

## 6.0 ENVIRONMENTAL OVERVIEW

FAA Order 1050.1E, *Environmental Impacts: Policies and Procedures*, and Order 5050.4B, *National Environmental Policy Act: Implementation Instruction for Airport Actions*, address specific environmental categories that are evaluated in environmental documents through the National Environmental Policy Act (NEPA). The following section inventories the categories that pertain to the Airport and their existing conditions (Construction Impacts, Cumulative Impacts, and Secondary (Induced) Impacts).

### 6.1 AIR QUALITY

Air quality analysis for federally funded projects must be prepared in accordance with applicable air quality statutes and regulations that include the Clean Air Act of 1970<sup>36</sup>, the 1977 Clean Air Act Amendments<sup>37</sup>, the 1990 Clean Air Act Amendments<sup>38</sup>, and the National Ambient Air Quality Standards<sup>39</sup> (NAAQS). In particular, the air pollutants of concern in the assessment of impacts from airport-related sources include six “criteria pollutants”; carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO<sub>2</sub>), ozone (O<sub>3</sub>), particular matter (PM-10 and PM-2.5), and sulfur dioxide (SO<sub>2</sub>).

The Airport is located in Garfield County, which is designated by the U.S. Environmental Protection Agency as being in attainment for all criteria pollutants.

### 6.2 COMPATIBLE LAND USE

As discussed in **Section 2.7 Regional Setting and Land Use**, the land surrounding RIL is primarily zoned as Rural to the north and east, with Planned Unit Development (PUD) to the south, and Light Industrial PUD to the west. There is also a small parcel of land to the southwest of the main airport entrance that is zoned as Public Zone District; this is in place for the newly developed campus for the Colorado Mountain College. No residential development exists in close proximity to the Airport.

An airport influence area was designated in 2000, which coincides with the 14 CFR Part 77 Imaginary Surfaces that protect the airspace surrounding the Airport. This encompasses the approach areas for both runway ends, as well as the conical and horizontal surfaces. The existing airport influence zone is aligned with the original centerline of the runway. As a result, the zoning overlay requires updating to reflect the new runway centerline coinciding with the 2010 runway realignment.

The City of Rifle and Garfield County zoning and land use exhibits are attached in **Appendix B** of this Master Plan.

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<sup>36</sup> U.S. Code. The Clean Air Act of 1970. U.S. Congress, Public Law 91-604, 42 U.S.C. §7401

<sup>37</sup> U.S. Code. The 1977 Clean Air Act Amendments, U.S. Congress, Public Law 95-95, 42 U.S.C. §7401

<sup>38</sup> U.S. Code. The 1990 Clean Air Act Amendments, U.S. Congress, Public Law 101-549, 42 U.S.C. §7401

<sup>39</sup> 40 CFR Part 50, Section 121, National Ambient Air Quality Standard

### 6.3 DEPARTMENT OF TRANSPORTATION ACT: SECTION 4(F)

The Department of Transportation (DOT) Act, Section 4(f)<sup>40</sup> 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 of national, state, or local significance or land from an historic site of national, state, or local significance unless there is no feasible or prudent alternative and the use of such land includes all possible planning to minimize harm resulting from the use”.

An analysis of DOT 4(f) properties in and near the city of Rifle found 17 Section 4(f) properties (see **Table 6-1**). The nearest property to the Airport is the Colorado Mountain College, located approximately one-quarter mile to the south.

TABLE 6-1 – DOT SECTION 4(F) PROPERTIES

	Property Name	Address	Type	Distance to Airport*
1	Colorado Mountain College	3695 Airport Rd., Rifle, CO 81650	School	0.25 miles
2	Highland Elementary School	1500 E 7th St, Rifle, CO 81650	School	1.4 miles
3	Davidson Park	715 Fir Avenue, Rifle, CO 81650	Park	1.4 miles
4	Macintosh Park	710 Birch Ave. Rifle, CO, 81650	Open Space	1.7 miles
5	Promotory Park	2025 Birch Ave Rifle, CO, 81650	Park	1.9 miles
6	Heinze Park	612 Railroad Ave. Rifle, CO,	Park	2.2 miles
7	Rifle Middle School	753 Railroad Ave, Rifle, CO 81650	School	2.2 miles
8	Centennial Park	300 West 5th Street Rifle, CO, 81650	Park	2.3 miles
9	Metro Park	1718 Railroad Ave. Rifle, CO, 81650	Park	2.4 miles
10	Rifle Action Park	200 E. 16th Street Rifle, CO, 81650	Park	2.5 miles
11	Wamsley Elementary School	225 E 30th St, Rifle, CO 81650	School	2.5 miles
12	Deerfield Park	300 E. 30 <sup>th</sup> Street, Rifle, CO 81650	Park	2.5 miles
13	Arnold Park	350 Arnold Ave. Rifle, CO, 81650	Park	2.6 miles
14	Joyce Park	595 W. 24 <sup>th</sup> Street, Rifle, CO 81650	Park	2.7 miles
15	Palomino Park	500 W. 24 <sup>th</sup> Street, Rifle, CO 81650	Park	2.7 miles
16	Moki Park	699 Moki Ave Rifle, CO, 81650	Park	2.9 miles
17	Rifle High School	1350 Prefontaine Ave, Rifle, CO 81650	School	2.9 miles

\*Distance to nearest point at airport

Source: Google Earth and City of Rifle (<http://www.rifleco.org/documents/9/PARKS.pdf>), Accessed June 18, 2013

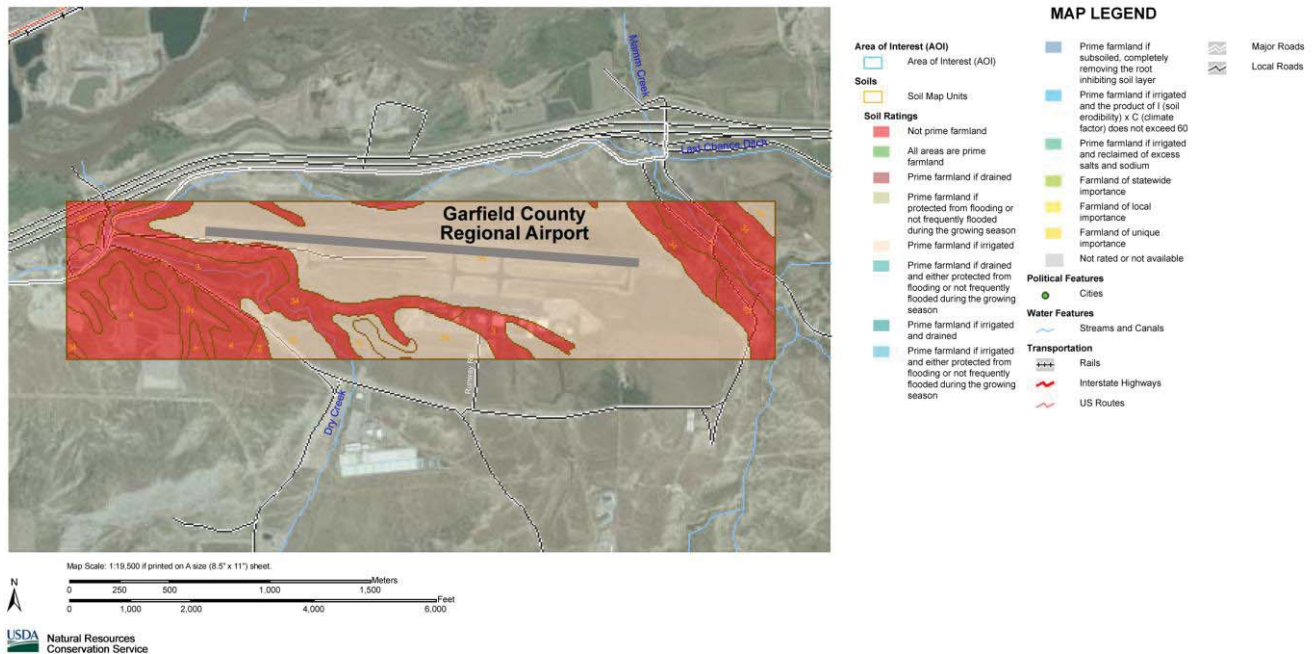
### 6.4 FARMLANDS

The Farmland Protection Policy Act (FPPA) regulates federal actions that may impact or convert farmland to a non-agricultural use. FPPA defines farmland as “prime or unique land as determined by the participating state or unit of local government and considered to be of statewide or local importance”

The FPPA excludes land dedicated to urban use (including aviation) prior to 1982. Land in the vicinity of the Airport is classified by the U.S. Department of Agriculture – Natural Resources Conservation Service as “Not Prime Farmland and Prime Farmland if Irrigated”, as depicted in **Figure 6-1**.

<sup>40</sup> U.S. Department of Transportation Act, section 4(f), recodified and renumbered as § 303(c) of 49 U.S.C.

FIGURE 6-1 – EXISTING FARMLANDS



Source: USDA Natural Resources Conservation Service

## 6.5 FISH, WILDLIFE, AND PLANTS

Requirements have been set forth by The Endangered Species Act<sup>41</sup>, The Sikes Act<sup>42</sup>, The Fish and Wildlife Coordination Act<sup>43</sup>, The Fish and Wildlife Conservation Act<sup>44</sup>, and the Migratory Bird Treaty Act<sup>45</sup>, for the protection of fish, wildlife, and plants of local and national significance.

Garfield County has several species listed by the U.S. Fish and Wildlife Service (USFWS) as being threatened or endangered as depicted in **Table 6-2**.

***A biotic survey and coordination with the USFWS is recommended prior to a ground disturbing development.***

<sup>41</sup> Endangered Species Act of 1973, U.S. Congress, Public Law 93-205, 16 U.S.C §1531-1544

<sup>42</sup> Sikes Act, Amendments of 1974, U.S. Congress, Public Law 93-452

<sup>43</sup> Fish and Wildlife Coordination Act of 1958, U.S. Congress, Public Law 85-624, 16 U.S.C §661-666c

<sup>44</sup> Fish and Wildlife Conservation Act of 1980, U.S. Congress, Public Law 96-366, 16 U.S.C §2901-2912

<sup>45</sup> Migratory Bird Treaty Act of 1981, 16 U.S.C §703-712

TABLE 6-2 – CANDIDATE, THREATENED, & ENDANGERED SPECIES

Species	Scientific Name	Status
<b>Birds</b>		
Greater sage-grouse	<i>Centrocercus urophasianus</i>	Candidate
Mexican Spotted owl	<i>Strix occidentalis lucida</i>	Threatened
Yellow-Billed Cuckoo	<i>Coccyzus americanus</i>	Candidate
<b>Fishes</b>		
Bonytail chub	<i>Gila elegans</i>	Endangered
Colorado pikeminnow	<i>Ptychocheilus lucius</i>	Endangered
Greenback Cutthroat trout	<i>Oncorhynchus clarki ssp. stomias</i>	Threatened
Humpback chub	<i>Gila cypha</i>	Endangered
Razorback sucker	<i>Xyrauchen texanus</i>	Endangered
<b>Flowering Plants</b>		
Colorado hookless Cactus	<i>Sclerocactus glaucus</i>	Threatened
Debeque phacelia	<i>Phacelia submutica</i>	Threatened
Parachute beardtongue	<i>Penstemon debilis</i>	Threatened
Ute ladies'-tresses	<i>Spiranthes diluvialis</i>	Threatened
<b>Mammals</b>		
Canada Lynx	<i>Lynx canadensis</i>	Threatened
North American wolverine	<i>Gulo gulo luscus</i>	Proposed Threatened

Source: U. S. Fish and Wildlife Service, IPaC System, Accessed June 18, 2013

## 6.6 FLOODPLAINS

Executive Order 11988, *Floodplain Management*<sup>46</sup> directs federal agencies to “avoid to the extent possible the long- and short-term adverse impacts associated with the occupancy and modification of floodplains and to avoid direct and indirect support of floodplain development wherever there is a practicable alternative”.

An examination of the Flood Insurance Rate Maps (FIRM) for the area surrounding RIL found that the area is not mapped but is classified as Area D<sup>47</sup>, “Areas of undetermined, but possible, flood hazards”.

Coordination with the U.S. Army Corp of Engineers is recommended prior to extensive development projects to ensure floodplains are not impacted.

## 6.7 HAZARDOUS MATERIALS, POLLUTION PREVENTION, AND SOLID WASTE

The Resource Conservation and Recovery Act (RCRA)<sup>48</sup>, Comprehensive Environmental Response, Compensations, and Liability Act (CERCLA)<sup>49</sup>, Superfund Amendments and Reauthorization Act (Superfund)<sup>50</sup>, and the Community Environmental Response Facilitation Act (CERFA)<sup>51</sup> are the four predominant laws regulating actions related to the use, storage, transportation, or disposal of hazardous materials, chemicals, substances, and wastes. Federal actions that pertain to the funding or approval of airport projects require the analysis of the potential for environmental impacts per the regulating laws.

<sup>46</sup> Executive Order 11988, Floodplain Management, 1977

<sup>47</sup> National Flood Insurance Program, Flood Insurance Rate Map Number 080205IND0A, August 2, 2006

<sup>48</sup> U.S. Code, 1976, Resource Conservation and Recovery Act, 42 USC, §6901

<sup>49</sup> U.S. Code 1980, Comprehensive Environmental Response, Compensation and Liability Act, 42 USC, §9601-9628

<sup>50</sup> U.S. Code 1986, Superfund Amendments and Reauthorization Act, 42 USC

<sup>51</sup> U.S. Code 1992, Community Environmental Response Facilitation Act, Public Law 102-426

Furthermore, property listed or considered for the National Priority List (NPL) should be evaluated in relation to the Airport’s location.

There are no known hazardous waste sites, materials, or NPL sites located at the Airport.

## 6.8 HISTORICAL, ARCHITECTURAL, ARCHEOLOGICAL, AND CULTURAL RESOURCES

The National Historic Preservation Act<sup>52</sup> and the Archaeological and Historical Preservation Act<sup>53</sup> regulate the preservation of historical, architectural, archaeological and cultural resources. Federal actions and undertakings are required to evaluate the impact on these resources.

The National Register of Historic Places lists three properties within the vicinity of the Airport (see **Table 6-3**). The nearest property to the Airport is the Rifle Bridge, approximately two miles away.

*Coordination with the State Historic Preservation Office (SHPO) may be required for future development projects depending on scope and size.*

TABLE 6-3 – NATIONAL REGISTER OF HISTORIC PLACES - RIFLE

Property Name	Address	Date Added to Registry	Distance to Airport
<b>Rifle Bridge</b>	Off SR 6/24 over Colorado River, Rifle	1985	2.0 miles
<b>Rifle Post Office</b>	Railroad Ave. and Fourth St., Rifle	1986	2.2 miles
<b>Havemeyer-Willcox Canal Pumphouse and Forebay</b>	West of Rifle, Rifle	1980	9.5 miles

Source: National Register of Historic Places, Colorado – Garfield County, City of Rifle, Accessed June 18, 2013

## 6.9 LIGHT EMISSIONS AND VISUAL IMPACTS

Federal regulations do not specifically regulate airport light emissions; however, the FAA does consider airport light emissions on communities and properties in the vicinity of an airport. A significant portion of light emissions at airports are a result of safety and security equipment and facilities. The Airport’s primary sources of lighting are:

- Pilot Controlled High Intensity Runway Lighting (HIRL) on Runway 8/26
- Pilot Controlled Medium Intensity Lighting on Taxiway A and connector taxiways
- Runway End Intensity Lights (REIL) on Runway 8
- Omni Directional Approach Lighting System (ODALS) on Runway 26

<sup>52</sup> U.S. Code, 1966, National Historic Preservation Act of 1966, Public Law 89-665

<sup>53</sup> U.S. Code, 1974, Archaeological and Historical Preservation Act of 1974, 16 USC 469

- Precision Approach Path Indicator (PAPI) on Runway 8/26
- Airport beacon
- Parking and other landside lighting

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

## 6.10 NATURAL RESOURCES AND ENERGY SUPPLY

Executive Order 13123, *Greening the Government through Efficient Energy Management*, supports the expansion and use of renewable energy within facilities and activities. It also requires federal agencies to reduce the use of petroleum, total energy use and associated air emissions, and water consumption in facilities. In addition, the FAA encourages the development of facilities that demonstrate high standards of design including principles of sustainability.

The airport installed 3,600 photovoltaic panels on five acres of airport-owned land in 2011. The solar array is community owned and allows members of Holy Cross Energy to purchase power from the panels and benefit in the same way that typical residences with solar panels on their homes do.

## 6.11 NOISE

Aircraft noise and noise surrounding airports are two of the most notorious issues related to the environment at airports. The FAA examines actions and development that may change runway configurations, airport/aircraft operation and/or movements, aircraft types, and flight patterns, all of which could ultimately alter the noise impacts on the communities in the vicinity of an airport. Noise concerns and abatement procedures are covered in detail in **Section 2.11**.

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

Airport development actions have the potential to create social impacts, health and safety risks to children, and socioeconomic impacts, including moving homes or businesses; dividing or disrupting established communities; changing surface transportation patterns; disrupting orderly, planned development; and creating a notable change in employment.

The Airport is located away from residential areas, businesses, communities, and schools. As such, the Airport and its existing conditions do not create socioeconomic impacts, environmental injustice, or health and safety risks to children.

## 6.13 WATER QUALITY

The Clean Water Act<sup>54</sup> provides the federal government the “authority to establish water quality standards, control discharges, develop waste treatment management plans and practices, prevent or minimize the loss of wetlands, location with regard to an aquifer or sensitive ecological area such as a wetland area, and regulate other issues concerning water quality”.

The most significant hydrological features in the area are the Colorado River, located one-half mile north of the Airport, Mamm Creek located 600 feet east of the Airport, Dry Creek located 500 feet to the west of the Airport, and the Last Chance Ditch located 300 feet north of the Airport.

The major watershed near Rifle is the Colorado Headwaters-Plateau Watershed. It is monitored by the National Park Service Water Resources Division, Colorado Department of Public Health and Environment, The Rivers of Colorado Water Watch Network, and the EPA National Aquatic Resource Survey Data.

## 6.14 WETLANDS

Executive Order 11990, Protection of Wetlands, defines wetlands as “those areas that are inundated by surface or groundwater with a frequency sufficient to support and under normal circumstances does or would support a prevalence of vegetative or aquatic life that requires saturated or seasonally saturated soil conditions for growth and reproduction.”

A preliminary look at existing wetlands, through the U.S. Fish and Wildlife Service’s Wetlands Mapper, shows that wetlands may exist on and near the Airport. An official wetland delineation is recommended prior to any extensive development projects.

## 6.15 WILD AND SCENIC RIVERS

The Wild and Scenic Rivers Act of 1968, as amended, describes those river segments designated as, or eligible to be included in, the Wild and Scenic Rivers System. Impacts should be avoided or minimized to the extent possible when the rivers or river segments that fall under this Act may be affected by a proposed action. In addition, the President’s 1979 *Environmental Message Directive* on Wild and Scenic Rivers, directs Federal agencies to avoid or mitigate adverse effects on rivers identified in the Nationwide Rivers Inventory as having potential for designation under the Wild and Scenic Rivers Act.

The Cache La Poudre River is the only nationally designated Wild and Scenic River in Colorado. The River is approximately 150 miles to the northeast of the Airport.

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<sup>54</sup> U.S. Code, 1977 The Clean Water Act, 33 U.S.C. §1251-1387