

CHAPTER 1

INVENTORY OF EXISTING CONDITIONS

The inventory of existing conditions documents the 2023 conditions at Southwest Wyoming Regional Airport (RKS or Airport). This chapter identifies and provides the baseline for facilities and services at the Airport. Information was collected in several ways, including an airport site visit in May 2023, and a review of the Airport records. This information is used for analysis throughout the different phases of the Airport Master Plan. This chapter is organized into the following sections:

- Airport Overview
- Airside Facilities - accessible to and in support of aircraft
- Landside Facilities - facilities accessible to and in support of people and the logistics of airport operations
- Climate – Wind and Weather Conditions
- Environmental Overview
- Inventory Summary

1.1 AIRPORT OVERVIEW

This section provides an understanding of the Airports' geographical location, operational characteristics, and a brief history. An airport overview summary is provided in **Table 1.1**.

Table 1.1

AIRPORT OVERVIEW

Airport Attributes	Description
Airport Sponsors	City of Rock Springs/Sweetwater County/Sweetwater County Airport Joint Powers Board
NPIAS Airport Classification	Nonhub, Primary
WYDOT Classification	Commercial Service
Acreage	1,242 acres
Airport Reference Point	N 41°35'39.18" W 109°03'54.72"
Elevation	6,764.57 feet

Source: FAA Airport Data Information Portal, 2015 ALP

1.1.2 AIRPORT LOCATION

The Airport is located approximately eight miles east of the city of Rock Springs, in Sweetwater County, Wyoming (**Figure 1.1**). RKS is accessed by Interstate 80, to Highway 370, and is located directly off the highway.

Sweetwater County is in southwest Wyoming and was established in 1869, though the boundaries of the county continued to be adjusted as the Wyoming Territorial Legislation dictated. Green River was established as the county seat in 1875 and remains so today.¹ Rock Springs is the largest city in Sweetwater County and the fifth largest in the State.² Coal mining brought settlers as early as 1850, and has since been replaced by natural gas, oil, and mineral production.³

The Airport is one of nine commercial service airports in Wyoming. The next closest commercial service airport is Riverton Regional Airport, approximately 92 nautical miles (nm) to the north. Fort Bridger Airport, 61 nm west of RKS is the next closest airport with instrument approach procedures (IAP).

The Airport is included in the National Plan of Integrated Airport Systems (NPIAS) and classified as a commercial service, nonhub, primary airport.⁴ This category of airport generally has more than 10,000 commercial enplanements (passenger boardings) per year but accounts for less than 0.05 percent of the nation's total enplanements. These airports also support significant use by general aviation. The 2016 Wyoming State Aviation System Plan classifies RKS as a commercial airport, which category serves major populations, economic centers, and areas of tourism providing a connection to national and global economies.

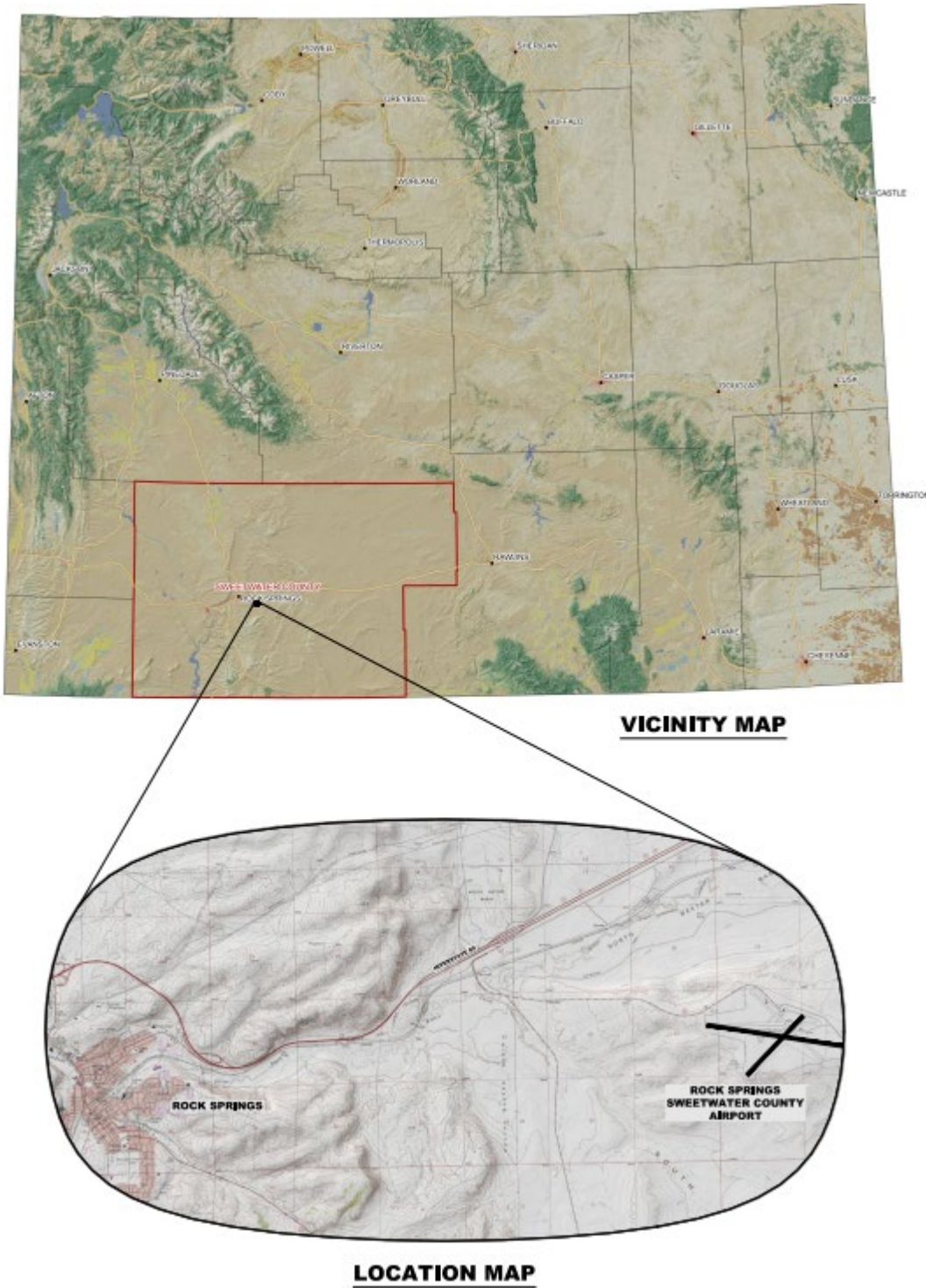
¹ Wyoming Historical Society, Accessed June 2023, [Sweetwater County, Wyoming | WyoHistory.org](https://www.wyohistory.org)

² Wyoming Demographics, Accessed June 2023, [Wyoming Cities by Population \(wyoming-demographics.com\)](https://www.wyoming-demographics.com)

³ Wyoming Historical Society, Accessed June 2023 [Rock Springs, Wyoming | WyoHistory.org](https://www.wyohistory.org)

⁴ Acronyms and terms used throughout the Master Plan document are provided in **Appendix A**.

Figure 1.1
AIRPORT LOCATION AND VICINITY



Source: Ardurra (2023)

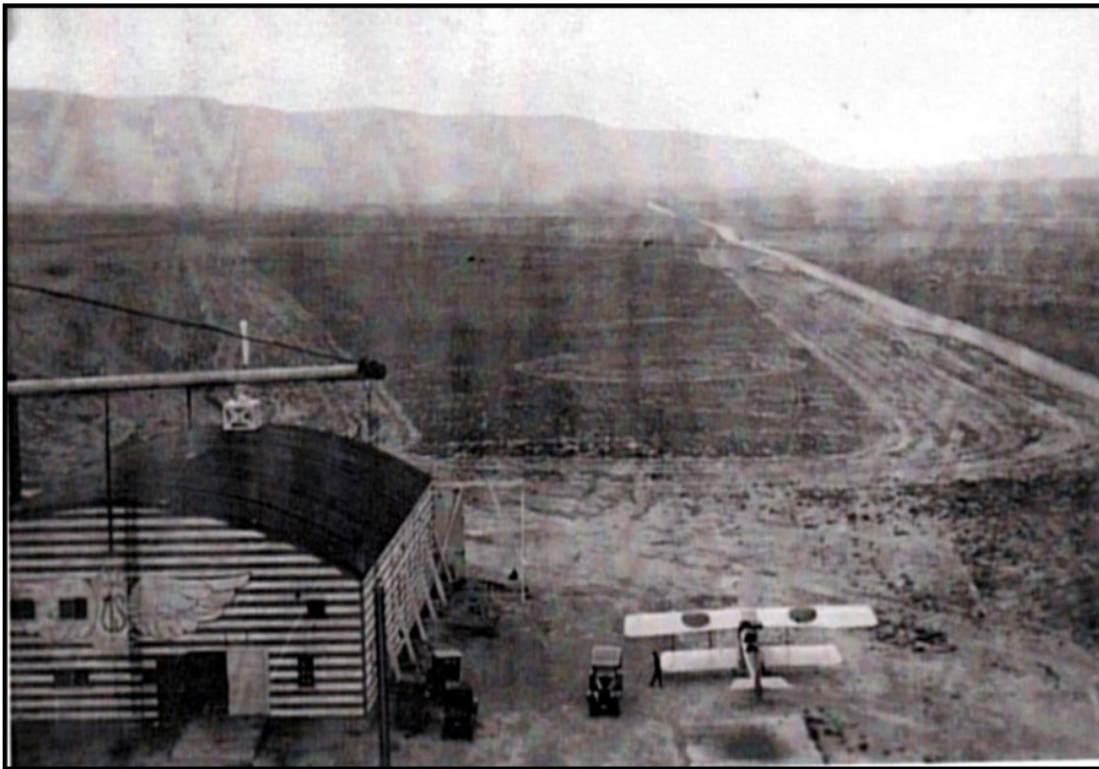
1.1.3 HISTORY

The original airfield was located approximately four miles north of the downtown area, near the Sweetwater County Fairgrounds and the White Mountain Golf Course. The development of the airfield began in 1920 to be used by the United States Airmail Service as the route was expanded to form the transcontinental system.

Figure 1.2 is a photo of the original Rock Springs Airmail Airport. The Airport supported the US Airmail Service until 1928 when the route was commercialized and won by the newly formed United Airlines (UAL). Rock Springs Airmail Airport then became a stopover for the UAL transcontinental airline route. In June of 1931, Amelia Earhart used the Airport as a stopover point while making the transcontinental flight, **Figure 1.3**. By the 1940s the original airmail airport had outgrown the needs as aircraft got larger and the number of operations increased. It was decided that a new airport would be built eight miles east of Rock Springs and was conditionally opened by February of 1942 and is the location of the existing airport. ⁵

Figure 1.2

ORIGINAL ROCK SPRINGS AIRMAIL AIRPORT



Source: 2015 Rock Springs Airport National Register of Historic Places Site Assessment Report

⁵ 2015 Rock Spring Airport Historic Hangar and Terminal, National Register of Historical Places Site Assessment report (15-WAS-197

Figure 1.3

AMELIA EARHART STOPOVER



Source: 2015 Rock Springs Airport National Register of Historic Places Site Assessment Report

1.1.4 RECENT HANGAR DEVELOPMENT

Table 1.2 summarizes the FAA grant history, and **Table 1.3** summarizes the grant history from WYDOT.

Table 1.2

FAA GRANT HISTORY 2012-2022

Year	Project Description	Grant Amount
2012	Construct Taxiway	\$3,721,099
2012	Wildlife Hazard Assessments	\$93,720
2013	Rehabilitate Runway	\$1,089,998
2014	Acquire Aircraft Rescue & Fire Fighting Vehicle	\$727,863
2014	Rehabilitate Runway	\$206,250
2015	Improve Runway Safety Area	\$805,000
2016	Install Airfield Guidance Signs	\$30,000
2016	Modify Service Road	\$64,000
2016	Rehabilitate Runway	\$4,051,161
2016	Rehabilitate Runway Lighting	\$325,000
2017	Construct GA Terminal Building	\$2,003,387
2019	Install Miscellaneous NAVAIDS	\$200,000
2019	Reconstruct Taxiway	\$1,375,000
2019	Rehabilitate Taxiway	\$3,007,105
2019	Rehabilitate TW A & B and Upgrade Lights	\$500,000
2019	Acquire Aircraft Rescue & Fire Fighting Safety Equipment	\$23,304
2020	CARES Act Funds	\$1,094,717
2020	Construct Snow Removal Equipment Building	\$3,200,000
2020	CRRSA Act Concessions	\$5,152
2021	CRRSA Act Funds	\$1,008,208
2021	Expand Commercial Terminal Building	\$7,893,334
2021	General ARPA	\$1,118,564
2021	Improve/Modify/Rehabilitate Terminal Building	\$4,920,506
2021	Expand Terminal Building	\$493,550
2022	Large Concessions	\$4,122
2022	Small Concessions	\$16,487

Source: FAA, Airport Improvement Program (AIP), Grant Histories (2023)



Table 1.3

WYDOT GRANT HISTORY

Year	Project Description	Grant Amount
2018	2018 Marketing	\$50,000
2019	2019 Aviation Encouragement	\$2,500
2019	2019 Marketing	\$80,000
2019	Seal Coat and Mark Pavements	\$210,000
2020	Acquire SRE (Multi-function Unit)	\$725,660
2020	Acquire Marking Equipment	\$30,000
2020	2020 Marketing	\$80,000
2020	2020 Aviation Encouragement	\$2,500
2021	Rehabilitate TW A & B and Upgrade Lighting	\$5,420,912
2021	Seal Coat and Mark Pavements	\$709,000
2021	2021 Marketing	\$80,000
2022	Construct Fuel System, Site Preparation	\$839,465

Source: WYDOT BlackCat (2023)

1.2 AIRSIDE FACILITIES

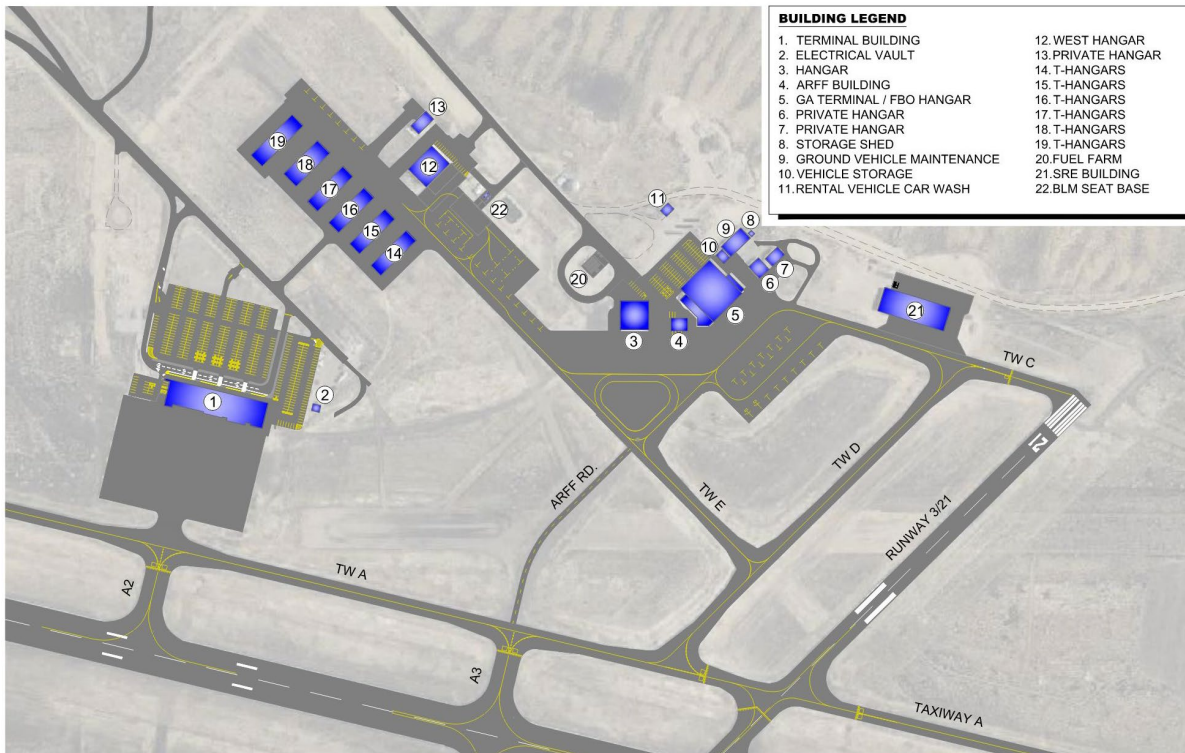
1.2.1 EXISTING RUNWAY AND TAXIWAY SYSTEM

The airfield facilities include both runways, the taxiway system, navigational aids (NAVAIDS), and other support facilities relevant to aircraft activities. RKS is equipped with two active runway surfaces, Runway 9/27, and Runway 3/21.

Runway 9/27 is the primary runway at 10,000 feet long by 150 feet wide and is used by commercial, cargo, military, and general aviation aircraft. The runway is a precision runway with High Intensity Runway Lights (HIRL).

Runway 3/21 is the crosswind runway at 5,228 feet long by 75 feet wide and is used for mostly small, general aviation aircraft during high crosswind conditions. The runway is a visual runway with Medium Intensity Runway Lighting (MIRL). **Figure 1.4** illustrates airfield layout, runway configuration, property uses, and other key airport facilities.

Figure 1.4
EXISTING AIRPORT FACILITIES



Source: Ardurra (2023)

1.2.2 TAXIWAY SYSTEM

The RKS taxiway system, illustrated in **Figure 1.4**, consists of Taxiway A, a full parallel taxiway located on the north of Runway 9/27; Taxiway C, which connects the GA apron to Runway 21; Taxiway D, which connects Taxiway A to Taxiway C; Taxiway E which gives access to the GA apron from Taxiway D, and a partial length parallel Taxiway F which connects Runway 3/21 on the west side of the runway to the midpoint of Runway 9/27. In addition, Taxiway A has five connecting taxiways: A1, A2, A3, A5, and A6 and they are all 50 feet wide.

Table 1.4

TAXIWAY DESIGN

Taxiway Segment	Taxiway A	Taxiway C	Taxiway D	Taxiway E	Taxiway F
Type	Parallel	Connector	Connector	Connector	Partial Parallel
Dimension (width)	50	50	50	50	50
Paved Shoulder Width	N/A	N/A	N/A	N/A	N/A
Edge Lighting	MITL	MITL	MITL	MITL	MITL
Runway-Taxiway Centerline Separation	400	485	485	N/A	485

Source: Ardurra (2023)

1.2.3 AIRFIELD PAVEMENT CONDITIONS

The FAA requires any airport sponsor requesting and receiving federal funds for pavement improvements to implement a pavement maintenance management program. The Aeronautics division of the Wyoming Department of Transportation (WYDOT) routinely inspects the condition of airfield pavements at Wyoming airports as part of an ongoing Pavement Management Program. WYDOT performs a Pavement Conditions Index (PCI) inspection every four years with the most recent inspection of the Airport’s airfield pavement being completed in 2020.

During a PCI inspection, inspectors identified signs of deterioration on the surface of the pavement. Pavement defects are characterized in terms of type of distress, severity level of distress, and amount of distress.⁶ This information is then used to develop a composite index (PCI) that represents the overall condition of the pavement in numerical terms, ranging from 0 (failed) to 100 (excellent). The PCI reports allow airports to evaluate their overall pavement condition, prepare and estimate budgets to maintain pavement at an acceptable condition and identify required maintenance and rehabilitation activities. The 2020 inspection ratings and WYDOT PCI forecast is summarized in **Table 1.6**, and the FAA and WYDOT rating scale is presented in **Table 1.7**.

⁶ Wyoming 2022 IDEA, Accessed June 2023, [Wyoming 2022 IDEA — Overview \(appliedpavement.com\)](https://www.appliedpavement.com)

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Table 1.5
Airfield Pavement Conditions

Pavement Area	2020 Inspection Rating	2028 Forecast PCI
Runway 3-21	89	72
Runway 9-27	93	77
Terminal Apron	87	82
West T-Hangars	81	72
GA Apron	90	81
Taxiway A1	88	76
Taxiway A2	91	78
Taxiway A3	92	79
Taxiway A5	93	79
Taxiway A6	92	79
Taxiway A	100	83
Taxiway C	82	70
Taxiway D	85	73
Taxiway E	81	64
Taxiway F	90	77

Source: WYDOT Aeronautics, Airport Pavement Management Program (2023)

Table 1.6
PAVEMENT RATING SCALE

PCI	FAA Rating	WYDOT Repair Rating
100-85	Good	
85-70	Satisfactory	Preventative Maintenance
70-55	Fair	
55-40	Poor	Major Rehabilitation
40-25	Very Poor	
25-10	Serious	Reconstruction
10-0	Failed	

Source: FAA, WYDOT Aeronautics, Airport Pavement Management Program (2023)

The pavements at the Airport are primarily asphalt, with the only concrete being found on the aprons. The PCI of the pavements at the Airport range from a low of 70 (Good) to a high of 100 (Excellent). The average rated PCI for all pavements is 92 (Excellent), overall, the pavements at RKS are in excellent condition, and shown in **Figure 1.5**. The primary pavement distresses observed during the May 2020 inspection were weathering (low), raveling and longitudinal and transverse cracking.

Figure 1.5
Airfield Pavement Conditions (2020)



Source: WYDOT Aeronautics, Airport Pavement Management Program, Ardurra (2023)

1.2.4 INSTRUMENT PROCEDURES AND NAVIGATIONAL AIDS

Aircraft arriving or departing from the Airport rely on instrument procedures, instrument and visual approach aids, weather observation, and communication for safe operations. This section describes these items in more detail.

Instrument Approach Procedures

Table 1.8 identifies the Airport’s Instrument Approach Procedures (IAP’s) by type, allowable aircraft approach category, and lowest approach minimums. Runway 3/21 is a visual runway so there are no IAPs associated with the runway.

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Table 1.7
INSTRUMENT APPROACH PROCEDURES

Runway	Procedure	Category	Aircraft Approach Category (AAC)	Visibility Mins (Statute Mile)
09	RNAV (GPS) ¹ 09	LPV	All	3/4
		LNAV/VNAV	All	3/4
		LNAV	A, B, C	3/4
			D	1
		Circling	A and B	1
			C	1 ½
09	VOR ² RWY 09	Straight-In	A, B, C	3/4
			D	1
			A and B	1
		Circling	C	1 ½
			D	2 ½
27	ILS or LOC RWY 27	ILS	All	1/2
		LOC	All	1/2
		Circling	A and B	1
			C	1 ½
			D	2 ½
		27	RNAV (GPS) RWY 27	LPV
LNAV/VNAV	All			1/2
LNAV	All			1/2
	A and B			1
Circling	C			1 ½
	D			2 ½
27	VOR/DME RWY 27	Straight-In	A, B, C	1/2
			D	1
			A and B	1
		Circling	C	1 ½
			D	NA

Source: Skyvector (2023)

Notes: ¹RNAV (GPS): Area Navigation (Required Navigation Performance)

²VOR/DME: VHF Omni-Directional Range/Distance Measuring Equipment



Navigational Aids

Multiple types of Navigational Aids (NAVAIDs) are used at RKS. These are visual or electronic guides that assist aircraft during all flight conditions. Visual NAVAIDs are guides such as lights and wind indicators that a pilot can see. Electronic NAVAIDs are used in conjunction with onboard aircraft navigational systems.

Visual Aids

Visual NAVAIDs at RKS include a white and green omnidirectional rotating beacon, a segmented circle to show the traffic pattern direction, and lighted wind indicators. Additional visual aids include the Medium Intensity Approach Lighting System with Runway alignment indicators (MALSR), Runway End Identifier Lights (REILs), and Precision Approach Path Indicators (PAPIs).

Electronic Aids

Electronic navigational aids use a combination of ground-based transmission facilities and onboard receiving instruments to help pilots navigate with a high degree of accuracy during poor visibility. NAVAIDs are not used solely during poor visibility; they can be used during all flight conditions and must be used when visibility and cloud ceilings are low enough to be considered instrument meteorological conditions (IMC).

The types of electronic nav aids available for aircraft flying to or from RKS include Very High Frequency Omnidirectional Range (VOR) with Distance Measuring Equipment Range (DME), Instrument Landing System (ILS), localizer, and GPS.

A VOR is a ground-based NAVAID. It is aligned with magnetic north and transmits azimuth information for high and low altitude routes and is used for airport approaches. When the VOR is located alongside DME, it is referred to as a VOR-DME. Together, they transmit both azimuth and distance information to aircraft. There is a VOR approach for Runway 9, and a VOR/DME approach for 27. The Rock Springs VOR/DME is located 1.4 nautical miles east of Runway 27.

An ILS is installed on Runway 27. The ILS provides both vertical and horizontal guidance to aircraft on approach. The localizer provides the horizontal position of the aircraft in relation to the runway centerline. The localizer is located 1,000 feet from the departure end of Runway 27. The glideslope provides vertical guidance for Runway 27, and it is located on the departure end of Runway 27, and the east end of Runway 9.

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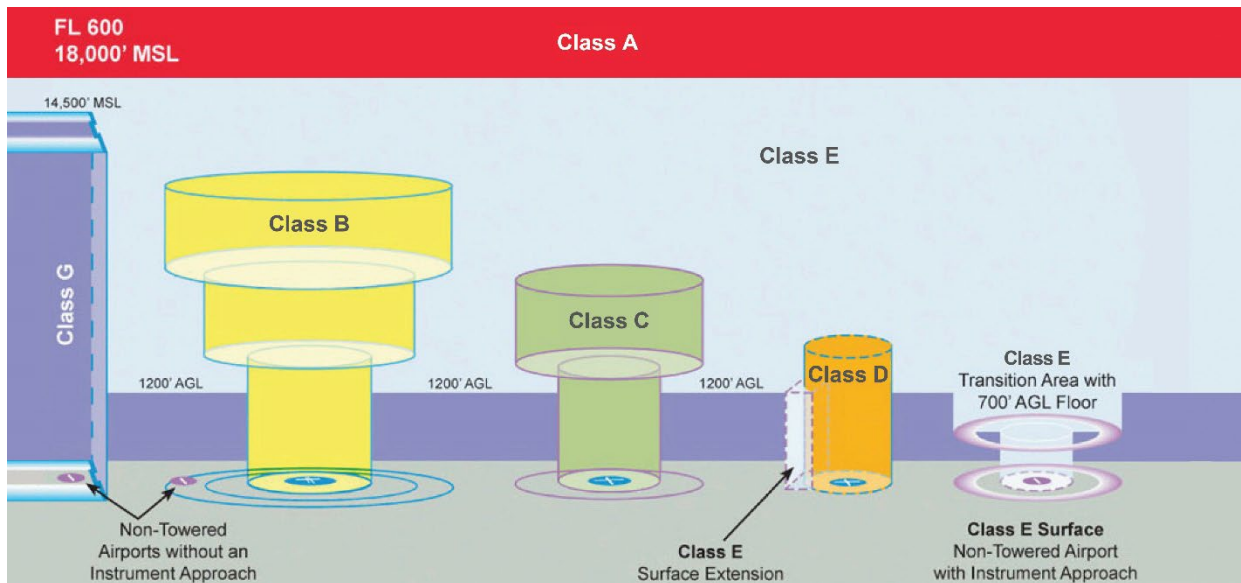
An Automated Surface Observation System (ASOS) is located northeast of Taxiway A5. The automated sensor in the ASOS transmits weather reports through a radio frequency, 118.375MHz and provides weather information to pilots on an hourly basis or when the weather exceeds the preselected weather thresholds such as when the visibility drops below 3 miles. Runway 9 is equipped with Omnidirectional Directional Approach Lighting System (ODALS). ODALS are sequential flashing approach lights that provide visual guidance for circling, offset, and straight-line approaches to non-precision runways.

The ILS, MALSR, ASOS, ODALS, VOR and PAPIs on Runways 9 and 27 are owned by the FAA while the PAPIs and REILs on Runways 3 and 21 are owned by the Airport.

1.2.5 AIRSPACE

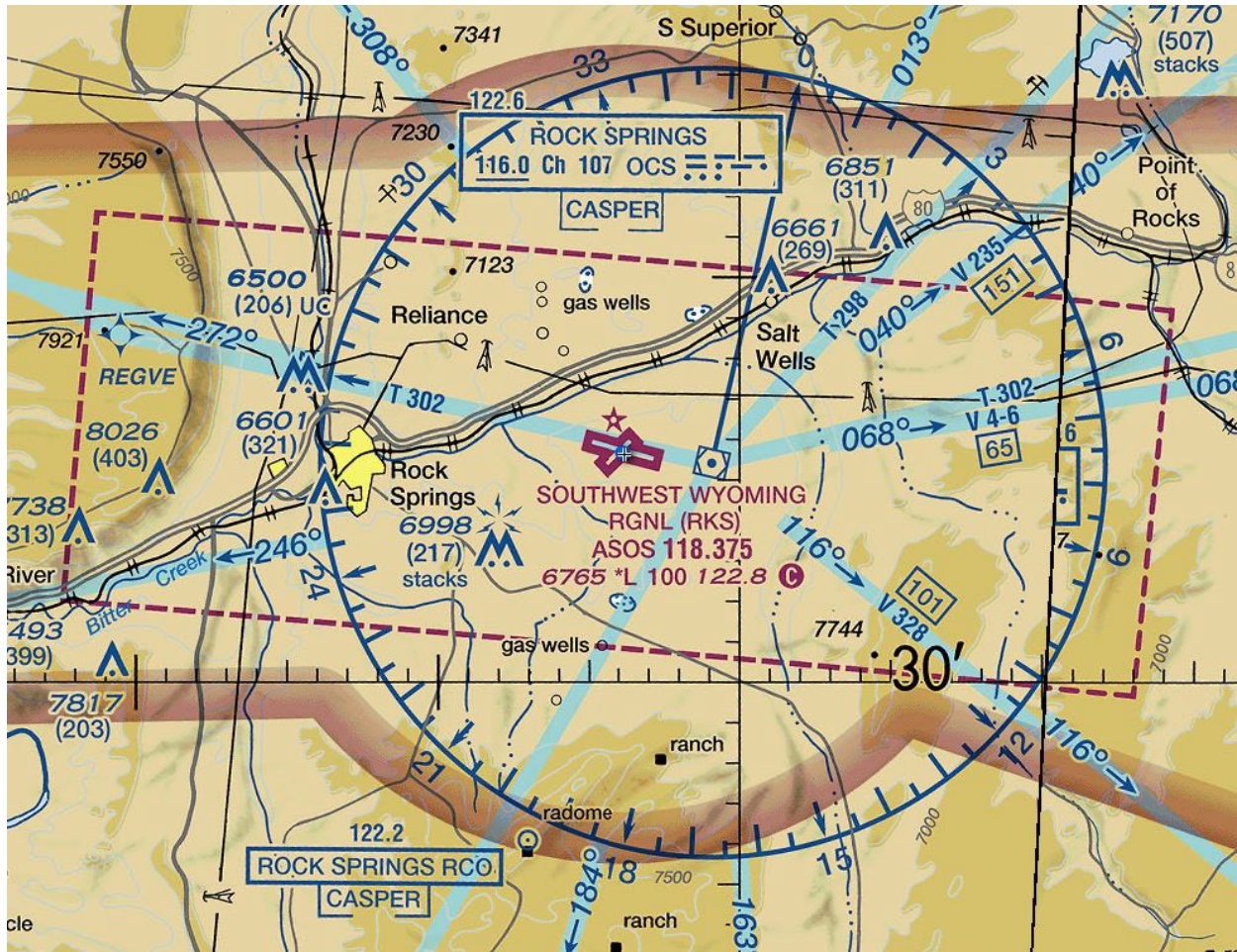
Figure 1.6 depicts the FAA-defined controlled airspace. The airspace surrounding RKS is Class E, the least restrictive classification of airspace. At RKS, Class E begins at the surface and is in a rectangular shape around the Airport. Class E extends upward to 18,000 feet above mean sea level (MSL). **Figure 1.7** depicts the aeronautical chart for the Airport.

Figure 1.6
FAA AIRSPACE SYSTEM



Source: FAA, *Aeronautical Chart User's Guide* (2023)

Figure 1.7
RKS AIRSPACE



Source: Skyvector (2023)

1.2.6 AIRFIELD MARKING AND LIGHTING

Airfield marking and lighting enhance a pilot's wayfinding and situational awareness. The standards for airfield marking are defined in FAA AC 150/5340-1 current edition, *Standards for Airport Markings*. Standards for airfield lighting are defined in AC 150/5340-30 current edition, *Design and Installation Details for Airport Visual Aids*.

Runway Markings

Runway markings are white, and their marking scheme depends on the approach category of the runway. Runway 9/27 is a precision runway consisting of the runway end designator, centerline, a threshold bar, aiming point, touchdown zone, and runway edge marking. Runway 3/21 is a visual runway, consisting of the runway end designator, centerline, threshold bar and edge markings. **Table 1.9** summarizes the component systems for Runways 9/27 and 3/21.

Table 1.8

MARKINGS AND LIGHTING

Markings	Runway 9/27		Runway 3/21	
	9	27	3	21
Runway Markings				
Aiming Points	Yes		Yes	
Centerline	Yes		Yes	
Threshold Bars	Yes		Yes	
Runway Number and Edge Lines	Yes		Yes/No Edge Lines	
Touchdown Zone Distance Markers	Yes		No	
Runway Lighting				
MALSR	Yes		No	
Visual Approach Path Guidance	PAPI		PAPI	
REIL	No		Yes	
Taxiway Lighting	MITL		MITL	

Source: *Ardurra (2023)*

Taxiway Markings

At RKS, taxiway markings consist of yellow centerline and enhanced centerline markings and hold position signs painted with white inscriptions on red backgrounds.

Runway Lighting

Runway 9/27 has High Intensity Runway Lighting (HIRL), PAPIs on both ends and a MALSR. Runway 3/21 is equipped with Medium Intensity Runway Lighting (MIRL), PAPIs and REILs. Additionally, all the runway and taxiway lights are equipped with Pilot Controlled Lighting (PCL) and can be activated on the common Traffic Advisory (CTAF) frequency.

Taxiway Lighting

The taxiways are equipped with blue medium-intensity taxiway edge lighting (MITL).

1.2.7 OTHER AIRSIDE FACILITIES

Fencing, gates, and service roads are airside facilities briefly discussed in this section.

Fencing and Gates

A six-foot chain link perimeter fence with barbed wire is in and around the terminal area, while the rest of the airport has an eight-foot wildlife fence to prevent wildlife and unauthorized access. Security gates provide access to the FBO, GA terminal, and GA hangars. There are two sliding gates with electrical keypads, one hydraulic lift gate with a keypad, and seven manual gates with padlocks.

Service Roads

The Airport has an unpaved perimeter road that follows the perimeter fence around airport property. The service road system also provides access to the various NAVAIDS, approach lights, and ASOS. Additionally, there is a service road that provides access from Taxiway A to the ramp at Taxiway E, and another service road connecting the GA Apron to the Commercial Apron.

1.3 LANDSIDE FACILITIES

This section summarizes the various aircraft support facilities, services, access, and utilities at RKS.

1.3.1 COMMERCIAL PASSENGER FACILITIES

United Express operated by SkyWest Airlines offers daily jet service to Denver International Airport using a CRJ 200.

Commercial Terminal

The original 26,000-square-foot commercial terminal was built in 1982, was remodeled and updated in 2010, and is currently under construction with a remodel and expansion (2023). The completed terminal will be approximately 32,400 square feet and houses two gates, ticketing, baggage, security, three rental car facilities, and administrative offices, see **Figure 1.8**. The building is located off taxiway connector A2, with a stand-alone commercial apron, providing appropriate airside access and security, and landside public access and parking.

Figure 1.8

COMMERCIAL TERMINAL EXPANSION



Source: Ardurra (2023)

Terminal Apron

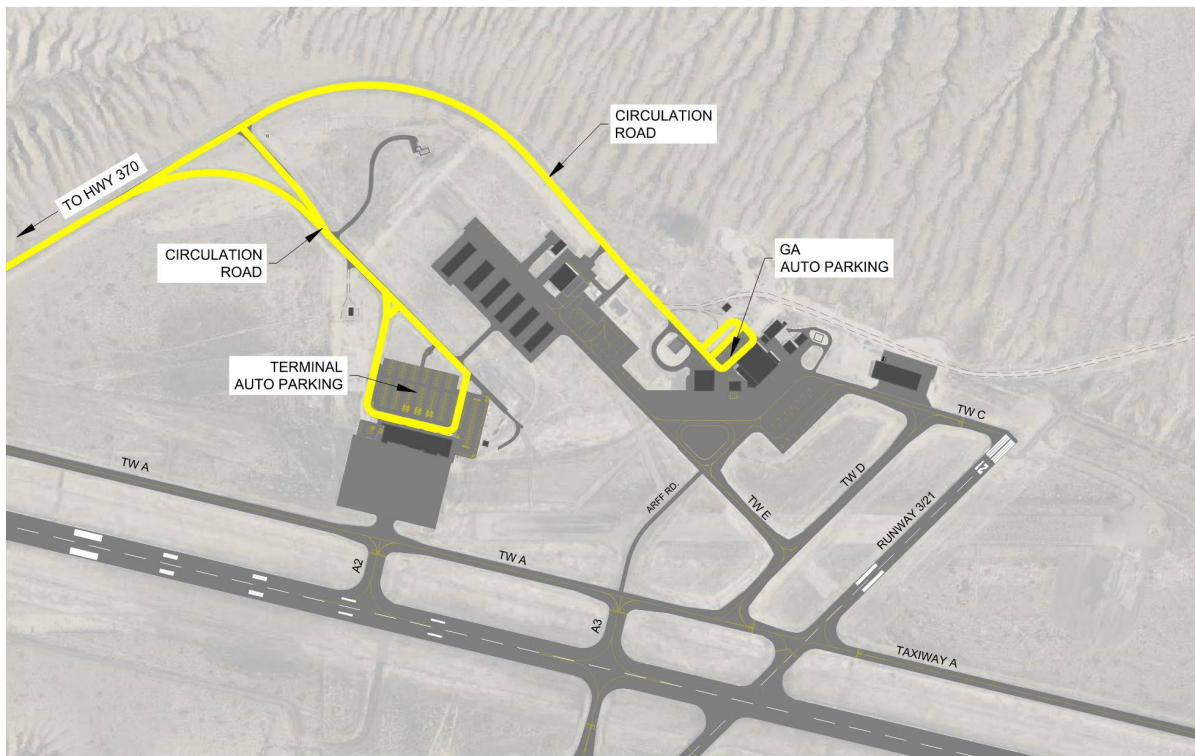
The terminal apron is located off taxiway connector A2. It is approximately 216,460 square feet, accessing two terminal gates. The apron is large and can accommodate multiple commercial aircraft at a time.

Terminal Access and Parking

The terminal is accessed off Highway 370, and airport road (see **Figure 1.9**). Currently, there are 280 public parking stalls for the terminal, with an additional 17 for employee parking, and 114 stalls for rental cars. Additionally, there are approximately 350 feet of curbside passenger drop-off/pick-up. These numbers will change with the completion of the terminal project and will be discussed in the facility requirements chapter. **Figure 1.9** depicts the future parking lot layout.

Figure 1.9

COMMERCIAL TERMINAL ACCESS



Source: Ardurra (2023)

1.3.2 OTHER AIRCRAFT APRONS

The general aviation apron provides access to hangars and tiedown areas. It is approximately 301,400 square feet and accommodates 22 aircraft tiedowns. Taxiway E runs adjacent to the GA apron to the area in front of the BLM SEAT Base, connecting to the T-Hangar apron. Three additional tiedowns are located near the BLM SEAT, six on the BLM SEAT apron (directly off taxiway E), and eight at the end of the T-Hangar apron, for a total of 39 tiedowns.

Table 1.9

AIRCRAFT APRON AND PARKING

Apron Area	Apron Function	Parking Space Type	Available Spaces
GA	Hangar and tiedown access	Tie Downs	22
Taxiway E	Taxiway	Tie Downs	11
BLM SEAT	BLM	Tie Downs	6
T-Hangar Apron	Tiedown access	Tie Downs	6

Source: Airport Staff (2023)

1.3.3 AIRCRAFT STORAGE

As of 2023, the airport master record reports 44 based aircraft including 34 single engine, five multi engine, one helicopter, and three ultralights. Facilities available to house these aircraft include a large 24,000 square foot community hangar housing the GA terminal and fixed base operator (FBO), as well as six rows of T-hangars, four box hangars, and the University of Utah Health AirMed hangar (identified as west hangar).

Table 1.10

TOTAL AIRPORT HANGARS

Hangar Type	Quantity
FBO Hangar	1
T-Hangars	6
Box Hangars	4
Health Air Med (West Hangar)	1

Source: Airport Staff (2023)

Figure 1.10

T-HANGARS



Source: Ardurra (2023)

1.3.4 FIXED BASE OPERATOR

There is one fixed base operator (FBO) at RKS, Sweetwater Aviation, and is owned and operated by the Airport. This is a full service FBO with over seven acres of ramp space, and 24,000 square feet of heated hangar space in a new facility constructed in 2018. The FBO offers ground handling, full service fueling and contract fuel, deicing, cargo handling, ground power units, crew and rental cars, and a pilot lounge complete with complimentary refreshments, conference rooms, and a golf simulator.

Figure 1.11

FBO



Source: Ardurra (2023)

1.3.5 AIRPORT OPERATORS

SkyWest is currently the only commercial passenger service operator at RKS. Although not based at the airport, Corporate Air, a FedEx feeder, operates and leases hangar space for transient aircraft, and Alpine Air, a UPS feeder, operates out of RKS. In June 2021 the Bureau of Land Management (BLM) opened a single-engine air tanker (SEAT) base at RKS, consisting of a four-acre facility that includes an apron, two aircraft loading positions, six tie downs, as well as a containment structure that houses retardant and mix tanks for aerial firefighting.⁷

1.3.6 AIRCRAFT RESCUE AND FIRE FIGHTING (ARFF)

Airport Certification and Regulations

RKS is a title 14, Code of Federal Regulation (CFR) Part 139 airport (14 CFR Part 139, or part 139). This federal certification is required for airports supporting regularly scheduled air carrier operations having a seating capacity of more than 9 passengers. To obtain or maintain the Part 139 certificate, the Airport is obligated to additional standards set forth by this regulation, including the operation of an Aircraft Rescue and Fire Fighting (ARFF) operation.

ARFF Index and Equipment

The level of ARFF index required at an airport is defined by the size and frequency of air carrier service at the Airport. The index rating is determined by the size (length) and frequency of air carrier operations. If the aircraft makes, on average, five or more daily departures from RKS, this aircraft is used to determine the ARFF index. If the aircraft makes less than five average daily departures, the Airport's ARFF index will be the next lower ARFF index with Index A being the minimum designated ARFF index.

Air carrier aircraft are grouped into the following five categories used to determine the AARF index:

- Index A includes aircraft less than 90 feet in length.
- Index B includes aircraft at least 90 feet but less than 126 feet in length.
- Index C includes aircraft at least 126 feet but less than 159 feet in length.
- Index D includes aircraft at least 159 feet but less than 200 feet in length.
- Index E includes aircraft at least 200 feet in length.

⁷ [BLM SEAT Base Already Making a Difference in Firefighting Efforts - SweetwaterNOW](#)

Currently, RKS is classified as an ARFF index A due to the size of commercial aircraft being used (CRJ-200) and the frequency of departures (less than five daily). The Airport, however, offers Index C service and can accommodate with prior permission. Due to the distance to town and emergency response times, the Airport has found success in maintaining a greater than required ARFF index, effectively making RKS more capable and efficient for emergency preparedness and response. To meet the minimum requirements for an Index A the Airport must have a vehicle capable of carrying a minimum of either:

- 500 pounds of sodium-based dry chemical, halon 1211, or clean agent; or
- 450 pounds of potassium-based dry chemical and water with a commensurate quantity of aqueous film foaming foam (AFFF) to total 100 gallons of simultaneous dry chemical and AFFF application.

The Airport uses a Rosenbauer fire engine, purchased new in 2015, as the primary ARFF response vehicle. The Rosenbauer has a water capacity of 1,500 gallons, 200 gallons of AFFF, and 500 pounds of Purple-K (PKP) dry-chemical fire suppressant. RKS also has an Oshkosh Striker 1500, purchased new in 2000, as a backup truck.

The Striker is equipped to carry 1,500 gallons of water, 500 pounds of dry chemical, and 210 gallons of AFFF. This truck is also equipped with three portable fire extinguishers: 20-pound BC, 30-pound D METL/X, and 25-pound halotron.

ARFF Facility

The ARFF facility at RKS is located on the GA apron. The building is two stories tall and has two back-in bays capable of housing the vehicles.

1.3.7 SNOW REMOVAL EQUIPMENT (SRE)

Part 139 airports are also required to maintain a snow and ice control plan. This plan prioritizes the areas of the Airport for snow removal, with the primary runway and movement areas being the highest priority. Snow removal is done by airport employees using an Overaasen blower, Overaasen multi-function, Western Star Plow truck, Oshkosh Plow truck, Mercedes Benz Unimog Plow truck, John Deere Loader, and smaller pickups and trailers with plows and sand distributors.

1.3.8 AIRPORT UTILITIES

Electricity

The electricity for the Airport comes from Rocky Mountain Power, with the main transmission line coming into RKS from the northeast, connecting near the GA area. The transmission line is reported to be nearing capacity.

Water

Water is trucked into the Airport in 6,000-gallon increments to supply the distribution system which has a total capacity of 300,000 gallons. The distribution system is airport-owned and maintained, with approximately 8,000 feet of PVC water line to distribute potable water to all airport facilities.

The Airport is required to keep enough water on hand to be able to meet the National Fire Protection Agency (NFPA) fire suppression efforts for our highest-demand facility. Currently, this is identified as the FBO but will transition to the terminal once the expansion project is complete. RKS must currently keep 145,000 gallons on hand, which has been very problematic in the summer. The warmer temperatures lead to much higher disinfection byproduct levels in the water, putting potable water quality at risk. The quantity required to be on hand will increase with the terminal and any other future development making the situation more extreme. There are efforts underway within the community to bring water to the Airport at the cost of at least \$60 million.

Sanitary Sewer

The Airport is not linked to the city sanitary system and therefore has several septic tanks and leach fields. Local septic leach fields exist for each building or group of buildings. A new low-pressure sewer system is being constructed with the commercial terminal expansion project. The system is designed to allow all on-site septic systems to be added to it over time. These systems are airport owned and maintained and are regularly pumped and transported to a treatment facility.

Natural Gas

Natural gas is supplied by Dominion Energy through two gas lines. There is a 3 inch and a 6-inch gas line providing a combined 55,000 Cubic Foot per Hour (CFH) of capacity. This gas is fed from a regulator station at the intersection of HWY 370 and Middle Baxter Road. This system was upgraded in 2022 through the Commercial Terminal Project. It is expected that the capacity of these lines is enough to supply future development at the Airport.

Stormwater

Stormwater is primarily captured by a combination of open channel flow or storm pipe and is discharged off airport property into natural drainages. Additionally, there are three retention ponds at the airport. One is located near the BLM SEAT base, another near the SRE building, and another across the dirt road from the FBO. The retention ponds are manmade, lined, isolated containers that do not connect to the waters of the United States. The Airport maintains a stormwater pollution prevention plan and a stormwater system master plan.

Telephone and Internet

CenturyLink provides phone and internet service to the Airport, with fiber connection at the fuel farm, GA, and commercial terminal. Fiber access is limited at the Airport, however, internet speeds through LR Communications are excellent, and there is not currently a need to increase fiber availability at the Airport. Airport utility providers are listed in **Table 1.12**.

Table 1.11

AIRPORT UTILITIES

Utility	Provider
Electric Power	Rocky Mountain Power
Water	Vendor (trucked to airport)
Sanitary Sewer	Septic
Gas	Dominion Energy
Stormwater	Public stormwater system
Communications	CenturyLink / LR Communications

Source: Airport Staff (2023)

1.4 Climate

Climate conditions are long-term averages for weather trends and include wind, temperature, cloud coverage, and precipitation. These elements can significantly impact aviation activity through individual aircraft performance and pilot capability. For example, high temperatures, especially at high elevation airports, can significantly increase the takeoff distance of an aircraft, or require weight management to ensure proper operation. Although these factors are the responsibility of individual pilots to determine, the Airport should be maintained to support these needs based on the aircraft that typically operate there, increasing the overall safety and operability of the Airport. **Table 1.12** summarizes the key climate conditions for RKS.

Table 1.12

CLIMATE SUMMARY

Climate Event	Climate Description	Value
Temperature	Hottest Month	July
	Average Daily Maximum (Hottest Month)	84°
	Annual Mean Maximum	55°
	Annual Mean Minimum	32°
Precipitation	Average Annual Rainfall	8.56 inches
	Maximum Precipitation Month	May
	Average Annual Snowfall	48 inches
	Maximum Snowfall Month	Jan-April
Visual Condition	Visual Meteorological Condition (VMC) ¹	88%
	Instrument Meteorological Condition (IMC) ²	12%
Winds ¹	Prevailing Wind Direction (from)	Southwest
	Average Prevailing Wind Speed	11 knots

Source: FAA Airport Data and Information Portal, U.S. Climate Data (2023)

Notes: ¹Winds have significant seasonal variations in direction and speed.

1.4.1 WIND

Wind patterns are an essential factor in determining runway requirements, and wind coverage is regulated by the FAA. A runway is oriented based on the largest wind coverage with the minimum crosswind. A crosswind is a wind that acts at a right angle to the runway, and wind coverage refers to the percentage of time a crosswind falls below a certain speed, defined by the runway design parameters. The FAA threshold for wind coverage is 95% and is based on the total number of weather observations, and the defined FAA crosswind standard, **Table 1.13**. If a runway’s wind coverage is less than 95% for the defined runway design code crosswind component, a crosswind runway should supplement the primary runway to achieve a runway system that totals 95% wind coverage or greater. Due to the aerodynamic nature of an aircraft, there is an inherent increase in operational safety by aligning the runway with the predominant wind. Aircraft are capable of landing with a crosswind, generally, smaller aircraft are more affected by crosswinds. Other factors affect the ability of aircraft to operate with a crosswind, including crosswind speed, type of aircraft, and the skill of the pilot.

Table 1.13
FAA CROSSWIND STANDARDS

Runway Design Code	Allowable Crosswind Component
A-I and B-I (includes small aircraft)	10.5 knots
A-II and B-II	13 knots
A-III, B-III, C-I through C-III, and D-I through D-III	16 knots
A-IV, B-IV, C-IV, and D-IV through D-IV	20 knots

Source: FAA AC 150/1300-13B, Airport Design (2023)

The following wind analysis was completed using wind data from the weather station located at the Airport from 2013 to 2022. Coverage less than the 95% FAA threshold is shown in bold. All weather wind coverage is summarized in **Table 1.14** and IFR wind coverage is shown in **Table 1.15**.

Table 1.14
RKS ALL WEATHER WIND COVERAGE

Runway Designation	20-Knot Crosswind Component	16-Knot Crosswind Component	13-Knot Crosswind Component	10.5 Knot Crosswind Component
Runway 3/21	99%	96.19%	91.23%	85.17%
Runway 9/27	98.58%	96.3%	91.9%	84.76%
Combined	99.94%	99.66%	98.82%	96.67%

Source: FAA Airport Data and Information Portal, ASOS (2023)



Table 1.15

RKS IFR WIND COVERAGE

Runway Designation	20-Knot Crosswind Component	16-Knot Crosswind Component	13-Knot Crosswind Component	10.5 Knot Crosswind Component
Runway 3/21	98.72%	96.61%	93.45%	89.65%
Runway 9/27	97.13%	93.43%	87.17%	78.72%
Combined	99.92%	99.72%	99.04%	97.15%

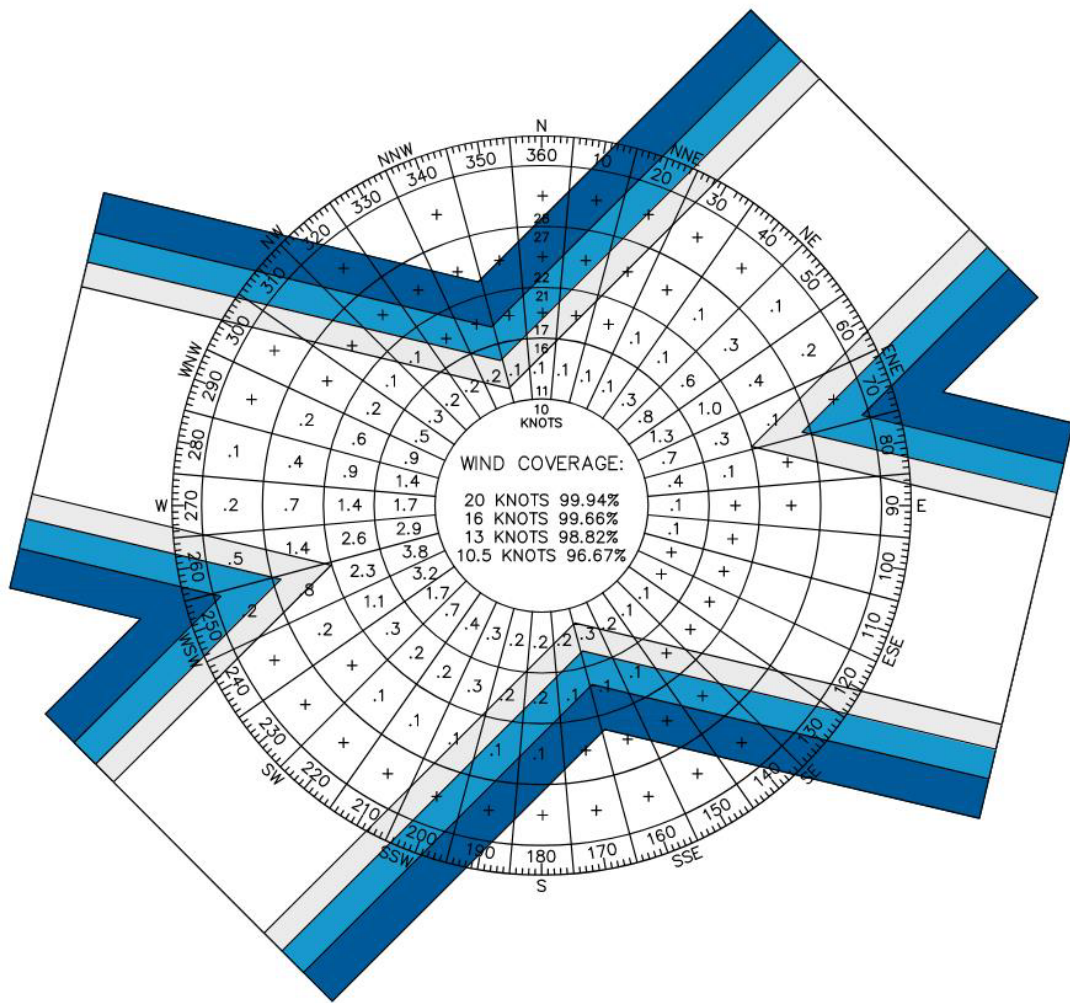
Source: FAA Airport Data and Information Portal, ASOS (2023)

The primary Runway 9/27 has an all-weather wind coverage of less than 95% for an allowable crosswind component of 13 knots or less. The all-weather combined wind coverage of the primary and crosswind runway has a total wind coverage of greater than 95% for all crosswind components.

For IFR conditions, the primary runway has wind coverage of less than 95% for an allowable crosswind component of 13 knots or less. The IFR combined has a wind coverage of less than 95% for the 10.5 knot crosswind component. See **Figures 1.12** and **1.13**.

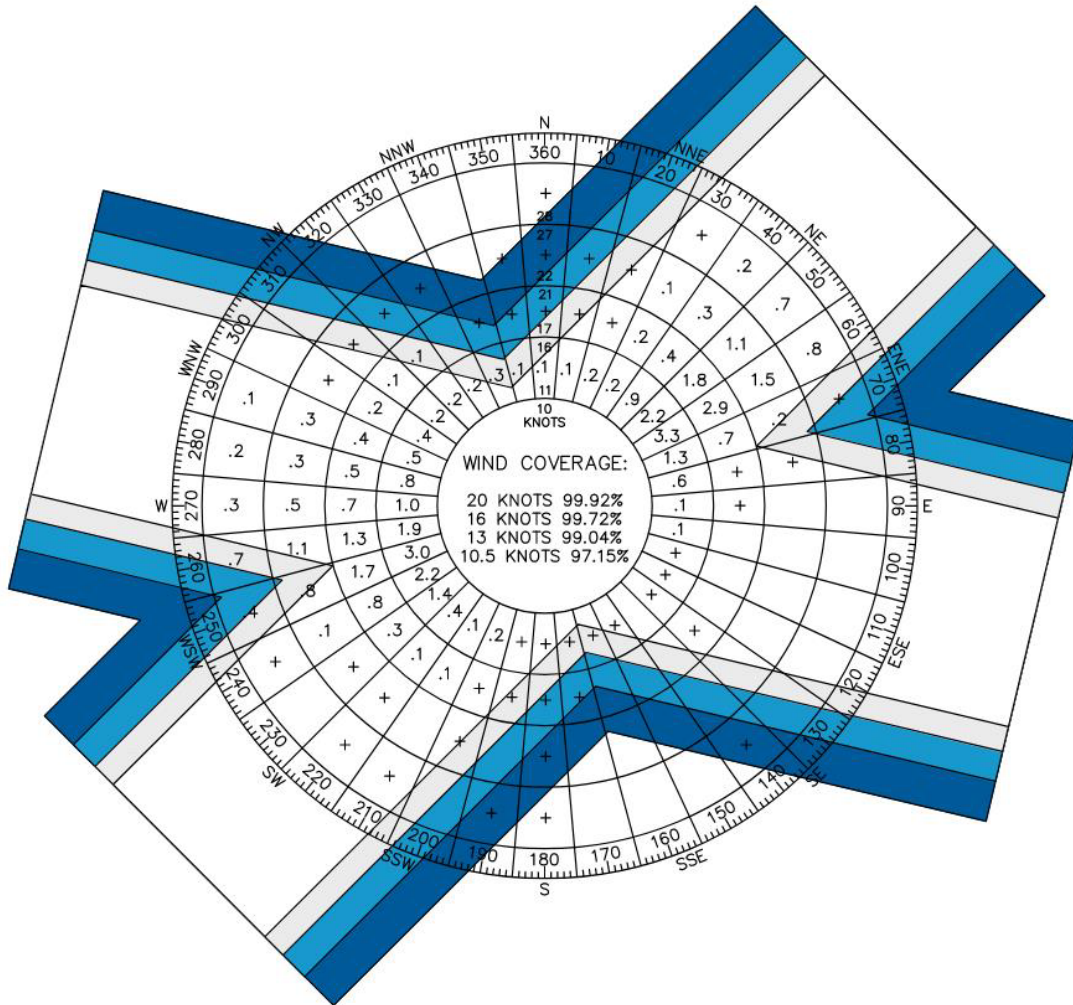
CHAPTER 1
INVENTORY OF EXISTING CONDITIONS

Figure 1.12
ALL WEATHER COMBINED



Source: Ardurra, FAA Airport Data and Information Portal (2023)

Figure 1.13
IFR COMBINED



Source: Ardurra, FAA Airport Data and Information Portal (2023)

1.5 ENVIRONMENTAL OVERVIEW

This section presents a high-level review of known existing environmental resources at or near RKS to develop an understanding of potential environmental impacts to future development. This review is not intended to satisfy the requirements of the National Environmental Policy Act of 1969 (NEPA); however, it will summarize conditions under NEPA categories that apply to the Airport, including:

- Air Quality
- Biological Resources
- Department of Transportation Act, Section 4(f)
- Farmlands
- Historical, Architectural, Archeological, and Cultural Resources
- Land Use
- Noise and Noise-Compatible Land Use
- Socioeconomic, Environmental Justice, Children’s Environmental Health, and Safety Risks
- Water Resources

Resource categories that will not be considered in this section, but may be considered or explored further in follow-on studies include:

- Climate
- Coastal Resources
- Hazardous Materials, Solid Waste and Pollution Prevention
- Natural Resources and Energy Supply
- Visual Effects
- Cumulative Impacts
- Irreversible and Irretrievable Commitment of Resources

1.5.1 AIR QUALITY

The Clean Air Act (CAA) is the primary statute related to air quality. The CAA regulates air pollutant emissions from stationary and mobile sources and authorizes the U.S. Environmental Protection Agency (EPA) to establish National Ambient Air Quality Standards (NAAQS) for six pollutants, called criteria air pollutants. The criteria pollutants include carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO₂), ozone (O₃), particle pollution (PM-10 and PM-2.5), and sulfur dioxide (SO₂).⁸ RKS is in Sweetwater County, Wyoming, which is part of the Upper Green River Basin (UGRB). The Upper Green River Basin Area has been designated as a nonattainment area (marginal) for 8-Hour Ozone (2008).⁹ All of Wyoming is in attainment with the 2015 Ozone NAAQS. The

⁸ U.S. Environmental Protection Agency (EPA). Accessed June 14, 2023, <https://www.epa.gov/criteria-air-pollutants>

⁹ U.S. Environmental Protection Agency (EPA). Accessed June 14, 2023, https://www3.epa.gov/airquality/greenbook/anayo_wy.html

Wyoming Department of Environmental Quality (DEQ) is currently assessing a pathway for submitting a request to the EPA to designate the UGRB as in attainment for the 2008 Ozone NAAQS.¹⁰

1.5.2 BIOLOGICAL RESOURCES

Section 7 of the Endangered Species Act (ESA) applies to the actions proposed or performed by federal agencies and sets forth requirements to determine if the proposed action(s) may impact endangered or threatened species. In accordance with Section 7 of the ESA, the FAA must initiate consultation with the U.S. Fish and Wildlife Service (USFWS) and/or National Marine Fisheries Service (NMFS) if the FAA determines that an action may affect a threatened or endangered species or designated critical habitat. Candidate species do not require consultation with USFWS under Section 7 of the ESA; however, USFWS encourages agencies to take advantage of any opportunities to conserve the species.¹¹

Threatened, Endangered, or Candidate Species

The USFWS Information, Planning and Conservation (IPaC) online system provides information regarding federally designated proposed, candidate, threatened, and endangered species, final critical habitats, species of conservation concern, and service refuges that may occur in an identified area or may be affected by proposed activities. The RKS Airport Master Plan project IPaC resource report identified six threatened, endangered, or candidate species that may occur within airport property or vicinity. There were no critical habitats, refuge lands, or fish hatcheries listed near RKS.

Table 1.16

ENDANGERED SPECIES ACT LISTED SPECIES NEAR RKS

Species	Scientific Name	Status
Birds		
Yellow-billed Cuckoo	Coccyzus americanus	Threatened
Fish		
Bonytail	Gila elegans	Endangered
Colorado Pikeminnow	Ptychocheilus Lucuis	Endangered
Humpback Chub	Gila cypha	Threatened
Razorback Sucker	Xyrauchen texanus	Endangered
Insects		
Monarch Butterfly	Danaus plexippus	Candidate

Source: USFWS Information for Planning and Consultation (IPaC), 2023.

¹⁰ Wyoming Department of Environmental Quality (DEQ). Accessed June 14, 2023, <https://deg.wyoming.gov/aqd/ozone/>

¹¹ U.S. Fish and Wildlife Service (USFWS), Environmental Conservation Online System (ECOS), Monarch Butterfly. Accessed June 14, 2023, <https://ecos.fws.gov/ecp/species/9743>

Migratory Birds

Birds are protected by the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA). Work that could lead to the take of an avian species protected under the MBTA and/or the BGEPA, their young, eggs, or nests, should be coordinated with the USFWS before any actions are pursued. The IPaC Report identified two species that may be found near RKS that are protected under the MBTA or BGEPA, the Golden Eagle (*Aquila Chrystos*) and Pinyon Jay (*Gymnorhinus cyanocephalus*).

1.5.3 DEPARTMENT OF TRANSPORTATION ACT 4(f)

Section 4(f) of the Department of Transportation Act states that the Secretary of Transportation will not approve any program or project that requires the use of any publicly owned land from a public park, recreation area, or wildlife and waterfowl refuge or historic site of national, state, or local significance as determined by the officials having jurisdiction thereof, unless there is no feasible and prudent alternative and the project includes all possible planning to minimize harm resulting from the use.¹²

A property must be a significant resource for Section 4(f) to apply. Any part of a Section 4(f) property is presumed to be significant unless there is a statement of insignificance relative to the entire property by the federal, state, or local official having jurisdiction over the property. Section 4(f) protects only those historic or archaeological properties that are listed or eligible for inclusion on the National Register of Historic Places (NRHP), except in unusual circumstances. There are numerous parks and recreational facilities in Rock Springs, with the nearest being Prairie Park approximately six miles west of RKS. There are 11 NRHP listed properties in Rock Springs, also approximately six miles from RKS.¹³ The nearest wildlife refuge is the Seedska-dee National Wildlife Refuge approximately 34 miles west of RKS.¹⁴ There are no Wyoming state parks or known historic sites within one mile of RKS.¹⁵

¹² Code of Federal Regulations (CFR) Title 23, Chapter I, Subchapter H, Part 774, Parks, Recreation Areas, Wildlife and Waterfowl Refuges, and Historic Sites (Section 4(f)). Accessed June 14, 2023, <https://www.ecfr.gov/current/title-23/chapter-I/subchapter-H/part-774>

¹³ Wyoming State Historic Preservation Office (SHPO). Accessed June 14, 2023, <https://wyoshpo.wyo.gov/index.php/nr-by-county-test-2/138-rock-springs>

¹⁴ U.S. Fish and Wildlife Service (USFWS). Accessed June 14, 2023, <https://www.fws.gov/refuge/seedska-dee/map>

¹⁵ Wyoming State Parks, Historic Sites, & Trails, Wyo Parks. Accessed July 17, 2023, <https://wyoparks.wyo.gov/index.php/places-to-go/view-places-on-wyoming-map>

1.5.4 FARMLANDS

The Farmland Protection Policy Act (FPPA) regulates federal actions with the potential to convert farmland to non-agricultural uses. Farmland includes prime farmland, unique farmland, and land of statewide or local importance. Approximately 95% of the soil type at RKS is Urban land – draft (map unit symbol 7101), which is not considered prime farmland.¹⁶

1.5.5 HISTORICAL, ARCHITECTURAL, ARCHEOLOGICAL, AND CULTURAL RESOURCES

The National Historic Preservation Act (NHPA) establishes the Advisory Council on Historic Preservation (ACHP) and the National Register of Historic Places (NRHP) within the National Park Service (NPS), administered in Wyoming by the Wyoming State Historic Preservation Office (SHPO). Section 106 of the NHPA requires federal agencies to consider the effects of their undertaking on properties on or eligible for inclusion in the NRHP. As noted earlier, there are 11 NRHP listed properties approximately six miles west of RKS in Rock Springs.

1.5.6 LAND USE

The FAA has not established a significance threshold for land use, and there are no specific factors to consider for land use. The determination that significant impacts exist in the land use impact category is normally dependent on the significance of other impacts, such as noise and Section 4(f) properties. AIP funding for airport development may not be approved unless the Secretary of Transportation receives written assurance that appropriate action, including the adoption of zoning laws, has been or will be taken, to the extent reasonable, to restrict the use of land adjacent to or in the vicinity of the Airport to activities and purposes compatible with normal airport operations, including takeoff and landing of aircraft.¹⁷ The land surrounding RKS is owned primarily by the Rock Springs Grazing Association and the Bureau of Land Management (BLM), with State of Wyoming owning smaller parcels near the Airport, and a current zoning designation of A (Agricultural).^{18 19} There are no residential land uses near the Airport.

¹⁶ U.S. Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS) Web Soil Survey (WSS) map. Accessed June 14, 2023, <https://websoilsurvey.sc.egov.usda.gov/app/WebSoilSurvey.aspx>

¹⁷ FAA Order 1050.1F Desk Reference (v2). Accessed June 14, 2023, https://www.faa.gov/sites/faa.gov/files/about/office_org/headquarters_offices/apl/desk-ref.pdf

¹⁸ Sweetwater County, Wyoming, MapServer. Accessed June 14, 2023, https://maps.greenwoodmap.com/sweetwater/map#zcr=0.8675203758395599/1959500/411500/0&lyrs=taxclass,national_water,ownership,roads

¹⁹ Sweetwater County Zoning Resolution, 2015. Accessed June 14, 2023, <https://cms7files1.revize.com/sweetwaterwy/Applications%20-%20Land%20Use/2015%20Zoning%20Resolution%20with%20Amendments%20as%20of%20November%2015,%202022.pdf>

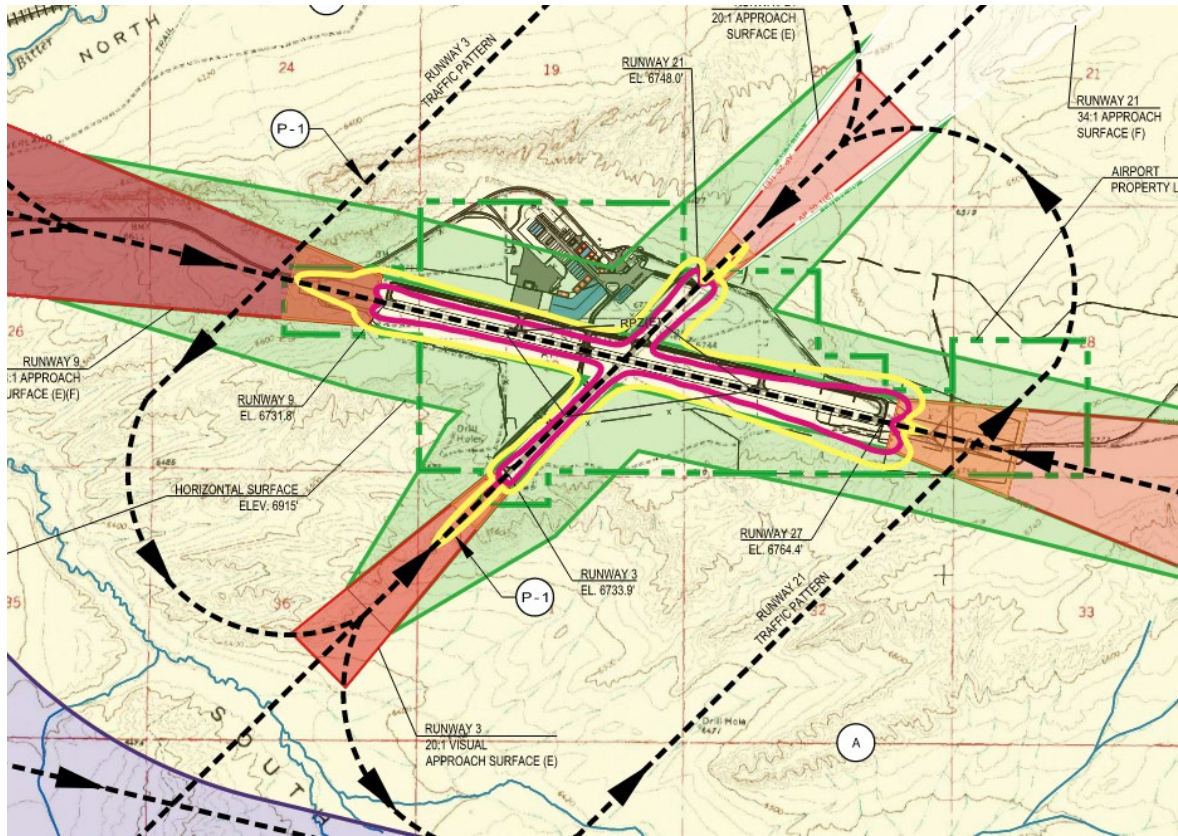
1.5.7 NOISE AND NOISE COMPATIBLE LAND USE

Noise associated with airport activity is of specific importance to the FAA in examining a proposed federal action. Airport development projects that have the potential to change an airport's runway configuration, aircraft operations, aircraft types, or aircraft flight characteristics can change future airport-related noise levels.

Noise is measured by the Day-Night Sound Level (DNL), the logarithmic average of sound levels in decibels (dB) and based on a 24-hour Equivalent Sound Level (Leq). The levels are time-weighted, such that noise events occurring during sensitive time periods (from 10 pm to 7 am) are penalized 10 dB (i.e., weighted more heavily than those occurring from 7 am to 10 pm). This penalty accounts for the greater sensitivity to noise during nighttime hours and the decrease in background noise levels during these hours. Determining DNL provides a means of measuring and mapping the potential impacts from airport noise relative to the land uses surrounding an airport. The FAA considers a noise impact significant if an action would cause noise sensitive areas to experience an increase in noise of DNL 1.5 dB or more at or above the DNL 65 dB noise contour when compared to the No Action Alternative.

The existing 65 DNL contour for RKS is contained within the existing airport property boundary. There are no existing incompatible uses related to noise at RKS.

Figure 1.14
EXISTING NOISE CONTOURS AT RKS



Source: Aviation, 2015 Airport Layout Plan for RKS

1.5.8 SOCIOECONOMIC, ENVIRONMENTAL JUSTICE, CHILDREN’S ENVIRONMENTAL HEALTH AND SAFETY RISKS

Socioeconomics is 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 the proposed action. RKS is located within the Rock Springs South Census County Division (CCD), Sweetwater County, Wyoming. According to the U.S. Census Bureau, the population of the Rock Springs South CCD census tract in 2020 was 127 with 36 total households.²⁰ However, there are no residents, schools, or other sensitive receptors located within one mile of the airport property boundary. A review of the EPA’s Environmental Justice Screen revealed no Environmental Justice populations within one mile of RKS.²¹

1.5.9 WATER RESOURCES

Water resources are surface waters and groundwater that are important in providing drinking water and in supporting recreation, transportation and commerce, industry, agriculture, and aquatic ecosystems. Surface water, groundwater, floodplains, and wetlands do not function as separate and isolated components of the watershed, but rather as a single, integrated natural system. Disruption of any one part of this system can have consequences to the functioning of the entire system. The analysis should include potential disruption of the system as well as potential impacts to the quality of the water resources. Because of the close and integrated relationship of these resources, their analysis is conducted under the all-encompassing impact category of water resources. Wild and Scenic Rivers are included because impacts to these rivers can result from obstructing or altering the free-flowing water of a designated river. This section covers the following main topics – wetlands, floodplains, surface waters, groundwater, and wild and scenic rivers.

²⁰ U.S. Census Bureau. Accessed June 14, 2023, https://data.census.gov/profile/Rock_Springs_South_CCD;_Sweetwater_County;_Wyoming?g=060XX00US5603792805

²¹ EPA Environmental Justice Screen. Accessed June 15, 2023, <https://ejscreen.epa.gov/mapper/>

Wetlands

For regulatory purposes under the Clean Water Act (CWA), wetlands are areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. Areas covered with water for such a short time that there is no effect on moist-soil vegetation are not considered wetlands, nor are the waters of streams, reservoirs, and deep lakes. Jurisdictional wetlands are federally protected under Section 404 of the Clean Water Act (CWA), which regulates the discharge of dredge or fill material into Waters of the United States, including wetlands.²²

A review of the National Wetlands Inventory (NWI) map provided by the USFWS revealed a 0.19-acre freshwater emergent wetland on previously disturbed land just north of the Sweetwater Aviation FBO. This area is described in the stormwater section, as this is a manmade retention pond that is isolated, and not connected to the waters of the United States.

There are also multiple riverine fingers in the canyons extending from the Airport.²³

Floodplains

A review of the RKS floodplain map revealed the entire airport is in Zone X, which is an area determined to be outside of the 500-year floodplain.²⁴

Surface Waters

Surface waters include areas where water collects on the surface of the ground, such as streams, rivers, lakes, ponds, estuaries, and oceans. The CWA establishes the basic structure for regulating the discharge of pollutants into waters of the United States, specific sections include Section 303(d), Section 404 and 401 (refer to wetland section), and Section 402, which establishes the National Pollutant Discharge Elimination System (NPDES) permitting program. Section 303(d) sets forth the process to identify impaired waters and to establish the maximum amount of pollutant allowed in a waterbody, known as the total maximum daily load, necessary to assess current conditions and project impacts. If project activities have the potential to discharge pollutants into Waters of the United States through a point source, a NPDES permit will likely be required. Additionally, a

²² EPA, Permit Program under CWA Section 404. Accessed June 15, 2023, <https://www.epa.gov/cwa-404/permit-program-under-cwa-section-404>

²³ USFWS, National Wetlands Inventory Wetlands Mapper. Accessed June 15, 2023, <https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/>

²⁴ Federal Emergency Management Agency (FEMA), Flood Map Service Center. Accessed June 14, 2023, <https://map1.msc.fema.gov/firm?id=5600870060A>

permit may also be required under the Wyoming Pollution Discharge Elimination System (WYPDES) program. Bitter Creek is located approximately one mile north of RKS. It is the closest surface water resource to the Airport.

Groundwater

Groundwater is subsurface water that occupies the space between sand, clay, and rock formations. The term “aquifer” is used to describe the geologic layers that store or transmit groundwater to wells, springs, and other water sources. The Safe Drinking Water Act prohibits federal agencies from funding actions that would contaminate an EPA-designated sole source aquifer or its recharge area. A review of the Wyoming State Geological Survey Groundwater Atlas showed no groundwater wells or springs on RKS.²⁵ A review of the EPA’s sole source aquifer map showed that RKS does not rest upon any sole source aquifers.²⁶

Wild and Scenic Rivers

According to the Wild and Scenic Rivers interactive map provided by the National Parks Service (NPS), the closest river designated as a Wild and Scenic River is the Snake River Headwaters located in northwestern Wyoming, over 100 miles from RKS.²⁷

1.6 SUMMARY

The Southwest Wyoming Regional Airport serves a wide variety of users and the Sponsors, WYDOT, and FAA have continuously invested in airport facilities to support the current and future use of the Airport. The Forecasts of Aviation Demand chapter will evaluate the existing activity levels, and, using factors that affect activity levels, develop an outlook of demand expected at the Airport. The forecast chapter will also evaluate the existing and future fleet mix operating at the Airport to determine the critical aircraft. The Facility Requirements chapter will then analyze the future FAA design requirements based on the needs of critical aircraft against the existing conditions provided in this chapter.

²⁵ Wyoming State Geological Survey, Groundwater Atlas of Wyoming. Accessed June 15, 2023, <https://portal.wsgs.wyo.gov/arcgis/apps/webappviewer/index.html?id=181c32a872a346bfae3579a62230a65a>

²⁶ EPA, Sole Source Aquifers. Accessed June 15, 2023, <https://epa.maps.arcgis.com/apps/webappviewer/index.html?id=9ebb047ba3ec41ada1877155fe31356b>

²⁷ NPS, Wild and Scenic Rivers. Accessed June 15, 2023, <https://nps.maps.arcgis.com/apps/View/index.html?appid=ff42a57d0aae43c49a88daee0e353142>