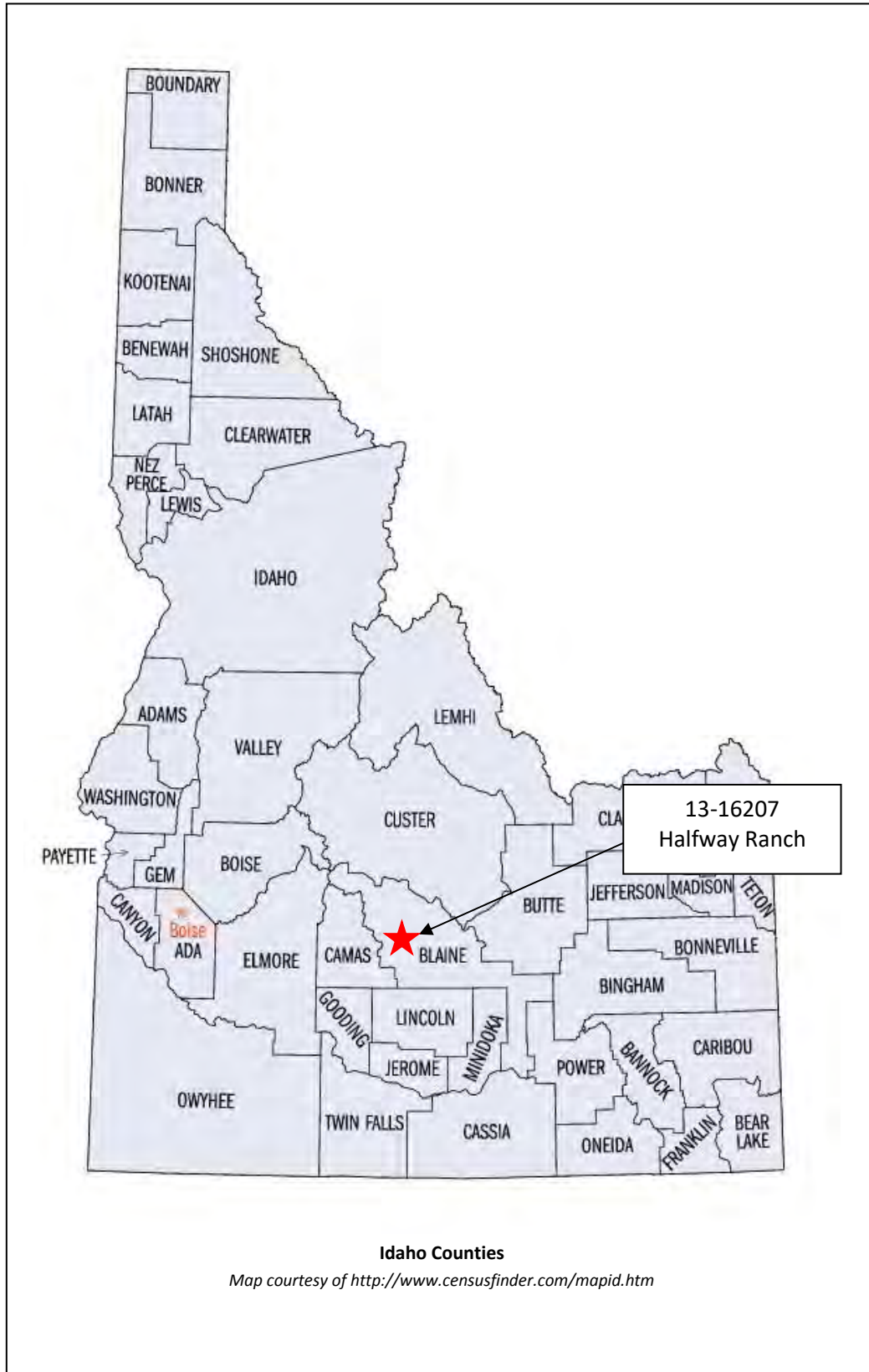
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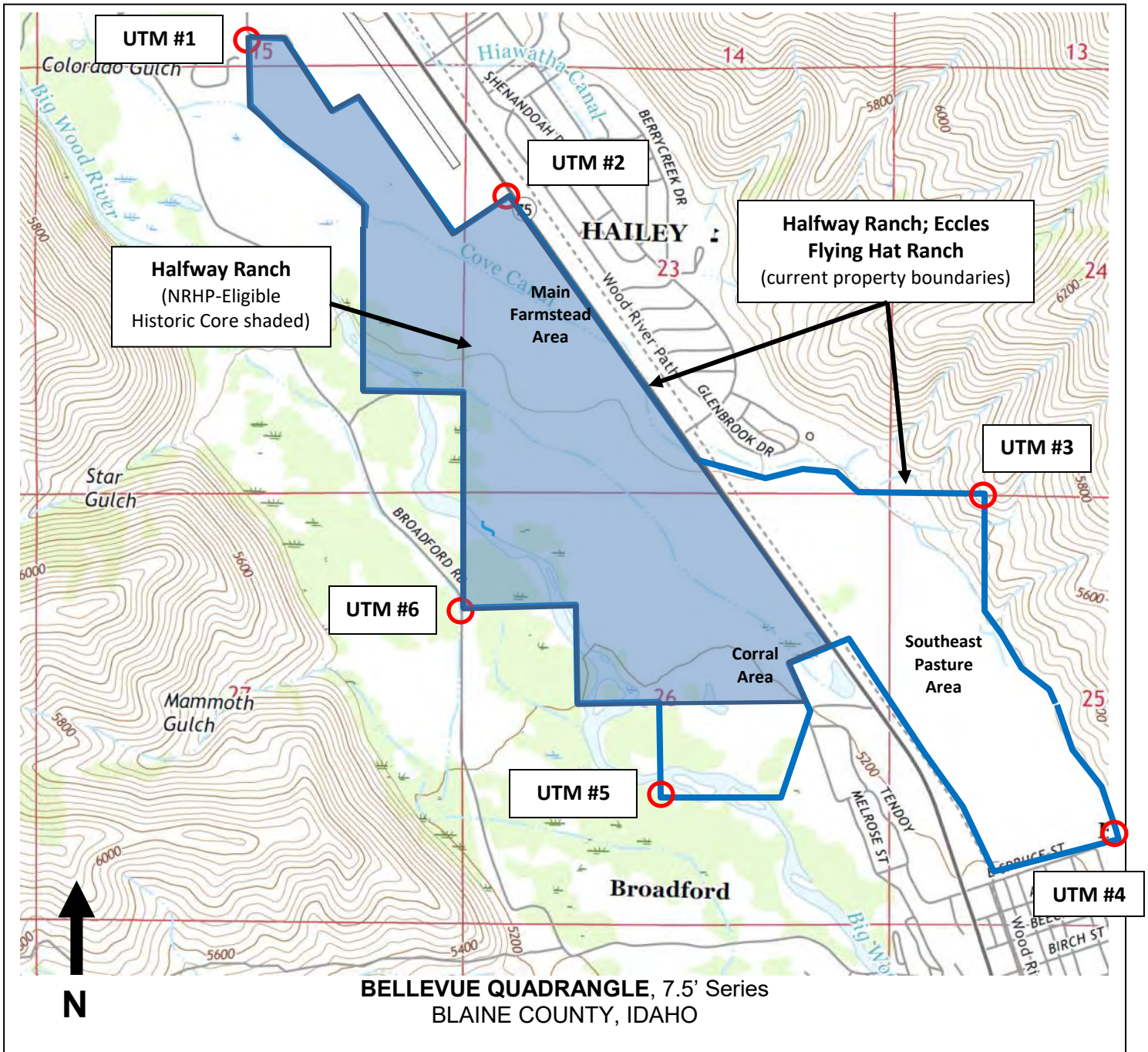
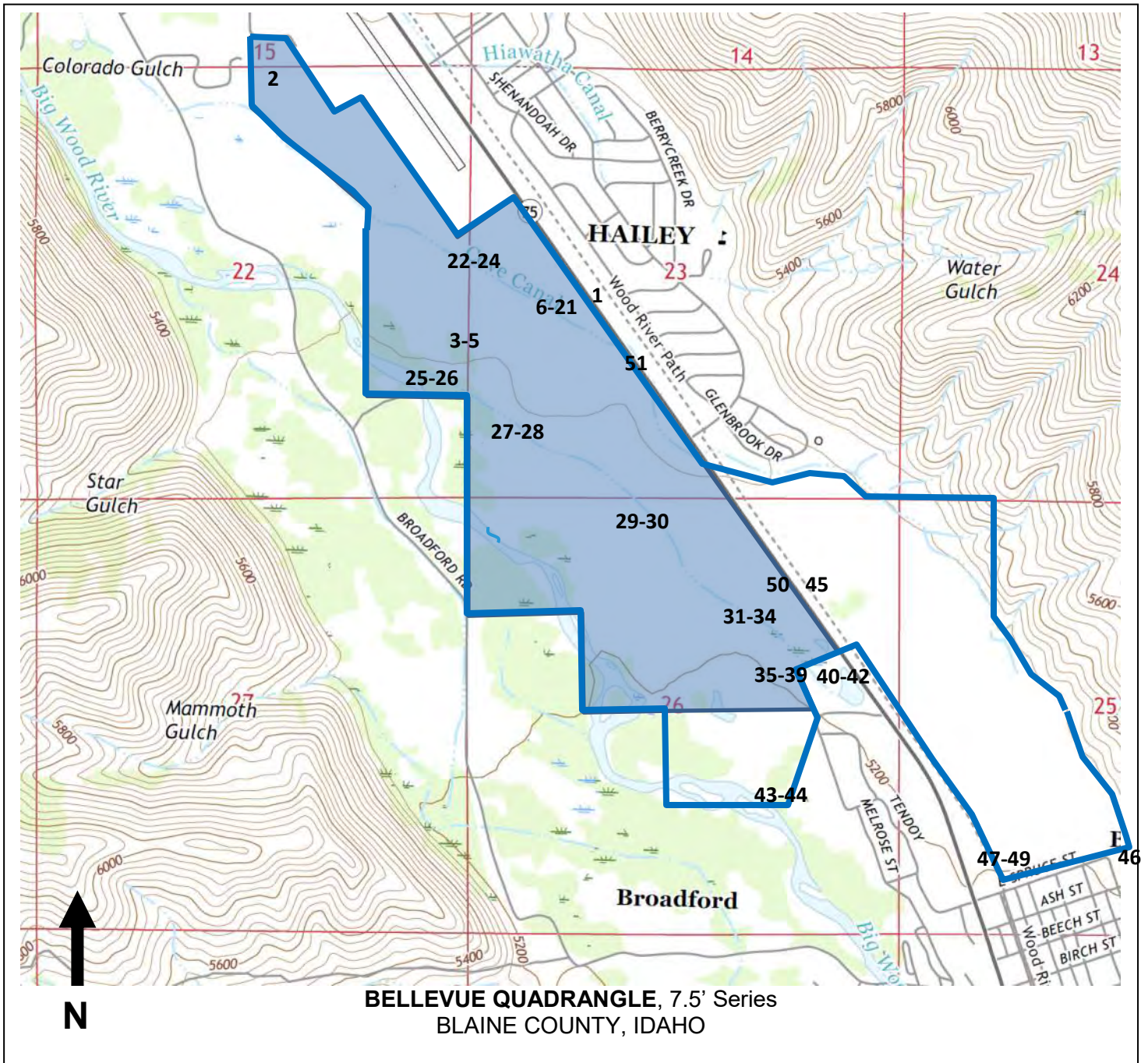
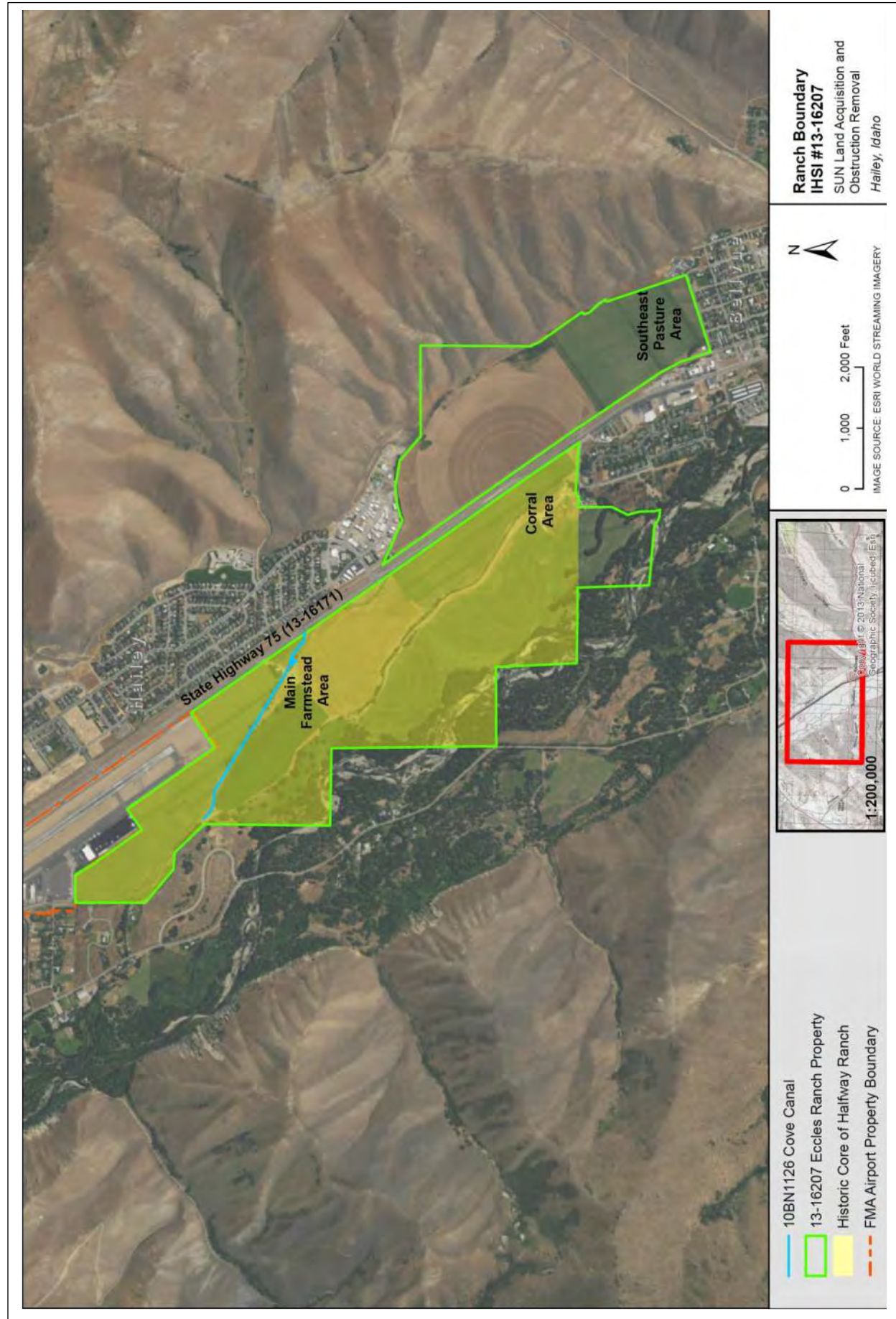
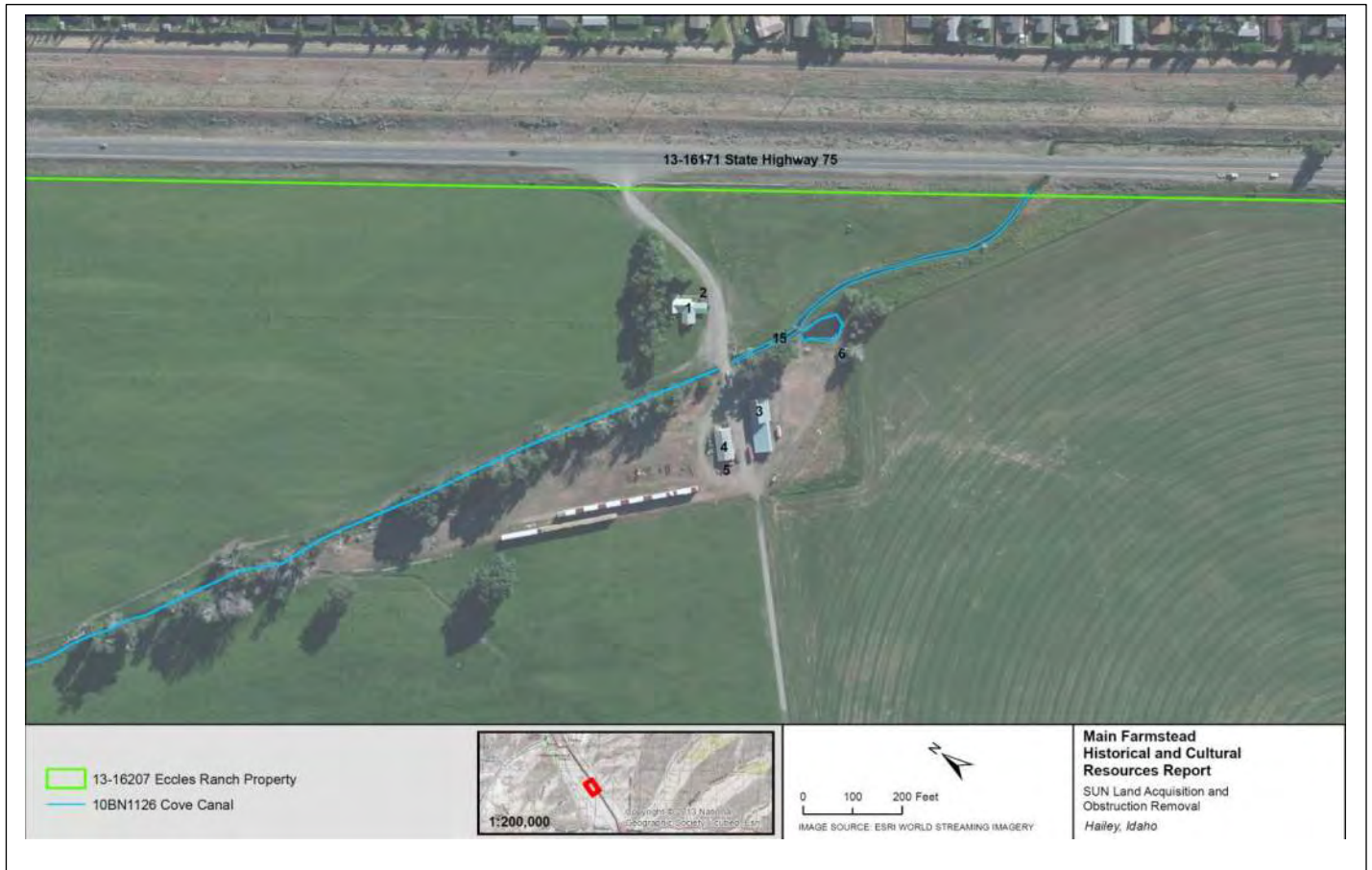



Photo Locations









 13-16207 Eccles Ranch Property

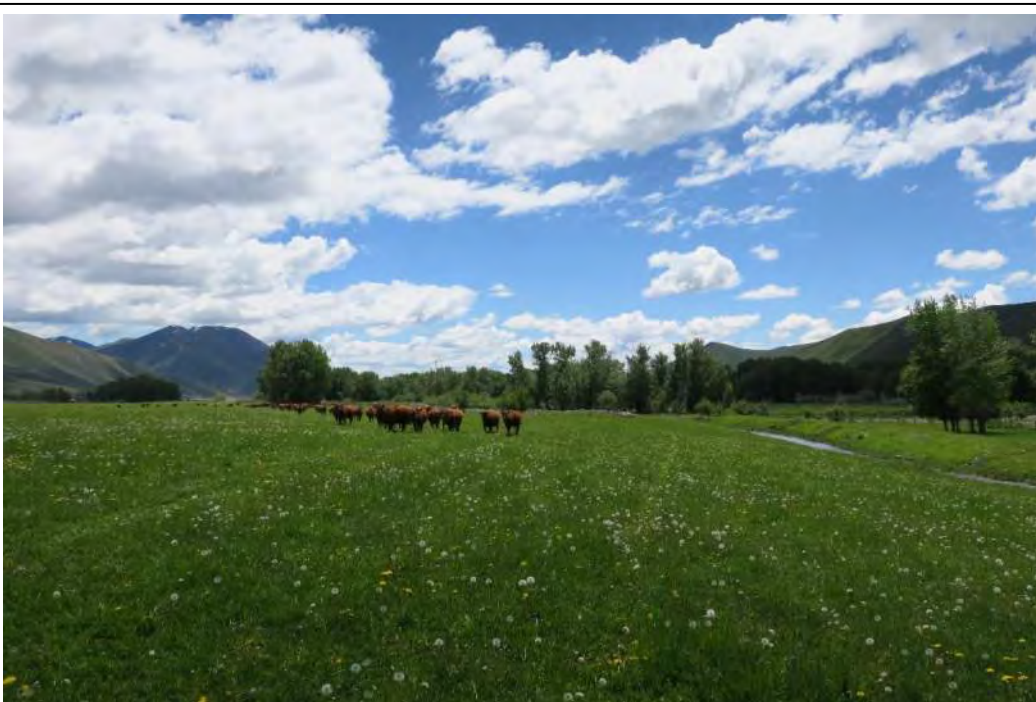


**Corral Area
Historical and Cultural
Resources Report**
SUN Land Acquisition and
Obstruction Removal
Hailey, Idaho





1. 13-16207, May 2017
View SW from entrance of SH 75



2. 13-16207, May 2017
View SE from north end of property; Cove Canal (10BN1126) at right



3. 13-16207, May 2017

View W-NW of north section of ranch at lateral off Cove Canal (10BN1126)



4. 13-16207, May 2017

View N-NW of north section of ranch at lateral off Cove Canal (10BN1126)



5. 13-16207, May 2017

View E-SE toward farmstead from lateral off Cove Canal (10BN1126)



6. 13-16207, May 2017

View W of Farmhouse (Resource #1) and Well (Resource #2)



7. 13-16207, May 2017
View S-SE of Farmhouse (Resource #1)



8. 13-16207, May 2017
View E-NE of Farmhouse (Resource #1)



9. 13-16207, May 2017
View N-NE of Farmhouse (Resource #1)



10. 13-16207, May 2017
View NW of Cove Canal (10BN1126)



11. 13-16207, May 2017
View SE of Cove Canal (10BN1126)



12. 13-16207, May 2017
View S of Barn (Resource #3)



13. 13-16207, May 2017
View SW of Barn (Resource #3) and Equipment Shed (Resource #4)



14. 13-16207, May 2017
View W of Barn (Resource #3)



15. 13-16207, May 2017
View N of Barn (Resource #3)



16. 13-16207, May 2017
View E-NE of Barn (Resource #3)



17. 13-16207, May 2017
View W-SW of Equipment Shed (Resource #4)



18. 13-16207, May 2017
View E-NE of Equipment Shed (Resource #4)



19. 13-16207, May 2017
View NE of Outhouse (Resource #5)



20. 13-16207, May 2017
View E of Outhouse (Resource #5)



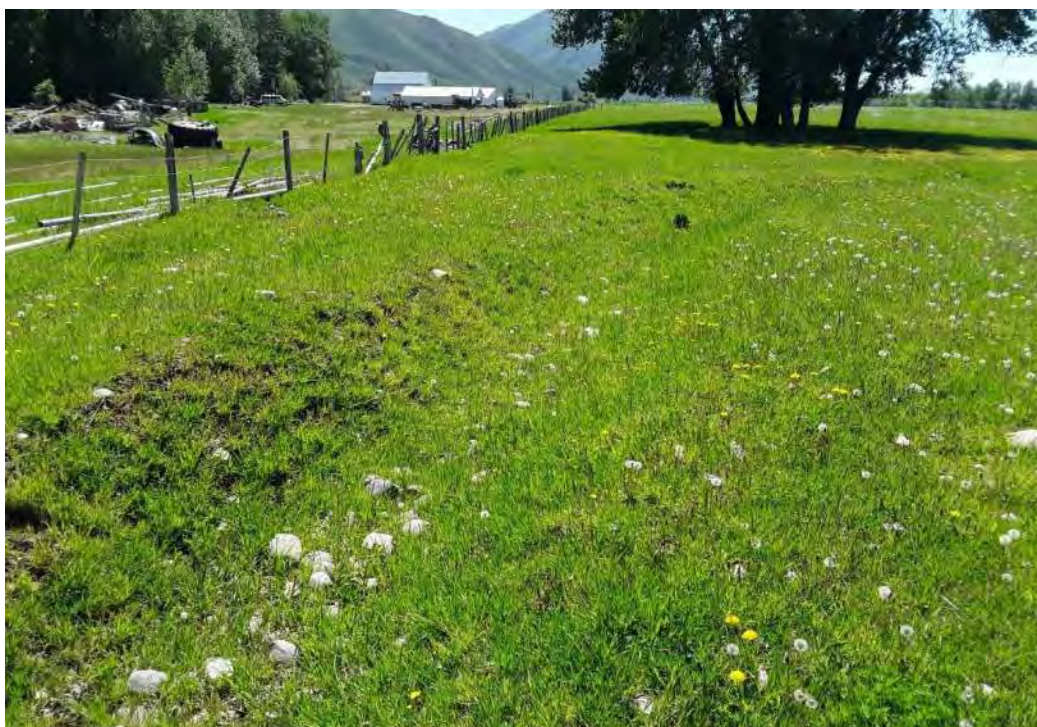
21. 13-16207, May 2017
View E-SE of Irrigation Equipment Shed (Resource #6)



22. 13-16207, May 2017
View SE of Cove Canal (Resource #15; 10BN1126)



23. 13-16207, May 2017
View SE of lateral off Cove Canal (Resource #15; 10BN1126)



24. 13-16207, May 2017
View SE of remnant lateral off Cove Canal (Resource #15; 10BN1126), farmstead in background



25. 13-16207, May 2017

View W-NW of Rockwell-White Power Plant Canal (10BN1191) at its point of diversion from the Big Wood River at northwest edge of ranch property



26. 13-16207, May 2017

View SE of Rockwell-White Power Plant Canal (10BN1191) traveling across the northwest edge of ranch property



27. 13-16207, May 2017

View NW of Rockwell-White Power Plant Canal (10BN1191) at ranch road



28. 13-16207, May 2017

View SE of Rockwell-White Power Plant Canal (10BN1191) at ranch road



29. 13-16207, May 2017

View SE of Rockwell-White Power Plant Canal (10BN1191; at left) along ranch road



30. 13-16207, May 2017

View S-SE across south part of ranch from ranch road



31. 13-16207, May 2017

View NW of Rockwell-White Power Plant Canal (10BN1191) along ranch road in south section of ranch property



32. 13-16207, May 2017

View NW along ranch road in south section of ranch property



33. 13-16207, May 2017

View W-NW of south section of ranch property



34. 13-16207, May 2017

View SE of ancillary ranch buildings at south end of property (Corral Area)



35. 13-16207, May 2017
View SE toward Corral Area at south end of ranch property



36. 13-16207, May 2017
View N-NE of Worker's Shack (Resource #7) in Corral Area



37. 13-16207, May 2017

View W-NW in Corral Area toward Utility Building (Resource #9) and Grain Bin (Resource #8)



38. 13-16207, May 2017

View W-NW in Corral Area of Utility Building (Resource #9)



39. 13-16207, May 2017

View W-NW in Corral Area of Corral (Resource #10)



40. 13-16207, May 2017

View E-NE of Rockwell-White Power Plant Canal (10BN1191) underpass channels and tailrace outlet



41. 13-16207, May 2017

View E-NE of Rockwell-White Power Plant Canal (10BN1191) underpass channels and tailrace outlet



42. 13-16207, May 2017

View S-SW of Rockwell-White Power Plant Canal (10BN1191) from spillway



43. 13-16207, May 2017
View N from southwest edge of ranch property



44. 13-16207, May 2017
View S-SE of Big Wood River at southwest edge of property



45. 13-16207, May 2017

Southeast Pasture Area, view SE

Note: this parcel added to ranch in the mid-to-late 1990s



46. 13-16207, May 2017

Southeast Pasture Area, view NW

Note: this parcel added to ranch in the mid-to-late 1990s



47. 13-16207, May 2017

Southeast Pasture Area, view NW of ancillary ranch buildings and structures (Resource #s 11-13)

Note: this parcel added to ranch in the mid-to-late 1990s



48. 13-16207, May 2017

Southeast Pasture Area, view NW of ancillary shed (Resource #13)

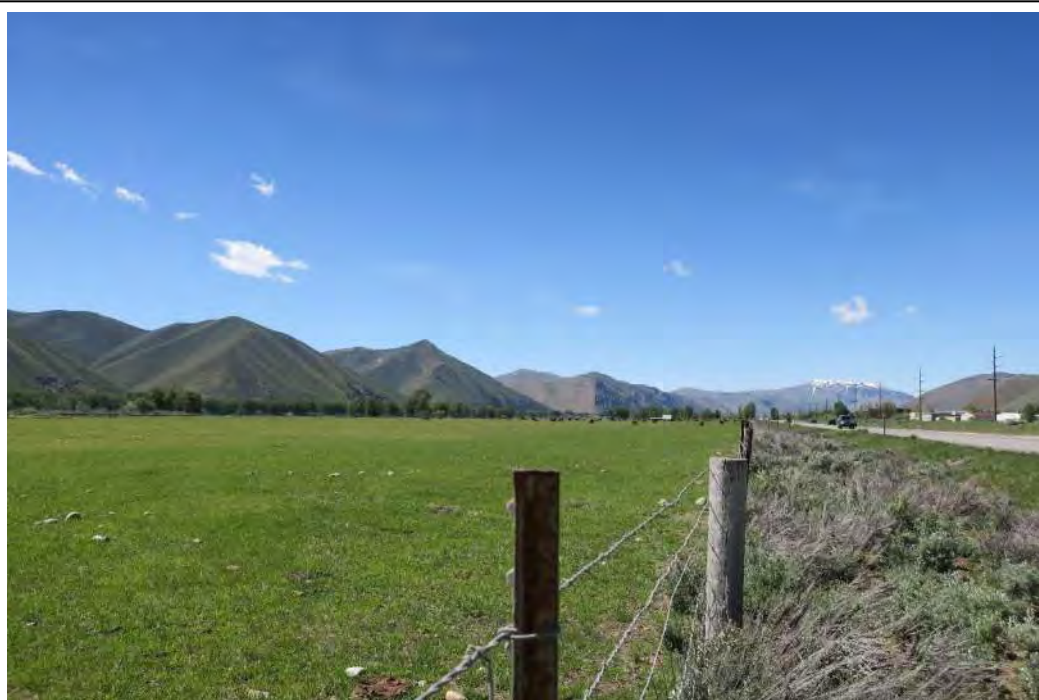
Note: this parcel added to ranch in the mid-to-late 1990s



49. 13-16207, May 2017

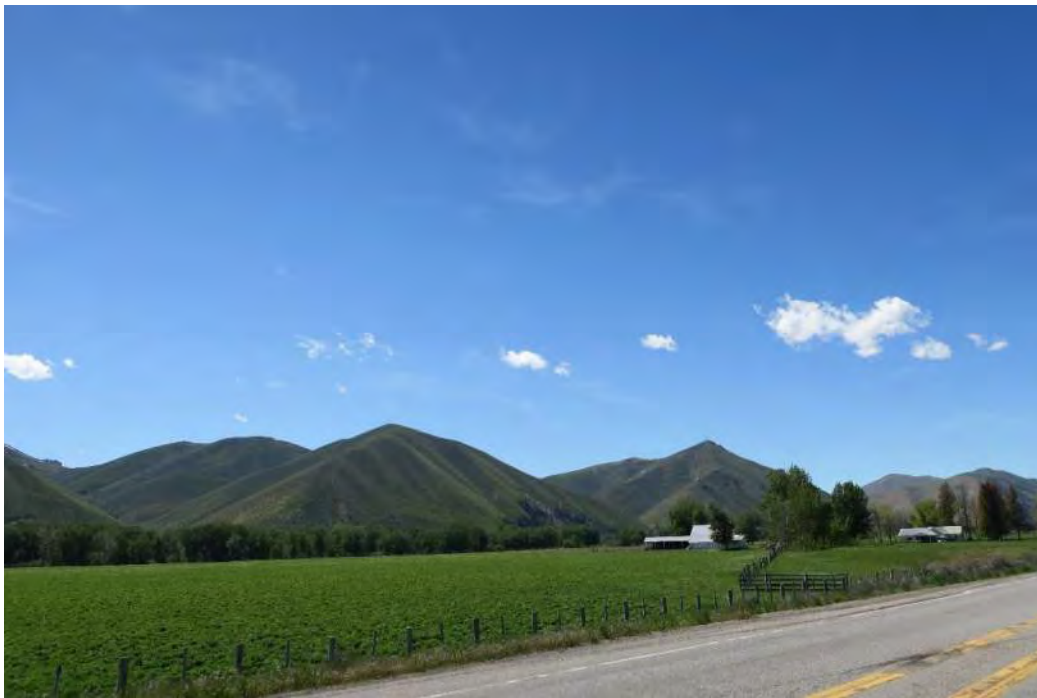
Southeast Pasture Area, view N-NW of Equipment Garage (Resource #14)

Note: this parcel added to ranch in the mid-to-late 1990s



50. 13-16207, May 2017

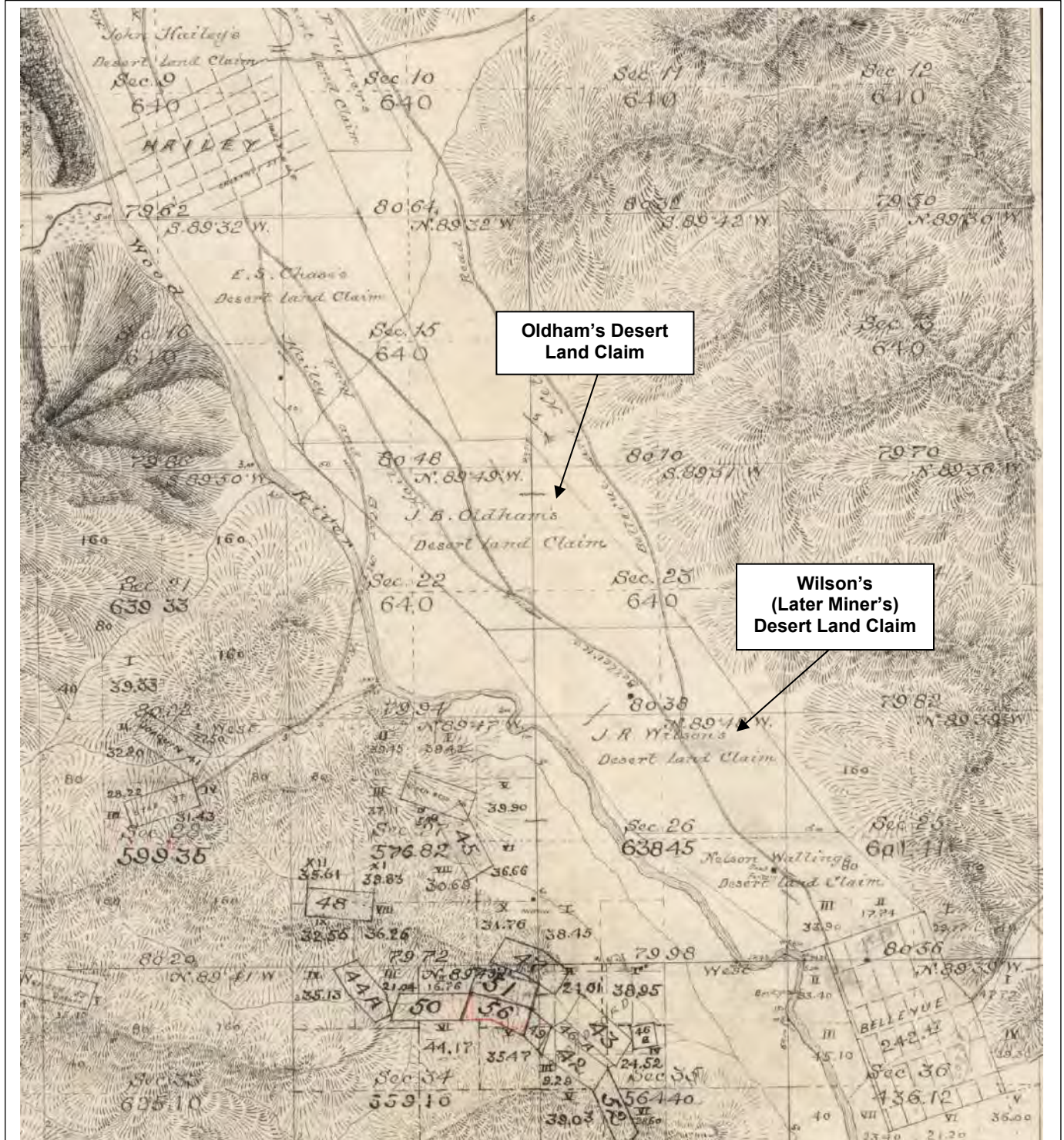
View NW of central pasture areas west of SH 75



51. 13-16207, May 2017

View W-NW of ranch pasture toward farmstead

HISTORIC MAP(S)



1882 Subdivisional Plat, T2N, R18E of Boise Meridian (detail)

Courtesy <http://www.glorerecords.blm.gov/>

PROPERTY NAME	Friedman Memorial Airport			FIELD#	FMA-01			
STREET	1610 AIRPORT CIR					RESTRICT	<input type="checkbox"/>	
CITY	Hailey	VICINITY	<input type="checkbox"/>	COUNTY CD	13	COUNTY NAME	Blaine	
SUBNAME		BLOCK		SUBLOT		ACRES	209	
						LESS THAN	<input checked="" type="checkbox"/>	
TAX PARCEL	RPH2N180150010		UTMZ	11	EASTING	717763	NORTHING	4821337
TOWNSHIP	2	N_S	N	RANGE	18	E_W	E	
						SECTION	15	
							1/4, 1/4	
QUADRANGLE	Hailey & Bellevue Quads, 7.5'			OTHERMAP				
SANBORN MAP		SANBORN MAP#		PHOTO#	Digital			

ASSOCIATED FEATURES	23 buildings, runway, taxiway	TOTAL # FEATURES	25
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NR REF # NPS CERT ACTIONDATE FUTURE ELIG DATE
 DIST/MPLNAME1 DIST/MPLNAME2

CRITERIA A ☐ B ☐ C ☐ D ☐ CRITERIA CONSIDERATION A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐

AREA OF SIGNIF AREA OF SIGNIF

COMMENTS	See continuation sheets for Description, Resource Inventory, History, and so forth.
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PROJ/RPT TITLE	Friedman Memorial Airport Land Acquisition and Obstruction Removal	SVY DATE	5/21/17	SVY LEVEL	Intensive
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RECORDED BY	Kerry Davis, PSLLC	PH	816-225-5605	ADDRESS	1007 E. Jefferson Street, Boise, ID 83712
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SUBMITTED PHOTOS ☒ NEGS ☐ SLIDES ☐ SKETCH MAP ☒

SVY RPT # ***** FOR ISHPO USE ONLY ***** IHSI# FMA-01

MS RPT # SITS#

IHPR # HABS NO. ID- HAER NO. ID- REV#

CS #		IHSI# REF	13-16156 thru 13-16160; FMA-02	NR REF# 2		REV# REF		RI	SI	HE
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SVY RPT# 1 SVY RPT# 2 SVY RPT# 3 MS RPT# 1 MS RPT# 2 #V #S #IS

ADD'L NOTES	Also section 22. UTM Ref 5: 11/718525/4819875. Additional sources: HistoricAerials.com; HistoricMapWorks.com; Friedman Airport Lobby Photo Collection.
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MORE DATA ☒

ATTACH ☒

# OF PHOTOS		NEGBOX#		# OF SLIDES		SHPO DETER		DETER DATE	
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INITIALED		ENTRY DATE		REVISE		REVISE		REVISE	
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IHSI#

SITS#

REV#

PROPERTY NAME	Friedman Memorial Airport	IHSI#	FMA-01
FIELD#	FMA-01	COUNTY NAME	Blaine
OTHER NAME	Hailey Airport		
COUNTY CD	13	CITY	Hailey
		VICINITY	<input type="checkbox"/>
UTM REF2	11/718017/4821279	UTM REF3	11/719512/4819308
		UTM REF4	11/719337/4819187

OTHER MATERIAL2		CULTAFFIL		AGENCYCERT	Local
SIGNIFDATE		SIGNIFPERIOD		SIGNIFPERSON	
ARCH/BUILD			ARCHPLANS	<input type="checkbox"/>	TAXEASE <input type="checkbox"/> TAXCERT <input type="checkbox"/>
OWNERSHIP	Public-Local	PROPOWN	FRIEDMAN MEMORIAL AIRPORT AUTHORITY, BLAINE COUNTY, 1616 AIRPORT CIR HAILEY ID 83333		
MORE DATA	<input checked="" type="checkbox"/>	ATTACH	<input checked="" type="checkbox"/>		

DOCSOURCE	Blaine Co. Assessor; SHPO Records
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ADD'L NOTES	Also section 22. UTM Ref 5: 11/718525/4819875. Additional sources: HistoricAerials.com ; HistoricMapWorks.com ; Friedman Airport Lobby Photo Collection.
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COMMENTS	See continuation sheets for Description, Resource Inventory, History, and so forth.
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PHOTO LOG ☐ IHSI# REF 13-16156 thru 13-16160; FMA-02 INITIALED ☐ DATE ENTERED ☐

SKETCH ☒

IHS# _____

SITS# _____

REV# _____

IDAHO HISTORIC SITES INVENTORY FORM

PROPERTY NAME IHSI#
FIELD# COUNTY NAME

COMMENTS:

See continuation sheets for Description, Resource Inventory, History, and so forth.

ATTACH ☒

IHSI#	_____
SITS#	_____
REV#	_____

ARCHITECTURAL DESCRIPTION

The Friedman Memorial Airport spans approximately 209 acres abutting the south edge of Hailey, Blaine County, Idaho. Aligned parallel to the west of State Highway 75, the airport property encompasses twenty-five (25) resources constructed between 1968 and c.2015, of which twenty-three (23) are buildings (18 hangars, control tower, 2 terminals, office building, garage) and two (2) are structures (taxiway, runway).

Though established in the early 1930s, the historic portions of the airport do not retain sufficient integrity nor communicate their historic associations sufficiently to be eligible for listing in the National Register as a historic district. No resource appears to be individually eligible for listing in the National Register of Historic Places (NRHP) and there is currently no district potential.

Overall, the airport conveys the character of aviation-related resources (hangars, runways, air traffic control, and so forth) from the late twentieth and early twenty-first century. Of the twenty-five resources on the airport property, all but four date to the 1980s and into the early twenty-first century, or reflect extensive alterations from the era. None of these airport resources meet NRHP Criteria Consideration G for exceptional importance of resources less than 50 years of age; 50 years being the NRHP's "general estimate of the time needed to develop historical perspective and to evaluate significance."¹ As such, if integrity is maintained, these resources will need to be reevaluated for potential NRHP eligibility around 2032, when enough time will have passed to accurately ascertain significance.

The Friedman Memorial Airport is characterized by its single runway (and associated parallel taxiway) aligned northwest-southeast amidst open grassy ground. Additional landscape features that are not counted separately include perimeter fencing, driveways, parking lot, small nonhistoric utility sheds, plantings and trees, flagpoles, and runway lights, as well miscellaneous service roadways along the airport perimeter.

Resource Inventory

The following list provides information specific to each resource located within the airport, grouped by resource type and then in order by chronological date of construction and geographic location. Also included below are the five resources documented in 1993 prior to their demolition.

Resource #	Photo #	Resource Name	Construction Date(s)	Eligibility Status	Justification
1	1	Air Traffic Control Tower	c.1985	Ineligible	Constructed after period of significance; not historic
2	2, 3	Large Single-bay Hangar (FMA-03)	c.1974	Ineligible	Constructed after period of significance; not historic
3	2, 4	Large Single-bay Hangar	c.1995	Ineligible	Constructed after period of significance; not historic
4	7	Single-bay Hangar	c.2015	Ineligible	Constructed after period of significance; not historic
5	8	Single-bay Hangar	c.2015	Ineligible	Constructed after period of significance; not historic
6	2, 5	Three-bay Hangar	c.1985	Ineligible	Constructed after period of significance; not historic
7	2, 6	Four-bay Hangar	c.1985	Ineligible	Constructed after period of significance; not historic

¹ National Register Bulletin *How to Apply the National Register Criteria for Evaluation* (Washington, D.C.: Dept. of Interior, National Park Service, 1998), 41.

FMA-01 – Friedman Memorial Airport

8	9	Terminal	c.1985; c.2015	Ineligible	Constructed after period of significance; not historic
9	10	Equipment Garage	c.1985; c.2003	Ineligible	Constructed after period of significance; not historic
10	11	Todd C. Combs Management & Operations Center	c.2015	Ineligible	Constructed after period of significance; not historic
11	12, 13	Single-bay Hangar	c.1985	Ineligible	Constructed after period of significance; not historic
12	12, 13	Single-bay Hangar	c.1985	Ineligible	Constructed after period of significance; not historic
13	12, 14	Single-bay Hangar	c.1985	Ineligible	Constructed after period of significance; not historic
14	15	Three-bay Hangar	c.1985	Ineligible	Constructed after period of significance; not historic
15	16	Multi-bay Hangar	c.1979	Ineligible	Constructed after period of significance; not historic
16	17	Multi-bay Hangar	c.1979	Ineligible	Constructed after period of significance; not historic
17	18	Multi-bay Hangar	c.1979	Ineligible	Constructed after period of significance; not historic
18	19	Multi-bay Hangar	c.1980	Ineligible	Constructed after period of significance; not historic
19	20	Multi-bay Hangar	c.1985	Ineligible	Constructed after period of significance; not historic
20	21	Multi-bay Hangar	c.1985	Ineligible	Constructed after period of significance; not historic
21	22	Multi-bay Hangar	c.1985	Ineligible	Constructed after period of significance; not historic
22	23	Large Single-bay Hangar	c.2003	Ineligible	Constructed after period of significance; not historic
23	24	Atlantic Aviation Terminal	c.2015	Ineligible	Constructed after period of significance; not historic
24	25, 26	Runway 13-31 (FMA-02)	1968; c.1975; c.1988; c.2006	Ineligible	Integrity lost due to extensive alterations/additions; original materials and alignment indiscernible
25	27, 28	Taxiway	c.2013	Ineligible	Constructed after period of significance; not historic
13-16156	n/a	Sun Valley Aviation Hangar No. 1	undetermined	Nonextant	Demolished c.1994
13-16157	n/a	Sun Valley Aviation Inc. Office	undetermined	Nonextant	Demolished c.1994
13-16158	n/a	Sun Valley Aviation Hangar #2	undetermined	Nonextant	Demolished c.1994
13-16159	n/a	Friedman Airport County Shop Building	undetermined	Nonextant	Demolished c.1994
13-16160	n/a	Sinclair Hangar	undetermined	Nonextant	Demolished c.1994

HISTORY and SIGNIFICANCE

Though established during the significant early 20th century, the historic aviation-related area within the Friedman Memorial Airport does not retain sufficient integrity nor clearly communicate its historic associations sufficiently to be eligible for listing in the National Register. The airport property encompasses twenty-five (25) resources constructed between 1968 and c.2015. No resource appears to be NRHP-eligible.

The Development of Friedman Memorial Airport: 1930s – 2010s

In the mid-to-late 1920s Idaho, and places nationwide truly caught 'airport fever.' As municipalities anticipated the benefit of accommodating airplanes, they promptly bought up land and leveled it for landing strips. Among those doing this in Idaho were Boise, Pocatello, and Idaho Falls in 1926, 1928, 1929, respectively.

Around this time, in 1931, the Friedman family donated 76 acres of farmland just south of Hailey to the City of Hailey for the purposes of developing an airport. Opening in May the following year, the airport featured a 0.75-mile dirt airstrip aligned northwest-southeast between the Big Wood River and U.S. Highway 93 (now SH 75). *The Hailey Times* reported on the opening and naming of the airport for early area resident, Simon M. Friedman (1853-1926), a native of Germany and early homesteader in the area. The grand opening boasted the presence of five airplanes, which was remarkable as it "was the first time that more than one airplane was in the valley and the unexpected arrival of so many birdmen aroused the greatest enthusiasm."

The new airport's earth and grass landing strip had been created under the oversight of the state highway department by the labor of local Boy Scouts and area citizens, who had "[cleared] off the rocks, [filled] the ditches, [removed] trees and [leveled] the field of wonderful beauty and exceptional adaptability to the intended purpose." In addition to the dirt runway, the airport boasted a "great compass 100 feet in diameter with a fine flag pole in the center and with arrows on the ground to give the birdmen the exact directions." Rocks gathered in the leveling of the field were whitewashed and laid into the shape of a compass and compass arrows, as well as formed into the word "HAILEY" set within a separate half-circle. In addition, a native stone monument attributed to John Bonin stood just northwest of the compass and at the time of dedication still awaited the installment of a bronze tablet. A 1932 photo shows the grass field and the only other improvements being that of these vernacular ground features (See historic photos below).

During the Depression, airport developments nationwide were facilitated by New Deal projects, primarily executed by the WPA, from the mid-1930s through the early-to-mid 1940s. The *Final Report on the WPA Program* reported that the WPA built over 480 airports and improved or expanded more than 470 existing airfields during the life of the program. By the end of the decade, Idaho boasted an Aeronautics Division of the Department of Public Works and 11 developed airports statewide – Boise, Burley, Coeur D'Alene, Kellogg, Lewiston, Nampa, Pocatello, Preston, Salmon, Twin Falls, and Idaho Falls. Though shown on the 1939 Metsker map of Blaine County as the Hailey "City Airport," the Friedman Memorial Airport was not yet considered 'developed' as it still had no buildings or beacon or paved runway. Airport improvements were slow and steady, with regrading and improving of the airfield in 1941, construction of the first hangar by 1945 (nonextant; see historic photos below), and the initiation of flying service—Wood River Flying Service—and a flying school by 1947.

With the onset of World War II, federal programs such as the Development of Landing Areas for National Defense (DLAND) received large allocations of funding, which were administered by the Civil Aeronautics Administration (CAA) for both civil and defense purposes. Airport traffic control, airport construction, and other associated activities became the purview of this federal agency. Following World War II was a period of focused expansion of the nation's civil airports. The Civil Aeronautics Administration (CAA) promoted this expansion through a federal aid program, proposing work to more than 120 airports in Idaho in the late 1940s, which included the field at Hailey. The final, 1949 allocation for improvements at Friedman Memorial Airport was \$18,629, with an expected local match of \$33,500. By the end of 1949, the CAA reported a net gain of 28 new airports of all types in the Rocky Mountain states.

In 1959, the new Federal Aviation Agency recommended a \$5.9 million airport program for Idaho, which included acquisition of land and general improvements such as runway paving, lighting, automobile parking areas, and operational buildings at fourteen airports. Though this program did not specify allocations for Friedman Airport,

Hailey's municipal airport road this wave of midcentury expansion and experienced major improvements in the 1960s. Though still featuring just a grass landing strip and a single hangar, in 1960 the Blaine County Airport Commission formed and the first commercial airline—West Coast Airlines—began using the airport. In June that year, the *Statesman* reported on the Idaho State Board of Examiners' approval of the Idaho Aeronautics department's request for funds to construct a terminal at Friedman Memorial Airport. Anticipated to cost \$6,000, the terminal was to accommodate the approximately four flights each day—typically two each from Boise and Salt Lake City—a 1962 photo shows the terminal in place, adjacent to the original 1945 hangar (see historic photos below). Culminating the 1960s improvements, the runway was paved and widened to 100 feet in 1968.

As with most forms of travel, transportation infrastructure has always responded to technological developments in the various modes of travel. As planes got larger, heavier, faster, airports were, and still are, required to expand to accommodate for safety and efficiency of operation. As a result, the history of the airport in general, and Friedman Memorial Airport specifically, is one of constant change and evolution, with expansions occurring in one form or another every few years. Between 1974 and 1976, the FAA invested \$600,000 into the Friedman Airport, resulting in resurfacing of the then ~4,600' runway, construction of a new turn-around section at the south end of the airport, installation of a new sprinkler system, and access road development, as well as installation of runway lights.

A 1976 article in the *Statesman* reported the airport was nearing capacity and new airport sites were being investigated that could handle larger jets. At the time, the airport handled almost 25,000 take-offs and landings annually, which was expected to jump to 32,000 in 1977. As a result, an Airport Master Plan was developed and in place by September 1978. At this time, the airport featured a paved runway and only 5 or 6 hangar buildings (two on the northeast side of the runway along SH 75, and only one of which is still extant (resource #2)).

The aviation industry and airport infrastructure nationwide underwent drastic changes in the late 1970s, particularly due to the Airline Deregulation Act of 1978, which, according to Idaho historian, Arthur Hart, "had an immediate and drastic impact on the aviation industry...[and] especially felt in Idaho, with a population less than a million people. Without strict Civil Aeronautics Board regulation, airlines were free to pull out of small town service that was unprofitable."

Late twentieth century changes at the airport changed the appearance of the site considerably. The airport received a terminal building in 1985 and an air traffic control tower around the same time. The terminal was expanded in 1991 and between 1984 and 1992 the runway was extended about over 1,750' at its southeast end, all as a result of increased traffic. In 1993-1994, several buildings were demolished as the airport was, again, expanded and improved upon. Additional expansions between 1998 and 2003, and again between 2004 and 2009 added another 1,150' to the length of the runway at the southeast end. Between 2004 and 2009, the hangars and plane parking previously located on the east edge of the airport property, between the runway and SH 75, were relocated, consolidating all taxiing traffic to the west edge of the airport. Most recently, around 2013, the current taxiway was constructed and connections to the runway realigned to their current appearance.

ADDITIONAL SOURCES

"67 New Airport Cites Listed For Gem State," *The Idaho Statesman*, 12 February 1947.

"Airport Gain In West Told," *The Idaho Statesman*, 27 March 1950.

Airport Map of Idaho Showing Airports and Landing Fields 1939. Boise, Idaho: Department of Public Works, Aeronautics Division, 1939.

"Friedman Airport Gets Federal Aid," *The Idaho Sunday Statesman*, December 4, 1949.

"Hailey Honors Pioneers With The Most Beautiful Airport in Idaho," *The Hailey Times*, May 19, 1932.

FMA-01 – Friedman Memorial Airport

Hart, Arthur A. *Wings Over Idaho: An Aviation History*. Caxton Press/Historic Boise, Inc., 2008.

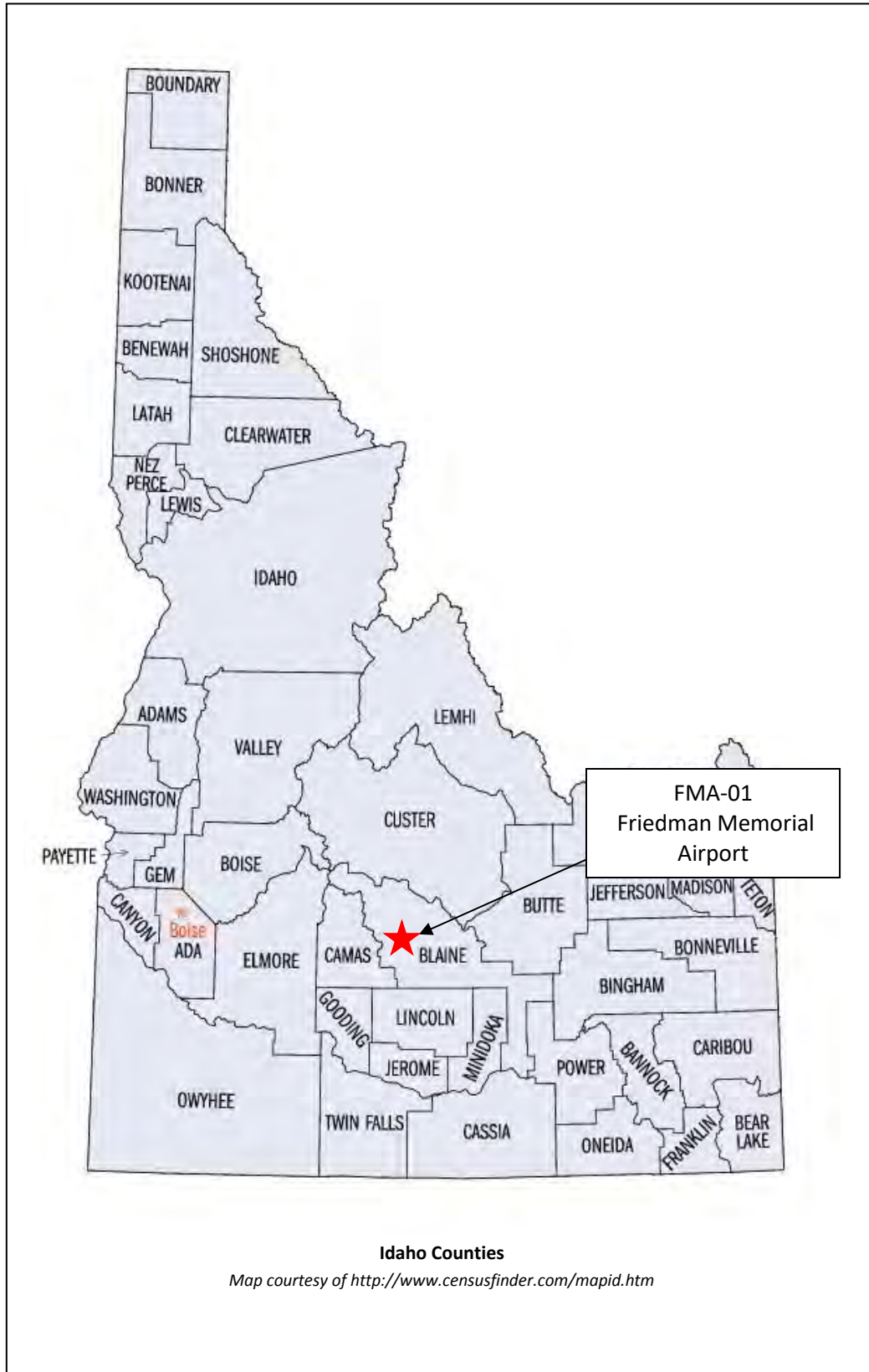
"Idaho Airport Work Listed in House Bill," *The Idaho Sunday Statesman*, April 10, 1949.

"Jet Service Eyed by Hailey Airport Planners," *The Idaho Statesman*, November 17, 1976.

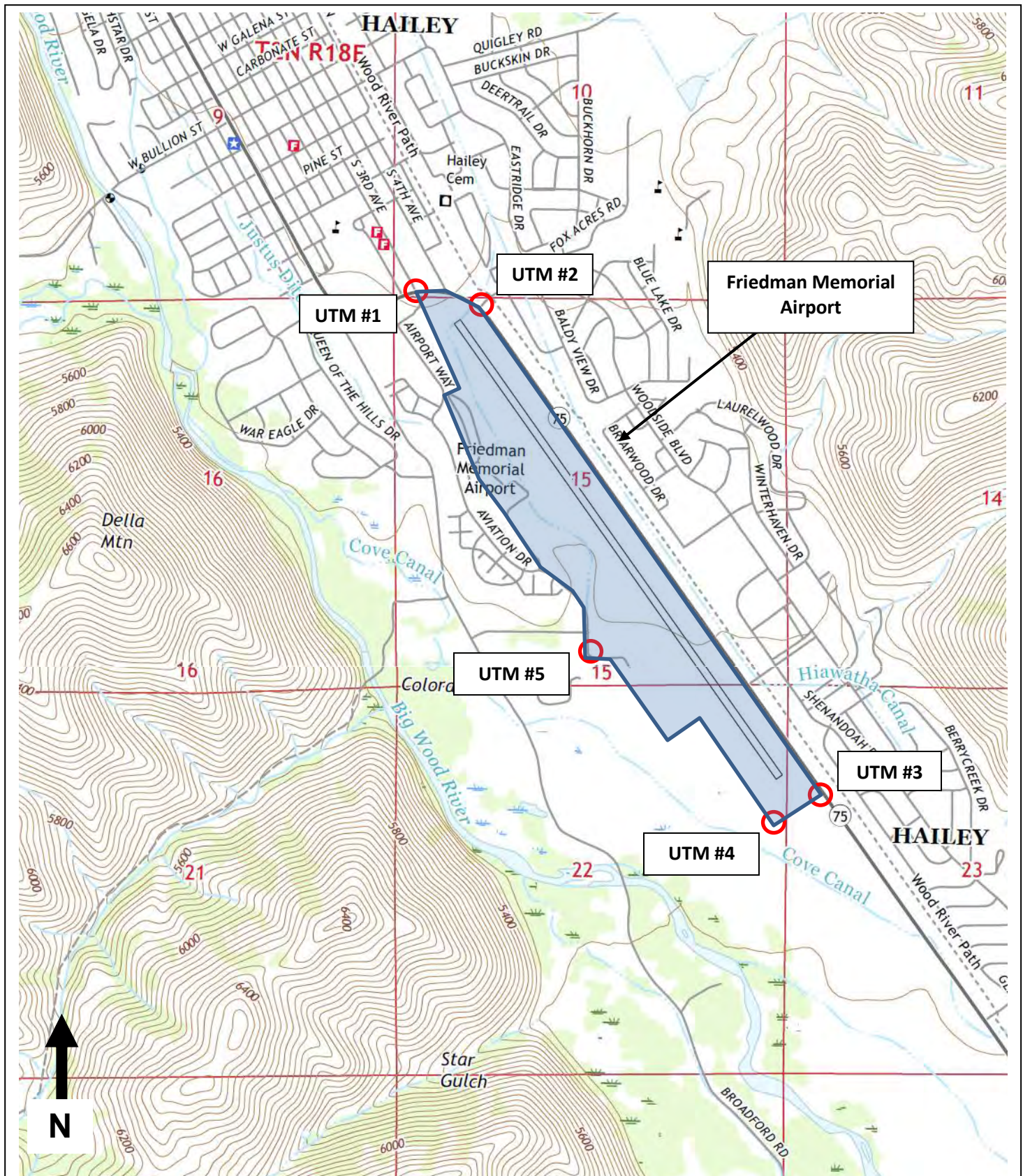
Milbrooke, Anne. *Guidelines for Evaluating and Documenting Historic Aviation Properties*. National Register Bulletin. U.S. Department of the Interior, National Park Service, National Register of Historic Places, 1998.

Walsworth, Claudia. "A Cultural Resource Survey of the Friedman Memorial Airport." 1993.

"Wood River Air Service Announced," *The Idaho Daily Statesman*, June 17, 1960.



FMA-01 – Friedman Memorial Airport



HAILEY and BELLEVUE QUADRANGLES, 7.5' Series
BLAINE COUNTY, IDAHO





1. Resource #1: Air Traffic Control Tower, view S-SW
May 2017



2. Resources #2, #3, #6, #7 (R-L): Hangars, view W
May 2017



3. Resource #2 (FMA-03): Large Single-Bay Hangar, view E
May 2017



4. Resource #3. Large Single-Bay Hangar, view NW
May 2017



5. Resource #6. Three-Bay Hangar, view W
May 2017



6. Resource #7. Four-Bay Hangar, view S
May 2017



7. Resource #4. Single-Bay Hangar, view SE
May 2017



8. Resource #5. Single-Bay Hangar, view SW
May 2017



9. Resource #8. Terminal, view W-NW
May 2017



10. Resource #9. Equipment Garage, view W
May 2017



11. Resource #10. Combs Building, view SE
May 2017



12. Resources #11, #12, #13 (R-L). Single-Bay Hangars, view S
May 2017



13. Resource #12. Single-Bay Hangar, view W
May 2017



14. Resource #13. Single-Bay Hangar, view W
May 2017



15. Resource #14. Multi-Bay Hangar, view NE
May 2017



16. Resource #15. Multi-Bay Hangar, view SE
May 2017



17. Resource #16. Multi-Bay Hangar, view NE
May 2017



18. Resource #17. Multi-Bay Hangar, view NE
May 2017



19. Resource #18. Multi-Bay Hangar, view NE
May 2017



20. Resource #19. Multi-Bay Hangar, view NE
May 2017



21. Resource #20. Multi-Bay Hangar, view NE
May 2017



22. Resource #21. Multi-Bay Hangar, view N-NE
May 2017



23. Resource #22. Large Single-Bay Hangar, view SE
May 2017



24. Resource #23. Atlantic Aviation Terminal, view S
May 2017



25. Resource #24 (FMA-02). Runway 13-31, view NW
May 2017



26. Resource #24 (FMA-02). Runway 13-31, view SE
May 2017



27. Resource #25. Taxiway, view NW
May 2017



28. Resource #25. Taxiway, view SE
May 2017

HISTORIC PHOTOS



27. Friedman Memorial Airport, opening day, May 14, 1932

Courtesy Friedman Memorial Airport Lobby Display Collection



28. Friedman Memorial Airport, Aerial View, 1932

Courtesy Friedman Memorial Airport Lobby Display Collection



29. Friedman Memorial Airport, Aerial View, detail, 1932
Courtesy Friedman Memorial Airport Lobby Display Collection
Note compass and other landscape features



30. Friedman Memorial Airport, First Hangar (nonextant), 1945
Courtesy Friedman Memorial Airport Lobby Display Collection



31. Friedman Memorial Airport, Landing Strip, 1960
Courtesy Friedman Memorial Airport Lobby Display Collection



32. Friedman Memorial Airport, First Hangar w/addition (nonextant), 1962
Courtesy Friedman Memorial Airport Lobby Display Collection



33. Friedman Memorial Airport, Doctors' Fly-In, 1978
Courtesy Friedman Memorial Airport Lobby Display Collection



34. Friedman Memorial Airport, Aerial view, 1994
Courtesy Friedman Memorial Airport Lobby Display Collection

IDAHO HISTORIC SITES INVENTORY FORM

PROPERTY NAME	Friedman Memorial Airport Runway	FIELD#	FMA-02
STREET	1610 AIRPORT CIR	RESTRICT	<input type="checkbox"/>
CITY	Hailey	VICINITY	<input type="checkbox"/>
COUNTY CD	13	COUNTY NAME	Blaine
SUBNAME		BLOCK	
SUBLOT		ACRES	21
LESS THAN	<input checked="" type="checkbox"/>	TAX PARCEL	RPH2N180150010
UTMZ	11	EASTING	717932
NORTHING	4821238	TOWNSHIP	2
N_S	N	RANGE	18
E_W	E	SECTION	15
1/4, 1/4		1/4	
QUADRANGLE	Hailey & Bellevue Quads, 7.5'	OTHERMAP	
SANBORN MAP		SANBORN MAP#	
PHOTO#	Digital		

PROPERTY TYPE	Structure	CONST/ACT1	Original Construction	ACTDATE1	1968	CIRCA1	<input type="checkbox"/>
CONST/ACT2	Alteration	ACTDATE2	1975	CIRCA2	<input checked="" type="checkbox"/>		

ASSOCIATED FEATURES	runway	TOTAL # FEATURES	1
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ORIGINAL USE	Transportation	WALL MATERIAL	
ORIGSUBUSE	Air-related	FOUND. MATERIAL	CONCRETE
CURRENT USE	Transportation	ROOF MATERIAL	
CURSUBUSE	Air-related	OTHER MATERIAL	
ARCHSTYLE	No Style	PLAN	Rectangular
CONDITION	Excellent		

NR REF #		NPS CERT		ACTIONDATE		FUTURE ELIG DATE	
DIST/MPLNAME1		DIST/MPLNAME2					

Individually Eligible	<input type="checkbox"/>	Contributing in a potential district	<input type="checkbox"/>	Noncontributing	<input type="checkbox"/>	Future eligibility	<input type="checkbox"/>
Not Eligible	<input checked="" type="checkbox"/>	Multiple Property Study	<input type="checkbox"/>	Not evaluated	<input type="checkbox"/>		

CRITERIA	A	<input type="checkbox"/>	B	<input type="checkbox"/>	C	<input type="checkbox"/>	D	<input type="checkbox"/>	CRITERIA CONSIDERATION	A	<input type="checkbox"/>	B	<input type="checkbox"/>	C	<input type="checkbox"/>	D	<input type="checkbox"/>	E	<input type="checkbox"/>	F	<input type="checkbox"/>	G	<input type="checkbox"/>
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AREA OF SIGNIF		AREA OF SIGNIF	
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COMMENTS	DESCRIPTION
	The Friedman Memorial Airport Runway (FMA-02), also known as Runway 13-31, is located on the Friedman Memorial Airport (FMA-01), which spans approximately 209 acres abutting the south edge of Hailey, Blaine County, Idaho. Aligned parallel to the west of State Highway (SH) 75 (12-16171), the runway structure is one of twenty-five (25) resources constructed between 1969

PROJ/RPT TITLE	Friedman Memorial Airport Land Acquisition and Obstruction Removal	SVY DATE	5/21/17	SVY LEVEL	Intensive
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RECORDED BY	Kerry Davis, PSLLC	PH	816-225-5605	ADDRESS	1007 E. Jefferson Street, Boise, ID 83712
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SUBMITTED PHOTOS	<input checked="" type="checkbox"/>	NEGS	<input type="checkbox"/>	SLIDES	<input type="checkbox"/>	SKETCH MAP	<input checked="" type="checkbox"/>
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SVY RPT #		***** FOR ISHPO USE ONLY *****	IHSI#	FMA-02			
MS RPT #			SITS#				
IHPR #		HABS NO. ID-		HAER NO. ID-		REV#	

CS #		IHSI# REF	FMA-01	NR REF# 2		REV# REF	
SVY RPT# 1		SVY RPT# 2		SVY RPT# 3		MS RPT# 1	
MS RPT# 2							

ADD'L NOTES	Also section 22.
MORE DATA	<input checked="" type="checkbox"/>
ATTACH	<input checked="" type="checkbox"/>

# OF PHOTOS		NEGBOX#		# OF SLIDES		SHPO DETER		DETER DATE	
INITIALED		ENTRY DATE		REVISE		REVISE		REVISE	

IHSI#	
SITS#	
REV#	

IDAHO HISTORIC SITES INVENTORY FORM

PROPERTY NAME	Friedman Memorial Airport Runway	IHSI#	FMA-02
FIELD#	FMA-02	COUNTY NAME	Blaine
OTHER NAME			
COUNTY CD	13	CITY	Hailey
		VICINITY	<input type="checkbox"/>
UTM REF2	11/719319/4819397	UTM REF3	
		UTM REF4	

OTHER MATERIAL2		CULTAFFIL		AGENCYCERT	Local
SIGNIFDATE		SIGNIFPERIOD		SIGNIFPERSON	
ARCH/BUILD		ARCHPLANS	<input type="checkbox"/>	TAXEASE	<input type="checkbox"/>
		TAXCERT	<input type="checkbox"/>		
OWNERSHIP	Public-Local	PROPOWN	FRIEDMAN MEMORIAL AIRPORT AUTHORITY, BLAINE COUNTY, 1616 AIRPORT CIR HAILEY ID 83333		
MORE DATA	<input checked="" type="checkbox"/>	ATTACH	<input checked="" type="checkbox"/>		

DOCSOURCE	Blaine Co. Assessor; SHPO Records
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ADD'L NOTES	Also section 22.
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COMMENTS	<p>DESCRIPTION</p> <p>The Friedman Memorial Airport Runway (FMA-02), also known as Runway 13-31, is located on the Friedman Memorial Airport (FMA-01), which spans approximately 209 acres abutting the south edge of Hailey, Blaine County, Idaho. Aligned parallel to the west of State Highway (SH) 75 (13-16171), the runway structure is one of twenty-five (25) resources constructed between 1968 and c.2015 on the airport. The Friedman Memorial Airport Runway is the only runway on the airport. It and its associated parallel taxiway are aligned northwest-southeast amidst open grassy ground. The asphalt-paved runway has a rectangular footprint measuring approximately 115' by 7,550'. The runway structure dates to 1968, with various alterations, widenings, and lengthening projects dating to c.1975, c.1988, c.2006, and c.2013.</p>
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PHOTO LOG	<input type="checkbox"/>	IHSI# REF	FMA-01	INITIALED		DATEENTERED	
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SKETCH ☒

IHSI#	SITS#	REV#

IDAHO HISTORIC SITES INVENTORY FORM

PROPERTY NAME	Friedman Memorial Airport Runway	IHSI#	FMA-02
FIELD#	FMA-02	COUNTY NAME	Blaine

COMMENTS:

DESCRIPTION

The Friedman Memorial Airport Runway (FMA-02), also known as Runway 13-31, is located on the Friedman Memorial Airport (FMA-01), which spans approximately 209 acres abutting the south edge of Hailey, Blaine County, Idaho. Aligned parallel to the west of State Highway (SH) 75 (13-16171), the runway structure is one of twenty-five (25) resources constructed between 1968 and c.2015 on the airport. The Friedman Memorial Airport Runway is the only runway on the airport. It and its associated parallel taxiway are aligned northwest-southeast amidst open grassy ground. The asphalt-paved runway has a rectangular footprint measuring approximately 115' by 7,550'. The runway structure dates to 1968, with various alterations, widenings, and lengthening projects dating to c.1975, c.1988, c.2006, and c.2013.

ATTACH ☒

HISTORY

Previously a grass and dirt landing strip, the Friedman Memorial Airport Runway was paved and widened to 100 feet in 1968. Between 1974 and 1976, the FAA invested \$600,000 into the Friedman Airport, resulting in resurfacing of the then ~4,600' runway, construction of a new turn-around section at the south end of the airport, installation of a new sprinkler system, and access road development, as well as installation of runway lights. Between 1984 and 1992 the runway was extended about over 1,750' at its southeast end, all as a result of increased traffic. Additional expansions between 1998 and 2003, and again between 2004 and 2009 added another 1,150' to the length of the runway at the southeast end. Most recently, around 2013, the current taxiway was constructed and connections to the runway realigned to their current appearance.

ELIGIBILITY

The cumulative effect of a series of extensive late-twentieth century changes compromises the runway structure's integrity of design, materials, workmanship, feeling, and association. It is not eligible for National Register of Historic Places listing.

ADDITIONAL SOURCES

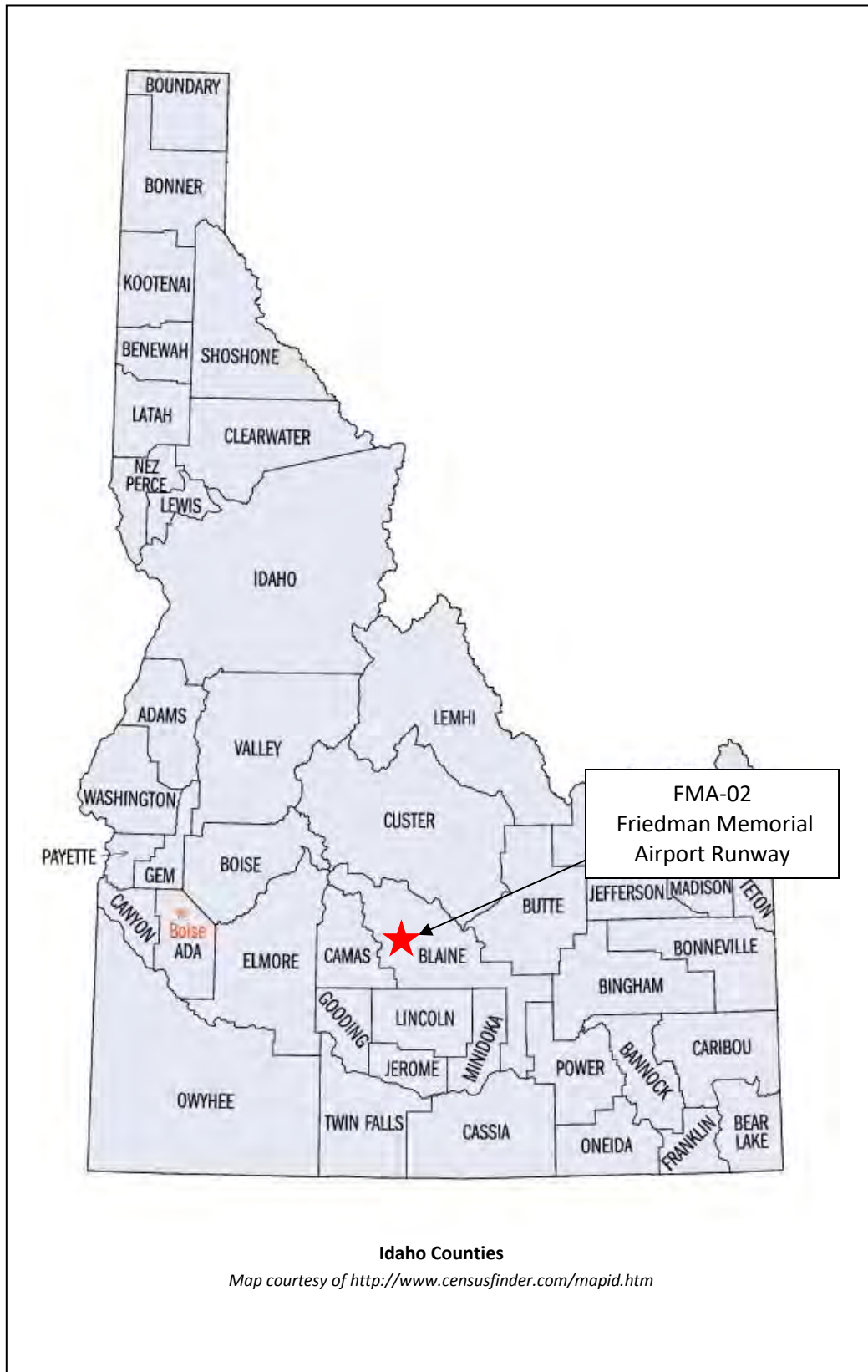
Hart, Arthur A. Wings Over Idaho: An Aviation History. Caxton Press/Historic Boise, Inc., 2008.

"Jet Service Eyed by Hailey Airport Planners," The Idaho Statesman, November 17, 1976.

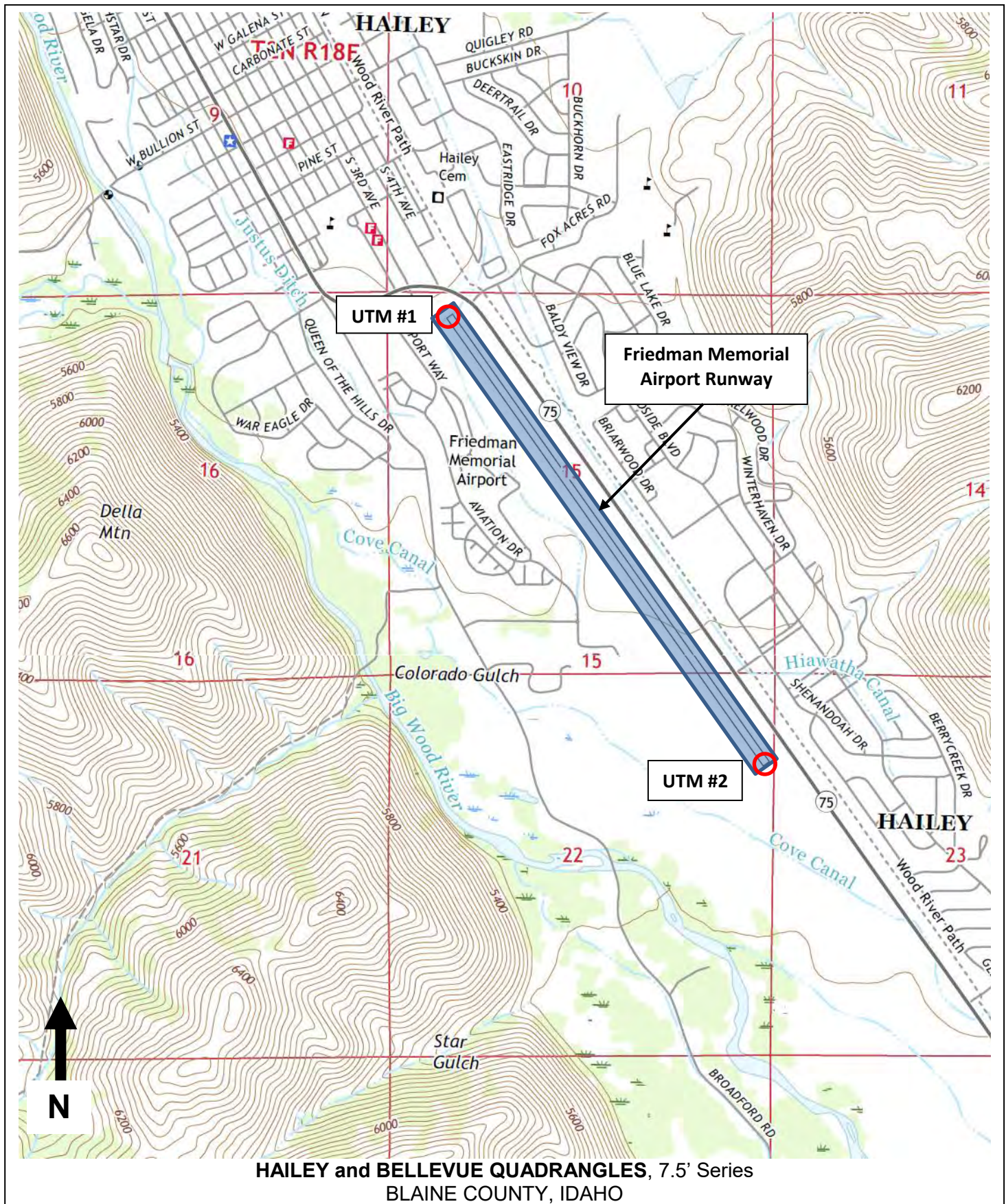
Milbrooke, Anne. Guidelines for Evaluating and Documenting Historic Aviation Properties. National Register Bulletin. U.S. Department of the Interior, National Park Service, National Register of Historic Places, 1998.

Walsworth, Claudia. "A Cultural Resource Survey of the Friedman Memorial Airport." 1993.

IHSI#	SITS#	REV#



FMA-02 – Friedman Memorial Airport Runway







FMA-02 (Airport Resource #24) Runway 13-31, view NW
May 2017



FMA-02 (Airport Resource #24) Runway 13-31, view SE
May 2017



Friedman Memorial Airport, Grass Landing Strip, 1960
Courtesy Friedman Memorial Airport Lobby Display Collection



Friedman Memorial Airport, Doctors' Fly-In, 1978
Courtesy Friedman Memorial Airport Lobby Display Collection



Friedman Memorial Airport, Aerial view, 1994
Courtesy Friedman Memorial Airport Lobby Display Collection

PROPERTY NAME				Friedman Memorial Airport Hangar				FIELD#		FMA-03																					
STREET								1610 AIRPORT CIR				RESTRICT		<input type="checkbox"/>																	
CITY				Hailey				VICINITY		<input type="checkbox"/>		COUNTY CD		13		COUNTY NAME		Blaine													
SUBNAME								BLOCK				SUBLOT				ACRES		1		LESS THAN		<input checked="" type="checkbox"/>									
TAX PARCEL				RPH2N180150010				UTMZ		11		EASTING		718032		NORTHING		4820864													
TOWNSHIP				2				N_S		N		RANGE		18		E_W		E		SECTION		15		NW 1/4, 1/4		<input type="checkbox"/> 1/4					
QUADRANGLE								Hailey Quad, 7.5'								OTHERMAP															
SANBORN MAP								SANBORN MAP#								PHOTO#				Digital											

ASSOCIATED FEATURES TOTAL # FEATURES

NR REF # NPS CERT ACTIONDATE FUTURE ELIG DATE
 DIST/MPLNAME1 DIST/MPLNAME2

CRITERIA A ☐ B ☐ C ☐ D ☐ CRITERIA CONSIDERATION A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐

AREA OF SIGNIF AREA OF SIGNIF

COMMENTS	REMARKS
	<p>The Friedman Memorial Airport Hangar (FMA-03) is located on the Friedman Memorial Airport (FMA-01), which spans approximately 209 acres abutting the south edge of Hailey, Blaine County, Idaho.</p> <p>This large, gable-front hangar is one of twenty-five (25) resources constructed between 1968 and c.2015 on the airport. The Friedman Memorial Airport Hangar is a large, tall, one-story, gable-front hangar with a single, full-width airplane bay defining the</p>

PROJ/RPT TITLE	Friedman Memorial Airport Land Acquisition and Obstruction Removal	SVY DATE	5/21/17	SVY LEVEL	Intensive
----------------	--	----------	---------	-----------	-----------

RECORDED BY	Kerry Davis, PSLLC	PH	816-225-5605	ADDRESS	1007 E. Jefferson Street, Boise, ID 83712
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SUBMITTED PHOTOS ☒ NEGS ☐ SLIDES ☐ SKETCH MAP ☒

SVY RPT # ***** FOR ISHPO USE ONLY ***** IHSI# FMA-03

MS RPT # SITS#

IHPR # HABS NO. ID- HAER NO. ID- REV#

CS #		IHSI# REF	FMA-01	NR REF# 2		REV# REF		RI	SI	HE
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SVY RPT# 1 SVY RPT# 2 SVY RPT# 3 MS RPT# 1 MS RPT# 2 #V #S #IS

ADD'L NOTES

MORE DATA

☒

ATTACH

☒

# OF PHOTOS	NEGBOX#	# OF SLIDES	SHPO DETER	DETER DATE
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INITIALED		ENTRY DATE		REVISE		REVISE		REVISE	
-----------	--	------------	--	--------	--	--------	--	--------	--

IHS# _____

SITS# _____

REV# _____

IDAHO HISTORIC SITES INVENTORY FORM

PROPERTY NAME	Friedman Memorial Airport Hangar	IHSI#	FMA-03
FIELD#	FMA-03	COUNTY NAME	Blaine
OTHER NAME			
COUNTY CD	13	CITY	Hailey
		VICINITY	<input type="checkbox"/>
UTM REF2		UTM REF3	
		UTM REF4	

OTHER MATERIAL2		CULTAFFIL		AGENCYCERT	Local
SIGNIFDATE		SIGNIFPERIOD		SIGNIFPERSON	
ARCH/BUILD		ARCHPLANS	<input type="checkbox"/>	TAXEASE	<input type="checkbox"/>
		TAXCERT	<input type="checkbox"/>		
OWNERSHIP	Public-Local	PROPOWN	FRIEDMAN MEMORIAL AIRPORT AUTHORITY, BLAINE COUNTY, 1616 AIRPORT CIR HAILEY ID 83333		
MORE DATA	<input checked="" type="checkbox"/>	ATTACH	<input checked="" type="checkbox"/>		

DOCSOURCE	Blaine Co. Assessor; SHPO Records
-----------	-----------------------------------

ADD'L NOTES	
-------------	--

COMMENTS	<p>The Friedman Memorial Airport Hangar (FMA-03) is located on the Friedman Memorial Airport (FMA-01), which spans approximately 209 acres abutting the south edge of Hailey, Blaine County, Idaho.</p> <p>This large, gable-front hangar is one of twenty-five (25) resources constructed between 1968 and c.2015 on the airport. The Friedman Memorial Airport Hangar is a large, tall, one-story, gable-front hangar with a single, full-width airplane bay defining the primary (NE) elevation. A metal, bi-parting, eight-leaf (four each side), sliding door system occupies the bay. Other features include: very shallow roof pitch; vertical seam metal siding; and very shallow eaves. The rear (SW) elevation features: four, high-set fixed sash windows; a single vehicular bay at the north end; and a small, single-cell, shed roofed projection at the south end.</p>
----------	---

PHOTO LOG	<input type="checkbox"/>	IHSI# REF	FMA-01	INITIALED		DATEENTERED	
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SKETCH ☒

IHSI# _____ _____ _____	SITS# _____ _____ _____	REV# _____ _____ _____
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IDAHO HISTORIC SITES INVENTORY FORM

PROPERTY NAME IHSI#
FIELD# COUNTY NAME

COMMENTS:

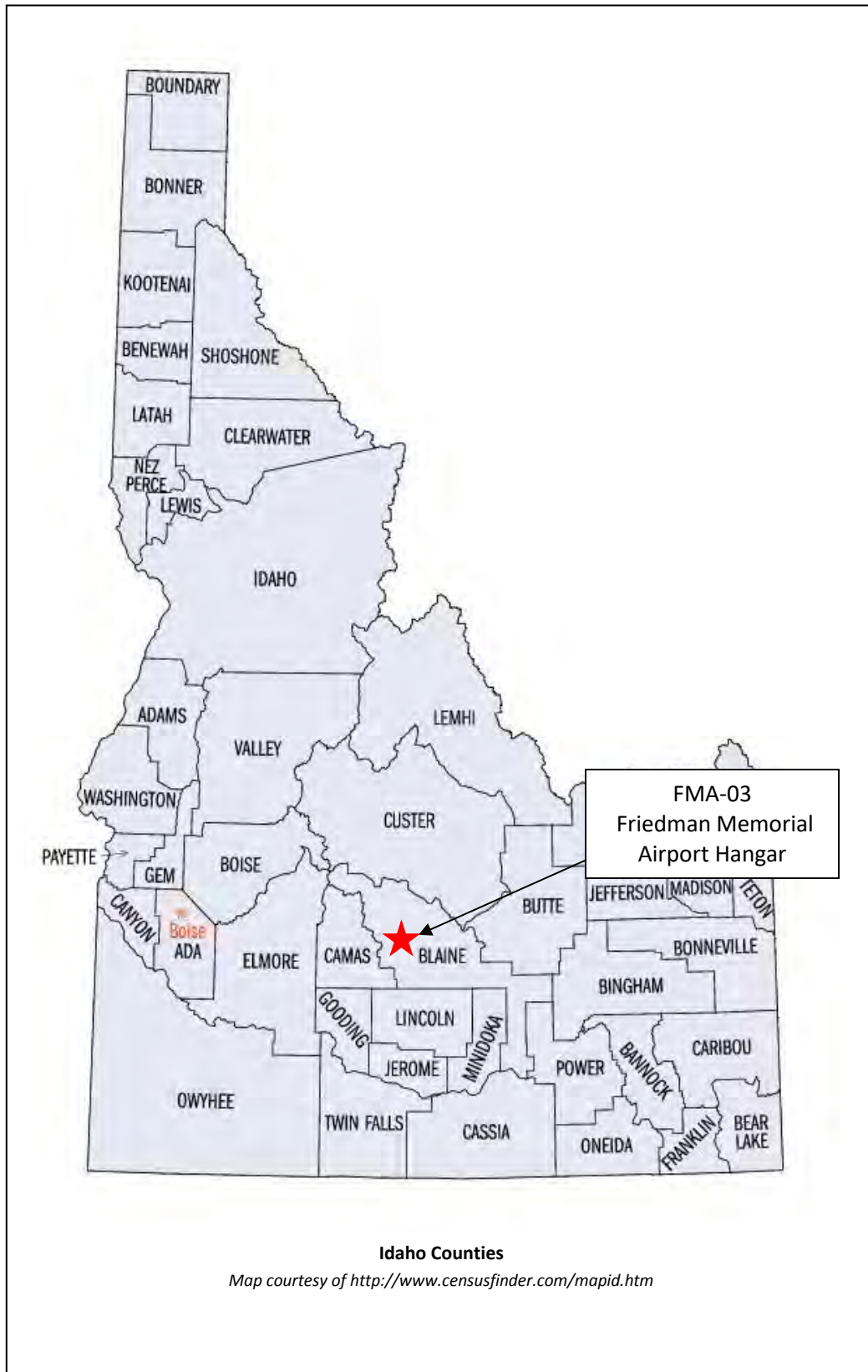
The Friedman Memorial Airport Hangar (FMA-03) is located on the Friedman Memorial Airport (FMA-01), which spans approximately 209 acres abutting the south edge of Hailey, Blaine County, Idaho.
This large, gable-front hangar is one of twenty-five (25) resources constructed between 1968 and c.2015 on the airport. The Friedman Memorial Airport Hangar is a large, tall, one-story, gable-front hangar with a single, full-width airplane bay defining the primary (NE) elevation. A metal, bi-parting, eight-leaf (four each side), sliding door system occupies the bay. Other features include: very shallow roof pitch; vertical seam metal siding; and very shallow eaves. The rear (SW) elevation features: four, high-set fixed sash windows; a single vehicular bay at the north end; and a small, single-cell, shed roofed projection at the south end.

The hangar dates to c.1974 and first appears in a 1978 photograph.

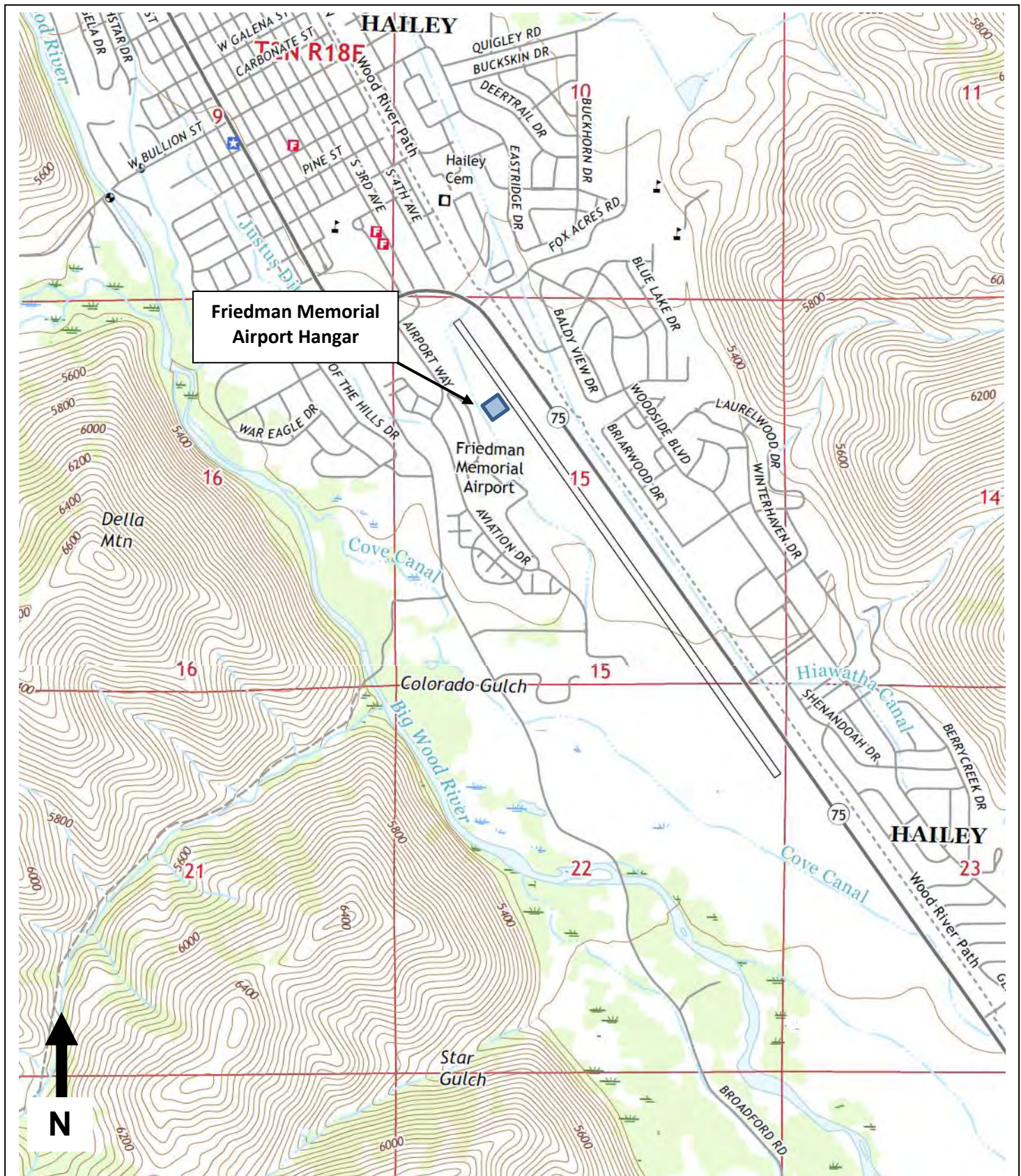
Though this building retains integrity of location, setting, design, materials, workmanship, feeling, and association, it does not meet NRHP eligibility Criteria Consideration G for buildings less than fifty years of age. Furthermore, when it does become 50 years of age, it does not present sufficient significance to be considered individually eligible and would likely only be eligible as a contributing resource to a larger historic district. Based on the character and construction dates of all other airport resources, historic district potential will not be possible until about 2032.

ATTACH ☒

IHSI#	_____
SITS#	_____
REV#	_____



FMA-03 – Friedman Memorial Airport Hangar



HAILEY and BELLEVUE QUADRANGLES, 7.5' Series
BLAINE COUNTY, IDAHO





FMA-03 (Resources #2), view W
May 2017



FMA-03 (Resources #2), view E
May 2017



Friedman Memorial Airport, Doctors' Fly-In, 1978
Courtesy Friedman Memorial Airport Lobby Display Collection



Friedman Memorial Airport, Aerial view, 1994
Courtesy Friedman Memorial Airport Lobby Display Collection

ATTACHMENT 1

**Federal Aviation Administration (FAA) Letter to State Historic Preservation
Office (SHPO) Letter dated April 5, 2018**



U. S. Department
of Transportation

**Federal Aviation
Administration**

Helena Airports District Office
2725 Skyway Drive, Suite 2
Helena, MT 59602-1213

April 5, 2018

Matt Halitsky
Historic Preservation Review Officer
The Idaho State Historic Preservation Office
210 Main Street
Boise, Idaho 83702

Subject: Determination of Eligibility and Determination of Effect on Historic Properties
due to Proposed Improvements at the Friedman Memorial Airport (SUN) at
Hailey, Idaho

Dear Mr. Halitsky,

The Federal Aviation Administration (FAA) is examining the environmental impacts due to proposed improvements at the Friedman Memorial Airport (SUN) in Hailey, Idaho. A project is proposed for SUN to acquire (or put under easement) land that abuts the airport to the south, removal of trees that are obstructions to airspace, and relocate the perimeter fence after the acquisition. A project description and project layout are included with this letter and a detailed Background and Justification Summary is provided with the Cultural Resource Inventory. The proposed project and its associated activities are subject to the National Historic Preservation Act (NHPA) and its implementing regulations under Section 106 36 CFR part 800 (as amended) as well as the National Environmental Policy Act (NEPA). The FAA has initiated preparation of an environmental document to meet its regulatory obligations and intends to complete Section 106 in conjunction with the NEPA process.

A Cultural Resources Inventory (CRI) of the Built Environment on Airport Property has been completed and is enclosed with this letter in hard copy and on disk. The report documents the results of an inventory to identify and evaluate resources at and abutting SUN. A total of three historic properties were identified and documented as part of the survey effort: The Friedman Memorial Airport (FMA-01), which also included two of its twenty-five resources (a runway, FMA-02; and a hangar FMA-03); Cove Canal (10BN1126); and Halfway Ranch/Eccles Flying Hat Ranch (13-16207). The following provides a summary of the resources and the FAA's recommendation of eligibility to the National Register of Historic Places (NRHP):

Friedman Memorial Airport (FMA-01): Not Eligible for listing in the NRHP

Though established in the early 1930s, the historic portions of the airport are either nonextant or do not retain sufficient integrity to communicate their historic associations sufficiently to be eligible for listing in the National Register

as a historic district. Overall, the airport conveys the character of aviation-related resources (hangars, runways, air traffic control, and so forth) from the late twentieth and early twenty-first century. Of the twenty-five resources on the airport property, all but four date to the 1980s and into the early twenty-first century, or reflect extensive alterations from the era.

- ***Friedman Memorial Airport Runway (FMA-02): Not Eligible*** for listing in the NRHP
 - The Friedman Memorial Airport Runway, also known as Runway 13-31, is aligned parallel to the west of State Highway (SH) 75 (13-16171). The runway is one of twenty-five resources constructed between 1968 and c.2015 on the airport and is the only runway on the airport. The runway structure dates to 1968, with various alterations, widenings, and lengthening projects dating to c.1975, c.1988, c.2006, and c.2013. FMA-02 is not eligible for listing in the National Register of Historic Places due to a loss of integrity. The cumulative effect of a series of extensive late-twentieth century changes compromises the runway structure's integrity of design, materials, workmanship, feeling, and association.
- ***Friedman Memorial Airport Hangar (FMA-03): Not Eligible*** for listing in the NRHP
 - The hangar dates to c.1974 and first appears in a 1978 photograph. Though this building retains integrity of location, setting, design, materials, workmanship, feeling, and association, it does not meet NRHP eligibility Criteria Consideration G for buildings less than fifty years of age. Furthermore, when it does become fifty years of age, it does not present sufficient significance to be considered individually eligible.

Cove Canal (10BN1126): Eligible for listing in the NRHP

According to a 1952 US Department of the Interior Geological Survey Circular, this canal was established in 1882. A previous Survey states that the Cove Canal dates to 1883-1884 and is one of the earliest irrigation structures in Blaine County. The Cove Canal meanders southeast from its origin on the left (east) bank of the Big Wood River, traveling approximately 7.65 miles to its terminus southeast of Bellevue. Cove Canal receives its water from the Big Wood River and follows a curvilinear path across the Halfway Ranch/Eccles Flying Hat Ranch (13-16207), under SH 75 (13-16171), and extends generally southeast its full length to its terminus southeast of Bellevue off Gannet Road.

The Cove Canal appears to be individually eligible for listing in the NRHP under Criteria A. This structure is associated with significant trends in local history (Criterion A) and it retains sufficient integrity to communicate its historic associations with the agricultural development of the Wood River Valley. This property possesses the following aspects of integrity: location, setting, design, materials, workmanship, feeling, and association. It retains sufficient integrity to be individually NRHP eligible.

Halfway Ranch/Eccles Flying Hat Ranch (13-16207): Eligible for listing in the NRHP

This ranch district contains historic resources dating from c.1883 to c.2006. The ranch originated with two, separate, early 1880s Desert Lands Act claims, certificates of which were transferred in 1888. The historic core of this ranch property was known as the Halfway Ranch as early as 1910 and historically encompassed about 640 acres primarily on the west side of present-day SH 75, as it does today. The property is comprised of three general areas: the Main Farmstead Area; the Corral Area; and the Southeast Pasture Area.

A subset of the ranch encompassing about 615 acres on the west side of SH is eligible for listing in the NRHP as a historic district. The Main Farmstead Area and Corral Area are within the NRHP-eligible historic district boundaries. The Southeast Pasture Area was added to the overall ranch property in the 1990s and is not eligible as part of the historic district.

Halfway Ranch/Eccles Flying Hat Ranch appears to be eligible for listing in the NRHP as a historic district comprised of eight potentially contributing resources under Criteria A. This district is associated with significant trends in local history (Criterion A) and it retains sufficient integrity to communicate its historic associations with the agricultural development of the Wood River Valley.

The proposed project includes: Acquisition or easement of property that lies within the Historic District of the Halfway Ranch/Eccles Flying Hat Ranch and a portion of the Cove Canal, removal of trees along the Cove Canal and at the farmstead of the Ranch, a perimeter fence to be installed around the Runway Safety Area. The CRI evaluated the proposed project and recommended that the project will have No Adverse Effect, either directly and indirectly, on historic resources in the Area of Potential Effect (APE).

The FAA agrees with the recommendation and has made a determination of ***No Historic Properties Adversely Affected*** for the proposed project. The reasons for this determination are summarized as follows:

- Aside from the Halfway Ranch/Eccles Flying Hat Ranch and Cove Canal, the CRI did not identify any other historic or cultural resources in or near the APE;
- Acquisition and easement of the property as proposed and the construction of a perimeter fence will neither directly or indirectly affect the historic properties of either the Ranch or the Cove Canal;
- The proposed tree removal is along a small percentage (less than four percent) of the approximately 7.65 mile-long NRHP-eligible Cove Canal will not markedly diminish the overall integrity of the irrigation structure. The proposed tree removal will impact some aspects of the current setting of the NRHP-eligible Halfway Ranch/Eccles Flying Hat Ranch, however the presence of the trees cannot be confirmed to have been an original or historic aspect to the ranch and thus their elimination does not present a substantial loss of integrity of setting and does not meet the threshold of a finding of adverse effect.
 - More specifically, the trees lining Cove Canal are on what was originally unirrigated land categorized as 'desert' at the time of initial development, the trees lining Cove Canal are not original to the site and no evidence is apparent suggesting they were intentionally planted (such as for a wind break). Instead,

they appear to be the de facto result of ongoing lack of canal maintenance, which typically included prevention of vegetation maturation along canal banks by means of mowing, burning, cutting, and so forth.

- Review of a birdseye view (1884), quadrangle maps (since 1895), and historic aerials (since 1954) shows trees along the canal either nonexistent or varying considerably in density and location(s) over time. Due to the lack of evidence from either the historic record or on-site investigation, the trees were not found to be a historically significant component of the canal or ranch setting(s).

Please review this finding and the enclosed documentation and provide either your concurrence or non-concurrence on this determination. You can provide your response, comments, or recommendations to me at diane.stilson@faa.gov or send them to me at the following address:

Diane Stilson, P.E.
FAA Helena Airport District Office
2725 Skyway Drive, Suite 2
Helena, Montana 59602-1213

Thanks in advance for any comments or information you have to offer.

Sincerely,



Diane Stilson, P.E.
Civil Engineer
Environmental Specialist

Enclosure:

Description and Layout of Proposed Improvements
Cultural Resource Inventory 2018 and Site Forms (CD and hard copy)
Database (CD)

cc: (Via e-mail, without enclosures)
Friedman Memorial Airport Authority (FMAA)
T-O Engineers
file

Description of Proposed Improvements at Friedman Memorial Airport (SUN) at Hailey, Idaho:

The Friedman Memorial Airport (SUN) is located in Blaine County and the City of Hailey, Idaho, in an area generally known as the Wood River Valley. The Airport is sponsored by the City and County through the Friedman Memorial Airport Authority (FMAA), formed by a Joint Powers Agreement between the two entities. The Airport is a “commercial service” airport, serving several airlines and a wide variety of general aviation traffic.

SUN currently operates with several non-standard conditions that include: The Runway Protection Zone (RPZ) on the south end of the airport is not located on property owned or permanently controlled by the airport; Obstructions (trees) have been identified within the airspace used by aircraft taking off on Runway 13 (to the south) and aircraft landing on Runway 31 (from the south); and the full Runway Safety Area for aircraft departing to the south extends off of airport property, which is currently mitigated through the implementation of “Declared Distances”.

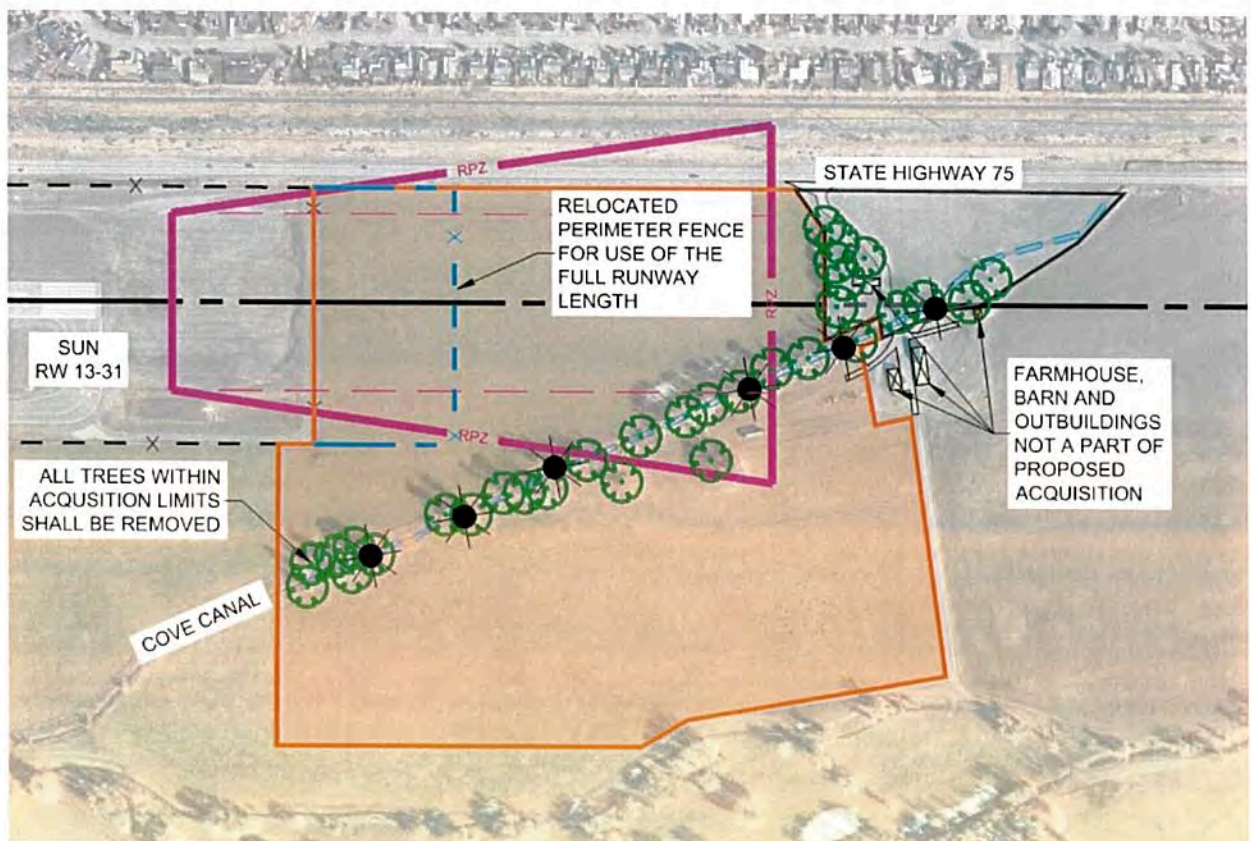
The FMAA, sponsor of the airport, has proposed the following improvements to address these nonstandard issues:

- Acquire 59.1 acres of property to meet the goals of FAA design and safety standards, including,
 - Control of the Runway Protection Zone;
 - Protecting the 14 CFR Part 77 Approach Surface from incompatible land uses and obstructions,
 - Clearing the Runway Protection Zone from obstructions, and
 - Clearing the critical Approach Protection Area from obstructions.
- Create an Avigation Easement for 5.5 acres of property to meet the goals of FAA design and safety standards, including,
 - Protecting the 14 CFR Part 77 Approach Surface from incompatible land uses and obstructions,
 - Clearing the critical Approach Protection Area from obstructions, and
- Removal of trees lining Cove Canal (10BN1126) on the Halfway Ranch/Eccles Flying Hat Ranch (13-16207) which have been deemed obstructions to airspace at Friedman Memorial Airport (FMA-01).
 - The trees are primarily cottonwoods that have reached a height of as much as 80 feet to 100 feet in-height. Tree removal will include cutting them at ground level and remaining stumps treated with a pre-emergent to restrict regrowth. The banks of the canal will transition from a forested canopy to shrub or grassland complex.
- Relocation of a perimeter fence around the Runway Safety Area

A previous version of the proposed action was informally coordinated with SHPO that included acquisition of the farmhouse on the Halfway Ranch/Eccles Flying Hat Ranch. However, it has been decided to work out an easement with the property owner to remove obstructions and comply with zoning and utility requirements rather than include the farmhouse in the acquisition.



PROPOSED ACQUISITION AND RANCH HISTORIC DISTRICT



PROPOSED ACQUISITION (LAND, TREE REMOVAL, AND FENCE)

ATTACHMENT 2

State Historic Preservation Office (SHPO) Concurrence Letter dated May 1, 2018



IDAHO STATE
HISTORICAL
SOCIETY

RECEIVED

MAY 07 2018

HLN-ADO

1 May 2018

Diane Stilson
Federal Aviation Administration
Helena Airports District Office
2725 Skyway Drive #2
Helena, Montana 59602-1213



C.L. "Butch" Otter
Governor of Idaho

Janet Gallimore
Executive Director
State Historic
Preservation Officer

Administration:
2205 Old Penitentiary Rd.
Boise, Idaho 83712
208.334.2682
Fax: 208.334.2774

Idaho State Museum:
610 Julia Davis Dr.
Boise, Idaho 83702
208.334.2120

**Idaho State Archives
and State Records
Center:**
2205 Old Penitentiary Rd.
Boise, Idaho 83712
208.334.2620

**State Historic
Preservation Office:**
210 Main St.
Boise, Idaho 83702
208.334.3861

**Old Idaho Penitentiary
and Historic Sites:**
2445 Old Penitentiary Rd.
Boise, Idaho 83712
208.334.2844

HISTORY.IDAHO.GOV

Re: Friedman Memorial Airport (SUN), Hailey, Blaine County, Idaho
SHPO# 2018-629

Dear Ms. Stilson:

Thank you for consulting with our office on the above referenced project. We understand the scope of work includes an evaluation of National Register eligibility for the Friedman Memorial Airport in Hailey, Idaho, as well as the acquisition of an easement on adjacent property to accommodate safety protocols within the Runway Safety Area. This includes the removal of the windrow along the Cove Canal at the historic Halway Ranch (13-16207).

After reviewing the project submittal, SHPO concurs with the recommended determinations of eligibility for FMA-01, FMA-02, FMA-03, 13-16207 and 10BN1126. Pursuant to 36 CFR 800, we have applied the criteria of effect to the proposed undertaking. Based on the information received 11 April 2018, we object to the recommended determination of no adverse effect to historic properties and find the proposed project actions will result in an **adverse effect** to historic properties. Specifically, the removal of the windrow, a character defining feature of the historic farmstead associated with 13-16207, diminishes both the setting and feeling of the farmstead, two aspects of integrity that qualify the property for inclusion in the National Register of Historic Places.

We look forward to working with you to avoid, minimize or mitigate this adverse effect. If you have any questions, please contact me via phone or email at 208.488.7468 or matt.halitsky@ishs.idaho.gov.

Sincerely,

Matthew Halitsky, AICP
Historic Preservation Review Officer
Idaho State Historic Preservation Office

ATTACHMENT 3

Invitation for Tribal Consultation Letter dated January 15, 2019



U. S. Department
of Transportation

**Federal Aviation
Administration**

Helena Airports District Office
2725 Skyway Drive, Suite 2
Helena, MT 59602-1213

January 15, 2019

Mr. Nathan Small, Chairman
Shoshone Bannock Tribes
PO Box 306
Fort Hall, ID 83203

Subject: Invitation for Government-to-Government Tribal Consultation for Review of a
Proposed Project at the Friedman Memorial Airport near Hailey, Idaho

Dear Chairman Small:

The Federal Aviation Administration (FAA) is examining the environmental impacts for a potential project at the Friedman Memorial Airport (Airport) near Hailey, Idaho. Project descriptions and location maps are included with this letter. The proposed projects and their associated activities are subject to the National Historic Preservation Act (NHPA) and its implementing regulations under Section 106 36 CFR part 800 (as amended) as well as the National Environmental Policy Act (NEPA). The City of Hailey and Blaine County (the Airport Sponsors) have begun preparation of environmental documents for submission to the FAA to meet regulatory obligations and the FAA intends to complete Section 106 in conjunction with the NEPA process.

In accordance with Executive Order 13175, Consultation and Coordination with Indian and Tribal governments and FAA Order 1210.20, American Indian and Alaska Native Tribal Consultation Policy and Procedures, the FAA is inviting you to participate in government-to-government consultation. We are also initiating this consultation in accordance with Section 106 of the National Historic Preservation Act of 1966 and implementing regulations 36 CFR Part 800 to seek input on properties of cultural or religious significance that may be affected by the undertaking, and invite you to participate in government-to-government consultation in the Section 106 process.

A cultural resources survey was completed for the Airport and property proposed for acquisition in March 2018 and is enclosed with this letter. The survey did not find any sites of cultural interest, but identified two historic resources that are eligible to the National Register of Historic Places (NRHP) within the Area of Potential Effect (APE). These resources include the Cove Canal (10BN1126) and the Halfway Ranch / Eccles Flying Hat Ranch (13-16207). The proposed project has been determined that it will have an adverse effect on the Historic Ranch District due to the removal of trees in a windrow near the farmstead.

To confirm your intent to participate in this consultation, please notify Diane Stilson, the Environmental Specialist at our office. Diane can be contacted by phone at (406) 449-5422 or by

e-mail at diane.stilson@faa.gov or send your confirmation or comments to her at the following address:

Diane Stilson, P.E.
FAA Helena Airport District Office
2725 Skyway Drive, Suite 2
Helena, Montana 59602-1213

Thank you in advance for your response.

Sincerely,



William Garrison, Manager
Helena Airports District Office

Enclosures:

Project Description
Friedman Memorial Airport Land Acquisition and Obstruction Removal Cultural
Resources Survey (March 2018)

cc: (Via e-mail)

Carolyn Smith, Cultural Resources Coordinator, Shoshone Bannock Tribes
Friedman Memorial Airport Authority
T-O Engineers
file

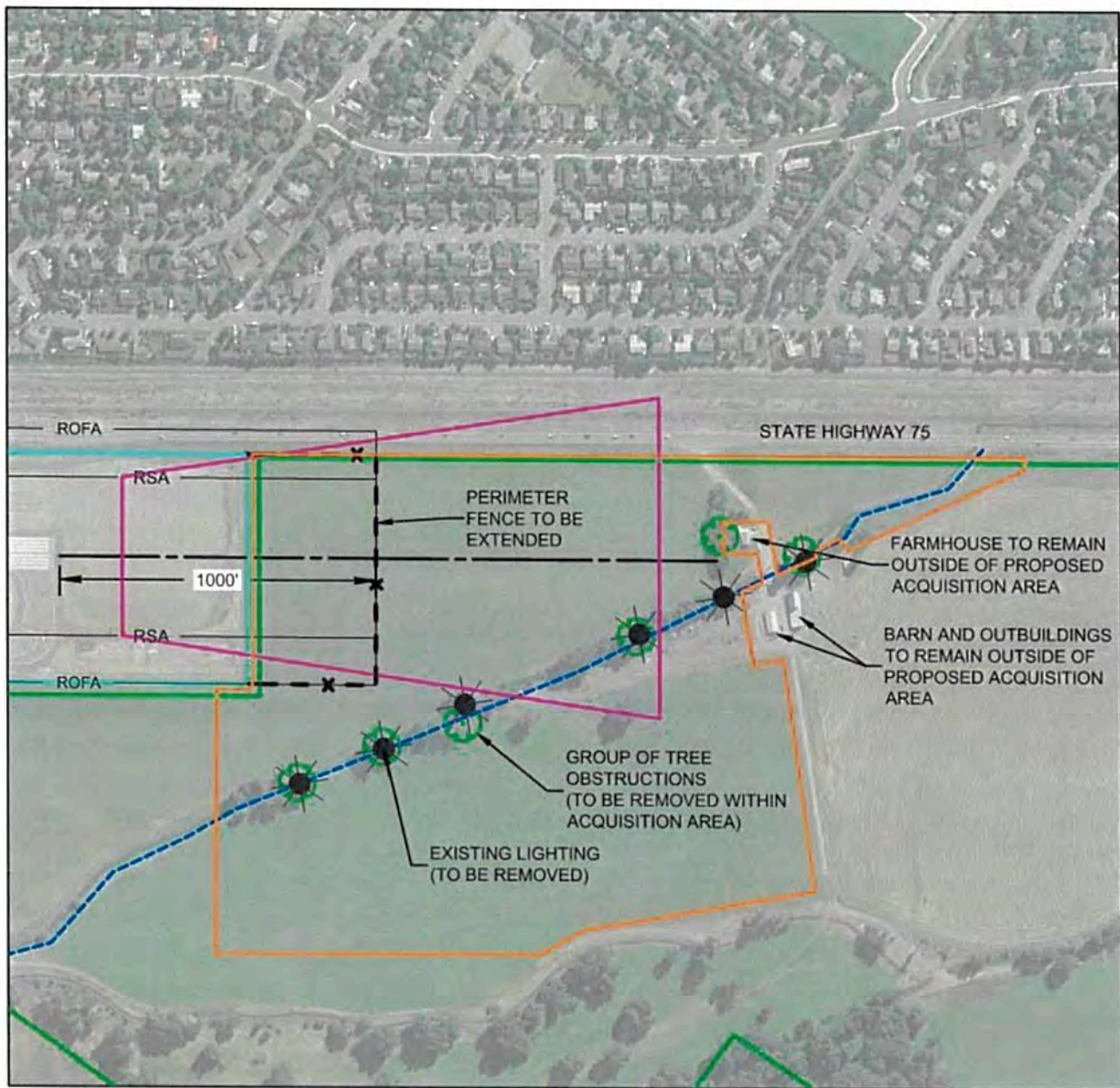
Description of Proposed Improvements at Friedman Memorial Airport (SUN) at Hailey, Idaho:

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SUN currently operates with several non-standard conditions that include: The Runway Protection Zone (RPZ) on the south end of the airport is not located on property owned or permanently controlled by the airport; Obstructions (trees) have been identified within the airspace used by aircraft taking off on Runway 13 (to the south) and aircraft landing on Runway 31 (from the south); and the full Runway Safety Area for aircraft departing to the south extends off of airport property, which is currently mitigated through the implementation of “Declared Distances”.

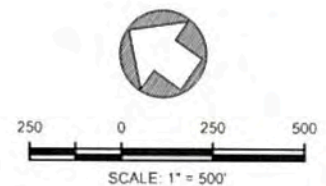
The FMAA, sponsor of the airport, has proposed the following improvements to address these nonstandard issues:

- Acquire 64.6 acres of property to meet the goals of FAA design and safety standards, including,
 - Control of the Runway Protection Zone;
 - Protecting the 14 CFR Part 77 Approach Surface and AC 5300-13A Departure Surface from incompatible land uses and obstructions,
 - Clearing the Runway Protection Zone from obstructions, and
 - Clearing the critical Approach and Departure Protection Area from obstructions.
- Removal of trees on the Halfway Ranch/Eccles Flying Hat Ranch (13-16207) which have been deemed obstructions to airspace at Friedman Memorial Airport (FMA-01).
 - The trees are primarily cottonwoods that have reached a height of as much as 80 feet to 100 feet in-height. The banks of the canal will transition from a forested canopy to shrub or grassland complex.
- Relocation of a perimeter fence around the Runway Safety Area



LEGEND

- AIRPORT PROPERTY BOUNDARY (FMA-01)
- - - RUNWAY 13-31 CENTERLINE
- RUNWAY PROTECTION ZONE [RPZ]
- RSA — RUNWAY SAFETY AREA [RSA]
- ROFA — RUNWAY OBJECT FREE AREA [ROFA]
- - - COVE CANAL (10BN1126)
- ECCLES FLYING HAT RANCH (13-16207)
- PROPOSED ACQUISITION AREA [64.6 AC]



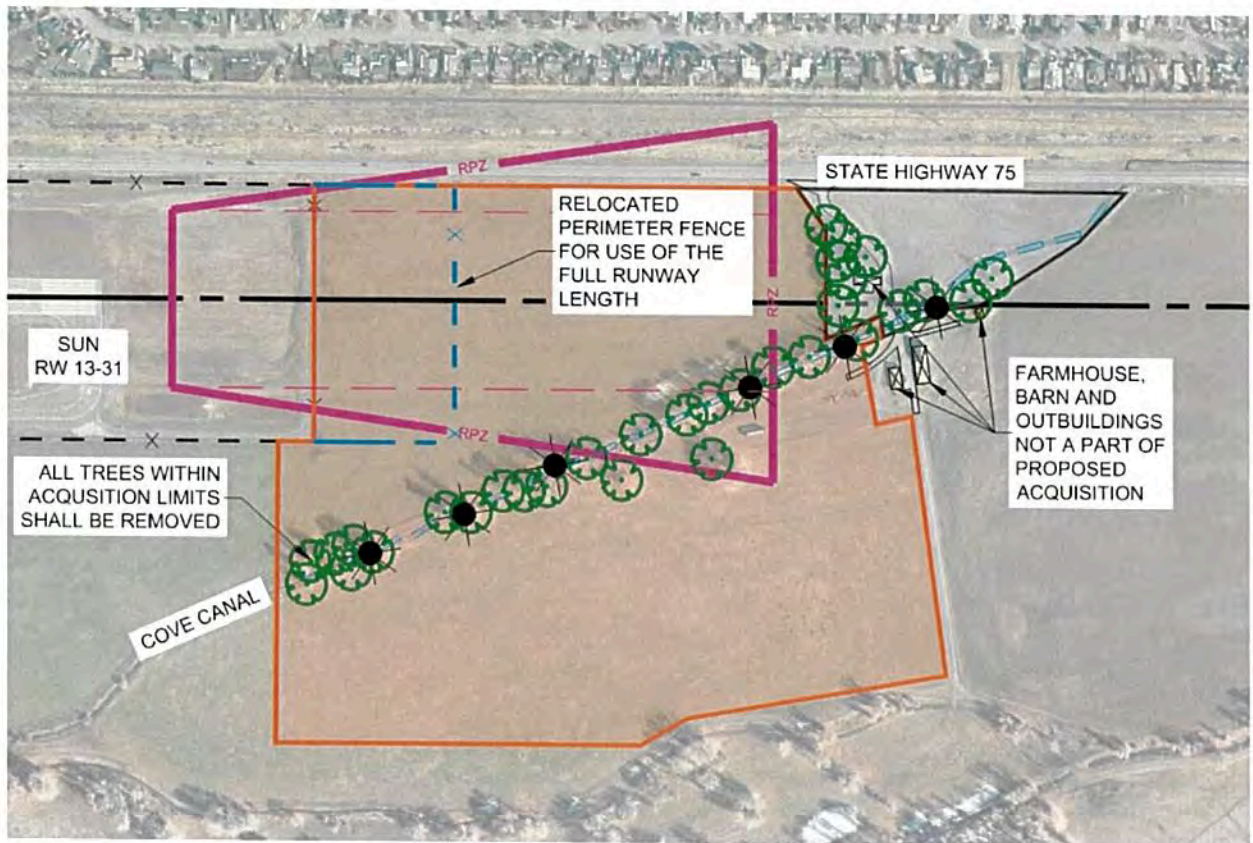
NOTE:
REFERENCE NAMES/NUMBERS PRESENTED IN "()" ABOVE ARE ASSIGNED BY THE IDAHO STATE HISTORIC PRESERVATION OFFICE (SHPO).

I:\170011\3_Acaddwg\Sheets\170011-FA-Figures.dwg



FIGURE 3-1: PROPOSED ACTION





PROPOSED ACQUISITION (LAND, TREE REMOVAL, AND FENCE)

APPENDIX D
NRCS SOILS AND FARMLAND EVALUATION
LAND ACQUISITION AND OBSTRUCTION REMOVAL
ENVIRONMENTAL ASSESSMENT

AIP # 3-16-0016-044-2017

Prepared for the Friedman Memorial
Airport (SUN) and the Federal Aviation
Administration

APPENDIX D

U.S. Department of Agriculture

FARMLAND CONVERSION IMPACT RATING

PART I <i>(To be completed by Federal Agency)</i>		Date Of Land Evaluation Request			
Name of Project		Federal Agency Involved			
Proposed Land Use		County and State			
PART II <i>(To be completed by NRCS)</i>		Date Request Received By NRCS		Person Completing Form:	
Does the site contain Prime, Unique, Statewide or Local Important Farmland? <i>(If no, the FPPA does not apply - do not complete additional parts of this form)</i>		YES <input type="checkbox"/>	NO <input type="checkbox"/>	Acres Irrigated	Average Farm Size
Major Crop(s)	Farmable Land In Govt. Jurisdiction Acres: %		Amount of Farmland As Defined in FPPA Acres: %		
Name of Land Evaluation System Used	Name of State or Local Site Assessment System		Date Land Evaluation Returned by NRCS		
PART III <i>(To be completed by Federal Agency)</i>		Alternative Site Rating			
		Site A	Site B	Site C	Site D
A. Total Acres To Be Converted Directly					
B. Total Acres To Be Converted Indirectly					
C. Total Acres In Site					
PART IV <i>(To be completed by NRCS)</i> Land Evaluation Information					
A. Total Acres Prime And Unique Farmland					
B. Total Acres Statewide Important or Local Important Farmland					
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted					
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value					
PART V <i>(To be completed by NRCS)</i> Land Evaluation Criterion Relative Value of Farmland To Be Converted (Scale of 0 to 100 Points)					
PART VI <i>(To be completed by Federal Agency)</i> Site Assessment Criteria <i>(Criteria are explained in 7 CFR 658.5 b. For Corridor project use form NRCS-CPA-106)</i>		Maximum Points	Site A	Site B	Site C
1. Area In Non-urban Use		(15)			
2. Perimeter In Non-urban Use		(10)			
3. Percent Of Site Being Farmed		(20)			
4. Protection Provided By State and Local Government		(20)			
5. Distance From Urban Built-up Area		(15)			
6. Distance To Urban Support Services		(15)			
7. Size Of Present Farm Unit Compared To Average		(10)			
8. Creation Of Non-farmable Farmland		(10)			
9. Availability Of Farm Support Services		(5)			
10. On-Farm Investments		(20)			
11. Effects Of Conversion On Farm Support Services		(10)			
12. Compatibility With Existing Agricultural Use		(10)			
TOTAL SITE ASSESSMENT POINTS		160			
PART VII <i>(To be completed by Federal Agency)</i>					
Relative Value Of Farmland <i>(From Part V)</i>		100			
Total Site Assessment <i>(From Part VI above or local site assessment)</i>		160			
TOTAL POINTS <i>(Total of above 2 lines)</i>		260			
Site Selected:	Date Of Selection	Was A Local Site Assessment Used? YES <input type="checkbox"/> NO <input type="checkbox"/>			
Reason For Selection:					
Name of Federal agency representative completing this form:					Date:

(See Instructions on reverse side)

Form AD-1006 (03-02)

STEPS IN THE PROCESSING THE FARMLAND AND CONVERSION IMPACT RATING FORM

- Step 1 - Federal agencies (or Federally funded projects) involved in proposed projects that may convert farmland, as defined in the Farmland Protection Policy Act (FPPA) to nonagricultural uses, will initially complete Parts I and III of the form. For Corridor type projects, the Federal agency shall use form NRCS-CPA-106 in place of form AD-1006. The Land Evaluation and Site Assessment (LESA) process may also be accessed by visiting the FPPA website, <http://fppa.nrcs.usda.gov/lesa/>.
- Step 2 - Originator (Federal Agency) will send one original copy of the form together with appropriate scaled maps indicating location(s) of project site(s), to the Natural Resources Conservation Service (NRCS) local Field Office or USDA Service Center and retain a copy for their files. (NRCS has offices in most counties in the U.S. The USDA Office Information Locator may be found at http://offices.usda.gov/scripts/ndISAPI.dll/oip_public/USA_map, or the offices can usually be found in the Phone Book under U.S. Government, Department of Agriculture. A list of field offices is available from the NRCS State Conservationist and State Office in each State.)
- Step 3 - NRCS will, within 10 working days after receipt of the completed form, make a determination as to whether the site(s) of the proposed project contains prime, unique, statewide or local important farmland. (When a site visit or land evaluation system design is needed, NRCS will respond within 30 working days.
- Step 4 - For sites where farmland covered by the FPPA will be converted by the proposed project, NRCS will complete Parts II, IV and V of the form.
- Step 5 - NRCS will return the original copy of the form to the Federal agency involved in the project, and retain a file copy for NRCS records.
- Step 6 - The Federal agency involved in the proposed project will complete Parts VI and VII of the form and return the form with the final selected site to the servicing NRCS office.
- Step 7 - The Federal agency providing financial or technical assistance to the proposed project will make a determination as to whether the proposed conversion is consistent with the FPPA.

INSTRUCTIONS FOR COMPLETING THE FARMLAND CONVERSION IMPACT RATING FORM

(For Federal Agency)

Part I: When completing the "County and State" questions, list all the local governments that are responsible for local land use controls where site(s) are to be evaluated.

Part III: When completing item B (Total Acres To Be Converted Indirectly), include the following:

1. Acres not being directly converted but that would no longer be capable of being farmed after the conversion, because the conversion would restrict access to them or other major change in the ability to use the land for agriculture.
2. Acres planned to receive services from an infrastructure project as indicated in the project justification (e.g. highways, utilities planned build out capacity) that will cause a direct conversion.

Part VI: Do not complete Part VI using the standard format if a State or Local site assessment is used. With local and NRCS assistance, use the local Land Evaluation and Site Assessment (LESA).

1. Assign the maximum points for each site assessment criterion as shown in § 658.5(b) of CFR. In cases of corridor-type project such as transportation, power line and flood control, criteria #5 and #6 will not apply and will, be weighted zero, however, criterion #8 will be weighed a maximum of 25 points and criterion #11 a maximum of 25 points.
2. Federal agencies may assign relative weights among the 12 site assessment criteria other than those shown on the FPPA rule after submitting individual agency FPPA policy for review and comment to NRCS. In all cases where other weights are assigned, relative adjustments must be made to maintain the maximum total points at 160. For project sites where the total points equal or exceed 160, consider alternative actions, as appropriate, that could reduce adverse impacts (e.g. Alternative Sites, Modifications or Mitigation).

Part VII: In computing the "Total Site Assessment Points" where a State or local site assessment is used and the total maximum number of points is other than 160, convert the site assessment points to a base of 160.

Example: if the Site Assessment maximum is 200 points, and the alternative Site "A" is rated 180 points:

$\frac{\text{Total points assigned Site A}}{\text{Maximum points possible}} = \frac{180}{200} \times 160 = 144 \text{ points for Site A}$

For assistance in completing this form or FPPA process, contact the local NRCS Field Office or USDA Service Center.

NRCS employees, consult the FPPA Manual and/or policy for additional instructions to complete the AD-1006 form.

Soil Map—Blaine County Area, Idaho



MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features



Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry



Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot



Spoil Area



Stony Spot



Very Stony Spot



Wet Spot



Other



Special Line Features

Water Features



Streams and Canals

Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

Background



Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Blaine County Area, Idaho

Survey Area Data: Version 14, Sep 11, 2017

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Aug 14, 2012—Nov 8, 2016

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend


Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
6	Balaam-Adamson complex, 0 to 2 percent slopes	5.4	2.7%
7	Balaam-Adamson complex, cool, 0 to 2 percent slopes	126.3	63.4%
8	Balaam-Adamson-Riverwash complex, 0 to 2 percent slopes	21.9	11.0%
42	Gimlett very gravelly sandy loam, 0 to 2 percent slopes	30.7	15.4%
66	Little Wood very gravelly loam, 0 to 2 percent slopes	14.9	7.5%
Totals for Area of Interest		199.2	100.0%

Farmland Classification—Blaine County Area, Idaho











MAP LEGEND








Area of Interest (AOI)

-  Area of Interest (AOI)




Soils








Soil Rating Polygons






-  Not prime farmland
-  All areas are prime farmland
-  Prime farmland if drained
-  Prime farmland if protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated
-  Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated and drained
-  Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season

-  Prime farmland if subsoiled, completely removing the root inhibiting soil layer
-  Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
-  Prime farmland if irrigated and reclaimed of excess salts and sodium
-  Farmland of statewide importance
-  Farmland of local importance
-  Farmland of unique importance
-  Not rated or not available







Soil Rating Lines










-  Not prime farmland
-  All areas are prime farmland
-  Prime farmland if drained

-  Prime farmland if protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated
-  Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated and drained
-  Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season
-  Prime farmland if subsoiled, completely removing the root inhibiting soil layer
-  Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60

-  Prime farmland if irrigated and reclaimed of excess salts and sodium
-  Farmland of statewide importance
-  Farmland of local importance
-  Farmland of unique importance
-  Not rated or not available

Soil Rating Points

-  Not prime farmland
-  All areas are prime farmland
-  Prime farmland if drained
-  Prime farmland if protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated
-  Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season

-  Prime farmland if irrigated and drained
-  Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season
-  Prime farmland if subsoiled, completely removing the root inhibiting soil layer
-  Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
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Water Features

MAP INFORMATION



Streams and Canals

Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

Background



Aerial Photography

The soil surveys that comprise your AOI were mapped at 1:24,000.

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Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

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Date(s) aerial images were photographed: Aug 14, 2012—Nov 8, 2016

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Farmland Classification

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
6	Balaam-Adamson complex, 0 to 2 percent slopes	Prime farmland if irrigated	5.4	2.7%
7	Balaam-Adamson complex, cool, 0 to 2 percent slopes	Prime farmland if irrigated	126.3	63.4%
8	Balaam-Adamson-Riverwash complex, 0 to 2 percent slopes	Not prime farmland	21.9	11.0%
42	Gimlett very gravelly sandy loam, 0 to 2 percent slopes	Prime farmland if irrigated	30.7	15.4%
66	Little Wood very gravelly loam, 0 to 2 percent slopes	Prime farmland if irrigated	14.9	7.5%
Totals for Area of Interest			199.2	100.0%

Description

Farmland classification identifies map units as prime farmland, farmland of statewide importance, farmland of local importance, or unique farmland. It identifies the location and extent of the soils that are best suited to food, feed, fiber, forage, and oilseed crops. NRCS policy and procedures on prime and unique farmlands are published in the "Federal Register," Vol. 43, No. 21, January 31, 1978.

Rating Options

Aggregation Method: No Aggregation Necessary

Tie-break Rule: Lower

Attachment 1
Executive Summary for Project
Impacts

EXECUTIVE SUMMARY

BACKGROUND

Friedman Memorial Airport (SUN) is located in Blaine County and the City of Hailey, Idaho, in an area generally known as the Wood River Valley. The Airport is sponsored by the City and County through the Friedman Memorial Airport Authority (FMAA), formed by a Joint Powers Agreement between the two entities. The Airport is a “commercial service” airport, serving several airlines and a wide variety of general aviation traffic.

The Airport property includes approximately 209 acres of land and is located in a very confined location; south of the city of Hailey urban core, west of State Highway 75, and east of the Wood River. The airport has one north/south oriented runway, Runway 13/31. The geographic constraints of the airport lead to a variety of conditions that result in the airport being unable to meet full design standards of the Federal Aviation Administration (FAA). Based on physical constraints of the airport’s airspace due to mountainous terrain and airport noise impacts on the City of Hailey, predominant take-off and landing operations at the airport are take-offs to the south on Runway 13, and landings from the south on Runway 31. This predominant “one way in/one way” out operation is utilized by all commercial (airline) aircraft and a majority of the large general aviation aircraft fleet, including corporate jets. As a result, the land on the south end of the airport is the most impacted by airport operations and represents one of the most critical areas to protect from a safety and land use compatibility standpoint.

One of the non-standard conditions related to the runway is the fact that the Runway Protection Zone (RPZ)¹ on the south end of the airport is not located on property owned or permanently controlled by the airport, creating potential safety and future land use compatibility issues (see Figure 1). The majority of the southern RPZ at SUN is owned by the adjacent landowner, with the existing RPZ protected by an easement which is set to expire in June of 2018. The landowner has stated that he has no interest in renewing the easement. As a result, both the landowner and FMAA believe acquisition of the property is in both party’s best interest to permanently resolve the issue. . When the easement expires, the Airport will lose the ability to control airspace and land uses in the critical RPZ. This is in conflict with FAA guidance and increases the safety risks to air traffic and to people on the ground.

¹ An RPZ is defined by the FAA as “An area at ground level prior to the threshold or beyond the runway end to enhance the safety and protection of people and property on the ground.” This area is critical to the safety of the public near the airport and, for this reason, the FAA emphasizes that airports have complete control of RPZs, preferably through fee simple ownership.

FIGURE 1 - SUN AIRPORT VICINITY, PROPOSED ACQUISITION (EA), AND HISTORIC DISTRICT



Another non-standard condition at the airport is the presence of “obstructions” within the airspace used by aircraft taking off on Runway 13 (to the south) and aircraft landing on Runway 31 (from the south). 14 Code of Federal Regulation Part 77 (14 CFR Part 77²) defines airspace surfaces around airports to protect the safety of aircraft operating in the airport environment. Any objects (trees, buildings, towers, terrain, etc.) that penetrate these airspace surfaces are known as obstructions. Of critical importance at SUN related to this project is the 14 CFR Part 77 Approach Surface, which is designed to protect aircraft as they land at the airport. Obstructions in the Approach Surface must be removed, lighted (beacon lights are placed on top of the trees), or airport layouts modified (e.g., relocate the runway end) in order to achieve an acceptable level of safety for aircraft operations.

In addition to 14 CFR Part 77, the FAA provides additional airport planning guidance in Advisory Circular (AC) 150/5300-13A, *Airport Design*. This design guidance is mandatory for airports that receive federal grants (including SUN). This document includes the definition of the Departure Surface, which is designed to allow aircraft to follow standard departure procedures when departing an airport. This surface is even larger than the 14 CFR Part 77 Approach Surface and obstructions to this surface can affect the safety of departure operations.

At SUN, there are between 110 and 140 individual trees (primarily cottonwoods) directly south of the airport, many of which are obstructions to the 14 CFR Part 77 Approach Surface and/or the Departure Surface off the south end of the airfield on property owned by the Eccles Flying Hat Ranch shown in Figure 1. The trees and farmhouse can be seen in Photo #1. The trees that are obstructions are currently lighted, and the lights and their maintenance are provided through an easement with the landowner. However, as previously stated, the easement is set to expire in June of 2018, and the landowner has stated that he has no interest in renewing the easement. Again, acquisition of the property has been determined to be the best course of

² This portion of federal law defines these surfaces to protect air traffic in the national aviation system.

action by both FMAA and the landowner to permanently resolve the issue. The obstructions need to be removed in order to provide safe aircraft operations at SUN airport. See Figures 2 and 3 for graphical depictions of these surfaces and the obstructions.

The final non-standard condition at the airport applicable to this proposed action is that the full Runway Safety Area for aircraft departing to the south extends off of airport property (see Figure 2). The Runway Safety Area (RSA) is a defined area intended to protect the safety of aircraft that overshoot, overrun or otherwise depart a runway surface. The extension of the RSA off of the property on the south end is currently mitigated through the implementation of “Declared Distances”. Declared Distances effectively shorten the runway available for use on takeoffs to the south on Runway 13 in order to meet FAA safety standards. The shortened available runway is particularly impactful on commercial airline operations. To safely operate off of a shortened runway, especially when the air temperature is high, the airlines must reduce their takeoff weight. This limits the amount of passengers, baggage and fuel they can carry, meaning passengers “bumped” from flights and/or limited range for the airline in those conditions. This is a regular occurrence for airline flights at the Airport during summer months. If the Airport owned additional property to the south, these Declared Distances would not be necessary, and therefore, would increase safety and enhance aircraft performance allowances at SUN.

PROJECT DESCRIPTION

The proposed project consists of the acquisition of up to approximately 64.75 acres of land at the south end of Runway 31 and removal of all trees that are or have the potential to become obstructions to landing and takeoff operations at the Airport. The project will allow the airport to control land use in this critical area, which will provide an increased level of safety and land use compatibility at SUN. The project is illustrated in the included Figures 2-4. Figure 2 shows the Ultimate Runway Safety Area (U-RSA) for Runway 13 departures. After acquisition, the airport boundary fence will be extended to provide a clear U-RSA for Runway 13. This will allow use of the full runway length for departures on Runway 13 and the removal of existing declared distances, which will enhance safety and aircraft performance capabilities, and prevent wildlife from entering the airport.

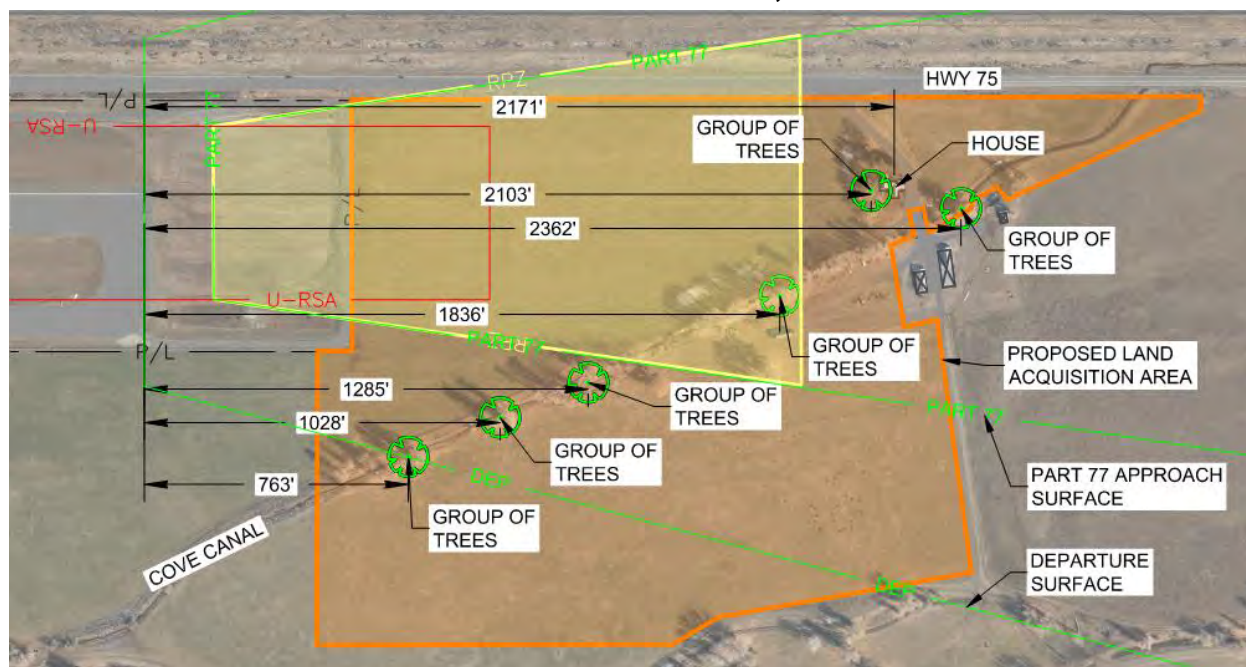
The property acquisition includes the entire portion of the Runway Protection Zone on private property³ and Runway Safety Area, along with the area⁴ of the Approach and Departure Surfaces to a distance of approximately 2,150 feet from the runway end. The property acquisition includes additional land outside of these surfaces to prevent uneconomical remnants of property resulting from the acquisition and provide control to the airport of the areas where trees have been allowed to grow in the past to prevent growth of new future obstructions. Initial conversations with the landowner indicate that simply buying the limits of the surfaces will leave areas that are not useable for the ranch; therefore this additional land is included in the proposed acquisition. This additional land to prevent uneconomical remnants includes the

³ A small portion of the Runway Protection Zone is within the Highway 75 Right of Way and is not part of this acquisition.

⁴ Note: This includes only the areas of land under the Approach and Departure Surfaces owned by the adjacent landowner. The portions of these surfaces that encompass the State Highway 75 right of way and property to the east of the highway are not included in this proposed project.

existing ranch house and adjacent property adjacent to State Highway 75 and west of the Cove Canal.

FIGURE 2 - APPROACH AND DEPARTURE SURFACES AT SUN, WITH PROPOSED ACQUISITION



The other element of the proposed project is the removal of the trees which have grown up to 100 feet tall and are identified as obstructions on the airport's Airport Layout Plan. Any trees that penetrate one of the 14 CFR Part 77 Approach or AC 150/5300-13A Departure surfaces, or that have the potential to penetrate these surfaces will be removed. Tree removal includes all existing mature trees as well as younger trees not yet penetrating the protected surfaces. As shown in Photo 1, if the younger trees are not removed they will quickly grow and penetrate the protected surfaces. Complete removal is needed to prevent re-growth of the trees and for mowing and ease of maintenance. Trimming or topping of the trees would remove the obstructions only temporarily, and then would require continuous maintenance to remain obstruction free. Additionally, the trees represent wildlife habitat. Commercial service airports like SUN are required by the FAA under 14 CFR Part 139 to alleviate wildlife hazards. This includes removal of wildlife attractants in the vicinity of the airport, especially in the Runway Protection Zones. Following acquisition and removal of the obstructions, the property will remain open space and portions of it will likely continue to be irrigated for pasture land and agricultural use, which are airport compatible uses as shown in Photo 2. No developments are planned on the property.

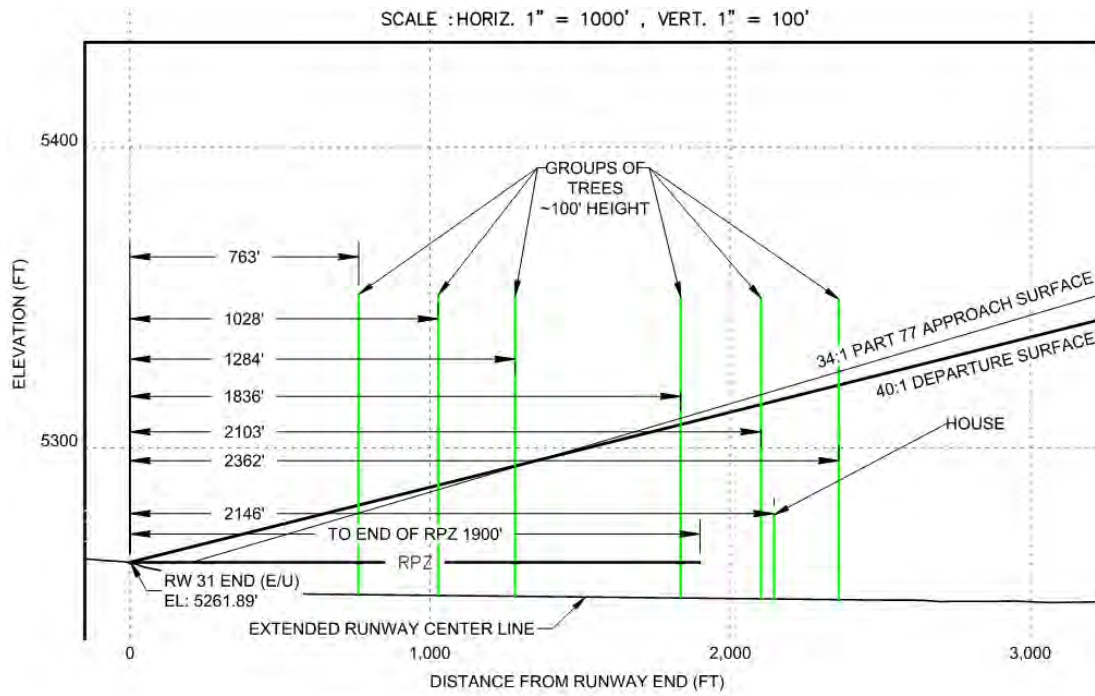
PHOTO 1 –OBSTRUCTIONS TO BE REMOVED– (TREE BELOW AIRCRAFT HAS A LIGHTING BEACON)



PHOTO 2 – COVE CANAL IN PASTURE – (SHOWS OBJECT FREE CONDITION MAINTAINED CANAL)

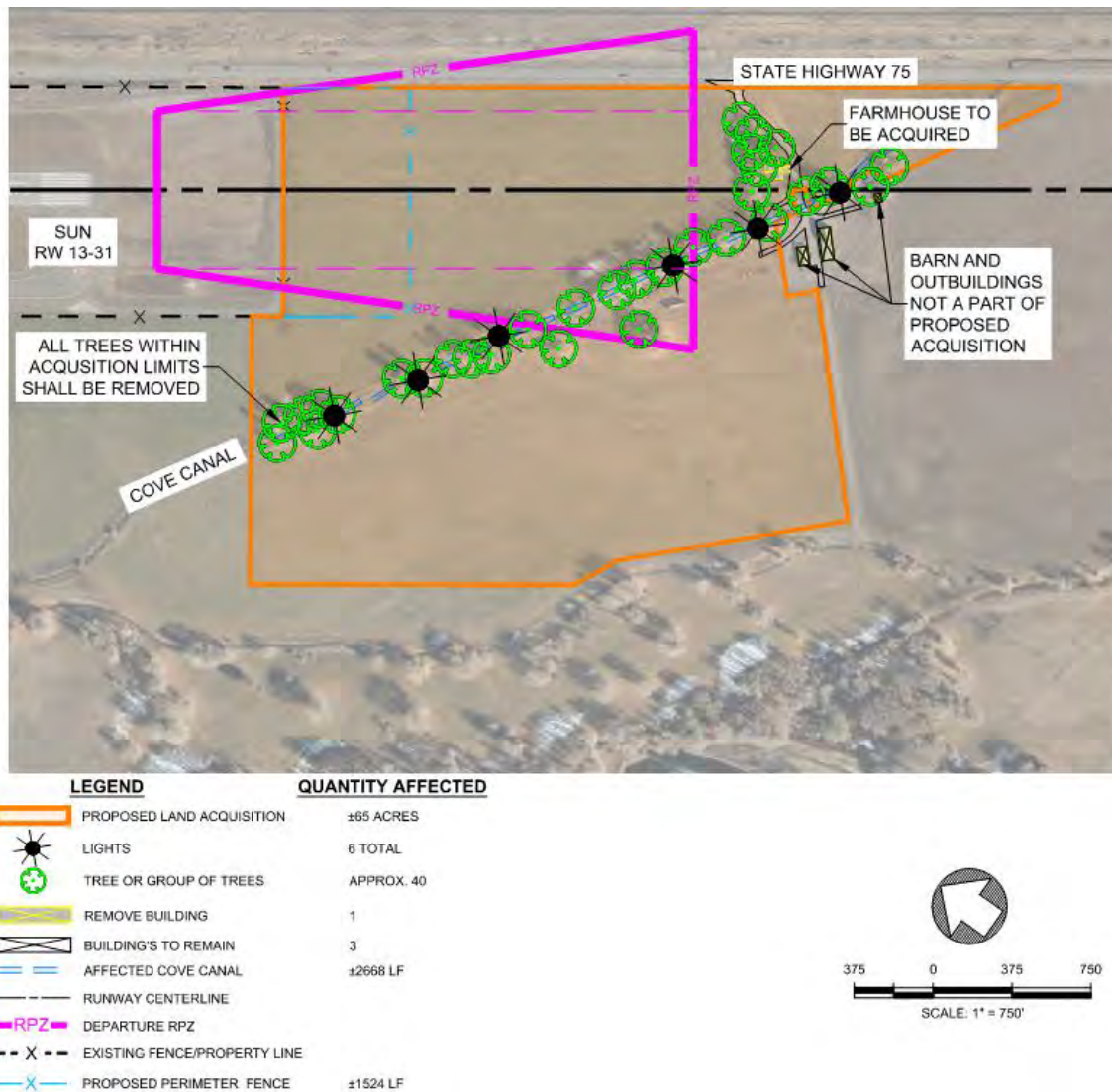


FIGURE 3 – OBSTRUCTIONS WITHIN APPROACH SURFACES AT SUN (PROFILE VIEW)



Source: T-O Engineers/Draft Airport Layout Plan

FIGURE 4– PROPOSED PROJECT ACTION



PROJECT JUSTIFICATION

The purpose of this project is to continue to ensure safe airport operations by bringing the airport into compliance with FAA standards and recommendations. The project is necessary to provide safe, navigable airspace in the vicinity of the airport and to remove and prevent incompatible land uses. The project will accomplish this by:

- Providing permanent control of the Runway Protection Zone through fee simple acquisition. This will ensure that the land uses of the RPZ will be compatible with safe air navigation and therefore protect the public on the ground adjacent to the airport.
- Controlling land to provide full Runway Safety Area off the south end of the runway, so that Declared Distances can be eliminated.
- Permanently removing obstructions in and near the Approach and Departure Surfaces and the associated wildlife hazards of these trees in close proximity to the airport.

These actions are justified, as 14 CFR Part 77, AC 150/5300-13A, and other FAA guidance require that airport sponsors take all reasonable actions to protect airspace by removing and mitigating hazards and prevent incompatible land uses in the vicinity of the airport in order to protect aircraft operators as well as people and property on the ground. Acquisition of this property will ensure that FMAA can comply with these requirements. Further, removal of existing obstructions and preventing trees from becoming future obstructions will improve the approach and departure safety for aircraft.

Required aspects of the project for Purpose and Need

- Acquisition of property that lies within the Historic District of the Halfway Ranch/Eccles Flying Hat Ranch and a portion of the Cove Canal. This is needed in order to:
 - Provide permanent control of the Runway Protection Zone through fee simple acquisition. This will ensure that the land uses of the RPZ will be compatible with safe air navigation and therefore protect the public on the ground adjacent to the airport.
 - Control land to provide full Runway Safety Area off the south end of the runway, so that Declared Distances on Runway 13/31 at SUN can be eliminated.
- Removal of Trees along the Cove Canal and at the farmstead. This is needed to:
 - Permanently remove obstructions in the vicinity of the Approach and Departure Surfaces and the associated wildlife hazards of these trees in close proximity to the airport.
- A perimeter fence must be installed around the Runway Safety Area. This is needed as:
 - This will allow full use of the runway pavement for takeoffs on Runway 13 and the removal of declared distances and operational restrictions for takeoffs to the south.
 - FAA under 14 CFR Part 139 requires a perimeter fence to exclude to alleviate wildlife incursions. In accordance with its Airport Certification Manual and the requirements of 14 CFR Part 139, each certificate holder must take immediate action to alleviate wildlife hazards whenever they are detected.
 - The area surrounding SUN Airport has known migrating wildlife. The Airport has had documented encounters with wildlife hazards. Approximately 1,524 foot of fencing must be installed to satisfy 14 CFR Part 139.

For Discussion with Farmland and Soil Classification

The Proposed Action Alternative includes approximately 6.5 acres of fenced RSA as part of the land acquisition. Once the fencing is installed, the irrigation wheel line will be reconfigured. The Prime Farmland soils located in that area would transition to “not Prime Farmland”, as they will no longer be irrigated. A Web Soil Survey (WSS) was conducted online through the United States Department of Agriculture (USDA) website. This survey helped to determine what types of soils are present on the project location as well as what types of farmland classification there is to be expected. Likewise, a Farmland Conversion Impact Rating form was completed by a member of the USDA based in Shoshone, Idaho in November of 2017. Part six of this form addressed site criteria that need to be considered within a project, two of which are extremely

pertinent to this project. The first criterion is the creation of non-farmable farmland including the 6.5 acres for the RSA. This acreage represents only 1% of the total farm acreage of the Eccles Flying Hat Ranch property and so is not a significant impact. Likewise, the On-Farm Investments criteria is an important consideration as the removal of the irrigation wheel line for the RSA fencing will affect the property. Because this removal is unavoidable to meet FAA safety standards, the 6.5 acres will no longer be irrigated and therefore will no longer constitute prime farmland. Removal of the section of wheel line will not affect the irrigation capacity of the remaining farmland outside the fence.

As discussed in the *Land Use Compatibility and Airports* report from the FAA, "agriculture is another land use that is compatible with airport operations as long as the use is not a wildlife attractant. Agricultural use of land near an airport permits the owner of the property to efficiently use land while providing an additional benefit to the community for airport protection^[1]". As stated before, the conversion of the land with the removal of the irrigation wheel line on the north side of the acquisition would make the area not prime farmland. There would be no concern for attracting wildlife on the property and the farmland remaining on the Eccles Flying Hat Ranch property would still be operational as farmland under this project.

Attachment 2
Farmland Conversion Rating
Impact Letter



November 6, 2017

Deena Merrill
T-O Engineers
2471 S. Titanium Place
Meridian, Idaho 83642

RE: Farmland Conversion Impact Form -- SUN Friedman Memorial Airport

Dear Ms. Merrill,

The Shoshone Natural Resource Conservation Services Field Office received your letter requesting completion of the AD-1600 Farmland Conversion Impact Rating for the Friedman Memorial Airport Land Acquisition and Obstruction Removal in Hailey, Idaho. My comments will specifically regard:

- Farmland/Agricultural Lands Protection
- Wetland Protection
- Site features such as wetlands, slopes, erosion, soil suitability, unique natural features, or vegetation.

The planned development identified in your request will impact prime farmland soils. See the soil map identifying soil #7, #42, and #66 in the acquisition area; Balaam-Adamson complex, Gimlett, and Little Wood soils are considered prime farmland if irrigated. Should the farmland be acquired the extension of the RPZ should have little to no effect on the current agricultural use. The Farmland Protection Policy Act discourages Federal activities that would convert farmland to nonagricultural purposes. Please note that farmland conversion to developed land is a national concern. The National Resource Inventory indicates in the period 2007-2012, 1.8245 million acres of farmland throughout the nation were lost to development.

Wetlands are identified in the project area and appear to be associated with Big Wood River. If you intend to conduct any activity that constitutes a discharge of dredged or fill material into wetlands or other waters, you should request a jurisdictional determination from the local office of the COE prior to starting the work.

Local Corps office: Corps of Engineers, Boise Field Office, 720 Park Blvd., Suite 245, Boise, ID 83712. Phone Number: (208) 433-4464.

There are no known unique features or vegetation in the area. Due to the area's history, the State Historical Preservation Office should be contacted to identify any possible sites of significance.

I have enclosed some maps identifying soils and wetland locations in the project area. I have also enclosed a Fish & Wildlife Service report for possible impacts to migratory birds, the threatened North American Wolverine and wetlands. There are no critical habitats in this area.

Natural Resources Conservation Service
217 West F Street, Shoshone, Idaho 83352
Voice: (208) 886-2258 Fax: (208) 855-524-1685



United States Department of Agriculture

Thank you for the opportunity to provide comments on the planned development.

Sincerely,
Patti Hurley
District Conservationist

A handwritten signature in cursive script that reads "Patti Hurley".

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