

CHAPTER FIVE

ENVIRONMENTAL CONSEQUENCES

5.1 BACKGROUND

Pursuant to the environmental documentation requirements of Federal Aviation Administration (FAA) Orders 5050.4B, *National Environmental Policy Act (NEPA) Implementing Instructions for Airport Actions*, and 1050.1E, *Environmental Impacts, Policies and Procedures*, this chapter describes the anticipated impacts of the Proposed Action upon each of the following environmental resource categories:

- Air Quality
- Coastal Resources
- Compatible Land Use
- Construction Impacts
- Department of Transportation Act Section 303(c) (Formerly Section 4(f) Resources)
- Farmlands
- Fish, Wildlife, and Plants
- Floodplains
- Hazardous Materials, Pollution Prevention, and Solid Waste
- Historical, Architectural, Archaeological, and Cultural Resources
- Light Emissions and Visual Impacts
- Natural Resources and Energy Supply
- Noise
- Secondary (Induced) Impacts
- Socioeconomic Impacts, Environmental Justice, and Children's Environmental Health and Safety Risks
- Water Quality
- Wetlands
- Wild and Scenic Rivers

With the No Action Alternative, the existing conditions would remain in place. Therefore, there would be no impacts not already occurring or expected to occur in any of the environmental resource categories.

5.2 CATEGORIES WHERE NO IMPACTS OCCUR

Due to the nature of the Proposed Action or the lack of resources in or near the project site, there are a number of categories that were evaluated and found to have no significant impacts. Each of these is described in the following sections.

5.2.1 COASTAL RESOURCES

Portions of the Proposed Action area are included in existing Submerged Lands Lease File Number SUB-0514-CU issued to the City of Cleveland Department of Port Control (DPC). This Lease authorizes the use and occupation of the previously submerged lands of Lake Erie for airport expansion, confined disposal facility and port development. The Proposed Action is consistent with the lease as the purpose of the Proposed Action is to address FAA safety requirements. Ohio Department of Natural Resources (ODNR) will require the DPC to obtain a Submerged Land Lease construction approval prior to construction. The Proposed Action would not include the construction of structures to control erosion, wave action or inundation along or near the Ohio shoreline of Lake Erie; therefore an ODNR Shore Structure Permit (ORC 1506.40) would not be required. If however during the design phase of the Proposed Action construction of structures to control erosion, wave action or inundation along or near the Ohio shoreline of Lake Erie is required, DPC would submit an application for an ODNR Shore Structure Permit (ORC 1506.40).

Similarly written approval from the Director, Ohio Department of Natural Resources would be requested if the Proposed Action includes improvements to the existing facilities, construction of new facilities or any change in use to the area included in existing Submerged Lands Lease File Number SUB-0514-CU.

The Proposed Action would be located within the Ohio Lake Erie Coastal Management Area (CMA). According to the Combined Coastal Management Program and Final Environmental Impact Statement for the State of Ohio, the Ohio Coastal Management Program (OCMP) only affects those activities considered to have a direct and significant impact on coastal lands, waters and resources. The OCMP defines "direct and significant impact" as the result of any action causing or likely to cause (1) changes in the manner in which land, water or other coastal resources are used, (2) changes in the environmental quality of coastal resources, or (3) limitations on the range of uses of coastal resources.

The Proposed Action would not change the manner the land is used nor will it limit the range of uses of coastal resources. Additionally, the findings detailed in the other sections of this Environmental Assessment (EA) demonstrate that the Proposed Action would not change the environmental quality of the coastal resources. Due to this fact, the Proposed Action would be consistent with OCMP. Therefore, no significant impact will occur to a Coastal Management Zone as a result of the Proposed Action or the No Action Alternative.

5.2.2 DEPARTMENT OF TRANSPORTATION ACT: SECTION 4(F)

The Federal statute that governs impacts in this category is commonly known as the Department of Transportation (DOT) Act of 1966, Section 4(f) provisions. Section 4(f) of the DOT Act was recodified and renumbered as Section 303(c) of 49 USC. FAA Order 5050.4B continues to refer to this statute as Section 4(f) to avoid confusion. Section 4(f) provides that the Secretary of Transportation will not approve any program or project that requires the use of any publicly-owned land such as a public park, recreation area, or wildlife/waterfowl refuge of national, state, or local significance or land from an historic site of national, state, or local significance as determined by the officials having jurisdiction thereof, unless there is no feasible and prudent alternative to the use of such land and such program, and the project includes all possible planning to minimize harm resulting from the use. A direct use of land occurs when land from a 4(f) site is permanently incorporated into a transportation facility. A constructive use occurs when proximity impacts of a project on a 4(f) property are so severe that the activities, features, or attributes that qualify the property or resources for protection under Section 4(f) are substantially impaired.

There are no publicly-owned lands within the areas of potential disturbance. The USS Cod Submarine, a National Register of Historic Places (NRHP) listed site, is located adjacent to the Airport. However, as discussed in Section 5.2.6, there would be no impacts to this site. Therefore, no direct or constructive use impacts to Section 4(f) resources would result from the Proposed Action or the No Action Alternative.

5.2.3 FARMLANDS

Prime farmland is land that has the best combination of physical and chemical characteristics for producing food, feed, fiber, forage, oilseed, and other agricultural crops with minimum inputs of field, fertilizer, pesticides, and labor, and without intolerable soil erosion. Prime farmland includes land that possesses the above characteristics but is being used currently to produce livestock and timber.¹ Unique farmland is land other than prime farmland that is used for production of specific high-value food and fiber crops. It has the special combination of soil quality, location, growing season and moisture supply need to economically produce sustained high quality or high yields of specific crops when treated and managed according to acceptable farming methods.²

There are no prime or unique farmlands located within the areas of potential disturbance and there would be no impacts to farmlands due to the Proposed Action or the No Action Alternative.

¹ U.S. Department of Agriculture, *Farmland Protection Policy Act*, Subtitle I, Section 2(c) (1) (A) June 17, 1994.

² U.S. Department of Agriculture, *Farmland Protection Policy Act*, Subtitle I, Section 2(c) (1)(B) June 17, 1994.

5.2.4 FLOODPLAINS

As described in Chapter Four, *Affected Environment*, the area of potential disturbance for the Proposed Action is not within the 100-year floodplain. There would be no impacts to floodplains due to the Proposed Action or the No Action Alternative.

5.2.5 HAZARDOUS MATERIALS AND SOLID WASTE

FAA Order 1050.1E, Appendix A, *Analysis of Environmental Impact Categories*, does not provide a specific threshold of significance for hazardous material and solid waste impacts. However, the Order does offer that actions involving property listed (or potentially listed) on the National Priorities List (NPL) would be considered significant. In other cases, only an unresolved issue may warrant the preparation of an Environmental Impact Statement (EIS). The Order further states that if remediation is required and the magnitude of the remediation and costs are significant, then the preparation of an EIS is justified.

The Ohio Environmental Protection Agency (EPA) granted a “blanket” Rule 13 permit for authorization to excavate and backfill (OAC 3745-27-13) construction activities via a letter dated April 6, 1993. The Proposed Action would be covered under that authorization. Ohio EPA confirmed that was correct and that the conditions of construction would have to be followed. (See Appendix A) In addition to the construction activities approved in the April 6, 1993 Ohio EPA letter, the Proposed Action must also conform to City of Cleveland Ordinance Chapter 3116 *Construction and Post-Construction Site Storm Water Runoff Control*. Pursuant to the terms of the permit, neither the Proposed Action nor the No Action Alternative would result in unique or major impacts to hazardous materials.

The Proposed Action would create a temporary increase in solid waste from construction debris generated during construction and operation. However, the Proposed Action would neither generate an unmanageable volume of solid waste nor affect the Airport’s existing solid waste management program. The increase in solid waste produced by the Proposed Action would not exceed the capability of the waste management system currently in place at Burke Lakefront Airport (BKL). Therefore neither the Proposed Action nor the No Action Alternative would result in unique or major impacts to solid waste management.

5.2.6 HISTORIC, ARCHAEOLOGICAL, ARCHITECTURAL, AND CULTURAL RESOURCES

Determination of Area of Potential Effect

As described in 36 CFR 800.4(a)(1) and in 36 CFR 800.16(d) the Area of Potential Effect (APE) for historic resources including structures and archaeological sites, is defined as “the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist.”

For direct impacts, the APE would be considered to be the area of potential disturbance as shown on Exhibit 4-1, *Area of Potential Disturbance*. There is one historic resource listed on the NRHP, the USS Cod Submarine, located adjacent to the Airport but not in the area of potential disturbance. (See Exhibit 4-2, *Existing Land Use*, for the location of the USS Cod Submarine). There are no other known historic resources in close proximity to the Airport. As previously stated BKL was built on top of a closed solid waste disposal facility; therefore, no archaeological or cultural resources are expected to exist within the site of the Airport.

For indirect impacts, such as noise or changes in view, the only modification due to the Proposed Action that could cause changes in the character or use of a historic property is related to changes in aircraft noise levels.

Consultation

Consultation concerning historical, architectural, archaeological, and cultural resources is located in Appendix A.

Assessment of Effect for the Proposed Action

Construction and operation of the Proposed Action would not physically destroy or alter any historic properties or remove any properties from its historic location. Therefore there would be no direct impacts due to the Proposed Action. As described in Section 5.3.5, *Noise*, the Proposed Action would not result in significant noise impacts on incompatible land use. The Proposed Action would not introduce an atmospheric, audible, or visual feature to the area that would diminish the integrity of any property's setting or through transfer, sale, or lease, diminishes the long-term preservation of any property's historic significance that Federal ownership or control would otherwise ensure. Therefore, there would be no indirect impacts for the APE.

The USS Cod Submarine is outside any noise contours. Therefore, no NRHP historic structures or historic properties would be directly or indirectly impacted by the Proposed Action. A historical or cultural resource survey is not necessary in accordance with 36 CFR 800.4 and 36 CFR 800.5 "No historic properties affected." There would be no impacts to historical, architectural, archaeological, or cultural resources with the Proposed Action. If however during construction activities any historic, architectural, archaeological, or cultural resource items are uncovered, immediate consultation with the State Historic Preservation Officer (SHPO) would occur.

5.2.7 LIGHT EMISSIONS AND VISUAL IMPACTS

Only in unusual circumstances (i.e. when high-intensity strobe lights would shine directly into people's homes) would the impact of light emissions be considered sufficient to warrant special study and a more detailed examination of alternatives in an EA. As directed by FAA Order 1050.1E, light emissions are assessed to the "...extent to which any lighting associated with an action will create an annoyance among people in the vicinity or interfere with their normal activities".

The Proposed Action does not include high-intensity strobe lights that would shine directly into residences. Therefore, as discussed above, no special lighting study is warranted.

Visual, or aesthetic, impacts are inherently more difficult to define because of the subjectivity involved. Aesthetic impacts deal more broadly with the extent that the development contrasts with the existing environment and whether the jurisdictional agency considers this contrast objectionable.

The Proposed Action would not significantly alter the lighting at the Airport. The existing approach lights would be replaced by in pavement lights in the area of the runway extension. The location of the other light stations would remain as they are today; however, they would be adjusted to meet the new light plane and or FAR Part 77 surface. There would be no adverse impacts from light emissions or visual impacts with construction and operation of the Proposed Action or the No Action Alternative.

5.2.8 NATURAL RESOURCES AND ENERGY SUPPLY

FAA Order 1050.1E suggests that an EA identify if the Proposed Action would significantly deplete the local supply of natural resources and if the local supply of energy will be sufficient to handle any increase in demand. The Cleveland Metropolitan Area, being an urbanized area, has access to a vast supply of energy resources and the types of natural resources that would be needed for the Proposed Action.

No unusual energy uses that would indicate that the power companies or fuel suppliers would have difficulty providing adequate capacity to meet the demand of Airport facilities were identified, or that any natural resources used during construction would be in short supply.

Based on these findings, it is anticipated neither the Proposed Action nor the No Action Alternative would result in significant adverse impacts to the supply of energy or adversely affect the supply of natural resources.

5.2.9 SECONDARY (INDUCED) IMPACTS

Major development proposals often involve the potential for secondary or induced impacts on surrounding communities. Examples may include shifts in population movement and growth, public service demands, and changes in business and economic activity to the extent influenced by proposed airport development. Induced impacts will normally not be significant except where there are also significant impacts in other categories, especially noise, land use, or direct social impacts.

The Proposed Action would not adversely affect regional growth and development trends, nor would it negatively impact local employment levels.

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

Socioeconomic impacts are assessed to determine the effect that the proposed airport development would have on the social and economic fabric of the surrounding communities. The types of socioeconomic impacts that typically arise from airport development are:

- Extensive relocation of residents without the availability of sufficient replacement housing;
- Extensive relocation of community businesses that would create severe economic hardship for the affected communities;
- Disruptions of local traffic patterns that would substantially reduce the levels of service of the roads serving the airport and its surrounding communities; and
- A substantial loss in community tax base.

Relocation of Residences

Neither the Proposed Action nor the No Action Alternative would result in the acquisition or the conversion of residential properties to Airport property. Therefore, no impacts to socioeconomic resources would occur as a result of relocation of residences.

Relocation of Businesses

The construction and operation of the Proposed Action would not result in significant adverse impacts to businesses located on or off-Airport. Therefore, no adverse impacts to socioeconomic resources would occur as a result of relocation of businesses.

Disruptions of Local Traffic Patterns

FAA Order 1050.1E, *Environmental Impacts: Policies and Procedures*, states that an EA should determine if disruptions of local traffic patterns, that would substantially reduce the levels of service of the roads serving the Airport and its surrounding communities, would occur as a result of implementing the Proposed Action. For the projects being assessed in this EA, there are no proposed modifications to off-Airport roadways and there is no anticipated increase in surface traffic other than a temporary increase during construction. As discussed previously the Proposed Project was designed to maintain to the extent practicable the vehicle service road that circles the Airport perimeter and provides access for the FAA, airport operations, U.S. Department of Agriculture (USDA) wildlife management and mitigation, and the U.S. Army Corps of Engineers (USACE). Therefore, there would be no significant disruption of local traffic patterns as a result of the Proposed Action or the No Action Alternative.

Environmental Justice

Executive Order (EO) 12898, *Federal Actions to Address Environmental Justice in Minority and Low-Income Populations*, requires all Federal agencies to address disproportionate and adverse human health or environmental effects of its programs, policies, and activities on minority and low-income populations. The EO also directs Federal agencies to incorporate environmental justice as part of their overall mission by conducting their programs and activities in a manner that provides minority and low-income populations an opportunity to participate in agency programs and activities.

The USDOT and the White House Office of Environmental Justice define minority as “individuals who are Black/African-American, Hispanic, Asian, Pacific Islander, American Indian, Eskimo, Aleut, or other non-white persons”. The Office of Environmental Justice indicates that for populations to be considered as a minority, the minority composition should either exceed 50 percent, or be greater than the minority population percentage in the general population of the geographic area under analysis. The appropriate unit of geographic analysis may be a governing body’s jurisdiction, a neighborhood, a census tract, or other similar unit.

FAA Order 1050.1E provides guidance for the preparation of environmental justice analysis in support of an EA. Section 16.2a (1) of the Order states that EAs should discuss the significant impact that a project would cause, and then identify affected populations. If a significant impact would affect low income or minority populations at a disproportionately higher level than it would other population segments, an environmental justice issue is likely.

In order to determine if there is a potential for significant impacts to low income or minority populations, a review of those impact categories that relate to the Airport’s neighboring communities was conducted. These impact categories include, air quality, noise, compatible land use, light emissions and visual impacts, and socioeconomic impacts. According to the applicable sections in this EA, there are no significant impacts to any of the impact categories listed above; therefore, it can be concluded that the Proposed Action would not disproportionately impact any minority populations within the Airport environs.

Children’s Environmental Health and Safety Risks

EO 13045, *Protection of Children from Environmental Health Risks and Safety Risks*, requires all Federal agencies (a) to make it a high priority to identify and assess environmental health risks and safety risks that may disproportionately affect children; and (b) shall ensure that its policies, programs, activities, and standards address disproportionate risks to children that result from environmental health risks or safety risks.

Based on a review of available data conducted as part of this EA, the Proposed Action would not result in an elevated risk related to health or safety concerns for children. Typically, the primary children’s health concern is asthma and related lung disorders. In order to determine whether the Proposed Action would increase

the likelihood of children contracting these health problems, the air quality analysis conducted in this chapter was examined. According to the analysis the Proposed Action would not create air quality conditions that would worsen breathing conditions for children. In addition, the Proposed Action would not result in the release of harmful agents into surface or groundwater resources above levels permitted by the State of Ohio and Federal regulations.

Based on the analyses conducted in this EA, neither the Proposed Action nor the No Action Alternative would result in the release of, or exposure to significant levels of harmful agents in the water, air, or soil that would affect children's health or safety.

5.3 CATEGORIES WHERE IMPACTS MAY OCCUR

The remaining portion of this chapter evaluated categories where no significant impacts were found as a result of the Proposed Action.

5.3.1 AIR QUALITY

The air quality assessment provides an evaluation of the potential for significant adverse impacts to air quality in Cuyahoga County due to the Proposed Action. A complete discussion of applicable laws and guidelines relied upon in the assessment is provided in Appendix C, *Air Quality*.

Two primary laws apply to air quality, the Clean Air Act, including the 1990 Amendments (CAA) and the NEPA. This section evaluates the conformity of the Proposed Action with the CAA, NEPA, and relevant state air quality requirements. The FAA has the responsibility under NEPA to prepare an air quality assessment of sufficient scope and depth to disclose the potential for significant adverse air quality impacts due to the Proposed Action.³

To evaluate net emissions due to the Proposed Action, an emission inventory was prepared for the No Action Alternative and for the development envisioned by the Proposed Action. The comparative evaluation of the emission inventories determined the net emissions increase due to the Proposed Action, and reflects the relative emissions impact of the Proposed Action.

For the emission inventory, the FAA-required and USEPA-approved Emissions and Dispersion Modeling System (EDMS) version 5.1.3 computer program released in November 2010 was used. EDMS is an emissions inventory and air dispersion model designed specifically to estimate emissions and calculate pollutant concentrations from airport specific sources.

The results of the emission inventory for the Proposed Action are provided in **Table 5-1**. Appendix C provides more detail on the methodology, input data, and results for the air quality analysis.

**Table 5-1
PROPOSED ACTION NET EMISSIONS INVENTORY
Burke Lakefront Airport**

ALTERNATIVES	ANNUAL EMISSIONS (tons per year)					
	CO	VOC	NO _x	SO _x	PM ₁₀	PM _{2.5}
2013* Proposed Action	0.16	0.00	0.28	0.00	0.03	0.03
NET EMISSIONS	0.16	0.00	0.28	0.00	0.03	0.03
2014* Proposed Action	0.05	0.00	0.09	0.00	0.01	0.01
NET EMISSIONS	0.05	0.00	0.09	0.00	0.01	0.01
2015 No Action	167.99	56.05	13.24	2.55	7.22	7.21
2015 Proposed Action	173.60	59.28	13.46	2.64	7.25	7.25
NET EMISSIONS	5.60	3.22	0.23	0.09	0.04	0.04
de minimis THRESHOLD	100	100	100	100	100	100

* 2013 and 2014 represent construction years.
Total emissions may not sum exactly due to rounding.
Source: EDMS version 5.1.3, L&B Analysis, 2012.

The air quality assessment demonstrates that construction and operation of the Proposed Action would not cause an increase in air emissions above the applicable de minimis thresholds established by the USEPA for the criteria pollutants. As such, the analysis of the Proposed Action at BKL demonstrates there would be no potential for significant adverse air quality impacts in Cuyahoga County. Consequently, further analysis such as dispersion modeling to demonstrate compliance to the National Ambient Air Quality Standards (NAAQS) would be unnecessary. The Proposed Action is therefore assumed to comply with the provisions of the Ohio State Implementation Plan (SIP) and meets all the relevant requirements under NEPA and the CAA. Further, the Proposed Action complies with CAA Section 176(c) (1) and would not:

- Cause or contribute to new violations of any NAAQS;
- Increase the frequency or severity of existing violations of any NAAQS; or,
- Delay the timely attainment of any NAAQS or any required interim emission reductions or milestones.

No further analysis or reporting is required under NEPA or the CAA with regard to air quality impacts and no mitigation measures are required with the No Action or Proposed Action.

³ FAA, *Environmental Impacts: Policies and Procedures (Order 1050.1E)*, March 20, 2006; Appendix A, *Analysis of Environmental Impact Categories*, Section 2, *Air Quality*, Paragraph 2.2a.

5.3.2 COMPATIBLE LAND USE

As stated in Chapter Four site is located in an urbanized area in downtown Cleveland. The Airport is surrounded by Lake Erie, the Cleveland Memorial Shoreway, I-90, and commercial/industrial development. Harbor dredging comprises the northeastern portions of the Airport property within the USACE's five (5) Confined Disposal Facilities (CDFs).

The Proposed Action would not change the current land use designation of the Airport and would be compatible with existing zoning and surrounding area land use plans. The Proposed Action would not change the urban characteristics of the existing land uses and would not change any of the physical characteristics of the Airport. Therefore, neither the Proposed Action nor the No Action would result in an adverse land use impact and no mitigation measures are required.

5.3.3 CONSTRUCTION IMPACTS

Construction impacts are the short-term effects of the construction process that can usually be mitigated with proper construction management and the use of a Stormwater Pollution Prevention Plan (SWPPP) and best management practices (BMPs), as outlined in FAA Advisory Circular (AC) 150/5370-10F, *Temporary Air and Water Pollution, Soil Erosion, and Siltation Control*.⁴

FAA Order 1050.1E, Appendix A, states that construction impacts alone are rarely significant pursuant to NEPA. However, the Order refers to the other relevant impact categories for thresholds of significance. Potential construction-related impacts resulting from the Proposed Action could temporarily affect noise levels, air quality, surface waters, and hazardous and solid waste.

Construction—Noise

Noise levels would temporarily increase during the construction period due to the construction vehicles and equipment being operated at the project site. However, the areas of potential disturbance are located more than one mile from the nearest residential development, and potential construction noise is not expected to be distinguishable from general background Airport and existing traffic noise. Therefore, no significant adverse construction impacts relative to noise would occur.

Construction—Air Quality

Impacts to air quality would occur due to the use of mostly diesel-powered equipment and fugitive dust. Construction emissions would be temporary and minimized by maintaining traffic flow during construction periods. The discharge of fugitive dust at the construction site could be minimized by the use of BMPs such as

⁴ FAA, *Standards for Specifying Construction of Airports*, Item P-156, Temporary Air and Water Pollution, Soil Erosion, and Siltation Control, AC 150/5370-10F (September 30, 2011).

ground sprinkling practices during high-dust generating activities or extended dry periods. Dust from construction and materials delivery vehicles could be minimized by the use of cargo-covering tarps and wet-downs, when possible.

Emissions from construction vehicles would temporarily impact local air quality; however, annual emissions from construction equipment would not equal or exceed the *de minimis* thresholds defining insignificant and negligible emissions. Therefore, no significant adverse construction impacts would occur relative to air quality.

Construction—Water Quality

Temporary impacts to surface water quality could result from erosion and siltation born from site disturbance activities. Cut and fill operations in the areas of potential disturbance may contribute to siltation during construction activities. Sediment transport would be temporary during the construction process. This risk of impact to water quality would be minimized to the fullest extent possible through the use of SWPPP and BMPs. Therefore, no significant adverse construction impacts would occur relative to surface waters. All necessary construction and water quality permits would be obtained as appropriate.

Construction—Hazardous and Solid Waste

Construction activities associated with the Proposed Action are expected to include the short-term use or generation of hazardous and non-hazardous materials and waste common to construction including petroleum hydrocarbon-based fuels, lubricants, and oils, paints, and cleaning solvents for the construction equipment. Appropriate materials management measures would be followed to prevent pollution to Lake Erie and to minimize the use and manage disposal of hazardous and non-hazardous substances. Therefore, no significant adverse construction impacts would occur relative to hazardous or solid wastes.

5.3.4 FISH, WILDLIFE, AND PLANTS

This section discusses the potential impacts to any species on the Airport listed as threatened or endangered pursuant to the *Endangered Species Act of 1973* (ESA), and describes the habitat necessary to support these species. “Threatened” means that surviving populations of the species are so small that the species could become extinct without protection, while “endangered” means that the entire species is in danger of extinction. In addition, other species that hold a special status either through other Federal laws or through State of Ohio protection are assessed for potential impacts.

FAA Order 1050.1E, *Environmental Impacts: Policies and Procedures* provides guidance regarding FAA policies and procedures for achieving compliance with NEPA and regulations issued by the Council on Environmental Quality for all FAA-administered projects. The Order provides requirements the FAA must meet in respect to analyzing project-related impacts to fish, wildlife, and plant species under NEPA and determining whether project-related impacts are significant.

A significant impact to Federally-listed threatened and endangered species would occur when the U.S. Fish and Wildlife Service (USFWS) or National Marine Fisheries Service (NMFS) determines that the proposed action would be likely to jeopardize the continued existence of the species in question, or would result in the destruction or adverse modification of Federally-designated critical habitat in the affected area. The involvement of Federally-listed threatened or endangered species and the possibility of impacts as potentially serious as extinction, destruction, or adverse modification of designated critical habitat, are factors weighing in favor of a finding of significance. However, an action need not involve a threat of extinction to Federally-listed species to meet the NEPA standard of significance. Lesser impacts including impacts on non-listed species could also constitute a significant impact.

As described in Chapter Four, the USFWS and the ODNR reported that BKL is within the range of a number of threatened or endangered species. Coordination with these agencies is located in Appendix A.

An on-site habitat assessment was conducted in May 2012 to identify any special-concern species which may be within the areas of potential disturbance. A copy of the report is provided in Appendix D, *Wetland Delineation, Threatened and Endangered Species Survey, and Habitat Assessment Report*.

While a number of species typically found along the lakeshore and or inhabiting open space were observed, none of the state or Federal threatened or endangered species were observed during the habitat assessment. One state species of special interest, the ruddy duck (*Oxyura jamaicensis*), was observed at the Airport, however, this was in the USACE's Confined Disposal Facility (CDF) that was at the time artificially flooded. The Proposed Action would not affect the USACE's CDF operations.

The Proposed Action is within the range of the Indiana bat (*Myotis sodalis*), a state and federally endangered species. However, no tree removal is proposed, therefore the project is not likely to impact this species. The project is within the range of the piping plover (*Charadrius melodus*). However, according to ODNR the project is not likely to have an impact on these species.

The Proposed Action is within the range of the bald eagle (*Haliaeetus leucocephalus*), a state threatened species. However, the Ohio Biodiversity Database currently has no records of this species near the project area. The Proposed Action is within the range of the black bear (*Ursus americanus*), a state endangered species, and the bobcat (*Lynx rufus*), a state endangered species. Due to the mobility of these species, ODNR has stated that the project is not likely to have an impact on these species.

The Proposed Action is within the range of the king rail (*Rallus elegans*), a state endangered bird. Nests for this species are deep bowls constructed out of grass and usually hidden very well in marsh vegetation. However this type of vegetation would not be destroyed due to the Proposed Action and therefore the Proposed Action is not likely to impact this species.

The Proposed Action is within the range of the yellow-bellied sapsucker (*Sphyrapicus varius*), a state endangered bird. However, no tree removal is proposed, therefore the project is not likely to impact this species.

The ODNR, Ohio Biodiversity Database has a record at BKL for the Upland Sandpiper (*Bartramia longicauda*), a state threatened bird. However none were observed during the on-site survey. The project is also within the range of the Canada darner (*Aeshna canadensis*), a state endangered dragonfly. This state endangered dragonfly was not observed during the on-site survey. The Canada darner prefers wooded lakes and ponds with abundant vegetation, as well as marshy and boggy lakes, and slow sluggish streams often associated with beaver ponds. The Proposed Action site consists mostly of disturbed mowed lawn areas, very small areas of disturbed wetlands (less than half an acre) and wasteground areas. This area would not be considered prime habitat for the Canada darner. In addition, while wetland impacts are expected, mitigation through either restoration or participating in wetland banks would likely result in higher quality wetlands than exist today on the Airport. The FAA does not support restoration of wetlands on airport property due to the FAA's safety restrictions regarding the creation of potential wild life attractants near airports.

Due to the reasons listed, neither the Proposed Action nor the No Action would adversely impact any Federal-listed or state-listed endangered, threatened, or special concern species and no mitigation measures are required.

5.3.5 NOISE

According to FAA Order 1050.1E, *Environmental Impacts: Policies and Procedures*, Section 14.3, a significant noise impact would occur if analysis shows that the proposed action will cause noise sensitive areas to experience an increase in noise of Day-Night Average Sound Level (DNL) 1.5 dB or more at or above DNL 65 dB noise exposure when compared to the no action alternative for the same timeframe. The Integrated Noise Model (INM) was used to calculate the difference in noise exposure levels between the Future (2015) No Action and the Future (2015) Proposed Action noise exposure contours.

No Action Alternative

Under the No Action alternative, no changes to runway configuration would occur at BKL by 2015; therefore the runway layout discussed for the Existing (2012) Baseline condition in Chapter Four would remain the same for the Future (2015) No Action conditions.

The 2015 operating levels are based upon the FAA's 2011 Terminal Area Forecast (TAF). The 2011 TAF includes 53,880 annual operations, or 147.62 average-annual day operations, in 2015. No major changes in the aircraft fleet mix are expected at BKL by 2015. Therefore the fleet mix modeled for the Future (2015) conditions remains similar to the fleet mix modeled for the Existing (2012) Baseline condition. **Table 5-2** provides a summary of the average daily operations and fleet mix modeled for the Future (2015) No Action noise exposure contour.

**Table 5-2
DISTRIBUTION OF AVERAGE DAILY OPERATIONS BY AIRCRAFT TYPE
FUTURE (2015) NO ACTION CONDITIONS
Burke Lakefront Airport**

INM ID	Arrivals		Departures		Total
	Daytime	Nighttime	Daytime	Nighttime	
Jet Aircraft					
CL600	3.78	0.08	3.78	0.08	7.72
CNA560U	6.82	0.14	6.82	0.14	13.92
LEAR35	8.15	0.17	8.15	0.17	16.63
MU3001	2.07	0.04	2.07	0.04	4.23
<i>Subtotal</i>	<i>20.82</i>	<i>0.42</i>	<i>20.82</i>	<i>0.42</i>	<i>42.49</i>
Turboprop Aircraft					
CNA208	11.62	0.24	11.62	0.24	23.72
CNA441	14.20	0.29	14.20	0.29	28.99
<i>Subtotal</i>	<i>25.83</i>	<i>0.53</i>	<i>25.83</i>	<i>0.53</i>	<i>52.70</i>
Piston Aircraft					
BEC58P	6.29	0.05	6.29	0.05	12.69
CNA172	0.55	0.01	0.55	0.01	1.12
GASEPV	1.10	0.02	1.10	0.02	2.25
<i>Subtotal</i>	<i>7.94</i>	<i>0.09</i>	<i>7.94</i>	<i>0.09</i>	<i>16.06</i>
Helicopters					
S76	18.18	0.00	18.18	0.00	36.36
<i>Subtotal</i>	<i>18.18</i>	<i>0.00</i>	<i>18.18</i>	<i>0.00</i>	<i>36.36</i>
Grand Total	72.77	1.04	72.77	1.04	147.62

Note: Daytime = 7:00 a.m. to 9:59 p.m., Nighttime = 10:00 p.m. to 6:59 a.m.
Totals might not equal sum due to rounding.

Source: FAA ATADS, FAA ETMSC, Landrum & Brown, 2012.

Under the No Action alternative, no changes to the average-annual day runway end utilization are expected to occur; therefore, the runway use percentages for the Future (2015) No Action remain the same as discussed for the Existing (2012) Baseline.

No changes to flight tracks locations or densities are expected to occur by the No Action alternative; therefore flight track locations and percentage of touch-and-go operations modeled for the Existing (2012) Baseline remain the same for the Future (2015) No Action conditions.

The Future (2015) No Action noise exposure contour, showing contour bands of 65, 70, and 75 DNL levels, is presented on **Exhibit 5-1, Future (2015) No Action Noise Exposure Contour**. The area within each five-decibel noise exposure contour is shown in **Table 5-3**. Approximately 0.30 square miles are within the 65+ DNL of the Future (2015) No Action noise exposure contour. The 65 DNL of the Future (2015) No Action noise exposure contour retains a similar size and shape as the Existing (2012) Baseline noise exposure contour due to similar runway use patterns expected in 2015 and the minimal change in operating levels forecasted for 2015. The 65 DNL of the Future (2015) No Action noise exposure contour is located over airport property, the right-of-way for State Route 2, and an adjacent surface parking lot.

**Table 5-3
AREA EXPOSED TO VARIOUS NOISE LEVELS (IN SQUARE MILES)
FUTURE (2015) NO ACTION NOISE EXPOSURE CONTOUR
Burke Lakefront Airport**

CONTOUR RANGE	FUTURE (2015) NO ACTION
65-70 DNL	0.15
70-75 DNL	0.08
75 + DNL	0.07
65 + DNL	0.30

Note: 65+ DNL contour area does not equal sum due to rounding
Source: Landrum & Brown, 2012.

Proposed Action

Under the Proposed Action alternative, the following changes to the runway configuration at BKL would occur:

- Construction of an approximate 400-foot Engineered Materials Arresting System (EMAS) bed on Runway End 6L
- Displaced landing threshold of Runway 6L 165 feet to the east
- An approximate 600-foot eastern shift to Runway End 24R for departures (Note: The landing threshold for Runway 24R would remain in its current location).

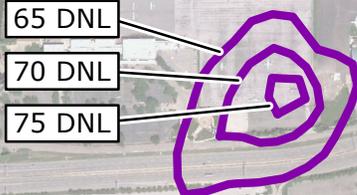
If this alternative is selected, it is anticipated that these changes would be implemented by 2015; therefore the runway layout modeled for the Future (2015) Proposed Action condition includes these changes. No change to the length or location of Runway 6R/24L would occur. The runway end coordinates that were modeled for the Future (2015) Proposed Action noise exposure contour are shown below.

<u>Runway</u>	<u>Latitude</u>	<u>Longitude</u>
6L	41.514105	-81.692114
24R	41.523760	-81.671628
6R	41.512688	-81.691686
24L	41.520264	-81.675608

There would be no change to operating levels and fleet mix as a result of the Proposed Action. Therefore, the fleet mix modeled for the Future (2015) Proposed Action noise exposure contour would remain the same as discussed for the Future (2015) No Action condition.

Under the Proposed Action alternative, no changes to the average-annual day runway end utilization are expected to occur. Therefore, the runway use percentages for the Future (2015) Proposed Action remain the same as discussed for the Existing (2012) Baseline and the Future (2015) No Action conditions.

LAKE ERIE



Legend

 Future (2015) No Action Noise Exposure Contour

0 1,000'



Runway 6L-24R RSA
Environmental Assessment
Cleveland Burke Lakefront Airport



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8/6/2012 Prepared by Landrum & Brown
Filename: Y:\CLES\2009 On-Call Contract\ E-L&B Work Product\2-GIS\MXD\DOCUMENT\ 5-1_Future (2015) No Action Contour.mxd
Contour: 8433 Spc

Future (2015) No Action Noise Exposure Contour

Exhibit:
5-1

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Under the Proposed Action, flight tracks locations would shift relative to the proposed shift in the Runway 6L threshold. Flight track locations modeled for the Future (2015) Proposed Action are shown in **Exhibit 5-2, Future (2015) Proposed Action INM Flight Tracks**. No change to flight track utilization densities are expected as a result of the Proposed Action.

The Future (2015) Proposed Action noise exposure contour, showing contour bands of 65, 70, and 75 DNL levels, is presented on **Exhibit 5-3, Future (2015) Proposed Action Noise Exposure Contour**. The area within each five-decibel noise exposure contour is shown in **Table 5-4**. There is approximately 0.31 square miles within the 65+ DNL of the Future (2015) Baseline noise exposure contour. The Future (2015) Proposed Action noise exposure contour retains a similar size and shape as the Future (2015) No Action noise exposure contour, although the contour shifts to the northeast due to the extension of Runway 6L/24R to the northeast and the shifted landing threshold on Runway 6L. The 65 DNL of the Future (2015) Proposed Action noise exposure contour is located over airport property, the right-of-way for State Route 2, and an adjacent surface parking lot.

**Table 5-4
AREA EXPOSED TO VARIOUS NOISE LEVELS (IN SQUARE MILES)
FUTURE (2015) PROPOSED ACTION COMPARED TO FUTURE (2015) NO
ACTION NOISE EXPOSURE CONTOUR
Burke Lakefront Airport**

CONTOUR RANGE	FUTURE (2015) NO ACTION	FUTURE (2015) PROPOSED ACTION	DIFFERENCE
65-70 DNL	0.15	0.15	0.00
70-75 DNL	0.08	0.09	0.01
75 + DNL	0.07	0.07	0.00
65 + DNL	0.30	0.31	0.01

Source: Landrum & Brown, 2012.

Potential Impacts

The Future (2015) Proposed Action noise exposure contour compared to the Future (2015) No Action noise exposure contour is shown on **Exhibit 5-4, Future (2015) Proposed Action Compared to Future (2015) No Action Noise Exposure Contour**. As shown in **Exhibit 5-5, Future (2015) Proposed Action Area of 1.5 dB Increase**, an increase in noise levels of DNL 1.5 dB would occur from the Proposed Action in 2015; however, the area of DNL 1.5 dB increase within the 65 DNL would occur entirely over airport property and would not impact any noise-sensitive land uses. Since no noise-sensitive land uses would experience an increase of noise levels at or above DNL 1.5 dB within the 65 DNL, no significant noise impacts would occur as a result of the Proposed Action and no mitigation measures are required.

5.3.6 WATER QUALITY

To determine significant impacts, FAA Order 1050.1E states that water quality regulations and issuance of permits will normally identify any deficiencies in the proposal with regard to water quality. It goes on to state that if consultation or analysis shows that there is the potential for exceeding water quality standards, identifies water quality problems that cannot be avoided or mitigated, or indicates difficulties in obtaining permits, then it may be concluded that the project would result in a significant impact.

As discussed in Chapter Four, BKL is adjacent to and built entirely on fill placed in Lake Erie. The Ohio EPA Division of Surface Water is tasked with ensuring surface waters in Ohio, including Lake Erie, are in compliance with the Federal Clean Water Act.

Basic Stormwater Handling

The Airport collects storm water and discharges it per Industrial Storm Water General Permit 3GR01518*DG, through a series of storm sewer pipes and manholes. One section of the 42 inch storm sewer pipe located beyond the Runway 6L end would need to be relocated due to the proposed EMAS bed. The proposed pipe relocation would be within the area of potential disturbance as provided in Chapter Four, *Affected Environment*. During the design phase for the Proposed Action, the exact location of the pipe and the need for additional storm sewer pipes and manholes would be determined.

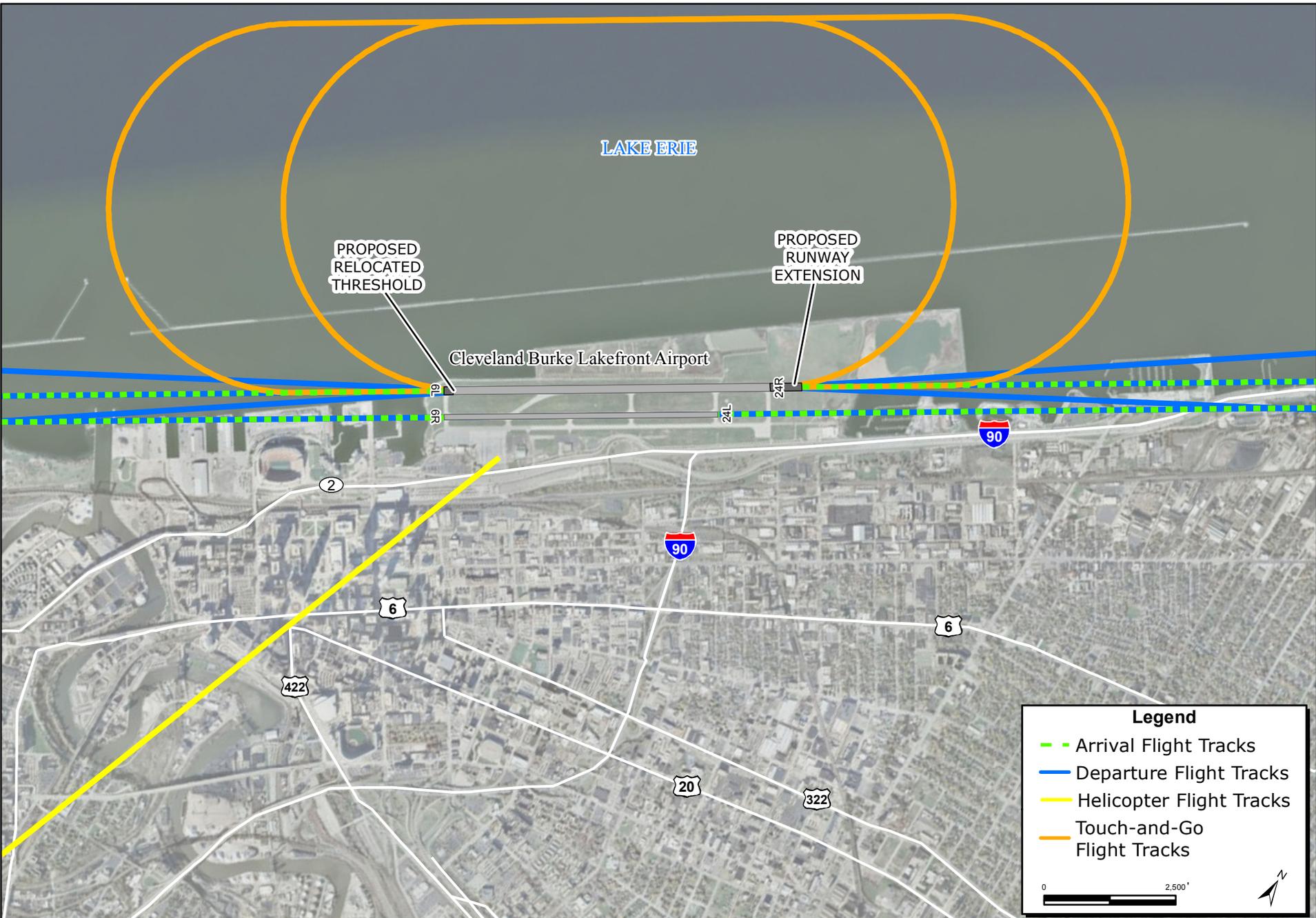
Combined Sanitation/Stormwater Pipes (Perpendicular to Runway)

The City of Cleveland has five (5) combined sewer pipes which currently bisect the existing runways at BKL. It is expected that the construction of the proposed section of runway/taxiway would not alter or affect four of the pipes leading to the Northeast Ohio Regional Sewer District's outfalls (CSO-098, CSO-097, CSO-096, and CSO-095). The combined sewer pipe that leads to CSO-099 is in the area underneath the runway construction. Coordination will be ongoing with the City of Cleveland and the Northeast Ohio Regional Sewer District to make sure all of the pipes are not damaged or put out of commission by construction activities including the roadway relocation.

Drainage along Confined Disposal Facility 10B

With the proposed roadway relocation into that long flat low drainage area, the existing drainage into the USACE's CDF 10B will need to be replaced. Currently there are the several elevated manhole/access points in the drainage area which will also need to be relocated. The exact location of the manhole/access points and the type of drainage system will be defined during the design process.

Due to the reasons listed no significant water quality impacts would occur as a result of the Proposed Action or the No Action Alternative. The Proposed Action it is not anticipated to exceed water quality standards.



Legend

- - Arrival Flight Tracks
- Departure Flight Tracks
- Helicopter Flight Tracks
- Touch-and-Go Flight Tracks

0 2,500'

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LAKE ERIE

PROPOSED
RELOCATED
THRESHOLD

PROPOSED
RUNWAY
EXTENSION

65 DNL

70 DNL

75 DNL

Cleveland Burke Lakefront Airport

65 DNL

70 DNL

75 DNL

Cleveland Memorial Shoreway



Legend

 Future (2015) Proposed Action
Noise Exposure Contour

0 1,000'



Runway 6L-24R RSA
Environmental Assessment
Cleveland Burke Lakefront Airport



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8/6/2012 Prepared by Landrum & Brown
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5-3_Future (2015) Proposed Action Contour.mxd
Contour: bk115pa

Future (2015) Proposed Action Noise Exposure Contour

Exhibit:
5-3

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LAKE ERIE

PROPOSED RELOCATED THRESHOLD

PROPOSED RUNWAY EXTENSION

65 DNL

70 DNL

75 DNL

Cleveland Burke Lakefront Airport

65 DNL

70 DNL

75 DNL

Cleveland Memorial Shoreway



Legend

- Future (2015) No Action Noise Exposure Contour
- Future (2015) Proposed Action Noise Exposure Contour



Runway 6L-24R RSA
Environmental Assessment
Cleveland Burke Lakefront Airport



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5-4_Future (2015) No vs PA Contour.mxd
Contour: bkl15pa; bkl15pa

**Future (2015) Proposed Action Compared to
Future (2015) No Action Noise Exposure Contour**

Exhibit:
5-4

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LAKE ERIE

PROPOSED
RELOCATED
THRESHOLD

65 DNL

70 DNL

75 DNL

Cleveland Burke Lakefront Airport

PROPOSED
RUNWAY
EXTENSION

24R

65 DNL

70 DNL

75 DNL

Cleveland Memorial Shoreway

Legend

 Area of 1.5 dB Increase

 Future (2015) Proposed Action
Noise Exposure Contour

0 1,000'



*Runway 6L-24R RSA
Environmental Assessment*
Cleveland Burke Lakefront Airport



FINAL
8/6/2012 Prepared by Landrum & Brown
Filename: Y:\CLE\2009 On-Call Contract\
E-L&B Work Product\2-GIS\MXD\DOCUMENT
5-5_Future (2015) RA_1.5-dB_Increase.mxd
Contour: bk115na; bk115pa

Future (2015) Proposed Action Area of 1.5 dB Increase

Exhibit:
5-5

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5.3.7 WETLANDS AND STREAMS

According to FAA Order 1050.1E, *Environmental Impacts: Policies and Procedures*, a significant impact occurs if the proposed action would:

- Adversely affect the function of a wetland to protect the quality or quantity of municipal water supplies, including sole source, potable water aquifers;
- Substantially alter the hydrology needed to sustain the functions and values of the affected wetland or any wetlands to which it is connected;
- Substantially reduce the affected wetland's ability to retain floodwaters or storm associated runoff, thereby threatening public health, safety or welfare (this includes cultural, recreational, and scientific resources important to the public, or property);
- Adversely affect the maintenance of natural systems that support wildlife and fish habitat or economically-important timber, food, or fiber resources in the affected or surrounding wetlands;
- Promote development of secondary activities or services that would affect the resources mentioned in items (1) through (4) in this section; or
- Be inconsistent with applicable State wetland strategies.

As described in Chapter Four there are potential wetlands in the area of potential disturbance. While all of the wetlands may not be destroyed by the actual construction of the Proposed Action, for this analysis all of the potential wetlands in the areas of potential disturbance are assumed to be impacted. **Table 5-5** lists the acreage of the wetlands potentially impacted by the Proposed Action. The preliminary jurisdictional status is currently under review by the USACE.

A Section 404 permit must be obtained prior to placing any fill material within a jurisdictional area. Non-jurisdictional wetlands are typically isolated wetland areas. Under most circumstances these wetlands are regulated by the Ohio EPA and require either a General or Individual Isolated Wetland Permit for dredge and fill activities. The preliminary jurisdictional status is currently under review by the USACE.

The FAA follows the "avoid, minimize, mitigate" policy regarding wetland impacts. Any remaining impacts to wetlands that cannot be avoided or minimized will require mitigation. Impacts and mitigation related to the Proposed Action will be identified and coordinated with the applicable agency.

**Table 5-5
WETLAND IMPACTS
Burke Lakefront Airport**

Wetland ID	Vegetative Coverage	Isolated, Adjacent, Abutting	Receiving Waters	ORAM Score Category (1,2,3)	Wetland Type (Cowardin et al. 1979)	Est. Total Size (ac.)
Wetland 1	<i>Agrostis stolonifera</i> , <i>Eleocharis erythropoda</i> , <i>Phalaris arundinacea</i>	Isolated	N/A	19 (Cat 1)	PEM	0.180
Wetland 2	<i>Agrostis stolonifera</i> , <i>Eleocharis erythropoda</i>	Isolated	N/A	19 (Cat 1)	PEM	0.066
Wetland 3	<i>Agrostis stolonifera</i> , <i>Eleocharis erythropoda</i>	Isolated	N/A	19 (Cat 1)	PEM	0.005
Wetland 4	<i>Agrostis stolonifera</i> , <i>Eleocharis erythropoda</i>	Isolated	N/A	19 (Cat 1)	PEM	0.029
Wetland 5	<i>Agrostis stolonifera</i> , <i>Eleocharis erythropoda</i>	Isolated	N/A	19 (Cat 1)	PEM	0.032

Source: ASC Group, 2012.

Avoidance

Avoidance refers to keeping away from the resource, resulting in no impact. For this project, wetland and Waters of the U.S. areas in or near construction staging areas will be avoided to the extent practicable. It is assumed that materials and equipment would be stored away from wetland areas and construction workers would avoid wetland areas at these construction staging locations through the use of sedimentation and erosion techniques. Where possible, wetland areas also will be fenced with signs reminding workers not to enter the areas.

Minimization

Minimization reduces potential impacts. As discussed in Chapter Three, *Alternatives*, the Proposed Action has been carefully selected to avoid and minimize impacts to the higher quality natural resources such as Lake Erie present within the project site.

Mitigation

The Proposed Action would result in the filling of wetlands. Those unavoidable impacts would need to be mitigated in accordance with EO 11990. Due to the FAA's restrictions regarding the creation of potential wild life attractants near airports, mitigation in this case refers to compensating for the potential impacts. The appropriate amount of wetland creation/restoration and/or preservation credits for impacts to non-jurisdictional wetlands would be coordinated with Ohio EPA but

is assumed to be at a 1:1 ratio based on the size, location, and quality of the wetlands. Potential credits are available at one or more of the following locations: wetland creation and restoration in the Cuyahoga Valley National Recreation Area, Cuyahoga and Summit Counties, Ohio; the Chagrin River Land Conservancy at the Chip Hess Consolidated Mitigation Bank; or wetland creation and restoration through Cleveland Metroparks.

DPC would be able to purchase wetland mitigation credits from an approved bank. The credits would have to be purchased and proof provided to Ohio EPA before impacts to the wetlands may occur. With the mitigation there would not be a significant impact to wetlands or streams due to the Proposed Action or the No Action Alternative.

5.4 SUMMARY OF IMPACTS

This section summarizes the environmental impacts and/or benefits associated with the implementation of the Proposed Action and the No Action alternative. **Table 5-6** summarizes the potential direct and secondary (induced) impacts.

**Table 5-6
SUMMARY OF IMPACTS
Burke Lakefront Airport**

IMPACT CATEGORY	ALTERNATIVE	
	NO ACTION	PROPOSED ACTION
AIR QUALITY	Cuyahoga County nonattainment for PM _{2.5} ; Maintenance for ozone, CO, SO ₂ , and PM ₁₀	Complies with Ohio State Implementation Plan and CAA Section 176(c)(1)
COASTAL RESOURCES	Consistent with OCMP	Consistent with OCMP
COMPATIBLE LAND USE	No Land Use/Zoning Change	No Land Use/Zoning Change
CONSTRUCTION	No Impact	Temporary Impacts
DOT SECTION 4(f) LANDS (RECODIFIED AS 303(c))	No Direct or Constructive Use Impacts	No Direct or Constructive Use Impacts
FARMLANDS	No Impact	No Impact
FISH, WILDLIFE, & PLANTS		
Federally-Listed Species & Critical Habitats	No Adverse Impact	No Adverse Impact
State – Listed Species	No Adverse Impact	No Adverse Impact
Essential Fish Habitat	No Adverse Impact	No Adverse Impact
FLOODPLAINS	No Impact	No Impact

**Table 5-6, Continued
SUMMARY OF IMPACTS
Burke Lakefront Airport**

HAZARDOUS WASTE/SOLID WASTE		
Hazardous Materials	No Impacts	No Impact if constructed according to OEPA Permit and City of Cleveland Ordinance
Solid Waste	No Impacts	Temporary increases can be met by current solid waste management system
HISTORICAL, ARCHITECTURAL, ARCHAEOLOGICAL, & CULTURAL RESOURCES	No Direct or Indirect Impacts No Historic Properties Affected	No Direct or Indirect Impacts No Historic Properties Affected
LIGHT EMISSIONS & VISUAL IMPACTS	No Impact	No Impact
NATURAL RESOURCES AND ENERGY	No Impact	Increases in demand for materials during construction can be met by local suppliers.
NOISE	No Significant Impact	No Significant Impact
SECONDARY INDUCED	No Adverse Impact	No Adverse Impact
SOCIOECONOMIC IMPACTS, ENVIRONMENTAL JUSTICE, AND CHILDREN'S ENVIRONMENTAL HEALTH AND SAFETY RISKS	No Impact	No impact
Relocation of Residences	No Impact	No Impact
Relocation of Businesses	No Impact	No Impact
Disruption of Local Traffic Patterns	No Impact	No Impact
Environmental Justice	No Impact	No Impact
Children's Environmental Health and Safety	No Impact	No Impact
WATER QUALITY	Impacts Would Not Exceed Standards	Impacts Would Not Exceed Standards
WETLANDS	No Impact	0.312 acres (Non-Jurisdictional)
WILD & SCENIC RIVERS	No impact	No impact

Source: ASC Group, Inc. and Landrum & Brown, 2012.

5.5 CUMULATIVE IMPACTS

The Council on Environmental Quality (CEQ) NEPA regulations (40 CFR 1508.7) define a cumulative impact as "...the impact on the environment, which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor, but collectively significant, actions taking place over a period of time."

Cumulative impacts must be evaluated relative to the direct and indirect effects of the proposed action for each environmental category discussed previously in this chapter. As with the environmental consequences discussion, the No Action alternative serves as the reference point against which potentially significant cumulative impacts are evaluated. Significant cumulative impacts are determined according to the same thresholds of significance used in the evaluation of each environmental category in the environmental consequences discussion. For the Proposed Action under review in this EA, the categories where impacts would occur include air quality; water quality; wetlands; and hazardous materials and solid waste. Below is a list of the projects near the Airport that have the potential to include impacts in these environmental categories. When combined with the impacts from the Proposed Action in this EA they could result in significant cumulative impacts.

Relocation of USS Cod Submarine

The USS Cod Submarine is listed on the National Register of Historic Places and currently located southwest of the Airport (See Exhibit 4-2, for a map showing the location). There are plans to expand the green space along the lakefront that may require the relocation of the USS Cod Submarine from its current location to another site on the lake. At this time, no known relocation site has been identified and no timeline for relocation has been set. Because the USS Cod Submarine is a self-contained historic site that has no relationship to its current location, it is not anticipated that the specific location of the ship would result in significant impacts to its historic value. No other environmental impacts would be anticipated with this project.

USACE Capacity Confined Disposal Facility Enhancement Project

The USACE operates a CDF immediately northeast of the Airport. This facility accepts and processes dredge material from nearby rivers. The USACE foresees the need to increase the capacity of the CDF to accommodate demand in the future. The USACE anticipates preparing an EA in late 2012 to disclose any environmental impacts with the project. While it is unknown what the EA will find, it is likely that there would be impacts associated with increased air emissions and fuel consumption for the construction and operation of the enhanced facility.

Cleveland Innerbelt Plan

The Federal Highway Administration (FHWA) and the Ohio Department of Transportation (ODOT) as joint lead agencies are proposing the major rehabilitation and reconstruction of the Cleveland Innerbelt Freeway system infrastructure to address operational, design, safety, and access shortcomings that severely impact the Freeway's ability to function in an acceptable manner. The Innerbelt Freeway system provides for the collection and distribution of traffic between the radial freeway system (I-71, I-90, I-77, SR 2, I-490, and SR 176) and the local street system, and it also moves traffic between each of the radial freeways, within the City of Cleveland Central Business District (CBD) area.

One portion of this project is located adjacent to the Airport and is anticipated to occur between the years 2022 - 2027. A Final EIS and Record of Decision were prepared for the project. The following was stated in the Final EIS regarding potential impacts to the Airport.

During project development, ODOT and FHWA have coordinated with the City of Cleveland Airport System regarding impacts to BKL. In addition, coordination has been conducted with the FAA under FAA Order 5000.3C. The project has been in development since 1999, including coordination with City of Cleveland officials. The Cleveland Airport System developed a proposed Master Plan that did not take into consideration the proposed project. Therefore, the project is not consistent with the proposed Master Plan, which has not yet been approved. There would be only minor impacts on airport property and no impacts on facilities. In their comments on the Draft EIS (DEIS), the Airport identified several concerns that are summarized as follows.

The primary concern appears to be impacts to property intended for economic development to produce a revenue stream for the Airport. The Airport expressed concerns with the uncertainty of the compensation that will be provided for that property, as well as the economic viability of the remainder of the development area on their property. Property impacts will be better quantified during detailed design, with compensation issues resolved during right-of-way acquisition as they would be for any impacted land owner, as required by the Federal Real Property Acquisition and Uniform Relocation Act. In addition, any property acquisition will require FAA approval in the form of a land release. This land release will require a revision to the Airport Layout Plan (ALP).

The Airport would prefer a design option that would reconfigure the State Route 2 interchange adjacent to the airport, which is the first interchange west of the Innerbelt Curve and services South Marginal Road. This option would allow the Airport to reclaim property. This option was considered and dismissed. It was determined that reconfiguration of this nearby interchange was beyond the scope of the current action and would need to be considered as an independent project, rather than as mitigation.

The Airport also expressed concerns related to operational impacts on the aircraft hold pad adjacent to the project. They noted the need for a blast fence to protect vehicles on the North Marginal Road from jet blast on the hold pad. ODOT acknowledges the need for design and construction of a blast fence. These costs are eligible cost of the project as mitigation. FAA, in their comments on the DEIS, acknowledged the need for continuing coordination with the Airport to resolve these concerns. FAA comments on the DEIS also noted the requirement for an FAA land release for acquired property, the need for a revision to the ALP, and the requirement to file notice prior to construction near the airport (per 14 CFR Part 77). ODOT acknowledges the need for an FAA land release, required studies by FAA, and the timeline that may be required for that effort. Based upon the anticipated construction schedule for that portion of the project, ample time is available to resolve right-of-way acquisition issues. If laws and regulations should change prior to implementation of the project in this area, ODOT and FHWA will comply with such rules.

In terms of environmental impacts, the Final EIS found the following regarding the project:

- Hazardous materials at 23 properties
- Increased air and noise emissions during construction
- Historic/Section 4(f) impacts to Broadway Mills, Marathon Gas Station, Distribution Terminal Warehouse

5.6 CONSISTENCY WITH APPROVED PLANS OR LAWS

The Proposed Action would be consistent with environmental plans, laws, or administrative determinations relating to the environment of Federal, state, regional, or local agencies.

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