

Draft Environmental Assessment

For the Sandpoint Airport Runway and Taxiway Improvements Sandpoint, Idaho PREPARED BY J-U-B ENGINEERS, INC. April 2019



J·U·B ENGINEERS, INC.

422 W. Riverside Spokane, Washington 99201 (509) 458-3727 www.jub.com

DRAFT Environmental Assessment For the Sandpoint Airport Runway and Taxiway Improvements at the Sandpoint Airport

Sandpoint, Idaho

April 2019

This Environmental Assessment becomes a Federal document when evaluated and signed by the responsible FAA official.

Responsible FAA Official

Date

Sandpoint Airport 2019 Environmental Assessment

Table of Contents

1.1 Introduction 1 1.2 Background and Existing Facilities 1 1.3 Existing Operations 5 1.4 Airport Forecasts 5 1.5 Proposed Action 7 Chapter 2 - Purpose and Need 17 2.1 Purpose of the Proposed Action 17 2.2 Need for the Proposed Action 17 2.3 Requested Federal Actions 22 Chapter 3 - Alternatives Considered 23 3.1 Overview 23 3.2 Preliminary Alternatives Considered 25 3.3 Alternatives Carried Forward for Analysis within this EA 50 Chapter 4 - Affected Environment and Environmental Consequences 52 4.1 Introduction 52 4.2 Air Quality 54 4.3 Biological Resources 58 4.5 Department of Transportation Act, Section 4(f) Resources 63 4.6 Farmlands 66 4.7 Hazardous Materials, Solid Waste, and Pollution Prevention 68 4.8 Historical, Architectural, Archaeological, and Cultural Resources 71 4.9 Land Use 77 4.10 Natural Resources and Energy Supply. 76 4.11 Noise and Compatible Land Use
1.2 Background and Existing Facilities 1 1.3 Existing Operations 5 1.4 Airport Forecasts 5 1.5 Proposed Action 7 Chapter 2 - Purpose and Need 17 2.1 Purpose of the Proposed Action 17 2.2 Need for the Proposed Action 17 2.3 Requested Federal Actions 22 Chapter 3 - Alternatives Considered 23 3.1 Overview 23 3.2 Preliminary Alternatives Considered 25 3.3 Alternatives Carried Forward for Analysis within this EA 50 Chapter 4 - Affected Environment and Environmental Consequences 52 4.1 Introduction 52 4.2 Air Quality 54 4.3 Biological Resources 58 4.5 Department of Transportation Act, Section 4(f) Resources 63 4.6 Farmlands 66 4.7 Hazardous Materials, Solid Waste, and Pollution Prevention 68 4.8 Historical, Architectural, Archaeological, and Cultural Resources 71 4.9 Land Use 77 4.12 Socioeconomics, Environmental Justice, and Children's Health and Safety Risks 81 4.14 Water Resources (including Wetlands, Floodplains, Surface Wate
1.3 Existing Operations 5 1.4 Airport Forecasts 5 1.5 Proposed Action 7 Chapter 2 - Purpose and Need 17 2.1 Purpose of the Proposed Action 17 2.2 Need for the Proposed Action 17 2.3 Requested Federal Actions 22 Chapter 3 - Alternatives Considered 23 3.1 Overview 23 3.2 Preliminary Alternatives Considered 25 3.3 Alternatives Carried Forward for Analysis within this EA 50 Chapter 4 - Affected Environment and Environmental Consequences 52 4.1 Introduction 52 4.2 Air Quality 54 4.3 Biological Resources 58 4.5 Department of Transportation Act, Section 4(f) Resources 63 4.6 Farmlands 66 4.7 Hazardous Materials, Solid Waste, and Pollution Prevention 68 4.8 Historical, Architectural, Archaeological, and Cultural Resources 71 4.9 Land Use 77 4.10 Natural Resources and Energy Supply 76 4.11 Noise and Compatible Land Use 77 4.12 Socioeconomics, Environmental Justice, and Children's Health and Safety Risks 81 </td
1.4 Airport Forecasts 5 1.5 Proposed Action 7 Chapter 2 - Purpose and Need 17 2.1 Purpose of the Proposed Action 17 2.2 Need for the Proposed Action 17 2.3 Requested Federal Actions 22 Chapter 3 - Alternatives Considered 23 3.1 Overview 23 3.2 Preliminary Alternatives Considered 25 3.3 Alternatives Carried Forward for Analysis within this EA 50 Chapter 4 - Affected Environment and Environmental Consequences 52 4.1 Introduction 52 4.2 Air Quality 54 4.3 Biological Resources 58 4.5 Department of Transportation Act, Section 4(f) Resources 63 4.6 Farmlands 66 4.7 Hazardous Materials, Solid Waste, and Pollution Prevention 68 4.8 Historical, Architectural, Archaeological, and Cultural Resources 71 4.10 Natural Resources and Energy Supply. 76 4.11 Noise and Compatible Land Use 77 4.12 Socioeconomics, Environmental Justice, and Children's Health and Safety Risks 81 4.14 Water Resources (including Wetlands, Floodplains, Surface Waters, Groundwater, and Wild and Scenic Rivers)
1.5 Proposed Action 7 Chapter 2 - Purpose and Need 17 2.1 Purpose of the Proposed Action 17 2.2 Need for the Proposed Action 17 2.3 Requested Federal Actions 22 Chapter 3 - Alternatives Considered 23 3.1 Overview 23 3.2 Preliminary Alternatives Considered 25 3.3 Alternatives Carried Forward for Analysis within this EA 50 Chapter 4 - Affected Environment and Environmental Consequences 52 4.1 Introduction 52 4.2 Air Quality 54 4.3 Biological Resources 58 4.5 Department of Transportation Act, Section 4(f) Resources 63 4.6 Farmlands 66 4.7 Hazardous Materials, Solid Waste, and Pollution Prevention 68 4.8 Historical, Architectural, Archaeological, and Cultural Resources 71 4.9 Land Use 77 4.10 Natural Resources and Energy Supply 76 4.11 Noise and Compatible Land Use 77 4.12 Socioeconomics, Environmental Justice, and Children's Health and Safety Risks 81 4.14 Water Resources (including Wetlands, Floodplains, Surface Waters, Groundwater, and Wild and Scenic Rivers) <t< td=""></t<>
Chapter 2 - Purpose and Need 17 2.1 Purpose of the Proposed Action 17 2.2 Need for the Proposed Action 17 2.3 Requested Federal Actions 22 Chapter 3 - Alternatives Considered 23 3.1 Overview 23 3.2 Preliminary Alternatives Considered 25 3.3 Alternatives Carried Forward for Analysis within this EA 50 Chapter 4 - Affected Environment and Environmental Consequences 52 4.1 Introduction 52 4.2 Air Quality 54 4.3 Biological Resources 58 4.5 Department of Transportation Act, Section 4(f) Resources 63 4.6 Farmlands 66 4.7 Hazardous Materials, Solid Waste, and Pollution Prevention 68 4.8 Historical, Architectural, Archaeological, and Cultural Resources 71 4.9 Land Use 74 4.10 Natural Resources and Energy Supply 76 4.11 Noise and Compatible Land Use 77 4.12 Socioeconomics, Environmental Justice, and Children's Health and Safety Risks 81 4.14 Water Resources (including Wetlands, Floodplains, Surface Waters, Groundwater, and Wild and Scenic Rivers) 87 4.15 Cumulative Impacts
2.1 Purpose of the Proposed Action 17 2.2 Need for the Proposed Action 17 2.3 Requested Federal Actions 22 Chapter 3 - Alternatives Considered 23 3.1 Overview 23 3.2 Preliminary Alternatives Considered 25 3.3 Alternatives Carried Forward for Analysis within this EA 50 Chapter 4 - Affected Environment and Environmental Consequences 52 4.1 Introduction 52 4.2 Air Quality 54 4.3 Biological Resources 58 4.5 Department of Transportation Act, Section 4(f) Resources 63 4.6 Farmlands 66 4.7 Hazardous Materials, Solid Waste, and Pollution Prevention 68 4.8 Historical, Architectural, Archaeological, and Cultural Resources 71 4.9 Land Use 74 4.10 Natural Resources and Energy Supply 76 4.11 Noise and Compatible Land Use 77 4.12 Socioeconomics, Environmental Justice, and Children's Health and Safety Risks 81 4.14 Water Resources (including Wetlands, Floodplains, Surface Waters, Groundwater, and Wild and Scenic Rivers) 87 4.15 Cumulative Impacts 103
2.2 Need for the Proposed Action 17 2.3 Requested Federal Actions 22 Chapter 3 - Alternatives Considered 23 3.1 Overview 23 3.2 Preliminary Alternatives Considered 25 3.3 Alternatives Carried Forward for Analysis within this EA 50 Chapter 4 - Affected Environment and Environmental Consequences 52 4.1 Introduction 52 4.2 Air Quality 54 4.3 Biological Resources 58 4.5 Department of Transportation Act, Section 4(f) Resources 63 4.6 Farmlands 66 4.7 Hazardous Materials, Solid Waste, and Pollution Prevention 68 4.8 Historical, Architectural, Archaeological, and Cultural Resources 71 4.9 Land Use 74 4.10 Natural Resources and Energy Supply 76 4.11 Noise and Compatible Land Use 77 4.12 Socioeconomics, Environmental Justice, and Children's Health and Safety Risks 81 4.14 Water Resources (including Wetlands, Floodplains, Surface Waters, Groundwater, and Wild and Scenic Rivers) 87 4.15 Cumulative Impacts 103
2.3 Requested Federal Actions. 22 Chapter 3 - Alternatives Considered 23 3.1 Overview 23 3.2 Preliminary Alternatives Considered 25 3.3 Alternatives Carried Forward for Analysis within this EA 50 Chapter 4 - Affected Environment and Environmental Consequences. 52 4.1 Introduction 52 4.2 Air Quality 54 4.3 Biological Resources 58 4.5 Department of Transportation Act, Section 4(f) Resources 63 4.6 Farmlands 66 4.7 Hazardous Materials, Solid Waste, and Pollution Prevention 68 4.8 Historical, Architectural, Archaeological, and Cultural Resources 71 4.9 Land Use 74 4.10 Natural Resources and Energy Supply 76 4.11 Noise and Compatible Land Use 77 4.12 Socioeconomics, Environmental Justice, and Children's Health and Safety Risks 81 4.14 Water Resources (including Wetlands, Floodplains, Surface Waters, Groundwater, and Wild and Scenic Rivers) 87 4.15 Cumulative Impacts 103
Chapter 3 - Alternatives Considered 23 3.1 Overview 23 3.2 Preliminary Alternatives Considered 25 3.3 Alternatives Carried Forward for Analysis within this EA 50 Chapter 4 - Affected Environment and Environmental Consequences 52 4.1 Introduction 52 4.2 Air Quality 54 4.3 Biological Resources 58 4.5 Department of Transportation Act, Section 4(f) Resources 63 4.6 Farmlands 66 4.7 Hazardous Materials, Solid Waste, and Pollution Prevention 68 4.8 Historical, Architectural, Archaeological, and Cultural Resources 71 4.9 Land Use 74 4.10 Natural Resources and Energy Supply 76 4.11 Noise and Compatible Land Use 77 4.12 Socioeconomics, Environmental Justice, and Children's Health and Safety Risks 81 4.14 Water Resources (including Wetlands, Floodplains, Surface Waters, Groundwater, and Wild and Scenic Rivers) 87 4.15 Cumulative Impacts 103
3.1 Overview.233.2 Preliminary Alternatives Considered253.3 Alternatives Carried Forward for Analysis within this EA50Chapter 4 - Affected Environment and Environmental Consequences524.1 Introduction524.2 Air Quality544.3 Biological Resources584.5 Department of Transportation Act, Section 4(f) Resources634.6 Farmlands664.7 Hazardous Materials, Solid Waste, and Pollution Prevention684.8 Historical, Architectural, Archaeological, and Cultural Resources714.9 Land Use744.10 Natural Resources and Energy Supply764.11 Noise and Compatible Land Use774.12 Socioeconomics, Environmental Justice, and Children's Health and Safety Risks814.14 Water Resources (including Wetlands, Floodplains, Surface Waters, Groundwater, and Wild and Scenic Rivers)874.15 Cumulative Impacts103
3.2 Preliminary Alternatives Considered 25 3.3 Alternatives Carried Forward for Analysis within this EA 50 Chapter 4 - Affected Environment and Environmental Consequences 52 4.1 Introduction 52 4.2 Air Quality 54 4.3 Biological Resources 58 4.5 Department of Transportation Act, Section 4(f) Resources 63 4.6 Farmlands 66 4.7 Hazardous Materials, Solid Waste, and Pollution Prevention 68 4.8 Historical, Architectural, Archaeological, and Cultural Resources 71 4.9 Land Use 74 4.10 Natural Resources and Energy Supply 76 4.11 Noise and Compatible Land Use 77 4.12 Socioeconomics, Environmental Justice, and Children's Health and Safety Risks 81 4.14 Water Resources (including Wetlands, Floodplains, Surface Waters, Groundwater, and Wild and Scenic Rivers) 87 4.15 Cumulative Impacts 103
3.3 Alternatives Carried Forward for Analysis within this EA 50 Chapter 4 - Affected Environment and Environmental Consequences 52 4.1 Introduction 52 4.2 Air Quality 54 4.3 Biological Resources 58 4.5 Department of Transportation Act, Section 4(f) Resources 63 4.6 Farmlands 66 4.7 Hazardous Materials, Solid Waste, and Pollution Prevention 68 4.8 Historical, Architectural, Archaeological, and Cultural Resources 71 4.9 Land Use 74 4.10 Natural Resources and Energy Supply 76 4.11 Noise and Compatible Land Use 77 4.12 Socioeconomics, Environmental Justice, and Children's Health and Safety Risks 81 4.14 Water Resources (including Wetlands, Floodplains, Surface Waters, Groundwater, and Wild and Scenic Rivers) 87 4.15 Cumulative Impacts 103
Chapter 4 - Affected Environment and Environmental Consequences524.1 Introduction524.2 Air Quality544.3 Biological Resources584.5 Department of Transportation Act, Section 4(f) Resources634.6 Farmlands664.7 Hazardous Materials, Solid Waste, and Pollution Prevention684.8 Historical, Architectural, Archaeological, and Cultural Resources714.9 Land Use744.10 Natural Resources and Energy Supply764.11 Noise and Compatible Land Use774.12 Socioeconomics, Environmental Justice, and Children's Health and Safety Risks814.14 Water Resources (including Wetlands, Floodplains, Surface Waters, Groundwater, and Wild and Scenic Rivers)874.15 Cumulative Impacts103
4.1 Introduction524.2 Air Quality544.3 Biological Resources584.5 Department of Transportation Act, Section 4(f) Resources634.6 Farmlands664.7 Hazardous Materials, Solid Waste, and Pollution Prevention684.8 Historical, Architectural, Archaeological, and Cultural Resources714.9 Land Use744.10 Natural Resources and Energy Supply764.11 Noise and Compatible Land Use774.12 Socioeconomics, Environmental Justice, and Children's Health and Safety Risks814.14 Water Resources (including Wetlands, Floodplains, Surface Waters, Groundwater, and Wild and Scenic Rivers)874.15 Cumulative Impacts103
4.2 Air Quality544.3 Biological Resources584.5 Department of Transportation Act, Section 4(f) Resources634.6 Farmlands664.7 Hazardous Materials, Solid Waste, and Pollution Prevention684.8 Historical, Architectural, Archaeological, and Cultural Resources714.9 Land Use744.10 Natural Resources and Energy Supply764.11 Noise and Compatible Land Use774.12 Socioeconomics, Environmental Justice, and Children's Health and Safety Risks814.14 Water Resources (including Wetlands, Floodplains, Surface Waters, Groundwater, and Wild and Scenic Rivers)874.15 Cumulative Impacts103
4.3 Biological Resources584.5 Department of Transportation Act, Section 4(f) Resources634.6 Farmlands664.7 Hazardous Materials, Solid Waste, and Pollution Prevention684.8 Historical, Architectural, Archaeological, and Cultural Resources714.9 Land Use744.10 Natural Resources and Energy Supply764.11 Noise and Compatible Land Use774.12 Socioeconomics, Environmental Justice, and Children's Health and Safety Risks814.14 Water Resources (including Wetlands, Floodplains, Surface Waters, Groundwater, and Wild and Scenic Rivers)874.15 Cumulative Impacts103
4.5 Department of Transportation Act, Section 4(f) Resources634.6 Farmlands664.7 Hazardous Materials, Solid Waste, and Pollution Prevention684.8 Historical, Architectural, Archaeological, and Cultural Resources714.9 Land Use744.10 Natural Resources and Energy Supply764.11 Noise and Compatible Land Use774.12 Socioeconomics, Environmental Justice, and Children's Health and Safety Risks814.14 Water Resources (including Wetlands, Floodplains, Surface Waters, Groundwater, and Wild and Scenic Rivers)874.15 Cumulative Impacts103
4.6 Farmlands664.7 Hazardous Materials, Solid Waste, and Pollution Prevention684.8 Historical, Architectural, Archaeological, and Cultural Resources714.9 Land Use744.10 Natural Resources and Energy Supply764.11 Noise and Compatible Land Use774.12 Socioeconomics, Environmental Justice, and Children's Health and Safety Risks814.14 Water Resources (including Wetlands, Floodplains, Surface Waters, Groundwater, and Wild and Scenic Rivers)874.15 Cumulative Impacts103
4.7 Hazardous Materials, Solid Waste, and Pollution Prevention 68 4.8 Historical, Architectural, Archaeological, and Cultural Resources 71 4.9 Land Use 74 4.10 Natural Resources and Energy Supply 76 4.11 Noise and Compatible Land Use 77 4.12 Socioeconomics, Environmental Justice, and Children's Health and Safety Risks 81 4.14 Water Resources (including Wetlands, Floodplains, Surface Waters, Groundwater, and Wild and Scenic Rivers) 87 4.15 Cumulative Impacts 103
4.8 Historical, Architectural, Archaeological, and Cultural Resources714.9 Land Use744.10 Natural Resources and Energy Supply764.11 Noise and Compatible Land Use774.12 Socioeconomics, Environmental Justice, and Children's Health and Safety Risks814.14 Water Resources (including Wetlands, Floodplains, Surface Waters, Groundwater, and Wild and Scenic Rivers)874.15 Cumulative Impacts103
4.9 Land Use744.10 Natural Resources and Energy Supply764.11 Noise and Compatible Land Use774.12 Socioeconomics, Environmental Justice, and Children's Health and Safety Risks814.14 Water Resources (including Wetlands, Floodplains, Surface Waters, Groundwater, and Wild and Scenic Rivers)874.15 Cumulative Impacts103
4.10 Natural Resources and Energy Supply764.11 Noise and Compatible Land Use774.12 Socioeconomics, Environmental Justice, and Children's Health and Safety Risks814.14 Water Resources (including Wetlands, Floodplains, Surface Waters, Groundwater, and Wild and Scenic Rivers)874.15 Cumulative Impacts103
4.11 Noise and Compatible Land Use774.12 Socioeconomics, Environmental Justice, and Children's Health and Safety Risks814.14 Water Resources (including Wetlands, Floodplains, Surface Waters, Groundwater, and Wild and Scenic Rivers)874.15 Cumulative Impacts103
4.12 Socioeconomics, Environmental Justice, and Children's Health and Safety Risks
4.14 Water Resources (including Wetlands, Floodplains, Surface Waters, Groundwater, and Wild and Scenic Rivers)
4.15 Cumulative Impacts103
· · · · · · · · · · · · · · · · · · ·
4.15.1 Past, Current, and Future Project Listing103
4.15.2 Environmental Impact Category Analysis
4.16 Public Involvement

4.17 Conclusion	
Chapter 5 - References	
Chapter 6 - List of Preparers	111
Chapter 7 - List of Agencies and Persons Consulted	

List of Figures

Figure 1.1. Airport Location Map2
Figure 1.2. Vicinity Map3
Figure 1.3. Existing Conditions Exhibit6
Figure 1.4. Runway Shift Exhibit7
Figure 1.5. Wind Cone Location Exhibit7
Figure 1.6. Taxiway Construction Exhibit8
Figure 1.7. Land Acquisitions Exhibit9
Figure 1.8. Relocation of North Boyer Avenue Exhibit11
Figure 1.9. New Apron Space and Taxilane Exhibit12
Figure 1.10. Hangar Build-Out Exhibit13
Figure 1.11. Snow Removal Equipment Building Exhibit14
Figure 1.12. Parking Areas and Access Roads Exhibit15
Figure 1.13. Project Action Summary Exhibit16
Figure 3.1. Illustration of MPU Timeline24
Figure 3.2. Alternative D1
Figure 3.3. Alternative D2
Figure 3.4. Alternative D3
Figure 3.5. Alternative D4
Figure 3.6. Alternative D5
Figure 3.7. Alternative A1
Figure 3.8. Alternative A240
Figure 3.9. Alternative A341
Figure 3.10. Alternative A442
Figure 3.11. Revised Preferred Alternative as reflected on the May 2015 ALP
Figure 3.12. Landside Development Areas47
Figure 3.13. Proposed Signage Improvements Exhibit
Figure 3.14. Proposed Action Alternative49
Figure 4.1. Proposed Action Study Area53
Figure 4.2. Hangars scheduled for removal at the Airport73
Figure 4.3. The existing hangar on Lot 2673
Figure 4.4. Noise Contour Exhibit79
Figure 4.5. Bonner County Employment Breakdown (2016)82
Figure 4.6. Sandpoint Airport Wetlands Exhibit90

List of Tables

Table 1.1. Proposed property acquisitions. 1	.0
Table 2.1. Comparison of FAA B-II design standards and existing airport conditions.	8
Table 3.1. Alternative Summary Table2	28
Table 4.1. Emissions levels associated with primary construction equipment	6
Table 4.2. Estimated net emissions levels for 20 construction days.	57
Table 4.3. Estimated net emissions levels for 200 construction days.	57
Table 4.4. Potential ESA-listed species at Sandpoint Airport.	50
Table 4.5. Section 4(f) resources in the vicinity of Sandpoint Airport.	54
Table 4.6. List of mapped soils on or near the Airport property.	6
Table 4.7. 2016 Bonner County population data8	32
Table 4.8. Bonner County employment data (2009-2016). 8	33
Table 4.9. Comparative Per Capita Income (PCI) [Bonner County and the State of Idaho; 2009-2015]. 8	33
Table 4.10. Delineated wetland areas within the EA study limits. 8	39
Table 4.11. Airport Impervious Surface Area (Acres))7
Table 4.12. Past, current, and future project-related wetland impacts.)7

List of Appendices

Appendix A:	Airport Layout Plan
Appendix B:	Sandpoint Airport Biological Resource Survey
Appendix C:	Sandpoint Airport Wildlife Hazard Site Visit Summary
Appendix D:	Initial Scoping Letters
Appendix E:	Sandpoint Airport Phase 1 Environmental Site Assessment
Appendix F:	Cultural Resources Survey for the Sandpoint Airport Environmental Assessment & State Historic Preservation Office/Tribal Historic Preservation Office Coordination Letters
Appendix G:	Sandpoint Airport Environmental Assessment Wetland Delineation Report & USACE Preliminary Jurisdictional Determination Letter, and Wetland Credit Memos
Appendix H: Appendix I:	Sandpoint Airport Capital Improvement Program: 2015 – 2034 Final Draft EA Availability and Comments and Responses on Draft EA

List of Acronyms and Abbreviations

Airport	Sandpoint Airport
AC	Advisory Circular
ACHP	Advisory Council on Historic Preservation
ACS	American Community Survey
AIP	Airport Improvement Program
ALP	Airport Layout Plan
AOA	Airport Operations Area
Airport Overlay	City Code Title 9, Chapter 12, Airport Overlay Zone District
APE	Area of Potential Effects
AWOS	Automated Weather Observation System
BA	Biological Assessment
BGEPA	Bald Eagle and Golden Eagle Protection Act of 1940
BMPs	Best Management Practices
BNSF	Burlington Northern Santa Fe
CAA	Clean Air Act
CERCLA	Comprehensive Environmental Response, Compensation, and
	Liability Act
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CIP	Capital Improvement Plan
СО	Carbon monoxide
dB	Decibel
DOL	Department of Labor
DOT	Department of Transportation
DNL	Day Night Average Sound Level
EA	Environmental Assessment
EAS	Environmental Assessment Services, LLC
EFH	Essential Fish Habitat
E.O.	Executive Order
EPA	Environmental Protection Agency
ESA	Endangered Species Act of 1973
FAA	Federal Aviation Administration
FBO	Fixed Base Operator
FEMA	Federal Emergency Management Agency
FIRMs	Flood Insurance Rate Maps
FPPA	Federal Farmland Protection Policy Act
GA	General Aviation
GHGs	Greenhouse gases
HHS	United States Department of Health and Human Services
HUD	United States Department of Housing and Urban Development
IDEQ	State of Idaho Department of Environmental Quality

IDFG	Idaho Department of Fish and Game
IFWIS	Idaho Fish and Wildlife Information System
IG	Industrial General
ITP	Industrial Technical Park
JAS	James A. Sewell & Associates, LLC
LMP	Limited Maintenance Plan
LUST	Leaking Underground Storage Tanks
MITL	Medium Intensity Taxiway Lighting
MBTA	Migratory Bird Treaty Act of 1918
MPU	Master Plan Update
MSA	Magnuson-Stevens Act
NAAQS	National Ambient Air Quality Standards
NAVAIDS	Navigational aids
NEPA	National Environmental Policy Act
NFIP	National Flood Insurance Program
NHPA	National Historic Preservation Act
NMFS	National Marine Fisheries Service
NO ₂	Nitrogen dioxide
NPDES	National Pollutant Discharge Elimination System
NPIAS	National Plan of Integrated Airport Systems
NPL	National Priorities List
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
O ₃	Ozone
ΡΑΡΙ	Precision Approach Path Indicator
PCI	Per Capita Income
PJD	Preliminary Jurisdictional Determination
PM	Particulate matter
Pb	Lead
RCRA	Resource Conservation and Recovery Act
RDC	Runway Design Code
REIL	Runway End Identifier Light
RNAV	Area Navigation
ROFA	Runway Object Free Area
ROW	Right-of-way
RPZ	Runway Protection Zone
RS	Residential Single-Family
RSA	Runway Safety Area
SCS	Soil Conservation Service
SHPO	State Historic Preservation Officer
SIP	State Implementation Plan
SO ₂	Sulfur dioxide
SPCC	Spill Prevention, Control, and Countermeasure
SWG	Single wheel gear

SZT	Sandpoint Airport
TAF	Terminal Area Forecast
TDG	Taxiway Design Group
ТНРО	Tribal Historic Preservation Officer
TMDL	Total Maximum Daily Load
TOFA	Taxiway Object Free Area
Transect	Transect Archaeology
TRI	Toxic Release Inventory
TTF	Through the fence
Uniform Act	Uniform Relocation Assistance and Real Property Acquisition
	Policies Act
USACE	United States Army Corps of Engineers
U.S.C.	United States Code
USDA	United States Department of Agriculture
USFWS	United States Fish and Wildlife Service
UST	Underground Storage Tanks
VOCs	Volatile Organic Compounds
VRCP	Voluntary Release Cleanup Program
WDFW	Washington Department of Fish and Wildlife
WHSV	Wildlife Hazard Site Visit

Chapter 1 - Background and Proposed Action

1.1 Introduction

The Sandpoint Airport (also SZT or "Airport") is located in the panhandle of northern Idaho (Figure 1.1), within the City of Sandpoint in Bonner County. While the Airport is situated within the City of Sandpoint (Figure 1.2), it is owned by Bonner County (the Airport Sponsor). Bonner County is proposing to make improvements to the Airport and its supporting facilities in order to meet existing and future needs. The primary proposed improvements would include the reconstruction and shifting of Runway 2/20, the construction of two new parallel taxiways, the construction of an additional apron area, land acquisition to protect the runway approaches and for airfield construction, additional hangar construction, and the construction of additional roads and parking areas. The Proposed Action is described in detail in Section 1.5 of this document.

The National Environmental Policy Act (NEPA) and the Council on Environmental Quality (CEQ) Regulations have established a broad national policy to protect and enhance the quality of the human environment, and require Federal agencies to develop programs and measures to meet national environmental goals. The Sponsor, in cooperation with the Federal Aviation Administration (FAA), has prepared this Environmental Assessment (EA) to identify the potential environmental impacts associated with the Proposed Action, as well as how any identified impacts can be avoided, minimized, or mitigated. The EA was prepared pursuant to Section 102(2)(c) of the National Environmental Policy Act (NEPA) and the Presidential Council of Environmental Quality (CEQ) Regulations Title 40 CFR §§ 1500-1508, the implementing regulations for NEPA, and in accordance with FAA order 1050.1F Environmental Impacts: Policies and Procedures, and FAA Order 5050.4B, National Environmental Policy Act (NEPA) Implementing Instructions for Airport Actions.

1.2 Background and Existing Facilities

The Sandpoint Airport is a key aviation facility for northern Idaho, providing services for charter and recreational users, as well as emergency responders. The Airport is situated within Sandpoint city limits approximately 1.2 miles north of the downtown area (**Figure 1.2**). SZT encompasses approximately 160 acres and is surrounded by evergreen forests and abundant outdoor recreational opportunities. SZT is situated less than one mile from the largest lake in Idaho – Lake Pend Oreille – and is the nearest airport to Schweitzer Mountain Resort, a popular regional resort for both winter and summer recreational activities (located approximately 10 miles northwest of SZT). Hiking, camping, hunting, and fishing opportunities are prevalent in the region. The City of Sandpoint, Lake Pend Oreille, and the abundant outdoor opportunities in the Sandpoint area are major attractions for people from throughout northern Idaho, eastern Washington, and western Montana. The popularity of the region is anticipated to grow in the coming years, and thus it is important that the Airport Sponsor make improvements at SZT to safely accommodate both current Airport operations as well as forecasted increases in future Airport operations (described in **Section 1.4**).

SZT is classified as a General Aviation (GA) Airport (an airport that does not provide commercial service) within the FAA's National Plan of Integrated Airport Systems (NPIAS). As part of the NPIAS, the Airport is

eligible to receive federal grants under the Airport Improvement Program (AIP). Currently, the Airport has a B-II Runway Design Code (RDC) classification based on the operational and physical characteristics of the aircraft currently operating and/or intended to operate at the Airport. However, portions of the current Airport facility do not meet B-II safety and design standards. Correcting these deficiencies – and increasing safety at the Airport – is the primary driver for the Proposed Action presented in this EA.



Figure 1.1. Airport Location Map.



Figure 1.2. Vicinity Map.

The Airport currently operates with one paved runway (Runway 2/20); an aircraft parking apron adjacent to the Airport Terminal connected to Runway 2/20 by a partial parallel taxiway on the eastside of the Airport (see area labeled as the "Terminal Area" in **Figure 1.3**); and, a secondary apron immediately southwest of the Terminal Area. Runway 2/20 is currently 75 feet wide and 5,500 feet long. The runway

has a partial parallel taxiway along the east side (approximately 4,500 feet in length), and several segments of parallel taxiways on the west side that service private airside developments (**Figure 1.3**). The Airport recently reconstructed the terminal apron adjacent to the east parallel taxiway. The secondary apron is approximately 145,000 square feet in size; however, the southernmost end of the secondary apron (approximately 65,000 square feet) is currently unusable for aircraft parking and maneuvering due to a conflict with the departure surface on the Runway 2 (southern) end. Currently, the two apron areas provide a total of 29 usable tie-down spaces (12 spaces on the Terminal Apron and 17 spaces on the secondary apron).

Development currently surrounding the Airport runway consists of on-Airport developments such as the Airport Business Park, the terminal apron and Fixed Base Operator (FBO), as well as private off-Airport developments such as SilverWing, the Quest Aircraft Company facility, Fishback Airpark, Omni Park, and several private properties that have through the fence (TTF) agreements for access to the Airport (see **Figure 1.3** for locations of the developments surrounding the Airport).

The Airport Business Park consists of County-owned land directly southeast of the runway that is leased by various individuals. Approximately half of the Airport Business Park lots are undeveloped and are planned to house additional hangars. The Airport Business Park currently includes a number of existing aircraft hangar buildings and a newly constructed FBO building, operated by Granite Aviation. The FBO provides various services for based and transient aircraft which includes: Jet A fuel and Avgas self-service and full service, aircraft deicing, flight training, aircraft rental, rental cars, courtesy cars, and a pilot lounge. The FBO fueling station consists of two, 12,000-gallon above-ground fuel tanks that are located on the terminal apron. The fueling station is attended during business hours and is available for self-service 24hours a day. The terminal apron area also includes four individual hangar buildings. Immediately east of the terminal apron area there is a vehicle parking lot that provides a total of 29 universal automobile parking spaces and two handicap accessible parking spaces.

Other components of the Airport's existing infrastructure include Airport-owned Runway End Identifier Lights (REILs) on Runway 2, FAA–owned REILs on Runway 20, and other various navigational aids (NAVAIDs), airport lighting, an Automated Weather Observation System (AWOS), and swales for managing stormwater.

SilverWing, a platted airpark situated southwest of the runway, spans 18 acres and consists of 44 individual lots. Currently, SilverWing is mostly undeveloped with the exception of one large hangar building. The SilverWing area fronts a partial parallel taxiway approximately 1,100 feet in length that is shared with the Quest Aircraft Company facility. The Quest Aircraft Company facility is located immediately northeast of SilverWing, is approximately 84,000 square feet, and specializes in production of Quest's Kodiak turboprop aircraft.

The Fishback Airpark, a hangar development along the west side of the Airport, consists of 10 individual parcels, four of which have been developed with hangar buildings.

The Omni Park development consists of 18 individual parcels, 13 of which have been developed with hangar buildings, and is situated on the west side of the Runway 20 end. Omni Park fronts a partial parallel taxiway that is approximately 1,000 feet in length.

Additional private airside developments that have access to the runway include two parcels along the east side of the Airport (near the mid-point of the runway). These two parcels are owned by Carlson Trust/ Lodi Z. Carlson and AMPM LLC. Both of the private parcels on the east side currently have connectors to the existing east side taxiway.

1.3 Existing Operations

Existing Airport operations and based aircraft were evaluated during the development of the 2015 Sandpoint Airport Master Plan Update (MPU). This evaluation utilized information from various sources including the FAA Terminal Area Forecast (TAF), a 2014 hangar survey, fueling records, and FlightAware (an aircraft activity data provider). According to the 2015 MPU, the Airport currently has 97 based aircraft and conducts 30,216 annual GA operations (of which, 392 are jet operations and 729 are helicopter operations).

1.4 Airport Forecasts

The 2015 MPU also provides future (forecasted) estimates for the Airport's based aircraft and annual operations anticipated to occur over a 20-year planning period. The MPU forecasting was based primarily on existing Airport activity, socioeconomic information, and national GA trends. The MPU indicates that the number of based aircraft is forecasted to increase to 137 and annual operations are anticipated to increase to 43,200 by the year 2032.

The Airport currently receives, and is expected to continue to receive, use by aircraft larger than the current B-II RDC. Generally, the FAA standard for justifying expansion improvements is 500 annual operations of aircraft larger than the current RDC. However, based on the 20-year forecast provided in the MPU and coordination with the FAA, the B-II RDC design standards remain the primary consideration for the Airport's existing and planned facilities, and should be sufficient for future Airport activities. The Proposed Action evaluated in this EA is designed to bring all Airport facilities up to current B-II RDC standards. Such improvements are needed to increase the overall safety of Airport operations.



Figure 1.3. Existing Conditions Exhibit.

Background and Proposed Action

1.5 Proposed Action

The Proposed Action evaluated in this EA is indicated on the FAA conditionally-approved Airport Layout Plan (ALP) that was completed during the development of the 2015 MPU. A full set of the ALP sheets developed for the 2015 MPU is included with this EA as **Appendix A**. The components of the Proposed Action being evaluated in this EA are individually described below, and are collectively shown in **Figure 1.13**. The specific components being evaluated include:

1) Runway reconstruction with a 30-foot shift to the north (removal of 30 feet at the south end of the runway and addition of 30 feet at the north end of the runway; see Figure 1.4) due to a 1.5 foot penetration of the approach surface by the nearby Burlington Northern Santa Fe (BNSF) railroad. The reconstruction would involve new edge lighting, lighted signs and replacement of visual NAVAIDs (e.g. wind cone, Figure 1.5). Precision Approach Path Indicator (PAPI) lights and the Runway End Identifier Lights (REILs) would be relocated. The existing RNAV (area navigation GPS) and LOC-A (localizer) approach procedures to Runway 2 would need to be amended due to the 30-foot shift. Departure procedures for both Runway 2 and Runway 20 would also need to be amended due to the 30-foot shift.



Figure 1.4. Runway Shift Exhibit.



Figure 1.5. Wind Cone Location Exhibit.

2) Construction of a full parallel taxiway on the west side of Runway 2/20 with a 240-foot offset. Construction of a public/private partial parallel taxiway on the east side of Runway 2/20 with a 240-foot offset (Figure 1.6). Removal of pavement that does not meet FAA standards. Addition of medium intensity taxiway lighting (MITL) to the new and shifted taxiways.



Figure 1.6. Taxiway Construction Exhibit.

3) Acquisition of parcels in fee and avigation easements within Runway Protection Zone (RPZ) limits at both ends of the runway; and, acquisition of portions of properties for future build out on the east and west side of the Airport property, such as new taxiways and airside improvements (see Figure 1.7 and Sheet 11 of Appendix A). Table 1.1 provides the details correlated to the proposed property acquisitions.



Figure 1.7. Land Acquisitions Exhibit.

Background and **Proposed Action**

Parcel # in Figure 1.7	Legal Parcel ID#	Acquisition Type	Acreage	Current Property Owner			
29	RPS00000100661A	Fee	3.3	Tillberg			
30	RPS00000100152A, RPS37770000PA0A	Fee	2.3	Marley			
31	RPS377700B0030A	Fee	1.1	Osborne			
32	RPS00000100306A	Fee	0.2	Newcomb			
33	RPS00000101395A	Fee	1.6	Tillberg			
34	RPS00000101057A	Fee	0.3	Howell			
35	RPS373200000CAA	Fee	1.2	Omni Park			
36	RPS00000104925A	Fee	0.8	Mehra			
37	RPS368800001A0A	Fee	0.3	Glantz			
38	RPS00000105280A	Fee	0.4	AMPM LLC			
39	RPS372100002B0A, RPS37210000ALAA, RPS37210000090A	Fee	1.3	Fishback			
40	RPS00000105275A	Fee	0.2	AMPM LLC			
41	RPS38630000050A	Fee	0.9	Quest			
42	RPS00000105300A	Fee	0.2	Pnumex Inc.			
43	RPS00000153203A	Fee	0.6	Сох			
44	RPS00000106650A	Fee	0.6	Carlson Trust			
45	RPS0499013000DA	Fee	0.3	Сох			
46	RPS00000106900A	Fee	9.6	Gunter			
47	RPS0499013000GA	Fee	0.9	Albright & Thurston LLC			
48	RPS06350000010A	Fee	0.2	BNE Holdings LLC			
49	RPS0499003000CA	Fee	2.8	Сох			
50	RPS362800000DAA	Easement	0.4	Gooby Trust			
51	RPS00000153820A	Fee	1.1	Сох			
52	NA (Railroad ROW)	Easement	2.2	BNSF			
53	NA (Roadway ROW)	Easement	4.56	City of Sandpoint			

 Table 1.1. Proposed property acquisitions.

- FUTURE ROFA (FROM 30' RUNWAY SHIFT) EXISTING ROFA APPROXIMATE BOYER AVENUE, RELOCATION
- 4) Relocation of a segment of North Boyer Avenue and associated fencing outside of the runway object free area (ROFA) [Figure 1.8].

Figure 1.8. Relocation of North Boyer Avenue Exhibit.

5) Apron and taxilane construction correlated to the existing Business Park situated within the southeast portion of the Airport (**Figure 1.9**). Note, the Piper hangar and one other hangar building (on Airport lot 26) would be removed to make room for the proposed apron space (refer to **Section 4.8** for more information regarding hangar removal).



Figure 1.9. New Apron Space and Taxilane Exhibit.

6) Airport hangar build-out correlated to the existing Business Park is situated within the southeast portion of the Airport (Figure 1.10). The proposed 38 hangars shown in Figure 1.10 reflect the recommendations of the ALP (see Appendix A). One of the five large structures shown at center and just right-of-center in Figure 1.10 would be built as the heated snow removal building (Figure 1.11).



Figure 1.10. Hangar Build-Out Exhibit.

7) Construction of a 100-foot x 100-foot heated snow removal equipment building (Figure 1.11).



Figure 1.11. Snow Removal Equipment Building Exhibit.

8) Construction of additional vehicle parking areas and access roads (Figure 1.12).



Figure 1.12. Parking Areas and Access Roads Exhibit.

Collectively, these proposed improvements (see **Figure 1.13**) would improve safety for all Airport users as well as the general public in the vicinity of the Airport, bring all Airport facilities to current B-II RDC standards, and meet Airport needs as the use of the Airport is forecasted to increase. It should be noted that the land acquisition and Airport hangar build-out correlated to the existing Business Park situated within the southeast portion of the Airport (described above as #6), would be dependent upon FAA funding availability and would be prioritized after airside needs have been met.



Figure 1.13. Project Action Summary Exhibit.

Background and Proposed Action

Chapter 2 - Purpose and Need

2.1 Purpose of the Proposed Action

The purpose of the Proposed Action is to improve the overall safety of the Airport by providing facilities that meet FAA B-II design standards for the airfield infrastructure, and to meet ongoing and future needs of the airside facilities.

2.2 Need for the Proposed Action

The proposed improvements described in this EA can be divided into two types, both of which are related to improving Airport safety. First, the proposed improvements related to FAA design standards are needed to correct operational, geometric and safety deficiencies at the Airport. These deficiencies are discussed in detail in the subsequent sections. Secondly, the proposed improvements to airside infrastructure are needed because the existing infrastructure does not sufficiently support the existing operational activity at the Airport and is expected to fall further short as the number of Airport operations continues to increase. The need for each of the specific improvements associated with the Proposed Action are discussed in **Sections 2.2.1** through **2.2.9**.

Before addressing the need for the specific proposed improvements in the following subsections, it is important to note that many deficiencies exist at the Airport because the existing features of the Airport do not meet all of the FAA B-II RDC design standards. The B-II RDC design standards and the existing deficiencies at the Airport are shown in **Table 2.1**. Correcting these deficiencies is the major focus of the Proposed Action presented in this EA. It should be noted that the Airport was originally built to meet the applicable FAA B-I design standards, and that the 2015 MPU forecast of aircraft operations classified the existing critical aircraft as B-II, meaning that B-II aircraft make up the majority of regular operations at the Airport. Therefore, given the current operations identified in the 2015 MPU, the Airport facilities should meet B-II RDC design standards.

Design Standard	B-II Standard	Is Runway 2/20 in Compliance?						
Runway Width	75 feet	75 feet Yes						
Shoulder Width 10 feet Yes								
Runway OFZ Width and Length ¹	400 x 200 feet	Yes						
RSA and Length ¹	150 x 300 feet	Yes						
ROFA Width and Length ¹	h and ¹ 500 x 300 feet No – Only 247 foot separation between North Boyer Avenue and Runway Centerline (see Figure 1.8).							
Runway Centerline to Taxiway Centerline	240 feet	No – Runway Centerline to Taxiway Centerline is only 200 feet.						
Centerline to Aircraft Parking Area	250 feet	Yes						
Centerline to Holdline	200 feet No – Runway Centerline to Holdline is only 185 feet.							
Crosswind Component	Crosswind Component 95% wind coverage at 13 knots Yes							
RPZ Dimensions	RPZ Dimensions 500 x 1,000 x 700 feet No – The Airport does not own/control 100% or RPZs.							
Approach Surface 20:1 Slope No – The BNSF railroad is an obstruction nea the Runway 2 end.								
1. Length beyond Runway End.								
Note: Design standards shown are for existing approach minimums of one statute mile or greater. More demanding standards may apply if approach minimums of less than one statute mile are implemented.								
BNSF: Burlington Northern Santa Fe OFZ: Obstacle Free Zone RSA: Runway Safety Area ROFA: Runway Object Free Area RPZ: Runway Protection Zone								
Source: 2015 Sandpoint Airport Master Plan Update								

 Table 2.1. Comparison of FAA B-II design standards and existing airport conditions.

2.2.1 Purpose for Runway Reconstruction with a 30-Foot Shift to the North

The Proposed Action is needed to both reconstruct the aged Runway 2/20 pavement and remove an obstruction, the BNSF Railroad, from the Runway 2 approach surface. The FAA requires maintenance of runway pavement for the overall safety of the Airport through Advisory Circular (AC) 150/5380-7A Airport Pavement Management Program and AC 150/5300-13A Airport Design, Change 1.

Runway 2/20 is currently 75 feet wide and 5,500 feet long, is constructed of asphalt, and has a published gross weight bearing capacity of 40,000 lbs. single wheel gear (SWG). According to the 2012 Idaho Airport System Plan, the condition of the majority of the runway in 2012 was "very poor," while the northernmost portion of the runway was listed as being in "fair" condition. In 2014, the runway received rehabilitation to maintain safety until the runway could be fully reconstructed. Currently, the runway is in need of a full reconstruction due to the age of the asphalt and associated deterioration.

The Proposed Action is also needed to remove an obstruction from the Runway 2 approach surface. Obstructions in the runway approach surfaces present safety hazards for aircraft during landing approach

and shortly after takeoff. Such obstructions can be natural (such as trees) or artificial (such as buildings, towers and power poles). During the development of the 2015 MPU, the BNSF Railroad located directly south of the runway was identified as an obstruction. In order to address the railroad obstruction, the reconstructed runway would need to be shifted 30 feet to the north (see **Figure 1.4**).

The existing instrument approach procedures would also be amended following the runway shift. Runway end 2 currently has both RNAV and LOC-A instrument approaches; both would be amended as part of the Proposed Action.

New edge lighting, lighted signs, visual NAVAIDs (both PAPIs and REILs), and a new wind cone/segmented circle would be included in the runway reconstruction and northward shift (see **Figure 1.5**).

2.2.2 Need for New and Relocated Taxiways

The Proposed Action is needed to provide a 5,500-foot full parallel taxiway on the west side of the runway, and a 3,610-foot (combined length) partial parallel taxiway on the eastside of the runway (see **Figure 1.6**). The need for parallel taxiways is linked to FAA AC 150/5300-13A, *Airport Design, Change 1*, Section 405. The full-length west side taxiway is needed to alleviate "back-taxiing" on the runway (discussed in the following paragraph). A partial parallel taxiway on the eastside is needed to account for the limited amount of Airport property space on the eastern edge of the runway, while also continuing to allow Airport users access to the Runway 2 end. The taxiways would consist of a combination of relocated taxiway segments (i.e. taxiway segments reconstructed with larger runway separation) and new taxiway segments (i.e. constructing taxiways where there are none that currently exist), which are indicated in **Figure 1.6**.

Back-taxiing is a ground procedure that uses the runway as a taxiway in the opposite direction an aircraft has landed or is preparing to takeoff. Back-taxiing increases occupancy time on the runway and decreases airport capacity. Currently, back-taxiing on the runway is necessary under some scenarios because the Airport does not have full-length parallel taxiways that extend to the north end of the runway, and because some of the existing taxiways do not have an adequate wingtip separation from the existing fence lines. Adequate separation of a taxiway from the runway centerline is critical to maintain safe separation between the wingtip of an aircraft on the taxiway and the wingtip of an aircraft in the adjacent position on the runway.

The existing taxiways need to be reconstructed with the centerline separation increased to 240 feet in order to meet B-II design standards. The existing runway-taxiway centerline separation is 200 feet. The taxiways also need to be reconstructed to increase the pavement width from 30 feet to 35 feet to meet Taxiway Design Group (TDG) II standards. The holdlines on the reconstructed taxiways would need to be established at 200 feet from the runway centerline. The current centerline-to-holdline separation is only 185 feet.

2.2.3 Need for Property Acquisitions

In order to proceed with the aforementioned runway shift and taxiway construction (which would directly address the need for Airport safety improvements), several properties adjacent to the Airport would need

to be acquired. Land acquisitions are also necessary within the Airport's RPZs in order to comply with FAA AC 150/5300-13A *Airport Design, Change 1*, Section 310. According to the FAA, RPZs are trapezoidal areas "off the end of the runway end that serve to enhance the protection of people and property on the ground" (FAA AC 150/5300-13 *Airport Design*). Under FAA design criteria, "the airport must own the landing area...[and] the airport owner must have sufficient interest in the Runway Protection Zones to protect the Runway Protection Zones from both obstructions and incompatible land use" (FAA AC 150/5300-13 *Airport Design*). **Table 1.1** provides details regarding the proposed property acquisitions; and, **Figure 1.7** shows the locations of the proposed property acquisitions.

Currently, Bonner County does not own/control all of the land contained within the RPZs. The Proposed Action is needed so that Bonner County can purchase the portions of land within the RPZs that are not already owned by the County (see **Figure 1.7** and Sheet 11 of **Appendix A** for depictions of the proposed acquisitions). Some portions of property within the RPZs are situated within the roadway and railroad right-of-way (ROW) owned by the City of Sandpoint and BNSF Railway, respectively. The portions of the RPZs within roadway and railroad ROWs cannot be purchased by the County, so avigation easements would need to be obtained so that the County can sufficiently control the areas as needed to ensure safe Airport operations. An avigation easement is a property right that is obtained by an individual or entity that protects the airspace above a specified height and describes restrictions for allowable uses of the property. Avigation easements are generally used to prevent construction of buildings and towers, planting trees, installation of lighting, or any other action that could interfere with safe aircraft operations.

Property acquisitions on the east and west side of the Airport property would be needed for new taxiway construction. The purpose for these acquisitions is tied to the need for new taxiway construction (see **Section 2.2.2**).

Property acquisitions would also be needed near the southeast portion of the Airport for apron and hangar buildout correlated to the existing Airport Business Park. This acquisition area consists of a single parcel which is currently owned by James Gunter (see **Table 1.1** and **Figure 1.7**, for details and location). The purpose for the Gunter land acquisition is tied to the need for new apron space and new aircraft hangars (see **Sections 2.2.6** and **2.2.7** below).

2.2.4 Need for Relocating North Boyer Avenue and Right-of-Way Fencing

The runway object free area (ROFA) is an area centered about the runway centerline and is designed to reduce the risks associated with an aircraft unexpectedly leaving the runway (FAA AC 150/5300-13 *Airport Design*). Safe operation of the Airport requires that the ROFA must be kept clear of all objects not necessary for air navigation or aircraft ground maneuvering. Currently, a portion of North Boyer Avenue and the associated right-of-way (ROW) fencing northeast of the runway is situated slightly within the ROFA (i.e. 247 feet from the runway centerline at one point, whereas the ROFA extends 250 feet from the runway centerline). With the proposed 30-foot runway shift toward the north, the ROFA incursion or encroachment would increase from 3 feet to approximately 12 feet. Therefore, North Boyer Avenue and ROW fencing in this area needs to be moved to the east (see **Figure 1.8**) in order to satisfy the FAA ROFA requirements.

2.2.5 Need for New Apron Space and Taxilanes

According to the 2015 MPU, the Airport does not have an adequate amount of ramp space, aircraft tiedown parking and covered parking based on the existing operations. The existing apron space is not sufficient to cope with peak aircraft parking and maneuvering requirements. Additional apron space is needed to provide new tie-down spaces, space for aircraft maneuvering and access to newly constructed hangar buildings (as needed in the purpose presented in **Section 2.2.7**). The 2015 MPU forecasted that the Airport will require a total of 69 tie-down spaces and 342,500 square feet of apron space, whereas only 29 tie-downs and 242,500 square feet of apron space currently exists.

In order to meet aircraft parking and maneuvering needs based on existing and future forecasted operations consistent with the 2015 MPU, an additional apron with at least 40 additional tie-downs, 101,500 square feet of additional apron space, and access to new hangar buildings needs to be constructed. New apron space with additional tie-downs (see **Figure 1.9**) and access to new hangar buildings would be constructed on the proposed Gunter land acquisition near the southeast portion of the Airport property (see **Figure 1.7** and **Table 1.1**).

2.2.6 Need for New Aircraft Hangars

Hangars are needed to provide storage and protection for both based and transient aircraft (especially during winter months for protection from harsh weather conditions). The need for covered parking is particularly critical at the Airport because of the extreme winter conditions in the Sandpoint area (i.e. large amounts of snow and ice, and low temperatures). The requirements for sufficient amounts of hangar buildings are linked to FAA AC 150/5070-6B *Airport Layout Plans*, Section 807. Currently, the Airport has 15 box hangars and 22 T-hangars on-Airport, and 20 box hangars and 10 T-Hangars off-Airport. In order to meet the existing and future demands of the Airport as recommended by the 2015 MPU, the Proposed Action would construct four new on-Airport T-hangar units, eight new off-Airport box hangars and 14 new off-Airport T-hangar units. **Figure 1.10** shows the proposed locations for the on-Airport hangars.

The 2015 MPU also specified that the existing hangar door sizes are not large enough to facilitate transient aircraft with large wingspans. The largest doors on the existing hangars are 60 feet wide, while the 2015 MPU recommends that door widths for jet hangars should be at least 100 feet wide. In order to accommodate larger transient jets, several large box hangars are needed.

2.2.7 Need for a Heated Snow Removal Equipment Building

The Airport receives an annual average of 70.3 inches of snowfall, and the airfield must be kept clear of snow and ice to maintain the safety of Airport operations. The reliability of equipment used to remove snow and ice from the airfield is critical to maintain safe conditions. The Airport does not currently have a dedicated storage building for the snow removal equipment. The lack of indoor storage for the snow removal equipment reduces the reliability and useful life of the equipment due to exposure to the elements. The requirements for housing and extending the useful life of snow removal equipment are linked to FAA AC 150/5220-18A, *Buildings for Storage and Maintenance of Airport Snow and Ice Control Equipment and Materials,* Section 1-1. A 100-foot x 100-foot heated snow removal equipment building is needed to increase the safety of Airport operations by improving the reliability and extending the useful

life of snow removal equipment. Figure 1.11 shows the possible locations for the proposed snow removal equipment building.

2.2.8 Need for New Parking Areas and Access Roads

The Proposed Action is needed to fulfill the automobile parking needs of the Airport tenants and visitors. The need for new parking areas and access roads are consistent with guidelines set forth in FAA AC 150/5070-6B, *Airport Master Plans*, Section 807. The Airport currently has an existing parking lot east of the terminal apron that provides 29 universal automobile parking spaces and two handicap accessible parking spaces. According to the 2015 MPU, additional parking spaces will be needed as the Airport grows over the coming years. New parking areas may require the construction of small roadways for access to the newly constructed areas.

Additional access roads would be needed to provide vehicle access to portions of the Airport that require maintenance or access by Airport tenants and Airport visitors (e.g. parking areas, airport facilities, etc.). **Figure 1.12** shows the locations for the proposed parking areas and access roads.

2.3 Requested Federal Actions

The requested federal actions associated with this EA include:

- Unconditional approval of the Proposed Action and the determination that the required environmental analysis for any future AIP funding applications associated with the Proposed Action have been fulfilled pursuant to 49 U.S.C. §47101.
- Amend the existing instrument procedures at SZT. Both the approach procedures to Runway 2 would need to be amended due to shifting the runway by 30 feet, and the departure procedures for both Runway 2 and Runway 20 would need to be amended based on facility improvements associated with the Proposed Action.
- Runway End Identifier Lights (REILs) located at the Runway 20 end will need to be relocated by the FAA.

Chapter 3 - Alternatives Considered

3.1 Overview

Federal environmental regulations concerning the environmental review process require that reasonable alternatives that might accomplish the objectives of a proposed project action be identified for consideration. The examination of alternatives is of critical importance to the environmental review process and serves to establish the conclusion that all reasonable alternatives have been considered.

The following information describes how this chapter is outlined. This chapter closely follows the process and information from the Improvement Alternatives Chapter included in the 2015 MPU. The overall process and timeline for development of the Master Plan Alternatives, as described in **Section 3.2** of this chapter, included the following major milestones:

- The 2015 MPU was initiated in June 2013. During the development of the MPU, nine preliminary runway alternatives were formulated in December 2013 as part of the Improvement Alternatives Chapter. These nine alternatives are illustrated and summarized in **Section 3.2.1**.
- All nine alternatives were evaluated, and by March 2014, five of the original nine alternatives were eliminated for not satisfying the screening criteria described in Section 4.1 of the MPU. In August 2014, the four remaining alternatives were evaluated further based on criteria presented in Table 4-2 of the MPU. The rationale behind the dismissal of eight of the nine original alternatives is described in Section 3.2.2. The remaining alternative was selected in January 2015 as the Preferred Alternative from the MPU.
- The Preferred Alternative from the MPU was then refined and used to develop the ALP, which
 was finalized in May 2015 as part of the MPU process. The changes made to the Preferred
 Alternative from the MPU for the May 2015 ALP, referred to in this chapter as the <u>Revised</u>
 <u>Preferred Alternative</u>, are summarized in Section 3.2.3.
- After the finalization of the MPU in September 2015, the Revised Preferred Alternative was retitled the <u>Proposed Action Alternative</u>, which is briefly described in **Section 3.2.4** and carried forward for analysis in this EA.

The overall timeline of the MPU process is illustrated in **Figure 3.1** on the second page of this chapter.

Section 3.2 of this chapter describes the alternatives that were considered from the 2015 MPU, the reasons for their dismissal from further consideration, and then the later refinement of the Preferred Alternative from the MPU. **Section 3.3** of this chapter describes the two alternatives (i.e. the <u>No Action Alternative</u> and the <u>Proposed Action Alternative</u>) being carried forward in this EA.



Figure 3.1. Illustration of MPU Timeline.

3.2 Preliminary Alternatives Considered

As discussed in Chapters 1 and 2 of this EA, there are safety-related and capacity-related deficiencies identified in the 2015 MPU (both airside and landside) which, if corrected, would improve overall safety and would bring the Airport into compliance with the FAA's RDC B-II design standards. These deficiencies can be divided into two categories based on location of the facilities at the Airport: "airside" airport infrastructure refers to secured areas of the Airport airfield that are used for aircraft operations (i.e. runways, taxiways, surrounding safety areas, etc.); while "landside" airport infrastructure supports the Airport operations, and includes aircraft parking aprons, hangar storage, access roads, and parking lots.

Airside deficiencies identified in the 2015 MPU include:

- Poor runway pavement condition;
- Insufficient separation between the existing parallel taxiway centerline and the runway centerline;
- Insufficient separation between the holdlines and the runway centerline;
- Insufficient width and length of the ROFA at the north end; and,
- Obstructions penetrating runway approach surfaces and insufficient land use control of RPZs.

Landside and support facility deficiencies identified in the 2015 MPU include:

- Insufficient apron and tie-down space to accommodate anticipated increases in Airport operations;
- Insufficient hangar storage to accommodate anticipated increases in Airport operations;
- Lack of a heated building in which to store and maintain snow removal equipment; and,
- Inadequate access roads and vehicle parking areas.

3.2.1 2015 Master Plan Update Alternatives

In the 2015 MPU, an initial set of nine preliminary alternatives were developed to address the deficiencies listed above and primarily focused on reconfiguring the runway and taxiway system. The preliminary alternatives consisted of five alternatives that were eliminated during initial screening (i.e. dismissed early in the MPU process), and four other alternatives that were further evaluated in the MPU. Any alternatives that utilize a C-II RDC were evaluated in the MPU primarily to highlight the space constraints at the Airport, as forecasts presented in the 2015 MPU state that operations of C-II aircraft were not expected to exceed the substantial use threshold of 500 operations per year in the next 20 years.

For rationale regarding why individual alternatives were dismissed, please refer to **Section 3.2.2**. A summary of the primary components for each of the nine preliminary alternatives is presented **Table 3.1** at the end of **Section 3.2.2**.

3.2.2 Alternatives Eliminated from Consideration

During the development of the 2015 MPU Improvement Alternatives Chapter, eight of the nine potential alternatives were dismissed, leaving the Preferred Alternative from the MPU (the nine original MPU alternatives are described in **Table 3.1** at the end of this section. The process that was used to narrow the nine original alternatives to one Preferred Alternative from the MPU is described in this section. The overall process consisted of:

- Initial screening that eliminated five of the nine alternatives early on through coordination with FAA and Airport representatives;
- Further evaluation of the remaining four alternatives based on relevant criteria; and,
- Selection of the <u>Preferred Alternative from the MPU</u> based on the ranking of the relevant criteria.

Five of the nine airside alternatives (D1-D5) were dismissed early after initial screening during the development of the MPU due to concerns regarding environmental impacts and adverse impacts to surrounding properties. A detailed evaluation of these alternatives is presented in Appendix H of the MPU. A summary of the rationale used to dismiss these five alternatives early in the MPU is included in **Table 3.1**.

The four airside alternatives (A1-A4) evaluated further as part of the MPU process (i.e. beyond the five alternatives dismissed during initial screening) were assessed based on the following general criteria:

- Does the alternative meet the project's purpose and need as defined in Chapter 2?
- Does the alternative improve safety at the Airport (primarily through meeting FAA design standards)?
- How many acres or individual properties would need to be acquired to implement the alternative?
- What level of impact to adjacent land uses would be required to implement the alternative (i.e. impacted residential lots, removed hangar buildings, removed aircraft tie-downs, relocated roadways)?
- Would the alternative impact environmentally sensitive areas?

The following paragraphs provide additional considerations that were made with regard to the alternative evaluation criteria.

FAA guidance recommends that the Airport should obtain control of the land within the RPZ. Gaining full control of the RPZ north of the Airport would also require an existing roadway (North Boyer Avenue) to be relocated.

The relocation of the existing roadway outside of the RPZ is incorporated into several of the alternatives. The relocation of the roadway alignment would result in alterations to existing developments north of the Airport and would result in encroachments to sensitive areas linked to Sand Creek, its associated wetlands and its floodplain. The alternatives illustrate, in varying degrees, roadway relocation possibilities. Each of the remaining four alternatives (i.e. Alternatives A1 - A4) performance criteria scoring is presented in **Table 3.1** at the end of this section. The four remaining airside alternatives were narrowed to one Preferred Alternative using this performance criteria scoring.

While Alternatives A1, A3, and A4 address the purpose and need of the project as outlined in Chapters 1 and 2, these alternatives were eliminated from further evaluation due to the relative level of impact and feasibility concerns when compared to Alternative 2. <u>Alternative A2 (Figure 3.8) was chosen as the Preferred Alternative from the MPU</u> because it meets the project's purpose and need, improves safety, and has relatively lower associated impacts to adjacent land uses/properties (as shown in Table 3.1). The proposed improvements detailed in the Preferred Alternative from the MPU are intended to directly address the purpose and need of the project as outlined in Chapters 1 and 2. However, the Preferred Alternative described in the Improvement Alternatives Chapter of the MPU was still in preliminary stages of development. The Preferred Alternative from the MPU was further refined midway through the MPU process and included in the ALP Update (dated May 2015).

Table 3.1. Alternative Summary Table

Alternative Name	Alternative Description and Associated Impacts	Does the Alternative meet the Purpose and Need?	Improve Safety?	Is the Alternative being carried forward in this EA?	Rational for Elimination	RPZ Property Acquisition and Easement (acres)	Non-RPZ property Acquisition and Easement (acres)	Residential Lots Impacted	Hangars Impacted	Tie-Downs Impacted	Roads Impacted	Does the Alternative Impact Sensitive Areas (e.g. wetlands)?
Dismissed Alternative 1 (D1) (Dismissed during initial screening)	 Alternative D1 utilized B-II RDC design standards. Alternative D1 would not alter the existing runway alignment, and would maintain the existing runway length of 5,500 feet. The eastside parallel taxiway would extend 4,500 feet starting at Runway End 2, with a separation of 240 feet from runway centerline to taxiway centerline to meet the B-II design standards for this segment. For the remaining 2,000 feet of the runway, the taxiway centerline would be located 150 feet from the runway centerline, which would require a holdline at the end of the 240-foot taxiway offset to prevent aircraft taxiing onto the 150-foot taxiway offset while the runway is occupied. Apron impacts – Loss of 12 tie-downs and associated apron space. Roadway impacts – None. Wetland impacts – All wetlands on existing Airport property would be filled due to incompatible land use. No impacts to adjacent, off-Airport wetlands. Property acquisitions and impacts – 28 acres of property. Other impacts – None. Alternative D1 is shown in Figure 3.2. 	Yes	No	No	The FAA advised that a 150-foot non-standard runway to taxiway separation would not be supported. 12 tie-downs, all on- Airport wetlands, and 28 acres of property would be impacted. This alternative was dismissed early during the initial screening process.	28 total acres (RPZ and Non- RPZ combined)	28 total acres (RPZ and Non- RPZ combined)	0 residential lots impacted	0 hangars impacted	12 tie- downs impacted	0 roads impacted	Yes
Dismissed Alternative 2 (D2) (Dismissed during initial screening)	 Alternative D2 utilizes C-II RDC design standards. Alternative D2 would not alter the existing runway alignment, and maintains the existing runway length of 5,500 feet. The proposed taxiway system for this alternative would include full-length, parallel taxiways on both sides of the runway with 300 feet runway centerline to taxiway centerline spacing to meet the C-II design standards Apron impacts – Loss of 22 tie-downs and associated apron space. Roadway impacts – North Boyer Avenue, Schweitzer Cutoff Road, and Burns Court relocation would be required. Wetland impacts – All wetlands on existing Airport property would be filled due to 	Yes	Yes	No	This alternative was eliminated due to the anticipated expense of relocating the railroad and North Boyer Avenue, and associated impacts to private property. The increased size of the safety areas (i.e. RPZs, ROFA, Runways Safety Area [RSA], etc.) needed for the C-II designation would cause significant impacts to Airport infrastructure, adjacent residential properties, and surrounding roadways. Based on the 20-year MPU Forecast, the C-II designation is	102 total acres (RPZ and Non- RPZ combined)	102 total acres (RPZ and Non- RPZ combined)	45 residential lots impacted	10 hangars impacted	22 tie- downs impacted	3 roads impacted	Yes

Sandpoint Airport 2019 Environmental Assessment Alternatives
	incompatible land use. There would likely				not expected to be persent							
	 incompatible land use. There would likely be impacts to the Sand Creek wetlands due to the North Boyer Avenue relocation. Property acquisitions and impacts – 102 percent of property acquisitions (accurately acquisition) 				not expected to be necessary. 22 tie-downs, three roads, all on-Airport wetlands and the Sand Creek Wetlands, 102 acres							
	required. One hangar from the Carlson property, two hangars from the Fishback				residential lots, the wind indicator, and the nearby BNSF							
	 Omni Park development impacted. Approximately 45 residential lots impacted. Other impacts – Required relocation of 				This alternative was dismissed early during the initial screening							
	wind indicator. Required relocation of BNSF Railroad south of the Airport. Alternative D2 is shown in Figure 3.3.				process.							
Dismissed Alternative 3 (D3) (Dismissed during initial screening)	 Alternative D3 utilizes B-II RDC design standards. Alternative D3 would relocate the runway, move it 60 feet to the east, and maintain the existing runway length of 5,500 feet. The taxiway system for Alternative D3 would include a full-length, parallel taxiway on the west side of the runway that meets the B-II runway centerline to taxiway centerline separation standard of 240 feet. This alternative does not feature a taxiway on the east side. Apron impacts – Loss of 12 tie-downs and associated apron space. Roadway impacts – North Boyer Avenue realignment required. Wetland impacts – All wetlands on existing Airport property would be filled due to incompatible land use. There would likely be impacts to the Sand Creek wetlands due to the North Boyer Avenue relocation. Property acquisitions and impacts – 44 acres of property acquisitions/easements required. Approximately 11 residential lots impacted on the east side of the runway. Other impacts – None. Alternative D3 is shown in Figure 3.4. 	Yes	Yes	No	After discussion with the FAA and the Airport, it was determined that Alternative D3 would be too costly to implement due to the impact on neighboring residential properties and the realignment of North Boyer Avenue. 12 tie- downs, one road, all on-Airport wetlands and the Sand Creek wetlands, 44 acres of property, and 11 residential lots would be impacted. This alternative was dismissed early during the initial screening process.	44 acres (RPZ and Non-RPZ combined)	44 acres (RPZ and Non-RPZ combined)	11 residential lots impacted	0 hangars impacted	12 tie- downs impacted	1 road impacted	Yes
Dismissed Alternative 4 (D4) (Dismissed during initial	Alternative D4 utilizes C-II RDC design standards. Alternative D4 would relocate the runway 1,450 feet to the north and maintain the existing runway length of 5,500 feet. The taxiway system for Alternative D4 would include full length parallel taxiways on both sides of the runway that would meet the C-II separation standard of 300 feet.	Yes	Yes	No	After discussions with the FAA and the Airport, it was determined that Alternative D4 would not be feasible due to the large amount of property acquisition required and the number of surrounding roads	106 acres (RPZ and Non-RPZ combined	106 acres (RPZ and Non-RPZ combined)	45 residential lots impacted	10 hangars impacted	22 tie- downs impacted	3 roads impacted	Yes
screening)					impacted (i.e. North Boyer							

Sandpoint Airport 2019 Environmental Assessment

	 Apron impacts – Loss of 22 tie-downs and associated apron space. Roadway impacts – North Boyer Avenue, Schweitzer Cutoff Road, and Burns Court relocation would be required. Wetland impacts – All wetlands on existing Airport property would be filled due to incompatible land use. There would likely be impacts to the Sand Creek wetlands due to the North Boyer Avenue relocation. Property acquisitions and impacts – 106 acres of property acquisitions/easements required. One hangar from the Carlson property, two hangars from the Fishback development, and seven hangars from the Omni Park development impacted. Other impacts – Required relocation of wind indicator. 				Avenue and two additional residential roads). The increased size of the safety areas (i.e. RPZs, ROFA, RSA, etc.) needed for the C-II designation would cause significant impacts to Airport infrastructure, adjacent residential properties, and surrounding roadways. Based on the 20 year MPU forecast, the C-II designation is not expected to be necessary. 22 tie-downs, three roads, all on- Airport and the Sand Creek wetlands, 106 acres of property, 10 hangars, 45 residential lots, and the wind indicator would be impacted. This alternative was dismissed early during the initial screening process.			
Dismissed Alternative 5 (D5) (Dismissed during initial screening)	 Alternative D5 utilizes B-II RDC design standards. Alternative D5 would shift the runway to the west by 30 feet. The proposed taxiway system for this alternative would include full-length, parallel taxiways on both sides of the runway. The taxiways would meet the B-II runway/taxiway separation standard of 240 feet. Apron impacts – None. Roadway impacts – North Boyer Avenue realignment required. Wetland impacts – All wetlands on existing Airport property would be filled due to incompatible land use. There would likely be impacts to the Sand Creek wetlands due to the North Boyer Avenue relocation. Property acquisitions and impacts – 38 acres of property acquisitions/easements required. Two hangars from the Fishback development and seven hangars from the Omni Park development impacted. Approximately 16 residential lots impacted. Other impacts – None. 	Yes	Yes	No	After discussions with the FAA and the Airport, it was determined that Alternative D5 would be too costly to implement due to the impact on neighboring residential properties and the Fishback and Omni Park hangars, and due to the realignment required for North Boyer Avenue. One road, all on-Airport wetlands and the Sand Creek wetlands, 38 acres of property, nine hangars, and 16 residential lots would be impacted. This alternative was dismissed early during the initial screening process.	38 acres (RPZ and Non-RPZ combined)	38 acres (RPZ and Non-RPZ combined)	16 residential lots impacted

9 hangars impacted	0 tie- downs impacted	1 road impacted	Yes

Alternative 1 (A1) (Dismissed as part of the MPU process)	 Alternative A1 utilizes B-II RDC design standards. This alternative would relocate Runway 2/20 by shifting it 60 feet toward the west, which is the minimum distance needed to obtain adequate clearance for the taxiway object free area (TOFA) along the eastern side of the runway along with increased runway to parallel taxiway separation (see Figure 3.7). Alternative A1 would include full-length, parallel taxiways on both sides of the runway with a 240-foot centerline separation. Apron impacts – None. Roadway impacts – North Boyer Avenue realignment required to move roadway out of RPZ. Wetland impacts – All wetlands on existing Airport property would be filled due to incompatible land use. There would likely be impacts to the Sand Creek wetlands due to the North Boyer Avenue relocation. Property acquisitions and impacts – 33 acres of property acquisitions/easements required. Two hangars from the Fishback development and seven hangars from the Omni Park development impacted. 	Yes	Yes, meets FAA N design standards.	٧o	Alternative A1 has been eliminated from further consideration because it did not perform as well as Alternative 2 against the evaluation criteria. One road, all on-Airport wetlands and the Sand Creek wetlands, 33 acres of property, nine hangars, five residential lots, and the wind indicator would be impacted.	15 acres	18 acres	5 residential lots impacted	0 tie- downs impacted	1 road mpacted	Yes
	wind indicator. Alternative A1 is shown in Figure 3.7 .										
Alternative 2 (A2) (Preferred Alternative from MPU)	Alternative A2 utilizes B-II RDC design standards. Alternative A2 would reconstruct Runway 2/20 in its current alignment (see Figure 3.8). This alternative would include the construction of a full- length parallel taxiway to the west of the runway and a partial-length parallel taxiway to the east of the runway. Both of the taxiways would be situated to have a 240-foot centerline separation from the runway. The partial eastside parallel taxiway would extend from the Runway 2 end to just north of the mid-point of the runway (approximately 3,500 feet in total length). It is recommended that the north connector of the eastside taxiway be used only as an exit from Runway 2/20. A full parallel taxiway to the east of the runway would not be required because the area northeast of the runway is not	Yes	Yes, meets FAA Ye design standards	'es	N/A	15 acres	13 acres	0 residential 0 hangar lots impacted impacted	12 tie- downs impacted ¹ ir	0 roads npacted ²	Yes

	 anticipated to be developed with Airport infrastructure. Apron impacts – Loss of 12 tie-downs and associated apron space. Roadway impacts – None. Wetland impacts – All wetlands on existing Airport property would be filled due to incompatible land use. No impacts to adjacent, off-Airport wetlands. Property acquisitions and impacts – 28 acres of property acquisitions/easements required. Other impacts – None. 											
Alternative 3 (A3) (Dismissed as part of the MPU process)	 Alternative A3 utilizes B-II RDC design standards. This alternative would leave Runway 2/20 in its current position, and would include full-length east and west parallel taxiways (see Figure 3.9). Both taxiways would be situated to have a 240-foot centerline separation from the runway, which would meet the B-II taxiway design standard. Apron impacts – Loss of 12 tie-downs and associated apron space. Roadway impacts – Realignment of North Boyer Avenue required to move roadway out of ROFA and TOFA. Wetland impacts – All wetlands on existing Airport property would be filled due to incompatible land use. There would likely be impacts to the Sand Creek wetlands due to the North Boyer Avenue relocation. Property acquisitions and impacts – 31 acres of property acquisitions/easements required. Approximately 11 residential lots impacted. Other impacts – None. 	Yes	Yes, meets FAA design standards	No	Alternative A3 has been eliminated from further consideration because it did not perform as well as Alternative 2 against the evaluation criteria. 12 tie-downs, one road, all on- Airport wetlands and the Sand Creek wetlands, 31 acres of property, and 11 residential lots would be impacted.	5 acres	16 acres	11 residential lots impacted	0 hangars impacted	12 tie- downs impacted	1 road impacted	Yes
Alternative 4 (A4) (Dismissed as part of the MPU process)	Alternative A4 would utilize a C-II RDC. Alternative A4 would shift the runway 450 feet north to keep the BNSF Railroad out of the ROFA, maintain a runway length of 5,500 feet, and include full parallel taxiways to the east and west with 300-foot runway/taxiway centerline separations (see Figure 3.10).	Yes	Yes, meets FAA design standards	No	After discussions with the FAA and the Airport, it was determined that Alternative A4 would not be feasible due to the large amount of property acquisition required and the number of surrounding roads impacted. The increased size of	4 acres	58 acres	45 residential lots impacted	10 hangars impacted	22 tie- downs impacted	3 roads impacted	Yes

Sandpoint Airport 2019 Environmental Assessment

Apron impacts – Loss of 22 tie-downs and associated apron space, however landside improvements discussed in later sections would result in a net-gain in the number of				
 tie-downs through the construction of additional apron space. Roadway impacts - North Boyer Avenue, Schweitzer Cutoff Road, and Burns Court relocation required to accommodate the ROFA. Wetland impacts - All wetlands on existing Airport property would be filled due to incompatible land use. There would likely be impacts to the Sand Creek wetlands due to to the North Boyer Avenue relocation. Property acquisitions and impacts - 102 acres of property acquisitions/easements required. On hangar from the Carlson property, two hangars from the Carlson property, two hangars from the Grispacted. Other impacts - Required relocation of wind indicator. 	 Apron impacts – Loss of 22 tie-downs ar associated apron space, however landsic improvements discussed in later section would result in a net-gain in the number of tie-downs through the construction of additional apron space. Roadway impacts – North Boyer Avenu Schweitzer Cutoff Road, and Burns Courelocation required to accommodate th ROFA. Wetland impacts – All wetlands on existin Airport property would be filled due incompatible land use. There would like be impacts to the Sand Creek wetlands dut to the North Boyer Avenue relocation. Property acquisitions and impacts – 1(acres of property acquisitions/easemen required. One hangar from the Carlsc property, two hangars from the Fishba development, and seven hangars from ti Omni Park development impacte Other impacts – Required relocation wind indicator. 	d d the safety areas (i.e. RPZs, ROFA, RSA, etc.) needed for the C-II designation would cause significant impacts to Airport infrastructure, adjacent residential properties, and surrounding roadways. Based on the 20-year MPU forecast, the C-II designation is not expected to be necessary. Alternative A4 has been eliminated from further consideration because it did not perform as well as /Alternative 2 against the evaluation criteria. 22 tie-downs, three roads, all on-Airport wetlands and the Sand Creek Wetlands, 102 acress of property, 10 hangars, 45 residential lots, and the wind indicator would be impacted.		
Alternative A4 is shown in Figure 3.10.	Alternative A4 is shown in Figure 3.10 .			

¹ While 12 tie-downs would be removed, the landside improvement discussed in later sections would result in a net-gain in the number of tie-downs through the construction of additional apron space. ² The first rendition of Alternative A2 did not require any realignments to North Boyer Avenue or any other roads. Impacts to North Boyer Avenue were not deemed necessary until the Preferred Alternative was developed into the Revised Preferred Alternative. Discussion of the North Boyer Avenue impacts is included in **Section 3.1.3**.



Figure 3.2. shows the proposed project plans correlated to Alternative D1. This figure was originally created by Mead and Hunt in collaboration with J-U-B ENGINEERS, Inc. during the development of the 2015 MPU; the identified wetland layer has been added to this figure and the title has been changed for use in this EA document.



Figure 3.3. shows the proposed project plans correlated to Alternative D2. This figure was originally created by Mead and Hunt in collaboration with J-U-B ENGINEERS, Inc. during the development of the 2015 MPU; the identified wetland layer has been added to this figure and the title has been changed for use in this EA document.



Figure 3.4. shows the proposed project plans correlated to Alternative D3. This figure was originally created by Mead and Hunt in collaboration with J-U-B ENGINEERS, Inc. during the development of the 2015 MPU; the identified wetland layer has been added to this figure and the title has been changed for use in this EA document.



Figure 3.5. shows the proposed project plans correlated to Alternative D4. This figure was originally created by Mead and Hunt in collaboration with J-U-B ENGINEERS, Inc. during the development of the 2015 MPU; the identified wetland layer has been added to this figure and the title has been changed for use in this EA document.



Figure 3.6. shows the proposed project plans correlated to Alternative D5. This figure was originally created by Mead and Hunt in collaboration with J-U-B ENGINEERS, Inc. during the development of the 2015 MPU; the identified wetland layer has been added to this figure and the title has been changed for use in this EA document.



Figure 3.7. shows the proposed project plans correlated to Alternative A1. This figure was originally created by Mead and Hunt in collaboration with J-U-B ENGINEERS, Inc. during the development of the 2015 MPU; the identified wetland layer has been added to this figure and the title has been changed for use in this EA document.



Figure 3.8. shows the proposed project plans correlated to Alternative A2. This figure was originally created by Mead and Hunt in collaboration with J-U-B ENGINEERS, Inc. during the development of the 2015 MPU; the identified wetland layer has been added to this figure and the title has been changed for use in this EA document.



Figure 3.9. shows the proposed project plans correlated to Alternative A3. This figure was originally created by Mead and Hunt in collaboration with J-U-B ENGINEERS, Inc. during the development of the 2015 MPU; the identified wetland layer has been added to this figure and the title has been changed for use in this EA document.



Figure 3.10. shows the proposed project plans correlated to Alternative A4. This figure was originally created by Mead and Hunt in collaboration with J-U-B ENGINEERS, Inc. during the development of the 2015 MPU; the identified wetland layer has been added to this figure and the title has been changed for use in this EA document.

3.2.3 Revised Preferred Alternative

After the Preferred Alternative from the MPU (Alternative A2) was identified midway in the 2015 MPU process (and illustrated in the Improvement Alternatives Chapter), it was further developed into the <u>Revised Preferred Alternative</u> in order to create the ALP Update dated May 2015. The primary components of the Revised Preferred Alternative (addressed between the completion of the 2015 MPU Improvement Alternatives Chapter and the finalization of the ALP) include the following:

- <u>Shifting the runway 30 feet to the north</u> the BNSF Railway south of the Airport was identified toward the end of the MPU process as a slight obstruction to the Runway 2 approach surface. In order to clear this obstruction, the proposed runway layout of the Preferred Alternative from the MPU has been shifted 30 feet north (along the same alignment as the existing runway) for the alignment of the Revised Preferred Alternative.
- <u>Taxiway layouts</u> the taxiway layout for the Revised Preferred Alternative is slightly different from the original Preferred Alternative from the MPU because it took into account the approaches to hangar developments and transitions to apron spaces. Also, a portion of taxiway adjacent to the SilverWing development was determined to be adequate without further modifications, so that area (i.e. southwest of the runway) does not show any new proposed taxiway pavement.
- <u>North Boyer Avenue Realignment</u> during development of the Revised Preferred Alternative, a small segment of North Boyer Avenue was determined to encroach upon the runway ROFA. In order to clear the FAA Standard 500-foot-wide ROFA for B-II aircraft, a small section (approximately 200-300 linear feet) of North Boyer Avenue northeast of the runway is planned to be realigned outside of the ROFA. This roadway shift is shown in the Revised Preferred Alternative.
- <u>Landside development areas</u> the Revised Preferred Alternative also contains property acquisitions and proposed taxilane, apron, and access road pavement associated with landside improvements. The landside improvements would also require the removal of the Piper hangar and two other hangar buildings to make room for the proposed apron space.

The Revised Preferred Alternative is illustrated in Figure 3.11.



Figure 3.11. Revised Preferred Alternative as reflected on the May 2015 ALP.

Specific landside elements and support facilities were also evaluated during development of the Revised Preferred Alternative in order to satisfy existing needs and forecasted growth in based aircraft and itinerant aircraft operations (see **Figures 3.12** and **Figure 3.13**). Landside elements and facilities that have been evaluated during the development of the Revised Preferred Alternative fall under the following categories:

- Aircraft Parking Apron
- Aircraft Storage Hangars
- Automobile Parking
- Ground Vehicle Access
- Maintenance and Snow Removal Equipment Facilities
- Land Acquisitions

The following subsections summarize the specific landside development elements that were evaluated and refined during the development of the Revised Preferred Alternative.

Aircraft Parking Apron

According to the 2015 MPU, the Airport is in need of an additional aircraft parking apron to meet existing and future needs. Two locations were evaluated as potential areas for the new aircraft parking apron; one on the east side of the runway and one on the west side. The potential locations for new aircraft parking apron are illustrated in **Figure 3.12** as "Potential Landside Expansion Areas." Both of the potential locations are approximately 8.8 acres in size; both would provide adequate space for the aircraft parking needs identified in the 2015 MPU with sufficient space for additional associated landside developments (e.g. aircraft storage hangars, automobile parking, and maintenance and snow removal equipment facilities as discussed in the following sections). The east side location was chosen because it would allow the existing Airport terminal apron to be extended and would be easier to integrate with existing Airport services and aircraft activity.

Aircraft Storage Hangars

As described in the 2015 MPU, the Airport requires additional hangar storage to accommodate existing and future aircraft activity. The recommended number of additional hangars listed in the MPU (i.e. a minimum of six on-Airport box hangars, 10 on-Airport T-hangars, eight off-Airport box/executive hangars, and 14 off-Airport T-Hangar units) could be situated in a number of different locations surrounding the Airport. Off Airport development including hangar storage is subject to approved TTF access agreements. **Figure 3.12** illustrates 30 proposed locations that could be used for construction of the recommended hangars, along with eight locations currently undergoing hangar development. The areas marked as potential landside expansion areas (specifically the preferred east side location) would not be entirely developed with aircraft tie-downs/apron, and would include space for new hangars. It should be noted that one T-hangar building (i.e. the Piper T-hangar located within the Airport Business Park) does not allow for adequate wingtip clearance for B-II aircraft to access the planned new hangars in the surrounding areas. The 2015 MPU recommended that the Piper T-hangar be removed with replacement T-hangars built elsewhere if demand exists. Also, the 2015 MPU describes two other existing hangars that would need to be removed to make room for proposed apron space. For locations of the existing hangers

planned for removal, please refer to **Figure 3.11**. The southernmost of these two hangars has already been removed by the Airport.

Automobile Parking

The 2015 MPU identified that the Airport requires additional parking areas based on the existing and future Airport activity. In general, parking requirements would be driven by the demands of individual tenants, and the associated business owners would be responsible for providing adequate parking for their facilities. Additionally, the proposed on-Airport landside developments would require additional parking areas. The location for planned on-Airport parking areas is the landside expansion area on the east side of the Airport (see **Figure 1.13** in Chapter 1).

Ground Vehicle Access

Ground vehicle access elements that have been considered include internal access roads (i.e. new access roads within the proposed eastside, landside expansion area), as well as improved signage along surrounding arterial roads to make the Airport easier to find. Improved signage would be necessary along U.S. Highway 2, U.S. Highway 95, and Idaho State Route 200. Based on the existing and anticipated future activity of the Airport, both improved signage and new internal access roads are considered to be necessary and are included as part of the Revised Preferred Alternative (see **Figure 3.13** for approximate locations of proposed improved signage).

Maintenance and Snow Removal Equipment Facilities

As discussed in the 2015 MPU and Chapter 2 of this EA, the removal of snow and ice from the airfield is of critical importance to maintain safe conditions at the Airport. In order to increase the dependability of equipment used for snow/ice removal, a dedicated snow removal equipment building is necessary. Several locations were considered for the preferred placement of a snow removal equipment building; these locations correspond with locations that have been identified as potential hangar development or landside expansion areas on **Figure 3.12**. In order to have the snow removal equipment building centrally located to easily access the airfield, the preferred location for the building is within the eastside landside expansion area.

Land Acquisitions

Property acquisitions of adjacent land are necessary to construct the Revised Preferred Alternative. Additionally, land acquisitions are needed so that the Airport can adequately own or otherwise control the runway and taxiway safety zones (i.e. ROFA, TOFA, RPZ, etc.). The total area of land acquisitions needed for the Revised Preferred Alternative, which includes both airside and landside improvements, equates to 37.36 acres of acquisitions in fee purchase and acquisitions in avigation easements (see **Figure 3.14** for overall areas of proposed acquisitions). For an illustration and additional details regarding individual parcels planned for acquisition please refer to **Figure 1.7** and **Table 1.1** in Chapter 1.

3.2.4 Proposed Action Alternative

Since the finalization of the 2015 MPU, the Revised Preferred Alternative has been retitled by the Airport Sponsor as the <u>Proposed Action Alternative</u>, which is illustrated in **Figures 1.13 and 3.14** and carried forward for analysis in this EA.



Figure 3.12. Landside Development Areas. This figure shows the potential areas that could be developed with landside infrastructure. This figure was created by Mead and Hunt in collaboration with J-U-B ENGINEERS, Inc. during the development of the 2015 MPU.



Figure 3.13. Proposed Signage Improvements Exhibit.



Figure 3.14. Proposed Action Alternative after refinements were incorporated since the completion of the 2015 MPU.

3.3 Alternatives Carried Forward for Analysis within this EA

The two alternatives being carried forward in this EA, the <u>No Action Alternative</u> and the <u>Proposed Action</u> <u>Alternative</u>, are discussed in the following sections.

3.3.1 No Action Alternative

NEPA implementing regulations require consideration of a No Action Alternative. The No Action Alternative is defined by the Council on Environmental Quality (CEQ) as the alternative that "considers the environmental consequences of not undertaking the action or proposed project." For this EA, the No Action Alternative is defined as the continued operation of the existing Airport facilities. Under the No Action Alternative, no improvements, modifications or upgrades would be made to the Airport's airside or landside facilities. The Airport would continue to operate under existing conditions.

The No Action Alternative would not address the purpose and need to correct B-II RDC deficiencies and provide safety improvements for existing and future Airport operations. The aircraft currently operating and projected to operate at the Airport require a greater runway-taxiway separation and wider taxiways than currently exist in order to comply with FAA regulations. While the No Action Alternative does not meet the project's purpose and need, NEPA requires its consideration as a baseline for other alternatives. Identification of the potential impacts associated with the No Action Alternative provides a baseline for the assessment of impacts associated with the Proposed Action Alternative. Therefore, the No Action Alternative is included in the detailed assessment of potential social, economic, and environmental impacts presented in Chapter 4.

3.3.2 Proposed Action Alternative

The Proposed Action Alternative would reconstruct the runway with a 30-foot shift to the north so that approach penetrations could be eliminated. It would also construct parallel taxiways while correcting taxiway geometric deficiencies (i.e. runway width, runway/taxiway centerline separation, and object free areas). This alternative would meet the project's purpose and need. Key features of the Proposed Action Alternative (see **Figure 3.14**) are:

- 1) Runway reconstruction with a 30-foot shift to the north. The reconstruction would involve installation of new edge lighting, lighted signs, and replacement of visual NAVAIDs (e.g. wind cone, PAPIs, and REILs).
- 2) Construction of a full parallel taxiway on the west side of Runway 2/20 with a 240-foot offset. A portion of taxiway adjacent to the SilverWing development was determined to be adequate without further modifications, so that area (i.e. southwest of the runway) in Figure 3.14 does not show any new proposed taxiway pavement. Construction of a public/private partial parallel taxiway on the east side of Runway 2/20 with a 240-foot runway/taxiway centerline separation. MITLs would be added to taxiways.
- 3) Acquisition of parcels in fee and avigation easements within RPZ limits at both ends of the runway; and, acquisition of portions of properties on the east and west side of the Airport property to construct new taxiways and make Airport improvements. For acquisition limits, refer to Figure 1.7 in Chapter 1.

- 4) Relocation of a segment of North Boyer Avenue and associated fencing outside of the ROFA.
- 5) Apron and taxilane construction correlated to the existing Business Park situated within the southeast portion of the Airport.
- 6) Hangar build-out correlated to the existing Business Park situated within the southeast portion of the Airport.
- 7) Construction of a 100' x 100' heated snow removal equipment building.
- 8) Construction of additional vehicle parking areas and access roads.

The Proposed Action Alternative meets the project purpose and need (described in Chapter 2) by upgrading the existing facilities at the Airport to provide safety improvements for existing and future operations, and by complying with the FAA's RDC B-II design group standards.

Chapter 4 - Affected Environment and Environmental Consequences

4.1 Introduction

This chapter evaluates potential impacts related to the Proposed Action Alternative on each of the Environmental Impact Categories defined by FAA Order 1050.1F. The evaluation of each Environmental Impact Category includes: (1) the *Affected Environment*, which describes the existing natural, ecological, cultural, social, and economic conditions that could be impacted by the Proposed Action Alternative; (2) the *Significance Criteria*, which outlines the regulatory standards described in the applicable FAA orders; (3) the *Analysis*, which describes the methodology used to evaluate resource impacts; and, (4) the *Environmental Consequences*, which evaluates the human and environmental consequences of the No Action Alternative and the Proposed Action Alternative for each environmental resource. Mitigation measures related to anticipated Proposed Action Alternative impacts are also discussed in the Environmental Consequences subsections, as appropriate.

Baseline data used to determine the affected environment were collected by reviewing existing documentation and databases, consulting with various individuals and agencies, and conducting field investigations.

The Sandpoint Airport is a public use airport located within the City limits of Sandpoint in Bonner County, Idaho, within the northern portion of the state. The Airport is situated west of U.S. Highway 2/395, approximately one mile north of the Sandpoint city center (see **Figure 1.1**, Airport Location Map; and, **Figure 1.2**, Vicinity Map in Chapter 1). The Airport is situated at approximately 2,131 feet above mean sea level. While the land directly surrounding the Airport is relatively flat, the Selkirk Mountains begin roughly one mile northwest of the Airport and rise to approximately 6,400 feet above sea level. There are multiple distinctive wetland areas on and immediately adjacent to the Airport. Soils present in the proposed project vicinity consist of a variety of silt loams (United States Department of Agriculture [USDA]/National Resources Conservation Service [NRCS] Soil Survey 2017).

The study area associated with the No Action Alternative correlates to the existing Airport property boundaries. The study area for the Proposed Action Alternative is defined as the existing Airport property and planned property acquisitions, totaling 160 acres (see **Figure 4.1**).

The following Environmental Impact Category does not exist within or adjacent to the study area, and is therefore not discussed further: Coastal Resources.





Sandpoint Airport 2019 Environmental Assessment

Affected Environment

4.2 Air Quality

4.2.1 Affected Environment

The Environmental Protection Agency (EPA) has established National Ambient Air Quality Standards (NAAQS) to defend public health and environmental welfare against the negative effects of outdoor air pollution. Primary NAAQS are health-based and geared toward protecting sensitive or at-risk portions of the population. Secondary NAAQS are welfare oriented and designed to prevent decreased visibility and damage to animals, vegetation, and physical structures. NAAQS have been established for the following criteria pollutants: carbon monoxide (CO), nitrogen dioxide (NO₂), ozone (O₃), sulfur dioxide (SO₂), particulate matter (PM), and lead (Pb).

The Clean Air Act (CAA) sets the overall policy for managing air quality across the nation. Under the CAA, air quality conditions within all areas of a state are required to be designated with respect to the NAAQS as "attainment," "nonattainment," or "unclassifiable." Areas that do not exceed the NAAQS are designated as attainment, while areas that exceed the standards are designated as nonattainment. Once a nonattainment area meets the NAAQS and requirements in the CAA and has a maintenance plan approved, the site may be re-designated as an attainment area by the EPA.

Section 176(c) of the CAA, as amended in 1990, requires that federal actions conform to the appropriate federal and state air quality plans in order to attain the CAA's air quality goals. Concurrently, Section 110 of the CAA, 42 U.S.C. §7410, requires that state and local air pollution control agencies adopt federally approved control strategies to minimize air pollution. The resulting body of regulations is known as a State Implementation Plan (SIP). SIPs generally establish limits and standards to minimize emissions of criteria air pollutants.

In 1987, the Sandpoint area was classified by the EPA as a nonattainment area for PM-10 (PM less than 10 micrometers in diameter). The area was designated as an attainment area for all other criteria pollutants. The State of Idaho submitted a PM-10 SIP to the EPA in August 1996, which included a comprehensive residential wood combustion program, controls on fugitive road dust, and emission limitations on industrial sources. The EPA approved the SIP in June 2002. Then, in June 2010, the EPA determined that the Sandpoint nonattainment area had attained the PM-10 NAAQS.

In December 2011, the State submitted the Sandpoint PM-10 Limited Maintenance Plan (LMP) to the EPA. The State requested that the EPA redesignate the Sandpoint nonattainment area to attainment for the PM-10 NAAQS, and requested revisions to the control measures in the Sandpoint PM-10 SIP. In April 2013, after review, the EPA approved the State's request to redesignate the Sandpoint area to attainment for PM-10, and partially approved the revisions to the control measures included in the PM-10 SIP. The revised PM-10 SIP and Sandpoint LMP are the standards for air quality regulations in the City of Sandpoint and surrounding areas, and helps uphold the current attainment of the PM-10 NAAQS (40 CFR Parts 52 and 81).

Currently, the EPA has determined that the Sandpoint area meets all the criteria established under the CAA and regulated through the NAAQS. Thus, as long as the LMP is upheld, the City of Sandpoint, and Bonner County, are considered attainment areas for all NAAQS criteria pollutants (EPA Green Book 2018).

However, because Sandpoint must adhere to a maintenance plan in order to uphold its attainment status, the Sandpoint area is classified as a "maintenance area" for PM-10, meaning that any federal action occurring within the area must adhere to the General Conformity Rule.

4.2.2 Significance Criteria

The FAA's Aviation Emissions and Air Quality Handbook (Version 3, Update 1, dated January 2015) states that both the rules and requirements described in the CAA and NEPA mandate that air quality impacts associated with federal actions and projects do not cause, or worsen, violations of relevant air quality standards. Essentially, an assessment or study of air quality, either qualitative or quantitative, is always necessary under NEPA or the CAA.

The General Conformity Rule of the CAA ensures that actions occurring in EPA-designated NAAQS nonattainment or maintenance areas which receive federal funding, support, approval, or permitting are accounted within, or do not in any way interfere with, the attainment strategy of an EPA-approved SIP. Currently, the Sandpoint area is designated as an attainment area, however because the Sandpoint area must adhere to the LMP (and therefore can be classified as a maintenance area), the Proposed Action Alternative would be subject to the General Conformity Rule, and the Proposed Action Alternative would need to conform to the current SIP for PM-10.

4.2.3 Analysis

Within the Sandpoint area, the most notable air pollutants (currently addressed by the SIP and Sandpoint City Ordinance No. 965) result from residential wood combustion devices, fugitive road dust from sanding/deicing materials, and emissions from local industrial sources. There are no presently existing air quality violations with regard to NAAQS, and the City of Sandpoint is located in an area designated by the EPA as attainment.

Under the No Action Alternative, no development and no resulting changes in air quality or air emissions would occur.

The purpose of the Proposed Action Alternative is to improve the overall safety of the Airport by providing facilities that meet FAA B-II design standards for airfield infrastructure and to meet ongoing and future needs of the airside facilities. However, rather than cause an increase in the overall number of Airport operations, the Proposed Action Alternative would instead allow the Airport to safely maintain its current (and forecasted) level of operations. No changes in aircraft fleet mix or taxiing times would occur.

Because the Proposed Action is subject to federal approval, and because Sandpoint Airport is located in a maintenance area for PM-10, the Federal action is subject to the General Conformity Rule. The first phase of the General Conformity process is the applicability phase which has two parts. The first part involves determining if the Federal action is located within in an area of non-attainment or maintenance which it is and the second part involves determining if the project is exempt from the General Conformity Rule or Presumed to Conform (PTC). If the project is exempt or PTC, no further analysis to demonstrate conformity is required. The proposed action is not exempt from General Conformity or PTC; therefore, the analysis moves to the evaluation phase which compares project-related emissions to the *de minimis* thresholds established in the CAA and General Conformity rules (where *de minimis* is the level where no

further analysis is needed). The *de minimis* consideration is only needed for criteria air pollutants that are in non-attainment or maintenance, which in the case of this project is PM-10. If the project-related net emissions of PM-10 are less than the *de minimis* level, then the federal action is considered to be too small to adversely affect the air quality status of the area, and the project is automatically considered to conform with the SIP, therefore complying with conformity requirements. The General Conformity Applicability Analysis is included in **Section 4.2.3.1**.

General Conformity Applicability and Evaluation

The most intensive element of the Proposed Action Alternative would be the construction associated with the runway reconstruction and shift. After consultation with an airport engineer, the runway reconstruction is anticipated to occur over the course of 15 to 20 consecutive days. Each day of the runway reconstruction would presumably consist of two, 10-hour shifts (20 hour working days). Equipment expected to be utilized for the Proposed Action Alternative consists of heavy loaders, excavators, compactors, bulldozers, graders, pavers, backhoes, water trucks, rollers, and other construction support equipment. For this analysis, the assumption is that a construction fleet of approximately 10 vehicles/pieces of equipment would be running continuously at the same time throughout the entire workday.

No *de minimis* thresholds exist for NAAQS for areas that meet air quality standards (i.e. attainment areas), however general thresholds for NAAQS in nonattainment or maintenance areas are 100 metric tons/year for each criteria pollutant. For this analysis, emissions levels were estimated for CO, Volatile Organic Compounds (VOCs), NO₂, SO₂ PM-10, PM-2.5, and Pb. VOCs were included because of the role they play in contributing to overall O₃ levels (caused by chemical reactions between nitrogen oxides and VOCs). Lead emissions are no longer a factor because of EPA requirements regarding the use of unleaded fuel. For the purpose of the evaluation for General Conformity, special attention was placed on PM-10 levels, due to the location of the Airport within a PM-10 maintenance area. **Tables 4.1** and **4.2** highlight emission levels for primary construction equipment likely associated with the Proposed Action Alternative.

Pollutant Level per Piece of Construction Equipment (g/operating hour)										
Pollutant Type	Bulldozer (g/hr.)	Roller (g/hr.)	Grader (g/hr.)	Excavator (g/hr.)	Loader/ Backhoe (g/hr.)	Paver (g/hr.)	Water Truck (g/hr.)	Compactor (g/hr.)	Skid Steer (g/hr.)	Trencher (g/hr.)
СО	276	133	153	141	399	143	751	1,255	311	152
VOCs	48	20	35	29	75	25	154	39	60	21
NO ₂	638	253	399	333	426	304	1,945	11	289	270
SO ₂	1	0	1	1	0	0	2	0	0	0
PM-10	42	21	29	26	63	24	84	3	47	21
PM-2.5	40	20	29	25	61	23	82	3	46	21
Pb*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Table 4.1. Emissions levels associated with primary construction equipment.

*Lead is no longer a factor because of EPA requirements to use unleaded fuels. Emissions levels are estimates based upon the EPA AP42 database. https://www.epa.gov/air-emissions-factors-and-quantification/ap-42-compilation-air-emission-factors.

Table 4.2 represents a combined total of 4,000 equipment operating hours, and assumes that each of the primary pieces of construction equipment would run continuously for the entire 20-hour shift for each day of the runway reconstruction portion of the Proposed Action Alternative. The total levels of individual criteria pollutants would be well below the significance thresholds of 100 metric tons/year.

	Estimated	Net Emissions Per Criteria Pollutant for 20 Construction Days (Metric								
Vehicle	Running				Tons)					
	Hours	CO	VOCs	NO ₂	SO ₂	PM-10	PM-2.5			
Bulldozer	400	0.110	0.019	0.255	0.0004	0.0170	0.0160			
Roller	400	0.053	0.008	0.101	0	0.0080	0.0080			
Grader	400	0.061	0.014	0.160	0.0004	0.0116	0.0116			
Excavator	400	0.056	0.012	0.133	0.0004	0.0104	0.0100			
Loader/Backhoe	400	0.160	0.030	0.170	0	0.0252	0.0244			
Paver	400	0.057	0.010	0.122	0	0.0096	0.0092			
Water Truck	400	0.300	0.062	0.778	0.0008	0.0336	0.0328			
Compactor	400	0.502	0.016	0.004	0	0.0012	0.0012			
Skid Steer	400	0.124	0.024	0.116	0	0.0188	0.0184			
Trencher	400	0.061	0.008	0.108	0	0.0080	0.0080			
Totals:	4,000	1.484	0.203	1.947	0.002	0.1434	0.1396			

Table 4.2. Estimated net emissions levels for 20 construction days.

Given the climate surrounding the Airport, work cannot be completed for each day of the year (365 days); five month (November-March) winter suspensions are fairly typical in the Sandpoint area. The anticipated maximum number of construction days would equate to approximately 200 days in any given year. **Table 4.3** depicts the overall potential levels of criteria pollutants if each of the primary pieces of equipment were run throughout every 20-hour shift in the 200-day construction season (totaling 4,000 hours for each piece of equipment, or 40,000 hours of total equipment running time). The 200-day construction outlook represents an extremely liberal estimate of how the Project Action Alternative could unfold.

Criteria Pollutant	со	VOCs	NO ₂	SO ₂	PM-10	PM-2.5
Metric Tons of Total						
Emissions	14.04	2.03	19.47	0.02	1.434	1.396
(40,000 Equipment	14.84					
Hours)						
Below or Above 100	Delaw	Delaw	Delaw	Delaw	Delaw	Delaw
MT/Year Threshold	Below	Below	Below	Below	Below	Below

Table 4.3. Estimated net emissions levels for 200 construction days.

Table 4.3 illustrates that the total level of each criteria pollutant, assuming that the primary construction equipment fleet would run constantly for each of the 20-hour workdays throughout a 200-working day schedule, would still be well below the 100 MT/Year significance threshold for nonattainment and maintenance areas. Given the estimated construction fleet size and construction schedule, criteria pollutants, including PM-10, would not surpass the *de minimis* thresholds from construction equipment

emissions for the Proposed Action Alternative, and the Proposed Action Alternative would be presumed to adhere to the current SIP, complying with conformity requirements.

4.2.4 Environmental Consequences

No Action Alternative

The No Action Alternative would not result in changes to air quality. Airport operations would continue at levels similar to existing operations. Therefore, the No Action Alternative would pose no significant impacts to air quality.

Proposed Action Alternative

Because federal approval is required for the implementation of the Proposed Action Alternative, it must be shown that the project would conform with the SIP for the criteria pollutant that is in nonattainment or maintenance. As noted earlier, the Sandpoint Area is subject to a SIP for PM-10 due to past exceedances of the standard. Therefore, conformity must be demonstrated only for PM-10.

The analysis in **Section 4.2.3.1** shows that with the Proposed Action Alternative improvements, the project-related emissions for PM-10 would be below the General Conformity Rule *de minimis* level and therefore the Federal action is considered to be too small to adversely affect the air quality status of the area. Therefore, a General Conformity Determination is not required. Also, **Table 4.3** discloses the net emissions for each of the NAAQS associated with the proposed action. Based on these emissions, and that the emissions associated with construction are temporary, the proposed action is not expected to result in an exceedance of the NAAQS, and impacts therefore are insignificant.

Mitigation

No mitigation is required as the Proposed Action will not have a significant impact on air quality.

The project specifications will include temporary erosion control measures to minimize the impacts to air quality during construction activities. Temporary erosion control measures will include implementation of Best Management Practices (BMPs) to minimize airborne dust resulting from ground-disturbing activities. Project specifications will include operations necessary to meet permitting requirements for the general construction, asphalt plant and crushing operations, as well as state and federal air quality requirements.

4.3 Biological Resources

4.3.1 Affected Environment

Federal agencies are required to follow the guidelines set forth in the Endangered Species Act of 1973 (ESA) [16 U.S.C. 1531-1543], the Migratory Bird Treaty Act of 1918 (MBTA) [16 U.S.C. 703-712], the Bald Eagle and Golden Eagle Protection Act of 1940 (BGEPA), and the Magnuson-Stevens Act of 1976 (MSA) (16 U.S.C 1801). This section evaluates the impact of the Proposed Action Alternative on the biological resources in the study area, including those resources protected under the ESA, the MBTA, the BGEPA and the MSA.

A biological resource survey was completed by J-U-B ENGINEERS, Inc. in February 2016 and updated in September 2017. The survey concluded that:

- There is no fish habitat, nor Essential Fish Habitat (EFH) protected under the Magnuson-Stevens Act, within the study area.
- Currently, the United States Fish and Wildlife Service (USFWS) lists three ESA-listed species as
 potentially occurring in Bonner County, Idaho: namely, Selkirk Mountains woodland caribou
 and proposed critical habitat; bull trout; and, North American wolverine. Coordination with
 the Idaho Department of Fish and Game (IDFG) determined that the woodland caribou and
 North American wolverine were the only listed species of concern observed within ten miles
 from the Airport (see Appendix B, Biological Resource Survey).

The close proximity of the Airport to the surrounding urban areas, major transportation corridors, and established residences creates a less than ideal habitat for most terrestrial and aquatic species. To more accurately determine the presence of wildlife at the Airport, a Wildlife Hazard Site Visit (WHSV) Summary Report was also completed independently of this EA in November 2014 (see **Appendix C**). The WHSV identified common birds, small mammals, white-tailed deer, and moose as the primary species occurring at the Airport. No fish species or fish habitat were observed within the EA study area. The WHSV did not identify any known occurrences of ESA-listed species within the Airport property. Letters describing the Proposed Action Alternative were sent to both the USFWS and the IDFG during project scoping. No scoping comments were received from the USFWS. The IDFG's primary recommendation for the Airport was the construction of complete perimeter fencing to minimize the number of wildlife strikes. Recently, the Airport installed new chain link perimeter fencing to address IDFG's concerns (see **Appendix D**, Scoping Letters).

4.3.2 Significance Criteria

According to FAA Order 1050.1F, a project would have significant impacts on biotic communities when USFWS or the National Marine Fisheries Service (NMFS) 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. To determine whether or not the Proposed Action Alternative would impact biological resources, the factors considered for analysis are whether the Alternative would have the potential for:

- A long-term or permanent loss of unlisted plant or wildlife species, i.e., extirpation of the 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; or,
- Adverse impacts on 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.

Order 1050.1F also describes that the project would have significant impacts on special status species when the USFWS determines that the Proposed Action Alternative would be likely to jeopardize the continued existence of federally listed endangered or threatened species potentially resulting in

extinction or extirpation, or when the Proposed Action Alternative would result in the destruction or adverse modification of federally-designated critical habitat in the affected area.

4.3.3 Analysis

A field survey and habitat evaluation were conducted to determine habitat types and species within the area that could be affected by the Proposed Action Alternative. The evaluation also included a review of the project area for the existence of suitable habitat for threatened and endangered species or species of special concern.

The WHSV conducted in November 2014 identified common birds, white-tailed deer, and moose as the most prominent general species currently existing at the Airport. Other species known to occur at the Airport include coyote, black bear, red fox, horses, and domestic animals. No fish or fish habitat was observed within the study area. General vegetation at the Airport consists of actively mowed grasses and assorted small shrubs at the fringe of the Airport property.

A biological resource survey for the project area was completed and approved by FAA in 2016. The 2016 survey addressed the potential impacts to Selkirk Mountains woodland caribou, bull trout, Canada lynx, grizzly bear, and whitebark pine. The survey was updated in September 2017 to address changes to ESA-listed species, namely the addition of North American wolverine to the Airport species list, and the removal of Canada lynx, grizzly bear, and whitebark pine from the Airport species list.

During the preparation of the biological resources survey, the USFWS's IPaC database was referenced. The IPaC database identifies three ESA-listed species and habitats as having the potential to occur on Airport property. The species were either listed as "threatened" (defined by the ESA as "any species which is likely to become endangered within the foreseeable future throughout all or a significant portion of its range"), "endangered" (defined by the ESA as "any species which is in danger of extinction throughout all or a significant portion of its range"), or "proposed threatened" (defined by the ESA as "any species currently proposed for official listing as threatened"). **Table 4.4** summarizes the potential ESA-listed species at the Airport.

ESA-Listed Species or Critical Habitat	Scientific Name	ESA Status	ID State Status
Selkirk Mountains woodland caribou and proposed critical habitat	Rangifer tarandus caribou	Endangered	Endangered
Bull trout	Salvelinus confluentus	Threatened	N/A
North American wolverine	Gulo gulo luscus	Proposed Threatened	Species of Concern

Table 4.4. Potential ESA-listed species at Sandpoint Airport.

Of the three listed species, only woodland caribou and North American wolverine have been documented by the IDFG within 10 miles of the Airport. Due to the close proximity of the Airport to surrounding urban areas, major transportation corridors, and established residences, a less than ideal habitat exists for the aforementioned species. The following information summarizes the potential impacts to the aforementioned ESA-listed species that may exist at the Airport. A more detailed account of the species and impacts determination is documented in the biological resources survey (see **Appendix B**).

Selkirk Mountains woodland caribou and proposed critical habitat

Suitable habitat characteristics for caribou include old growth forests of Engelmann spruce/subalpine fir and western red cedar/western hemlock, generally more than 100-150 years old. No old growth forests exist within or adjacent to Airport property. According to the 2012 Annual Report published by the Washington Department of Fish and Wildlife (WDFW), only one population of mountain caribou extends into the United States, containing approximately 27 individuals (WDFW 2012). The 2017 WDFW Periodic Status Review illustrates the existing recovery habitat for woodland caribou, which is well outside of the Airport and the City of Sandpoint. Based on the absence of suitable habitat characteristics and the small population number, the occurrence of Selkirk Mountains woodland caribou within the proposed project area is unlikely. The Proposed Action Alternative activities would have <u>no effect</u> on woodland caribou because neither the species, nor its habitat, is found on Airport property.

Bull trout

Suitable habitat characteristics for bull trout include oligotrophic lakes and deep pools of pristine, cold water in mountainous regions (Sternberg 1996). While the City of Sandpoint lies on the shore of Lake Pend Oreille, no lakes or streams exist on the Airport property (located approximately 0.75 miles from Lake Pend Oreille). However, Sand Creek, a tributary of Lake Pend Oreille that contains potential bull trout habitat, is situated approximately 600 feet away from the Airport. According to the survey, the Idaho Fish and Wildlife Information System (IFWIS) has recorded no instances of bull trout within 10 miles of the project area, and no suitable bull trout habitat exists in the project action area (see **Appendix B**). Therefore, the occurrence of bull trout within the proposed project area is unlikely. The Proposed Action Alternative activities would have <u>no effect</u> on the bull trout because neither the species, nor its habitat, is found on Airport property.

North American wolverine

Suitable habitat characteristics for wolverine includes remote, high alpine areas near the tree line where conditions are cold year-round and snow cover persists well into the month of May. Typically, their mean elevation range exists between 4,500 and 9,500 feet above sea level (Copeland 1996). No remote high alpine habitat exists on Airport property. Given the established human activity and development surrounding the Airport, the occurrence of North American wolverine within the proposed project area is unlikely. Additionally, the nearest occurrence of North American wolverine is approximately six miles away from the Airport according to the IFWIS (see **Appendix B**). Therefore, the Proposed Action Alternative would have <u>no effect</u> on North American wolverine because neither the species, nor suitable habitat, is found on Airport property.

Due to the lack of habitat, small population numbers, and lack of occurrences for any of the ESA-listed species, the biological resource survey indicated that the Proposed Action would have no effect on woodland caribou, bull trout, and wolverine within the defined project action area (**Appendix B**).

4.3.4 Environmental Consequences

No Action Alternative

The No Action Alternative would not result in any impacts to threatened, endangered, or proposed species as no development would occur to existing Airport facilities. Therefore, no mitigation measures are required for this alternative.

Proposed Action Alternative

Because the WHSV identified a range of common species that have the potential to exist near the Airport, there may be short-term adverse effects to general plant and wildlife species (small mammals and birds) that may influence species to avoid the immediate area during construction, mostly resulting from project noise or earthwork activities. However, due to the temporary nature of construction, no long-term, adverse impacts are expected to result from the Proposed Action Alternative. According to the WHSV, the biological resource survey, and coordination with the USFWS and IDFG, no ESA-listed species are known to exist at the Airport. Therefore, the Proposed Action Alternative would have no effect on any federally listed threatened or endangered species. Additionally, there is no EFH protected under the Magnuson-Stevens Act within the project study area and therefore the Proposed Action Alternative would have no effect on EFH. Therefore, based on this analysis, the FAA has determined that the Proposed Action would not result in significant impacts on biological resources.

Mitigation

The Proposed Action Alternative would have no significant effect on biological resources and therefore, no mitigation is required.

4.4 Climate

4.4.1 Affected Environment

The Airport is located at an average elevation of 2,131 feet above sea level (NGVD 29) and experiences a typical four-season climate, with both hot summers and cold winters. The Western Regional Climate Center collected data from 1910 to 2016 from a weather station located on Airport property. This data indicates that the area has an average low temperature during the summer of 47.2 °F, with an average high of 78.8 °F. During the winter, the average low falls to 22.1 °F, with an average high of 34.8 °F. The area receives approximately 32.04 inches of precipitation on average, with the highest amounts occurring during December and January. The area receives an average of 70.3 inches of snowfall, with the highest amounts occurring during December and January.

4.4.2 Significance Criteria

As outlined in FAA Order 1050.1F, the CEQ has indicated that climate and greenhouse gases (GHGs) should be considered in NEPA analyses due to the established effects of GHG emissions on climate. However, FAA Order 1050.1F also notes that the CEQ states, "it is not currently useful for the NEPA analysis to attempt to link specific climatological changes, or the environmental impacts thereof, to the particular project emissions, as such direct linkage is difficult to isolate and to understand." Climate and GHGs should be considered, however, there are currently no federal standards or significance thresholds for aviation related GHG emissions.

4.4.3 Analysis

GHGs result primarily from the combustion of fuels. Factors that could potentially increase the combustion of fuel and subsequent GHG emissions are an increase of airport capacity, an increase in the number of operations or alteration of operational characteristics that increase aircraft fuel burn. Due to the established effects of GHG emissions on climate, there is ongoing scientific research to improve understanding of global climate change and how airport activities influence the global climate. However, there are currently no accepted methods of determining significance of impacts to climate with regard to aviation given the small percentage of emissions aircraft and airports produce.

Construction impacts also have the potential to contribute to GHG emissions due to the use of combustible fuel in a wide range of construction equipment. However, any GHG emissions associated with construction would be temporary.

4.4.4 Environmental Consequences

No Action Alternative

The No Action Alternative would not cause an increase in GHG emissions. The increase in Airport operations forecasted in the 2015 MPU is not anticipated to increase Airport operations to a level that would significantly impact GHGs or climate change.

Proposed Action Alternative

The Proposed Action Alternative's primary purpose is to fix design standard deficiencies and to improve Airport safety. The principle GHGs that enter the atmosphere because of human activities are carbon dioxide, methane, nitrous oxide, and fluorinated gases. With respect to GHG emissions, aviation activity represents a small percentage of U.S. and global emissions. In 2017, the U.S. aviation system was forecasted to serve 97,879,461 operations, which is expected to increase to 107,529,872 by 2032 (FAA Terminal Area Forecast Summary 2017). Based on the 2015 Sandpoint MPU, aviation activity at the Airport would represent 0.0004% of U.S. activity in 2032, and the Proposed Action Alternative would not increase Airport capacity or increase the overall number of operations. Considering aviation activity accounts for approximately 3% of all GHG emissions, aviation activity at Sandpoint would represent an estimated 0.000012% of U.S. GHG emissions in 2022. Construction equipment use would be temporary, and would not result in significant impacts to GHG emissions. Thus it is unlikely that increased fuel consumption or use would result as part of the Proposed Action Alternative. The Proposed Action Alternative would not significantly impact air quality, aviation operations, or climate conditions in the vicinity of the Airport.

Mitigation

The Proposed Action Alternative would not result in significant impacts to GHG emissions or climate change and therefore, no mitigation is required.

4.5 Department of Transportation Act, Section 4(f) Resources

4.5.1 Affected Environment

49 U.S.C. 303(c) Section 4(f) of the Department of Transportation (DOT) Act necessitates the evaluation of a transportation program or project requiring the use of publicly-owned land of a park, recreational

area, or wildlife and waterfowl refuge of natural, state, or local importance; or publicly or privately owned land from a historic site of national, state, or local significance.

There are no Section 4(f) resources located within or directly adjacent to the project area. **Table 4.5** identifies the Section 4(f) resources located in the general vicinity of Sandpoint Airport. **Table 4.5** also identifies whether or not resources are located within the flight approach pattern, or the area below the path of an aircraft during landing or departure from the runway. Changes to flight patterns have the potential to impact Section 4(f) resources, if a quiet setting is a generally recognized purpose and attribute of a Section 4(f) resource.

Posource Title	Approximate Distance from	Within Flight Approach			
Resource Inte	Airport	Pattern?			
Hickory Spruce Park	0.54 miles	No			
Farmin Stidwell Elementary	0 EE milor	Voc			
School Playground	0.55 miles	fes			
Sandpoint Elks Golf Course	0.63 miles	No			
Great Northern Park	0.96 miles	Yes			
Alder Street Park	0.84 miles	No			
Cedar Street Triangle Park	0.95 miles	No			
Centennial Park	1.07 miles	Yes			
Farmin Park	1.10 miles	No			
Pinecrest Memorial Park	1.10 miles	Yes			
Travers Park	1.16 miles	Yes			
Sandpoint Historic District	1.16 miles	No			
Pine Street Park	1.16 miles	No			
Sandpoint Burlington Northern	1 10 miles	No			
Railway Station	1.19 miles	NO			
W.A. Bernd Building	1.20 miles	No			
Sandpoint City Beach Park	1.22 miles	No			
Pine Street Athletic Field	1.25 miles	No			
Sandpoint High School Athletic	1 35 miles	No			
Fields	1.55 miles	NO			
Dog Beach Park	1.50 miles	No			
Washington School Park	1.51 miles	No			
Lakeview Park	1.66 miles	No			
Amanda Nesbitt House	1.91 miles	No			
Sandpoint Community Hall	1.41 miles	No			
Pend Oreille Wildlife	6.90 miles	No			
Management Area	0.60 miles	INU			

*Data was gathered utilizing Google Earth, the National Register of Historic Places, the Idaho State Historical Society, and a field survey completed by Transect Archeology.
4.5.2 Significance Criteria

According to FAA Order 1050.1F, significant impacts for Section 4(f) would occur when the Proposed Action Alternative would involve more than a minimal physical use of Section 4(f) property, or would be deemed a constructive use that substantially impairs the 4(f) property, and when mitigation measures do not eliminate or reduce the effects of the Proposed Action Alternative below the threshold of significant impacts. FAA Order 1050.1F states that "substantial impairment occurs when the activities, features, or attributes of the resource that contribute to its significance or enjoyment are substantially diminished."

4.5.3 Analysis

The area of potential effect (APE) for Section 4(f) resources was defined as the existing and future Airport property that would be subject to construction activities and new flight patterns. A field survey was conducted to determine whether any historic properties exist within the APE, and the State Historic Preservation Officer (SHPO) and local tribes were contacted regarding the potential for other historic sites being eligible for the National Register of Historic Places (NRHP) or of local significance. While there are multiple 4(f) properties in the vicinity of the Airport, there are no Section 4(f) resources on or within a half-mile of the Airport property, and there are no recognized 4(f) properties within the proposed areas of land acquisition. The Proposed Action Alternative would not either physically occupy or require any ROW from any 4(f) property identified in **Table 4.2**. There would be no significant alterations to flight patterns resulting from the Proposed Action Alternative and there would be no required changes or new impacts to 4(f) properties from flight patterns.

4.5.4 Environmental Consequences

No Action Alternative

Under the No Action Alternative, no changes to Airport property would take place, and therefore, there would be no significant impacts to Section 4(f) resources.

Proposed Action Alternative

The nearest Section 4(f) resource, Hickory Spruce Park, is located 0.54 miles away from Airport property. Under the Proposed Action there would be no changes in the existing aircraft flight patterns, and no required property acquisitions from Section 4(f) resources. No direct or indirect impacts to Section 4(f) resources are anticipated to occur as a result of the Proposed Action Alternative, and it would not require the use of any Section 4(f) resources. Therefore, there would be no physical or constructive use of Section 4(f) resources, and there would be no significant impacts on Section 4(f) resources as a result of the Proposed Action Alternative.

Mitigation

The Proposed Action Alternative would not require the use of or impact any publicly-owned land from a public park, recreation area, or wildlife or waterfowl refuge of national, state, or local significance. Thus, the Proposed Action Alternative would not require any physical or constructive uses of Section 4(f) resources, nor result in any significant environmental consequences to Section 4(f) resources and therefore, no mitigation is required.

4.6 Farmlands

4.6.1 Affected Environment

The Federal Farmland Protection Policy Act (FPPA) [Subtitled I of Title XV, Section 1539-1549 of the Agricultural and Food Act of 1981 (Public Law 97-98)] requires federal agencies to "minimize the extent to which federal programs contribute to the unnecessary and irreversible conversion of farmland to nonagricultural uses, and to assure that federal programs are administered in a manner that, to the extent practicable, will be compatible with state, unit of local government, and private programs and policies to protect farmland." Federal agencies are required to develop and review their policies and procedures to implement the FPPA. The FPPA does not authorize the federal government to regulate the use of private or nonfederal land or, in any way, affect the property rights of owners.

For the purpose of FPPA, farmland includes prime farmland, unique farmland, and land of statewide or local importance. Farmland that is subject to FPPA requirements does not have to be currently in agricultural production. It can be forestland, pastureland, cropland, or other land, but not water or urban built-up land (USDA/NRCS 2017).

Prime farmland is defined as land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, oilseed and other agricultural crops with minimum inputs of fuel, fertilizer, pesticides, and labor (USDA/NRCS 2017).

Unique farmland is land other than prime farmland that is used for production of specific high-value food and fiber crops. It has favorable soil and climatic conditions and adequate moisture supply to produce economically sustainable yields of high quality crops when treated and managed according to acceptable farming methods (USDA/NRCS 2017).

Farmland of statewide or local importance is land other than prime or unique farmland that is determined and designated as such by state or local governments (USDA/NRCS 2017).

Table 4.6 lists the soils on or near the Airport property and the associated farmland classification (identified on the NRCS Web Soil Survey website).

Map Unit Name	Farmland Classification		
	Farmland of statewide importance, if drained		
Capehorn silt loam, 0 to 2 percent slopes	and either protected from flooding or not		
	frequently flooded during the growing season		
Haploxeralfs and Xerochrepts, 30 to 55 percent slopes	Not prime farmland		
Mission silt loam, 0 to 2 percent slopes	Prime farmland if drained		
Odenson silt loam, 0 to 2 percent slopes	Prime farmland if drained		

 Table 4.6. List of mapped soils on or near the Airport property.

Some of the mapped soils within the Airport property meet the criteria for "Farmland of statewide importance..." and, "Prime farmland if drained," however, that land has already been developed for Airport use and no agricultural lands exist within the study area.

4.6.2 Significance Criteria

Pursuant to FAA Order 1050.1F, Section 4-3.3, the FAA is required to prepare and submit Form AD-1006 "Farmland Conversion Impact Rating" and initiate formal coordination with USDA/NRCS when FPPA regulated farmlands will be converted to nonagricultural use. The USDA recommends the following be considered when determining potential impacts to farmland:

- Use of land that is not farmland or use of existing structures;
- Alternative sites, locations and designs that would serve the proposed purpose but convert either fewer acres of farmland or other farmland that has a lower relative value; or,
- Special siting requirements of the proposed project and the extent to which an alternative site fails to satisfy the special siting requirements along with the originally selected site.

4.6.3 Analysis

The FPPA PL-97-98 authorizes the USDA to develop criteria for identifying the effects of federal programs on the conversion of farmland to nonagricultural uses. Federal agencies are directed to use the developed criteria below:

- Identify and take into account the adverse effects of federal programs on the preservation of farmland/forestland.
- Consider appropriate alternative actions that could lessen adverse effects.
- Ensure that such federal programs, to the extent practicable, are compatible with state and local governments, and private programs and policies to protect farmland.

The FPPA does not apply to land already committed to "urban development or stormwater storage" (i.e. developed areas on the Airport). Therefore, when evaluating potential impacts on farmlands, it is necessary to evaluate only those areas designated as "important" and in active agricultural use, or those lands not yet developed. There is no undeveloped farmland on Airport property, and no property acquisitions of undeveloped land or land currently in agricultural use would occur. According to the City of Sandpoint Zoning Maps, all land adjacent to the Airport is either zoned as Industrial General, Industrial Technical Park, Residential Multifamily, Residential Single Family, or Mixed Used Residential.

4.6.4 Environmental Consequences

No Action Alternative

There is no undeveloped farmland within the proposed project area. Therefore, the No Action Alternative would not cause significant impacts to farmland.

Proposed Action Alternative

There is no undeveloped farmland within the proposed project area. No potential farmland or land currently in agricultural use would be acquired as part of the Proposed Action Alternative. Therefore, there would be no significant impacts on farmland resulting from the Proposed Action Alternative.

Mitigation

There is no farmland within proposed project area, and no farmland would be converted as a result of the Proposed Action Alternative. Therefore, no significant impacts to farmland would be anticipated to occur, and no mitigation is required.

4.7 Hazardous Materials, Solid Waste, and Pollution Prevention

4.7.1 Affected Environment

The State of Idaho Department of Environmental Quality (IDEQ) maintains environmental databases on sites with known contamination and sites that are regulated for hazardous materials according to the requirements of state or federal laws. The following is a list of environmental databases maintained by the IDEQ:

- Superfund Sites, Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA);
- National Priorities List (NPL), priority CERCLA sites;
- Underground Storage Tanks (UST);
- Resource Conservation and Recovery Act (RCRA);
- Leaking Underground Storage Tanks (LUST);
- Brownfield Projects;
- Toxic Release Inventory (TRI); and,
- Voluntary Release Cleanup Program (VRCP).

Hazardous materials present at the Airport include the following: aviation fuels, motor fuels, and pesticides; substances used to operate or maintain aircraft, ground vehicles, equipment, and buildings; and, various hazardous materials transported to and from the Airport via ground vehicles and aircraft. The storage, use, and transport of hazardous materials at the Airport is controlled by a framework of federal, state, and local regulations. BMPs have been established, and would remain in place, to ensure that fuel and other hazardous materials are properly dispersed and stored, and that necessary mitigation measures remain in place to address potential spills.

A Phase 1 Environmental Site Assessment was completed for the EA defined study area encompassing 160 acres by Environmental Assessment Services, LLC (EAS) in December 2015 (included as **Appendix E**). The report described one recognized environmental condition and three *de minimis* conditions at the Airport. The recognized controlled environmental condition, as described in the Phase 1 Site Assessment, is:

 Two, 12,000 gallon USTs and associated piping were removed from the Proposed Action Alternative area in August 2015. Soil sampling conducted during the UST removals indicated soil contamination in the vicinity of the north dispenser piping that was above the IDEQ Petroleum Risk Evaluation Manual (Petro REM) limits for a release of a regulated substance. The company conducting the UST removal and associated site assessment, Able Clean-Up Technologies Inc., reportedly completed a risk evaluation and determined that no additional work needed to be done on the site with regard to the contamination other than possibly a deed restriction. They also stated that a final determination would be issued by IDEQ. According to the EAS report, Mr. Mark Boyle with IDEQ was interviewed briefly by phone and stated that the site will likely receive a "Cleaned Up – No Further Action" upon review.

The two USTs were considered by EAS to be controlled environmental conditions that pose low risk to the Airport and that do not warrant any additional action.

The three *de minimis* conditions, or conditions that generally do not pose a threat to human health or the environment and that generally would not be the subject of an enforcement action, as described in the Phase 1 Site Assessment, are:

- Several drums (55-gallon and 35-gallon) were observed on the Airport. Approximately a dozen were observed in the north portion of the Airport property. The drums were not labeled, were staged directly on the ground, and often had unknown contents. Another dozen drums were observed in the central eastern portion of the Airport, which were typically older, rusty, not labeled, lying directly on the ground, and often had unknown contents. A 55-gallon drum was observed on the Airport property near the existing Airport fuel tanks, and was labeled "Hazardous Waste." This drum likely contained contaminated soil and/or groundwater associated with the UST removal completed in that area in August 2015. The drum has since been removed and properly disposed. Another 55-gallon drum was observed near the hangars in the southeast corner of Airport property. The drum was staged on a pallet but was not labeled and held unknown contents. None of the drums observed during the EAS assessment had soil staining or detectable odors indicating a release of contents.
- Two old fuel tanks were observed on Parcel No. RPS00000100660A (a required property acquisition); both were relatively small (~150 to 250 gallons) and were likely used to store heating oil in the past. Both tanks appeared to be empty and are not connected to any building structures or piping. There are also junked engines and heavy equipment staged on the parcel; relatively minor surface soil staining that appears to be petroleum in nature was observed in association with several of the engines and other equipment staged on the site.
- There is evidence of dumping on Parcel No. RPS00000106900A (a required property acquisition). Several piles of old tires and wheels, old tanks, drums (described above), and several junked vehicles were observed on the site. There is an open pipe protruding from the ground on this lot that is potentially an open well.

The three conditions listed above are considered by EAS to be *de minimis* conditions and pose only minimal environmental risks to the site.

4.7.2 Significance Criteria

FAA Order 1050.1F provides the NEPA requirements for the analysis of impacts. According to FAA Order 1050.1F, there is no established significance threshold for hazardous materials, solid waste, and pollution prevention. Factors to consider, however, would be if the Proposed Action Alternative would have the potential to:

- Violate applicable federal, state, tribal, or local laws or regulations regarding hazardous materials and/or solid waste management;
- Involve a contaminated site listed on the NPL;
- Produce an appreciably different quantity or type of hazardous waste;
- Generate an appreciably different quantity or type of solid waste or use a different method of collection or disposal and/or would exceed local capacity; or,
- Adversely affect human health and the environment.

4.7.3 Analysis

None of the data uncovered during the Phase 1 Environmental Site Assessment revealed the potential for negative effects from hazardous waste. The USTs were considered by EAS to be controlled environmental conditions that pose low risk to the Airport and associated facilities, and do not require further action. The 55-gallon storage drums, old fuel tanks, and dump site were considered by EAS to be *de minimis* conditions that pose minimal environmental risk to the site.

Construction, renovation, or demolition of most projects produces debris, and proper disposal must be utilized. New or building renovation projects also produce debris that can have impacts on the solid waste collection/treatment system. Minor demolition would occur as part of the Proposed Action Alternative, and demolished and waste materials produced as a result are not anticipated to be of a volume that would produce significant impacts to standard solid waste handling facilities.

Site grading would be required to meet the necessary grades for the Proposed Action Alternative. The majority of material would remain on Airport property, either in debris piles to house the excavated/graded material, as part of shoulder fill, or, if the excavation produces adequate gravels, as part of the base for the Proposed Action Alternative. Any excess material not able to be stored on Airport property would be disposed of by the contractor at one of the local gravel pits permitted to receive such material. Other waste materials would arise from concrete forms and temporary structures, packaging waste and food from construction workers, and other materials used for construction. These materials would be recycled by the contractor or would be placed in an approved collection area for non-recyclable waste and removed when appropriate.

4.7.4 Environmental Consequences

No Action Alternative

The No Action Alternative would not result in the creation or disturbance of any hazardous materials; therefore, there would be no significant impacts from the No Action Alternative with regard to hazardous waste.

Proposed Action Alternative

While there is no known hazardous waste contamination within the Proposed Action Alternative Area, the proposed project improvements have the potential to cause short-term, temporary impacts regarding hazardous materials, pollution prevention, and solid waste. Mitigation measures and BMPs would be in place to reduce the overall potential for impacts; and therefore, no significant impacts are expected to arise due to the Proposed Action Alternative.

Mitigation

Construction activities associated with Proposed Action Alternative have the potential to create solid waste material, therefore the Airport Sponsor and contractor would follow all federal, state, and local regulation addressing hazardous waste while executing construction activities that have the potential to generate hazardous waste. The contractor would be required to have a Spill Prevention, Control, and Countermeasure (SPCC) plan in place in the event that a spill occurs during the construction operations. The contractor would also have an approved erosion control plan in place, and would be required to provide a collection area for non-recyclable waste. Any waste generated through proposed project improvements would be disposed of in compliance with all federal, state, and local regulations.

4.8 Historical, Architectural, Archaeological, and Cultural Resources

4.8.1 Affected Environment

There are a number of federal statutes and Executive Orders (E.O.) that guide the protection of historic and cultural resources. This section discusses the known historic, archaeological, and paleontological resources within the project area. NEPA requires agencies to consider the effects of a planned federal undertaking upon the cultural environment, including historical, archaeological, and paleontological resources. In addition to NEPA, 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 CFR 800) require federal agencies to take into account the effects of their undertakings on historic properties. According to these regulations, a historic property is defined as "any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places (NRHP) ..." (36 CFR 800.16); compliance with Section 106 requires consultation with the Advisory Council on Historic Preservation (ACHP), the SHPO, and/or the Tribal Historic Preservation Officer (THPO) if there is the potential for adverse effects on historic properties listed on or eligible for listing on the NRHP.

Transect Archaeology (Transect) prepared an Archaeological and Historical Survey Report for the project action area in February 2016 (see **Appendix F**). The findings of the report are summarized in **Section 4.8.3** below.

4.8.2 Significance Criteria

The FAA determines whether the Proposed Action Alternative is an "undertaking," as defined in 36 CFR 800.16(y) and whether it is a type of activity that has the potential to cause adverse effects on historic properties eligible for, or listed on, the NRHP. If an undertaking may have an adverse effect, the first step is to identify the APE and the historical or cultural resources within it.

If an NRHP-eligible property occurs within the undertaking's APE and the Proposed Action Alternative may affect the property's historic characteristics, the FAA must apply the criteria of effect listed in 36 CFR 800.5(a). The Official must examine the potential effects in consultation with the SHPO/THPO and any Tribe or Native Hawaiian organization attaching religious or cultural importance to the identified property. 36 CFR 800.5(a) (3) permits a phased process in applying an assessment of effects when alternatives the agency is considering involve corridors, large land areas, or when access to property is restricted. The FAA may propose a "finding of no adverse effect" after determining that the undertaking would not:

- Physically destroy the property;
- Alter the property, but, if alterations were to occur, they would meet the requirements of the Secretary of the Interior's "Standards for Treatment of Historic Properties" (36 CFR Part 68);
- Remove the property from its historic location;
- Introduce an atmospheric, audible, or visual feature to the area that would diminish the integrity of the property's setting, provided the setting contributes to the property's historical significance; and,
- Through transfer, sale, or lease, diminish the long-term preservation of the property's historic significance that federal ownership or control would otherwise ensure.

4.8.3 Analysis

The APE for historic, architectural and cultural resources was defined as the existing Airport boundary and proposed acquisitions (approximately 160 acres). The APE for archaeological resources included all property that would result in a disturbance to the surface or sub-surface ground that has the potential to contain archaeological sites. A field survey was conducted by Transect (completed February 2016; see **Appendix F**) to determine whether any cultural resources exist within the APE. Research with regard to the age of the two hangars scheduled for removal was completed utilizing the Bonner County GIS Mapping Tool.

The 2016 Transect Report recommended that "the planned Sandpoint Airport EA project will likely have no effect on any pre-contact or historic sites eligible for inclusion in the NRHP." The report described only one previously unidentified late historic and early modern period occupation site (SPA01) in the APE associated with the northwest Sandpoint local known as Earl "Dusty" Dustin. The site contains his late historic shack, an early modern root cellar and early modern can dump, and sparsely scattered historic and modern debris dating from the 1940s to the 1980s.

According to the report, the historic and modern age occupation site does not appear to meet the requirements for inclusion in the NRHP because the notoriety of Earl "Dusty" Dustin is likely too isolated and modern for NRHP eligibility under the "significant people" criterion (criterion B). The shack structure is moveable, and may have been originally constructed of salvaged materials from other historic structures. The debris scattered near the site lacks integrity and consists of small fragments of materials dating from the 1940s through the 1980s. For the listed reasons, Transect recommended that the site would not be eligible for inclusion in the NRHP.

The two hangars that would need to be removed in order to develop the apron space necessary for the forecasted increase in Airport operations (see **Sheet 8** in the ALP; or, **Figure 4.2** on page 75 for hangar locations) were also analyzed to determine their eligibility for listing on the NRHP.



Figure 4.2. Hangars scheduled for removal at the Airport.

The Bonner County GIS Mapping Tool was utilized to gather construction and lease information with regard to the age of each of these hangars. After review, it was determined that both of the hangars scheduled for removal are modern structures with no historical significance and are not eligible for listing

on the NRHP. Per the Bonner County records, the original owner of the Piper Hangar, Chip Piper, was issued a ground lease to construct a hangar in November of 1984, and construction of the existing Piper Hangar occurred shortly after the issuance of the lease. Per communication with staff and Bonner Airport County Risk Management, the hangar on Lot 26 was built in 1970, meaning that both the Piper Hangar and the Lot 26 hangar are less than 50 years old. The 2016 Transect report did not mention either the Piper Hangar or the hangar on Lot 26 as significant with regard to historical, architectural, archeological, or cultural resources.



Figure 4.3. The existing hangar on Lot 26.

Affected Environment

Based on the recommendations of the cultural resource survey, FAA determined that no historic properties would be affected under the Proposed Action (see **Appendix F**; FAA Determination Letter). SHPO concurred with this determination in a letter dated July 6, 2016 (Appendix F; and Idaho State Historical Society Concurrence Letter).

FAA sent the cultural resource report to the THPOs of the Salish and Kootenai Tribes on April 11, 2016, and the Kalispel Tribe on August 2, 2018 (see **Appendix F**; Invitation for Government-to-Government Tribal Consultation and Section 106 Letters). The Confederated Salish and Kootenai Tribes deferred management recommendations to other area tribes due to lack of information for the specific project area, while the Kalispel Tribe declined the opportunity to consult on the project, stating that the nature and location of the proposed project strongly suggests that no Tribal interests are potentially affected (see **Appendix F**).

4.8.4 Environmental Consequences

No Action Alternative

Under the No Action Alternative, no changes to the existing proposed project area would take place, and therefore, there would be no significant impacts to historical, architectural, archeological, or cultural resources.

Proposed Action Alternative

The analysis above indicates that the Proposed Action Alternative would not impact historical, architectural, archeological, or cultural resources. As stated in FAA cultural resources determination letter and in the Idaho State Historical Society Concurrence Letter (see **Appendix F**), there are no eligible historic properties within the project area, no historic properties will be affected within the project area, and no additional investigations are recommended. Contact with Tribes with historical ties to this area revealed no additional concerns regarding cultural resources that were not identified in the cultural resource survey, and the Tribes did not pursue any further Government to Government consultation for the Proposed Action Alternative. Therefore, no significant impacts to historical, architectural, or cultural resources are anticipated to occur as a result of the Proposed Action Alternative.

Mitigation

The Proposed Action Alternative would not result in any significant environmental consequences to historical, architectural, or cultural resources and therefore, no mitigation is required. If construction activities uncover any materials such as stone tools, shell, bone, fire-cracked rock, charcoal, pottery, glass, brick, metal, or human remains work in the immediate vicinity will stop at once and the Idaho SHPO and the THPOs for the Confederated Salish and Kootenai Tribes, and the Kalispel Tribe will be notified.

4.9 Land Use

4.9.1 Affected Environment

The Airport is within the jurisdictional boundaries of the City of Sandpoint and is situated within an Airport Overlay Zone. The Airport Overlay Zone designation allows development space for airports and associated activities. The purpose of the Airport Overlay Zone is to reduce the potential for airport hazards by providing development standards for areas within the Zone. According to City of Sandpoint data, the majority of the study area is zoned as Industrial General (IG). Portions of the proposed land acquisitions fall within Industrial Technical Park (ITP) and Residential Single-Family (RS) zoning. The underlying zoning does not present any obstacles to Airport functionality or to construction of the Proposed Action Alternative.

4.9.2 Significance Criteria

FAA Order 1050.1F states that "the compatibility of existing and planned land uses in the vicinity of an airport is usually associated with the extent of noise impacts related to that airport." With this in mind, there must be assurances that zoning laws, existing infrastructure, and the adoption of zoning regulations are compatible with the location of the Airport.

According to the 2015 Sandpoint Airport MPU, guidance on compatible land uses intended to support local airport land use is provided in the 2009 Idaho Plan, which states that typical land uses that are compatible with airports include commercial, industrial, agricultural, golf courses, and parks.

In 1976, Bonner County enacted an Airport Overlay Zone, which regulates the height of structures near the Airport. Later, in 2000, the City of Sandpoint created the City Code Title 9, Chapter 12, *Airport Overlay Zone District* (Airport Overlay). The Airport Overlay features height restrictions according to zone, which mirror the Federal Aviation Regulation Part 77 surfaces for the Airport. The Airport Overlay purpose states that "the Airport Overlay Zone District is established for the purpose of preventing the creation or establishment of hazards to air navigation, as defined, or where such hazards are already created or established, eliminating, removing, altering, mitigating, marking or lighting such airport hazards."

The compatibility of existing and planned land uses in the vicinity of an airport is typically associated with the extent of the airport's noise impacts. A noise sensitive area is an area where noise interferes with normal activities associated with its use, such as residential, educational, health, or religious sites.

4.9.3 Analysis

The Proposed Action Alternative would require the acquisition of 37.36 acres to accommodate for updated RPZs, the ROFA, new taxiway construction, and airside improvements (see **Figure 1.7** in Chapter 1). Of the 37.36 acres, 7.16 acres would be avigation easements, while the remaining 30.2 acres would be parcels in fee acquisitions. All of the Proposed Action Alternative activities and necessary acquisitions would occur within the Airport Overlay Zone.

To determine Airport noise impacts on surrounding noise sensitive areas, sound levels are often measured in Day Night Average Sound Level (DNL). DNL represents the average total accumulation of all noise, measured in decibels (dB), over a 24-hour period. This average is derived from all aircraft operations during a 24-hour period that represents an airport's average annual operations per day. In the 2015 Sandpoint Airport MPU, Appendix B, Environmental Overview chapter, noise impacts associated with existing and future Airport operations were analyzed to provide an estimate of existing and future 65 DNL noise contours. According to the MPU, both the existing and future 65 DNL noise contours are contained within Airport property, with the exception of two small areas totaling a combined 2.167 acres located at the eastern edge and the southwestern corner of the Airport (see **Figure 4.2**; see Sheet 10 of the ALP; **Appendix A**). The portions of the 65 DNL extending beyond the future Airport property would fall within the Airport Overlay Zone, and specifically within the IG and ITP Zones; no residential, educational, health, or religious properties exist in either area, meaning that aircraft noise levels are currently compatible with adjacent land uses. **Section 4.11** discusses the impacts of noise and effects on compatible land uses in further detail.

4.9.4 Environmental Consequences

No Action Alternative

Existing land uses are expected to continue to be consistent and compatible with relevant City of Sandpoint land use plans and policies. Therefore, the No Action Alternative would cause no significant impacts to land use.

Proposed Action Alternative

The Proposed Action Alternative activities and property acquisitions would not create incompatibility between land uses. All of the future Airport property would be contained within the existing City of Sandpoint Airport Overlay Zone. Furthermore, the Proposed Action Alternative is not anticipated to increase noise impacts to adjacent receptors and all proposed improvements would comply with existing noise ordinances and regulations. Therefore, it is determined that the Proposed Action Alternative would not significantly impact land uses within the study area.

Mitigation

The Proposed Action Alternative would not result in environmental consequences to land use and therefore, no mitigation is required. However, for the acquisition of private property, the property owner(s) would be compensated at fair market value for the appraised property. The acquisition of the identified properties would be conducted in conformance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act (Uniform Act) [42 U.S.C. 4601 et seq.].

4.10 Natural Resources and Energy Supply

4.10.1 Affected Environment

Bonner County has areas with significant natural resources such as national forestland, wilderness areas, and wildlife refuges. Bonner County includes approximately 1.2 million acres, which consists of: 500,000 acres of U.S. Forest Service land, 440,000 acres of privately-owned land, 150,000 acres of State-owned land, and 110,000 acres of water. Electricity and natural gas for the proposed project area are provided by Avista Utilities and the Northern Lights Electric Cooperative.

4.10.2 Significance Criteria

According to FAA Order 1050.1F, the FAA has not established a significance threshold for Natural Resources and Energy Supply. Factors to consider, however, include the Proposed Action Alternative's potential to cause natural resource or energy demands to exceed available or future supplies of these resources. While resources would be utilized in the construction of the Proposed Action Alternative, the overall quantity is not expected to cause demands to exceed available or future resource supplies.

4.10.3 Analysis

Energy requirements associated with airport improvements generally consist of either those related to existing facilities (terminal and airfield lighting requirements), or air/ground vehicle movement requiring fuel consumption. The increase in energy demand at the Airport would primarily be related to the

electricity required to upgrade and light the parallel taxiways. Fuel would also be required during the construction of the proposed improvements, however, because project construction activities are a temporary impact, the impact to fuel consumption related to construction activities is also temporary and considered limited. There are no known sources of minerals or other energy resources at the Airport that would be affected by the Proposed Action Alternative.

4.10.4 Environmental Consequences

No Action Alternative

The No Action Alternative would not result in an increase in energy or natural resource consumption because no construction would occur; therefore, there would be no significant impact on the energy supply or natural resources.

Proposed Action Alternative

The energy required for the Proposed Action Alternative would have no measurable impact on the local energy supply. The runway lighting would be comparable to what currently exists. Newly constructed Airport infrastructure would likely cause a moderate increase in energy demands, but would not negatively impact the overall energy supply or nearby natural resources. The supply of materials needed for construction is readily available in Bonner County. No natural resources in short supply would be needed for the construction of the Proposed Action Alternative; therefore, there would be no significant impact on the energy supply or natural resources.

Mitigation

The analysis above concluded that impacts to fuel consumption related to construction activities would be temporary and limited, therefore the Proposed Action Alternative would not result in any significant environmental consequences to natural resources or energy supply and no mitigation is required.

4.11 Noise and Compatible Land Use

4.11.1 Affected Environment

As discussed in **Section 4.9**, airport noise is measured in DNL, which is the average total accumulation of all noise derived from all aircraft operations during a 24-hour period that represents an airport's average annual operations per day. Due to the logarithmic nature of noise, the loudest noise levels control the 24-hour average. In the DNL metric, any operation that occurs between 10 p.m. and 7 a.m. is considered more intrusive and is weighted by a factor of 10 dB to compensate for individuals' heightened sensitivity to noise during this period. For general reference, 40 dB equates to a quiet, suburban nighttime setting, while 20 dB equates to a bedroom at night.

Typical airport actions that could cause noise impacts include: new or extended runways and taxiways; NAVAID installation; land purchases for airport-related uses; substantial amounts of airport construction or demolition activities; and substantial changes in aircraft operations involving numbers of aircraft, aircraft types, new or revised approach or departure profiles or tracks; or, new or relocated airport access roadways.

Noise is often the predominant aviation environmental concern of the public. The Airport is within the jurisdictional boundaries of the City of Sandpoint and is situated within an Airport Overlay Zone as

described in **Section 4.9**. The Airport Overlay Zone designation allows development space for airports and associated activities, and therefore, noise at the Airport is consistent with existing noise ordinances and regulations.

Section 11.1.2 "Projects Not Requiring a Noise Analysis" of the FAA's 1050.1F Desk Reference states that "no noise analysis is needed for projects involving Design Group I and II airplanes (wingspan less than 79 feet) in Approach Categories A through D (landing speed less than 166 knots) operating at airports whose forecast operations in the period covered by the NEPA document do not exceed 90,000 annual propeller operations (247 average daily operations) or 700 annual jet operations (2 average daily operations)."

The same section also states, "no noise analysis is needed for projects involving existing heliports or airports whose forecast helicopter operations in the period covered by the NEPA document do not exceed 10 annual daily average operations with hover times not exceeding 2 minutes."

The Sandpoint Airport is Design Group II, Approach Category B, and according to the 2015 MPU, currently has 97 based aircraft and conducts 30,216 annual GA operations (of which, 392 are jet operations and 729 are helicopter operations). Therefore, the noise analysis exclusion applies to the Airport and no noise analysis was specifically completed for this EA.

However, estimations for the area encompassed by the 65 DNL noise contour for both existing and year 2032 conditions were evaluated as part of the 2015 Sandpoint Airport MPU. The estimations are illustrated in **Figure 4.2** and on sheet 10 of 11 within the ALP (**Appendix A**). As mentioned in **Section 4.9.3**, both the existing and future 65 DNL noise contours are contained within Airport property, with the exception of two small areas on the eastern and southwestern sides of the runway. The slight expansion represents a nominal increase in the area confined by the 65 DNL contour. The future 65 DNL contour would extend slightly beyond the existing contour by approximately 110 feet in the eastern area and 51 feet in the southwestern area, and is entirely contained within the Airport Overlay Zone.



Figure 4.4. Noise Contour Exhibit.

4.11.2 Significance Criteria

FAA guidelines indicate 65 DNL is the level of noise "acceptable to a reasonable person residing in the vicinity of an airport." This is consistent with other federal [FAA and U.S. Department of Housing and Urban Development (HUD)] land use compatibility guidelines and federal noise attenuation grant funding eligibility criteria. Therefore, the primary focus of the noise impact analysis is on areas located within the 65 DNL noise contours for the Proposed Action Alternative and the No Action Alternative.

FAA guidance concerning aircraft noise indicates that noise exposure impacts are considered significant only if there is a 1.5 DNL or greater increase at noise sensitive areas within the 65 DNL noise contour when comparing the Proposed Action Alternative to the No Action Alternative. If this increase is expected, then additional significance thresholds apply. An increase of 3.0 DNL or greater within the 60-65 DNL noise contour is considered significant when comparing the Proposed Action Alternative to the No Action Alternative.

Due to the small size of the Airport, additional FAA guidance applies with regard to noise analysis. FAA Order 1050.1F, Appendix B, Section B-1 identifies specific language for projects not requiring a Noise Analysis. Under this definition, it states: "No noise analysis is needed for proposals involving Design Group I and II airplanes (wingspan less than 79 feet) in Approach Categories A through D (landing speed less than 166 knots) operating at airports whose forecast operations in the period covered by the EA do not exceed 90,000 annual propeller operations (247 average daily operations) or 700 jet operations (2 average daily operations)."

4.11.3 Analysis

The 2015 MPU indicates that annual Airport operations are not anticipated to exceed the noise operations threshold over the next 20 years. The plan estimated the 2012 Airport use at 30,216 total annual operations, 392 of which were by jets. The plan also predicts that the total number of operations will grow to 43,200 annual operations by 2032, with jet operations not expected to increase over 700 annual operations. The plan predicted that a Design Group II and Approach Category B classification would continue to be valid for the Airport through the year 2032. Therefore, no detailed noise analysis was prepared in conjunction with this EA.

According to the FAA, special consideration should be given to the evaluation of noise impacts to noise sensitive areas within Section 4(f) properties (including national parks; national wildlife and waterfowl refuges; and historic sites, including traditional cultural properties). The existing and future 65 DNL noise contours are almost entirely contained within Airport property and there are no Section 4(f) properties in the proposed project area or within the 65 DNL noise contour. Based upon the land use compatibility guidelines provided in 14 CFR Part 150, *Airport Noise Compatibility Planning*, Appendix A, Table 1, all adjacent properties are considered compatible without restrictions below the 65 dB DNL contour as they are all contained within the Airport Overlay Zone, the Industrial General Zone, and the Industrial Technical Park Zone.

4.11.4 Environmental Consequences

No Action Alternative

The No Action Alternative would not result in any activities that would cause an increase to the existing noise conditions within the study area, therefore, no significant impacts to noise levels would occur.

Proposed Action Alternative

The Proposed Action Alternative would not increase the operations at the Airport above the operation threshold levels outlined in Order 1050.1F Appendix B, Section B-1 (90,000 annual propeller operations or 700 jet operations) requiring a noise analysis. The existing and future 65 DNL noise contours are contained within Airport property with the exception of the two aforementioned areas (see **Figure 4.2**). The areas where the contours are not on Airport property are within the Airport Overlay Zone and are compatible with Airport use (defined as IG and ITP in the City of Sandpoint Zoning Ordinance).

According to the FAA Order 1050.1F Desk Reference, Exhibit 11-3, commercial and industrial use is compatible with the 65 DNL sound level. Additionally, no structures presently exist in the noise contour areas that lie outside of the Airport property, and there are no Section 4(f) properties near the 65 DNL noise contours (existing and future). No noise sensitive properties such as schools, national parks, or historic properties exist within the contour area. Overall, the expansion of the noise contour would be deemed insignificant due to the fact that the existing operations levels would be maintained. Therefore, the Proposed Action Alternative is not anticipated to significantly increase or impact the existing noise conditions.

Mitigation

The Proposed Action Alternative would not result in any significant impacts to noise sensitive receptors and therefore, no mitigation is required.

4.12 Socioeconomics, Environmental Justice, and Children's Health and Safety Risks

4.12.1 Affected Environment

Socioeconomic impacts include extensive relocation of residents and community businesses, disruption of local traffic patterns, and the substantial loss in community tax base. Environmental Justice evaluates effects on low-income or minority populations. Children's Environmental Health and Safety Risks calculates impacts to the environment that have the potential to lead to a disproportionate health or safety risk to children. This section discusses the social conditions within the proposed project area and the factors that were used to gauge the social effects from the Proposed Action Alternative. Factors used to evaluate the social environment include the composition of residential communities, social interaction, neighborhood travel patterns and accessibility, and public facilities and services.

This section addresses the federal requirements to consider environmental justice for low-income and minority populations in programs and activities with federal involvement in compliance with Title VI of the 1964 Civil Rights Act and E.O. 12898, *Federal Actions to Address Environmental Justice in Minority and Low-Income Populations* that was enacted in 1994. The purpose of environmental justice consideration is to determine whether the No Action Alternative and Proposed Action Alternative would have

disproportionately high and adverse effects on minorities and/or low-income populations within the proposed project area (see **Table 4.7**, Bonner County Population Data).

Population	2014 Census Estimates
White, Non-Hispanic	93.4%
Hispanic or Latino	2.9%
Black	0.3%
American Indian or Alaskan Native	0.9%
Asian	0.7%
Native Hawaiian or Pacific Islander	0.1%
Persons reporting two or more races	2.2%

 Table 4.7. 2016 Bonner County population data.

Source: US Census Bureau. Note, percentages don't add to 100% due to rounding.

Idaho According to the Department of Labor (DOL), between 2006 and 2016 Bonner County experienced a six percent increase in population growth (40,127 to 42,536 individuals) [Idaho DOL 2017]. The median household of Bonner County in 2007-2011 was \$42,989. Approximately 15.2% of persons living in Bonner County met the U.S Department of Health and Human Services (HHS) poverty definition in the period from 2009-2013.

4.12.1.1 Employment and Income As reflected by the Idaho DOL (2017), the breakdown of employment in Bonner County is depicted in **Figure 4.5**.



of Figure 4.5. Bonner County Employment Breakdown (2016).

Bonner County contains a significant amount of outdoor recreation opportunities, manufacturing facilities, and forestry/logging companies, which is why employment in leisure and hospitality, manufacturing, and trade make up the majority of the local economy.

Table 4.8 depicts the employment rates during the last eight years for Bonner County as identified by theIdaho DOL.

Labor Force	2009	2010	2011	2012	2013	2014	2015	2016
Civilian Labor Force	20,958	19,494	19,036	18,597	18,292	18,254	18,578	18,820
Unemployment	2,328	2,516	2,352	1,948	1,615	1,304	1,119	1,029
% Unemployed	11.1	12.9	12.4	10.5	8.8	7.1	6.0	5.5
Employment	18,630	16,978	16,685	16,649	16,677	16,950	17,460	17,791

 Table 4.8. Bonner County employment data (2009-2016).

Per Capita Income (PCI), also known as income per person, is the mean income in an economic unit such as a county or state. It is often used to measure a county's standard of living and prosperity. Historically, the Bonner County PCI has been lower than the State of Idaho. **Table 4.9** provides data on the historical PCI for Bonner County.

Table 4.9. Comparative Per Capita Income (PCI) [Bonner County and the State of Idaho; 2009-2015].

Per Capita Income	2009	2010	2011	2012	2013	2014	2015
Bonner County	\$29,446	\$29,365	\$31,254	\$32,289	\$32,634	\$33,660	\$34,634
State of Idaho	\$31,436	\$31,727	\$33,296	\$34,691	\$35,703	\$37,153	\$38,392

4.12.1.2 Children's Environment

The Airport lies within the City limits of Sandpoint, and there are numerous areas nearby that children gather on a regular basis for education, sports, or recreation. Six major schools (elementary through high school levels) are within two miles of Airport property. Baseball and softball fields are located 1.2 miles away at Centennial Park and Travers Park, and numerous swimming areas line the lakeshore approximately 1.4 miles away.

4.12.2 Significance Criteria

4.12.2.1 Socioeconomic Impacts

According to FAA Order 1050.1F, the FAA has not established a significance threshold for Socioeconomics. However, consideration should be placed on whether the action would have the potential to:

- Induce substantial economic growth in the area, either directly or indirectly (e.g. through establishing projects in an undeveloped 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; or,
- Produce a substantial change in the community tax base.

4.12.2.2 Environmental Justice

According to FAA Order 1050.1F, the FAA has not established a significance threshold for Environmental Justice. Factors to consider include if the federal action has the potential to lead to a disproportionately high and adverse impact to an environmental justice population (low-income and/or minority population) due to significant impacts to other environmental impact categories, or impacts to the physical or natural environment that affect an environmental justice population in a way that the FAA determines is unique to the environmental justice population and significant to that population. The CEQ defines a low-income population as "any readily identifiable group of low-income persons who live in geographic proximity, and, if circumstances warrant, geographically dispersed/transient persons who will be similarly affected by a proposed program, policy, or activity." The CEQ also defines a minority population as "one that exceeds 50 percent of an affected area, or the population percentage is meaningfully greater than the minority population percentage in the general population or other appropriate geographic analysis."

4.12.2.3 Children's Environmental Health and Safety

According to FAA 1050.1F, the FAA has not established a significance threshold for Children's Environmental Health and Safety. However, consideration should be placed on whether or not the action would have the potential to lead to a disproportionate health or safety risk to children. This includes risks to health or safety that are attributable to products or substances that a child is likely to come into contact with or ingest, such as air, food, drinking or recreational water, soil, or other products to which they might be exposed.

4.12.3 Analysis

4.12.3.1 Socioeconomic Impacts

As the number of operations continues to increase at the Airport through intrinsic growth, the amount of operational delays would also increase under the No Action Alternative. Economic impacts due to operational delays include additional costs for crew, fuel and maintenance costs for operators of air carrier and air taxi aircraft, and fuel and maintenance costs for operators of general aviation aircraft.

Economic impacts from the Proposed Action Alternative include consideration of the required capital associated with all of the required construction improvements. Operation and maintenance costs would increase with the additional pavements and electrical systems, but not to a level beyond the capability of the Airport. The Proposed Action Alternative would likely result in positive overall economic impacts to the community because of its ability to bring in increased business activity and other support services. The majority of this activity would occur during the temporary construction period, however increases in economy would likely follow the increased use of the Airport.

Overall, the Proposed Action Alternative is not projected to induce substantial economic growth in the area as construction impacts would be temporary, and the improvements are not being made to

accommodate additional air traffic but rather to accommodate existing aircraft and bring the Airport fully into compliance with existing FAA standards. The reduction in delay should result in savings to operators of aircraft due to reduced fuel, maintenance, and crew costs. These savings could potentially be applied throughout the local economy. The Proposed Action Alternative does not disrupt or divide the physical arrangement of an established community, or displace persons or businesses, as all improvements would occur on Airport property, and no required acquisitions would involve residential relocations or community facilities.

Local traffic patterns may temporarily alter as a result of construction-related vehicles accessing the proposed project area, however any traffic increases would be limited and would not result in negative impacts or disrupt traffic infrastructure beyond the current level of service. The relocation of North Boyer Avenue out of the ROFA at the northeast corner of the Airport would cause a small interruption during the construction period as traffic would be temporarily detoured to other local roads, which would cause a minor change in traffic patterns in the area. However, traffic flow would be restored and the current level of service would be maintained after project completion. All local businesses would remain accessible during construction activities. It is expected that much of the construction would be completed by locally based contractors utilizing local labor, which would provide continued support of the State income and property tax base.

A review of the EPA's EJSCREEN Database of American Community Survey (ACS) five-year estimates (from 2011-2015) indicates that approximately 9% of the overall population surrounding the Airport is a minority population, well below the regional average of 26%, and below the 50% required by the CEQ minority population definition (EPA EJSCREEN 2015). Due to the defined extents of the Proposed Action Alternative, the presence of either minority or low-income populations residing in the immediate project area is unlikely.

Neither the No Action Alternative, nor the Proposed Action Alternative, are projected to have the potential to develop the factors described in **Section 4.12.2.1**. Therefore, the No Action Alternative and the Proposed Action Alternative are not expected to significantly impact socioeconomic factors.

4.12.3.2 Environmental Justice Impacts

Review of the EPA's EJSCREEN Database reflects a 9% minority population presence for the City of Sandpoint, however that percentage is well below the required CEQ-definition (50% of total population) of low-income or minority populations in the demographic composition of the community. There are likely no minority or low-income populations in the immediate project area. Given that there are no identified actions that would cause disproportionally high and adverse effects on minority or low-income populations, it is determined that neither the No Action Alternative nor the Proposed Action Alternative would significantly impact low-income or minority populations.

4.12.3.3 Children's Environmental Health and Safety Risks

The Proposed Action Alternative is not projected to introduce any new physical hazards into the existing environment. As environmental impacts are not expected to exceed significance thresholds as identified in FAA Order 1050.1F for air quality, noise, and water quality, and there are no other environmental

impacts noted that would negatively impact the health and safety of children, no significant impacts to children's environmental health and safety are expected from either alternative.

4.12.4 Environmental Consequences

No Action Alternative

There is the potential for negative socioeconomic impacts resulting from the No Action Alternative because of the potential increases in operational delays as operations continue to increase. No significant impacts to environmental justice, or children's health and safety risks would occur as it is the non-development alternative.

Proposed Action Alternative

Analysis did not identify any significant impacts to socioeconomic impacts, environmental justice, or children's environmental health and safety risks that would occur from the Proposed Action Alternative.

Mitigation

The Proposed Action Alternative would not result in a significant impact to socioeconomics, environmental justice and children's health and safety risks; and, therefore, no mitigation is required.

4.13 Visual Effects

4.13.1 Affected Environment

Light emissions on Airport property may originate from ground-based lighting and aircraft lighting from approach lights. Existing lighting at the Airport includes lighting for runways, taxiways and other NAVAIDS, and area lighting. Visual resources/visual character may be subjective because it includes personal aesthetic preferences. Visual impacts can include contrasts between a specific area, its existing environment, and the general perception of the community concerning any change. Existing visual impacts are those associated with the operation of the Airport and include arriving and departing aircraft and Airport facilities such as the rotating beacon, hangars, and associated buildings. The Proposed Action Alternative includes new lighting along the newly-constructed runway and taxiways. The additional lighting would be consistent with both the plans shown on the 2015 ALP and the existing Airport lighting systems.

4.13.2 Significance Criteria

According to FAA Order 1050.1F, the FAA has not established a significance threshold for light emissions or visual resources/visual character. Factors to consider include the potential of a federal action to annoy or interfere with normal activities due to light emissions; affect the nature and/or visual character of the area due to light emissions, including the importance, uniqueness, and aesthetic value of the affected visual resources; contrast with the visual resources and/or visual character in the study area; and/or, blocking or obstructing the views of visual resources, including whether these resources would still be viewable from other locations. Because of the relatively low levels of light intensity compared to background levels associated with most air navigation facilities (NAVAIDS) and other airport development actions, changes to light emissions at airports are unlikely to have an adverse impact on human activity or the use or characteristics of the protected properties.

Visual quality impacts deal more broadly with the extent that the development contrasts with the existing environment and whether the jurisdictional agency considers this contrast objectionable.

4.13.3 Analysis

The Airport has existed for many years with lighting features comparable to the Proposed Action Alternative. The new installations associated with the Proposed Action Alternative (e.g. edge lighting, lighted signs, NAVAIDS, and MITLs) are not anticipated to create an annoyance among people or interfere with normal activities. Additionally, the Proposed Action Alternative would not include vertical improvements, nor is it expected to have the potential to create any of the factors listed in the previous paragraphs. Therefore, no significant light emissions or visual impacts would be expected to result from the Proposed Action Alternative.

4.13.4 Environmental Consequences

No Action Alternative

The No Action Alternative would not alter the existing light emissions and visual quality of the study area, therefore, there would be a no significant impacts to light emissions and visual impacts.

Proposed Action Alternative

The lighting system associated with the runway reconstruction and construction of parallel taxiways would be placed in accordance with FAA regulations. The proposed improvements would include upgrades and minor modifications to the existing lighting systems, and additional lighting for new taxiway construction (MITLs). Any new/modified/upgraded lighting would be specifically designed to illuminate the Airport property (and to provide visual information to pilots) and would cause non-significant impacts to the adjacent land uses or on the visual quality of the surrounding area. Therefore, no significant light emissions or significant visual resources/visual character impacts would occur as a result of the Proposed Action Alternative.

Mitigation

The Proposed Action Alternative would not result in an environmental consequence to light emissions or visual quality; and, therefore, no mitigation is required.

4.14 Water Resources (including Wetlands, Floodplains, Surface Waters, Groundwater, and Wild and Scenic Rivers)

4.14.1 Wetlands

4.14.1.1 Affected Environment

Wetlands are complex ecosystems that contain a number of important functions, including flood control, ground water recharge, water filtration and purification, erosion control, wildlife habitat, recreation, research and education, and promotion of regional economic vitality.

Site visits at the Airport were conducted by James A. Sewell & Associates, LLC (JAS) in 2015 to evaluate potential wetland areas (see **Appendix G**; Wetland Delineation Report). The site visits completed by JAS were conducted over a range of dates (beginning in 2012 and continuing into 2016 when updates to the previous assessments were required). The assessments that JAS performed were built upon previous work completed by W & H Pacific as part of the 2006 EA for the Airport. As part of the actions associated with

the 2006 EA, a 3.40-acre wetland fill permit (NWW-031101670) was issued by United States Army Corps of Engineers (USACE). The permit was conditioned requiring the purchase of 7.480 units of wetland bank credits, of which, only 4.488 were used. Recent construction (October 2017) of a new AWOS access road filled 0.06 acres of wetlands and utilized 0.156 credits, leaving the Airport 2.836 unused wetland mitigation credits. These remaining credits can be applied toward future credit purchases. A memo memorializing the net balance of wetland credits was approved during recent communications with the USACE (dated June 28, 2017; see **Appendix G**).

The updated wetland delineation completed for this EA includes 247,014 square feet (5.67 acres) of identified wetland areas (see **Appendix G**). Eight wetlands were identified within the proposed project area. Approximately 2,613 square feet (0.06 acres) of wetlands were recently filled during construction of the aforementioned AWOS access road.

4.14.1.2 Significance Criteria

FAA Order 1050.1F and E.O. 11990, *Protection of Wetlands*, both contain significance criteria relating to wetlands. FAA Order 1050.1F states that a significant impact would occur if the Proposed Action Alternative 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 reduce the affected wetland's ability to retain floodwaters or storm runoff, thereby threatening public health, safety, or welfare;
- Adversely affect the maintenance of natural systems supporting wildlife and fish habitat or economically important time, food, or fiber resources of the affected or surrounding wetlands;
- Promote development of secondary activities or services that would cause the circumstances listed above to occur; or,
- Be inconsistent with applicable state wetland strategies.

Pursuant to E.O. 11990, *Protection of Wetlands*, Section 2(b), a public review of any plans or proposals for new construction in wetlands would also be required. The completed draft EA document will be circulated for a period of 30 days to satisfy the public review requirement.

4.14.1.3 Analysis

Field surveys of the proposed project area were conducted by JAS to determine the presence or absence of wetlands and to delineate and map the locations of existing wetlands. The locations of the delineated wetland areas contained on Airport property are defined in the wetland delineation report completed by JAS. The wetland boundaries were approved through a preliminary jurisdictional determination (PJD) by the USACE on May 17, 2016 (see **Appendix G**). The reference number associated with the PJD is NWW-2013-423.

Table 4.10 and **Figure 4.6** (on page 90 and 91) display the identified wetlands, their associated areas, and their wetland classifications. Specific attention was placed on whether or not the wetland would be

impacted (filled) as part of the Proposed Action Alternative. Wetlands D, E/F, H, and the SilverWing wetland are all classified as "palustrine emergent persistent seasonally flooded" (PEM1C) wetlands based on the plant community. Wetland G, the Omni Park wetland, Boyer Avenue wetland, and the Sand Creek wetland are all classified as "palustrine scrub-shrub persistent seasonally flooded" (PSS1C) wetlands based on the plant community.

According to FAA Advisory Circular 150/5200-33B, *Wetlands*, Section 2.4, wetlands and airport function and safety are not compatible due to their potential to attract wildlife. The wetlands identified as "impacted" in both **Table 4.10** and **Figure 4.4** are planned to be filled due to incompatibility with Airport activities.

Wetland Name	Area in Square Feet (Acres)	Wetland Classification	Wetland Impacted?		
Wetland D	56,142 sq. ft. (1.29 acres)	PEM1C	Yes		
Wetland E/F*	30,280 sq. ft. (0.70 acres)	PEM1C	Yes		
Wetland G	5,230 sq. ft. (0.12 acres)	PSS1C	Yes		
Wetland H**	2,744 sq. ft. (0.06 acres)	44 sq. ft. (0.06 acres) PEM1C			
SilverWing	11,395 sq. ft. (0.26 acres)	PEM1C	Yes		
Omni Park	11,065 sq. ft. (0.25 acres)	PSS1C	Yes		
Boyer Avenue	6,534 sq. ft. (0.15 acres)	PSS1C	No		
Sand Creek	123,624 sq. ft. (2.84 acres)	PSS1C	No		
Total wetland impacts (proposed fill associated with the Proposed Action Alternative):					
114,112 sq. ft. (2.62 acres rounded)					

Table 4.10. Delineated wetland areas within the EA study limits.

*Recent construction of a new AWOS access road filled in approximately 0.06 acres of Wetland E/F.

****** Wetland H contains 0.06 acres, appears isolated and thus would not be included in any subsequent fill permit, subject to USACE confirmation (SZT EA Wetland Delineation 2015 Report; Revised 2/23/2016).



Figure 4.6. Sandpoint Airport Wetlands Exhibit.

As outlined in **Section 4.14.1.2**, six criteria describe when a significant impact to wetlands would occur as a result of a project. A discussion of these six criteria is included in the following paragraphs.

First, according to FAA Order 1050.1F, a significant impact to wetlands would occur when the project 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 [1050.1F Desk Reference 14.1.3.1(1)]. The City of Sandpoint municipal water supply is derived from two locations, Little Sand Creek and Lake Pend Oreille. Lake Pend Oreille is located approximately 0.75 miles from the Airport, and the wetlands located at the Little Sand Creek would not be impacted as a result of the Proposed Action Alternative. Given the fact that the municipal water suppliers would not be impacted, and that the City of Sandpoint does not draw from a sole source aquifer, the Proposed Action Alternative would not significantly impact the quality or quantity of the municipal water supply.

Second, Order 1050.1F states that a significant impact would occur when any action would substantially alter the hydrology needed to sustain the affected wetland system's functions and values or those of a wetland to which it is connected [1050.1F Desk Reference 14.1.3.1(2)]. Of the eight identified wetlands within the defined EA study limits, six would be filled as a result of the Proposed Action Alternative, primarily because wetlands are not compatible with Airport safety. The overall number of functional points assigned to the wetlands on the Airport property is 2.5 out of a possible 12 points, representing a "low" overall functions and values rating (see **Appendix G**). To mitigate the proposed wetland, the Airport has proposed the use of Valencia Wetland Mitigation Bank credits. While the functions and values of the filled wetlands would not be maintained on the Airport property, they would be retained elsewhere through the use of the local wetland bank.

Third, Order 1050.1F states that a significant impact would occur when the action would substantially reduce the affected wetland's ability to retain floodwaters or stormwater runoff, thereby threatening public health, safety, and welfare [1050.1F Desk Reference 14.1.3.1(3)]. The Proposed Action Alternative would fill six wetlands on Airport property, thereby reducing the ability of the Airport wetlands to retain stormwater runoff. However, because wetlands are not compatible with Airport safety and use, the public safety threat caused by wetlands located within the Airport Operations Area (AOA) would be negated. The wetlands in question do not exist in mapped floodplains or floodways. Stormwater runoff will continue to be maintained onsite consistent with the City of Sandpoint Ordinance No. 1253, Stormwater Management.

Fourth, according to FAA Order 1050.1F, a significant impact would occur when the action would adversely affect the maintenance of natural systems supporting wildlife and fish habitat, or other economically important resources [1050.1F Desk Reference 14.1.3.1 (4)]. In accordance with FAA AC 150/5200-33B, wildlife found on Airport property are actively deterred from the Airport grounds, and no viable fish habitat or economically important resources exist within the wetlands that are planned to be filled as a result of the Proposed Action Alternative. Filling the wetlands on the Airport property would have no negative effects to any wetlands that exist outside of the Airport. There would be no significant impacts to the maintenance of natural systems outside of the Airport property resulting from the Proposed Action Alternative.

Fifth, a significant impact would occur when the action would promote the development of secondary activities or services that would cause the circumstances listed above to occur [1050.1F Desk Reference 14.1.3.1(5)]. The Proposed Action Alternative would only impact the wetlands not compatible with current Airport uses, and would help increase the overall level of safety at the Airport. Wetlands filled on Airport property will not impact wetlands in the vicinity of the Airport. No other significant impacts would occur as a result of the Proposed Action Alternative, and wetland banking credits would be utilized to mitigate the wetland fill.

The sixth and final criteria for significant wetland impacts in Order 1050.1F states that a significant impact would occur if the action is inconsistent with applicable state and federal wetland strategies. According to the wetland rating forms included in the wetland delineation report (see **Appendix G**), the wetlands on the Airport are category III wetlands that are abundant throughout the surrounding Idaho Watershed Basin, and are of "low" overall quality. Because of their low ranking, the wetlands are not included in the Conservation Strategy for Northern Idaho Wetlands. To offset the proposed wetland fill, the Airport would utilize Valencia Wetland Mitigation Bank credits as a compensation measure. According to Order 1050.1F, Section 14.1.4.2, the FAA "promotes wetland banking as a mitigation tool for projects that must occur in wetlands." The Proposed Action Alternative activities would also fall within the parameters of a Section 404 Permit. Therefore, the Proposed Action Alternative would be consistent with applicable wetland strategies and applicable federal guidelines, and no significant impacts to wetlands would occur as a result of the Proposed Action Alternative, assuming compensatory mitigation would take place at the Valencia Wetland Mitigation Bank.

From a practicality standpoint, the described wetland fill represents a reasonable step necessary to bring the Airport into FAA compliance. As described in FAA AC 150/5200-33B, *Wetlands*, Section 2.4, wetlands and Airport function are not compatible, and the wetland fill required by the Proposed Action Alternative would both alleviate safety concerns and allocate enough space for the new runway and apron areas, and would achieve the design and safety standards necessary to meet the project's purpose and need.

The opportunity for public review of the Proposed Action Alternative required by E.O 11990, *Protection of Wetlands*, Section 2(b) will be satisfied by a 30-day public comment review period of the Draft EA.

4.14.1.4 Environmental Consequences

No Action Alternative

The No Action Alternative would not result in any changes to the existing Airport facilities; therefore, no significant impacts to wetlands would occur.

Proposed Action Alternative

The wetland delineation report completed by JAS includes a total of 247,014 square feet (5.67 acres) of identified wetlands. The Proposed Action Alternative would fill all wetlands identified in the EA study area except the Sand Creek and the Boyer Avenue wetlands, which exist within the runway protection "no build zone" (see **Figure 4.6**). Overall, as depicted within **Table 4.10**, the Proposed Action Alternative would fill 2.62 acres of wetland areas classified as either PEM1C or PSS1C features. Because wetlands and Airport function and safety are not compatible, the described wetland fill represents the only practical means of

bringing the Airport into compliance with FAA design standards (August 28, 2007 update, FAA AC 150/5200-33B, *Wetlands*, Section 2.4).

Mitigation

E.O. 11990, *Protection of Wetlands*, and Section 404 guidelines mandate that federally funded projects avoid construction in wetlands unless there is no practical alternative, and the project includes all practical measures to minimize harm to wetlands. The Proposed Action Alternative will impact approximately 2.62 acres (out of 5.67 total acres) of wetlands. Avoiding wetlands is impractical because the runway shift and new taxiways need to occur in specific locations to maximize safety and efficiency in Airport operations. Specific mitigation is required to offset the necessary wetland impacts.

According to the FAA Advisory Circular 150/5200-33B, purchasing wetland bank credits ("compensatory mitigation") is the preferred mitigation for airport wetland fill. Compensatory mitigation at the Airport is proposed in the form of Valencia Wetland Mitigation Bank credit purchases, which satisfy the required mitigation obligations needed to proceed with a project that would have unavoidable wetland impacts. Because the wetlands credits would facilitate the removal of wetlands from Airport property while retaining the recorded functions and values at an offsite location, this mitigation method would not create or worsen wildlife hazards to aviation. The accompanying wetland assessment, approved in a PJD by the USACE (NWW-2013-423), tabulates 2.5 functional points, warranting the purchase of 6.55 wetland bank credits based on a 114,112 square foot assessment area (2.62 acres rounded).

A previous wetland fill permit on the Airport property (NWW-031101670), associated with filling 3.400 acres of wetland, required the purchase of 7.480 credits, and only 4.488 credits were used (from filling 2.040 acres of wetlands). The construction of an AWOS access road that recently filled 0.06 acres utilized 0.156 credits (as required by the USACE), leaving 2.836 credits remaining that apply to the future wetland bank credit purchase of 6.550 functional units. This results in a balance due of 3.714 functional units (see **Appendix G**; Use of Wetland Credits Associated with the Proposed 2017 Sandpoint Airport AWOS Access Road Construction Memo dated 6-28-2017; Nation Wide Permit (NWP) No. 39 Verification Letter dated 8-18-2017).

Applications for a Section 404 permit would be prepared after completion of the NEPA process when detailed plans for the design of Airport improvements have been produced.

4.14.1.5 No Practicable Alternative

E.O. 11990, *Protection of Wetlands*, and Section 404 guidelines mandate that federally funded projects avoid construction in wetlands unless there is no practical alternative, and the project includes all practical measures to minimize harm to wetlands. Based on the alternative screening processes performed during the development of the 2015 MPU and this EA, the Proposed Action Alternative is the only reasonable or practical alternative due to the runway shift and new taxiways required at the Airport. The Proposed Action Alternative would impact approximately 2.62 acres (out of 5.67 total acres) of wetlands, however all practicable measures would be taken to avoid and minimize these impacts. Unavoidable impacts would be mitigated through the use of compensatory wetland banking (as outlined in **Section 4.14.1.4** of this document; and recommended by FAA Order 1050.1F), which would not create or worsen wildlife hazards at the Airport. No significant floodplain impacts would occur as a result of the Proposed Action Alternative.

Surface water and groundwater impacts would be mitigated through the use of BMPs and preventative measures described in the City of Sandpoint Ordinance No. 1253, *Stormwater Management*, and the IDAPA 58.01.11, *Ground Water Quality Rule*. Based on the analysis contained in this EA, there is no practicable alternative to implementing the Proposed Action Alternative with regard to water resources, and the Proposed Action Alternative would include all practicable measures to minimize and mitigated impacts to water resources throughout the construction process.

4.14.2 Floodplains

4.14.2.1 Affected Environment

E.O. 11988 defines a floodplain as "lowland and relatively flat areas adjoining inland and coastal waters including flood prone areas of offshore islands, including at a minimum, that area subject to a one percent or greater chance of flooding in any given year. Encroachment onto floodplains can reduce the flood-carrying capacity of the floodplain and extend the flooding hazard beyond the encroachment area."

Floodplain Management (E.O. 11988; dated May 24, 1977) established federal policy for each agency to take action to "…reduce the risk of flood loss, to minimize the impact of floods on human safety, health and welfare, and to restore and preserve the natural and beneficial values served by floodplains in carrying out its responsibilities for (1) acquiring, managing and disposing of federal lands and facilities; (2) providing federally undertaken, financed, or assisted construction and improvements; and (3) conducting federal activities and programs affecting land use, including but not limited to water and related resources planning, regulating, and licensing activities" (42 CFR 26951).

Congress established the National Flood Insurance Program (NFIP) in 1968. The NFIP is administered at the local level. It is a voluntary mitigation program made available to state and local governments by the Federal Emergency Management Agency (FEMA). FEMA makes flood insurance, grants and loans available in those communities that practice sound floodplain management.

FEMA conducts hydrologic and hydraulic studies through the NFIP, and publishes flood insurance rate maps (FIRMs) that identify and delineate flood hazard risks for land use planning.

These FIRMs identify three zones of flood hazard risks:

- Flood Zone A corresponds to the 100-year floodplain that is determined by approximate methods. Detailed hydraulic analyses are not performed for such areas. No Base Flood Elevations or depths are shown within this zone. Mandatory flood insurance purchase requirements may apply.
- Flood Zone B corresponds to areas between the limits of the 100-year flood and the 500-year flood or certain areas subject to 100-year flooding with average depths less than one foot or where the contributing drainage area is less than one square mile, or areas protected by levees from the base flood.
- Flood Zone C corresponds to areas of minimal flood potential (500-plus year flood).

According to the FIRM produced through the NFIP (Community Panel #16017C0716E), the northeastern portion of the EA study area has been determined to be in Flood Zone A (i.e. within the 100-year

floodplain). This portion of the EA study area was included as the Runway 20 RPZ, and developments within the mapped floodplain are not anticipated.

4.14.2.2 Significance Criteria

According to FAA Order 5050.4B, if an action occurs within the 100-year floodplain, it is considered to be a floodplain encroachment. However, impacts to the 100-year floodplain can also occur from project components located outside the floodplain. Such impacts would include impacts on natural and beneficial floodplain values, water pollution, increased runoff from impermeable surfaces, changes in hydrologic patterns, or induced secondary development.

FAA Order 1050.1F states that floodplain impacts would be significant pursuant to NEPA if the result in notable adverse impacts on natural and beneficial floodplain values as defined in Paragraph 4.k of DOT Order 5650.2, *Floodplain Management and Protection*.

4.14.2.3 Analysis

The impact to floodplains was determined by identifying whether the Proposed Action Alternative would be located within the flood hazard risk areas and quantifying the resulting impacts. The EA study area contains a small area that is mapped as a floodplain (northeast of Runway 2/20). The mapped floodplain is associated with Sand Creek east of the Airport and is classified as a Zone A floodplain (i.e. 100-year floodplain). No developments within the mapped floodplain are anticipated as the portion of the EA study area included in the floodplain map would contain the Runway 20 RPZ.

4.14.2.4 Environmental Consequences

No Action Alternative

Under the No Action Alternative, no changes to floodplains would occur. Therefore, there would be no significant impacts to floodplains.

Proposed Action Alternative

No actions associated with the Proposed Action Alternative are anticipated to occur within the mapped floodplain northeast of the Airport. As mentioned above, the FEMA FIRM panel indicated the northeastern portion of the study area to be in Flood Zone A. This portion of the proposed project area was included as the Runway 20 RPZ, and no developments within the mapped floodplain are anticipated. Thus overall, there would be no significant impacts to floodplains from the Proposed Action Alternative.

Mitigation

The Proposed Action Alternative would not result in any significant environmental consequences to floodplains and therefore, no mitigation is required.

4.14.3 Surface Waters

4.14.3.1 Affected Environment

There is broad legislation that addresses the development of water quality standards and management thereof to protect surface water supplies. This section discusses the existing conditions of surface water quality within the study area.

Stormwater management facilities at and near the Airport generally contain grass-lined ditches and outfall structures that ultimately connect to underground stormwater vaults and pipes. Some portions of the stormwater system at the Airport drain into Sand Creek, which flows just outside of the eastern edge of the EA study area. Lake Pend Oreille and the Pend Oreille River are located approximately 1.1 and 1.8 miles, respectively, from the Airport. Because the Airport is relatively flat, any spills or erosion issues are expected to be contained within Airport property.

The City of Sandpoint draws water from both Sand Creek and Lake Pend Oreille, and stores the water in two, 2-million gallon reservoirs before it is delivered to over 4,000 connections in Sandpoint, Ponderay, Kootenai, Dover, and the unincorporated areas of Bonner County. The water quality for both sources is considered high. Testing of the municipal water supply and private water company supplies is required in accordance with the IDEQ. The Proposed Action Alternative does not involve acquiring any new water rights.

4.14.3.2 Significance Criteria

According to FAA Order 1050.1F, surface water significance thresholds would occur if water quality standards established by federal, state, local, and/or tribal regulatory agencies were exceeded; or, if public drinking water supplies were contaminated such that public health was adversely affected. Other factors that should be considered are whether the action would have the potential to:

- Adversely affect natural and beneficial water resource values to a degree that substantially diminishes or destroys such values;
- Adversely affect surface waters such that the beneficial uses and values of such waters are appreciably diminished or can no longer be maintained and such impairment cannot be avoided or satisfactorily mitigated; or,
- Present difficulties based on water quality impacts when obtaining a permit or authorization.

4.14.3.3 Analysis

When disturbed soil comes into contact with rain water, there is a potential for sediment-related pollution in surface waters. Stormwater runoff from construction sites that disturb one or more acres of land is regulated by the IDEQ and requires a National Pollutant Discharge Elimination System (NPDES) permit and State Waste Discharge General Permit for Stormwater Discharges. A site specific stormwater management plan must be developed in compliance with the City of Sandpoint Ordinance No. 1253, *Stormwater Management*, and the contractor must document the erosion, sediment, and pollution controls intended for use on the project prior to discharge of stormwater.

Currently, the Airport contains approximately 31.3 acres of impervious surface. After completion of the Proposed Action Alternative, the amount of impervious surface (resulting from pavement and hangar buildout) would be approximately 49.2 acres, meaning the Proposed Action Alternative would contribute approximately 17.9 acres of impervious surface to the Airport property. **Table 4.11** displays the total change in impervious surface area.

Airport Impervious Surface Area (Acres)			
Current Area	31.3 acres		
After Proposed Action Alternative Completion	49.2 acres		
Total increase in Impervious Surface: 17.9 acres			

Table 4.11. Airport Impervious Surface Area (Acres)

The new pavement has the potential to influence water quality due to surface water runoff. According to the Bonner County Comprehensive Plan, approximately 2.4 inches of runoff over the course of 24 hours is expected during a 25-year event for the Bonner County Region (Bonner County Planning Department 2002). Stormwater runoff can be a substantial nonpoint source of pollutants, including sediment, nutrients, metals, salts, oils, gas, and hydrocarbons. The quality of runoff from pavements is impacted by vehicle and aircraft-related contaminants, such as motor oil, grease, and tire rubber. Surface water runoff is also impacted by herbicides and pesticides that might be used in maintained areas along the pavements. Other activities that could potentially lead to water quality pollution include leaking hydraulic fluids, fuel, and lubrication systems associated with the use of construction equipment.

Turbidity and total suspended solids would increase if sediment transported by stormwater is not controlled. Increases in sediment loads could result in a stream being designated as 303(d), thus requiring a Total Maximum Daily Load (TMDL) analysis as a consequence of failing to meet water quality standards.

To control and minimize the transportation of stormwater and sediment on Airport property, new modifications and designs for stormwater detention would be provided consistent with the City of Sandpoint Ordinance No. 1253, *Stormwater Management*.

Per the City of Sandpoint Ordinance No. 1253, *Stormwater Management*, all stormwater facilities would follow the following standards:

- All facilities would be designed to accommodate a 25-year storm frequency and storm duration of five minutes, or equal to the time of concentration. According to the Bonner County Comprehensive Plan, a "25-year" storm releases about 2.4 inches of runoff in a 24-hour period, which equate to approximately 0.01 inches in five minutes (Bonner County Planning Department 2002).
- 2. When onsite facilities must accommodate drainage from offsite, such facilities would be designed to accommodate a 50-year storm frequency and storm duration of five minutes, or equal to the time of concentration.
- 3. Peak flows would be calculated by the rational method for areas 10 acres or less. Peak flows would be calculated by the NRCS Soil (NRCS; titled the Soil Conservation Service in the current Sandpoint Stormwater Ordinance) method TR-55, for areas greater than 10 acres. Other methods may be approved by the City Engineer. Because the Airport impervious surface area is greater than 10 acres, the NRCS method TR-55 would be used to calculate peak flows.
- 4. The intensity duration frequency curves from the Idaho Transportation Department would be used for the rational method.

- 5. Runoff coefficients and curve numbers would be as published in the "Catalog of Stormwater Best Management Practices for Idaho Cities and Counties," and would be determined based on the Airport's hydrologic soil groups, soil moisture retention, and the overall amount of water that infiltrates before runoff occurs.
- 6. Runoff could be directed into existing drainage facilities following treatment and retention, provided the existing facilities have sufficient capacity to accommodate the increased runoff and water quality standards are in no way diminished, as determined by the City Engineer. Existing facilities at the Airport consist of grass-lined ditches, swales, underground vaults, and stormwater pipes. Water quality standards would be upheld through the continued adherence to the standards described in the City of Sandpoint Ordinance No. 1253.
- 7. Any and all alterations to existing drainage ways would be approved by the City Engineer prior to construction activities.

The likelihood for any of the pollutants listed above entering a surface water body is low due to the existing site gradient and the established grassy swales. Increases in stormwater would be addressed through means similar to those that already exist at the Airport (i.e. additional grass-lined ditches, swales, underground vaults and stormwater pipes), and would adhere to the standards described in the City of Sandpoint Ordinance No. 1253.

4.14.3.4 Environmental Consequences

No Action Alternative

The No Action Alternative would not result in any increase in impervious surface area or change the existing conditions at the Airport. Therefore, no significant impacts to water quality would occur.

Proposed Action Alternative

The Proposed Action Alternative would increase the impervious surface area at the Airport by approximately 17.9 acres as a direct result of new pavement and hangar construction. The expanded area of impermeable surface produces additional surface runoff with potential to increase site erosion and impact water quality with the presence of motor oil, grease, tire rubber, and herbicides/pesticides. However, the Proposed Action Alternative would not be expected to significantly impact surface water or surface water flows in the project area, and despite the increases in impervious surfaces, the majority of the Airport property would remain as pervious ground (i.e. grassy areas). Runoff from the new airfield pavements would generally be collected and retained on Airport property. The defined grades for the runway and safety areas developed as part of the Proposed Action Alternative would allow water runoff to be diverted away from the runway and routed to additionally constructed onsite grassy swales, which would connect to the City of Sandpoint storm sewer system. Any new modifications and designs for stormwater detention would be provided consistent with the types and methods currently in use at the Airport, and with City of Sandpoint Ordinance No. 1253, Stormwater Management, so that stormwater directed to the City of Sandpoint storm sewer system does not overload the system during storm events. The mitigation techniques discussed in the following section would greatly minimize the potential for contaminates to come into contact with stormwater or surface water and cause water quality degradation.

Mitigation

An NPDES and State Waste Discharge General Permit for Stormwater Discharges would be required for activities associated with construction. An erosion and sediment control plan would be required prior to any site clearing, excavation, grading, or other development activity, and grading plans and stormwater design would follow FAA standards for airfield construction (FAA AC 150/5370-10, *Airport Construction Standards*). Surface waters would be protected by implementing performance standards, designs, and BMPs from the City of Sandpoint Ordinance No. 1253, *Stormwater Management*, which would be implemented during construction to minimize potential impacts from increased stormwater flows. The project would be seeded with an airport established seed mixture once final grading is completed to promote regrowth of vegetation. Establishment of vegetation that has been successful at the Airport would aid in the reduction of noxious weed invasion.

The contractor would inspect construction equipment daily during active construction to ensure hydraulic fluids, fuel, and lubrication systems are in good condition and free of leaks. The contractor would have a SPCC plan in place, as well as maintain a supply of absorbent materials onsite in the event a spill occurs with the construction of the Proposed Action Alternative. A collection area for non-recyclable waste (i.e. trash, concrete wash out, and portable toilet sanitary waste) would be provided and the contractor would arrange for its removal as appropriate.

4.14.4 Groundwater

4.14.4.1 Affected Environment

There is broad legislation that addresses the development of water quality standards and management thereof to protect groundwater supplies. This section discusses the existing conditions of groundwater quality within the study area.

As discussed in **Section 4.6.1**, Mission silt loam and Odenson silt loam are the primary mapped soil types on Airport property. In areas these soils are present, a seasonally high water table is typical between February and June (Weisel 1982).

Stormwater management facilities at and near the Airport generally contain grass-lined ditches and outfall structures that ultimately connect to underground stormwater pipes. Some portions of the stormwater system at the Airport drain into the nearby Sand Creek. Lake Pend Oreille and the Pend Oreille River are located approximately 1.1 and 1.8 miles, respectively, from the Airport. As discussed in **Section 4.14.3**, because the Airport is relatively flat, any spills or erosion issues are expected to be contained within Airport property.

While the City of Sandpoint does not utilize an aquifer to support its water supply, both Sand Creek and Lake Pend Oreille partially rely on precipitation and runoff from surrounding areas to recharge their water supplies. In general, water quality throughout Bonner County is considered high, and testing of the municipal water supply and private water company supplies would continue to be required in accordance with the IDEQ. As stated in the previous section, the Proposed Action Alternative does not involve acquiring any new water rights or drilling new wells.

4.14.4.2 Significance Criteria

According to FAA Order 1050.1F, significant impacts to groundwater would arise is the Proposed Action Alternative would either exceed groundwater quality standards established by federal, state, local, and tribal regulatory agencies; or, contaminate an aquifer used for public water supply such that public health may be adversely affected. Other factors that should be considered are whether the Proposed Action Alternative would have the potential to:

- Adversely affect natural and beneficial groundwater values to a degree that substantially diminishes or destroys such values;
- Adversely affect groundwater quantities such that the beneficial uses and values of such groundwater are appreciably diminished or can no longer be maintained and such impairment cannot be avoided or satisfactorily mitigated; or,
- Present difficulties based on water quality impacts when obtaining a permit or authorization.

In Idaho, groundwater is specifically regulated by Idaho Administrative Code (IDAPA) 58.01.11, *Groundwater Quality Rule*.

4.14.4.3 Analysis

When rain falls in areas with disturbed soil, there is the potential for sediment-related pollution to occur during the infiltration process. As discussed in **Section 4.14.3**, runoff from construction sites that disturbs one or more acres of land is regulated by the IDEQ and requires a NPDES permit and State Waste Discharge General Permit for Stormwater Discharges. A site specific stormwater management plan would be developed (described in **Section 4.14.3.3**) and the contractor must document all erosion, sediment, and pollution controls intended for use on the project prior to discharge of stormwater.

Currently, the Airport contains approximately 31.3 acres of impervious surface. After completion of the Proposed Action Alternative, the amount of impervious surface (resulting from pavement and hangar buildout) would be approximately 49.2 acres, meaning the Proposed Action Alternative would contribute approximately 17.9 acres of impervious surface to the Airport property. **Table 4.11** (on page 97) displays the total change in impervious surface area.

The new pavement has the potential to influence groundwater quality due to a decrease in the Airports ability to infiltrate runoff. The quality of runoff from pavements is impacted by vehicle and aircraft-related contaminants, such as motor oil, grease, and tire rubber. Groundwater is also impacted by herbicides and pesticides that might be used in maintained areas along the pavements. Other activities that could potentially lead to groundwater pollution include leaking hydraulic fluids, fuel, and lubrication systems associated with the use of construction equipment.

The likelihood for any of the pollutants listed above entering a groundwater body is low due to the existing site gradient and the established grassy swales. Potential increases in groundwater pollutant levels would be addressed through means similar to those that already exist at the Airport (i.e. additional grass-lined ditches, swales, underground vaults, and stormwater pipes), and would adhere to the standards described in the IDAPA 58.01.11, *Ground Water Quality Rule*.
4.14.4.4 Environmental Consequences

No Action Alternative

The No Action Alternative would not result in any increase in impervious surface area or change the existing conditions at the Airport. Therefore, no significant impacts to groundwater would occur.

Proposed Action Alternative

The Proposed Action Alternative would increase the impervious surface area at the Airport by approximately 17.9 acres as a direct result of new pavement and hangar construction. The expanded area of impermeable surface produces additional water runoff while decreasing the ability of water to infiltrate, potential causing pooling and ponding in areas without proper drainage or permeable soils. However, the Proposed Action Alternative would not be expected to significantly impact groundwater or groundwater flows in the project area, and despite the increases in impervious surfaces, the majority of the Airport property would remain as pervious ground (i.e. grassy areas). Runoff from the new airfield pavements would generally be collected and retained on Airport property. The defined grades for the runway and safety areas developed as part of the Proposed Action Alternative would allow water runoff to be diverted away from the runway and routed to additionally constructed onsite grassy swales, which would connect to the City of Sandpoint storm sewer system. Any new modifications and designs for stormwater detention would be provided consistent with the types and methods currently in use at the Airport, and with City of Sandpoint Ordinance No. 1253, Stormwater Management, so that stormwater directed to the City of Sandpoint storm sewer system does not overload the system during storm events. The mitigation techniques discussed in the following section would greatly minimize the potential for contaminates to come into contact with groundwater and cause water quality degradation.

Mitigation

An NPDES and State Waste Discharge General Permit for Stormwater Discharges would be required for activities associated with construction. An erosion and sediment control plan would be required prior to any site clearing, excavation, grading, or other development activity, and grading plans and stormwater design would follow FAA standards for airfield construction (FAA AC 150/5370-10, *Airport Construction Standards*). Groundwater would be protected by implementing performance standards, designs, and BMPs from the IDAPA 58.01.11, *Ground Water Quality Rule*, which would be implemented during construction to minimize potential impacts from infiltration. The project would be seeded with an airport established seed mixture once final grading is completed to promote regrowth of vegetation. Establishment of vegetation that has been successful at the Airport would aid in the reduction of noxious weed invasion.

The contractor would inspect construction equipment daily during active construction to ensure hydraulic fluids, fuel, and lubrication systems are in good condition and free of leaks. The contractor would have a SPCC plan in place, as well as maintain a supply of absorbent materials onsite in the event a spill occurs with the construction of the Proposed Action Alternative. A collection area for non-recyclable waste (i.e. trash, concrete wash out, and portable toilet sanitary waste) would be provided and the contractor would arrange for its removal as appropriate.

4.14.5 Wild and Scenic Rivers

4.14.5.1 Affected Environment

The National Wild and Scenic Rivers System was created by Congress in 1968 to preserve certain rivers with outstanding natural, cultural, and recreational values in a free-flowing condition so that they might be enjoyed by present and future generations. It encourages river management and promotes public participation in developing goals for river protection. Rivers may be designated by Congress or, if certain requirements are met, the Secretary of the Interior. Each river is administered by either a federal or state agency. Designated segments do not need to include an entire river, and may include tributaries. For federally administered rivers, the designated boundaries generally average one-quarter mile on either bank in the lower 48 states.

There are no Wild and Scenic Rivers within the Sandpoint area. The nearest designated section of Wild and Scenic River is the western extents of the St. Joe River, located approximately 80 miles from the Airport near the river's headwaters at the Idaho and Montana border.

4.14.5.2 Significance Criteria

According to FAA Order 1050.1F, the FAA has not established a significance threshold for Wild and Scenic Rivers. However, factors to consider would be whether or not the Proposed Action Alternative would have an adverse impact on the values for which a river was designated (or considered for designation) through:

- Destroying or altering a river's free-flowing nature;
- A direct and adverse effect on the values for which a river was designated (or under study for designation);
- Introducing a visual, audible, or other type of intrusion that is out of character with the river or would alter outstanding features of the river's setting;
- Causing the river's water quality to deteriorate;
- Allowing the transfer or sale of property interests without restrictions needed to protect the river or the river corridor (which cannot exceed an average of 3,200 acres per mile which, if applied uniformly along the entire designate segment, is one-quarter of a mile on each side of the river); or,
- Any of the above impacts preventing a river on the Nationwide Rivers Inventory or a Section 5(d) river that is not included in the NRI from being included in the Wild and Scenic River System or causing a downgrade in its classification (e.g. from wild to recreational).

4.14.5.3 Environmental Consequences

No Action Alternative

The No Action Alternative would not result in any significant impacts to Wild and Scenic Rivers as no development would occur.

Proposed Action Alternative

Because there are no Wild and Scenic Rivers within the area surrounding the Airport, there would be no significant impacts to this resource as a result of the Proposed Action Alternative.

Mitigation

There would be no significant impacts to Wild and Scenic Rivers as a result of the Proposed Action Alternative; therefore, no mitigation is required.

4.15 Cumulative Impacts

A cumulative impact analysis provides information on impacts resulting from other actions that have occurred or that will occur within a defined time and geographic area. A cumulative impact is an effect on the environment that results from incremental action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes other such actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time. In determining whether the Proposed Action Alternative would have a significant impact, the environmental evaluation shall include considerations of whether the action is related to other actions with individually insignificant but cumulatively significant impacts. This analysis shall include identification and consideration of the cumulative impacts of ongoing, proposed, and reasonably foreseeable future actions and may include information garnered from FAA, Airport Sponsor, and the NEPA process.

For the purpose of this EA, the cumulative impacts analysis considers the possible impacts of developments both on and off the Airport combined with the potential impacts resulting from the Proposed Action Alternative. This information is used to decide if a proposed airport project's impact to a specific resource would cause a significant impact on that resource when added to past, present, and reasonably foreseeable actions within a specific geographic area or designated time frame. The analysis identified whether any of the following actions are planned to occur within the vicinity of the Proposed Action Alternative: development by local government or planning agencies, land development projects, other development or improvements at the Airport, roadway improvements, and public infrastructure projects.

4.15.1 Past, Current, and Future Project Listing

The following section will address past, current, and future projects at the Airport, as well as developments in the vicinity of the Airport.

Past Projects

The following projects occurred within the past five years (2013 - 2017) at or near the Airport and are considered in the cumulative impacts analysis.

- Terminal apron reconstruction (2013) As described in the 2015 MPU, the terminal apron was reconstructed in 2013 to 900 feet long by 200 feet wide. The terminal apron has the strength to carry 45,000 pound single wheel gear and 90,000 pound dual wheel gear on a routine basis, and is capable of handling heavier aircraft. There are four box hangars adjacent to the terminal apron, a fueling station, FBO Granite Aviation, and an automobile parking lot.
- 2. Subdivision development (2016) Residential development in the form of subdivisions (e.g. Spring Creek Neighborhood) has recently occurred within the vicinity of the Airport.

- 3. Solar roadways installation in Jeff Jones Town Square (2016) The small project is 150 square feet, with 30 solar roadway panels. The energy produced by the solar panels s connected to the electricity meter at the Jeff Jones Town Square.
- 4. Bike Lane Development (2016) Construction of a bike lane occurred between Boyer Avenue and Boyer Road along Schweitzer Cutoff Road.
- 5. Airport Signage (2016) Directional signage was installed at the intersection of Schweitzer Cutoff Road and U.S. Highway 95.
- 6. Perimeter fencing installation (2017) 11,380 linear feet of perimeter fencing is currently being installed at the Airport to help better regulate access and increase security on Airport grounds.
- 7. AWOS Access Road construction (2017) Construction of a new access road to the existing AWOS station to provide all-season access. The new road involves approximately 500 linear feet of gravel roadway and three culvert structures.

Current Projects

The following are current projects ongoing at or near the Airport and are considered in the cumulative impact analysis.

1. Schweitzer Cutoff Road Bridge – The Schweitzer Cutoff Bridge over Sand Creek is currently undergoing replacement and rehabilitation procedures due to significant cracks in the girders.

Reasonably Foreseeable Projects

The future projects described in the current 5-Year Airport Capital Improvement Plan (ACIP) for the Airport were recently updated and are considered in the cumulative impact analysis (see **Appendix H**).

- 1. Funds were allocated in the ACIP for land acquisition for East and West Parallel Taxiways and/or RPZs. Land acquisition is scheduled to occur from 2019 through 2023.
- 2. There also may be interest in developing a City Fire Station that would be located on the east side of North Boyer Avenue and north of the BNSF Railroad tracks. The fire station nearest the Airport sits approximately a mile and a half from the Airport property, and this potential new station would increase the amount of emergency services available to the Airport and areas north of the railroad tracks, especially if there were to be substantial train delays.

4.15.2 Environmental Impact Category Analysis

This cumulative impact analysis focuses on those resources either directly or indirectly impacted by the Proposed Action Alternative. In other words, if the Proposed Action Alternative would not cause a direct or indirect impact on a resource, then it will not contribute to a cumulative impact on that resource.

As outlined earlier in this chapter, Coastal Resources do not exist within the EA study area and therefore will not contribute to cumulative impacts.

Cumulative Impacts to Air Quality

The Proposed Action Alternative would cause no significant impacts on air quality from increases in Airport operations or construction. If two or more current or future projects are under construction at one time and these projects are in close proximity, there is the possibility of a cumulative air quality impact resulting from fugitive dust. However, the use of standard measures to mitigate fugitive dust emissions

would minimize these impacts. Therefore, there are no significant cumulative impacts anticipated to occur with regard to air quality.

Cumulative Impacts to Biological Resources

No significant impacts to biological resources would result from the Proposed Action Alternative. Because the Proposed Action Alternative would not cause a direct or indirect impact to biological resources, it would not contribute to a significant cumulative impact on biological resources.

Cumulative Impacts to Climate

The Proposed Action Alternative would not significantly increase Airport capacity or increase the overall number of operations. The proposed runway/taxiway modifications would not have a significant impact on aircraft fuel burn, and construction equipment use would not result in significant impacts to GHG emissions. Thus it is unlikely that increased fuel consumption or use would result as part of the Proposed Action Alternative would not significantly impact air quality, operations, or climate conditions in the vicinity of the Airport, and therefore would not contribute to a significant cumulative impact to climate.

Cumulative Impacts to Department of Transportation Act Section 4(f) Resources

No adverse significant impacts to Section 4(f) resources would occur as a result of the Proposed Action Alternative. Because the Proposed Action Alternative would not cause a direct or indirect impact to Section 4(f) resources, it would not contribute to a significant cumulative impact on Section 4(f) resources.

Cumulative Impacts to Farmlands

No prime or significant farmland would be impacted by the Proposed Action Alternative. No current or future developments, neither private nor public are identified that would convert agricultural land to non-agricultural use. Because the Proposed Action Alternative would not cause a direct or indirect impact to farmlands, it would not contribute to a significant cumulative impact on farmlands.

Cumulative Impacts to Hazardous Materials, Solid Waste, and Pollution Prevention

Past, current, and future development projects coupled with the Proposed Action Alternative are not likely to result in hazardous material impacts because each development project would be required to mitigate the impacts of any potential construction-related spill and clean up any existing soil conditions containing hazardous materials. Therefore, no significant cumulative impacts to hazardous materials are expected to occur.

Cumulative Impacts to Historical, Architectural, Archaeological, and Cultural Resources

The Proposed Action Alternative would not cause significant impacts to Section 106 resources. Because the Proposed Action Alternative would not cause a direct or indirect impact to Section 106 resources, it would not contribute to a significant cumulative impact on Section 106 resources.

Cumulative Impacts to Land Use

The Proposed Action Alternative would not cause significant impacts to natural resources or energy supplies. Because the Proposed Action Alternative would not cause a direct or indirect impact to natural resources or energy supplies, it would not contribute to significant cumulative impacts on natural resources or energy supplies.

Cumulative Impacts to Natural Resources and Energy Supply

The Proposed Action Alternative would not cause significant impacts to natural resources or energy supplies. Because the Proposed Action Alternative would not cause a direct or indirect impact to natural resources or energy supplies, it would not contribute to significant cumulative impacts on natural resources or energy supplies.

Cumulative Impacts to Noise

No noise impacts would occur as a result of the Proposed Action Alternative. If the future development of the fire station was to occur on Airport property, adjustments would likely be necessary to the 65 DNL noise contour to account for sirens and emergency vehicles (average of 120 dB per siren). However, the new fire station would not alter existing surface traffic patterns, and is not anticipated to contribute to a significant noise impact because any increase in noise levels would be short-term (i.e. only in emergency situations). Given the above information, no significant cumulative impacts to noise are expected to occur.

Cumulative Impacts to Socioeconomics, Environmental Justice, and Children's Health and Safety Risks

As discussed earlier in the chapter, the Proposed Action Alternative would have no effect on socioeconomics. Property acquisition would occur in compliance with federal standards and no relocation is required. Therefore, no significant cumulative impacts to socioeconomics are expected to occur.

Review of the environmental justice analysis indicates that there are no significant low-income or minority populations residing in the vicinity of the Airport, and the Proposed Action Alternative would not cause significant impacts to environmental justice populations. Therefore, there are no significant cumulative impacts to environmental justice anticipated to occur.

Review of the analysis for children's environmental health and safety determines that the Proposed Action Alternative would not introduce any new physical hazards to the existing environment, would not exceed air quality, noise, or water quality standards, and overall would cause no significant impacts to children's environmental health and safety. Therefore, there are no significant cumulative impacts to children's environmental health and safety expected to occur.

Cumulative Impacts to Visual Effects

As discussed earlier in the chapter, the Proposed Action Alternative would not cause significant impacts to visual effects. Therefore, no significant cumulative impacts to visual effects are anticipated to occur.

Cumulative Impacts to Water Resources

Cumulative Impacts to Wetlands

Wetland impacts for past, current and future projects discussed earlier in this chapter are illustrated in **Table 4.12.** All major wetland fill projects from the last 12 years are considered in order to more accurately gauge the potential impacts associated with the Proposed Action Alternative.

Project	Wetlands Impacted (acres)			
2006 Sandpoint Airport Environmental Assessment	3.40			
2007 SilverWing Development	0.94			
2017 AWOS Access Road Development	0.06			
2018-2022 Proposed Action Alternative	2.62			
Total wetland impacts (since 2006) on Airport Property: 7.02 acres				

Table 4.12. Pa	ast, current, a	nd future pro	oject-related	wetland im	pacts.
	, , ,				

As part of a 2006 EA for the Airport, 3.40 acres of wetlands were filled and 7.48 wetland mitigation credits were purchased. Then, in 2007, 0.94 acres of wetlands were filled utilizing credits remaining from 2006 as part of the SilverWing Development. The completed 2015 wetland delineation report identified additional wetlands which are still present in the proposed project area. Approximately 0.06 acres of these delineated wetlands were filled during the creation of a new AWOS access road. The remaining wetlands on Airport property, with the exception of the Boyer Avenue and Sand Creek wetlands, would be filled as a result of the Proposed Action Alternative because of the incompatibility with Airport operations. The wetland impacts from the Proposed Action Alternative would total approximately 2.62 acres. The wetland impacts would be mitigated with the purchase and use of 6.55 total wetland bank credits (the FAA preferred method of wetland mitigation), and impacts to wetlands on Airport property would not affect any wetlands in the vicinity of the Airport. There are no other known wetland impacts associated with past, current, or future projects in the vicinity of the Airport. Therefore, no significant cumulative impacts to wetlands are anticipated to occur provided proper mitigation strategies or wetland bank credits are utilized for all projects.

Cumulative Impacts to Floodplains

The Proposed Action Alternative would not cause significant impacts to floodplains because all development aspects of the alternative would occur outside of the mapped floodplain zone. No past, current, or future projects are planned within the mapped floodplain zone. Therefore, no significant cumulative impacts are anticipated to occur with regard to floodplains.

Cumulative impacts to Surface Water

The Proposed Action Alternative would increase the overall impervious surface at the Airport by approximately 17.9 acres. As such, impacts resulting from the increased impervious surface would be minimized through BMPs designed to meet local, state, and federal requirements for surface water quality associated with onsite stormwater management. Runoff from the new pavements would generally be managed onsite. Any new modifications to the stormwater management system would be similar to, and match the outfall rate of, the existing system, and would adhere FAA standards for airfield construction (AC 150/5370-10, *Airport Construction Standards*) and to the City of Sandpoint Ordinance No. 1253, *Stormwater Management*.

Generally, stormwater impacts are mitigated on an individual basis, meaning that each project deals with stormwater impacts differently depending on project needs or requirements. Within the City of Sandpoint, all past, current, and future projects are required to meet the standards discussed in Ordinance

No. 1253, *Stormwater Management*. As long as those standards are met and proper BMPs and mitigation measures are utilized, no significant cumulative impacts are anticipated with regard to stormwater and surface water quality.

Cumulative Impacts to Groundwater

The Proposed Action Alternative would increase the overall impervious surface at the Airport, thereby decreasing the Airport's ability to allow water to infiltrate into the ground. To help negate potential impacts to groundwater quality, BMPs and designs from IDAPA 58.01.11, *Ground Water Quality Rule*, would be utilized throughout construction of the Proposed Action Alternative. Any new modifications to the existing system would adhere to FAA standards for airfield construction (Advisory Circular 150/5370-10, *Airport Construction Standards*).

Generally, groundwater impacts are mitigated on an individual basis, meaning that each project deals with groundwater impacts differently depending on project needs or requirements. Within the City of Sandpoint, all past, current, and future projects are required to meet the standards discussed in IDAPA 58.01.11 *Ground Water Quality Rule*. As long as those standards are met and proper BMPs and mitigation measures are utilized, no significant cumulative impacts are anticipated with regard to stormwater and water quality.

Cumulative Impacts to Wild and Scenic Rivers

As discussed earlier in the chapter, there are no Wild and Scenic Rivers within the vicinity of the Airport. Therefore, no significant cumulative impacts to Wild and Scenic Rivers would occur as a result of the Proposed Action Alternative.

4.16 Public Involvement

Public involvement is a vital component of the NEPA process. Public and agency coordination was conducted during the NEPA process.

The Draft EA will be published on April 12, 2019 and will be followed by a 30-day comment period ending on May 12, 2019. Notice of Availability of the Draft EA will be advertised in the Bonner County Daily Bee on April 12, 2019, and April 19, 2019. Copies of the Draft EA will be available in hard copy for public review at the Office of the Airport Manager, and the East Bonner County Library. Electronic copies will also be available through the Bonner County website. Responses to all verbal and written comments will be provided in Appendix I of the Final EA.

4.17 Conclusion

This EA has been developed consistent with the existing national environmental policies and objects of Section 101(a) of the NEPA and meets the requirements of the CEQ Regulations. The Proposed Action Alternative meets the purpose and need as described in Chapter 1, would address existing design and operational deficiencies, and increase the overall ability of the Airport to support its current level of activity. After careful review and consideration, it has been determined that the Proposed Action Alternative would not yield any significant cumulative impacts to either the natural or human environment. Mitigation measures have been outlined as environmental commitments to offset the project related impacts described herein.

Chapter 5 - References

ACHP. 2016. *National Historic Preservation Act*, Section 106. Advisory Council on Historic Preservation. Accessed 10-3-2017. Web.

Copeland, J.P. 1996. Biology of the wolverine in central Idaho. Thesis, University of Idaho, Moscow. 138pp.

EPA. 2013. *Clean Air Act*, Section 110 and Section 176. U.S. Government Publishing Office. Accessed 10-2-2017. Web. <u>https://www.epa.gov/clean-air-act-overview/clean-air-act-text#toc</u>.

EPA. 2017. Clean Water Act, Section 404. Environmental Protection Agency. Accessed 9-25-2017. Web.

EPA. 2017. Green Book. Environmental Protection Agency. Accessed 10-2-2017. Web.

FAA. 2007. AC 150/5200-33B *Wetlands*, Section 2.4. U.S. Department of Transportation. Accessed 7-18-2017. Web.

FAA. 2007. AC 150/5220-18A Buildings For Storage and Maintenance of Airport Snow and Ice Control Equipment and Materials, Section 1-1. U.S. Department of Transportation. Accessed 5-18-2017. Web.

FAA. 2012. AC 150/5300-13A *Airport Design, Change 1*, Section 310. U.S. Department of Transportation. Accessed 5-18-2017. Web.

FAA. 2015. AC 150/5070-6B *Airport Layout Plans*, Section 807. U.S. Department of Transportation. Accessed 5-18-2017. Web.

FAA. 2015. *Aviation Emissions and Air Quality Handbook*. Version 3, Update 1. U.S. Department of Transportation. Accessed 9-18-2017. Web.

FAA. 2015. Order 1050.1F *Environmental Impacts: Policies and Procedures*. U.S. Department of Transportation. Accessed 8-14-2017. Web.

Idaho Department of Labor. 2017. *Bonner County Workforce Trends*. Idaho Department of Labor. Accessed 9-21-2017. Web.

J-U-B Engineers, Inc. *et. al.* 2015. *Sandpoint Airport Master Plan Update*. Sandpoint Airport, Bonner County, ID. Accessed 6-21-2017. Web.

Sternberg, D. 1996. *Freshwater Game Fish of North America*. Cy DeCosse, Inc. Minnetonka, Minnesota. Print.

U.S. Census Bureau. 2015. *EJSCREEN ACS Summary Report*. Environmental Protection Agency. Accessed 9-25-2017. Web.

References

USDA/NRCS. 2012. *Farmland Protection Policy Act*. United States Department of Agriculture. Accessed 10-2-2017. Web. <u>https://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb1049284.pdf</u>.

USDA/NRCS. 2017. *Web Soil Survey*. United States Department of Agriculture. Accessed 10-2-2017. Web. <u>https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx</u>.

Weisel, Charles J. Soil Survey of Bonner County Area, Idaho. USDA, 1982.

WDFW. 2012. Woodland Caribou. WDFW. Accessed 9-20-2017.Web

WDFW. 2017. Periodic Status Review for the Woodland Caribou. WDFW. Accessed 9-20-2017. Web.

Chapter 6 - List of Preparers

J-U-B Engineers, Inc., located in Spokane, Washington was responsible for providing the analysis contained in this Environmental Assessment (EA). Below are the staff members who were responsible for the preparation of this EA.

J-U-B Engineers, Inc. 422 West Riverside Avenue, Suite 304 Spokane, Washington 99201

The qualifications for the personnel from J-U-B Engineers, Inc. directly responsible for preparing this EA are as follows:

Mark Napier, P.E., Project Manager Preliminary Engineering, Document Preparation

Marti Hoge, Environmental Planner, Project Manager Environmental Analysis, Document Preparation

Vince Barthels, Biologist Biological Survey, Environmental Analysis, Document Preparation

Spencer Stephens, E.I.T. Computer Aided Drafting, Document Preparation

Zachary Scott, Environmental Planner Document Preparation, Document Review

Lexie Yoder, Environmental Planner Document Preparation, Document Review

Subconsultants

Transect Archaeology Lyle Nakonechny; Principle Author Cultural Resources Inventory

James A. Sewell & Associates, LLC Martin Taylor, Principle Author Wetland Delineation Report

Environmental Assessment Services, LLC Deborah Phipps, Principle Author

Phase I Environmental Site Assessment

Chapter 7 - List of Agencies and Persons Consulted

Federal Agencies

Diane Stilson, P.E. Federal Aviation Administration Airports District Office 2725 Skyway Drive, Suite 2 Helena, MT 59602-1213

Bryon Holt, Biologist Idaho Fish and Wildlife Office, U.S. Fish and Wildlife Service 11103 East Montgomery Drive Spokane, WA 99206 Greg Becker, District Conservationist Natural Resources Conservation District Service, Sandpoint Field Office 1224 Washington Avenue Sandpoint, ID 83864

Shane Slate, Project Manager U.S. Army Corps of Engineers Coeur d'Alene Regulatory Office 1910 Northwest Boulevard, Suite 210 Coeur d'Alene, ID 83814-5699

State Agencies

Kiira Siitari, Environmental Staff Biologist Panhandle Regional Office, Idaho Fish and Game 2885 W. Kathleen Avenue Coeur d'Alene, ID 83815

Local Interests

Shelby Rognstad, Mayor City of Sandpoint City Hall 1123 Lake Street Sandpoint, ID 83864

Dave Shuck, Airport Manager Sandpoint Airport 1100 Airport Way Sandpoint, ID 83864

Jan Lee, Chairman Sandpoint Airport Advisory Board 1500 Highway 2 Sandpoint, ID 83864 Travis Pitkin, Curator of Archaeology The Idaho State Historic Preservation Office 210 Main Street Boise, ID 83702

Don Huston, P.E., Director Bonner County, Road & Bridge Department 1500 Highway 2, Suite 101 Sandpoint, ID 83864

Bonner County Board of Commissioners 1500 Highway 2 Sandpoint, ID 83864