

ENVIRONMENTAL OVERVIEW



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CHAPTER EIGHT

ENVIRONMENTAL

An environmental overview is designed to assist the planning team by providing information regarding the possible presence of sensitive environmental resources that could be affected by airport improvement projects. This information is intended to help determine if additional alternatives are needed in order to avoid or minimize the environmental impact of a project; identify the level of coordination and analysis needed for these projects; and identify if an environmental assessment or environmental impact statement would be required or whether categorical exclusions may apply in order to help the planning team estimate costs and scheduling to complete the National Environmental Policy Act (NEPA) process.¹

The purpose of this environmental overview is to identify existing environmental conditions in and around the airport. This environmental overview is a preliminary review and is based mainly on existing studies and documentation gathered from federal, state, and local government agencies with limited field investigation or agency coordination. It is intended to help Idaho Falls Regional Airport (IDA) conduct an initial evaluation of the airport improvement projects discussed in [Chapter 7, Development Alternatives](#), in order to expedite the environmental review and compliance process.²



8.1. The Environmental Review Process

When federal funding is used for airport improvement projects, these activities are considered to be federal actions and are then subject to the NEPA process. This process is an independent, federal decision making process requiring public disclosure of critical planning and environmental information regarding the proposed action and its reasonable alternatives. Depending on the potential environmental effects of the proposed project, it can require either a categorical exclusion (CATEX), an environmental assessment, or an environmental impact statement to be completed as part of the environmental review process.

8.1.1. Categorical Exclusion

A proposed action may be categorically excluded from a detailed environmental analysis if it meets certain criteria that the Federal Aviation Administration (FAA) has previously determined to have no significant environmental impact. These actions normally involve administrative and planning-related actions such as approval of an airport layout plan (ALP) or authorization for the purchase of snow removal equipment. However, they can also include projects such as installing or upgrading airfield lighting as well as making certain improvements to an existing airfield facility such as resurfacing runway pavements.

8.1.2. Environmental Assessment

An environmental assessment (EA) is a concise document that takes a hard look at the expected environmental effects of a proposed action in order to determine if the proposed action has the potential to cause significant environmental effects. These actions typically involve more extensive projects such as approval of a new runway or a major runway extension. If the FAA determines the action will not have a significant environmental impact, the agency will issue a finding of no significant impact (FONSI) that explains the reason for this determination. If the agency determines the action will have a significant environmental impact, an environmental impact statement will be required.

8.1.3. Environmental Impact Statement

An environmental impact statement (EIS) is a more detailed and rigorous evaluation of the environmental impacts of the proposed action. The types of proposed actions that typically require an environmental impact statement include construction of a new commercial service airport located in a metropolitan statistical area. The environmental impact statement process requires the FAA to publish a notice of intent in the Federal Register to inform the public of the upcoming environmental analysis and describe how the public can become involved in the process. This is followed up with a draft of the environmental impact statement being published for public review and comment for a minimum of 45 days. Upon close of the public comment period, the FAA considers all substantive comments and, if necessary, conducts further analyses. The final environmental impact statement is then published along with responses to substantive comments. After a 30-day wait period, the process ends with the FAA issuing a record of decision (ROD) that explains the decision, describes the alternatives considered, and discusses any plans for mitigation and monitoring.³

8.1.4. Environmental Documentation Required

While some of the projects proposed in this airport master plan may be within the scope of a categorical exclusion, most of these projects will likely require an environmental assessment.

8.2. Environmental Overview Summary

This environmental overview discusses existing conditions associated with the environmental impact categories defined in FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures*, that need to be evaluated as part of the environmental review and compliance processes.⁴ These environmental impact categories are listed in [Table 8.1](#) along with a summary of potential impacts or agency coordination and permits that may be required.

Table 8.1: Environmental Overview Summary

Environmental Impact Category	Potential Impacts and Required Permits
Air Quality	<ul style="list-style-type: none"> •Unlikely to have a significant impact. •An Idaho Department of Environmental Quality permit to construct may be required.
Biological Resources	<ul style="list-style-type: none"> •Unlikely to have a significant impact.
Climate	<ul style="list-style-type: none"> •Unlikely to have a significant impact.
Coastal Resources	<ul style="list-style-type: none"> •No coastal resources are associated with the airport.
Department of Transportation Act, Section 4(f)	<ul style="list-style-type: none"> •West side development projects will impact Section 4(f) resources. •Will likely require consultation with the agencies having jurisdiction over Section 4(f) resources.
Farmlands	<ul style="list-style-type: none"> •May require coordination with the Natural Resources Conservation Service (NRCS) and a Farmland Conversion Impact Rating Form AD-1006 to be completed.
Hazardous Materials, Solid Waste, and Pollution Prevention	<ul style="list-style-type: none"> •May require Phase I and Phase II Environmental Site Assessments to determine if hazardous materials are located at the project site. •May require development of a hazardous materials response plan and a spill prevention, control, and countermeasure plan.
Historical, Architectural, Archeological, and Cultural Resources	<ul style="list-style-type: none"> •West side development projects will potentially impact historic resources. •Will require coordination with the state historic preservation office (SHPO) and the tribal historic preservation office (THPO). •May require development of an inadvertent discovery plan.
Land Use	<ul style="list-style-type: none"> •Will require coordination with the City of Idaho Falls Planning Division to ensure projects are consistent with local plans. •May require a letter from the City of Idaho Falls stating the proposed action is consistent with existing land use plans.
Natural Resources and Energy Supply	<ul style="list-style-type: none"> •Unlikely to have a significant impact.
Noise and Noise-Compatible Land Use	<ul style="list-style-type: none"> •Unlikely to have a significant impact.
Socioeconomics, Environmental Justice, and Children's Health and Safety Risks	<ul style="list-style-type: none"> •Unlikely to have a significant impact. •Relocation assistance would be required for projects that involve property acquisition.
Visual Effects	<ul style="list-style-type: none"> •West side development projects will likely impact visual effects.
Water Resources	<ul style="list-style-type: none"> •A wetland delineation and a U.S. Army Corps of Engineers Section 404 permit may be required for projects involving the East Lateral, Armstrong Lateral, or Hoff Lateral. •National Pollutant Discharge Elimination System (NPDES) and Idaho Pollution Discharge Elimination System (IPDES) permits may be required.

8.3. Resources Not Affected

8.3.1. Coastal Resources

Idaho Falls Regional Airport is located in Bonneville County, Idaho, which is not within the Coastal Barrier Resources System (CBRS) as shown on U.S. Fish and Wildlife Service coastal barrier maps.⁵ Therefore, no coastal resources are associated with the airport.

8.3.2. Wild and Scenic Rivers

According to the Nationwide Rivers Inventory, which is maintained by the National Parks Service, there are no Wild and Scenic Rivers or river segments located on airport property or in its immediate vicinity.⁶ Therefore, the projects proposed in this airport master plan would have no effect on Wild and Scenic Rivers.

8.4. Air Quality

8.4.1. Regulatory Setting

The Clean Air Act (CAA) authorized the U.S. Environmental Protection Agency (EPA) to establish National Ambient Air Quality Standards (NAAQS) for six common air pollutants. These pollutants, which are known as criteria pollutants, include carbon monoxide (CO), nitrogen dioxide (NO₂), ozone (O₃), particulate matter (PM₁₀ and PM_{2.5}), sulfur dioxide (SO₂), and lead (Pb).

The Idaho Department of Environmental Quality is responsible for monitoring emissions to make sure levels of these pollutants meet federal and state air quality standards throughout Idaho.⁷

a. Attainment, Nonattainment, and Maintenance Areas

Attainment areas are areas where the air quality meets or exceeds the national standard. If the air quality does not meet the national standard, the EPA designates the area as a nonattainment area. Nonattainment areas are then required to have a state implementation plan (SIP) that details the emission reduction strategies to bring nonattainment areas into attainment. After the air quality in that area once again meets the national standard, the EPA designates the area as a maintenance area.⁸

b. Required Permits

An Idaho Department of Environmental Quality air quality permit to construct (PTC) is required before constructing or modifying buildings, structures, and installations that emit or may emit air pollutants.⁹

8.4.2. Affected Environment

Idaho Falls Regional Airport is located in Bonneville County. According to the Idaho Department of Environmental Quality, which monitors air quality at 30 sites within the state, the closest monitoring station is in Idaho Falls and is located approximately 3.78 miles southeast of the airport.¹⁰ According to the EPA Green Book, as of May 2023, Bonneville County is in attainment for all criteria air pollutants.¹¹

8.4.3. Environmental Consequences

To identify the potential impact the projects proposed in this airport master plan would have on air quality, both direct and indirect impacts resulting from the construction and operation of these projects need to be examined. This requires preparing an emissions inventory to determine the amount of criteria pollutants that would be generated by construction and operation of each proposed project.

a. Construction Emissions

Construction of the projects proposed in this airport master plan would result in both direct and indirect impacts to air quality. However, these impacts will be short-term and are considered normal for construction activities.

b. Operational Emissions

The projects proposed in this airport master plan are unlikely to result in an increase in the number of flights, type of aircraft, or number of airport users beyond expected growth, and therefore would have no impact on air quality.

8.4.4. Significance Determination

According to FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures*, the threshold for determining if an action would have a significant impact on air quality is if, "*The action would cause pollutant concentrations to exceed one or more of the National Ambient Air Quality Standards (NAAQS), as established by the Environmental Protection Agency under the Clean Air Act, for any of the time periods analyzed, or to increase the frequency or severity of any such existing violations.*"¹²

a. Potential Impacts

The airport is located in an attainment area for all criteria air pollutants, and a temporary increase in emissions due to construction is unlikely to affect Bonneville County's attainment status. Therefore, the projects proposed in this airport master plan are not expected to have a significant impact on air quality.

8.5. Biological Resources

8.5.1. Regulatory Setting

The Endangered Species Act (ESA) requires federal agencies to consult with the U.S. Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS) to determine if a proposed action the agency authorizes, funds, or carries out is likely to jeopardize a species listed as threatened or endangered or result in the destruction or adverse modification of designated critical habitat.

8.5.2. Affected Environment

As previously discussed in [Section 4.1. Natural and Physical Environment](#), the airport is located within the city of Idaho Falls and is situated less than 1,000 feet from the western bank of the upper Snake River. It is also within the eastern section of the Snake River Plain which is a large and wide depression that extends east to west across southern Idaho. The Upper Snake River Plain is nearly level and contains pastureland, cities, suburbs, industries, and cropland where extensive surface irrigation occurs.

The airport property has been previously disturbed by development activities and has minimal vegetation as it is maintained to support aircraft operations. The airport property is currently zoned as light manufacturing and heavy commercial. The land surrounding the airport is primarily zoned as agricultural farmland, commercial, and residential.

a. Federally-Protected Species; Critical Habitat; Essential Fish Habitat

Several public databases were reviewed to determine the special status species that may be present on airport property. These databases include the U.S. Fish & Wildlife Service Information, Planning, and Consultation (IPaC) database and the National Oceanic and Atmospheric Administration Essential Fish Habitat Mapper. According to these databases, there are no designated or proposed critical habitats, and no essential fish habitats or habitat areas of particular concern located on airport property. According to the IPaC database, the monarch butterfly (*Danaus plexippus*) is a candidate species that could potentially occur on or near airport property. However, consultation with the U.S. Fish & Wildlife Service is not required for candidate species under Section 7 of the Endangered Species Act.¹³

b. State-Protected Species

The Idaho State Wildlife Action Plan is the state's guiding document for managing and conserving at-risk species with the potential to be listed under the Endangered Species Act. The species of greatest conservation need and the habitats upon which they depend that have been observed within Bonneville County are listed in [Table 8.2](#).¹⁴

Table 8.2: Idaho Species of Greatest Conservation Need

Common Name	Scientific Name	Common Name	Scientific Name
Tier 1 Species			
Morrison's Bumble Bee	<i>Bombus morrisoni</i>	Yellow-billed Cuckoo	<i>Coccyzus americanus</i>
Western Bumble Bee	<i>Bombus occidentalis</i>	Wolverine	<i>Gulo gulo</i>
Greater Sage-Grouse	<i>Centrocercus urophasianus</i>	Grizzly Bear	<i>Ursus arctos</i>
Tier 2 Species			
Clark's Grebe	<i>Aechmophorus clarkii</i>	Pinyon Jay	<i>Gymnorhinus cyanocephalus</i>
Western Grebe	<i>Aechmophorus occidentalis</i>	Harlequin Duck	<i>Histrionicus histrionicus</i>
Western Toad	<i>Anaxyrus boreas</i>	Silver-haired Bat	<i>Lasionycteris noctivagans</i>
Golden Eagle	<i>Aquila chrysaetos</i>	Hoary Bat	<i>Lasiurus cinereus</i>
Sagebrush Sparrow	<i>Artemisiospiza nevadensis</i>	Northern Leopard Frog	<i>Lithobates pipiens</i>
Burrowing Owl	<i>Athene cunicularia</i>	Lewis's Woodpecker	<i>Melanerpes lewis</i>
American Bittern	<i>Botaurus lentiginosus</i>	Long-billed Curlew	<i>Numenius americanus</i>
Ferruginous Hawk	<i>Buteo regalis</i>	Sage Thrasher	<i>Oreoscoptes montanus</i>
Black Tern	<i>Chlidonias niger</i>	Bighorn Sheep	<i>Ovis canadensis</i>
Idaho Dune Tiger Beetle	<i>Cicindela arenicola</i>	American White Pelican	<i>Pelecanus erythrorhynchos</i>
Rocky Mountain Dusksnail	<i>Colligyrus greggi</i>	White-faced Ibis	<i>Plegadis chihi</i>
Trumpeter Swan	<i>Cygnus buccinator</i>	Caspian Tern*	<i>Hydroprogne caspia</i>
Bobolink	<i>Dolichonyx oryzivorus</i>	California Gull*	<i>Larus californicus</i>
Common Loon	<i>Gavia immer</i>		
Tier 3 Species			
Grasshopper Sparrow	<i>Ammodramus savannarum</i>	Franklin's Gull	<i>Leucophaeus pipixcan</i>
Short-eared Owl	<i>Asio flammeus</i>	Western Small-footed Myotis	<i>Myotis ciliolabrum</i>
Yellow Bumble Bee	<i>Bombus fervidus</i>	Little Brown Myotis	<i>Myotis lucifugus</i>
Hunt's Bumble Bee	<i>Bombus huntii</i>	Clark's Nutcracker	<i>Nucifraga columbiana</i>
Common Nighthawk	<i>Chordeiles minor</i>	Mountain Goat	<i>Oreamnos americanus</i>
Olive-sided Flycatcher	<i>Contopus cooperi</i>	Rotund Physa	<i>Physella columbiana</i>
Townsend's Big-eared Bat	<i>Corynorhinus townsendii</i>	White-headed Woodpecker	<i>Picoides albolarvatus</i>
Monarch	<i>Danaus plexippus</i>	Great Gray Owl	<i>Strix nebulosa</i>
Sandhill Crane	<i>Grus canadensis</i>	Ring-billed Gull*	<i>Larus delawarensis</i>

*Breeding population only

Source: Idaho Department of Fish and Game, Bonneville County Observations List.

c. Migratory Birds

Certain birds are protected by the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA). Activities that may result in impacts to Birds of Conservation Concern (BCC) or their habitats should be coordinated with the USFWS, and all appropriate regulations and conservation measures should be followed. According to the IPaC database, there are 18 species on the Birds of Conservation Concern list or that warrant special attention that could potentially occur on or near airport property (Table 8.3).¹⁵

Table 8.3: Birds of Conservation Concern

Common Name	Scientific Name	Breeding Season
American White Pelican	<i>pelecanus erythrorhynchos</i>	April 1 – August 31
Bald Eagle	<i>Haliaeetus leucocephalus</i>	December 1 – August 31
Black Tern	<i>Chlidonias niger</i>	May 15 – August 20
Bobolink	<i>Dolichonyx oryzivorus</i>	May 20 – July 31
California Gull	<i>Larus californicus</i>	March 1 – July 31
Cassin's Finch	<i>Carpodacus cassinii</i>	May 15 – July 15
Clark's Grebe	<i>Aechmophorus clarkii</i>	June 1 – August 31
Evening Grosbeak	<i>Coccothraustes vespertinus</i>	May 15 – August 10
Franklin's Gull	<i>Leucophaeus pipixcan</i>	May 1 – July 31
Lesser Yellowlegs	<i>Tringa flavipes</i>	Breeds elsewhere
Lewis's Woodpecker	<i>Melanerpes lewis</i>	April 20 – September 30
Marbled Godwit	<i>Limosa fedoa</i>	Breeds elsewhere
Olive-sided Flycatcher	<i>Contopus cooperi</i>	May 20 – August 31
Pinyon Jay	<i>Gymnorhinus cyanocephalus</i>	February 15 – July 15
Rufous Hummingbird	<i>selasphorus rufus</i>	April 15 – July 15
Sage Thrasher	<i>Oreoscoptes montanus</i>	April 15 – August 10
Western Grebe	<i>aechmophorus occidentalis</i>	June 1 – August 31
Willet	<i>Tringa semipalmata</i>	April 20 – August 5

Source: U.S. Fish & Wildlife Service, Information for Planning and Consultation.

8.5.3. Environmental Consequences

To identify the potential impact the projects proposed in this airport master plan would have on biological resources, impacts from construction and ongoing operations need to be examined. This includes the following:

- Identifying potential impacts from construction activities such as the destruction or alteration of habitat, the disturbance or elimination of local fish, wildlife, or plant populations, and the introduction of invasive species.
- Identifying the vegetation types and wildlife species associated with the project area.
- Identifying potential impacts from operation of the proposed project. This includes discussing disturbances to noise-sensitive terrestrial and aquatic animal species generated by operational noise within the vicinity of the project area as well as any land area or open water that aircraft would fly over.¹⁶

8.5.4. Significance Determination

According to FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures*, the threshold for determining if an action would have a significant impact on biological resources is if, “*The U.S. Fish and Wildlife Service or the National Marine Fisheries Service determines that the action would be likely to jeopardize the continued existence of a Federally-listed threatened or endangered species, or would result in the destruction or adverse modification of federally-designated critical habitat.*”

The FAA has not established a significance threshold for non-listed species. However, FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures*, does identify the following factors to consider in evaluating potential impacts.

The action would have the potential for:

- A long-term or permanent loss of unlisted plant or wildlife species from a large project area.
- Adverse impacts to special status species (e.g., state species of concern, species proposed for listing, migratory birds, bald and golden eagles) or their habitats.
- Substantial loss, reduction, degradation, disturbance, or fragmentation of native species’ habitats or their populations.
- Adverse impacts on a species’ reproductive success rates, natural mortality rates, non-natural mortality (e.g., road kills and hunting), or ability to sustain the minimum population levels required for population maintenance.¹⁷

a. Potential Impacts

The projects proposed in this airport master plan are not expected to have a significant impact on biological resources.

8.6. Climate

8.6.1. Regulatory Setting

The Clean Air Act authorized the U.S. Environmental Protection Agency to regulate greenhouse gas emissions. The EPA determined there are six greenhouse gases that need to be regulated which include carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFC), perfluorocarbons (PFC), and sulfur hexafluoride (SF₆).

8.6.2. Affected Environment

The U.S. Environmental Protection Agency prepares an annual *Inventory of U.S. Greenhouse Gas Emissions and Sinks*. According to this report, total gross U.S. greenhouse gas emissions were 6,340.2 million metric tons of carbon dioxide equivalent (MMT CO₂ Eq.) for 2021 with transportation activities accounting for 28.5%. This includes 6.6% contributed by commercial aircraft and 2.0% contributed by other aircraft.¹⁸

According to the U.S. EPA's *Inventory of U.S. Greenhouse Gas Emissions and Sinks by State*, Idaho's total greenhouse gas emissions for 2020, which was the most recent year of analysis, was estimated at 35.369 million metric tons of carbon dioxide equivalent. In Idaho, the transportation sector contributed approximately 10.312 million metric tons of carbon dioxide equivalent.¹⁹

8.6.3. Environmental Consequences

To identify the potential impact the projects proposed in this airport master plan would have on climate, the same emission sources included in the air quality analysis should be examined. For non-aircraft sources of emissions, greenhouse gas emissions should be determined from projections of fuel burn and converted to CO₂e. This includes evaluating both direct and indirect emissions that would occur as a result of any operational changes as well as construction of these projects.²⁰

a. Operational Changes

The projects proposed in this airport master plan are unlikely to result in an increase in the number of flights, type of aircraft, or number of airport users beyond expected growth, and therefore would not have a direct impact on climate.

b. Construction Emissions

Construction of the projects proposed in this airport master plan would result in both direct impacts (e.g., the use of construction equipment) and indirect impacts (e.g., worker commutes to the site) to climate. However, these impacts will be short-term, of local impact, and are considered normal for construction activities.

8.6.4. Significance Determination

The FAA has not established a significance threshold for climate. However, guidance provided by the Council on Environmental Quality does recommend federal agencies consider the potential effects of a proposed action, as indicated by its greenhouse gas emissions, and the implications regarding climate change. It is also important to note that there are currently no accepted methods for determining the impact an aviation project would have on climate change.²¹

a. Potential Impacts

The projects proposed in this airport master plan are not expected to have a significant impact on climate.

8.7. Department of Transportation Act, Section 4(f)

8.7.1. Regulatory Setting

Under Section 4(f) of the U.S. Department of Transportation Act, any transportation project that requires the use of public land considered to be a significant resource is prohibited unless there is no feasible and prudent alternative, and the project includes all possible planning to minimize harm resulting from the use. 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).

A project that would use Section 4(f) parks or recreation areas must also comply with Section 6(f) of the Land and Water Conservation Fund if the property was acquired or developed with financial assistance under the Land and Water Conservation Fund State Assistance Program.

a. Land and Water Conservation Fund Act, Section 6(f)

Section 6(f) of the Land and Water Conservation Fund Act established a grant program for states and local governments to acquire and develop public outdoor recreation sites and facilities. It also prevents these lands from being converted to non-recreation uses unless the U.S. Department of the Interior (DOI) approves the conversion. Section 6(f), which is administered by the National Park Service (NPS), requires that areas funded through the program remain for public outdoor recreation use or be replaced by lands of equal value, location, and recreation usefulness.

8.7.2. Affected Environment

An initial review of publicly available records was conducted to identify potential Section 4(f) resources located at or adjacent to the airport. This includes records maintained by the National Park Service, the National Register of Historic Places, and the city of Idaho Falls.

a. Parks and Recreational Resources

Publicly owned parks and recreational areas are considered to be Section 4(f) resources when they are of national, state, or local significance and open to the public. The public parks and recreational areas that are located at or adjacent to the airport and could potentially be considered 4(f) resources are listed in [Table 8.4](#).²²

Esquire Acres Park was developed using Land and Water Conservation Fund Act funds as well as FAA funds and has the potential to be a Section 6(f) property. However, there is no proposed development associated with Esquire Acres Park and the master plan alternatives.

Table 8.4: Parks and Recreational Areas

Property Name	Location
Old Butte Park and Soccer Complex	1055 North 26th West
Esquire Acres Park	800 Moonlite Drive
Reinhart Park	1055 Washburn Avenue

Source: City of Idaho Falls.

b. Wildlife and Waterfowl Refuges

Publicly-owned wildlife and waterfowl refuges are considered to be Section 4(f) resources when they are of national, state, or local significance and are open to the public. According to the U.S. Fish & Wildlife Service, there are no wildlife or waterfowl refuges located on or adjacent to airport property.²³

c. Historic Sites

Public and privately owned historic sites are considered to be Section 4(f) resources when they are of national, state, or local significance regardless of whether they are open to the public. The National Register of Historic Places was reviewed to identify existing historic sites located on or adjacent to airport property that could potentially qualify as Section 4(f) resources ([Table 8.5](#)).²⁴ As discussed in [Section 8.10. Historical, Architectural, Archeological, and Cultural Resources](#), an additional 24 resources were recently identified as potentially being eligible for listing in the National Register of Historic Places.

Table 8.5: Existing Historic Sites

Property Name	Location
Airport Historic District	2381 Foote Drive
East Lateral Canal System	Adjacent to and on airport property

Source: National Park Service, National Register of Historic Places.

8.7.3. Environmental Consequences

To identify the potential impact the projects proposed in this airport master plan would have on Section 4(f) resources, both the physical use and constructive use of these resources need to be examined.²⁵

a. Physical Use

A physical use of Section 4(f) resources occurs if a proposed project involves the actual physical taking of a Section 4(f) property through the 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. This typically does not include the temporary occupancy of a Section 4(f) property for construction-related activities.

b. Constructive Use

A constructive use occurs if a proposed project impacts a Section 4(f) property so severely that the activities, features, or attributes that qualify the property for protection under Section 4(f) are substantially impaired.

8.7.4. Significance Determination

According to FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures*, the threshold for determining if an action would have a significant impact on Section 4(f) resources is if, *"The action involves more than a minimal physical use of a Section 4(f) resource or constitutes a "constructive use" based on an FAA determination that the aviation project would substantially impair the Section 4(f) resource. Resources that are protected by Section 4(f) are publicly owned land from a public park, recreation area, or wildlife and waterfowl refuge of national, state, or local significance; and publicly or privately owned land from an historic site of national, state, or local significance. Substantial impairment occurs when the activities, features, or attributes of the resource that contribute to its significance or enjoyment are substantially diminished."*²⁶

a. Potential Impacts

West side development projects will likely impact the parks and recreational areas considered to be Section 4(f) resources and also have the potential to impact sections of the Armstrong, East, and Hoff laterals which are sub-features of the historic East Lateral Canal System.

8.8. Farmlands

8.8.1. Regulatory Setting

The Farmland Protection Policy Act (FPPA) regulates federal actions with the potential to convert farmland to non-agricultural uses.

8.8.2. Affected Environment

The National Resources Conservation Service (NRCS) keeps an inventory (i.e., the Web Soil Survey) of the prime and unique farmland in the United States. This inventory identifies the classification, soil type, and location of important rural lands needed to produce food, feed, fiber, forage, and oilseed crops. The farmland classifications for each of the soil types identified in the National Resources Conservation Service Web Soil Survey for Idaho Falls Regional Airport are listed in Table 8.6.

Table 8.6: Farmland Classifications

Soil Type	Farmland Classification	Acres	Percentage
Bannock loam	Prime farmland if irrigated	4.6	0.5%
Bock loam	Prime farmland if irrigated	63.1	7.4%
Packham gravelly loam	Prime farmland if irrigated	20.8	2.4%
Pancheri silt loam 0-2% slopes	Prime farmland if irrigated and reclaimed of excess salts and sodium	447.2	52.4%
Pancheri silt loam 2-4% slopes	Prime farmland if irrigated and reclaimed of excess salts and sodium	263.3	30.9%
Pancheri silt loam 4-8% slopes	Not prime farmland	30.0	3.5%
Polatis-Rock outcrop complex 2-25% slopes	Not prime farmland	5.2	0.6%
Stan sandy loam	Prime farmland if irrigated	19.1	2.2%

Source: USDA, NRCS.

According to the National Resources Conservation Service Web Soil Survey, approximately 12.5% of the airport property consists of soil types that are considered prime farmland if irrigated (map unit 6, 7, 20, & 47), and approximately 83.3% consists of soil types that are considered prime farmland if irrigated and reclaimed of excess salts and sodium (map unit 22 & 23). Some of this property is currently being used for active farming.²⁷

8.8.3. Environmental Consequences

For projects that involve converting farmlands to non-farm use, U.S. Department of Agriculture (USDA) Form AD-1006, *Farmland Conversion Impact Rating*, will need to be completed and submitted to the local National Resources Conservation Service office or U.S. Department of Agriculture service center for evaluation in order to determine potential impact on farmlands.²⁸

8.8.4. Significance Determination

According to FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures*, the threshold for determining if an action would have a significant impact on farmlands is if, "The total combined score on Form AD-1006, "Farmland Conversion Impact Rating," ranges between 200 and 260 points."²⁹

a. Potential Impacts

The projects proposed in this airport master plan are not expected to have a significant impact on farmlands.

8.9. Hazardous Materials, Solid Waste, and Pollution Prevention

8.9.1. Regulatory Setting

The Resource Conservation and Recovery Act (RCRA) authorized the U.S. Environmental Protection Agency to establish a comprehensive regulatory program that ensures hazardous waste is safely managed from the time it is created until it is disposed. This includes how it is transported, treated, and stored. Under Idaho's Rules and Standards for Hazardous Waste, hazardous waste is regulated at the state level by the Idaho Department of Environmental Quality (DEQ).³⁰

According to FAA Advisory Circular 150/5100-17, *Land Acquisition and Relocation Assistance for Airport Improvement Program (AIP) Assisted Projects*, an adequate due diligence environmental audit should be conducted as part of the project planning and environmental assessment phases to determine if hazardous materials and contamination is present on the property. These audits include Phase I and Phase II Environmental Site Assessments which should identify quantities of any hazardous materials located at the proposed project site or in the immediate vicinity of a project site.³¹

8.9.2. Affected Environment

Construction of the projects proposed in this airport master plan would generate construction debris that would result in a temporary increase in the quantity of solid waste generated at the airport. Additionally, this debris may potentially contain hazardous materials such as asbestos or lead-based paint.

a. Identification of Contaminated Sites

The U.S. Environmental Protection Agency maintains a list of superfund sites that have known releases or threatened releases of hazardous substances, pollutants, or contaminants throughout United States called the National Priorities List (NPL). According to this list, there are no sites located on airport property or in its immediate vicinity.³²

According to the EPA's MyEnvironment online search application, there has not been any toxic releases to air, land, or water reported on airport property. However, this site did identify the Snake River Animal Shelter to be a Brownfield property because this location was operated as a landfill in 1968.³³ Brownfield sites are vacant or underutilized properties that may have been compromised by actual or perceived contamination.³⁴

A review of the Idaho Department of Environmental Quality facility mapper revealed two reports of leaking underground storage tanks (LUST) on airport property. These include a storage tank owned by Aero Mark (Case 430) reported in 1992 and a storage tank owned by Delta Air Lines (Case 1285) reported in 1998. Both spills were cleaned up.³⁵

A Phase 1 Environmental Site Assessment (ESA) of the east side retention basin, tree farm, RV parking, and community garden was conducted by North Wind Environmental Consulting Services during this master plan. Small amounts of hazardous materials were present but stored properly, and one *de minimus* environmental condition was observed (an above ground storage tank, oil stained dirt, and bags of herbicide and fertilizer). No further environmental surveys were recommended for these sites.³⁶

b. Identification of Solid and Hazardous Waste Disposal Capacity

The Peterson Hill Landfill serves as the sole municipal solid waste landfill for Bonneville County, and most construction and demolition debris is diverted to the Hatch Pit. As of 2008, the landfill currently accepted between 65,000 and 75,000 tons of waste per year and had a total projected life of approximately 150 years.³⁷

8.9.3. Environmental Consequences

To identify the potential impact the projects proposed in this airport master plan would have on hazardous materials, solid waste, and pollution prevention, impacts from construction and ongoing operations need to be examined. This includes determining the following:

- Describe the waste that would be generated from the construction and operation of the projects. This includes waste generated from the disturbance of hazardous materials at an existing contaminated site.
- Determine if the projects would impact the capacity of waste disposal facilities.
- Determine whether the projects would interfere with any ongoing remediation of existing contaminated sites at the proposed project site or in the immediate vicinity of a project site.

a. Hazardous Materials

- Identify types and quantities of any hazardous materials (e.g., oil, gasoline, or jet fuel) that would be used during construction and operation of the proposed projects or any waste generated from the disturbance of hazardous materials at an existing contaminated site, and describe how these hazardous materials would be stored, managed, and transported.
- Determine if any identified contaminated sites would be impacted by the proposed projects.
- Provide the locations of aboveground and underground storage tanks located in the area and if they would be used or potentially impacted by the proposed projects. Determine if waste disposal related to the projects would result in impacts to the capacity of disposal facilities.

b. Hazardous Waste

- Identify any hazardous waste that would be generated by construction and operation of the proposed projects, and describe how it would be stored, managed, and transported.
- Identify any on-site treatment, engineering, or administrative controls that may be applied to the hazardous waste encountered.

c. Solid Waste

- Identify the solid waste that would be generated by construction and operation of the proposed projects, and describe how it would be stored, managed, and disposed.

d. Pollution Prevention

- Describe any pollution prevention activities, plans, programs, or policies currently being undertaken or in effect that may be relevant to the proposed projects.
- Describe how pollution prevention plans or programs associated with the proposed projects would help avoid, prevent, or reduce pollutant discharges or emissions.
- Describe aspects of operations and waste generation from the proposed projects that could result in accidental discharges with the potential to negatively impact the environment.
- Describe appropriate pollution prevention planning measures that will be taken to address accidental discharges, and describe methods to be employed to control spills and any other unauthorized releases during construction and operation of the proposed projects.³⁸

8.9.4. Significance Determination

The FAA has not established a significance threshold for hazardous materials, solid waste, and pollution prevention. However, FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures*, does identify the following factors to consider in evaluating potential impacts:

- The proposed project would have the potential to involve a contaminated site or violate applicable federal, state, tribal, or local laws or regulations regarding hazardous materials or solid waste management.
- The proposed project would generate a quantity or type of solid waste that would exceed local capacity.
- The proposed project would adversely affect human health and the environment.³⁹

a. Potential Impacts

The projects proposed in this airport master plan are not expected to have a significant impact on hazardous materials, solid waste, and pollution prevention.

8.10. Historical, Architectural, Archeological, and Cultural Resources**8.10.1. Regulatory Setting**

The National Historic Preservation Act (NHPA) established the Advisory Council on Historic Preservation (ACHP) and the National Register of Historic Places within the National Park Service. In Idaho, these are administered by the Idaho State Historic Preservation Office. Resources eligible for inclusion in the National Historic Preservation Act are also covered by Section 106 of the National Historic Preservation Act and Section 4(f) of the U.S. Department of Transportation Act.

8.10.2. Affected Environment

A cultural resources survey was conducted by Preservation Solutions LLC and T-O Engineers in May 2019 as part of Airport Improvement Program project #3-16-0018-041-2016. This survey evaluated above-ground resources for the entire airport and two abutting properties which included Reed's Dairy and Swanson Farmstead.

a. Historical and Architectural Resources

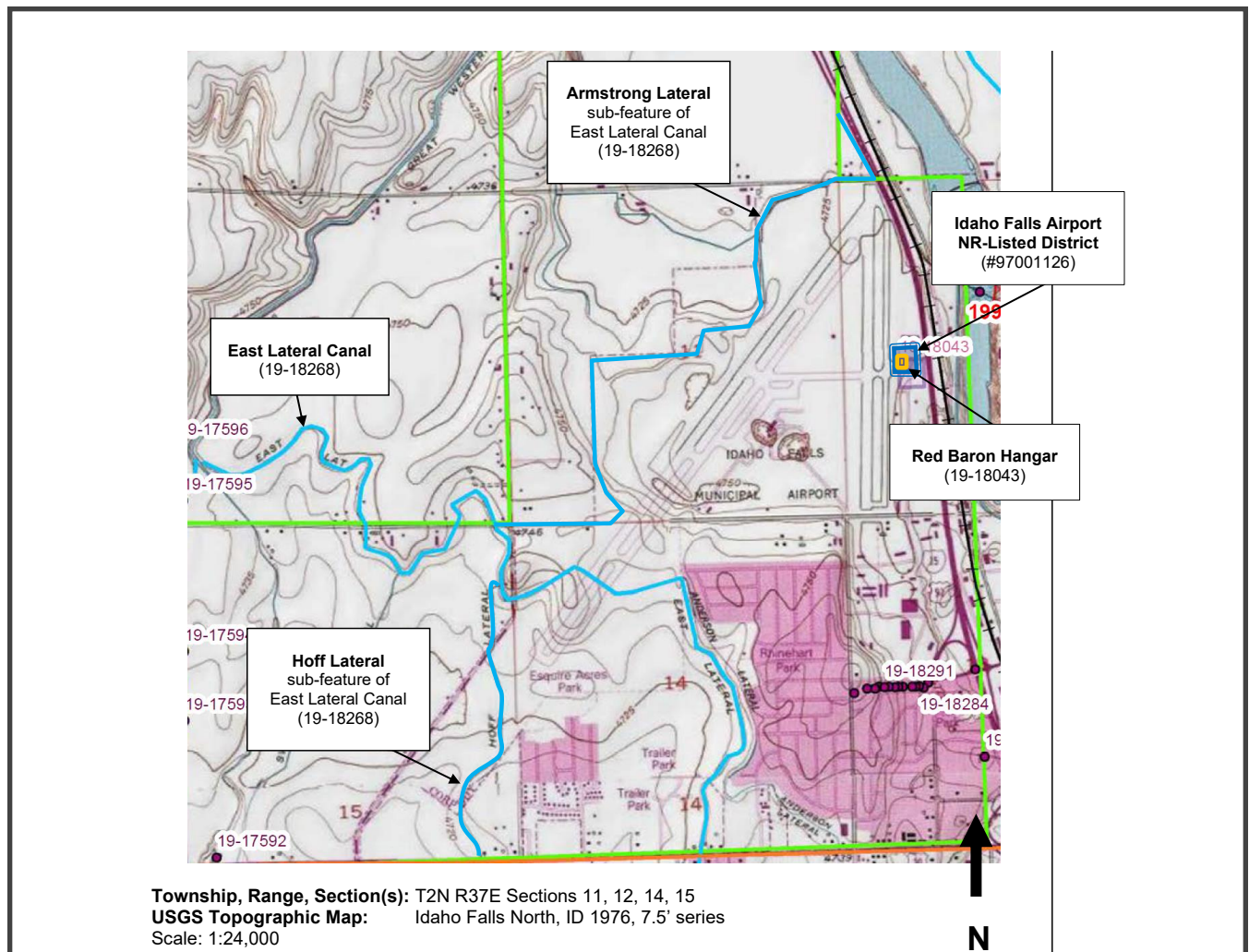
According to this survey, there are three properties in the survey area that have been previously documented and found to be eligible for listing in the National Register of Historic Places (Table 8.7 and Figure 8.1).

Table 8.7: Previously Documented Historic Properties

Reference #	Property	Associations	Status
97001126	Idaho Falls Airport Historic Dist.	WPA, early-to-mid 20th century aviation	Listed
19-18043	Red Baron Hangar	WPA, early-to-mid 20th century aviation	Listed, contributing
19-18268	East Lateral Canal System	Early settlement	Eligible

Source: Preservation Solutions LLC, Idaho Falls Regional Airport Historic Resource Documentation.

Figure 8.1: Previously Documented Historic Properties



Source: Preservation Solutions LLC, Idaho Falls Regional Airport Historic Resource Documentation.

During the on-site investigation, an additional 24 resources were identified as potentially being eligible for listing in the National Register of Historic Places. These include a Craftsman-style farmhouse and two garages as well as a sub-lateral of the East Lateral Canal system located on the Reed's Dairy property; a sub-lateral of the East Lateral Canal system located on the Swanson Farm; three sub-lateral sections of the East Lateral Canal system located on airport property; and an additional 16 structures that are potentially eligible to be included as part of the NRHP-listed Idaho Falls Airport Historic District (Table 8.8 and Figure 8.2).⁴⁰

Table 8.8: Potentially Eligible Idaho Falls Airport Historic District Structures

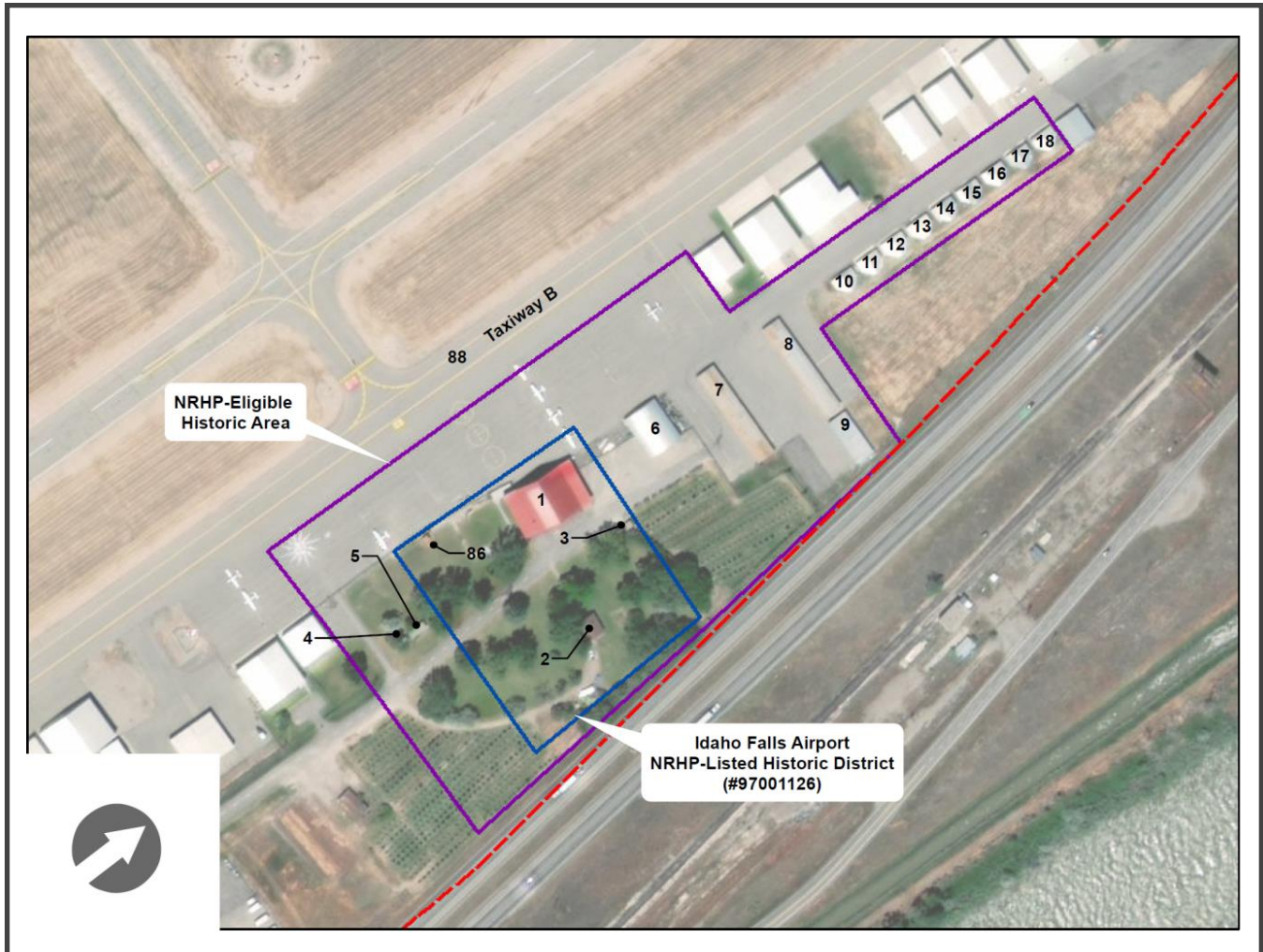
Resource #	Resource	Potential NRHP Eligibility	Date
03	Shed	Contributing	c.1940
04	Power Utility Bldg.	Contributing	c.1945
05	Water Well Shed	Contributing	c.1945
06	Shop	Contributing	c.1957
07	Six-bay Hangar	Contributing	c.1947
08	Six-bay Hangar	Contributing	c.1947
09	Two-bay Hangar	Contributing	c.1950
10	Single-bay Hangar	Contributing	c.1956
11	Single-bay Hangar	Contributing	c.1956
12	Single-bay Hangar	Contributing	c.1956
13	Single-bay Hangar	Contributing	c.1956
14	Single-bay Hangar	Contributing	c.1956
15	Single-bay Hangar	Contributing	c.1956
16	Single-bay Hangar	Contributing	c.1956
17	Single-bay Hangar	Contributing	c.1956
18	Single-bay Hangar	Contributing	c.1956

Source: Preservation Solutions LLC, Idaho Falls Regional Airport Historic Resource Documentation.

8.10.3. Environmental Consequences

To identify the potential impact the projects proposed in this airport master plan would have on historical, architectural, archaeological, and cultural resources, both direct and indirect impacts from construction and ongoing operations need to be examined. This is determined through consultation with the State Historic Preservation Office (SHPO), the Tribal Historic Preservation Office (THPO), and other relevant agencies. When assessing effects, there are three possible outcomes: no historic properties affected, no adverse effect on historic properties, or adverse effect on historic properties.⁴¹

Figure 8.2: Potentially Eligible Idaho Falls Airport Historic District Structures



Source: Preservation Solutions LLC, Idaho Falls Regional Airport Historic Resource Documentation.

8.10.4. Significance Determination

The FAA has not established a significance threshold for historical, architectural, archeological, and cultural resources. However, FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures*, does state that a factor to consider in evaluating potential impacts is if a proposed action would result in a finding of Adverse Effect through the Section 106 process.⁴²

a. Potential Impacts

West side development projects have the potential to impact sections of the Armstrong Lateral, East Lateral, and Hoff Lateral which are sub-features of the historic East Lateral Canal System.

8.11. Land Use

8.11.1. Regulatory Setting

Under the Airport Improvement Program, the FAA may not approve a grant for an airport development project unless the project is consistent with local land use plans. This section should assess the compatibility of land uses in the vicinity of the airport to ensure those uses do not adversely affect safe aircraft operations. This includes identifying any municipal solid waste landfills (40 CFR § 258.10), water management facilities, wildlife refuges, wetlands or other land uses referenced in FAA Advisory Circular 150/5200-33, *Hazardous Wildlife Attractants on or Near Airports* that have the potential to attract hazardous wildlife.

8.11.2. Affected Environment

As previously discussed in [Section 4.2. Airport Zoning](#), and [Section 6.10. Land Use](#), the city of Idaho Falls and Bonneville County are the two jurisdictions that control land use in the immediate areas surrounding the airport. The city's land use regulations designate airport property as Light Manufacturing and Heavy Commercial (LM) ([Figure 4.14](#)). Additionally, the city adopted an Airport Overlay Zone in 2019 with the intention of restricting incompatible uses from locating near the airport ([Figure 4.12](#)). This includes height zone limitations to protect the airport's Part 77 surfaces ([Figure 4.13](#)).

a. Wildlife Hazards

As previously discussed in [Section 6.10.6. Wildlife Hazard Attractants](#), the airport completed a Wildlife Hazard Assessment (WHA) in 2003. The following potential wildlife attractants were identified in this assessment:

- Stormwater runoff at IDA collects in a retention basin located behind the National Oceanic and Atmospheric Administration (NOAA) Air Resources Laboratory between Foote Drive and Interstate Highway 15. The water collects into a standing body of water where it infiltrates into the soil. This standing body of water could be considered a wildlife attractant.
- The Hatch Pit is a landfill operated by Bonneville County. It is located approximately 6,000 feet, or 1.2 miles, northwest of IDA's aircraft operating area and northern approach corridor.
- The City of Idaho Falls Wastewater Treatment Plant is located approximately 2.8 miles south of the airport.

8.11.3. Environmental Consequences

To identify the potential impact the projects proposed in this airport master plan would have on land use, both existing and future land uses must be examined. This includes determining if these projects would result in land uses that are incompatible with existing or future planned uses and assessing the compatibility of land uses in the vicinity of the airport to ensure those uses do not adversely affect safe aircraft operations.

8.11.4. Significance Determination

The FAA has not established a significance threshold for land use. However, FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures*, does state that the determination that significant impacts exist in the land use impact category is normally dependent on the significance of other impact categories. For example, if a proposed project included acquisition of property or noise impacts were associated with airport operations, the project could be considered to have a significant impact on land use.⁴³

a. Potential Impacts

The projects proposed in this airport master plan are not expected to have a significant impact on land use.

8.12. Natural Resources and Energy Supply**8.12.1. Regulatory Setting**

The Council on Environmental Quality (CEQ) requires federal agencies to consider energy requirements, natural depletable resource requirements, and the conservation potential of proposed projects.

8.12.2. Affected Environment

As previously discussed in [Section 4.14, Utilities](#), the airport is located in a well-developed area with adequate access to water, sewer, power, and natural gas, and none of these resources are in short supply in the region.

a. Suppliers of Resources

The City of Idaho Falls is the airport's water and sewer service provider, Idaho Falls Power provides electricity, and Intermountain Gas Company provides natural gas service.

b. Consumption of Resources

Construction of the projects proposed in this airport master plan would likely result in a temporary increase in the airport's consumption of natural resources. These resources include a variety of construction materials, electricity, fuel, oil, and water. These resources are widely available in Bonneville County and the surrounding area, and construction of these projects is not expected to place an undue strain on supplies within the region.

Long-term operation and maintenance of these projects (e.g., terminal and cargo facility expansions) will likely permanently increase demands on water, electricity, and natural gas. These demands are expected to be met by existing infrastructure and are not expected to place an undue strain on supplies within the region.

8.12.3. Environmental Consequences

To identify the potential impact the projects proposed in this airport master plan would have on natural resources and energy supply, impacts from construction as well as ongoing operations and maintenance need to be examined. This includes determining how a proposed project would increase demand for utilities servicing the area, fuel consumption, and consumable materials—especially scarce or unusual materials—in and around the study area.

8.12.4. Significance Determination

The FAA has not established a significance threshold for natural resources and energy supply. However, FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures*, does state that a factor to consider in evaluating potential impacts is if the action would have the potential to cause demand to exceed available or future supplies of these resources.⁴⁴

a. Potential Impacts

The projects proposed in this airport master plan are not expected to have a significant impact on natural resources and energy supply.

8.13. Noise and Noise Compatible Land Use

8.13.1. Regulatory Setting

The Aviation Safety and Noise Abatement Act required the FAA to establish a single system for measuring aviation noise around airport communities that takes into account noise intensity, duration of exposure, frequency of operations, and time of occurrence as well as identifying land uses normally compatible with various noise exposures. As a result, the FAA determined that a person's cumulative exposure to noise resulting from aviation activities must be established in terms of day night average sound level (DNL).

This metric accounts for noise levels of individual aircraft operations, the number of times per day they occur, and when they occur by logarithmically averaging aircraft sound levels at a location during a complete 24-hour period. This metric applies a 10-decibel (dB) penalty to noise that occurs at night (i.e., between 10 p.m. and 7 a.m.). This penalty counts each operation occurring at night the same as ten daytime operations. The penalty attempts to correct for the fact that nighttime noise events are more disruptive than those generated during daytime hours when ambient noise levels are generally higher.

8.13.2. Affected Environment

Noise contours were developed for this airport master plan in order to identify current and future noise conditions. These noise contours were prepared using the FAA's software system, Aviation Environmental Design Tool (AEDT), for determining noise impacts. [Figure 8.3](#) shows the current DNL noise contours based on 2021 operations while [Figure 8.4](#) shows the future DNL noise contours based on operations forecast for 2041.

8.13.3. Environmental Consequences

To identify the potential impact the projects proposed in this airport master plan would have on noise and noise compatible land use, both direct and indirect noise impacts that would occur as a result of construction and ongoing operation of these projects will need to be examined. This includes determining the following information:

- The number of residences located within each noise contour where aircraft noise exposure is at or above DNL 65 dB as well as the location and number of other noise sensitive uses such as schools, hospitals, parks, and recreation areas.
- The identification of noise sensitive areas within the DNL 60 dB contour that are exposed to aircraft noise at or above DNL 60 dB but below DNL 65 dB and are projected to experience a noise increase of DNL 3 dB or more.

Figure 8.3: 2021 Noise Contours

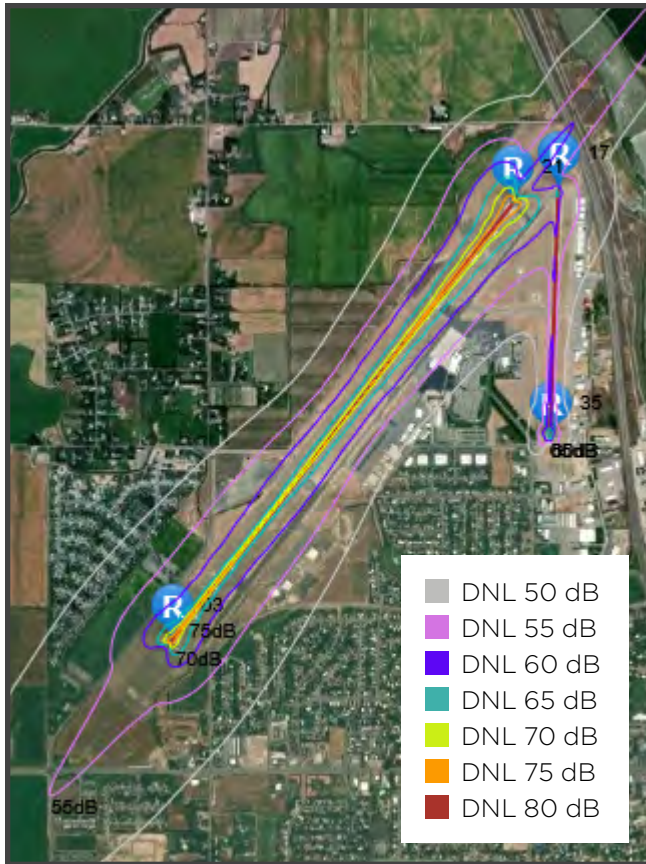
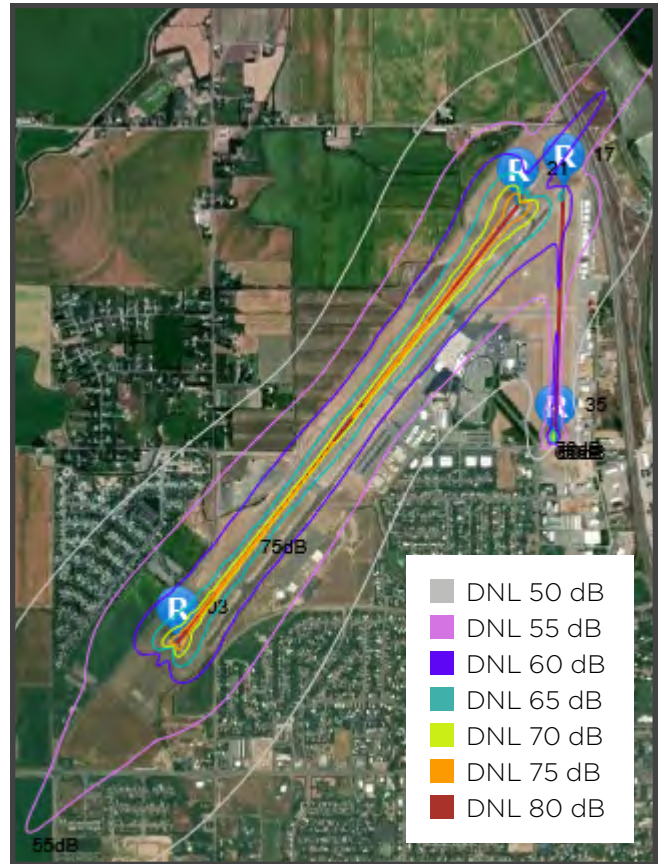


Figure 8.4: 2041 Noise Contours



Source: Ardurra.

8.13.4. Significance Determination

According to FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures*, the threshold for determining if the action would have a significant impact on noise and noise-compatible land use is if, "The action would increase noise by DNL 1.5 dB or more for a noise sensitive area that is exposed to noise at or above the DNL 65 dB noise exposure level, or that will be exposed at or above the DNL 65 dB level due to a DNL 1.5 dB or greater increase, when compared to the no action alternative for the same timeframe."⁴⁵

a. Potential Impacts

Both the current and future 65 dB DNL contours are contained entirely within airport property. Therefore, the projects proposed in this airport master plan are not expected to have a significant impact on noise and noise compatible land use.

8.14. Socioeconomics, Environmental Justice, and Children's Health & Safety Risks

8.14.1. Regulatory Setting

a. Socioeconomics

The Uniform Relocation Assistance and Real Property Acquisitions Policy Act is a federal law that establishes minimum standards for federally funded programs and projects that require the acquisition of real estate or displaces persons from their homes, businesses, or farms.

b. Environmental Justice

Title VI of the Civil Rights Act explicitly prohibits any discrimination in federally funded programs and projects, and Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-income Populations*, requires federal agencies to identify and address any disproportionately high and adverse health or environmental effects of proposed projects on minority and low-income populations.

c. Children's Health and Safety Risks

Executive Order 13045, *Protection of Children from Environmental Health Risks and Safety Risks*, requires federal agencies to identify and assess environmental health or safety risks that may disproportionately affect children. This includes risks attributable to products a child might use or be exposed to or substances they are likely to come in contact with or ingest (e.g., air, food, water, soil).

8.14.2. Affected Environment

a. Socioeconomics

According to the U.S. Census Bureau, the city of Idaho Falls has a total population of 64,818 with a median age of 35. The median household income is \$61,833, the employment rate is 60.3%, and the poverty rate is 10.8%.⁴⁶

b. Environmental Justice

According to the U.S. Census Bureau, the population of the city of Idaho Falls is predominantly white and does not have a significant number of people considered to be an environmental justice population ([Table 8.9](#)).⁴⁷ In addition, it should be acknowledged that Idaho Falls Regional Airport is located on the traditional land of the Shoshoni and Bannock people and was ceded to the United States July 3, 1868, via land cession 520.⁴⁸ The City of Idaho Falls is grateful for the opportunities afforded on said land.

Table 8.9: City of Idaho Falls Race and Ethnicity Data

Race and Ethnicity	Population	Percentage
Total	64,818	100.00%
Population of one race	59,764	92.20%
White	52,860	81.55%
Black or African American	437	0.67%
American Indian and Alaska Native	833	1.29%
Asian	870	1.34%
Native Hawaiian and Other Pacific Islander	93	0.14%
Other Race	4,671	7.21%
Population of two or more races	5,054	7.80%

Source: U.S. Census Bureau, 2020.

c. Children's Health and Safety Risks

According to the U.S. Census Bureau, approximately 4,236 (6.3%) of the city of Idaho Falls population is less than five years of age, and approximately 16,912 (25.3%) is less than 18 years of age.⁴⁹

Areas of particular concern for this impact category are schools, daycares, parks, and children's health clinics. According to the EPA's Environmental Justice Screening and Mapping Tool, EJScreen, there are no schools, daycares, or children's health clinics located on airport property or in its immediate vicinity.⁵⁰ As previously discussed in [Section 8.7. Department of Transportation Act, Section 4\(f\)](#), there are three parks and recreational areas located at or adjacent to the airport ([Table 8.4](#)).

8.14.3. Environmental Consequences

To identify the potential impact the projects proposed in this airport master plan would have on socioeconomics, environmental justice, and children's health and safety risks, both direct and indirect impacts need to be examined. This includes identifying potential impacts that would occur as a result of operational changes and construction of these projects.

a. Socioeconomics

- Identify the effect the proposed project would have on economic activity, employment, income, poverty rates, population growth, housing, public services, and social conditions in the study area.
- In cases where the proposed project would result in relocation of local businesses, public services, or housing, estimate the number and characteristics of the individuals and families to be displaced; describe the impact on the affected neighborhood; and provide an indication of the ability of that neighborhood to provide adequate relocation housing for the families to be displaced.

b. Environmental Justice

- Determine if a low income or minority population will sustain more of the impact than any other population segment, or if they will experience impacts that are appreciably more severe or greater in magnitude than the rest of the population.

c. Children's Health and Safety Risks

- Determine if children will sustain more of the impact than any other population segment.
- Determine if the impacts suffered by children will be appreciably more severe or greater in magnitude than the adverse effects suffered by the rest of the population.

8.14.4. Significance Determination**a. Socioeconomics**

The FAA has not established a significance threshold for socioeconomics. However, FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures*, does identify the following factors to consider in evaluating potential impacts.

The action would have the potential to:

- Induce substantial economic growth in an area.
- Disrupt or divide the physical arrangement of an established community.
- Cause extensive relocation when sufficient replacement housing is unavailable.
- Cause extensive relocation of community businesses that would cause severe economic hardship for affected communities.
- Disrupt local traffic patterns and substantially reduce the levels of service of roads serving an airport and its surrounding communities.
- Produce a substantial change in the community tax base.
- When the action would result in significant impacts in other environmental impact categories and disproportionately affect an environmental justice population.
- When environmental impacts affect an environmental justice population in a way that the FAA determines to be unique or significant to that population.
- Lead to disproportionate health or safety risks to children.⁵¹

b. Environmental Justice

The FAA has not established a significance threshold for environmental justice. However, FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures*, does state that a factor to consider is if the action would have the potential to lead to disproportionately high and adverse impact to an environmental justice population (i.e., a low-income or minority population) or results in impacts on the physical or natural environment that affect an environmental justice population in a way that the FAA determines are unique to the environmental justice population and significant to that population.⁵²

c. Children's Health and Safety Risks

The FAA has not established a significance threshold for children's health and safety risks. However, FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures*, does state that a factor to consider in evaluating potential impacts is if the action would have the potential to lead to a disproportionate health or safety risk to children.⁵³

d. Potential Impacts

The projects proposed in this airport master plan are not expected to have an impact on socioeconomics, environmental justice populations, or children's health and safety.

8.15. Visual Effects**8.15.1. Regulatory Setting**

There are no special purpose laws or requirements specific to light emissions or visual effects. However, some visual resources are protected under federal, state, or local regulations. Some of these protected visual resources include scenic roadways; Wild and Scenic Rivers; national scenic areas; scenic easements; trails protected under the National Trails System Act; biological resources; parks, recreation areas, wildlife, or waterfowl refuges; historic properties; and other features protected under other federal, state, or local regulations. Additional laws protecting resources that may be affected by visual effects include Section 106 of the National Historic Preservation Act, and Section 4(f) of the Department of Transportation Act as well as any state and local regulations, policies, and zoning ordinances that may apply.

8.15.2. Affected Environment

The airport is located in Idaho Falls which is a developed area with several existing light sources from surrounding commercial and residential land uses which contribute to the overall visual environment.

a. Light Emissions

The airport is currently equipped with several sources of light emissions which includes airfield and apron lighting, visual navigational aids, terminal lighting, parking lot lighting, airborne and ground-based aircraft operations, and roadway lighting. These sources of light emissions are typical for airports and are essential to the safe and efficient movement of aircraft as well as the safety of vehicles and pedestrians using the airport.

b. Visual Resources and Visual Character

As previously discussed in [Section 8.7, Department of Transportation Act, Section 4\(f\)](#), there are three publicly owned parks and recreational areas located at or adjacent to the airport that could potentially be considered visually protected resources. There are also two historic sites and three potential historic sites located at or near the airport that could potentially be considered visually protected resources. These sites include the Idaho Falls Airport Historic District and portions of the East Lateral Canal System as well as a Craftsman-style farmhouse and two garages located on the Reed's Dairy property.

The visual character of the airport consists of various airside and landside facilities which include the runways, taxiways, apron areas, terminal building, parking lots, air cargo facility, aircraft hangars, fuel facilities, fixed base operator, and airport landscaping.

8.15.3. Environmental Consequences

To identify the potential impact the projects proposed in this airport master plan would have on visual effects, both direct and indirect impacts from construction and ongoing operations need to be examined.

a. Light Emissions

Light emission impacts are typically related to the extent to which any lighting or glare associated with the proposed projects would create an annoyance for people in the vicinity and would interfere with their normal activities. When the potential for annoyance exists, information should be included in the analysis such as the location of lights or light systems, pertinent characteristics of the lighting (e.g., intensity, flashing sequence for strobe lighting) and its intended use (e.g., security lighting, runway lighting), and mitigation measures that could be implemented to lessen any annoyance such as shielding or angular adjustment.

b. Visual Resources and Visual Character

Visual resources and visual character impacts are typically related to a decrease in the aesthetic quality of an area resulting from development, construction, or demolition. Analysis of visual impacts considers whether the proposed projects would affect, obstruct, substantially alter, or remove visual resources including buildings, historic sites, or other landscape features that are visually important or have unique characteristics. When the potential to obstruct a visual resource exists, information should be included in the analysis such as how a project would alter the character and quality of views and the number of locations from which the resource can be viewed.

8.15.4. Significance Determination

The FAA has not established a significance threshold for light emissions or for visual resources and visual character. However, FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures*, does identify the following factors to consider in evaluating potential impacts.

The degree to which the proposed projects would have the potential to:

- Create annoyance or interfere with normal activities from light emissions.
- Affect the importance, uniqueness, or aesthetic value of the visual character of the area.
- Block or obstruct views of visual resources or contrast with the visual character of the area.⁵⁴

a. Potential Impacts

West side development projects could have an impact on light emissions and visual character.

8.16. Water Resources

8.16.1. Regulatory Setting

a. Wetlands

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. Under the Clean Water Act, the term wetlands means areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. This generally includes swamps, marshes, bogs, and similar areas, but does not include streams, reservoirs, and deep lakes or areas covered with water for such a short time that there is no effect on moist-soil vegetation.

b. Floodplains

Floodplains are lowland areas adjoining inland and coastal waters which are periodically inundated by flood waters. As part of the National Flood Insurance Program (NFIP), the Federal Emergency Management Agency established a mapping system known as the Flood Insurance Rate Map (FIRM) which is used to delineate floodplain areas within the United States. Flood hazard areas are identified on the Flood Insurance Rate Map as a Special Flood Hazard Area (SFHA). These areas are often discussed in terms of the 100-year flood. The 100-year flood is a flood having a 1% chance of occurring in any given year. The 100-year flood is also known as the base flood.

According to Executive Order 11988, *Floodplain Management*, federal agencies must avoid, to the extent possible, the long and short-term adverse impacts associated with the occupancy and modification of 100-year floodplains. This includes avoiding direct or indirect support of floodplain development wherever there is a practical alternative.

City of Idaho Falls Code, Title 10, Chapter 4, *Flood Control*, addresses local requirements for minimizing public and private losses related to flooding.

c. Surface Waters

Surface waters include streams, rivers, lakes, ponds, estuaries, and oceans as well as other waters on the surface of the ground that are not considered to be wetlands, floodplains, groundwater, or Wild and Scenic Rivers. Surface waters are federally protected under Section 303(d), Section 404, Section 401, and Section 402 of the Clean Water Act which regulate the discharge of pollutants into waters of the United States and established the National Pollutant Discharge Elimination System (NPDES) permit program. If a project disturbs one or more acres of land, the Idaho Department of Environmental Quality may also require an Idaho Pollution Discharge Elimination System (IPDES) permit.⁵⁵

According to the September 2022 edition of the Idaho Falls Public Works *Engineering Design Policy Manual*, all storm drain systems that ultimately flow to an Irrigation District system must be approved of by the affected Irrigation District prior to City approval and acceptance.⁵⁶

d. 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.

Under Idaho Code Section 39-120, the Idaho Department of Environmental Quality is designated as the agency responsible for coordinating and administering ground water quality protection programs in Idaho.

According to the General Water Quality Rule of the Idaho Administrative Code (IDAPA 58.01.11), activities with the potential to degrade general resource aquifers shall be managed in a manner which maintains or improves existing ground water quality through the use of best management practices and best practical methods to the maximum extent practical.

e. Required Permits

- A U.S. Army Corps of Engineers Section 404 permit may be required for projects involving the East Lateral, Armstrong Lateral, or Hoff Lateral.
- National Pollutant Discharge Elimination System and Idaho Pollution Discharge Elimination System permits may be required.

8.16.2. Affected Environment**a. Wetlands**

According to the U.S. Fish and Wildlife Service National Wetlands Inventory (NWI) map, there are two types of wetlands located on airport property. These include a 5.75-acre riverine habitat associated with the East Lateral, a 67.57-acre riverine habitat associated with the Armstrong Lateral, a 67.57-acre riverine habitat associated with the Hoff Lateral, and a 0.18-acre freshwater emergent wetland habitat located just south of the Aero Mark building at the end of Olympia Street.⁵⁷

An aquatic resources delineation was conducted by T-O Engineers October 13, 2022. The area surveyed for this study is approximately 9.7 acres of airport property located northeast of the Foote Drive and International Way intersection. There is one drainage ditch and two depressional wetlands located within the study area that currently serve as stormwater basins. According to this report, the study area contains a total of 0.58 acres of palustrine emergent (PEM) wetlands and 0.08 acres of palustrine forested (PFO) wetlands. However, the drainage ditch and depressional wetlands are isolated from other Waters of the United States, and therefore may not be jurisdictional under Section 404 of the Clean Water Act.⁵⁸ A jurisdictional determination (JD) was requested from the U.S. Army Corps of Engineers (USACE) and these wetlands were found to be non jurisdictional.⁵⁹

b. Floodplains

According to the Idaho Falls floodplain map, the entire airport is located in Zone C which is an area of minimal flooding.⁶⁰

c. Surface Waters

The following surface waters are located on airport property or in its immediate vicinity.

- The Snake River is located approximately 0.2 miles east of the airport.
- The airport is located within the New Sweden Irrigation District, and sections of the Hoff Lateral, Armstrong Lateral, and East Lateral are located on and adjacent to airport property.⁶¹
- Surface drainage at the airport terminates into two retention basins where the water infiltrates into the soil. No surface drainage enters the irrigation canals or the Snake River.

d. Groundwater

According to the Idaho Department of Water Resources (IDWR) Groundwater Quality map, there are six wells located on airport property. Two of these wells are located at the Old Butte park and Soccer Complex, one is located at the apron in front of the rental car quick turnaround area (QTA), two are located at the Snake River Animal Shelter, and one is located in the infield west of the Runway 21 approach lighting system. Additional wells exist on potential land acquisition areas as well as on land recently acquired for Runway 21 approach protection east of the Snake River.⁶²

The airport is located within the Eastern Snake Plain Aquifer (ESPA) region. The Eastern Snake River Plain Aquifer is a sole source, basalt aquifer that provides drinking water for approximately 200,000 people in southeastern and south-central Idaho.⁶³

8.16.3. Environmental Consequences

To identify the potential impact the projects proposed in this airport master plan would have on water resources, both direct and indirect impacts need to be examined. This includes identifying potential impacts that would occur as a result of operational changes as well as construction of these projects.

a. Wetlands

- Describe how the proposed project would affect or alter the physical condition or function of any wetlands. This includes impacts resulting from any fill, excavation, or construction as well as draining, dredging, channelizing, filling, diking, impounding, or related activities.
- Determine if construction within a wetland could lead to loss of a wetland function such as natural flood control, resulting in increased flooding in the vicinity of the proposed project.
- Determine if the creation of a new impermeable surface such as a runway could lead to increased runoff and affect water quality in nearby wetlands.
- Determine if these impacts would fall under the terms and conditions of a Section 404 general permit.

b. Floodplains

- Describe the potential direct and indirect impacts to all floodplains identified within the project area that might result from construction of the proposed project (e.g., grading).
- Where appropriate, describe impacts on natural and beneficial floodplain values, water pollution, increased runoff from impermeable surfaces, or changes in hydrologic patterns.

c. Surface Waters

- Describe the potential direct impacts to all surface waters identified within the study area that might result from construction of the proposed project.
- Identify any indirect impacts that could occur from construction of the proposed project such as sedimentation or petrochemical spills that could reach surface waters and cause water quality issues.
- Describe any potential impacts that could occur from ongoing operation of the proposed project such as increased runoff from new impermeable surfaces or changes in hydrologic patterns that could affect water quality and hydrology in nearby surface waters.
- Determine if these impacts fall under the terms and conditions of a Section 404 permit.

d. Groundwater

- Describe the potential impact impervious surfaces, excavation, and construction would have on groundwater. This includes potential petrochemical spills from construction activities that could reach groundwater through infiltration and cause water quality issues.
- Describe how ongoing operation of the proposed project would affect groundwater.

8.16.4. Significance Determination**a. Wetlands**

According to FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures*, the threshold for determining if an action would have a significant impact on wetlands is if the action would:

- Adversely affect a wetland's function to protect the quality or quantity of municipal water supplies including surface waters and sole source and other aquifers.
- Substantially alter the hydrology needed to sustain the affected wetland system's values and functions or those of a wetland to which it is connected.
- Substantially reduces the affected wetland's ability to retain floodwaters or storm runoff.
- Adversely affect the maintenance of natural systems supporting wildlife and fish habitat or economically important timber, food, or fiber resources of the affected wetlands.

b. Floodplains

According to FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures*, the threshold for determining if an action would have a significant impact on floodplains is if, “The action would cause notable adverse impacts on natural and beneficial floodplain values.” Natural and beneficial floodplain values are defined in Department of Transportation Order 5650.2, *Floodplain Management and Protection*.

c. Surface Waters

According to FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures*, the threshold for determining if an action would have a significant impact on surface waters is if the action would:

- Exceed water quality standards established by federal, state, or local regulatory agencies.
- Contaminate public drinking water supply such that public health may be adversely affected.

d. Groundwater

According to FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures*, the threshold for determining if an action would have a significant impact on groundwater is if the action would:

- Exceed groundwater quality standards established by federal, state, local, and tribal regulatory agencies.
- Contaminate an aquifer used for public water supply such that public health may be adversely affected.⁶⁴

e. Potential Impacts

A wetland delineation and mitigation measures may be required for projects involving the East Lateral, Armstrong Lateral, or Hoff Lateral.

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