

Environmental Assessment for the Proposed Field Maintenance Program (FMP) Garage Construction in Big Horn County, Wyoming



Bureau of Land Management-Administered Public Lands – Five Springs Area April 2025

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

For further information:
Vincent Nguyen, EIT
Environmental Engineer
ATO Technical Operations
WSA Engineering Services (AJW-2W16E)
Phone: (206) 304-2372
Email: vincent.t.nguyen@faa.gov

Vincent T. Nguyen

Digitally signed by VINCENT T M
NGUYEN
Date: 2025.04.09 08:35:57 -07'00'

Responsible FAA Official

4/9/25

Date

EA Preparer:



**Federal Aviation
Administration**

777 South Aviation Boulevard
El Segundo, California 90245

Table of Contents

Executive Summary.....	v
1 Introduction	1
1.1 Introduction	1
1.2 Background	1
1.3 Proposed Action.....	3
1.4 Requested Federal Actions	4
2 Purpose and Need.....	5
2.1 Purpose	5
2.2 Need	5
3 Alternatives.....	6
3.1 Siting Process	6
3.2 Alternatives Assessed in the Environmental Assessment.....	6
3.2.1 Proposed Action.....	6
3.2.2 No Action Alternative.....	10
4 Affected Environment, Environmental Consequences, and Mitigation	11
4.1 Air Quality	11
4.1.1 Regulatory Setting and Affected Environment	11
4.1.2 Environmental Consequences.....	12
4.2 Biological Resources.....	14
4.2.1 Regulatory Setting and Affected Environment	14
4.2.2 Environmental Consequences.....	17
4.3 Climate	17
4.3.1 Regulatory Setting and Affected Environment	17
4.3.2 Environmental Consequences.....	18
4.4 Department of Transportation Act: Section 4(f).....	19
4.4.1 Regulatory Setting and Affected Environment	19
4.4.2 Environmental Consequences.....	20
4.5 Hazardous Materials, Solid Waste, and Pollution Prevention	20
4.5.1 Regulatory Setting and Affected Environment	20
4.5.2 Environmental Consequences.....	21
4.6 Historical, Architectural, Archaeological and Cultural Resources.....	22
4.6.1 Regulatory Setting and Affected Environment	22
4.6.2 Environmental Consequences.....	24
4.7 Land Use.....	25
4.7.1 Regulatory Setting and Affected Environment	25

4.7.2	Environmental Consequences.....	25
4.8	Natural Resources and Energy Supply	26
4.8.1	Regulatory Setting and Affected Environment	26
4.8.2	Environmental Consequences.....	26
4.9	Noise	27
4.9.1	Regulatory Setting and Affected Environment	27
4.9.2	Environmental Consequences.....	27
4.10	Socioeconomics, and Children’s Environmental Health and Safety Risks	28
4.10.1	Regulatory Setting and Affected Environment	28
4.10.2	Environmental Consequences.....	29
4.11	Visual Effects	30
4.11.1	Regulatory Setting and Affected Environment	30
4.11.2	Environmental Consequences.....	31
4.12	Water Resources	31
4.12.1	Regulatory Setting and Affected Environment	31
4.12.2	Environmental Consequences.....	33
4.13	Cumulative Impacts	34
5	Public Outreach, Agency Coordination, and Tribal Consultation	36
5.1	Public Outreach.....	36
5.2	Agency Coordination.....	36
5.3	Tribal Consultation.....	36
6	References	37

Tables

Table 4-1. Ambient Air Quality Standards	13
Table 4-2. Federally Protected Species and Potential Occurrence in the Project Area.....	15
Table 4-3. State Protected Species and Potential Occurrence in the Project Area	16

Figures

Figure 1-1. Aerial View of Bighorn National Park (west side).	2
Figure 1-2. Existing BLM-administered Public Lands (project site).....	3
Figure 3-3. Location of Proposed FMP Garage.	8
Figure 3-2. Site Layout of the Proposed Action.	9

Appendix A. Incorporated References and Public Involvement

Appendix B. Technical Reports

ACRONYMS AND ABBREVIATIONS

ACHP	Advisory Council on Historic Preservation
AGL	Above Ground Level
APE	Area of Potential Effects
ARSR	Air Route Surveillance Radar
ATO	Air Traffic Organization
BLM	Bureau of Land Management
BMP	Best Management Practice
BNF	Bighorn National Forest
CAA	Clean Air Act
CEQ	Council on Environmental Quality
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
CH ₄	Methane
CO	Carbon Monoxide
CO ₂	Carbon Dioxide
CO ₂ e	Carbon Dioxide Equivalent
DHS	Department of Homeland Security
DNL	Day Night Average Sound Level
DoD	Department of Defense
DOI	Department of the Interior
DOT	Department of Transportation
EA	Environmental Assessment
EIS	Environmental Impact Statement
EPA	Environmental Protection Agency
FAA	Federal Aviation Administration
FMP	Field Maintenance Program
FONSI	Finding of No Significant Impact
FWS	U.S. Fish & Wildlife Service
GHG	Greenhouse Gas
IPaC	Information for Planning and Consultation
N ₂ O	Nitrous Oxide
NAAQS	National Ambient Air Quality Standards
NCSHPO	National Conference of State Historic Preservation Officers
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NO ₂	Nitrogen Dioxide
NO _x	Nitrogen Oxides
NPDES	National Pollutant Discharge Elimination System
NPL	National Priorities List
NRHP	National Register of Historic Places
O ₃	Ozone
Pb	Lead

PM	Particulate Matter
PM _{2.5}	Particulate Matter Equal to or Less than 2.5 Microns
PM ₁₀	Particulate Matter Equal to or Less than 10 Microns
RCRA	Resource Conservation and Recovery Act
ROW	Right-of-Entry
SHPO	State Historic Preservation Office
SIP	State Implementation Plan
SO ₂	Sulfur Dioxide
SOW	Statement of Work
SPCC	Spill Prevention Control and Countermeasures
THPO	Tribal Historic Preservation Office
U.S.	United States
U.S.C.	United States Code
WAAQS	Wyoming Ambient Air Quality Standards
WDEQ	Wyoming Department of Environmental Quality
WSA	Western Services Area
VOC	Volatile Organic Compound

Executive Summary

Introduction

The Federal Aviation Administration (FAA) has prepared this environmental assessment (EA) for the proposed construction of a new Field Maintenance Program (FMP) garage within public lands administered by the Bureau of Land Management (BLM) in Big Horn County, Wyoming, pursuant to the National Environmental Policy Act (NEPA) (42 United States Code [U.S.C.] 4371) and FAA Order 1050.1F, *Environmental Impacts, Policies and Procedures* (FAA 2015). An EA is a concise document used to describe a proposed action's anticipated environmental impacts and provides sufficient evidence and analysis for determining whether to prepare an Environmental Impact Statement (EIS) or a Finding of No Significant Impact (FONSI).

The Bureau of Land Management (BLM) has prepared a separate EA pursuant to NEPA; Department of the Interior (DOI) requirements from the Department Manual, Environmental Quality; and guidelines listed in BLM's NEPA Handbook, H-1790-1. The FAA's EA addresses environmental resources specific to the Department of Transportation (DOT) which were dismissed in BLM's EA analysis for the Proposed Action (BLM 2024a). Therefore, the FAA has applied a limited adoption of the BLM's EA utilizing the document's analysis of water resources, visual impacts, and recent historical consultations with the Wyoming State Historic Preservation Office (SHPO).

Proposed Action

The Proposed Action is the construction of a new FMP garage building on BLM-administered public lands to house tools, a road grader, snow cat, and other FAA heavy equipment and vehicle support equipment. The site for the proposed garage would encompass an approximately 0.9-acre parcel of land that intersects present United States (U.S.) Highway 14A (Medicine Wheel Passage) and a small access road. The parcel is currently undeveloped with its natural features such as native vegetation and naturally occurring rock fragments intact. The proposed garage would be 20 feet tall above ground level (AGL) with a 3,600 square-foot building footprint and would be prefabricated on a concrete footing foundation. Construction is anticipated to begin in June 2025 and take up to four months to complete.

Purpose and Need

The purpose of the project is to construct a new garage at the western base of the Bighorn National Forest (BNF) that meets current FAA design standards and improves the functional and operational capabilities of the services provided by the Lovell Air Route Surveillance Radar (ARSR). The ARSR site is considered a joint surveillance radar where it is not only critical to the FAA's mission and aviation safety but is also utilized daily by the Department of Defense (DoD) and Department of Homeland Security (DHS) to conduct their missions for defense of the United States of America.

The FAA maintains and operates the ARSR site located on the BNF year-round. In the winter months, U.S. Highway 14A is closed to the public due to consistent adverse weather that create hazardous driving conditions. Road closures hinder the FAA's ability to effectively manage and respond to outages at the ARSR site which would be detrimental to national security. The project is needed to improve road access and emergency response times by constructing a facility that meets current FAA standards and meets the current and future needs of the FAA, DoD, DHS. These would be remedied by the construction of a new garage.

Alternatives

The FAA conducted a stakeholder's meeting to determine viable and preferred sites for a new garage in BNF. Two possible sites in the same general location were initially considered to be viable, and one was subsequently identified as the preferred site. One of these sites – designated Site 1 – was recommended as the Proposed Action. A second site – designated as Site 2 – is located on the same parcel of land as Site 1, with the primary difference being the conceptual location garage and gravel access entry way. Therefore, for analysis purposes, Site 1 and Site 2 would have the same environmental impacts and are considered the Proposed Action. In addition, a No Action Alternative, where a new garage would not be constructed, is considered.

Environmental Consequences and Mitigation

The Proposed Action would result in no significant direct, indirect, cumulative, or construction impacts on coastal resources, farmlands, Section 4(f) properties, historical, architectural, archaeological or cultural resources, land use, natural resources and energy supply, socioeconomics, or children's environmental health and safety risks. There also would be no significant impact to wetlands or any other water resources (e.g., floodplains, surface waters, groundwater, or Wild and Scenic Rivers).

Construction activity would result in negligible impacts on climate, noise, and visual resources; these effects would be temporary and would not exceed any thresholds of significance. Long-term maintenance of the new garage would not result in an increase in noise and there are no sensitive noise receptors nearby. The new garage would not contrast with the area's visual character – which is composed primarily of the natural landscape and a public highway – nor would there be an increase in light emissions.

There would be minor and temporary impacts to air quality during construction and demolition activities, but these would not result in an exceedance of any federal or state air quality standards. Long-term operation and maintenance of the new garage would not result in changes to air quality or create any new air quality impacting sources.

Implementing hazardous materials handling, solid waste disposal, and pollution prevention Best Management Practices (BMPs) during construction of the Proposed Action would result in no significant direct, indirect, or cumulative impacts to hazardous materials, or as a result of their presence.

There are no federally-protected species or their habitat in the study area. Therefore, there would be no direct, indirect, or cumulative impacts to federally-protected species. Several State-listed species are present on the Airport property, but none are expected in the project area. These include golden eagles, cassin's finch, and the black rosy-finch. Golden eagles are known to use the grasslands within the project site for occasional hunting, but no nesting habitat is present. Similarly, the cassin's finch and black rosy-finch may also use the infield grasslands for foraging, but their presence is expected to be extremely rare as there is no nesting or high-quality roosting habitat as both species prefer high altitude sites for nesting. No direct, indirect, or cumulative impacts to State-listed species is expected as they are not present in the project area and the project area does not provide any suitable foraging or nesting habitat.

Under the No Action Alternative, a new garage would not be constructed. There would be no direct, indirect, construction, or cumulative impacts to environmental resources resulting from this alternative. The parcel of land being considered for the new garage would continue to remain the same.

Permits

All appropriate permits would be obtained by the construction contractor prior to constructing the new garage. Per FAA Order 1050.1F, Paragraph 6-1.a.(4), a preliminary list of potential permits required for implementation of the project may include the following:

- Federal: Right-of-way (ROW) grant and construction authorization from the BLM
- State of Wyoming: Wyoming Department of Environmental Quality: National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges Associated with Construction Activities

Public Outreach

The proposed project was initially presented to the public during the BLM NEPA process when a separate EA was listed on the BLM ePlanning website. The FAA requested provided another opportunity for public comment regarding DOT Section 4(f) determination. Based on the size and routine nature of the proposed project, the BLM and FAA determined that external scoping was not necessary. There were no public comments provided during the BLM's and FAA's public comment periods.

Agency Coordination

The FAA has an undertaking under the Proposed Action. Consultation under Section 106 of the National Historic Preservation Act with the Wyoming State Historic Preservation Office (SHPO) was initiated by the BLM. Based upon the BLM's Section 106 Programmatic Agreement with the Advisory Council on Historic Preservation (ACHP) and the National Conference of State Historic Preservation Officers (NCSHPO), the FAA is relying upon the BLM's determination that there are no historic properties within the Area of Potential Effects (APE). The SHPO has concurred that there are no adverse impacts to historic properties and cultural resources within the APE (Appendix A).

Tribal Consultation

No Tribal consultation letters were prepared for this Environmental Assessment. However, the FAA remains committed to addressing Tribal concerns should any be forthcoming.

1 Introduction

This chapter introduces the proposed project and provides background information. An overview of the Proposed Action is also provided.

1.1 Introduction

The Federal Aviation Administration (FAA) has prepared this environmental assessment (EA) for the proposed construction of a new Field Maintenance Program (FMP) garage within public lands administered by the Bureau of Land Management (BLM) in Big Horn County, Wyoming, pursuant to the National Environmental Policy Act (NEPA) (42 United States Code [U.S.C.] 4371)¹; FAA Order 1050.1F – Environmental Impacts: Policies and Procedures (FAA 2015); as well as applicable Executive Orders, and other federal, state, and local laws and regulations.

The FAA is the federal lead agency under NEPA. The Bureau of Land Management (BLM) has prepared a separate EA pursuant to NEPA; Department of the Interior (DOI) requirements from the Department Manual, Environmental Quality; and guidelines listed in BLM’s NEPA Handbook, H-1790-1. The FAA’s EA addresses environmental resources specific to the Department of Transportation (DOT) which were dismissed in BLM’s EA analysis for the Proposed Action (BLM 2024a). The FAA has applied a limited adoption of the BLM’s EA utilizing the document’s analysis of water resources, visual impacts, and recent historical consultations with the Wyoming State Historic Preservation Office (SHPO).

1.2 Background

The project site is located on BLM-administered public lands and is located approximately 19.5 miles southeast from Lovell, Wyoming. The project site is generally bounded by the present U.S. Highway 14A (Medicine Wheel Passage) to the north, the Bighorn National Forest (BNF) to the east, Five Springs Creek to the south, and additional BLM-administered public lands to the west. An aerial photograph of the general vicinity is shown on Figure 1-1. Due to difficulties accessing present U.S. Highway 14A during the winter season, the project was recommended for consideration from the FAA where planning and design were initiated.

¹ On January 20, 2025, President Trump issued Executive Order (EO) No. 14154: Unleashing American Energy, which revoked EO 11991: Relating to Protection and Enhancement of Environmental Quality (May 24, 1977), and instructed the Chair of the Council on Environmental Quality (CEQ) to rescind its NEPA-implementing regulations. On February 25, 2025, the CEQ issued an interim final rule to remove the existing implementing regulations for NEPA (90 FR 10610 (Feb. 25, 2025)). The Draft EA was prepared in accordance with CEQ’s National Environmental Policy Act Implementing Regulations Revision Phase 2, 89 FR 35442 (May 1, 2024) (Phase 2 final rule), now pending rescission.



Figure 1-1. Aerial View of Bighorn National Park (west side).

1.3 Proposed Action

The FAA proposes to construct a new FMP garage building on BLM-administered public lands to house tools, a road grader, snow cat, and other FAA heavy equipment and vehicle support equipment. The site for the proposed garage would encompass an approximately 0.9-acre parcel of land that intersects present U.S. Highway 14A and a small access road. The parcel is currently undeveloped with its natural features such as native vegetation and naturally occurring rock fragments intact. The proposed garage would be 20 feet tall above ground level (AGL) with 3,600 square feet building footprint and would be prefabricated on a concrete footing foundation. A lease would be procured by FAA to include the land area required to contain the new facility. Access to the site would be from the present U.S. Highway 14A and the access road leading towards Five Springs Creek. It is anticipated that design and construction procurement would occur between April 2025 and May 2025, with construction anticipated to occur over a 4-month period beginning in June 2025.



Figure 1-2. Existing BLM-administered Public Lands (project site).

1.4 Requested Federal Actions

Action is needed related to the lease between the FAA and the BLM. Therefore, the requested federal actions include:

1. Lease acquisition for the new FMP garage.

2 Purpose and Need

This chapter presents the underlying problem being addressed and describes the purpose of the Proposed Action and why it is needed. Identification of the purpose and need for a Proposed Action provides the rationale and the foundation for identification of reasonable alternatives that can meet the purpose for the action and, therefore, address the need or problem.

2.1 Purpose

The FAA's FMPs have a dual mission. The first is emergency response, stabilization, and restoration of critical infrastructure and roadways. Their secondary mission is to perform planned projects throughout the regional districts in support of the national airspace system. The purpose of the project is to construct a new garage at the western base of the BNF that meets current FAA design standards and improves the functional and operational capabilities of the services provided by the Lovell Air Route Surveillance Radar (ARSR). The ARSR site is considered a joint surveillance radar where it is not only critical to the FAA's mission and aviation safety but is also utilized daily by the Department of Defense (DoD) and Department of Homeland Security (DHS) to conduct their missions for defense of the United States of America.

2.2 Need

The FAA maintains and operates the ARSR site located on the BNF year-round. In the winter months, US Highway 14A is closed to the public due to consistent adverse weather that create hazardous driving conditions. Road closures hinder the FAA's ability to effectively manage and respond to outages at the ARSR site which would be detrimental to national security. The Proposed Action is needed to improve road access and emergency response times by constructing a facility that meets current FAA standards and meets the current and future needs of the FAA, DoD, DHS. These would be remedied by the construction of a new garage.

3 Alternatives

This chapter provides a summary of the alternatives analysis conducted by the FAA. Two potential alternative locations for a new garage were evaluated from the FAA's National Airspace System Defense Program Office (FAA NDP). FAA NDP concluded with the identification of the two alternatives assessed in this EA – the No Action Alternative and the Proposed Action.

3.1 Siting Process

The FAA conducted a stakeholder's meeting to discuss the Proposed Action and a final site recommendation was developed. The design specifications and proposed site locations are found within the Statement of Work (SOW) document.

This SOW provides an overview of all potential sites considered, a detailed evaluation of the preferred site option, and the conclusions and recommendations for a potential location of the new garage (FAA 2024). The BLM has confirmed and accepted the project site as stated in their published FONSI and Notice to Proceed documents (BLM 2024b).

All sites considered were evaluated against the required design criteria. Visibility and impacts were assessed and documented to determine which sites were viable. Two sites in the same general location (see Figures 3-1 & 3-2) were selected by FAA NDP representatives based on team discussion and inputs on the advantages and disadvantages of each site.

3.2 Alternatives Assessed in the Environmental Assessment

The two alternatives studied in detail in this EA are summarized below.

3.2.1 Proposed Action

The Proposed Action would entail construction and maintenance of a new garage within the BNP. The Proposed Action includes the installation of a prefabricated garage with a concrete footing along with a gravel-based access entry way. The proposed location of the new garage is on an approximately 0.9-acre undisturbed site from the BLM (see Figure 3-1). The proposed site is located south of the intersection of the present U.S. Highway 14A and the access road leading to Five Spring Creek. The coordinates of the proposed garage location are Latitude 44° 47' 50.0" N and Longitude 107° 59' 10.0 W. The site is located on land that would be leased from the BLM. A lease would be procured by FAA to include the land area required to contain the new garage facility. Access to the site would be from the present U.S. Highway 14A.

The proposed garage would enable the installation of modern and required heavy equipment, provide adequate space and an enhanced work environment for FAA personnel, and lower operating costs. The Proposed Action would provide for a modern, operationally efficient garage that would meet all applicable FAA requirements and would provide quicker response times for the operational support of the Lovell ARSR facility.

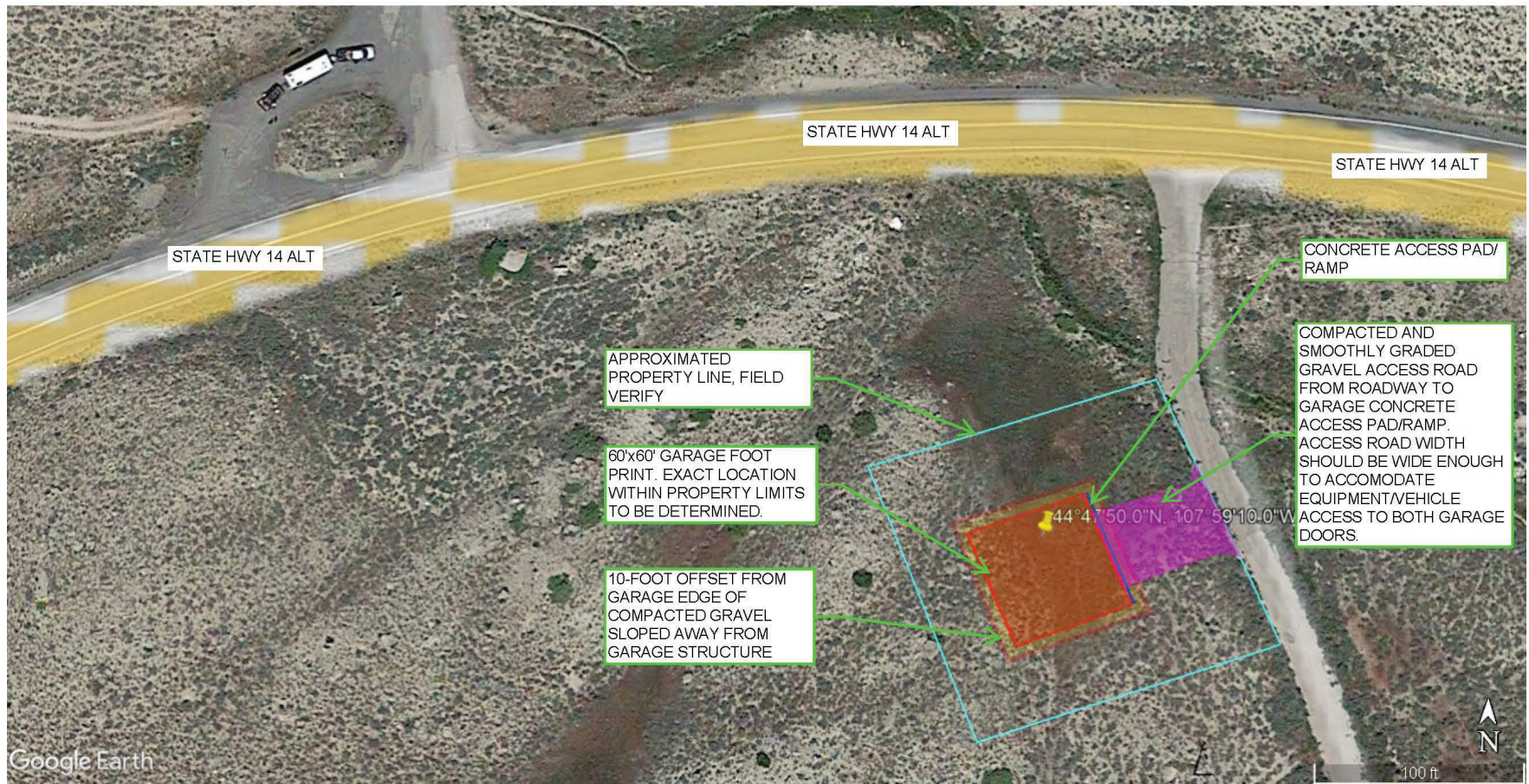
The new garage would be approximately 20 feet tall AGL with a 3,600 square-foot building footprint and would be prefabricated on a concrete footing foundation. Associated fencing and other related features (gravel access road and lighting) would be built within the parcel as part of the Proposed Action. A conceptual site layout of the Proposed Action is shown in Figure 3-1.

Construction of the new garage is expected to begin in May 2025 and occur over an approximate 4-month period.

Existing highways and access roads would be used during construction. Staging areas would be confined to the proposed property boundary. The public roads are sufficient to accommodate the minor increase in traffic that would occur during construction activities. Public utilities and water are not readily available to the site.

Proposed Garage Layout Plan (Preferred Location)

QSI ARSR Garage Construction Project



PROPOSED GARAGE LAYOUT PLAN 1
NOT TO SCALE

Figure 3-1. Location of Proposed FMP Garage.

Proposed Garage Layout Plan (Alternate Location)

QSI ARSR Garage Construction Project

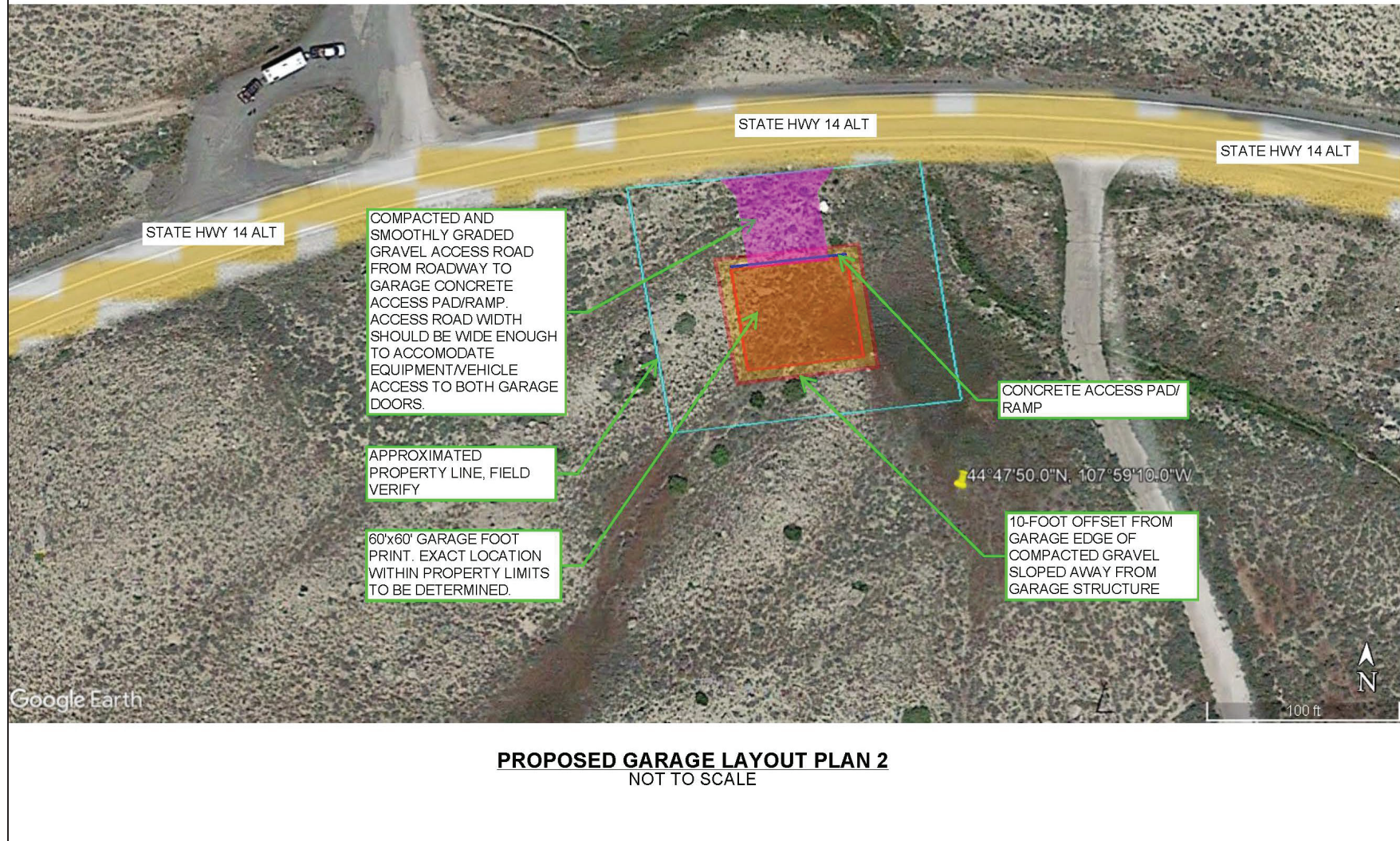


Figure 3-3. Site Layout of the Proposed Action.

3.2.2 No Action Alternative

Under the No Action Alternative, the request for an authorization to construct and maintain a new garage located on BLM-administered public lands would be denied. The existing use of the land would therefore remain the same. The Lovell ARSR facility is critical to the FAA's mission of ensuring a safe NAS. Additionally, the site is utilized by DoD and DHS to fulfill their missions for national security. If the No Action alternative was selected, the FAA would not be able to construct the garage building needed to assist in the maintenance of the Lovell ARSR site, which could negatively impact aviation safety and national defense.

Although this alternative would not fulfill the purpose and need of the Proposed Action, this alternative is carried forward as required by the CEQ, which required consideration of a No Action Alternative to assess environmental consequences that may occur if the Proposed Action is not implemented.

4 Affected Environment, Environmental Consequences, and Mitigation

This chapter describes the regulatory setting and affected environment (existing conditions) of each resource and identifies the environmental consequences of the alternatives considered, as well as any mitigation, minimization, or best practices identified to reduce impacts, if applicable. FAA Order 1050.1F Desk Reference identifies the following resource categories for consideration in NEPA analysis: Air Quality; Biological Resources; Climate; Coastal Resources; Department of Transportation Act, Section 4(f); Farmlands; Hazardous Materials, Solid Waste, and Pollution Prevention; Historical, Architectural, Archeological, and Cultural Resources; Land Use; Natural Resources and Energy Supply; Noise; Socioeconomics, and Children’s Environmental Health and Safety Risks; Visual Effects; and Water Resources.

Paragraph 4-2.c of FAA Order 1050.1F states that, “[i]f an environmental impact category is not relevant to the proposed action or any of the reasonable alternatives identified (i.e., the resources included in the category are not present or the category is not otherwise applicable to the proposed action and alternative[s]), this should be briefly noted and no further analysis is required.” Resources that are not present in the project area, and that therefore would not be impacted, includes coastal resources, farmlands, wetlands, and Wild and Scenic Rivers.

The proposed site is not located within a designated coastal zone pursuant to the Coastal Zone Management Act of 1972 as defined by National Oceanic and Atmospheric Administration. Therefore, there would be no direct, indirect, or cumulative impacts of the Proposed Action on coastal resources. Additionally, there are no prime, unique, statewide or locally important farmlands present in the project area defined by criteria in 7 CFR § 658.5; there would be no direct, indirect, or cumulative impacts of the Proposed Action on farmlands. There are no wetlands that meet Clean Water Act jurisdictional or Executive Order 11990 criteria present in the project area. There are no waters, wetlands, riparian, or other sensitive habitats within the project area that are regulated by federal or state laws. Additionally, there are no Wild and Scenic Rivers in the project area. The closest Wild and Scenic River segments to are part of the Big Horn River, which is approximately 10 miles south-southwest of the proposed site. Therefore, there would be no potential for impacts to these resources.

The Desk Reference also states that impact categories that are minimally affected by a project need not be described in detail, but instead should be briefly discussed and dismissed early in the NEPA review. It further states, that an explanation should be provided as to why these impact categories are being dismissed. Therefore, some of the resources described below are not analyzed in detail because they would be only minimally affected by the No Action Alternative or Proposed Action, as described in the environmental consequences sections.

4.1 Air Quality

4.1.1 Regulatory Setting and Affected Environment

The FAA Order 1050.1F Desk Reference describes air quality as the measure of the condition of the air expressed in terms of ambient pollutant concentrations and their temporal and spatial distribution. Air quality regulations in the United States are based on concerns that high concentrations of air pollutants can harm human health, especially for children, the elderly, and people with compromised health conditions; as well as adversely affect public welfare by damage to crops, vegetation, buildings, and other property. FAA Order 1050.1F requires that potential effects of the Proposed Action are evaluated

against the National Ambient Air Quality Standards (NAAQS), which are expressed in terms of pollutant concentration measured (or averaged) over a defined period of time (FAA 2023a). The U.S. Environmental Protection Agency (EPA), under mandates of the Clean Air Act (CAA) Amendments of 1990, has established primary and secondary NAAQS for seven air contaminants or criteria pollutants. These contaminants are carbon monoxide (CO), nitrogen dioxide (NO₂), ozone (O₃), lead (Pb), sulfur dioxide (SO₂), and particulate matter equal to or less than 10 microns in size (PM₁₀) and equal to or less than 2.5 microns in size (PM_{2.5}).

The Wyoming Ambient Air Quality Standards (WAAQS) are similar to the federal standards for the criteria air pollutants with very few exceptions. At the state level, Wyoming Department of Environmental Quality (WDEQ) manages air quality, regulates mobile emissions sources, and oversees the industrial activities of the entire state. The WDEQ is responsible for ensuring that federal and state air quality standards are met by monitoring ambient air pollutant levels throughout the region and implementing strategies to attain the standards.

States are required to identify those areas where the NAAQS are not being met in compliance with the federal CAA of 1970, 42 U.S.C. 7401, et seq., as amended. Areas that are not meeting NAAQS for a specific pollutant are designated as nonattainment areas by the EPA. The CAA Amendments define a “nonattainment area” as a locality where air pollution levels consistently exceed NAAQS, or that contributes to ambient air quality in a nearby area that fails to meet standards. A state with one or more nonattainment areas must prepare a State Implementation Plan (SIP) for each nonattainment area, detailing the programs and requirements that the state will implement to meet the NAAQS by the deadlines specified in the CAAA. If the air quality in a geographic area is equal to or better than the national standard, the EPA typically designates the region as an “attainment area.” Big Horn County is currently designated by the EPA to be in an attainment area with respect to Wyoming’s ambient air quality standards.

4.1.2 Environmental Consequences

FAA Order 1050.1F Desk Reference (FAA 2023a) defines significant air quality impacts as those where the agency project or action would result in exceedance of one or more of the NAAQS or any State or local standards for any of the time periods analyzed. Table 4-1 presents the Federal and State of Wyoming air quality standards.

Table 4-1. Ambient Air Quality Standards

Pollutant	Averaging Time	Wyoming Standard	Federal Standard
Ozone (O ₃)	1-hour	—	—
	8-hour	70 ppb	70 ppb
Carbon Monoxide (CO)	1-hour	35 ppm	35 ppm
	8-hour	9 ppm	9 ppm
Nitrogen Dioxide (NO ₂)	1-hour	100 ppb	100 ppb
	Annual	53 ppb	53 ppb
Sulfur Dioxide (SO ₂)	1-hour	75 ppb	75 ppb
	24-hour	—	140 ppb
Particulate Matter (PM) ≤ 10 microns (PM ₁₀)	24-hour	150 µg/m ³	150 µg/m ³
	Annual	50 µg/m ³	—
Particulate Matter (PM) ≤ 2.5 microns (PM _{2.5})	24-hour	35 µg/m ³	35 µg/m ³
	Annual	12 µg/m ³	12 µg/m ³

Note: ppm = parts per million; ppb = parts per billion

Proposed Action

Minor impacts to air quality that would result from the Proposed Action during construction activities would include temporary emissions of CO, PM_{2.5}, PM₁₀, volatile organic compounds (VOC) and nitrogen oxides (NO_x) from dust, construction vehicle exhaust, and general construction activities. None of the impacts to air quality would exceed federal *de minimus* levels for any of the criteria pollutants. Therefore, the construction of the proposed garage would not significantly affect air quality.

Mitigation, Minimization, and Best Practices

Although there would be no significant impacts from construction of the Proposed Action, and changes in emissions due to construction would be negligible, the following measures would be implemented to reduce emissions during construction:

- Implement the Clean Air Construction Standards.
- Minimize the amount of disturbed soils at any given time during project activities.
- If needed, spray water for dust suppression and prevent fugitive dust from becoming airborne.
- Suspend or adjust intensity of project activities during periods of sustained high wind speeds (e.g., 30 miles per hour and over), as defined by the Occupational Safety and Health Administration.
- Maintain vehicles and equipment in good working condition.
- Decrease vehicle speed limits while at project site to reduce fugitive dust generation and obey posted vehicle speed limits while off-site.
- Load trucks with debris below their maximum hauling capacity.
- Use tarp covers on trucks transporting construction materials and construction debris to and from the site.

No Action

Under the No Action Alternative, the garage would not be constructed, and the existing land would remain the same. Air quality would remain unchanged, and no air quality impacts would occur.

4.2 Biological Resources

4.2.1 Regulatory Setting and Affected Environment

The FAA Order 1050.1F Desk Reference states that biological resources are valued for their intrinsic, aesthetic, economic, and recreational qualities and include fish, wildlife, plants, and their respective habitats. Typical categories of biological resources include terrestrial and aquatic plant and animal species, game and non-game species, special status species (state or federally-listed threatened or endangered species, marine mammals, or species of concern, such as species proposed for listing or migratory birds), and environmentally-sensitive or critical habitats.

FAA Order 1050.1F Desk Reference requires that potential effects of the Proposed Action be evaluated with regard to terrestrial and aquatic plant and animal species, game and non-game species, species status species, migratory birds, and environmentally sensitive or critical habitats. Several federal and state laws, Executive Orders, and regulations govern this action. These include the Endangered Species Act, the Sikes Act, the Fish and Wildlife Coordination Act, the Fish and Wildlife Conservation Act, the Migratory Bird Treaty Act, and Executive Order 13112 - Invasive Species.

The entire landscape of the proposed site and surrounding area has been largely unmodified by human activities with native vegetation or habitat. The project area for biological resources encompasses the direct footprint of temporary and permanent ground disturbance resulting from proposed construction activities. This would include the 0.9-acre parcel and the immediate surrounding area. Vegetation types within the project area consist of landscaped habitat that support shrubs and other vegetation.

A variety of sources were consulted to determine what special status species have the potential to occur in the project area. The U.S. Fish & Wildlife Service (FWS) was consulted via their Information, Planning, and Conservation online system (IPaC) for a species list on November 20, 2024. Special-status species that have the potential to occur in the project area are summarized below. Table 4-2 lists federal species with potential to occur in the project area and Table 4-3 lists state species with potential to occur in the project area. Based on the species lists identified for the project area (FWS 2024), there is one special status species that could potentially occur within the project area. None of the species with potential to occur in the project area are federally-listed species and there is no designated critical habitat or essential fish habitat within the project area. The special status species that could potentially occur within the study area are:

- Golden eagle (*Aquila chrysaetos*) – State Fully Protected

For golden eagles, there is no nesting habitat present, but ruderal grasslands within the project site can be used as hunting grounds. These species may occur in the project area as an occasional forager, primarily during migration and winter.

Table 4-2. Federally Protected Species and Potential Occurrence in the Project Area

Name	Listing Status	Habitat	Potential for Occurrence in the Project Area
Monarch butterfly (<i>Danaus plexippus</i>)	Federal Candidate	Winter roost sites extend along the coast from northern Mendocino to Baja California and Mexico; roosts located in wind-protected tree groves with nectar and water sources nearby; larval host plant is milkweed (<i>Asclepias</i> sp.).	Absent. Ruderal grasslands and landscaped vegetation at the project site can provide foraging habitat, but neither monarchs nor milkweed have been documented during previous surveys.
Ute Ladies'-tresses (<i>Spiranthes diluvialis</i>)	Federal Threatened	Moist meadows associated with perennial stream terraces, seasonal flooded river terraces, floodplains, oxbows at elevations between 4,300 to 6,850 feet, and subirrigated or spring-fed abandoned stream channel and valleys.	Absent. No suitable habitat within the project area.

Table 4-3. State Protected Species and Potential Occurrence in the Project Area

Name	Listing Status	Habitat	Potential for Occurrence in the Project Area
Black Rosy-finch (<i>Leucosticte atrata</i>)	Wyoming Species of Special Concern (nesting)	Breeds in alpine areas, usually near rock piles, and cliffs. Winters in open country, including mountain meadows, high deserts, valleys, and plains.	Absent. No suitable habitat for this species in the project area.
Cassin's finch (<i>Haemorhous cassinii</i>)	Wyoming Species of Special Concern	Occupies a variety of coniferous forest types over a broad elevational range. Often found in mature forests of lodgepole and ponderosa pine.	Absent. No suitable habitat for this species in the project area.
Golden eagle (<i>Aquila chrysaetos</i>)	State Fully Protected	Breeds on cliffs or in large trees (rarely on electrical towers); forages in open areas.	Absent as Breeder. There is no nesting habitat present within the project area, but ruderal grasslands within the vicinity can be used as hunting grounds. Golden eagles may occur in the project area as an occasional forager, primarily during migration and winter.

4.2.2 Environmental Consequences

FAA Order 1050.1F Desk Reference defines significant impacts to federally listed species as when the FWS determines that the Proposed Action would be likely to jeopardize the continued existence of fish, wildlife, and plants in question, or result in a destruction or adverse modification to Federally or state-designated critical habitats in the project area. Impacts to non-listed species are associated with factors affecting population dynamics and sustainability (e.g., reproductive success rates, natural mortality rates, non-natural mortality) and minimum population levels required for population maintenance.

The FAA has not established a significance threshold for non-listed species. Effects to special status species and sensitive habitats were analyzed based on the potential for the species, their habitat, or the natural community in question to be disturbed or enhanced following project implementation.

Proposed Action

The common wildlife species found within the vicinity of the project site are tolerant of low levels of human disturbance. There may be temporary disturbance effects to these species, but no impacts are expected to be present after construction. Golden eagles that may occur as occasional foragers may be temporarily disturbed during construction. No federal or state listed species are known to occur within the project area and none are expected to occur due to a lack of suitable habitat and because of the moderate level of activity around the parcel from vehicle traffic. No critical habitat is present in the study area. Based on these considerations, it is anticipated that the project would have no direct or indirect effects on federally listed species or their designated critical habitats.

The FAA has determined that the Proposed Action would have no effect on any federally listed threatened or endangered species or designated critical habitat. This determination is based on the fact that the proposed garage and immediate surrounding areas do not provide any suitable natural habitat. Furthermore, existing traffic and other human activity within this area decrease the suitability of any potential habitat.

No Action

Under the No Action Alternative, the garage would not be constructed, and the existing land would remain the same. Therefore, there would be no impact to the 0.9-acre parcel of land and any vegetation, wildlife, or habitat in the project area.

4.3 Climate

4.3.1 Regulatory Setting and Affected Environment

The FAA Order 1050.1F Desk Reference states that climate change is a global phenomenon that can have local impacts. Scientific measurements show that earth's climate is warming, with concurrent impacts including warmer air temperatures, increased sea level rise, increased storm activity, and an increased intensity in precipitation events. Research has shown there is a direct correlation between fuel combustion and greenhouse gas (GHG) emissions. GHGs include carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. Increasing concentrations of GHGs in the atmosphere affect climate change and GHG emissions from anthropogenic sources include the combustion of fossil fuels, including fuel from aircraft and other vehicles such as construction equipment. GHG emissions are reported in metric tons of carbon dioxide equivalent (CO₂e) (FAA 2023a). The FAA Order 1050.1F Desk Reference recommends consideration of: 1) the potential effects of a proposed action or its alternatives on climate change as indicated by its GHG

emissions; and 2) the implications of climate change for the environmental effects of a proposed action or alternatives (FAA 2023a). The increase in GHG emissions is primarily from human activity in five economic sectors, including transportation, electric power, industry, commercial and residential, and agriculture (FAA 2023b). Of the five major sectors nationwide, transportation accounts for the highest percent of GHG emissions (approximately 28 percent), followed by electricity (approximately 25 percent), and by industry (approximately 23 percent) (EPA 2024a).

For the Proposed Action, construction-related emissions are primarily associated with the exhaust from heavy equipment (e.g., backhoes, bulldozers, graders, etc.), delivery trucks (e.g., dump trucks, etc.), and construction worker vehicles getting to and from the construction site. These emissions are temporary in nature and generally confined to the construction site and the access/egress roadways. GHG emissions of concern from construction include CO₂, CH₄, N₂O, and CO₂e.

4.3.2 Environmental Consequences

The FAA has not established a significance threshold for climate. As noted in the FAA Order 1050.1F Desk Reference, the FAA has not identified specific factors to consider in making a significance determination for GHG emissions (FAA 2015). Given the ongoing scientific research being undertaken to improve the understanding of climate change, FAA's guidance notes that significance determination criteria "will evolve as the science matures or if new Federal requirements are established" (FAA 2015).

Proposed Action

Implementation of the Proposed Action would not result in a significant change in the type and number of vehicles beyond those currently occurring within the vicinity; therefore, no direct impacts to climate would occur as a result of maintenance of the new garage under the Proposed Action.

Construction activity as well as transportation of materials would temporarily increase GHG emissions associated with the equipment used for these activities (e.g., excavators, trucks, cranes). Because there is a direct relationship between the amounts of GHG emitted and fuel consumption, there would be a temporary increase in GHG emissions from gasoline and diesel fuel usage associated with construction activities. Typical expected quantities of GHG emissions from these types of activities can be determined using available data for similar construction and demolition projects to help assess potential climate change effects (see Section 4.1, Air Quality). The temporary increase in GHG emissions from this project would comprise a negligible fraction of the State of Wyoming's GHG emissions and would not represent a locally or regionally significant increase.

The Proposed Action would contribute GHGs only temporarily during construction, there would be no significant permanent increase in GHGs. Because the Proposed Action represents a negligible amount of GHG emissions in the U.S. and given the related uncertainties surrounding the assessment of these emissions on both a regional and global scale, the incremental contribution from the project to nationwide and global GHG emissions cannot be adequately assessed given the current assessment methodology.

No Action

Under the No Action Alternative, the garage would not be constructed and the existing land would remain the same. Therefore, there would be no changes to climate impacts beyond existing conditions.

4.4 Department of Transportation Act: Section 4(f)

4.4.1 Regulatory Setting and Affected Environment

According to the FAA Order 1050.1F Desk Reference, Section 4(f) the U.S. Department of Transportation Act of 1966 (now codified at 49 U.S.C. § 303) provides for the protection of significant publicly owned parks, recreation areas, wildlife or waterfowl refuges, and publicly or privately-owned historic sites of federal, state, or local significance eligible for listing on the National Register of Historic Places (NRHP). Section 4(f) protects these properties from *use* unless it is determined that there is no feasible and prudent alternative and a project includes all possible planning to minimize harm.

A Section 4(f) *use* would occur if the Proposed Action or alternative(s) would involve an actual physical taking of Section 4(f) property through purchase of land or a permanent easement, physical occupation of a portion or all of the property, or alteration of structures or facilities on the property.

A physical *use* may be considered *de minimis* if, after taking into account avoidance, minimization, mitigation, and enhancement measures, the result is either:

- 1) A determination that the project would not adversely affect the activities, features, or attributes qualifying a park, recreation area, or wildlife or waterfowl refuge for protection under Section 4(f); or
- 2) A Section 106 of the NHPA *finding of no adverse effect or no historic properties affected*.

A *de minimis* impact determination requires agency coordination and public involvement. For parks, recreation areas, and wildlife and waterfowl refuges, the officials with jurisdiction over the property must be informed of the FAA's intent to make a *de minimis* impact determination, after which the FAA must provide an opportunity for public review and comment. The public notice and opportunity for comment may be combined with similar public involvement efforts for the NEPA process. After considering any public comments and if the officials with jurisdiction concur in writing that the project would not adversely affect the activities, features, or attributes that make the property eligible for Section 4(f) protection, the FAA may finalize a *de minimis* impact determination. For historic sites under Section 106, the FAA must consult with the consulting parties identified in accordance with 36 CFR part 800 (Section 106's implementing regulations) and inform the officials with jurisdiction of the intent to make a *de minimis* impact determination. The officials with jurisdiction must concur in a *finding of no adverse effect or no historic properties affected*. Compliance with 36 CFR part 800 satisfies the public involvement and agency coordination requirement for *de minimis* findings for historic sites.

Section 303(c), Title 49 U.S.C., commonly referred to as Section 4(f) of the Department of Transportation Act of 1966 (DOT Section 4[f]), as amended, states that the "...Secretary of Transportation will not approve a project that requires the use of any publicly-owned land from a public park, recreation area, or wildlife and waterfowl refuge of national, state, or local significance or land from a historic site of national, state, or local significance as determined by the officials having jurisdiction thereof, unless there is no feasible and prudent alternative to the use of such land...and [unless] the project includes all possible planning to minimize harm resulting from the use."

The project area is located within the Five Springs area where it is designated for recreational use by the BLM and therefore qualifies as a Section 4(f)-eligible property.

4.4.2 Environmental Consequences

As stated above, Section 4(f) properties typically include publicly owned parks, recreation areas, wildlife and waterfowl refuges, public and private historic sites, and public lands with multiple uses, such as state and national forests, rivers, lakes, planned facilities, bikeways, and trails have multiple designated uses, including recreation, environmental conservation, and/or historic preservation. In general, actions that have the potential to affect Section 4(f) properties involve a *physical* or *constructive use* of such properties. A *physical use* results from a permanent or temporary taking of a DOT Section 4(f) resource, such as through purchase of land or alteration of property. A *constructive use* results from an action that does not physically take a property but impairs the attributes of a property that qualify it for protection under DOT Section 4(f), such as impacts related to noise, air pollution, or access restrictions.

Proposed Action

The FAA has completed the process of evaluating the potential impacts of the proposed construction on this section of BLM-administered public land within the Five Springs area and determined that the Proposed Action would result in a *de minimis use* of the property through permanent incorporation. Information and input were provided by the BLM which helped the FAA make this determination. The BLM concurred with this determination on March 20, 2025 (Appendix A).

Construction of the proposed garage facility within this portion of BLM-administered public lands would result in a *use* via permanent incorporation of this Section 4(f) property. However, the FAA has determined that, through the implementation of the terms of BLM's Decision Record document, the construction activities associated with the Proposed Action and the presence of the garage would not adversely affect the activities, features, or attributes that make the Five Springs area eligible for Section 4(f) protection and any such impacts are expected to be *de minimis* (BLM 2024c). Any increase in noise during construction would only be temporary and would not constitute a *constructive use*. Construction-related noise impacts would be temporary and minimal with no long-term impacts to the quiet natural setting. The Five Springs area is not expected to experience diminished visitation nor increased traffic resulting from the Proposed Action. Furthermore, the project area of 0.9-acres is miniscule when compared to the entirety of Five Springs area and would not substantially impair the protected activities, features, or attributes of this location.

No Action

Because no activities would occur under this alternative, there would be no direct, indirect, or cumulative impacts to Section 4(f) properties.

4.5 Hazardous Materials, Solid Waste, and Pollution Prevention

4.5.1 Regulatory Setting and Affected Environment

The FAA Order 1050.1F Desk Reference states that hazardous materials, solid waste, and pollution prevention as an impact category includes an evaluation of the following:

- Waste streams that would be generated by a project, potential for the wastes to impact environmental resources, and the impacts on waste handling and disposal facilities that would likely receive the wastes;
- Potential hazardous materials that could be used during construction and operation of a project, and applicable pollution prevention procedures;

- Potential to encounter existing hazardous materials at contaminated sites during construction, operation, and decommissioning of a project; and
- Potential to interfere with any ongoing remediation of existing contaminated sites at the proposed project site or in the immediate vicinity of a project site.

Federal agencies are directed by Executive Order 12088 - Federal Compliance with Pollution Control Standards, as amended, to comply with “applicable pollution control standards,” in the prevention, control, and abatement of environmental pollution; and consult with the EPA, state, interstate, and local agencies concerning the best techniques and methods available for the prevention, control, and abatement of environmental pollution. For the Proposed Action the most relevant statutes for complying with this standard are the Resource Conservation and Recovery Act (RCRA) (as amended by the Federal Facilities Compliance Act of 1992) and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended by the Superfund Amendments and Reauthorization Act of 1986 (Superfund) and the Community Environmental Response Facilitation Act of 1992. RCRA governs the generation, treatment, storage, and disposal of hazardous wastes. CERCLA provides for consultation with natural resource trustees and cleanup of releases of a hazardous substance (excluding petroleum) into the environment.

At the state level, the state’s hazardous waste management rules are administered and enforced by the WDEQ Solid and Hazardous Waste Division. The state has received RCRA authorization from the EPA.

There are no hazardous waste sites within the project area that are on or proposed for listing on the National Priorities List (NPL; EPA 2024b). Additionally, according to the EPA’s EnviroMapper database, there are no Superfund sites in the immediate vicinity of the project area (EPA 2024c).

4.5.2 Environmental Consequences

Significant impacts for hazardous materials, pollution prevention and solid waste are defined by FAA Order 1050.1F Desk Reference as those actions which involve property listed (or potentially listed) on the NPL. Also constituting a significant impact are actions that would have difficulty meeting applicable local, state, or Federal laws and regulations on hazardous materials or actions affecting sites known or suspected to be contaminated. Although the FAA has not established a significance threshold for Hazardous Materials, Solid Waste, and Pollution Prevention, they have identified factors to consider when evaluating impacts. These include assessing whether a project has the potential to violate applicable Federal, state, tribal or local laws or regulations regarding hazardous materials and/or solid waste management; produce an appreciably different quantity or type of hazardous waste; generate an appreciably different quantity or type of solid waste or use a different method of collection or disposal and/or would exceed local capacity; involve a contaminated site (including, but not limited to, a site listed on the NPL); or adversely affect human health and the environment.

Proposed Action

The Proposed Action would result in a short-term and temporary increase in the amount of hazardous materials primarily associated with the use of fuels, lubricants, and fluids for trucks and other construction site vehicles such as graders, bulldozers, and refueling trucks. During construction operations there is a potential for release of petroleum, hydraulic fluids, engine oil, and associated chemicals. BMPs would be implemented to contain any spills as a matter of practice and contractual obligation.

Construction-related solid waste would be generated during construction activities. The construction debris generated by the Proposed Action would be recycled or disposed of according to State and local regulations. Construction-related waste would temporarily increase on-site and would be transported to acceptable recycling or fill locations off-site.

The FAA would ensure compliance with applicable, state, or Federal laws and regulations on hazardous materials. There would be no significant impact of hazardous materials, pollution prevention, and solid waste as a result of implementing the Proposed Action.

Mitigation, Minimization, and Best Practices

The following measures and practices would be implemented to minimize potential impacts to hazardous materials, solid waste, and pollution:

- Develop a hazardous materials response plan and/or a spill prevention, control, and countermeasure plan (SPCC) to identify those precautions, training requirements, and response measures that would be taken to prevent and contain releases of hazardous materials.
- Employ source reduction strategies such as recovering, recycling, or composting waste materials.
- Find markets for recovered, recycled, or composted products, or other wastes that are usable for producing energy or other activities.
- Recycle construction debris associated with the action.
- Develop detailed plans for site-specific protocols on the handling, storage, and management of hazardous materials at the construction site and for transportation to and from the construction area.

In addition to those measures identified above, appropriate measures would be required during project execution to alert workers of the potential for contamination and to provide guidance for proper notification if a spill or release occurs. In the event of a spill or release, the site would cease operations until protective measures are implemented, and the appropriate regulatory authorities are consulted.

No Action

Under the No Action Alternative, the garage would not be constructed, and the existing land would remain the same. Therefore, there would be no increase in the use of hazardous materials and the generation of hazardous wastes and solid wastes would not occur.

4.6 Historical, Architectural, Archaeological and Cultural Resources

4.6.1 Regulatory Setting and Affected Environment

According to the FAA Order 1050.1F Desk Reference, historical, architectural, archeological, and cultural resources encompass a range of sites, properties, and physical resources relating to human activities, society, and cultural institutions. Such resources include past and present expressions of human culture and history in the physical environment, such as prehistoric and historic archaeological sites, structures, objects, districts, which are considered important to a culture or community. Historical, architectural, archeological, and cultural resources also include aspects of the physical environment, namely natural features and biota, which are a part of traditional ways of life and practices and are associated with community values and institutions.

Historic and cultural resources are protected by multiple federal regulations. NEPA, under 40 CFR Part 1508.8, requires federal agencies to consider the effects of actions on historic and cultural resources;

definitions of historic and cultural resources under NEPA are broad and can include resources not eligible for the NRHP (ACHP 2013).

The National Historic Preservation Act of 1966 (NHPA) (P.L. 89–665, as amended by P.L. 96-515, 54 U.S.C. § 300101 et seq.) directs the federal government to consider the effects of its actions on historic properties listed or eligible for listing in the NRHP under Section 106 through a compliance process, set forth in the law’s implementing regulations, 36 CFR Part 800. Conducting the Section 106 process in coordination with NEPA review of a federal action is an effective way to gather the information needed to assess broad impacts on historical, architectural, archeological, and cultural resources. Steps of the Section 106 compliance process include the following:

- 1) Establish whether the Proposed Action constitutes an undertaking. Per 36 CFR Part 800.16, an undertaking is an action funded in whole or in part under the direct or indirect jurisdiction of a federal agency. If the Proposed Action is an undertaking with the potential to affect historic properties, the appropriate State Historic Preservation Office (SHPO) or Tribal Historic Preservation Office (THPO) and other consulting parties (stakeholders), such as relevant Tribes, are identified and consulted with on the project in good faith.
- 2) Identify NRHP-listed or eligible properties. Eligible historic properties in the geographic area of the Proposed Action (also known as the area of potential effects [APE]) are identified and evaluated for significance, including properties potentially eligible or listed with the NRHP that may be affected by the Proposed Action. If historic properties are not present, the federal agency seeks concurrence of the SHPO/THPO in a 30-day review period and makes information available to other consulting parties.
- 3) Assess effects of the Proposed Action on eligible historic properties. If the assessment determines no historic properties or no adverse effect to eligible historic properties, the SHPO/THPO and other consulting parties are informed and given a 30-day review period. If the assessment determines actual or potential adverse effect to eligible historic properties, the SHPO/THPO and other consulting parties are notified for further consultation.
- 4) Resolve adverse effects to eligible historic properties through consultation with the SHPO/THPO, Advisory Council on Historic Preservation (ACHP), and other consulting parties, as necessary.

FAA Order 1050.1F does not provide a significance threshold for this impact category; however, the FAA has identified a factor to consider when evaluating the context and intensity of potential environmental impacts for historical, architectural, archeological, and cultural resources (see Exhibit 4-1 of FAA Order 1050.1F). This factor includes, but is not limited to, situations in which the proposed action or alternative(s) would result in a finding of Adverse Effect through the Section 106 process (FAA 2023a).

Under 36 CFR Part 800, it is the agency’s responsibility to define the APE on historic properties in consultation with the SHPO and seek the SHPO’s concurrence (36 CFR § 800.4(a)). The APE is “the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist.” The agency, in consultation with consulting parties, must identify within the APE historic properties that are either in, or eligible for listing in, the NRHP (36 CFR § 800.4(b)). The Proposed Action would take place within areas that have had minimal development. The proposed APE is approximately 3 acres and is comprised of the area where construction of the new garage is proposed, plus a 100-foot buffer around the proposed

construction area. Construction staging would occur on undisturbed areas with minimal subsurface disturbance. The APE will be confirmed through consultation with the SHPO per 36 CFR § 800.4(a)(1). The FAA is relying on the BLM's Section 106 consultation with the SHPO which was initiated on July 15, 2024. Correspondences from the BLM and SHPO are provided in Appendix A.

A *Class III Cultural Resources Inventory Report*, identified the Kane-Dalton Road (site 48BH1390) as a historic road eligible for the NRHP on the project site (Appendix B). Terra Alta Archaeology recommended the segment of road running through the project site as lacking integrity and therefore ineligible for the NRHP. There are no other previously identified cultural resources within the APE and the potential for buried resources is considered low (Terra Alta Archaeology 2024). Therefore, The Proposed Action would result in a finding of no Adverse Effect through the Section 106 process.

4.6.2 Environmental Consequences

In general, actions that have the potential to affect historic and cultural resources are those that involve modifications to land or buildings and structures, including construction, grading, excavation, maintenance, rehabilitation, and renovation, or the sale or lease of a historic property. Any project that would involve construction, ground disturbance, or modification of the exterior of a historic property, or a property in the viewshed of a historic property or district, may require consultation with the relevant SHPO/THPO and other consulting parties, as appropriate. Other effects to consider include noise, vibration, lighting, and increased traffic. The FAA has not established a significance threshold for historical, architectural, archeological, and cultural resources. FAA Order 1050.1F provides a factor to consider when evaluating potential impacts that is, the action would result in a finding of adverse effect through the Section 106 process.

Proposed Action

The APE is within BLM-administered public lands and has been largely undisturbed. This is not archaeologically sensitive area and the potential for buried resources is low (Terra Alta Archaeology 2024). Consultation under Section 106 of the National Historic Preservation Act with the Wyoming State Historic Preservation Office (SHPO) was initiated by the BLM. Based upon the BLM's Section 106 Programmatic Agreement with the Advisory Council on Historic Preservation (ACHP) and the National Conference of State Historic Preservation Officers (NCSHPO), the FAA is relying upon the BLM's determination that there are no historic properties within the Area of Potential Effects (APE). The SHPO has concurred that there are no adverse impacts to historic properties and cultural resources within the APE (Appendix A). Based on these factors, no adverse effects to historical, architectural, archeological, and cultural resources are anticipated.

Mitigation, Minimization, and Best Practices

The following measure would be implemented to reduce the potential effects of construction on unidentified archaeological resources:

- Develop an Inadvertent Discovery Plan prior to beginning project construction work to outline actions to be taken if cultural resources are discovered during project construction activities. If an inadvertent discovery of previously unidentified prehistoric or historic archaeological resources is made, work would stop immediately within a 100-foot radius of the find and the FAA will secure services of a qualified archaeologist to evaluate the resource and coordinate with the SHPO. A report evaluating the find and identifying mitigation for impacts would be prepared by the archaeologist and submitted to the BLM and FAA.

No Action

Under the No Action Alternative, a new garage would not be constructed and there would be no ground disturbing activities; therefore, there would be no potential for impacts to historical, architectural, archaeological, or cultural resources.

4.7 Land Use

4.7.1 Regulatory Setting and Affected Environment

Impacts to land use generally result from acquisition of property, conversion of land to a different use, or noise impacts associated with airport operations. Potential impacts of FAA actions may also affect land use compatibility (e.g., disruption of communities, relocation, induced socioeconomic impacts, land uses protected under Section 4(f) of the U.S. Department of Transportation Act). The impacts on land use, if any, should be analyzed and described under the appropriate impact category with any necessary cross references to the land use section. FAA Order 1050.1F Desk Reference states that the FAA has not established a significance threshold for land use, and the FAA has not provided specific factors to consider in making a significance determination for land use. The determination that significant impacts exist in the land use impact category is normally dependent on the significance of other impact categories. For example, Section 11.3.1 of the Desk Reference provides guidance on land use impacts in relation to aircraft noise. The Desk Reference states that if the proposal would result in other impacts that have land use ramifications, for example, disruption of communities, relocation, and induced socioeconomic impacts, the impacts on land use should be analyzed in these contexts and described accordingly under the appropriate impact category (FAA 2023a).

The proposed site is located on BLM-administered public lands within Big Horn County. Big Horn County does not have county wide zoning due to large swathes of publicly owned land from the BLM and U.S. Forest Service within its boundaries. The proposed site and surrounding areas are predominantly rural in character because of the proximity to the BNF and other BLM public lands. Approximately 19.5 miles east of Lovell, Wyoming, the proposed site is generally bounded by the present U.S. Highway 14A (Medicine Wheel Passage) to the north, the BNF to the east, Five Springs Creek to the south, and additional BLM-administered public lands to the west. The primary land uses west, east, and south of the proposed site are rural. Areas to the north of the proposed site are comprised of a mix of rural, recreational, and public land uses. The Five Springs Falls Campground is located approximately 0.5 miles north of the project area.

4.7.2 Environmental Consequences

The FAA has not established a significance threshold for land use, nor has the FAA provided specific factors to consider in making a significance determination for land use. The determination that significant impacts exist in the land use impact category is normally dependent on the significance of other impact categories (FAA 2015).

Proposed Action

For the proposed improvements that would occur on BLM-administered public lands, a lease would be procured by FAA to include the land area required to contain the garage. This would result in a land use change in that area from rural to commercial. The BLM has already issued a Notice to Proceed and their FONSI approving this change (BLM 2024b).

No Action

Under the No Action Alternative, the garage would not be constructed and there would be no impacts to land uses.

4.8 Natural Resources and Energy Supply

4.8.1 Regulatory Setting and Affected Environment

FAA Order 1050.1F Desk Reference describes the natural resources and energy supply impact category as related to 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). Consumption of natural resources and use of energy supplies may result from construction, operation, and/or maintenance of a proposed action. The Desk Reference identifies the following related to natural resources and energy supply: Energy Independence and Security Act (42 U.S.C. 17001 et seq.); Energy Policy Act (42 U.S.C. 15801 et seq.); and Executive Order 13834, Efficient Federal Operations, 83 Federal Register 23771. The Order states "It is the policy of the FAA... consistent with NEPA and the CEQ [U.S. Council on Environmental Quality] regulations, to encourage the development of FAA facilities that exemplify the highest standards of design including sustainability principles. All elements of the transportation system should be designed with a view to conservation of energy and other resources, pollution prevention, harmonization with the community environment, and sensitivity to the concerns of the traveling public" (FAA 2023a). Energy in the form of electricity, natural gas, aviation fuel, diesel fuel, and gasoline is required for the operation of aircraft and airport facilities. Additionally, new facility construction requires consumption of energy and natural resources.

There are no known natural resources or mineral or energy resources located within the project area. Electricity, materials, and water sources needed for construction shall be provided by the construction contractors.

Utility power for the proposed site shall be derived from Rocky Mountain Power and is transmitted and delivered through their power networks. Water resources will not be required for the operations of the new garage.

4.8.2 Environmental Consequences

The FAA has not established a significance threshold for natural resources and energy supply. The factor to consider is if "the action would have the potential to cause demand to exceed available or future supplies of these resources" (FAA 2015).

Proposed Action

The consumption of natural resources and energy supply would be required by the Proposed Action during both construction and operation. Energy in the form of electricity, gasoline, and diesel fuel would be consumed during construction, and, once operational, the Proposed Action would require additional energy use to provide heating, lighting, and electricity to the new garage. Existing nearby utility connections would be used and extensive underground utility work would not be necessary.

There is sufficient energy and resources to supply utilities to the facilities during construction and for operation. The Proposed Action would bring an increase in energy consumption related to maintenance of the new garage. However, the increase would not exceed the available supply of natural resources or energy available either locally or regionally. The anticipated increase in additional resources and energy

consumption required by the Proposed Action would not represent a significant additional demand on local utilities.

Construction of the Proposed Action would require typical construction materials and the use of energy and water for construction activities. Due to the lack of adequate supply of these resources, the construction contractor will provide any needed construction materials and other resources not readily available in the region. The Proposed Action would not involve the use of any unusual or scarce resources nor cause a demand for the use of any unusual or scarce resources in short supply. BMPs would be implemented to conserve water and power during construction to the extent possible and construction waste would be minimized by recycling construction materials when possible. As the Proposed Action would not result in use of natural resources or energy in excess of available supplies, implementation of the Proposed Action would not result in significant direct, indirect, or cumulative impacts on natural resources or energy.

No Action

Under the No Action Alternative, there would be no construction of the garage. The existing land would remain the same and would be assumed to result in no water, generation of waste, and electricity demand. Thus, there would be no changes to this resource.

4.9 Noise

4.9.1 Regulatory Setting and Affected Environment

The FAA Order 1050.1F Desk Reference states that noise is considered unwanted sound that can disturb routine activities (e.g., sleep, conversation, student learning) and can cause annoyance (FAA 2023a). Noise associated with aircraft and airport operations can adversely impact surrounding land uses that are noise sensitive. According to FAA Order 1050.1F, a noise sensitive area is “an area where noise interferes with normal activities associated with its use. Normally noise sensitive areas include residential, educational, health, and religious structures and sites, and parks, recreational areas, areas with wilderness characteristics, wildlife refuges, and cultural and historical sites” (FAA 2023a).

Roadway noise is generated by vehicles traveling on major and minor roads surrounding the general area, including but not limited to the old and present U.S. Highway 14A and an access road that are nearest to the project area. There are no residences adjacent to the project area; the closest residences are approximately 19.5 mile away in Lovell, Wyoming.

4.9.2 Environmental Consequences

FAA Order 1050.1F Desk Reference provides the FAA’s significance threshold for noise as an action that would increase noise by Day Night Average Sound Level (DNL) 1.5 decibels (dB) or more for a noise sensitive area. The project site is not considered to be a noise sensitive area. The FAA does not have a threshold of significance for construction noise. If appropriate, surface transportation impacts, including construction noise, should be conducted using accepted methodologies from the appropriate modal administration, such as the Federal Highway Administration for highway noise.

In general, special attention should be given to noise sensitive areas when developing mitigation. In addition, FAA 1050.1F notes that special consideration needs to be given to the evaluation of the significance of noise impacts on noise sensitive areas within Section 4(f) properties (including, but not limited to, noise sensitive areas within national parks; national wildlife and waterfowl refuges; and

historic sites, including traditional cultural properties) where the land use compatibility guidelines in 14 CFR part 150 are not relevant to the value, significance, and enjoyment of the area in question.

Proposed Action

The Proposed Action does not involve aircraft noise. The Proposed Action would not significantly change in the type and number of vehicles beyond those currently occurring within the vicinity; therefore, the Proposed Action would not result in direct or indirect vehicle-related noise impacts. Construction of the Proposed Action would result in temporary elevated noise levels from activities such as on-site construction equipment, personal vehicles used by construction employees to access parking areas, and delivery/haul trucks used for equipment and material delivery and haul trips. Present U.S. Highway 14A along with other access roads, would be used for hauling. Surrounding roadways would experience an increase in traffic and consequently traffic noise related to these activities, but traffic is not predicted to double in volume, and any increases in noise is not anticipated to be noticeable to average human hearing. Increases in traffic would be temporary in nature and would not result in significant impacts to noise receptors adjacent to the haul routes or surrounding roadways.

During construction of the Proposed Action, noise impacts are expected but would be generally localized at the vicinity of the construction site. Construction equipment and vehicles would result in localized increases in noise levels but would be temporary and would not disrupt normal airport operations or activities. There are no sensitive noise facilities (e.g., residences and schools) located within 500 feet of the project. The closest residences are approximately 19.5 mile west of any construction activities. Given this distance and the presence of a single highway, construction related noise would not be noticeable at any residences. The construction phase of this project is expected to create a temporary and negligible increase in noise in the vicinity of the project area. The increased noise would last for the duration of construction activities during authorized hours of operation. Therefore, the Proposed Action would not have a significant noise or noise-compatible land use impact.

Mitigation, Minimization, and Best Practices

Although there would be no significant noise impacts from construction of the Proposed Action, the following measures would be implemented to reduce the potential effects of construction noise:

- Use operational controls, such as limiting vehicle engine idling on-site and time-of-day restrictions for certain activities.
- Use quieter or ambient-sensitive back-up alarms on construction equipment whenever practical.
- Use noise pathway controls, including noise barriers and enclosures free from gaps and holes, placed as close as possible to construction areas.
- Use complaint response procedures.

No Action

Under the No Action Alternative, a new garage would not be constructed; therefore, there would be no noise impacts.

4.10 Socioeconomics, and Children's Environmental Health and Safety Risks

4.10.1 Regulatory Setting and Affected Environment

4.10.1.1.1 Socioeconomics

The FAA Order 1050.1F Desk Reference describes socioeconomics as an umbrella term used to describe aspects of a project that are either social or economic in nature, or a combination of the two. A

socioeconomic analysis evaluates how elements of the human environment such as population, employment, housing, and public services might be affected by a proposed action. According to FAA Order 1050.1F Desk Reference, a significance threshold for socioeconomics has not been established by the FAA; however, factors have been identified to consider when evaluating potential environmental impacts for socioeconomics including situations in which the action has a potential to result in the following: 1) Induce substantial economic growth in an area, either directly or indirectly (e.g., through establishing projects in an undeveloped area); 2) Disrupt or divide the physical arrangement of an established community; 3) Cause extensive relocation when sufficient replacement housing is unavailable; 4) Cause extensive relocation of community businesses that would cause severe economic hardship for affected communities; 5) Disrupt local traffic patterns and substantially reduce the levels of service of roads serving an airport and its surrounding communities; and 6) Produce a substantial change in the community tax base (FAA 2023a).

4.10.1.1.2 Children's Environmental Health and Safety Risks

Pursuant to Executive Order 13045 - Protection of Children from Environmental Health Risks and Safety Risks 62 Federal Register 19885, (April 21, 1997), federal agencies are directed, as appropriate and consistent with the agency's mission, to make it a high priority to identify and assess environmental health risks and safety risks that may disproportionately affect children. The FAA is encouraged to identify and assess environmental health risks and safety risks that the agency has reason to believe could disproportionately affect children. Environmental health risks and safety risks include risks to health or to safety that are attributable to products or substances 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. No significance threshold for impacts to children's environmental health and safety has been established by the FAA; however, whether or not an action would have the potential to lead to a disproportionate health or safety risk to children following has been identified for consideration (FAA 2023a).

4.10.2 Environmental Consequences

The FAA has not established significance thresholds for socioeconomics, and children's environmental health and safety; however, the FAA has identified factors to consider when evaluating the context and intensity of potential environmental impacts for socioeconomics, and children's environmental health and safety (see Exhibit 4-1 of FAA Order 1050.1F). The determination that significant impacts exist in the socioeconomic impact category is normally dependent on whether the potential socioeconomic impact(s) are interrelated with or inseparable from a physical or natural environmental effect. Note these factors are not intended to be thresholds. If these factors exist, there is not necessarily a significant impact; rather, the FAA must evaluate these factors considering context and intensity to determine if there are significant impacts (FAA 2015).

Proposed Action

The project area is contained entirely within BLM-administered public lands. No businesses, residences, or other properties are located within the immediate project area. There would be minor, temporary economic benefits from additional construction jobs, but no substantial or significant economic growth in the area would occur as a result of the Proposed Action.

There is no Census Tract that encompasses the surrounding area of the Proposed Action's location to define the study area for the analyses of these resources.

The Proposed Action would not change the type and number of vehicles beyond those currently occurring within the vicinity; therefore, operation of the Proposed Action would not result in release in environmental contaminants, an increase in air pollutant emissions, or an increase in noise. The Proposed Action would not involve land acquisition, relocation of any children or other individuals, or result in the disruption of any existing communities. The Proposed Action would be located entirely on BLM-administered public lands with no community present to disrupt or divide. The project is not expected to significantly affect environmental resources of the airport or create any substances that could be harmful to children if ingested or encountered. Overall, the Proposed Action would not have any direct or indirect impacts that would adversely impact environmental health and safety of children.

No Action

Under the No Action Alternative, a new garage would not be constructed, and there would be no effect on socioeconomic issues. The No Action Alternative would not result in any changes, and thus would not affect the environmental health and safety of children.

4.11 Visual Effects

4.11.1 Regulatory Setting and Affected Environment

The FAA Order 1050.1F Desk Reference states that visually protected resources can be located within or near a project area and could be affected by light emissions and/or changes to visual resources and the visual character. The Desk Reference states that visual effects deal broadly with the extent to which a proposed action 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 environment. Light emissions include any light that emanates from a light source into the surrounding environment, such as airfield lighting, navigational aids, terminal lighting, parking facility lighting, and roadway lighting. Glare is a type of light emission that occurs when light is reflected off a surface (e.g., window glass, solar panels, or reflective building surfaces). No light sensitive areas are located within the project area. There is no nighttime lighting found within the vicinity of the project site.

Visual resources include buildings, sites, traditional cultural properties, and other natural or manmade landscape features that are visually important or have unique characteristics. Visual resources may include structures or objects that obscure or block other landscape features. Visual character refers to the overall visual makeup of the existing environment where a proposed project would be located. For example, areas in close proximity to densely populated areas generally have a visual character that could be defined as urban, whereas less developed areas could have a visual character defined by the surrounding landscape features, such as open grass fields, forests, mountains, or deserts, etc. (FAA 2023a).

The project site is located in the viewshed of a designated scenic vista or state scenic highway; it is located in close proximity to the BNF and the Five Springs Falls Campground on higher elevation. The proposed garage will be a notable visual feature within the project area, but the level of change to the landscape can be moderate. Maintenance activities may attract attention but should not dominate the view of the casual observer.

4.11.2 Environmental Consequences

The FAA has not established a significance threshold for visual effects in the FAA Order 1050.1F Desk Reference; however, the following factors have been identified for consideration when evaluating potential environmental impacts for visual effects: 1) Light Emissions Effects – The degree to which the action would have the potential to create annoyance or interfere with normal activities from light emissions; and the degree to which the action would have the potential to affect the visual character of the area due to the light emissions, including the importance, uniqueness, and aesthetic value of the affected visual resources; and 2) Visual Resources and Visual Character Effects – The degree to which the action would have the potential to affect the nature of the visual character of the area, including the importance, uniqueness, and aesthetic value of the affected visual resources; the degree to which the action would have the potential to contrast with the visual resources and/or visual character in the study area; and the degree to which the action would have the potential to block or obstruct the views of visual resources, including whether these resources would still be viewable from other locations.

Proposed Action

The Proposed Action would construct a new garage which has a height of approximately 20 feet AGL, building footprint of 60 feet by 60 feet (3,600 square feet), and a fenced area of 80 feet by 80 feet (6,400 square feet). The Proposed Action would likely affect the nature of the visual character of the area through the garage's blocky structure with vertical, horizontal, and diagonal lines into the landscape post-construction. There will be no external nighttime lighting constructed with the Proposed Action.

Construction activities are not anticipated to cause impacts from light emissions or to visual resources and/or visual character of the area surrounding the project site. Construction activities would occur primarily during daylight hours.

Mitigation, Minimization, and Best Practices

As noted on the BLM's EA, the proposed garage shall be painted with the Standard Environmental Color Carlsbad Canyon. The color selection utilized will minimize the visual contrast of the facility and partially retain the existing character of the landscape.

Construction activities would be conducted during daylight hours to the extent possible to minimize potential construction effects.

No Action

Under the No Action Alternative, the new garage would not be constructed. There would be no impacts from light emissions or to visual resources and visual character.

4.12 Water Resources

4.12.1 Regulatory Setting and Affected Environment

The FAA Order 1050.1F Desk Reference describes water resources as surface waters and groundwater that are important in providing drinking water and in supporting recreation, transportation and commerce, industry, agriculture, and aquatic ecosystems. Surface water, groundwater, and floodplains do not function as separate and isolated components of the watershed, but rather as a single, integrated natural system. Because of the close and integrated relationship of these resources, their analysis is conducted under the all-encompassing water resources impact category. The overall

hydrology of the site is largely unmodified due to the BLM-administered public lands left in its natural state.

Floodplains

Floodplains are lowland areas adjoining inland and coastal waters that are periodically inundated by flood waters (FAA 2023a). Floodplain data was retrieved from the Federal Emergency Management Agency (FEMA) Flood Map Service Center. FEMA Flood Insurance Rate Map Panel 56003C0350D (effective February 19, 2014) indicates portions of project site are located within the 500-year floodplain (FEMA 2020). FAA Order 1050.1F states that floodplain impacts would be significant if: The action would cause notable adverse impacts on natural and beneficial floodplain values. Natural and beneficial floodplain values are defined in Paragraph 4.k of DOT Order 5650.2, Floodplain Management and Protection. The project area consists mainly of areas that are impervious. The project site is in a Zone X area with a reduced flood risk due to the land designated as an area of minimal flood hazard.

Surface Water

Surface waters include streams, rivers, lakes, ponds, estuaries, and oceans. FAA Order 1050.1F Desk Reference states that a significant impact exists if the action would: 1) Exceed water quality standards established by federal, state, local, and tribal regulatory agencies; or 2) Contaminate public drinking water supply such that public health may be adversely affected.

The proposed site lies within the larger Wind/Big Horn River Basin watershed (HUC_12 code 10080010) and primarily situated within the perennial Five Springs Creek subwatershed (HUC_12 code 100800100401) which encompasses a total of 14,510.5 acres. There are no surface waters within the project area. The Five Springs Creek, which is approximately 0.5 mile south of the project area, is the nearest surface water to the project area. The flow direction of the Five Springs Creek is from east to west from the Bighorn Mountains. Inflow to the Five Springs Creek consists of multiple springs discharging groundwater to the surface as well as precipitation in the form of rainfall and snowmelt. Maximum streamflow discharges are during the spring and early summer as a result of snowmelt runoff.

Groundwater

Groundwater is water that does not evaporate, run off, or transpire, and filters through the soil and subsurface (FAA 2023a). FAA Order 1050.1F Desk Reference states that a significant impact to groundwater exists if the action would: 1) Exceed groundwater quality standards established by federal, state, local, and tribal regulatory agencies; or 2) Contaminate an aquifer used for public water supply such that public health may be adversely affected. The project area for groundwater includes all areas where the ground could be disturbed by construction of the Proposed Action, where impervious surfaces could change rates of groundwater infiltration, where construction vehicles and other equipment could potentially impact groundwater, and where commercial operations could increase spills or leaks.

The depth to first groundwater at the project site is approximately 19.5 feet below ground surface (JB Engineers 2024). Water levels will fluctuate up and down depending on precipitation levels, streamflow, snowmelt, as well as infiltration from the N&S Supply Ditch located due east of the project site. While there are no active water production wells on the project site, one active well is present within 1,500 feet south-southeast (Wyoming State Geological Survey 2024). The project site is not located over an EPA designated sole source aquifer. The closest sole source aquifer – The Yellowtail Reservoir, Big Horn

County – is located approximately 9 miles west of the project site. A geotechnical report detailing surface and subsurface conditions is provided in Appendix B.

4.12.2 Environmental Consequences

FAA Order 1050.1F Desk Reference provides the FAA’s significance threshold for floodplains, surface water, and groundwater. For floodplains, a significant impact would occur when the action would “cause notable adverse impacts on natural and beneficial floodplain values,” as defined in Paragraph 4.k of DOT Order 5650.2, Floodplain Management and Protection (FAA 2015). For surface water, a significant impact would occur when the action would “exceed water quality standards established by federal, state, local, and tribal regulatory agencies; or contaminate public drinking water supply such that public health may be adversely affected” (FAA 2015). For groundwater, a significant impact would occur when the action would “exceed groundwater quality standards established by federal, state, local, and tribal regulatory agencies; or contaminate an aquifer used for public water supply such that public health may be adversely affected” (FAA 2015).

Proposed Action

The Proposed Action would not modify the existing floodplain and there would be no notable adverse impacts to natural and beneficial floodplain values. No surface water resources would be directly or indirectly impacted to construct the new garage. The Proposed Action is located on existing pervious areas where stormwater runoff would continue to flow towards the Five Springs Creek through the N&S Supply Ditch. The minor alterations in the drainage pattern associated with the Proposed Action would not substantially alter the overall drainage pattern of the natural environment.

Construction activities would include ground disturbance for the garage and gravel-based access road which would increase the potential for sediments and other pollutants to be present in stormwater runoff. The Proposed Action would not result in withdrawal of groundwater, create any new wells supplying water to facilities, or cause any reduction in groundwater levels that could impact other groundwater users in surrounding locations. The Proposed Action would not have a significant impact on groundwater.

Mitigation, Minimization, and Best Practices

There are no significant impacts anticipated to floodplains, surface waters, or groundwater; however, minimization and avoidance measures in the form of BMPs would be implemented to further reduce potential impacts from the Proposed Action. Some of these are summarized below:

- Procurement of a National Pollutant Discharge Elimination System (NPDES) from the WDEQ.
- Post-construction stormwater controls would be constructed to reduce stormwater runoff and pollutant loads in compliance with the Clean Water Act.
- Construction General Permits would be required for stormwater discharges during construction activities.
- An erosion and sediment control plan would be included with BMPs for reducing impacts to surface runoff and the drainage system during construction. Control measures would include soil stabilization practices, sediment control practices, wind erosion control practices, sediment tracking control practices, and waste management and disposal control practices.

No Action

Under the No Action Alternative, the new garage would not be constructed and there would be no impacts to floodplains, surface waters, and groundwater.

4.13 Cumulative Impacts

This section describes the cumulative impacts of the Proposed Action to those resources where potential impacts have been identified – namely air quality; biological resources; and hazardous materials, solid waste, and pollution prevention – as described above. Cumulative impacts to environmental resources result from incremental effects of the Proposed Action when combined with other past, present, and reasonably foreseeable future projects in the area. Cumulative impacts can result from individually minor, but collectively substantial, actions undertaken over a period of time by various agencies (Federal, state, and local) or individuals (CEQ, 40 CFR 1508.7). In accordance with NEPA, a discussion of cumulative impacts resulting from projects that are proposed, under construction, recently completed, or planned for implementation in the near future is required. The No Action Alternative serves as the reference point for which cumulative impacts are measured.

The Proposed Action would result in minor impacts to air quality, biological resources, and hazardous materials, solid waste, and pollution prevention, and these resources were analyzed with other projects occurring within the past (five years), present, and reasonably foreseeable future (five years) to determine whether the cumulative effects would cause any significant environmental effect.

FAA Order 1050.1F Desk Reference provides guidance for determining significance under NEPA. An EA is required to discuss the potential direct, indirect, and cumulative effects of a proposed action and their significance and determine whether a Proposed Action would cause a cumulative impact when assessed in conjunction with other projects within defined temporal and geographic boundaries. In determining the significance of the cumulative effects, the same thresholds of significance used in identifying individual project-related impacts apply. The incremental direct and indirect impacts associated with the Proposed Action were considered with the direct and indirect effects of other projects to determine whether they would cause additive or synergistic effects.

A number of construction, reconstruction, and demolition projects have occurred within the vicinity of the project site over the last five years and several more are planned in the near future. All of these construction projects have similar effects as described by the Proposed Action and no cumulative impacts are anticipated. The list of past, present, and reasonably foreseeable future actions is derived from previous site visits and observations.

Past and Present Actions

- Road maintenance of present U.S. Highway 14A.
- Construction of an emergency runaway truck ramp on U.S. Highway 14A.

Reasonably Foreseeable Actions

- Road improvements to the old U.S. Highway 14A
- Renovations and improvements to the Five Springs Falls Campground

Air Quality

The Proposed Action would produce some occasional dust in the air and vehicle emissions during construction and demolition phases. Planned construction and demolition projects within the project

site's vicinity would also produce similar effects on air quality from dust and vehicle emissions. The cumulative effects of all construction activity within the project site's vicinity would depend on the timing of the various projects.

All construction projects would be required to obtain any required construction permits and adhere to any permit stipulations intended to minimize effects to air quality. The incremental increase in emissions from the Proposed Action when added to other past, present, and reasonably foreseeable emission sources in the vicinity would not produce a cumulative impact on air quality.

Biological Resources

The Proposed Action is not anticipated to contribute to significant cumulative impacts to biological resources when considered in combination with other past, present, and reasonably foreseeable projects. During construction of the Proposed Action, ground disturbance would occur and would convert 0.9-acres of natural land into a garage space and other pervious surfaces. No permanent habitat impacts have occurred at the Proposed Action location. There are no federal listed species present in the study area and state listed species would not be further impacted by the Proposed Action. In summary, no cumulative impacts would occur to protected species or to habitat critical to the survival of protected species as the project site and surrounding area is not suitable habitat for listed species.

Hazardous Materials, Solid Waste, and Pollution Prevention

The Proposed Action would construct a new garage and not result in a significantly increased infrastructure. Hazardous materials would be associated with equipment required for construction and maintenance of the proposed facility. Planned maintenance and construction projects for the Lovell ARSR facility would also introduce hazardous materials associated with construction activities to the area, but adherence to Federal and State hazardous materials regulations coupled with BMPs to reduce pollution and solid waste would prevent any significant cumulative effects from occurring.

5 Public Outreach, Agency Coordination, and Tribal Consultation

This chapter summarizes the public outreach, agency coordination, and tribal consultation that occurred for this project.

5.1 Public Outreach

The proposed project was initially presented to the public during the NEPA process when a separate EA was listed on the BLM's ePlanning website. The FAA provided another opportunity for public comments regarding DOT Section 4(f) compliance. Based on the size and routine nature of the proposed project, the BLM and FAA determined that external scoping was not necessary. No public comments were provided during the BLM's and FAA's public review period.

5.2 Agency Coordination

The FAA has an undertaking under the Proposed Action. Consultation under Section 106 of the National Historic Preservation Act with the Wyoming State Historic Preservation Office (SHPO) was initiated by the BLM. Based upon the BLM's Section 106 Programmatic Agreement with the Advisory Council on Historic Preservation (ACHP) and the National Conference of State Historic Preservation Officers (NCSHPO), the FAA is relying upon the BLM's determination that there are no historic properties within the Area of Potential Effects (APE). The SHPO has concurred that there are no adverse impacts to historic properties and cultural resources within the APE (Appendix A).

5.3 Tribal Consultation

No Tribal consultation letters were prepared for this EA nor the BLM's EA. However, the FAA remains committed to addressing Tribal concerns should any be forthcoming.

6 References

- Advisory Council on Historic Preservation (ACHP). 2013. *NEPA and NHPA: A Handbook for Integrating NEPA and Section 106*. https://www.achp.gov/sites/default/files/2017-02/NEPA_NHPA_Section_106_Handbook_Mar2013_0.pdf
- Bureau of Land Management (BLM). 2024a. Federal Aviation Administration Building Environmental Assessment, August 2024. https://eplanning.blm.gov/public_projects/2034227/200628459/20119549/251019529/EA_106367389.pdf
- BLM. 2024b. Federal Aviation Administration Building WYWY106367389, Finding of No Significant Impact (FONSI), August 2024. https://eplanning.blm.gov/public_projects/2034227/200628459/20119547/251019527/FONSI_WY_WY-106367389.pdf
- BLM. 2024c. Federal Aviation Administration Building WYWY-106367389, Decision Record (DR), August 2024. https://eplanning.blm.gov/public_projects/2034227/200628459/20119548/251019528/Decision%20Record_WYW106367389.pdf
- Council on Environmental Quality (CEQ). 2023. National Environmental Policy Act Guidance on Consideration of Greenhouse Gas Emissions and Climate Change. January 9, 2023. <https://www.federalregister.gov/documents/2023/01/09/2023-00158/national-environmental-policy-act-guidance-on-consideration-of-greenhouse-gas-emissions-and-climate>
- Environmental Protection Agency (EPA). 2024a. Sources of Greenhouse Gas Emissions by Economic Sector in 2022. <https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions>.
- EPA. 2024b. United State Environmental Protection Agency, Superfund National Priority List (NPL) Sites – by State, <https://www.epa.gov/superfund/national-priorities-list-npl-sites-state#WY>. Accessed November 20, 2024.
- EPA. 2024c. EnviroMapper database. <https://geopub.epa.gov/myem/efmap/index.html?ve=7,44.5268190157689,-107.99520934128236&pText=Big%20Horn%20County,%20Wyoming&miny=43.948819015769&minx=-108.573209341282&maxy=45.104819015769&maxx=-107.417209341282>. Accessed November 20, 2024.
- EPA. 2024d. EJSCREEN: Environmental Justice Screening and Mapping Tool. <https://www.epa.gov/ejscreen>.
- Federal Aviation Administration (FAA). 2015. FAA Order 1050.1F - Environmental Impacts: Policies and Procedures. https://www.faa.gov/documentLibrary/media/Order/FAA_Order_1050_1F.pdf.
- FAA. 2023a. Order 1050.1F Desk Reference – Federal Aviation Administration Office of Environment and Energy (Version 3). <https://www.faa.gov/media/31111>.
- FAA. 2023b. Bipartisan Infrastructure Law (BIL) Airport Traffic Control Tower (ATCT) Replacement Program Programmatic Environmental Assessment. September 2023.
- FAA. 2024. Statement of Work for Garage Construction Project. January 2024.

Federal Emergency Management Agency (FEMA). 2024. Flood Map Service Center, updated 2023. Panel 56003C0350D (effective February 19, 2024).

Fish and Wildlife Service (FWS). 2024. IPaC Information for Planning and Consultation. <https://ipac.ecosphere.fws.gov/location/CSMPEZENHJDWXEYVADRRUBOC6M/resources>. Accessed November 20, 2024.

JB Engineers. 2024. Geotechnical Engineering Report, New Storage Garage Near 5 Springs Campground, Big Horn County, Wyoming, August 19, 2024.

Terra Alta Archaeology. 2024. Class III Cultural Resources Survey of Federal Aviation Administration Building near Five Springs Road, August 2024.

Wyoming State Geological Survey. 2024. Groundwater Atlas of Wyoming. <https://portal.wsgs.wyo.gov/arcgis/apps/webappviewer/index.html?id=181c32a872a346bfae3579a62230a65a>. Accessed November 22, 2024