

## **Appendix D**

### **ENVIRONMENTAL REVIEW**

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The proposed capital improvements and preventative maintenance projects at the Treasure Valley Executive Airport are described in Chapters 5 and 6 of this Master Plan Update (MPU). Short-term development projects address immediate expansion and development of apron, taxiway, and pavement needed to address growth and safe and efficient airport operations. Intermediate projects focus on fuel farm installation, land acquisition, and taxiway improvements. Long-term projects include additional property acquisition, runway and taxiway extensions, and pavement improvements.

Construction of the planned improvement projects described within this MPU requires compliance with the National Environmental Policy Act (NEPA). In general, NEPA is satisfied for projects not categorically excluded (described in FAA Order 1050.1F) by the preparation of an Environmental Assessment (EA). When significant environmental impacts are anticipated, an Environmental Impact Statement (EIS) may be required to satisfy NEPA. An EA was completed in 2006 for portions of the proposed east side land acquisition, east side hangar development, and Taxiway B extension. However, given that 15 years have passed since the original NEPA analysis, the resource analysis and FAA's determination of a Finding of No Significant Impact (FONSI) is no longer current and will require new NEPA documentation.

FAA will make the final determination regarding the level of NEPA documentation and the required resource evaluations for the short-, intermediate-, and long-term projects. Based on the scope, scale, and location of the proposed Airport improvements, the following sections document the environmental resource studies anticipated to be required prior to the implementation of the Airport improvement projects.

Based on the existing environmental conditions at the Airport, the following resources are not present, or would not be impacted, and require no further documentation:

- Coastal Resources
- Floodplains
- Wild and Scenic Rivers

#### **AIR QUALITY**

The Environmental Protection Agency (EPA) has established National Ambient Air Quality Standards (NAAQS) in the interest of protecting human health and the environment against the detrimental effects of air pollution. The NAAQS exist for six pollutants, including carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), ozone (O<sub>3</sub>), sulfur dioxide (SO<sub>2</sub>), particulate matter (PM<sub>2.5</sub> and PM<sub>10</sub>), and lead (Pb).

Air quality conditions for a given area are designated with respect to NAAQS as “attainment,” “maintenance,” “nonattainment,” or “unclassifiable.” According to the EPA’s Greenbook, Canyon County is in attainment for all criteria pollutants; however, the County is considered an “area of concern” for PM<sub>10</sub> and O<sub>3</sub> by the Idaho Department of Environmental Quality (IDEQ).

During construction of the short-, intermediate-, and long-term projects, temporary impacts to air quality may occur. Temporary impacts would generally result from the operation of construction vehicles and fugitive dust during excavation and grading activities. As aircraft operations increase during the forecasted period, permanent air quality impacts have the potential to occur and may need to be evaluated as part of any environmental documentation for future projects. This evaluation would typically include development of an air emissions inventory with estimates for on-site construction activity and aircraft-related emissions. Any changes to the status of the airshed’s designation for criteria pollutants would also impact the air quality evaluation required for future NEPA documentation. This may be most critical when the Airport extends the runway in the long-term time period and accepts larger aircraft.

## BIOLOGICAL RESOURCES

Section 7 of the Endangered Species Act (ESA), as amended applies to federal actions and describes requirements for consultation to determine if a proposed action would significantly impact an endangered or threatened species. According to the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) database, slickspot peppergrass (*Lepidium papilliferum*) is the only ESA-listed species with the potential to exist at the Airport.

Slickspot peppergrass generally grows in “slickspots,” or small areas within larger sagebrush habitat that are often lower than surrounding areas and retain water longer. Even though the Airport is located within the range of slickspot peppergrass habitat, the general conditions observed at the Airport include a mix of fragmented and heavily disturbed grass fields surrounded by agricultural fields. Preliminary site investigations have found no suitable habitat areas for slickspot peppergrass on, or in the immediate vicinity of, the Airport, and there have been no documented occurrences of the species either within or immediately adjacent to the Airport property. These preliminary findings may need to be confirmed prior to the construction of any planned development projects.

Changes to the ESA list for project area would need to be evaluated prior to the completion of any NEPA documentation. Coordination between the FAA and the USFWS may be required to determine the presence or absence of threatened or endangered species at the Airport. This should be further evaluated during intermediate and long-term projects when land procurement is anticipated.

## CLIMATE

The EPA’s *Inventory of U.S. Greenhouse Gas Emissions and Sinks 1990-2017* found that the transportation sector, which includes the aviation industry, accounted for 28.9% of U.S. greenhouse gas (GHG) emissions in 2017. According to the FAA Order 1050.1F Desk Reference, of the six recognized GHGs, only CO<sub>2</sub> is a direct aircraft combustion product. Therefore, NEPA review should consider the potential incremental change in CO<sub>2</sub> emissions that would result from proposed development and an increase in overall aircraft operations.

As the aircraft operations increase throughout the entirety of the planning period, it may be useful to document and analyze the increase in CO<sub>2</sub> emissions as a result. The FAA has developed the Aviation Environmental Design Tool (AEDT) to better aid in the development of emissions analysis. However, there is no significance threshold for aviation GHG emissions, and the FAA has not identified specific factors to consider in making a significance determination for GHG emissions. Overall, despite the forecasted increase of operations, no significant changes to climate from proposed projects are anticipated.

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

Section 4(f) of the Department of Transportation Act protects significant publicly owned parks, recreation areas, wildlife and waterfowl refuges, and publicly or privately-owned historic sites of national, state, or local significance. A cultural resource survey was completed for the Airport in February 2021. The cultural resource survey indicates that there are no Section 4(f) resources on the Airport property. The report indicates that there are three linear features that qualify for Section 4(f) protection, the Canyon Hill Lateral, the Notus Canal, and the Caldwell High Line Canal located in the general vicinity of the airport. These features are currently located outside of Airport property and are not anticipated to be impacted by short-term improvements at the Airport. Intermediate and long-term projects will include acquiring property that encompasses the Canyon Hill Lateral and the Caldwell High Line Canal. Specifically, intermediate projects will include piping the Caldwell High Line Canal and relocating the Caldwell Hill Lateral. Impacts to such features would require mitigation and consultation with the Idaho State Historic Preservation Office.

#### **FARMLANDS**

Farmlands are protected under the Farmland Protection Policy Act (FPPA), which requires federal agencies to minimize the conversion of farmland to nonagricultural uses. FPPA guidelines classify farmland as “prime farmland,” “unique farmland,” or “farmland of statewide or local importance.”

The FPPA does not apply to land that has already been developed for urban or built-up uses. Currently, most of the land on the Airport property has been developed for Airport, industrial, or agricultural uses. While there is land currently used for agriculture at the Airport, this land should be considered developed as it is existing Airport property.

The Airport and the surrounding land are also classified as a U.S. Census designated urban area. Therefore, during the land acquisition elements of the short-, intermediate-, and long-term improvements, and despite the presence of prime farmland in the land acquisition areas, it is likely that the surrounding lands would be exempt from the FPPA due to the urban area classification, and no formal coordination with the USDA/NRCS would be required. If formal consultation with the NRCS is required, USDA Form AD 1006 would be completed for review and concurrence by the regional NRCS Soil Scientist.

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

The Airport is required to follow applicable laws and regulations regarding hazardous materials and solid waste management. General hazardous materials that tend to exist at airports include aviation fuel, motor fuel, pesticides, and substances used for operation and maintenance of aircraft, vehicles,

equipment, and buildings. According to the Idaho Department of Environmental Quality (IDEQ), five hazardous waste sites exist at the Airport—four sites from the Airport itself, and a fifth from Green Arrow Inc. (see Chapter 1, Table 1N).

These sites are located in the vicinity of the existing general aviation (GA) apron. As such, the Reconstruction of the GA apron (Long-Term Project #23) may require additional coordination with IDEQ due to the potential disturbance of a documented Resource Conservation and Recovery Act (RCRA) site. Additionally, a Phase I Environmental Site Assessment would be required prior to any land acquisition listed in the intermediate and long-term projects to determine the presence of any hazardous materials or pollution in any of the proposed acquisition areas.

A construction-related National Pollutant Discharge Elimination System (NPDES) Permit and a Stormwater Pollution Prevention Plan (SWPPP) may also be required prior to any of the on-Airport construction projects. The level of documentation required should be evaluated prior to each project. In most cases, disturbance of more than one acre of ground, will require a NPDES Permit and SWPPP. This is anticipated in most of the short-, intermediate-, and long-term projects. The NPDES Permit and SWPPP would document best management practices (BMPs) used to minimize potential pollution impacts related to construction and site runoff.

## **HISTORICAL, ARCHITECTURAL, ARCHAEOLOGICAL, AND CULTURAL RESOURCES**

NEPA requires federal agencies to consider the effects of planned federal actions on historical, architectural, archaeological, and cultural resources. The planned federal actions must also comply with the National Historic Preservation Act (NHPA) 16 U.S.C. 470, as amended). Section 106 of the NHPA, and its implementing regulations (36 C.F.R. 800), requires federal agencies to analyze the effects of their undertakings on historic properties. According to these regulations, a historic property is “any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places (NRHP).”

A cultural resource survey and report for the Airport property was conducted in February 2021. The cultural resource survey indicates that there are no known Section 4(f) resources on the Airport property. The report indicates that there are three linear features that are potentially eligible for listing on the National Register of Historic Places (NRHP). These features—Canyon Hill Lateral, Notus Canal, and Caldwell High Line Canal—are all located outside of Airport property. Intermediate and long-term projects will include acquiring property that encompasses the Notus Canal and the Caldwell High Line Canal. Future improvements at the Airport that may impact any of these features would require mitigation and consultation with the Idaho State Historic Preservation Office. Specifically, intermediate projects will include piping the Caldwell High Line Canal and relocating the Caldwell Hill Lateral.

## **LAND USE**

The FAA Order 1050.1F Desk Reference describes that land use and aviation compatibility are closely tied to noise-related impacts. A Land Use Compatibility Study was completed for this MPU and is included as Appendix C. This study documents existing and proposed land uses and zoning in the vicinity

of the Airport and discusses potential noise-related impacts resulting from an increase in runway length and overall operations. For the purpose of noise as it relates to land use, the 65 day-night noise level metric (DNL) is accepted by the FAA, EPA, and Department of Housing and Urban Development (HUD) as an appropriate measure of noise exposure.

The Airport is located within the City of Caldwell limits, east of the main downtown area. The Airport is bordered by I-84 to the west and agricultural fields and industrial buildings to the north, south, and east. West of I-84 is a manufactured housing development and a storage facility. The Airport property is located within a zoned Airport District, which exists to provide support for airport operations, services to airport users, and to protect public interests and invests made in aviation. The Airport is also located within two Overlay zones: the APO-1 Airport Land Use Limitation Zone and the APO-2 Airport Noise Abatement Zone. The zones work together to minimize noise levels on the surrounding area, contribute to the safe operation and development of the Airport, and to protect possible future expansion areas at the Airport.

The Airport is surrounded by “Light Industrial” zoning; however, the current Caldwell Comprehensive Plan identifies the primary general land use within the Airport’s vicinity as “Industrial,” accounting for approximately 28.8 percent of the planned land use. Both the intermediate- and long-term projects contain property acquisition elements that would result in land use changes from “Industrial” to “Public/Quasi-Public.” Additionally, the intermediate- and long-term planned property acquisitions would result in zoning changes to land currently in the “Light Industrial Zone.” After the acquisition occurs, the land would be included in the “Airport District”. Due to these land use and zoning changes, a Land Use Analysis is recommended prior to the acquisition of any property.

As Airport operations increase alongside the planned runway expansion, the forecasted 65 DNL contour is anticipated to expand around Runway 12-30. Due to the proposed property acquisitions, the 65 DNL contour would remain on the Airport property east of the runway. West of the Airport, across I-84, eight single-family structures would be impacted. These noise impacts are discussed further in the following Noise section.

## **NOISE AND COMPATIBLE LAND USE**

Noise is defined by the FAA as unwanted sound that can disturb routine activities and cause annoyance. Volume, frequency, atmospheric conditions, ambient sound, and the type of activity generating noise are all factors that influence an individual’s perception of noise. Aircraft noise is generally one of the more intrusive environmental impacts for any given project in an airport environment.

As described in the section above, the FAA’s established noise significance threshold for most general aviation airports is 65 decibels (dB) DNL. When considering noise at airports, noise sensitive areas are those found within the 65 DNL contour. As part of the Land Use Compatibility assessment completed for this MPU, the 65 DNL contour was analyzed alongside the planned runway expansion and forecasted increase in overall aircraft operations. Due to the planned property acquisitions, the 65 DNL contour would remain on the Airport property; however, eight single-family structures, west of the Airport along Bannock Drive, are located within the future 65 DNL contour. Due to the presence of these residences within the 65 DNL contour, a quantitative noise assessment would be required prior to the implementation of the intermediate-, and long-term projects. Exhibits C4 and C5 presented in Appendix C – Land Use Compatibility, depict the current and future noise contours for the Airport.

## **SOCIOECONOMICS, ENVIRONMENTAL JUSTICE, AND CHILDREN'S ENVIRONMENTAL HEALTH AND SAFETY**

Socioeconomic or environmental justice impacts known to result from Airport development are generally associated with land acquisition, relocations, or other community disruptions, including changes to surface transportation patterns or division of an existing community. The intermediate- and long-term projects each contain land acquisition elements. In the intermediate term, approximately 27 acres would be acquired along the northeast edge of the Airport. In the long term, approximately 13 acres would be acquired at the eastern edge of the Airport and 13 acres at the western extent of the Airport.

The acquisition of property or the displacement of people or businesses is required to conform to the Uniform Relocation Assistance and Real Property Acquisitions Policies Act of 1970 (Uniform Act). These regulations mandate that specific relocation assistance services be made available to property owners or tenants during the acquisition process. The acquisition of the properties described in the intermediate- and long-term projects would require compliance with the Uniform Act and coordination between the FAA and property owners.

The EPA's Environmental Justice Screening and Mapping Tool was referenced to determine the population within a one-mile radius of the Airport. The database states that approximately 14,853 individuals live in the area surrounding the Airport. Of those individuals, approximately 40 percent belong to a minority group, and approximately 20 percent meet the criteria to be classified as low income. Overall, impacts to minority or low-income groups may occur as a result of the planned development projects at the Airport. An environmental justice analysis should be conducted prior to any land acquisition to document potential impacts to minority or low-income groups, and all property acquisition should adhere to the Uniform Act.

The U.S. Census has documented that approximately 4,750 children live within a one-mile radius of the Airport, accounting for approximately 23 percent of the population. Children's environmental health and safety risks are usually impacted by the introduction of new physical hazards into the existing environment. Future development projects are not likely to exceed significance thresholds for air quality, noise, and water quality, and no other environmental impacts are anticipated to negatively affect the health and safety of children. Food, drinking water, recreational water, soil, and other products a child might encounter are unlikely to be influenced by planned development at the Airport. During construction of the proposed development projects, appropriate measures should be taken to prevent access by unauthorized individuals to project areas, and BMPs should be implemented to decrease the potential for environmental health risks to children.

### **VISUAL EFFECTS (INCLUDING LIGHT EMISSIONS)**

Visual effects, visual resources, and visual characteristics can be subjective as each includes personal aesthetic preferences. Visual impacts include contrasts between a specific area, the existing environment, and the general perception of the community concerning any change in lighting or visual characteristics. At airports, visual elements generally include airfield lighting and landside lighting.

In the short term, development along Taxiway B and construction of the Terminal Apron will include associated lighting. This additional lighting is not anticipated to significantly impact the visual character at the Airport and would be consistent with current lighting levels.

In the intermediate term, installation of Runway End Identifier Lights (REILs) at both runway ends and of a Medium Intensity Approach Lighting System with Runway Alignment Indicator Lights (MALSR) would alter existing lighting levels at the airport and may alter the visual characteristics of the surrounding area.

In the long term, additional runway lighting would be installed alongside the planned runway extension, and a new air traffic control tower (ATCT) would be constructed. These development projects may also alter the existing ambient light levels as well as the visual characteristics of the Airport.

These visual changes associated with the intermediate- and long-term projects should be evaluated prior to their installation, and notification procedures consistent with those described in the City of Caldwell Code Section 10, Article 11, *Airport Overlay Zone* would need to be followed throughout the development process.

## **WATER RESOURCES (INCLUDING WETLANDS, FLOODPLAINS, SURFACE WATERS, GROUNDWATER, AND WILD AND SCENIC RIVERS)**

### *Wetlands*

Wetlands are defined by the Clean Water Act (CWA) as “areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.” The U.S. Army Corps of Engineers (USACE) regulates the discharge of dredge and/or fill material into waters of the United States, including adjacent wetlands, under Section 404 of the CWA.

According to the USFWS National Wetlands Inventory (NWI), both riverine and freshwater emergent wetlands are depicted on the Airport property. However, field verification and aerial imagery indicate that no wetlands are present at the Airport. While there are several irrigation canals and laterals in the vicinity of the Airport, no wetlands have been identified. Field surveys and/or a wetland delineation may be required to determine the presence or absence of wetlands within the parcels identified for acquisition in the intermediate- and long-term projects.

### *Floodplains*

As there are no documented floodplains in or adjacent to the Airport, no impacts to floodplains are anticipated as a result of the short-, intermediate-, or long-term improvement projects.

### *Surface Waters*

There are no surface waters located on the Airport property. The only surface waters in the vicinity of the Airport are a series of irrigation ditches, canals, drains, and laterals, specifically the Canyon Hill Lateral, the Notus Canal, the Caldwell Drain, and the Caldwell High Line Canal. Indian Creek, an impaired waterway, flows to the west of the Airport; however, it is separated from the Airport by I-84.

Coordination with the local irrigation district and the Bureau of Reclamation (BOR) would be necessary during construction of the canal cover that would be installed in the intermediate-term projects.

### *Groundwater*

Groundwater is the subsurface water that occupies the space between sand, clay, and rock formations. Aquifers are generally discussed in relation to groundwater and are defined as geologic layers that store or transmit groundwater to wells, springs, or other sources. The EPA's Sole Source Aquifer mapping tool was referenced to determine the presence or absence of sole source aquifers in the vicinity of the Airport. The Eastern Snake River Plain Aquifer, the nearest sole source aquifer to the Airport, is located approximately 80 miles east.

The water supply in the City of Caldwell is derived from 17 deep groundwater wells, one of which is located on the Airport property in the northwest corner near the rotating beacon. During the south taxiway pavement rehabilitation projects in the short- and long-term, BMPs should be implemented that protect the City's groundwater resources.

### *Wild and Scenic Rivers*

As there are no designated Wild and Scenic Rivers in the vicinity of the Airport, the proposed development projects would have no impacts to Wild and Scenic Rivers.

## **CONCLUSIONS**

The short-, intermediate- and long-term improvement projects at the Caldwell Airport will require analysis of potential impacts to the resources identified on and near the Airport property. Final determination regarding the intensity of the resource evaluation and the level of the NEPA documentation will be made by the FAA Environmental Resource Specialist based on FAA's NEPA implementing guidelines.

NOTE: This Environmental Overview was researched and completed by JUB Engineers.