MOBILE DOWNTOWN AIRPORT TERMINAL DEVELOPMENT PROGRAM

Environmental Assessment

July 2021

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Acronyms and Abbreviations

Acronym	Definition
ACAMP	Alabama Coastal Area Management Program
ACEIT	Airport Construction Emissions Inventory Tool
ADCNR	Alabama Department of Conservation and Natural Resources
ADEM	Alabama Department of Environmental Management
AEDT	Aviation Environmental Design Tool
Aeroplex	Mobile Aeroplex at Brookley
ALNHP	Alabama Natural Heritage Program
ALP	Airport Layout Plan
APE	Area of Potential Effects
APU	Auxiliary Power Unit
BCC	Birds of Conservation Concern
BFM	Mobile Downtown Airport
BGEPA	Bald and Golden Eagle Protection Act
BMP	Best Management Practice
CEQ	Council on Environmental Quality
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
CH4	Methane
CO	Carbon Monoxide
CO_2	Carbon Dioxide
CWA	Clean Water Act
CZMA	Coastal Zone Management Act
dB	Decibel
dBA	A-weighted Decibel
DNL	Day/Night Average Sound Level
EA	Environmental Assessment
ECOS	Environmental Conservation Online System
EFH	Essential Fish Habitat
EO	Executive Order
FAA	Federal Aviation Administration
GHG	Greenhouse Gas
GSE	Ground Service Equipment
HAP	Hazardous Air Pollutant
HFC	Hydrofluorocarbon

Acronym	Definition
I-	Interstate
IPaC	Information for Planning and Consultation
MAA	Mobile Airport Authority
MBNEP	Mobile Bay National Estuary Program
MBTA	Migratory Bird Treaty Act
MOVES	Motor Vehicle Emissions Simulator
MOB	Mobile Regional Airport
MSFCMA	Magnuson-Stevens Fishery Conservation and Management Act
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act of 1969
NHPA	National Historic Preservation Act
NO_2	Nitrogen Dioxide
N_2O	Nitrous Oxide
NOAA	National Oceanic and Atmospheric Administration
NPDES	National Pollution Discharge Elimination System
NRCS	Natural Resource Conservation Service
NRHP	National Register of Historic Places
NWI	National Wetlands Inventory
O_3	Ozone
OSW	Other Surface Waters
PAL	Planning Activity Level
PFC	Perfluorocarbons
$PM_{2.5}$	Particulate matter less than or equal to 2.5 microns in diameter
PM_{10}	Particulate matter less than or equal to 10 microns in diameter
RCRA	Resource Conservation and Recovery Act
RPZ	Runway Protection Zone
SAF	Sustainable Aviation Fuel
SF_6	Sulfur Hexafluoride
SFH	Suitable Foraging Habitat
SHPO	State Historic Preservation Office
SO_2	Sulfur Dioxide
SPCC	Spill Prevention, Control, and Countermeasure
SW	Surface Waters
T1T	Interim Terminal
TAF	Terminal Area Forecast
TNC	The Nature Conservancy

Acronym	Definition
USACE	U.S. Army Corps of Engineers
U.S.C.	United States Code
USDA	U.S. Department of Agriculture
USDOT	U.S. Department of Transportation
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
VOC	Volatile Organic Compounds

1 INTRODUCTION AND BACKGROUND

This Environmental Assessment (EA), required by the National Environmental Policy Act of 1969 (NEPA), as amended (40 Code of Federal Regulations [CFR] 1500-150 8) and prepared in accordance with Federal Aviation Administration (FAA) Orders 1050.1F, Environmental Impacts: Policies and Procedures and 5050.4B, National Environmental Policy Act (NEPA) Implementing Instructions for Airport Actions, analyzes the potential environmental effects of a Proposed Action involving the construction and operation of a new commercial service passenger terminal at Mobile Downtown Airport (referred to as "BFM") (U.S.C. 4321, 1969). The EA is required under NEPA because the Proposed Action does not fall within the scope of a Categorical Exclusion.

1.1 BACKGROUND

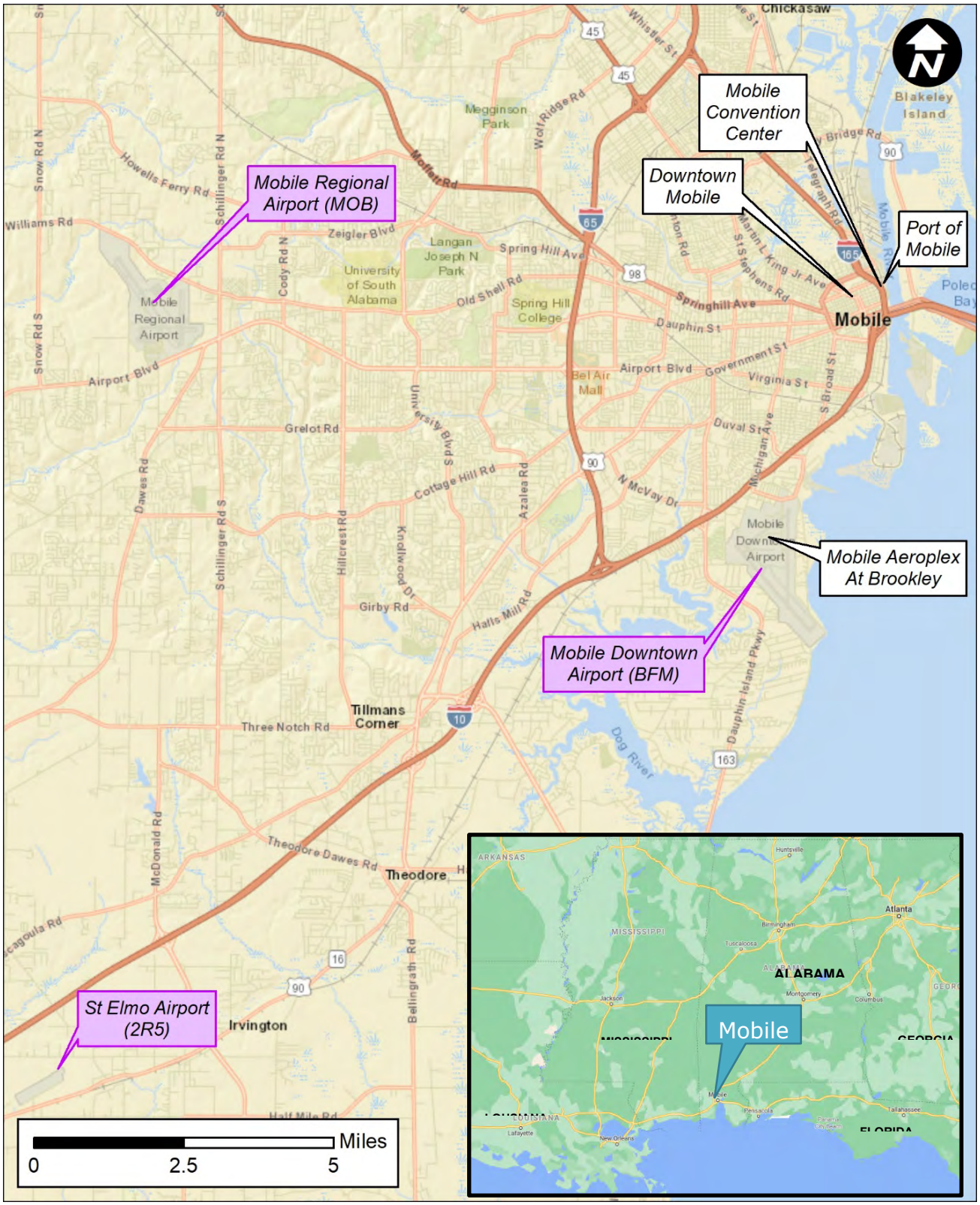
In 1982, an act of the Alabama Legislature formally created an independent Mobile Airport Authority (MAA or Authority) to own and operate Mobile Regional Airport (referred to as "MOB"), BFM, and the Brookley Complex, renamed the Mobile Aeroplex at Brookley ("Aeroplex") in 2011. In May 2020, MAA entered into an agreement with the State of Alabama to manage the operations at the St. Elmo Airport (general aviation) in Mobile County, west of Mobile (see Exhibit 1-1).

MAA owns and operates two airports in Mobile. BFM is located 4 miles south of the city's downtown, and MOB is located approximately 11 miles west of the city's downtown. MOB currently serves as the primary commercial passenger airport within Mobile. In 2018, MOB served approximately 300,000 enplaned passengers along with a small number of commercial, general aviation, and military operations. During the same period, BFM did not have any enplaned passengers, but did serve a similar number of commercial, general aviation, cargo, and military operations. In May 2019, the T1T Terminal opened at BFM to house a low-cost carrier which carried passengers until air carrier operations were ceased in mid-2020. In early 2018, the Authority commissioned a study to assess the feasibility of relocating commercial passenger service from MOB to BFM to better serve Mobile and growing regional demand. The study, published in June 2018, concluded that relocation of the commercial service to BFM, located only 5 miles southwest of downtown Mobile, would better serve the regional passenger demand and recapture demand that had been lost to other area airports over the years.

BFM is generally bounded by Interstate 10 (I-10) on the northwest, State Route 163 to the southeast and Mobile Bay to the east. According to the December 31, 2020 FAA Airport Master Record the Airport occupies 1,616 acres and has two runways: Runway 14/32 (9,618 feet x 150 feet) and Runway 18/36 (7,800 feet x 150 feet) (see Exhibit 1-2).

The 2018 study prompted the Authority's decision to repurpose an existing building to be used as an interim terminal (T1T) building at BFM to further test the viability of the commercial service relocation. On May 1, 2019, the T1T Terminal opened with Frontier Airlines providing service between Mobile, Chicago and Denver. The existing 20,000 square foot, two-gate T1T Terminal serves as the current passenger handling facility with two ground level aircraft gates. While Frontier ended the service in April 2020 to relocate their equipment to larger markets, they demonstrated successful commercial service operations at BFM. The status of BFM was changed to a Class I Part 139 Certified Airport as part of the actions undertaken to support scheduled service of large aircraft. MAA has continued to work with multiple air carriers regarding reestablishment of commercial service at the T1T terminal.

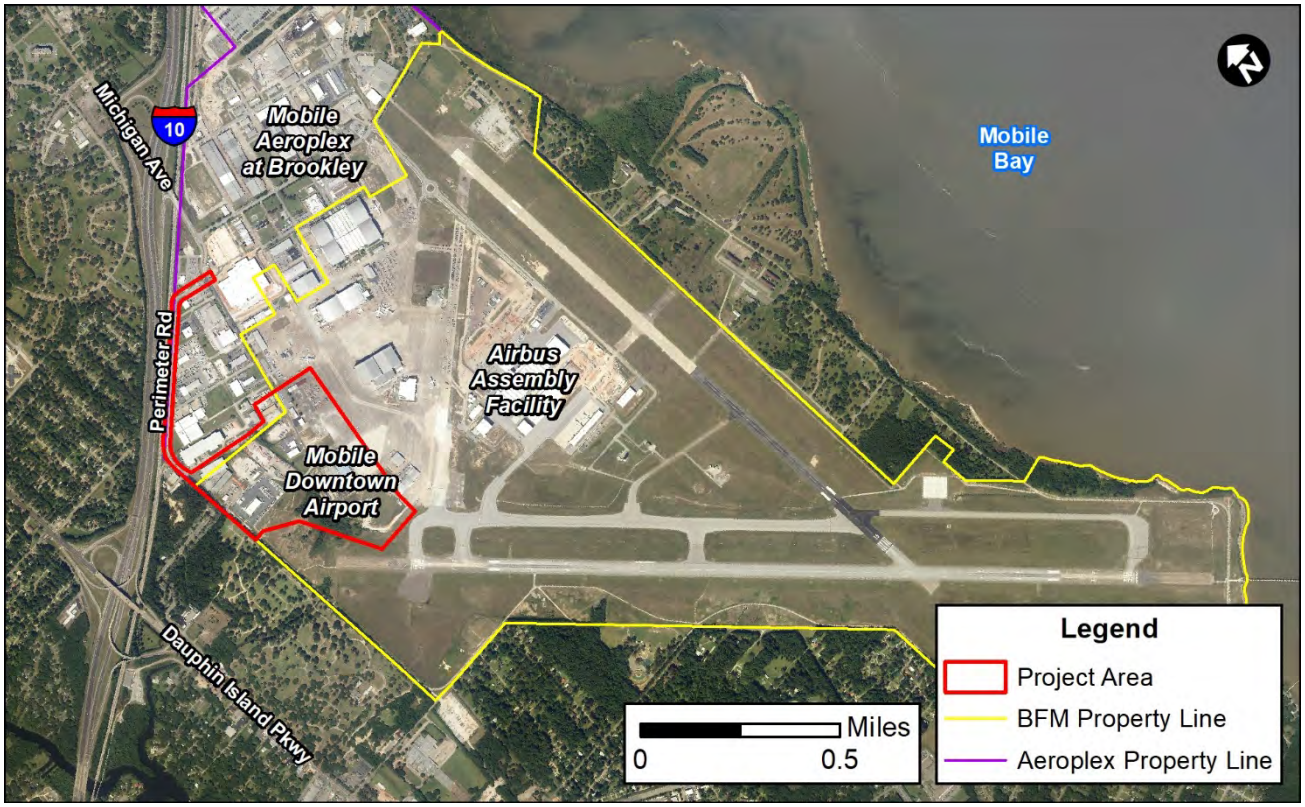
Exhibit 1-1: MAA Airports



In January 2019, MAA initiated preparation of an updated Airport Master Plan (BFM Master Plan) to define the 20-year program for BFM. The central element of the BFM Master Plan is the definition of the Terminal Development Program which would enable relocation of the commercial service to the Airport. The BFM Master Plan and companion Airport Layout Plan (ALP) include the program elements associated with the Terminal Development Program that is it the subject of this EA. Specifically, this EA includes the terminal elements associated with Planning Activity Level (PAL) 1 and PAL 2.

Per the October 2020 Master Plan, the PAL 1 and PAL 2 forecast defined the need to handle 588,250 Enplaned Passengers supported by 26,180 Commercial Aircraft Operations. The significant increase in forecast reflects a combination of the forecasted passengers and aircraft operations for MOB plus a forecast of "leakage recapture" associated with Mobile region passenger demand lost to other regional airports due to the proximity of MOB versus BFM to the center of the passenger demand and the direct accessibility of BFM to I-10 that traverses the passenger catchment area. This "recaptured leakage" represents the difference between Master Plan forecast and the FAA Terminal Area Forecast (TAF) forecast, solely based on growth at MOB.

Exhibit 1-2: BFM – Project Area



1.2 DESCRIPTION OF THE PROPOSED ACTION

The Proposed Action consists of the development and operation of a commercial service passenger terminal and associated infrastructure at BFM. The proposed site is generally located on previously developed land east of the western Airport Perimeter Road and north of the existing T1T Terminal. Exhibit 1-3 shows the proposed projects to be undertaken during the Planning Activity Levels 1 and 2 (PAL 1 & 2) timelines at the BFM.

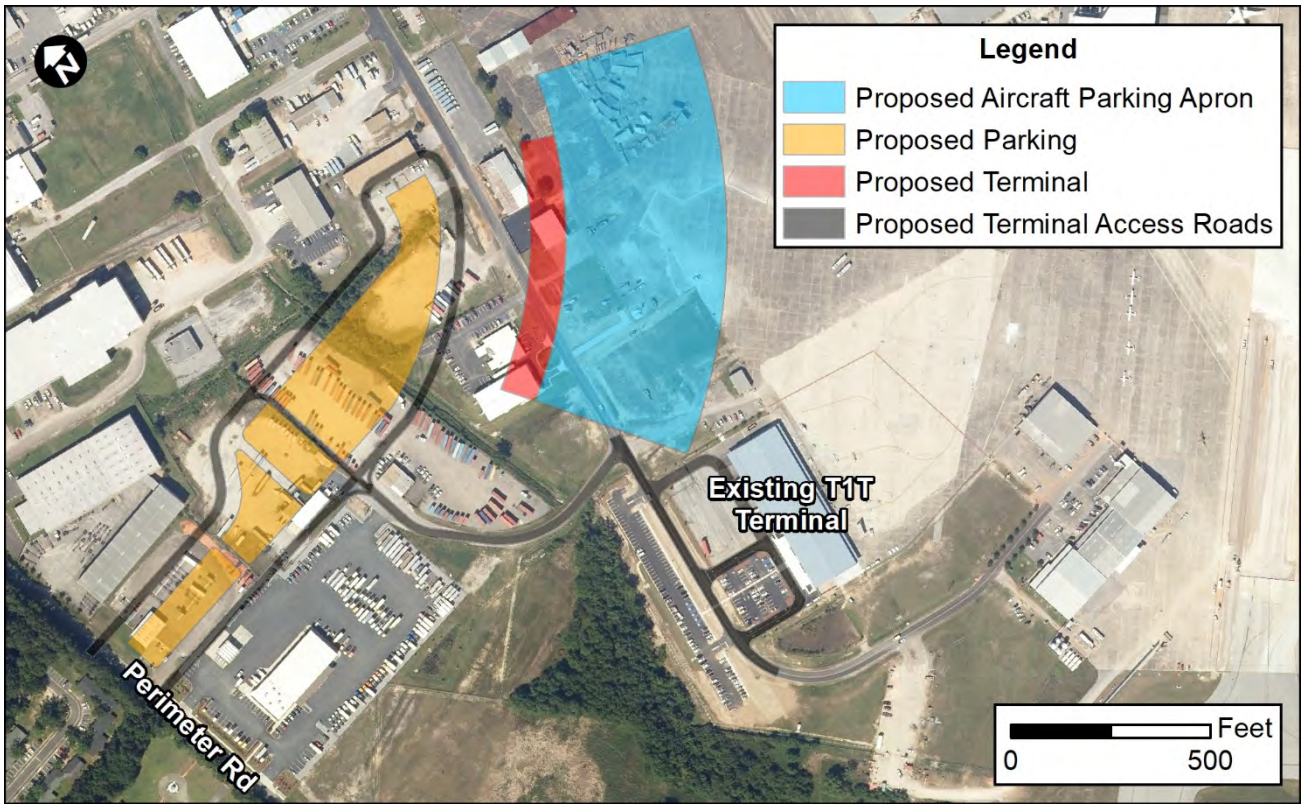
The Proposed Action includes the following major elements:

- Up to a 6-gate, 133,500 square foot commercial service passenger terminal with associated support facilities and infrastructure.
- Up to approximately 35,500 square yards of new concrete aircraft parking apron.
- Up to 12 acres of paved vehicle parking lots.
- Up to a 5-level (240,500 square foot per floor) parking garage with up to a 5.5-acre footprint (contained within the 12 acres of parking lots).
- New terminal access loop road and access road to the existing T1T Terminal from Perimeter Road.

The following connected actions are supporting or enabling elements to the Proposed Action:

- Reconstruction of up to approximately 134,500 square yards of existing concrete apron pavement and 31,500 square yards of apron taxilane.
- Relocation of existing tenants in the terminal building site and demolition of the vacated buildings.
- Conversion of the existing Penske truck operations facility into other transportation uses, such as a rental car facility.
- Improvement of the existing Perimeter Road from Michigan Avenue to the terminal access loop road.
- Installation of new 15,000-and 12,000-gallon Jet A tank at existing fuel farm.
- Installation of utilities to the new terminal building and relocation of affected utilities to existing building to remain in place.
- Replacement and reconfiguration of the airport drainage infrastructure, including enclosing a section of Rabby Creek.
- Construction of ground service equipment (GSE) maintenance area (5,000 square feet plus apron).

Exhibit 1-3: Proposed Action BFM Terminal Development Program



1.3 DOCUMENT CONTENT AND ORGANIZATION

This document is organized as follows:

- Chapter 2 describes the purpose and need for the Proposed Action
- Chapter 3 describes alternatives to the Proposed Action
- Chapter 4 describes the affected environment, potential environmental consequences, and potential mitigation, avoidance, and minimization measures
- Chapter 5 describes the public involvement that was completed as part of the EA
- Chapter 6 provides a list of those responsible for preparing the EA
- Chapter 7 provides a list of agencies and persons consulted in preparation of the EA
- The appendices provide a list of references used in the preparation of the EA, correspondence with agencies, public outreach materials, and additional technical details.

An EA is a disclosure document prepared for the Federal agency (in this case the FAA) responsible for approving a proposed Federal or Federally funded action, in compliance with the requirements set forth by the Council on Environmental Quality (CEQ) in its regulations implementing NEPA. The purpose of this EA is to investigate, analyze, and disclose the potential impacts of the Proposed Action and its reasonable alternatives. In this case, the FAA is responsible for reviewing and approving actions that pertain to airports and their operation. As such, this EA has been prepared in accordance with FAA Orders 1050.1F and 5050.4B, and consideration to guidance included in the *FAA Environmental Desk Reference for Airport Actions* (FAA 2007).

This EA was also prepared pursuant to other laws relating to the quality of the natural and human environments, including:

- The Department of Transportation (USDOT) Act, 49 United States Code (U.S.C.), § 303
- 49 U.S.C., §40114, as amended
- 49 U.S.C., §§47101, et seq.
- Executive Order 11990, Protection of Wetlands
- Executive Order 11988, Floodplain Management
- Executive Order 11593, Protection and Enhancement of the Cultural Environment
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations
- Federal Aviation Act of 1958 recodified as 49 U.S.C. §§40101, et seq.
- The Airport and Airway Improvement Act of 1982, 49 U.S.C. §47108, as amended
- National Historic Preservation Act (NHPA), 16 U.S.C. §470(f), as amended
- 36 CFR Part 800, Advisory Council on Historic Preservation
- Archaeological and Historic Preservation Act, 16 U.S.C. §469(a)
- Archaeological Resource Protection Act, 16 U.S.C. §470(aa)
- Farmland Protection Policy Act, 7 U.S.C. §73, and implementing regulations at 7 CFR §658
- Clean Air Act, 42 U.S.C. §§7401, et seq., and implementing regulations at 40 CFR. Parts 51 and 93
- Clean Water Act (CWA), 33 U.S.C. §§121, et seq., and implementing regulations at 33 CFR
- §§325 and 33 CFR §336
- 33 CFR Parts 320-330, Regulatory Programs of the Corps of Engineers
- Endangered Species Act, 16 U.S.C. §661, et seq., as amended
- Coastal Zone Management Act (CZMA) 16 U.S.C. §§ 1451-1466
- Other laws, regulations, and policies as applicable

Notice about the subject project was published in the Mobile Press-Register. Copies of this document were viewed at the Mobile Airport Authority Office at 1891 9th St, Mobile, AL, the FAA's Jackson Airports District Office, and online at https://www.mobileairportauthority.com/public-notices/.

2 PURPOSE AND NEED

The MAA, in coordination with the City of Mobile and through outreach with the larger Mobile community, has identified needs based on the desires of these participants to move commercial air passenger service from MOB in west Mobile to BFM.

2.1 PURPOSE AND NEED

The *purpose* of this project is to construct a commercial air passenger service terminal at BFM, ultimately relocating all commercial and passenger airline service from MOB to BFM to be consistent with the MAA's Master Plan vision, which is to establish BFM as the airport of choice in the Mobile region.

The *need* for the project is that the existing operation at MOB creates a competitive disadvantage based on location and related access issues, which have contributed to passenger leakage to other regional facilities. The current MOB location also limits opportunities for economic growth through partnerships with the Aeroplex due to the distance between the Aeroplex and MOB. Locating the commercial service passenger terminal at BFM provides a centralized location, readily accessible to the regional airline passenger demand, and convenient to business and professional demand located in and near downtown Mobile.

Passenger and commercial operations would be transferred from MOB to BFM by 2025, with growth from 300,000 to 525,000 enplaned passengers (2018 to 2025) at BFM anticipated as a result of this shift. To meet the requirements of the new terminal building at BFM, the following needs have been identified at BFM:

- Up to 6 aircraft parking gates
- Up to 12 acres of additional surface parking
- Improved access to the passenger terminal building
- A rental car facility
- Associated fuel storage, utility infrastructure, drainage infrastructure, and maintenance areas
- Expansion of the terminal apron

The development of the new terminal building would require sufficient on-airport land areas that could be co-located with existing and future air and surface transportation infrastructure. No existing facilities at BFM, including the T1T Terminal, meet the needs of the passenger operations that are proposed to be added to the Airport. Therefore, there is a critical need for the particular location and size for the terminal building and supporting upgrades to meet the MAA's needs for passenger and commercial operations at BFM.

In addition to the purpose and need of the MAA, the FAA also has specific purpose and needs to fulfill federal requirements as set forth under 49 U.S.C. § 47101. FAA approval of the Proposed Action, and the subsequent FAA decisions related to issuing the approvals for the construction and operation of the passenger terminal and supporting upgrades, would fulfill the agency's obligations and support United States national policy pursuant to 49 U.S.C. § 47101(a) and 49 U.S.C § 40101(b).

2.2 IMPLEMENTATION PHASING

The passenger terminal would be operational by 2025, including 9 aircraft parking gates. As discussed in Section 1.2, the project includes construction of a 6-gate, 133,500 square foot commercial service passenger terminal; new aircraft parking apron; additional landside vehicle parking; improved access; and supporting fuel, utilities, maintenance, and other elements. The proposed new terminal is presently undergoing a Project Definition Study, which may recommend a smaller terminal footprint for opening day to account for market recovery in the local and national passenger market.

2.3 REQUIRED LAND USE / ENVIRONMENTAL PERMITS AND APPROVALS

Federal

- FAA approval of modification of the ALP

- Federal environmental approval pursuant to NEPA
- Section 404/401 permits under the CWA
- Section 7 permit under the Endangered Species Act

State

- National Pollution Discharge Elimination Systems Permits (NPDES) administered by the Alabama Department of Environmental Management (ADEM)

Local

- City of Mobile building permits
- Stormwater
- Airport buffer zone

3 ALTERNATIVES

The CEQ regulations implementing NEPA require that the Federal decision-makers perform the following tasks when preparing an EA:

- Evaluate all reasonable alternatives, including alternatives not within the jurisdiction of the Federal agency, and for alternatives which were eliminated from detailed study; briefly discuss the reasons that any alternatives that were eliminated.
- Devote substantial treatment to each alternative considered in detail, including the No Action Alternative and the Proposed Action, so that reviewers may evaluate their comparative merits.

This section describes the Proposed Action and alternatives to the Proposed Action, including the No Action Alternative, and evaluates the ability of each to meet the purpose and need described in Chapter Two, Purpose and Need. The Proposed Action, described in Section 1.2 of this EA, would fulfill the purpose and need for the project. The No Action Alternative would not meet the purpose and need; however, it is analyzed in the EA pursuant to the requirements of the CEQ, FAA Orders 1050.1F, 5050.4B, and NEPA.

Federal and state guidelines concerning the environmental review process require that all prudent, feasible, reasonable, and practicable alternatives that might accomplish the objectives of a project be identified and evaluated. Federal agencies may consider the applicant's purposes and needs and common sense realities of a given situation in the development of alternatives (CEQ, 1983). Federal agencies may also afford substantial weight to the alternative preferred by the applicant, provided there is no substantially superior alternative from an environmental standpoint.

3.1 DEVELOPMENT ALTERNATIVE SITES CONSIDERED FOR FURTHER ENVIRONMENTAL REVIEW

Various development alternative sites for the commercial air passenger service terminal were considered for further environmental review. If the development alternative site did not meet the stated needs described in Section 2.1, the site was eliminated from further detailed environmental review. The following summarizes the development options that were thoroughly considered as alternatives to the Proposed Action at BFM.

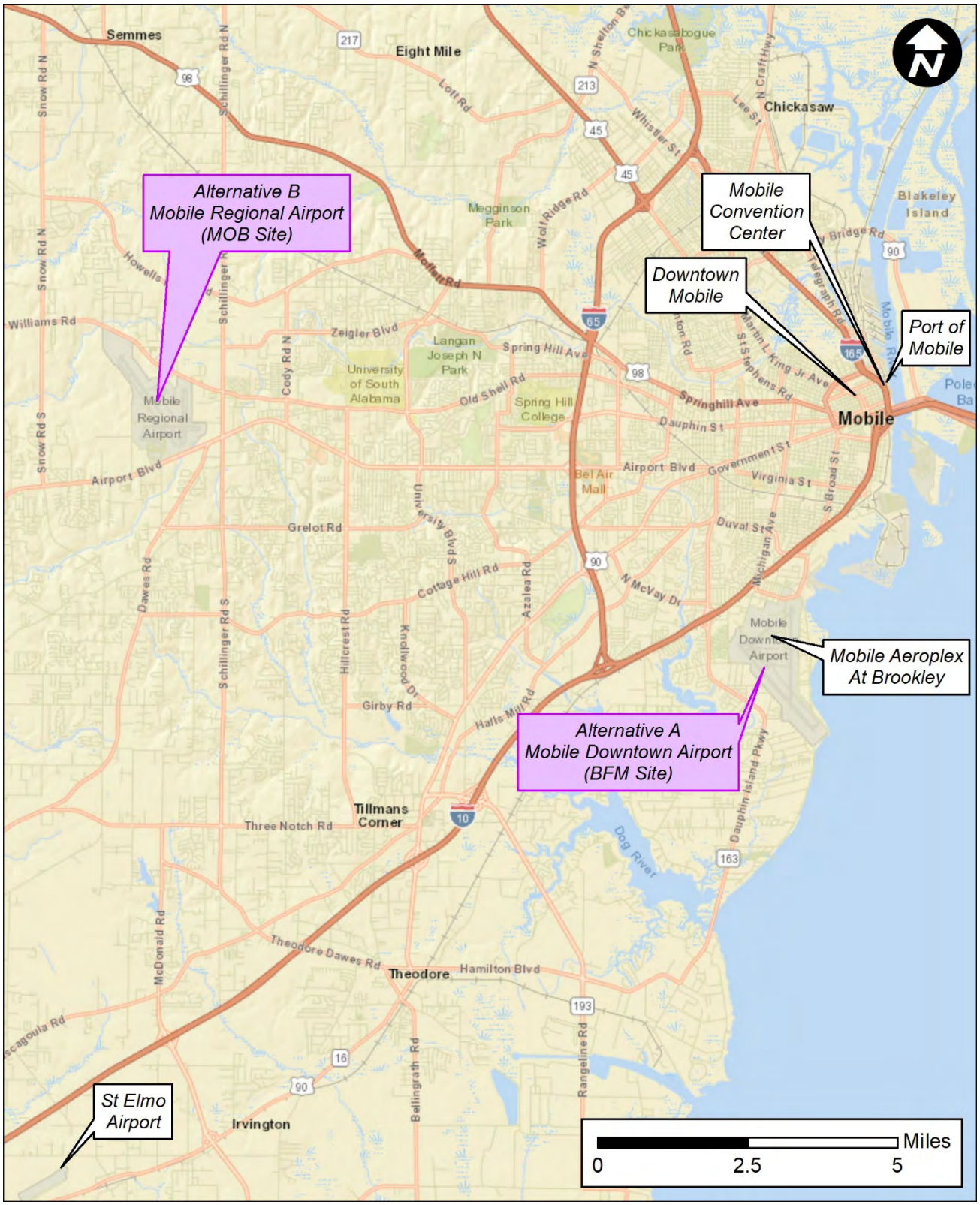
A multi-step evaluation process took place for this EA to evaluate the various development alternative site locations. The alternatives were evaluated against the following pass or fail criteria, which are drawn from the needs presented in Section 2.1:

- **Does the alternative site reduce travel time to the air passenger terminal?** Sites were evaluated based on the travel time from downtown Mobile to the site, compared with the existing travel time to MOB (approximately 35 minutes based on non-congested travel time using Google Maps). The downtown Mobile area was chosen for this evaluation criteria due to the high concentration of potential travelers to/from this area, including the businesses in the Central Business District, the Port of Mobile (where cruise ships dock), and the downtown convention center.
- **Does the alternative site provide access to major transportation corridors?** Sites were evaluated based on their proximity and access to the surrounding interstate roadway system. This is important for passenger and cargo transportation.
- **Does the alternative site allow for expansion of existing facilities?** MAA has identified the need to have additional land in the future as passenger operations expand. Sites were evaluated based on the size of the site and the potential for expansion on the site.
- **Does the alternative site allow for improved interface with the Mobile Aeroplex at Brookley?** MAA's Master Plan envisions the Mobile airport(s) to become a regional economic catalyst. Notable development has occurred at Aeroplex in the past 10 years, including Airbus's first U.S.-based manufacturing facility. Together with the airport(s), the Aeroplex is anticipated to continue to

contribute to Mobile serving as an aviation center of significance for the region.

Two development sites were evaluated, both of which are currently owned by MAA. The following discussion documents the sites that were analyzed in the alternatives analysis and the recommendation of the alternative for further detailed environmental review in this EA. The two alternative sites evaluated are shown on Exhibit 3-1. A summary of the alternatives analysis conducted as a part of this EA process is provided at the end of this section in Table 3-1. Each alternative site is included in the table along with a determination if the alternative would be carried forward for further environmental analysis.

Exhibit 3-1: Alternative Sites



3.2 ALTERNATIVE A (BFM SITE)

Alternative A would move passenger and commercial air operations from MOB to the BFM site.

- Does the alternative site reduce travel time to the air passenger terminal?
    - Yes, Alternative A would reduce travel time from downtown Mobile to the air passenger terminal, from an existing average of 35 minutes to an average of 10 minutes. This is due to both the shorter distance (5.2 miles vs. an existing 13.3 miles) and the predominant use of an interstate.
- Does the alternative site provide access to major transportation corridors?
    - Yes, the Alternative A site is less than 1 mile from an interstate (I-10).
- Does the alternative site allow for expansion of existing facilities?
    - Yes, the Alternative A site would allow for further development, as described in the Master Plan.
- Does the alternative site allow for improved interface with the Mobile Aeroplex at Brookley?
    - Yes, the Alternative A site is adjacent to the Aeroplex.

Conclusion: Alternative A would provide direct access to I-10 and would reduce travel time to the air passenger terminal. The site allows for future expansion, and also provides for improved interface with the Aeroplex.

3.3 ALTERNATIVE B (MOB SITE)

Alternative B would expand operations at the existing MOB site to accommodate future expansion of passenger and commercial air operations.

- Does the alternative site reduce travel time to the air passenger terminal?
    - No, Alternative B would not change travel time from downtown Mobile to the air passenger terminal. With development in Mobile anticipated to continue to grow, travel times on the existing routes to MOB would stay the same or worsen.
- Does the alternative site provide access to major transportation corridors?
    - No, the Alternative B site is 8 miles from the nearest major transportation corridor (I-65). From downtown Mobile, the travel time in non-congested conditions is similar for the most direct route (13.3 miles via US 90 and Airport Boulevard), a southern route (18.4 miles via I-10, I-65, and Airport Boulevard), and a northern route (19.6 miles via I-165, I-65, and Airport Boulevard).
- Does the alternative site allow for expansion of existing facilities?
    - Yes, Alternative B would allow expansion of existing facilities on the existing MOB property.
- Does the alternative site allow for improved interface with the Mobile Aeroplex at Brookley?
    - No, the Alternative B site is approximately 15 miles from the Aeroplex.

Conclusion: Alternative B would not reduce travel time or improve access to major transportation corridors. It would allow for future expansion, but does not provide for improved interface with the Aeroplex.

3.4 NO ACTION ALTERNATIVE

The No Action Alternative would use existing passenger facilities at MOB, but would not expand operations at the existing MOB site to accommodate future expansion of passenger and commercial air operations.

- Does the alternative site reduce travel time to the air passenger terminal?

  - No, the No Action Alternative would not change travel time from downtown Mobile to the air passenger terminal. With development in Mobile anticipated to continue to grow, travel times on the existing routes to MOB would stay the same or worsen.

- Does the alternative site provide access to major transportation corridors?
  - No, the No Action Alternative site is 8 miles from the nearest major transportation corridor (I-65). From downtown Mobile, the travel time in non-congested conditions is similar for the most direct route (13.3 miles via US 90 and Airport Boulevard), a southern route (18.4 miles via I-10, I-65, and Airport Boulevard), and a northern route (19.6 miles via I-165, I-65, and Airport Boulevard).
- Does the alternative site allow for expansion of existing facilities?
  - No, the No Action Alternative would not include expansion of existing facilities on the existing MOB property.
- Does the alternative site allow for improved interface with the Mobile Aeroplex at Brookley?
  - No, the No Action Alternative site is approximately 15 miles from the Aeroplex.

Conclusion: The No Action Alternative would not reduce travel time or improve access to major transportation corridors. It would not allow for future expansion, nor does it provide for improved interface with the Aeroplex.

3.5 SUMMARY OF ALTERNATIVES

Table 3-1 provides a summary of the alternatives analysis conducted as part of this EA process. The elements of each alternative are described in the table along with a determination if the alternative would be carried forward for further environmental analysis. The alternatives are shown on Exhibit 3-2.

Table 3-1: Development Alternatives Analysis Summary

Alternative	Meet the Screening Criteria?				Carried Forward for Detailed Environmental Review?
	Reduce travel time	Access to major transportation corridors	Allow for expansion	Improve interface with Aeroplex	
A (BFM site)	Yes	Yes	Yes	Yes	Yes
B (MOB site)	No	No	Yes	No	No
No Action	No	No	No	No	No

Exhibit 3-2: Project Alternatives

3.6 ALTERNATIVES CONSIDERED BUT DISMISSED FROM DETAILED ENVIRONMENTAL REVIEW

As a result of the evaluation described above, Alternative B was not carried forward for further evaluation. It does not meet the screening criteria and does not address the project's needs.

In addition, an option to create a limited access roadway from I-65 or I-10 to MOB was considered as part of the Metropolitan Airport System Feasibility Study (2018). A route from any of the interstates would be between approximately 6 and 10 miles long and was determined to be prohibitively expensive. Therefore, this option was not carried forward for detailed environmental review.

Once the BFM property was chosen, several alternative sites and layouts were considered for the proposed passenger terminal and adjacent roads as described in Technical Memorandum No. 4 – Alternatives in the BFM Master Plan (MAA 2021). Through evaluation of concepts with MAA and Advisory Committees, the terminal site and layout shown as Alternative A was recommended as the preferred alternative. Alternatives carried forward are shown on Exhibit 3-2.

3.7 ALTERNATIVES CARRIED FORWARD FOR DETAILED ENVIRONMENTAL REVIEW

As a result of the evaluations previously described, the only development alternative carried forward for further evaluation is the Proposed Action (Alternative A), shown on Exhibit 3-2. As discussed previously, the No Action Alternative will also be carried forward as required by FAA Orders 1050.1F, 5050.4B, and NEPA.

3.7.1 Alternative A (Proposed Action)

Construct a commercial service passenger terminal with associated support facilities and infrastructure, including demolishing vacated buildings

The Proposed Action includes construction of a new up to 133,500 square foot passenger terminal with up to six aircraft gates. It is envisioned that current tenants of the existing T1T Terminal building would be relocated to the new terminal. All commercial flights would ultimately be relocated to the new passenger terminal complex in phases, and the T1T Terminal building would eventually be converted to other uses such as maintenance or belly cargo facility. While the configuration of the terminal building is still under final planning and design, a demand-based set of facility requirements were defined in the October 2020 Master Plan, based on the forecasted passenger volumes and aircraft operations.

The Proposed Action includes installation of new 15,000- and 12,000-gallon Jet A tanks at the existing fuel farm; installation of new utilities to the new terminal building and relocation of existing utilities that would serve existing buildings near the new terminal; replacement and reconfiguration of airport drainage infrastructure, including enclosing a section of Rabby Creek; and construction of the GSE maintenance area (approximately 5,000 square feet plus apron). The existing wash rack would be relocated as part of the Proposed Action, and the existing Penske truck operations facility may be utilized for different transportation uses (such as a rental car facility) that are closely aligned with existing uses.

Expand the existing apron

The Proposed Action includes expansion of the apron area. This includes the construction of up to an approximately 35,500-square yard concrete aircraft parking apron, reconstruction of up to approximately 134,500 square yards of existing concrete apron pavement, and reconstruction of up to approximately 31,500 square yards of concrete apron taxilanes. This apron area would serve the new passenger terminal, the fixed base operator, overhaul and repair facility, and cargo providers.

Construct paved employee and visitor vehicle parking garage/lots

The Proposed Action includes construction of up to approximately 12 acres of employee and visitor parking areas in addition to rental car ready/return parking lots and vehicle circulation areas for access to the terminal curbside and parking areas. These areas would include space for commercial vehicles delivering goods and

products to the terminal and space for rental car Quick Turn-Around facilities. This would be comprised of up to a 5-level parking garage (with up to a 5.5-acre footprint and 240,500 square feet per floor), with the rest as surface parking. The surface parking lot would be located between the terminal loop roads defined below to enable access from either road.

Construct a new terminal access loop road and access road to the existing T1T Terminal, and improve the existing Perimeter Road from Michigan Avenue to the new terminal access loop road

The Proposed Action includes construction of new access roads to the new commercial passenger terminal and the existing T1T Terminal. The loop roads would be connected to the existing Perimeter Road that would be improved to handle the new volume of traffic associated with the collective terminals. The T1T Terminal is currently accessed from Michigan Avenue, which would be truncated to enable implementation of the Terminal Development Program.

Perimeter Road, running along the west and northwest edge of the airport property, is intended to be used for access to the terminals. A new dedicated two-lane loop road would be connected to Perimeter Road to provide access to the T1T Terminal that would continue to support commercial passenger service at BFM during construction of the new terminal facilities. This road would also maintain access to the current fixed base operator that is accessed via Michigan Avenue.

A second dedicated four-lane loop road would be constructed as part of the terminal development program to provide access to the new terminal frontage road, parking lots and the parking garage. The T1T Terminal and new terminal loop roads would provide access to the rental car center to be located between the roads.

3.7.2 No Action Alternative

Under the No Action Alternative, no development not already approved by the FAA for NEPA purposes would occur and there would not be physical impacts to any environmental resources. Because there would be no development, this alternative would not address any of the purpose and need criteria. Therefore, it is not an alternative that meets the purpose and need. However, a No Action Alternative must be included in the evaluation of environmental impacts pursuant to CEQ Regulation 40 CFR 1502.14(d). The purpose of the No Action is to serve as a baseline against which impacts from the other alternatives are assessed for significance.

In order to define the No Action Alternative for this EA, it is important to understand if it is feasible for the Airport to meet the forecasted activity and, if so, with what inefficiencies. This is done by: (1) identifying facilities that could be used to meet the forecasted activity, (2) identifying operational measures that may be implemented due to the lack of new facilities, and (3) identifying the effect of the inherently inefficient operating environment. These are described below:

1. **Use of Facilities**—The existing passenger terminal at MOB could continue to be used for commercial air passenger operations in the Mobile region. However, this solution would not address the underlying issues that have restrained growth at MOB. The *Mobile Metropolitan Airport System Feasibility Study* (2018) found that MOB currently captures approximately 54% of the air passenger travel market. Drive time and cost are the primary factors in airport choice, followed by airport amenities, airline preference, and availability of nonstop routes. Although MOB is the closest airport for most passengers within the market area, there is notable leakage to the next three closest airports (Pensacola International Airport, Gulfport-Biloxi International Airport, and Louis Armstrong New Orleans International Airport). Continuing to operate air passenger services from MOB would not improve drive time, and existing goals to expand airline service, reduce passenger costs, and the desire to add nonstop routes would not be addressed. The No Action Alternative also would not provide future opportunities for growth through partnerships and proximity to commercial operations, cruise lines, the convention center, and industrial uses.
2. **Operational Measures**—Three legacy carriers currently provide passenger air service at MOB. The attractiveness for new carriers has historically been low due to the challenging roadway access and

relatively limited passenger travel. The opportunities to add routes and low-cost carriers in order to attract additional air passenger travel would also be limited due to the existing terminal size. Further, the costs to passengers would remain high due to the lack of flight options.

3. **Inefficiencies in the System**—Access to MOB is challenging, both due to the distance (11 miles from downtown Mobile) and because of the nature of the roads from downtown to MOB. Airport Boulevard, the east-west road connecting MOB with downtown Mobile, is heavily developed with frequent traffic signals, and congestion resulting in longer and less reliable travel times.

While the No Action Alternative described above would be feasible, it does not address the existing issues at MOB or provide for future potential growth of passenger service in the Mobile area. Based on the discussion above, it was determined that MOB could continue to provide air passenger operations, but there would be substantial challenges and inefficiencies.

Also, selection of the No Action Alternative would inhibit MAA's ability to grow its passenger service in conjunction with the Aeroplex, which would consequently affect the larger goal of increased economic growth in the region. However, as discussed above, the No Action Alternative is required by the CEQ to be evaluated in an EA. As such, this alternative will be carried forward in the EA, assuming air passenger operations would remain at MOB, and will be used as the baseline against which the Proposed Action will be evaluated.

4 AFFECTED ENVIRONMENT & ENVIRONMENTAL CONSEQUENCES

4.1 INTRODUCTION

This chapter provides a description of the affected environment and potential environmental consequences for the environmental impact categories that have the potential to be affected by the Proposed Action. The environmental impact categories assessed in this EA include the following:

- Air quality – Section 4.2
- Climate – Section 4.3
- Noise and noise-compatible land use – Section 4.4
- Visual effects – Section 4.5
- Cultural resources – Section 4.6
- U.S. Department of Transportation Act, Section 4(f) – Section 4.7
- Water resources – Section 4.8
- Biological resources – Section 4.9
- Coastal resources – Section 4.10
- Land use – Section 4.11
- Hazardous materials, solid waste, and pollution prevention – Section 4.12
- Natural resources and energy supply – Section 4.13
- Socioeconomics, environmental justice, and children's environmental health and safety risks – Section 4.14
- Cumulative Impacts – Section 4.15

The study area varies based on the environmental impact category being analyzed and is defined for each environmental impact category in this chapter. The level of detail provided in this chapter is commensurate with the importance of the potential impact on the environmental impact categories. The following environmental impact categories are not analyzed in detail for the reason stated:

- **Farmlands**. The project is located within an urbanized area as defined by the 2010 US Census, and thus is exempt from the Farmland Protection Policy Act.
- **Wild and Scenic Rivers**. There are no wild and scenic rivers protected by the Wild and Scenic Rivers Act located within the water resources study area. The nearest wild and scenic river is a segment of Black Creek, near Hattiesburg, Mississippi. The nearest river listed on the Nationwide Rivers Inventory is a segment of Chickasaw Creek north of Mobile, several miles from the project area. Therefore, the Proposed Action would not affect a wild and scenic river.

4.2 AIR QUALITY

4.2.1 Definition of Resource and Regulatory Setting

Air quality in a given location is described by the concentration of various pollutants in the atmosphere. A region's air quality is influenced by many factors including the type and amount of pollutants emitted into the atmosphere, the size and topography of the air basin, and the prevailing meteorological conditions.

The Clean Air Act, as amended, required U.S. Environmental Protection Agency (USEPA) to set National Ambient Air Quality Standards (NAAQS) for principal pollutants considered harmful to public health and the environment, including: ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), particulate matter less than or equal to 10 microns in diameter (coarse particulates or PM_{10}), particulate matter less than or equal to 2.5 microns in diameter (fine particulates or $PM_{2.5}$), and lead. Those areas where the NAAQS are not met are designated as "nonattainment" and would require a conformity determination as defined under 40 CFR §93.153(b).

In addition to the ambient air quality standards for criteria pollutants, national standards exist for hazardous air pollutants (HAPs), which are regulated under Section 112(b) of the 1990 Clean Air Act Amendments. The National Emission Standards for Hazardous Air Pollutants regulate HAP emissions from stationary sources (40 CFR Part 61 and 63). Because of the low levels of emissions of these pollutants in the ambient air below the mixing height (3,000 feet above ground level), HAPs are not quantified in this EA.

The ADEM monitors and maintains an annual emissions inventory, regulates mobile emissions sources, issues permits for the construction and operation of emissions sources, and ensures compliance with applicable regulations through conducting air inspections, reviewing reports, and pursuing enforcement. ADEM sets permit rules and standards for individual emissions sources based on the size of the emission units and type of pollutants emitted.

Air quality effects determinations are based on changes in emissions of regulated pollutants relative to existing conditions, and impacts are reviewed for significance in light of Federal air pollution standards and regulations. FAA Order 1050.1F states that significant air quality impacts would be demonstrated if the Proposed Action exceeded one or more of the NAAQS for any of the time periods analyzed or increased the frequency or severity of any such existing violations.

4.2.2 Resource Study Area

This analysis focuses on and provides a quantitative estimation of existing aviation operational emissions at BFM, projected emissions from construction activities, and emissions from future aircraft operational scenarios that may be induced by the Proposed Action. Because BFM is not located in a nonattainment or maintenance area for any criteria pollutant, a conformity determination is not necessary.

4.2.2.1 Construction

Construction emissions connected with the multiple construction projects associated with the Proposed Action were calculated using the Airport Construction Emissions Inventory Tool (ACEIT) (TRB, 2014; TRB, 2016) which contains construction emission factors from existing USEPA regulatory models, such as the Motor Vehicle Emissions Simulator (MOVES, revised January 2013) and NONROAD (July 2009), as well as emission factors for fugitive emissions (USEPA 2021). To calculate a construction emissions inventory, the user specifies certain high-level inputs, such as project site weather and project cost, and ACEIT uses a series of assumptions to generate lists of emissions sources (such as construction equipment and employee on-road automobiles) and associated usage factors. While ACEIT assumed construction vehicle activity levels can be revised and customized, ACEIT default activity levels were used for the BFM emissions inventory and are expected to be conservative of actual emissions related to the Proposed Action. ACEIT requires a project location, average temperature in summer (April-September as defined by ACEIT), average temperature in winter (October-March as defined by ACEIT), and maximum temperature variation in both seasons as inputs. The project location was specified as the County of Mobile, Alabama.

4.2.2.2 Operations

Air pollutant emissions quantities associated with aircraft activity are developed using the FAA Aviation Environmental Design Tool (AEDT).[1] AEDT incorporates the number of annual average daily daytime and nighttime aircraft operations, flight paths, and flight profiles of aircraft, along with its extensive internal database of aircraft air quality and performance information, to calculate the emissions of the aircraft up until the mixing height for this analysis. The mixing height is the height above the ground up to which emissions are determined to affect local air quality conditions; the AEDT default value of 3,000 feet above ground level was used for this analysis. For this project, AEDT calculated criteria pollutant emissions from the operation of aircraft engines and the associated GSE and Auxiliary Power Units (APUs). Aircraft emissions were estimated

[1] AEDT 3c, the current version of the model at the onset of this EA, was used for the air quality analysis documented herein.

for the existing condition (2018) and for the No Action Alternative and Proposed Action for the future project years of 2025 and 2030.

4.2.3 Existing Conditions

ADEM maintains a single air quality monitoring station within Mobile County. This station is located approximately 10 miles to the north-northwest of the Project Area and monitors ozone, sulfur dioxide, and fine particulate matter. There is a second monitor in the vicinity of BFM but located across Mobile Bay approximately 14.3 miles southeast in Fairhope/Baldwin County. It monitors ozone and fine particulate matter. BFM is located in a generally flat area directly on Mobile Bay, and there are no meteorological or topographic features that would interfere with the dispersal of local air pollutant emissions.

The description of existing conditions for air quality is limited to the evaluation of emissions from aircraft operations. Motor vehicle (roadway) emissions and stationary sources were not included in the baseline. Emission sources at BFM, which are typical of airports, include aircraft engines, GSE, and APUs. The operational information for this analysis was obtained from the Mobile Airport Authority Master Plan (MAA, 2021). Table 4-1 provides a description of the existing condition air pollutant emissions at BFM.

Table 4-1: Existing (2018) Conditions Air Pollutant Emissions Inventory

Source	CO	VOC	NO_X	SO_X	PM_{10}	$PM_{2.5}$
	(Short tons per year, below mixing height)					
Aircraft	120.53	7.79	28.30	4.28	0.48	0.48
GSE	7.36	0.42	1.41	0.01	0.08	0.07
APUs	1.00	0.06	0.89	0.12	0.08	0.08
2018 Total	**128.89**	**8.27**	**30.6**	**4.41**	**0.64**	**0.63**

NOTE: Total numbers may not add correctly due to rounding.

CO = carbon monoxide; VOC = volatile organic compounds; NO_X = oxides of nitrogen; SO_X = oxides of sulfur; PM_{10} = particulate matter less than or equal to 10 microns in diameter; $PM_{2.5}$ = particulate matter less than or equal to 2.5 microns in diameter

SOURCES: Mobile Airport Authority Master Plan, 2020; FAA AEDT 3c; Environmental Science Associates, 2021.

4.2.4 Environmental Consequences

4.2.4.1 No Action Alternative

Under the No Action Alternative, passenger service would not change. As shown in Table 4-3, emissions in the No Action Alternative would not cause or contribute to violations of the NAAQS for criteria pollutants. Therefore, there would be no significant impact.

4.2.4.2 Proposed Action: Construction

Construction associated with the Proposed Action, scheduled to occur from 2024 to the end of 2026, may result in the production of mobile source emissions, primarily such as NOx, from the use of heavy-duty non-road construction equipment such as graders, backhoes, and dozers as well as on-road vehicles such as cars used in employee travel to and from construction sites. In addition, fugitive dust emissions would result from site preparation and grading activities. During the finishing phase, paving operations and the application of asphalt, architectural coatings (paints), and other building materials would release VOCs. Construction emissions can vary substantially from day to day depending on the phase of construction, the specific type of construction activities performed on a given day, and weather conditions. The project list, modeling parameters, and complete construction modeling assumptions can be found in Appendix A.

Construction criteria pollutant emissions are presented in Table 4-2, in short tons per year. Note that ACEIT calculates SO_2 directly, rather than SO_X, which is different from the AEDT calculations.

Table 4-2: List of BFM Construction Projects and Modeling Parameters

Project	Emissions (Short Tons/year)					
	CO	VOC	NO_x	SO_2	$PM_{2.5}$	PM_{10}
Apron Pavement Reconstruction	76.75	127.31	8.79	0.23	0.38	2.64
Addition to Terminal	8.90	0.29	0.27	0.02	0.01	0.05
Five Level Parking Garage	19.16	10.86	1.15	0.04	0.04	0.39
Permanent Wash Rack	3.45	0.19	0.17	0.01	0.01	0.03
Replacement Access Road	6.37	3.63	0.67	0.01	0.03	0.11
Surface Parking Lots	2.36	0.58	0.10	0.00	0.01	0.02
Terminal Access Loop	8.46	6.16	0.88	0.02	0.04	0.17
Terminal Building	38.13	1.62	1.95	0.08	0.07	0.24
Expand Terminal Apron South	2.24	2.59	0.39	0.01	0.01	0.09
Expand Terminal Apron	7.43	11.46	0.98	0.02	0.04	0.27
GSE Support Area	9.12	0.75	0.27	0.02	0.01	0.07
Improve Perimeter Road	4.73	6.37	0.66	0.01	0.03	0.16
Rabby Creek Culvert	0.68	0.06	0.05	0.00	0.00	0.00
Relocate Tenants	11.00	0.39	0.47	0.01	0.02	0.02
Maximum Annual Emissions	198.79	172.25	16.79	0.49	0.69	4.26

Values may not add to the total, due to rounding.

SOURCES: Mobile Airport Authority Master Plan, 2021; FAA AEDT 3c; Environmental Science Associates, 2021.

4.2.4.3 Proposed Action: Operations

The emissions inventories for the Proposed Action are summarized in Table 4-3. The data is provided for 2025 and 2030 under the No Action and Proposed Action Scenarios. Criteria pollutant operational emissions, including ozone precursors (NO_X and VOC), would be higher under the Proposed Action than under the No Action Alternative in all years.

Table 4-3: BFM Operational Emissions for the Proposed Action and No Action Scenarios

2025 Source	CO	VOC	NO_X	SO_X	PM_{10}	$PM_{2.5}$
Aircraft	168.86	13.38	65.17	8.69	0.82	0.82
GSE	21.03	0.92	2.77	0.02	0.16	0.15
APUs	7.23	0.49	2.99	0.49	0.49	0.49
2025 Proposed Action Total	**197.12**	**14.79**	**70.93**	**9.2**	**1.47**	**1.46**
Aircraft	153.64	12.84	49.28	6.72	0.69	0.69
GSE	15.91	0.75	2.31	0.01	0.13	0.12
APUs	4.33	0.19	2.11	0.33	0.27	0.27
2025 No Action Alternative	**173.88**	**13.78**	**53.7**	**7.06**	**1.09**	**1.08**
Difference (+/-)	***23.24***	***1.01***	***17.23***	***2.14***	***0.38***	***0.38***
2030 Source	**CO**	**VOC**	**NO_X**	**SO_X**	**PM_{10}**	**$PM_{2.5}$**
Aircraft	174.31	13.65	69.74	9.23	0.85	0.85
GSE	22.34	0.96	2.88	0.02	0.16	0.15
APUs	7.96	0.57	3.22	0.54	0.54	0.54
2030 Proposed Action Total	**204.61**	**15.18**	**75.84**	**9.79**	**1.55**	**1.54**
Aircraft	155.67	12.96	50.61	6.84	0.7	0.7
GSE	16.16	0.76	2.35	0.01	0.13	0.12
APUs	4.34	0.19	2.16	0.34	0.27	0.27
2030 No Action Alternative	**176.17**	**13.91**	**55.12**	**7.19**	**1.1**	**1.09**
Difference (+/-)	***28.44***	***1.27***	***20.72***	***2.6***	***0.45***	***0.45***

NOTE: Numbers may not sum to totals shown due to rounding.

CO = carbon monoxide; NO_x = oxides of nitrogen; $PM_{2.5}$ = particulate matter less than or equal to 2.5 microns in diameter; PM_{10} = particulate matter less than or equal to 10 microns in diameter; SO_X = oxides of sulfur; VOC = volatile organic compound

SOURCES: Mobile Airport Authority Master Plan, 2020; FAA AEDT 3c; Environmental Science Associates, 2021.

The construction and operations emissions associated with the Proposed Action and the No Action Alternative would not cause or contribute to violations of the NAAQS for criteria pollutants in 2025 or 2030, and Mobile County is in attainment for all criteria pollutants. Thus, the Proposed Action would not cause significant impacts to air quality.

4.2.5 Mitigation, Avoidance, and Minimization Measures

To minimize air quality effects, all local, state, and federal laws and ordinances regarding air quality would be followed during construction. All construction equipment and vehicles should be properly maintained to reduce emissions. A Dust Control Plan may include measures to water unpaved areas being disturbed, broom cleaning, installation of a vehicle tracking pad to reduce tracking materials offsite, and wetting or application of a dust palliative to stockpiles of soil for dust control.

Best management practices (BMPs) would be implemented during construction to minimize emissions. BMPs could include practices such as the use of watering trucks to minimize fugitive dust, or the covering of trucks when transferring materials. Final BMPs would be determined during a more detailed design phase of the

project.

4.3 CLIMATE

4.3.1 Definition of Resource and Regulatory Setting

Climate change is a global phenomenon that can have local impacts. Scientific measurements show that the Earth's climate is warming, with concurrent impacts including warmer air temperatures, increased sea level rise, increased storm activity, and an increased intensity in precipitation events. Research has shown there is a direct correlation between fuel combustion and greenhouse gas (GHG) emissions. GHGs are defined as including carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). CO_2 is the most important anthropogenic GHG because it is a long-lived gas that remains in the atmosphere for up to 100 years.

GHGs have a varying global warming potential. The global warming potential is the potential of a gas or aerosol to trap heat in the atmosphere and is the measure of the total energy that a gas absorbs over a particular period of time, compared to carbon dioxide. The reference gas used when determining global warming potential is CO_2. More information about climate can be found in Chapter 3 of the *FAA Order 1050.1F Desk Reference* (FAA, 2020).

4.3.2 Resource Study Area

GHG emissions for the project are considered locally, utilizing the same study area as defined in Section 4.2.2, Air Quality.

4.3.3 Existing Conditions

An airport-related GHG emissions inventory was prepared based on 2018 operations level. GHG levels are expressed in CO_2 equivalent short tons. Aircraft operations emitted 11,533 CO_2 equivalent short tons in 2018.

4.3.4 Environmental Consequences

4.3.4.1 No Action Alternative

Under the No Action Alternative, passenger services would remain at MOB, thus there would be no change to existing levels of GHG emissions.

4.3.4.2 Proposed Action

GHG emissions were prepared to evaluate the change in CO_2 equivalent emissions associated with the Proposed Action. The Proposed Action and No Action scenarios were modeled in both 2025 and 2030 utilizing the FAA AEDT tool, and displayed in Table 4-4.

Table 4-4: Carbon Dioxide Equivalent Emissions

Source	Carbon Dioxide e (Short Tons)
Aircraft	23,410
2025 Proposed Action Total	**23,410**
Aircraft	18,092
2025 No Action Alternative	**18,092**
Difference (+/-)	***5,319***
Source	**Carbon Dioxide e (Short Tons)**
Aircraft	24,868
2030 Proposed Action Total	**24,868**
Aircraft	156
2030 No Action Alternative	**18,421**
Difference (+/-)	***6,448***

NOTE: Numbers may not sum to totals shown due to rounding.
SOURCE: Mobile Airport Authority Master Plan, 2020; FAA AEDT 3c; Environmental Science Associates, 2021.

The FAA has not established a significance threshold for climate, and there are no federal standards for aviation-related GHG emissions. The Proposed Action would not cause a significant increase in GHG emissions, therefore there would be no significant impact.

4.3.5 Mitigation, Avoidance, and Minimization Measures

BMPs would be implemented to minimize air emissions and energy usage during construction of the Proposed Action, potentially reducing GHG emissions.

4.4 NOISE AND NOISE-COMPATIBLE LAND USE

4.4.1 Definition of Resource and Regulatory Setting

The measurement and human perception of sound involve two basic physical characteristics: intensity and frequency. Intensity is a measure of the acoustic energy of sound vibrations, expressed in terms of sound pressure. The higher the sound pressure, the more energy carried by the sound and the louder the perception of that sound. The second important physical characteristic is sound frequency, which is the number of times per second the air vibrates or oscillates. Low-frequency sounds are characterized as rumbles or roars, while high-frequency sounds are typified by sirens or screeches.

The typical human ear is not equally sensitive to all frequencies of the audible sound spectrum. As a consequence, when assessing potential noise impacts on humans, sound is measured using an electronic filter that de-emphasizes the frequencies below 1,000 Hz and above 5,000 Hz in a manner corresponding to the human ear's decreased sensitivity to extremely low and extremely high frequencies. This method of frequency weighting is referred to as A-weighting and is expressed in units of A-weighted decibels (dBA). A-weighting follows an international standard methodology of frequency weighting and is typically applied to community noise measurements. Some representative noise sources and their corresponding A-weighted noise levels are shown in Table 4-5. As shown, the relative perceived loudness of a sound doubles for each increase of 10 dBA, although a 10-dBA change in the sound level corresponds to a factor of 10 changes in relative sound energy. Generally, single-event sound levels with differences of 2 dBA or less are not perceived to be noticeably different by most listeners.

Table 4-5: Common Sounds On the A-Weighted Decibel Scale

Sound	Sound Level (dBA)	Relative Loudness (approximate)	Relative Sound Energy
Rock music, with amplifier	120	64	1,000,000
Thunder, snowmobile (operator)	110	32	100,000
Boiler shop, power mower	100	16	10,000
Orchestral crescendo at 25 feet, noisy kitchen	90	8	1,000
Busy street	80	4	100
Interior of department store	70	2	10
Ordinary conversation, 3 feet away	60	1	1
Quiet automobiles at low speed	50	1/2	.1
Average office	40	1/4	.01
City residence	30	1/8	.001
Quiet country residence	20	1/16	.0001
Rustle of leaves	10	1/32	.00001
Threshold of hearing	0	1/64	.000001

SOURCE: U.S. Department of Housing and Urban Development, Aircraft Noise Impact—Planning Guidelines for Local Agencies, 1972.

The FAA has determined that the cumulative noise energy exposure of individuals to noise resulting from aviation activities must be established in terms of yearly Day/Night Average Sound Level (DNL). DNL is a 24-hour, time-weighted average noise metric, expressed in terms of dBA, which accounts for the noise levels of individual aircraft events, the number of times those events occur, and the time of day they occur. DNL contours are a graphical representation of the distribution of noise over the surrounding area from an airport's average annual daily aircraft operations. In the calculation of DNL, for each hour during the nighttime period (10:00 p.m. to 7:00 a.m.), the sound levels are increased by a 10 decibel-weighting penalty (equivalent to a 10-fold increase in aircraft operations) before the 24-hour value is computed. The weighting penalty accounts for the more intrusive nature of noise during the nighttime hours. The terms and metrics associated with aircraft noise used in the noise analysis are further described in detail in Appendix A.

FAA requires an analysis of noise exposure when development actions may change the cumulative noise exposure of individuals to aircraft noise in areas surrounding the airport. Common development actions that may change the cumulative noise environment include changes to runway reconfiguration, aircraft operations and/or movements, aircraft types using the airport, or aircraft tracks and profiles. The FAA established land use compatibility guidelines relative to certain noise levels in Title 14 CFR Part 150, Appendix A. Most land uses are compatible with noise levels less than DNL 65 dBA.

FAA Order 1050.1F, FAA Order 5050.4B, and Title 14 CFR Part 150 specify the methods required for evaluation of the airport noise environment. The FAA defines DNL 65 dBA as the threshold of exterior noise compatibility for residential and other noise-sensitive land uses. FAA Order 1050.1F defines noise sensitive areas as areas where noise interferes with normal activities associated with its use. Noise sensitive areas may include residential, educational, health, religious structures and sites, parks and recreational areas, areas with wilderness characteristics, wildlife refuges, and cultural and historical sites. Local needs or values may dictate further delineation based on local requirements or determinations. As FAA Order 5050.4B states, an increase of DNL 1.5 dB located at or above a level of DNL 65 dBA would be considered a significant impact. An increase of DNL 3.0 dB located from DNL 60-65 dBA could be considered significant but only if this increase is within areas with an established quiet setting such as national parks, wildlife refuges, and historic sites including

traditional cultural properties.

4.4.2 Resource Study Area

4.4.2.1 Construction

The evaluation of construction-related noise impacts considered noise sources, typical noise levels generated by different types of construction equipment, and the distance between construction areas and noise-sensitive receptors (e.g. residences). Table 7.3 in the Federal Highway Administration Construction Noise Handbook (FHWA, 2006) lists various types of construction equipment and the noise levels they generate at 50 feet from the equipment. Construction noise was evaluated using reference construction equipment noise level data and applying a "point" source distance attenuation of 6 dB per doubling of distance from the sources to noise sensitive areas.

4.4.2.2 Aircraft Operations

FAA Order 1050.1F requires that detailed noise analyses be performed through noise modeling using the FAA's AEDT. AEDT incorporates the number of annual average daily daytime and nighttime aircraft operations; flight paths; and flight profiles of aircraft, along with its extensive internal database of aircraft noise and performance information, to calculate the DNL at many points on the ground around an airport. From a fine grid of points, the AEDT contouring program draws contours of equal DNL that can be superimposed onto land use maps. For this EA, three standard ranges of DNL noise contours are presented: DNL 65 dBA, 70 dBA, and 75 dBA and above.

The existing noise environment in the area surrounding BFM was evaluated based on the number of aircraft operations at the airport in 2018 (the existing condition year) and associated airport operational characteristics (e.g., runway use, flight track locations, etc.). The operational information for this existing analysis was obtained from the Mobile Airport Authority Master Plan (2020).

Per FAA Order 1050.1F, the future noise environment and potential noise impacts related to the Proposed Action and the No Action Alternative were evaluated for 2025 and 2030 using AEDT3c. The operational information and resulting DNL contours for the Proposed Action were obtained directly from the Mobile Airport Authority Master Plan, and the No Action Alternative operational information was derived from AEDT data sheets prepared for the Mobile Airport Authority Master Plan. The No Action modeling files were generated by removing the additional air carrier operations expected as part of the Proposed Action and replacing them with estimated air carrier operations with the expected growth separate from the Proposed Action. Additional information on aircraft noise and the AEDT modeling files can be found in Appendix A.

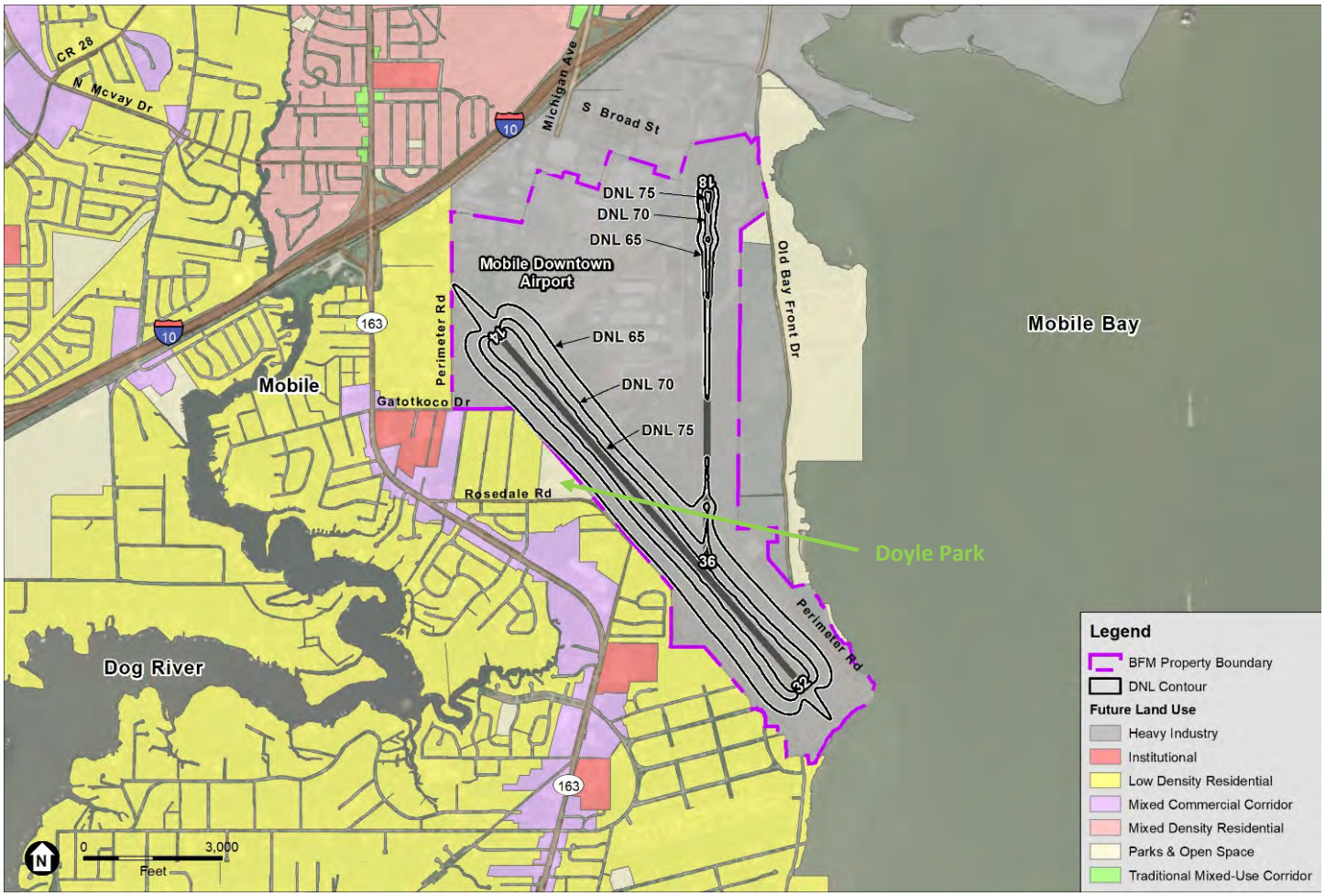
4.4.3 Existing Conditions

Existing (2018) operations by aircraft category are summarized in Table 4-6. The noise exposure resulting from these existing conditions can be found in Exhibit 4-1.

Table 4-6: Existing Conditions (2018) Annual Operations by Aircraft Category

Aircraft Category	Numbers of Operations
Air Carrier	1,783
Air Taxi	2,685
General Aviation (IFR)	5,478
General Aviation (Other)	8,881
Military	45,267
Total	**64,094**
SOURCE: Mobile Airport Authority Master Plan, 2020.	

Exhibit 4-1: 2018 Day-Night Average Sound Level Contours



Land uses within the DNL 65 dBA and higher contour for the existing conditions are included in Table 4-7. The existing DNL 65 dBA contour is contained on airport property and there are no residential land uses or noise-sensitive sites (such as population centers, households, schools, libraries, hospitals, or places of worship) exposed to aircraft noise levels of DNL 65 dBA or greater in the existing condition scenario.

Table 4-7: Land Uses within the DNL 65 dBA and Higher Contours 2018 Existing Condition Scenario

Land Use	DNL 65-70	DNL 70-75	DNL 75+	Total
On-Airport Property	194.2	102.1	87.6	383.6
Off-Airport Property (low-density residential, parks and open space, and heavy industrial)	-	-	-	-
Total Acres	**194.2**	**102.1**	**87.6**	**383.6**

NOTE: Numbers may not add due to rounding.
DNL = Day-Night Average Sound Level
SOURCES: City of Mobile Future Land Use Map (FLUM), 2017; Adapted by Environmental Science Associates, 2021.

4.4.4 Environmental Consequences

4.4.4.1 No Action Alternative

Although the Proposed Action would not be implemented under the No Action Alternative, BFM would still

implement various airport improvement and rehabilitation projects forecasted through the master planning process. These activities, including runway resurfacing, would produce construction-related noise that would temporarily increase ambient noise levels in the immediate vicinity of proposed projects and their construction haul routes.

As discussed under the Proposed Action, the location of BFM does not require that construction traffic travel through residential areas, and haul routes would be established to avoid noise sensitive areas.

Milling and paving equipment would be the source of most noise associated with the No Action Alternative. Paving equipment, on average, generates noise levels of approximately 85 dB within 50 feet of operation.[2] Equipment used on airfield pavement rehabilitation projects typically include, but may not be limited to, jackhammers, backhoes, frontend loaders, concrete/asphalt mixer trucks, milling machines, and paving machines. The nearest noise sensitive receptors (residences along Military Road) are approximately 1,500 feet west of the Runway threshold. Due to an attenuation of 6 dB per doubling of distance from the construction area, noise from the runway rehabilitation projects would be approximately 55 dB at this location, and would be noticeable at the noise receptor. Similar to the Proposed Action, the No Action Alternative would be required to conform to the local noise ordinance regulating construction noise and no significant impacts are anticipated.

4.4.4.2 Proposed Action: Construction

The Proposed Action includes the construction of buildings, aircraft parking apron, parking lots, and roadways. Construction activities would result in an increase in ambient noise levels in the immediate vicinity of work areas on BFM and adjacent roads, as well as on construction haul routes. The greatest increase in noise would occur during demolition, site excavation, grading, construction, and paving operations.

The location of the Proposed Action does not require that construction traffic travel through residential areas. In addition, construction plans would identify haul routes that would be selected to: 1) ensure that trucks and vehicles use the local freeway system and available commercial routes to the extent possible (i.e., I-10) and 2) identify routes to travel as directly as possible from the freeways and commercial routes to the airport construction sites.

The noisiest types of construction equipment anticipated to be used at BFM range between 80 dB (backhoe) and 90 dB (concrete saw) as measured at 50 feet (FHWA 2006). Equipment in this noise range would include, but may not be limited to backhoes, concrete/asphalt mixer trucks, dozers, dump trucks, graders, flatbed trucks, pavers, and scrapers. The nearest noise sensitive receptors (residences along Neshota Drive) are as close as approximately 90 feet west of the Proposed Action, directly across Perimeter Road from airport property. At these locations, construction would include demolition, site excavation, grading, building construction, and road construction, which would generate an average of 85 dB from the equipment used for these purposes. With attenuation, temporary, intermittent noise from the grading and road construction would be approximately 80 dB at the closest receptor, and 60 dB at the westernmost region of Neshota Drive. Temporary construction noise may be noticeable at these noise receptors. However, it is not anticipated that significant impacts would be experienced by the receptors as construction crews would be required to conform to the local noise ordinance regulating construction noise, construction would occur daytime hours, construction activities would be temporary, and the construction noise would generally blend with the industrial and aircraft noise already experienced at this location.

Given the type of construction associated with the Proposed Action and the distance from construction areas to noise sensitive land uses, no significant construction noise impacts would occur. Despite attenuation, temporary, intermittent noise from construction activities associated with the Proposed Action may be noticeable by nearby noise receptors.

[2] U.S. Department of Transportation, Federal Highway Administration, 2006. *Construction Noise Handbook, FHWA-HEP-06-015*. August.

4.4.4.3 Proposed Action: Operations

The aircraft operational fleet totals across the future No Action and Proposed Action modeling years are shown in Table 4-8. The air carrier are the only operations expected to change as part of the Proposed Action; thus, the air taxi, general aviation, and military operations are all consistent across each study year.

Table 4-8: No Action and Proposed Action Operation Counts Annual Operations by Aircraft Category

Aircraft Category	2025 No Action	2025 Proposed Action	2030 No Action	2030 Proposed Action
Air Carrier	2,750	10,020	2,900	11,810
Air Taxi	14,340	14,340	14,370	14,370
General Aviation (IFR)	5,642	5,642	5,722	5,722
General Aviation (Other)	9,158	9,158	9,288	9,288
Military	43,670	43,670	43,670	43,670
Total	**75,560**	**82,830**	**75,950**	**84,860**

SOURCES: Environmental Science Associates, 2021; Mobile Airport Authority Master Plan, 2020.

Exhibit 4-2 and Exhibit 4-3 present the No Action and Proposed Action noise contours in 2025 and 2030. As operations increase at the airport, the noise contours would increase accordingly, and throughout all the study years the DNL 70 and DNL 75 contours remain entirely on airport property. The DNL 65 contour would leave airport property in all study years in both the No Action and Proposed Action alternatives in three areas:

- **Directly off the end of Runway 32**—The DNL 65 contours extend off into Mobile Bay and while there is no impact to any land use category, the contour is technically off of airport property.
- **Directly off the end of Runway 14**—The DNL 65 contours extend across Perimeter Road into Pine Crest Cemetery and into a wooded area just north of the cemetery. While these areas are zoned as Low Density Residential, these parcels contain no residences so they do not need to be investigated against the land use noise compatibility thresholds.
- **Alongside Runway 14-32**—The contour expands laterally as operations at the airport increase compared to the existing year, and, in all of the future study years several residential parcels, heavy industry, and a local park are all intersected by the DNL 65 contours.
    - A group of residential parcels near the intersection of Military Road and Hoppin Street are intersected by the DNL 65 contours. There are three parcels intersected by the two 2025 noise contours and four in both 2030 contours. These parcels were noted and would be analyzed versus the land use noise compatibility thresholds below. These parcels can be seen in Exhibit 4-4. Although there is a small area that is zoned for heavy industry just north of these parcels, there is no evidence of heavy industry in this area and heavy industry is considered compatible at a noise level of DNL 65.
    - Alongside Runway 14-32 further to the southeast around Cedar Point Rd, Airview Drive, and Lartigue Cemetery, there is one additional parcel that is intersected by the DNL 65 contour generated by the 2030 Proposed Action scenario. This parcel is analyzed versus the land use noise compatibility thresholds. This parcel can be seen in Exhibit 4-5.
    - Between the two areas of residential parcels above, all of the DNL 65 contours intersect the parcel containing Doyle Park, a local park due southwest of the airport. This parcel is analyzed versus the land use noise compatibility thresholds.

Exhibit 4-2: 2025 No Action/2025 Proposed Action

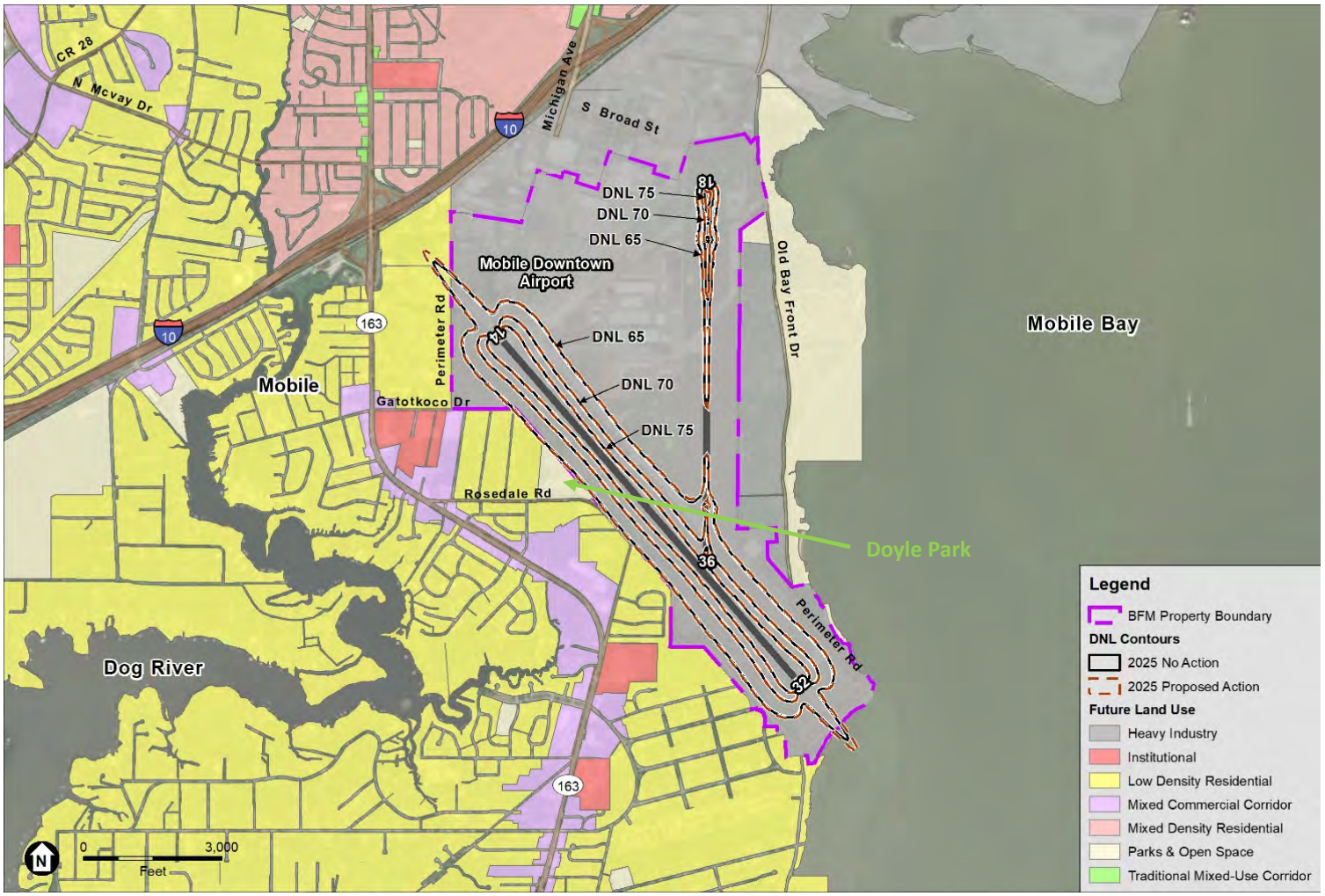


Exhibit 4-3: 2030 No Action/2030 Proposed Action

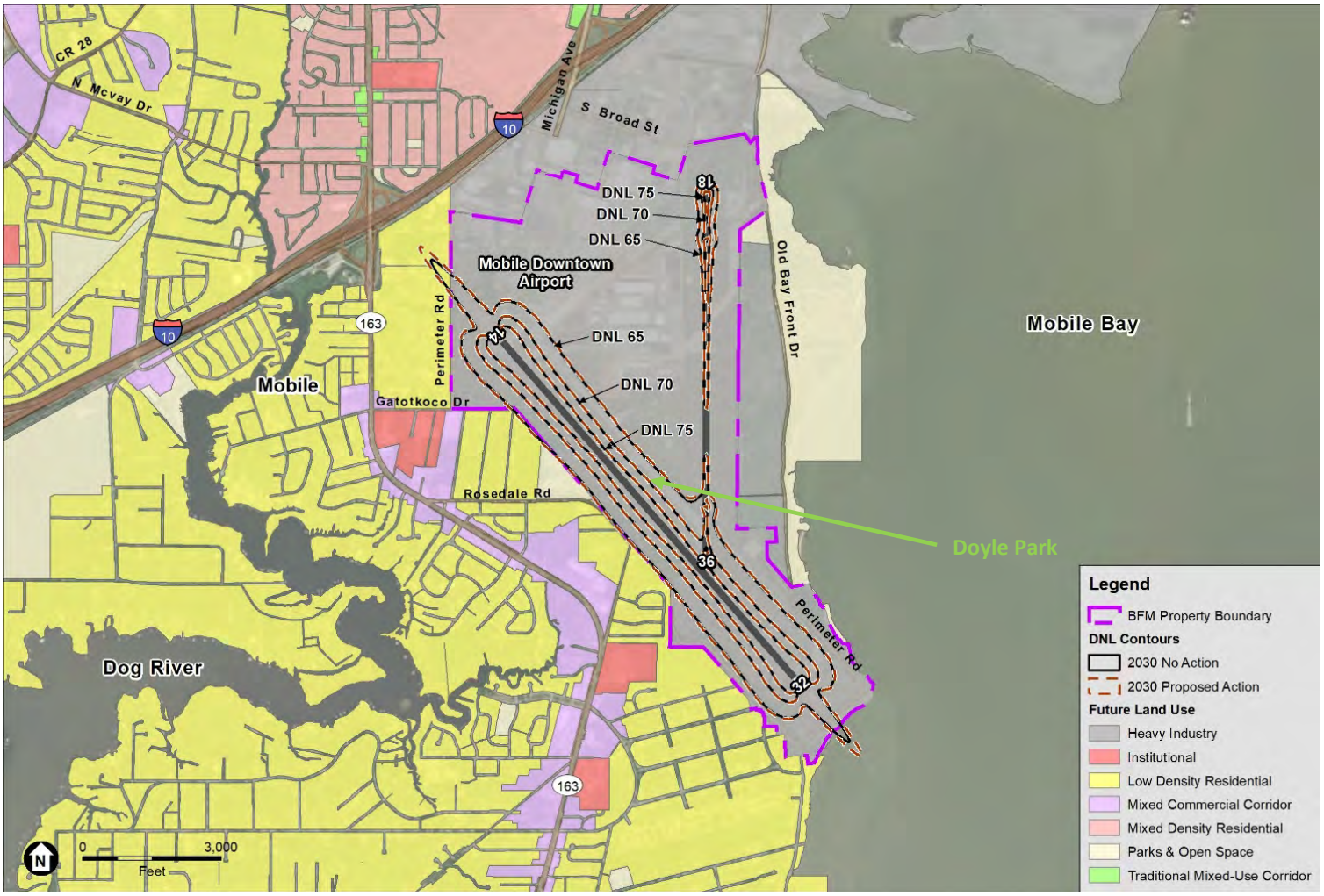


Table 4-9 and Table 4-10 show the areas impacted by the 2025 and 2030 contours. These tables show the changes within each year when comparing the No Action and Proposed Action projects.

Table 4-9: Land Uses within the DNL 65 and Higher Contours (2025)

Land Use		DNL 65-70	DNL 70-75	DNL 75+	Total
2025 No Action					
	On-Airport Property Total (Acres)	**215.5**	**109.2**	**95.3**	**420.0**
Off-Airport Property	Low Density Residential	2.71	-	-	2.71
	Parks & Open Space	0.02	-	-	0.02
	Heavy Industry	0.08	-	-	0.08
	Off-Airport Property Total (Acres)	**2.81**	**0.0**	**0.0**	**2.81**
	Total Acres	**218.31**	**109.2**	**95.3**	**422.81**
2025 Proposed Action					
	On-Airport Property Total (Acres)	**223.1**	**112.0**	**98.0**	**433.1**
Off-Airport Property	Low Density Residential	5.19		-	5.19
	Parks & Open Space	0.17	-	-	0.17
	Heavy Industry	0.11	-	-	0.11
	Off-Airport Property Total (Acres)	**5.48**	**0**	**0.0**	**5.48**
	Total Acres	**228.6**	**112.0**	**98.0**	**438.6**

NOTE: Numbers may not add due to rounding.
DNL = Day-Night Average Sound Level
SOURCES: City of Mobile Future Land Use Map (FLUM), 2017; Adapted by Environmental Science Associates, 2021.

Table 4-10: Land Uses within the DNL 65 and Higher Contours (2030)

Land Use		DNL 65-70	DNL 70-75	DNL 75+	Total
2030 No Action					
	On-Airport Property Total (Acres)	**217.7**	**110.1**	**96.6**	**424.4**
Off-Airport Property	Low Density Residential	3.24	-	-	3.24
	Parks & Open Space	0.06	-	-	0.06
	Heavy Industry	0.09	-	-	0.09
	Off-Airport Property Total (Acres)	**3.38**	**0.0**	**0.0**	**3.38**
	Total Acres	**221.1**	**110.1**	**96.6**	**427.8**
2030 Proposed Action					
	On-Airport Property Total (Acres)	**226.5**	**113.6**	**99.8**	**440.0**
Off-Airport Property	Low Density Residential	6.36		-	6.36
	Parks & Open Space	0.30	-	-	0.30
	Heavy Industry	0.13	-	-	0.13
	Off-Airport Property Total (Acres)	**6.78**	**0**	**0.0**	**6.78**
	Total Acres	**233.3**	**113.6**	**99.8**	**446.8**

NOTE: Numbers may not add due to rounding.
DNL = Day-Night Average Sound Level
SOURCES: City of Mobile Future Land Use Map (FLUM), 2017; Adapted by Environmental Science Associates, 2021.

The residential, parks, and open space land use areas within the DNL 65 contour both have the possibility of being deemed incompatible with respect to the FAA standards within FAA Order 1050.1F. Exhibit 4-4 and Exhibit 4-5 show the impacted residential parcels (excluding cemeteries and parcels without homes). Table 4-11 identifies the parcels that are within each of the 65 DNL contours. There are no significant impacts at any of the parcels identified, with the maximum increase on the parcels of 0.36 dBA in the 2030 project year.

Doyle Park (shown on Exhibit 4-2 and Exhibit 4-3) is identified as a noise sensitive area as the DNL 65 contours intersect the park in all future scenarios. The park experiences a maximum increase of 0.30 dBA in the 2030 project year.

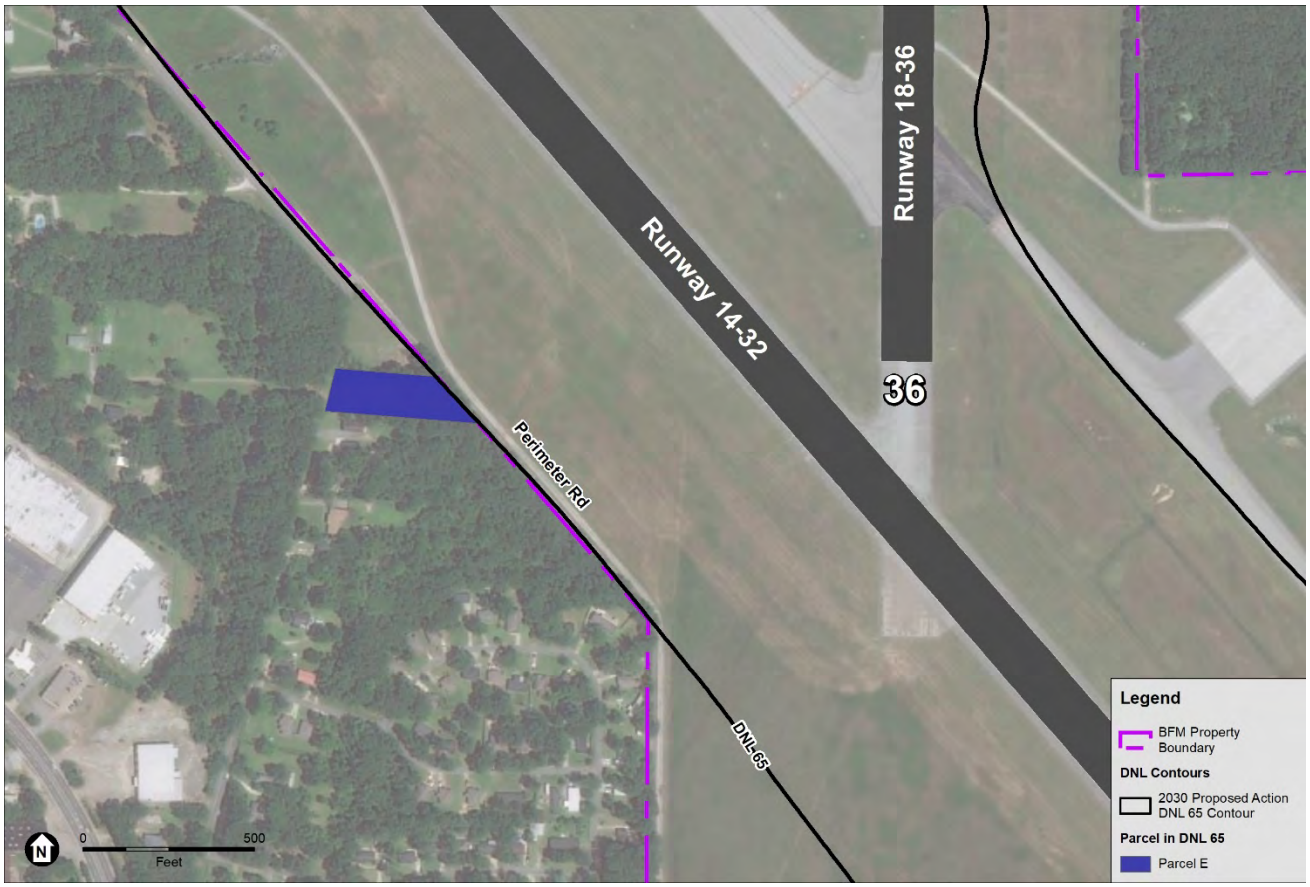
Exhibit 4-4: Residential Parcels in DNL 65 North (with 2030 Contour)

Table 4-11: Residential Parcels Within the DNL 65 Contours

Parcel Identifier	2025 No Action	2025 Proposed Action	2030 No Action	2030 Proposed Action	2030 No Action
A	-	-	-	-	X
B	X	X	X	X	X
C	X	X	X	X	X
D	X	X	X	X	X
E	-	-	X	X	X
F	-	-	-	-	X

SOURCE: Environmental Science Associates, 2021

Exhibit 4-5: Residential Parcel in DNL 65 South (with 2030 Contour)



The increased number of annual aircraft operations associated with the Proposed Action in 2025 and 2030 would expose noise sensitive areas to noise levels of DNL 65 dBA or greater. However, there would be no noise sensitive areas that would experience an increase in aircraft noise of DNL 1.5 dBA or more in areas exposed to DNL 65 dBA or greater as a result of the Proposed Action when compared to the No Action Alternative. Therefore, no significant noise impact would occur as a result of the Proposed Action.

4.4.5 Mitigation, Avoidance, and Minimization Measures

Temporary noise impacts due to construction would be mitigated through community outreach to clearly outline the proposed construction timeline. MAA would provide and maintain the construction timeline on their website for public view.

4.5 VISUAL EFFECTS

4.5.1 Definition of Resource and Regulatory Setting

Visual effects deal broadly with the extent to which the project would either: 1) produce light emissions that create annoyance or interfere with activities; or 2) contrast with, or detract from, the visual resources and/or visual character of the existing environment. Visual effects can be difficult to define and assess because they involve subjectivity.

For clarify and uniformity, visual effects are broken into two categories: 1) light emission effects; and 2) visual resources and visual character. Light emissions include any light that emanates from a light source into the surrounding environment. Visual resources include buildings, sites, traditional cultural properties, and other natural or manmade landscape features that are visually important or have unique characteristics. In some locations, the nighttime sky may be considered a visual resource. Visual Character refers to the overall visual

makeup of the existing environment where the project would be located.

Some visual resources are protected under federal, state, or local regulations. Protected visual resources generally include, but are not limited to, federal, state, or local scenic roadways/byways; wild and scenic rivers; National Scenic Areas; scenic easements; trails protected under the National Trails System Act or similar state or local regulations; biological resources; and features protected under federal, state, or local regulations.

Although there are no federal special purpose laws or requirements specific to light emissions and visual effects, there are special purpose laws and requirements that may be relevant. Laws protecting resources that may be affected by visual effects include Section 106 of the NHPA, Section 4(f) of the USDOT Act, the Wild and Scenic Rivers Act, the CZMA, and state and regional coastal protection acts. More information about visual resources and visual effects can be found in Chapter 13 of the *FAA Order 1050.1F Desk Reference* (FAA, 2020).

4.5.2 Resource Study Area

The study area for visual resources is a one-mile radius from the project footprint.

4.5.3 Existing Conditions

4.5.3.1 Light Emissions

Sources of light emission within the study area include the existing facilities at BFM and the Aeroplex as well as the lighting on I-10. Headlights from cars on I-10 and adjacent streets also contribute to nighttime light emissions within the study area.

4.5.3.2 Visual Resources and Visual Character

The study area can be characterized as primarily industrial, with multiple large buildings hosting the aerospace industry present at the Aeroplex and aviation operations are actively conducted by the military at BFM. The airport is bounded by I-10 to the west, Mobile Bay to the east, the Aeroplex to the north, and residential land use to the south. Single family residences are also present across I-10. No notable visual resources are present within the study area.

Viewers within the study area include employees and visitors at the Aeroplex, residents of the adjacent neighborhoods, visitors to Pine Crest Cemetery, and students at Pillans Middle School. Viewer sensitivity to operations at the airport is low, given the historical and current land use at BFM.

4.5.4 Environmental Consequences

4.5.4.1 No Action Alternative

Under the No Action Alternative, passenger service would not change; therefore, there would be no impact to cultural resources.

4.5.4.2 Proposed Action

The FAA has not established a significance threshold for light emissions, visual resources, or visual character. Factors to consider when assessing the significance of potential visual effects include the degree to which the action would have the potential to:

- Create annoyance or interfere with normal activities from light emissions;
- Affect the visual character of the area;
- Contrast with the visual resources and/or visual character in the study area; and
- Block or obstruct the views of visual resources, including whether these resources would still be viewable from other locations.

Visual impacts are not anticipated due to the Proposed Action, as visual quality would not be reduced. The Proposed Action is consistent with the existing visual character of the area, as aviation operations are active

at BFM. Light emissions generated by construction would not cause disruption to the nearby residences. Light emissions from operations would not be noticeably different than existing conditions. Therefore, the Proposed Action would not significantly impact the nature of the visual character of the area, including the importance, uniqueness, and aesthetic value of the affected visual resources.

4.5.5 Mitigation, Avoidance, and Minimization Measures

BMPs such as light shielding during nighttime construction and fugitive dust containment measures would reduce the potential for visual impacts due to the Proposed Action.

4.6 CULTURAL RESOURCES

4.6.1 Definition of Resource and Regulatory Setting

Cultural resources encompass a range of sites, properties, and physical resources relating to human activities, society, and cultural institutions. Such resources include past and present expressions of human culture and history in the physical environment, such as prehistoric and historic archaeological sites, structures, objects, and districts that are considered important to a culture or community. Cultural resources also include aspects of the physical environment, namely natural and biological features that are part of traditional ways of life and practices and are associated with community values and institutions.

The major law that protects cultural resources is the NHPA. Section 106 of the NHPA requires a federal agency to consider the effects of its action on historic properties. Compliance with Section 106 requires consultation with the State Historic Preservation Office (SHPO) and other parties, including Native American tribes. The Section 106 process is outlined in 36 CFR Part 800. Major steps in the process include identifying the Area of Potential Effects (APE) in consultation with the SHPO and identifying and evaluating any historic properties. If a historic property would be adversely affected, the consultation process includes resolution of adverse effects. More information about cultural resources can be found in Chapter 8 of the *FAA Order 1050.1F Desk Reference* (FAA, 2020).

As part of the Section 106 process, coordination has been initiated with the Alabama Historical Commission (see Appendix B) as well as with the following tribes: Alabama-Coushatta Tribe of Texas, Alabama-Quassarte Tribal Town, Choctaw Nation of Oklahoma, Coushatta Tribe of Louisiana, Mississippi Band of Choctaw Indians, and Muscogee (Creek) Nation. No response has been received from any of the tribes as of publication of this document (see Section 7 for more detail).

4.6.2 Resource Study Area

The study area for cultural resources is referred to as the Area of Potential Effects (APE) which is defined as the land within the DNL 65 dBA contour for the 2030 design year. The DNL 65 dBA contour was previously described in Section 4.5.2 and is shown on Exhibit 4-3.

4.6.3 Existing Conditions

The BFM property is actively used for aviation operations, commercial business that supports the aeronautical industry, and industrial use including the Airbus manufacturing facility. The property has constantly been disturbed as the industrial, aviation, and military uses have grown over the years. A graded grass area is present in the southwest portion of the project area, which is primarily used as the Runway Protection Zone (RPZ).

Pine Crest Cemetery and Lartigue Cemetery are adjacent to the Project Area and included on the Alabama Historic Cemetery Register but have not been determined eligible or listed on the National Register of Historic Places (NRHP).

4.6.4 Environmental Consequences

4.6.4.1 No Action Alternative

Under the No Action Alternative, passenger service would not change; therefore, there would be no impact to cultural resources.

4.6.4.2 Proposed Action: Construction

Construction at the property would take place within existing aviation, commercial, and industrial land use areas. Ground disturbance is proposed primarily on previously disturbed and impervious land at the airport. No ground disturbance is proposed outside of airport property.

The Proposed Action would not adversely affect any properties eligible for or listed on the National Register. The project is consistent with existing land use at the airport and the adjacent Aeroplex. Pine Crest Cemetery is currently shielded from the airport by an existing tree line which would not be impacted by the Proposed Action. The atmosphere at Lartigue Cemetery would not noticeably change, as it currently has uninterrupted views of the runway and aviation facilities at BFM. The properties along Perimeter Road are generally shielded from the airport by the existing tree line. The properties that are adjacent to the runway and not shielded by the tree line would not be adversely affected by a change in view, as their current viewshed is dominated by aviation and industrial land use currently at BFM. The project would not acquire property from or change a historic property.

4.6.4.3 Proposed Action: Operations

Once constructed, operations of the Proposed Action would not affect cultural resources. Operations from the terminal relocation project would not result in a significant change in noise level, as aviation operations are active at BFM and the noise contours are primarily confined to the airport boundary. The DNL 65 dBA noise contour extends into a small portion of Pine Crest Cemetery next to the runway.

4.6.5 Mitigation, Avoidance, and Minimization Measures

The Alabama Historical Commission has concurred that the Proposed Action would have no effect on cultural resources eligible for or listed on the National Register. Therefore, no mitigation measures are applicable.

If archaeological materials are encountered during construction, the procedures codified at 36 CFR 800.13(b) will apply. Archaeological materials consist of any items, fifty years old or older, which were made or used by man. These items include but are not limited to, stone projectile points (arrowheads), ceramic sherds, bricks, worked wood, bone and stone, metal, and glass objects. The federal agency or the applicant receiving federal assistance should contact our office immediately. If human remains are encountered, the provisions of the Alabama Burial Act (Code of Alabama 1975, §13A-7-23.1, as amended; Alabama Historical Commission Administrative Code Chapter 460-X-10 Burials) should be followed.

4.7 DEPARTMENT OF TRANSPORTATION ACT, SECTION 4(F)

4.7.1 Definition of Resource and Regulatory Setting

Section 4(f) of the USDOT Act of 1966 (now codified at 49 U.S.C. § 303) protects significant publicly owned parks, recreational areas, wildlife and waterfowl refuges, and historic sites. Section 4(f) provides that the Secretary of Transportation may approve a transportation program or project requiring the *use* of publicly owned land of a public park, recreational area, or wildlife or waterfowl refuge of national, state, or local significance, or land of a historic site of national, state, or local significance, only if there is no feasible and prudent alternative to using that land and the program or project includes all possible planning to minimize harm resulting from the use.

Procedural requirements for complying with Section 4(f) are set forth in USDOT Order 5610.1C, *Procedures for Considering Environmental Impacts*. The FAA also uses the Federal Highway Administration regulations (23 CFR Part 774) and guidance (Section 4(f) Policy Paper) when assessing the potential for *use* of Section 4(f) properties. These requirements are not binding on the FAA; however, the FAA may use them as guidance to the extent relevant.

To qualify for protection under Section 4(f), public parks, recreational facilities, and wildlife or waterfowl refuges must be considered *significant* (USDOT, 2012). Pursuant to 23 CFR § 771.135(c), Section 4(f) resources are presumed to be significant unless the official having jurisdiction over the site concludes that the entire site is not significant. Historic sites qualifying for Section 4(f) protection must be officially listed on or eligible for inclusion on the National Register of Historic Places or contribute to a historic district that is eligible for or listed on the NRHP. More information about Section 4(f) of the USDOT Act can be found in Chapter 5 of the *FAA Order 1050.1F Desk Reference* (FAA, 2020).

4.7.2 Resource Study Area

The study area for Section 4(f) resources is the DNL 65 DNL contour, previously described in Section 0. This is consistent with the APE for cultural resources, described in Section 4.7.

4.7.3 Existing Conditions

No resources under the protection of Section 4(f) are located within the study area. Doyle Park, which has multiple recreational fields, is located on Perimeter Road directly south of the study area and partially inside of the DNL 65 dBA noise contour.

4.7.4 Environmental Consequences

4.7.4.1 No Action Alternative

Under the No Action Alternative, passenger service would not change; therefore, there would be no impact to resources protected under Section 4(f).

4.7.4.2 Proposed Action

Doyle Park is partially within the DNL 65 dBA noise contour. However, a quiet atmosphere is not a defining feature of the park as its primary attributes are sports fields. Therefore, there would not be a significant impact to resources protected under Section 4(f).

4.7.5 Mitigation, Avoidance, and Minimization Measures

No mitigation measures are applicable due to the nature of impact to Doyle Park.

4.8 WATER RESOURCES

4.8.1 Definition of Resource and Regulatory Setting

The CWA, Section 404 protects Waters of the U.S., which include wetlands, rivers, and perennial streams. Executive Order (EO) 11990, *Protection of Wetlands*, directs federal agencies to take action to minimize the destruction, loss, or degradation of wetlands on their property and mandates review of proposed actions on wetlands through procedures established by National Environmental Policy Act (NEPA). Per Section 404 of the CWA a permit is required from the Department of the Army, Corps of Engineers (USACE) for discharges of dredge or fill material into Waters of the U.S. The State of Alabama does not have wetlands permitting regulations separate from the USACE. Applications for potential wetland impacts are made directly to the USACE, with copies to ADEM Field Operations Division in Montgomery for water quality certification or to the Mobile Branch for coastal wetlands projects.[3]

4.8.2 Resource Study Area

The study area defined for water resources encompasses a 1-mile radius from the outer boundary of the Project Area. The Project Area conservatively estimates a maximum envelope to assess the potential direct

[3] Pursuant to Chapter 335-8-1, Alabama Administrative Code

impacts of the proposed construction footprint. For purposes of this analysis, a desktop survey was performed for the study area, and onsite reconnaissance and potential direct impacts quantification was limited to within the defined Project Area.

4.8.3 Existing Conditions

4.8.3.1 Wetlands

The Estuarine and Marine Deepwater classification includes bays and estuaries in coastal areas that have a hydrologic connection to coastal waters. This habitat exists as tidally influenced portions of the Dog River on the western side of the study area and in Mobile Bay on the eastern side of the study area.

Estuarine and Marine Wetland habitat includes plant communities otherwise known as deep marsh or floating marsh where vegetation is found either partially or completely above the surface of water. This habitat does not exist within the Project Area but does occur on the eastern edge of the study area adjacent to Mobile Bay.

Freshwater Forested/Shrub Wetland habitat can occur on a range of different landforms and hydrologic regimes, including floodplains and bottomlands, basins and depressions, coastal fringes, and disturbed wet areas. This habitat does not exist within the Project Area but does occur on the eastern edge of the study area adjacent to Mobile Bay.

Freshwater Wetland habitat type includes areas where the water table is at, near, or above the land surface for a significant portion of most years creating conditions that support aquatic or hydrophilic vegetation and characteristic soils. This may include marshes, mudflats, emergent vegetation areas, swamps, and alluvial/tidal flats that may be non-vegetated. Wetlands were delineated within the Project Area (Exhibit 4-6). Wetland 1 is approximately 0.5 acres, and wetland 2 is approximately 0.08 acres. These wetlands are dominated by invasive exotic trees, shrubs, and grasses, and Wetland 1 appears to be in proximity to or otherwise associated with a historic trash dumping area.

The Freshwater Wetlands for Restoration habitat classification was developed by the Mobile Bay National Estuary Program (MBNEP) and The Nature Conservancy (TNC) to describe freshwater wetlands that meet the following criteria: intersect headwater streams, lie outside of protected areas, lie within low-health catchment basins, fall within jurisdictional boundaries of municipalities that have current wetland/stream buffer regulations, and lie within tidally influenced watersheds. This habitat does not exist within the Project Area but does occur along Dog River on the far western edge of the study area (MBNEP and TNC, 2020).

The Maritime Forest habitat may include bay swamps, bottomlands, and forested floodplain dominated by hardwoods, willows, and mixed hardwood shrubs that occur naturally in the landscape. This habitat is found in the far western portion of the study area associated with Dog River and does not exist within the Project Area.

4.8.3.2 Surface Water Systems

Freshwater Ponds include natural inland water bodies of various sizes and shapes (excluding reservoirs). Shorelines of freshwater ponds will appear to naturally follow the landscape and possibly show evidence of fluctuating water levels on shoreline. Freshwater ponds occur on the western edge of the study area. There are no freshwater ponds within the Project Area.

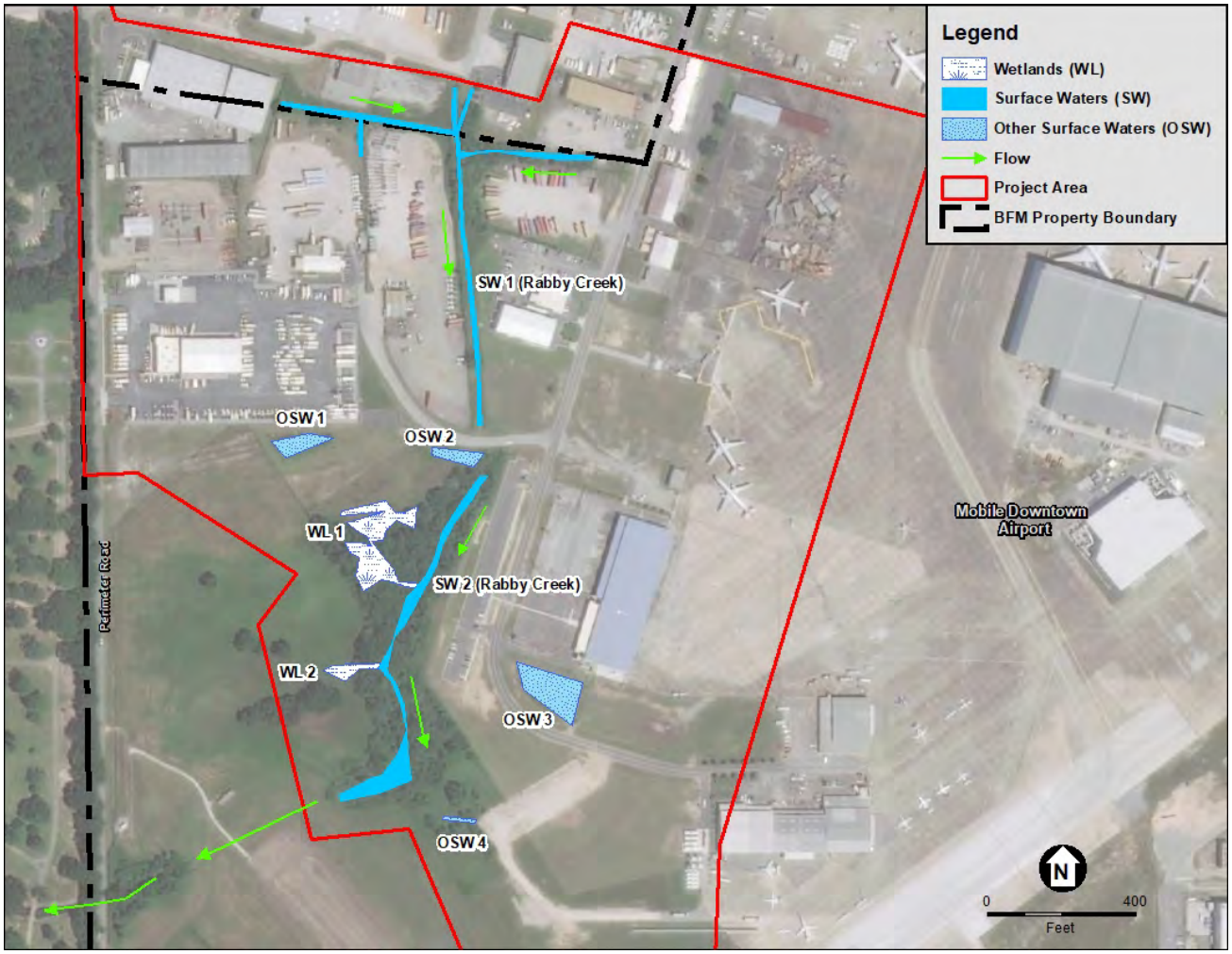
Riverine Systems include mainstream rivers. The mainstream portion of Dog River occurs in the far western portion of the study area (Exhibit 4-6). Dog River is tidally influenced in the lower reaches of this system within the study area. Dog River does not flow through the Project Area; however, the Project Area is hydrologically connected to Dog River through Rabby Creek.

The Streams and River systems include natural, first-order streams and creeks that flow into larger river systems, as well as the mainstream portions of river systems. Rabby Creek, a tributary of Dog River, is located within the Project Area (Exhibit 4-6). In total, approximately 3,035 linear feet of Rabby Creek flows through the central portion of the Project Area under invasive exotic tree canopy. The Creek enters a culvert just

outside of the Project Area, is channeled into a closed, underground culvert in the Runway Safety Area associated with Runway 14-36, resurfaces, and flows off airport property, under the airport access road, and to the west where it connects to the Dog River.

The northern portion of Rabby Creek (SW1) in the Project Area is a system of channelized ditches appearing within the footprint of the original Rabby Creek as identified on historic aerial photos as far back as 1938 (Cartographic Research Laboratory, 2021). The 2,000 linear feet/0.49 acres of SW1 within the Project Area have been straightened to facilitate surface water flow and occur in areas within the developed area of BFM where natural topography has been altered for the adjacent development. Approximately 1,035 linear feet/0.5 acres of the southern portion of Rabby Creek (SW2) in the Project Area, although impacted by BFM site development, does display more natural stream features including minimal sinuosity and pool and riffle features. The SW2 portion of Rabby Creek is incised and affected by water flow, sediment deposition, and litter from adjacent land use. The topography in the area is steep (approximately 20 to 30 feet elevation change) from the adjacent uplands to the creek profile.

Exhibit 4-6: Surface Water Systems within the Project Area



Swales and Ditches are part of a surface water management system engineered to convey stormwater runoff from paved surfaces or developed areas, and they can occur on a spectrum from grassed, riprap-lined, or concrete flumes. Various swales exist within the airport property and within the Project Area, but, as they are not regulated by the USACE, they are not specifically delineated or analyzed for potential impacts from the Proposed Action. Revisions to the existing stormwater management system as necessary to accommodate the proposed facilities would be included in the final project design.

Other Surface Waters (OSW) include manmade stormwater ponds and drainage features, such as upland cut ditches and riprap lined ditches, designed and constructed to convey stormwater. MAA manages OSWs to reduce the attractiveness of OSWs to wildlife in accordance with their *Wildlife Management Plan* (MAA, 2012) which was developed per CFR Title 14 FAR Part 139.337. OSWs are delineated within the Project Area: OSW 1 is a wet detention pond with some wetland aquatic species, OSW2 is a riprap-lined ditch with some standing water and vegetation, OSW3 is a dry detention pond supporting some aquatic wetland vegetation, and OSW4 is a drainage ditch off of an abandoned pavement area.

4.8.3.3 Floodplains

No regulatory floodways, 100-year floodplains, or 500-year floodplains are present within the study area.

4.8.4 Environmental Consequences

4.8.4.1 No Action Alternative

Under the No Action Alternative, passenger service would not change; therefore there would be no impact to water resources.

4.8.4.2 Proposed Action: Construction

Construction of the Proposed Action is not anticipated to impact any wetlands. The northern section of Rabby Creek (SW1) would be encapsulated. Impacts that cannot be avoided would be reduced to the greatest extent practicable, and unavoidable impacts would be mitigated offsite in accordance with the 2008 USACE mitigation rule and relevant state regulations. Coordination between MAA and the USACE and ADEM to determine the extent of required mitigation for wetlands and Rabby Creek is ongoing through site plan development and unavoidable impacts would be permitted by the USACE prior to commencement of construction activities. Construction of the Proposed Action would not significantly impact water resources.

4.8.4.3 Proposed Action: Operations

While the Proposed Action would require stormwater management, it is MAA's intent to accommodate these improvements through modifications to the existing onsite ponds and to utilize existing discharge locations. Operation of the Proposed Action would not significantly impact water resources.

4.8.5 Mitigation, Avoidance, and Minimization Measures

All wetlands have been avoided, as well as the southern segment of Rabby Creek (SW2). BMPs utilized during construction would minimize the risk of accidental discharge of pollutants and sediment into ditches and streams within the airport boundary.

4.9 BIOLOGICAL RESOURCES

4.9.1 Definition of Resource and Regulatory Setting

Biological resources include terrestrial and aquatic plant and animal species; special status species, such as those protected under the Federal Endangered Species Act of 1973 or the State of Alabama; and environmentally sensitive or critical habitats. Habitat is defined as the area or environment where the resources and conditions are present that cause or allow a plant or animal to live there. This analysis focuses on the biological resources observed or suspected to be present within or in the vicinity of the Proposed Action, and includes the analysis of potential impacts to wetlands as an important and regulated habitat type. These species and their habitats are regulated through a number of federal and state regulations.

The Endangered Species Act requires the FAA to determine if a Proposed Action under its purview would affect a federally listed species or critical habitat designated for that species (U.S. Code § 1531-1544 1973). In addition, candidate species (any species that either the U.S. Fish and Wildlife Service (USFWS) or National Oceanic and Atmospheric Administration (NOAA]) is considering for listing as "endangered" or "threatened"), shall be identified in order to alert federal agencies of potential proposals or listings. Although Alabama's rare

species of concern do not have the same regulatory protection as federal endangered or threatened species, some state-identified nongame species do receive regulatory protection through the Alabama Regulations on Game Fish and Fur Bearing Animals administered by the Alabama Department of Conservation and Natural Resources (ADCNR) (Alabama Nongame Species Regulation).

The *Migratory Bird Treaty Act* (MBTA) is protective of many of the bird species observed in the study area. Specific to the Alabama Nongame Species Regulation, all nongame birds are protected except crows, starlings, blackbirds, English sparrows, Eurasian collared doves, pigeons, and other non-native species (Alabama Nongame Species Regulation). Although the Bald Eagle has been delisted from the Endangered Species Act, this species is still protected by the Nongame Species Regulation, the Bald and Golden Eagle Protection Act of 1940 (BGEPA) and the MBTA.

The *Magnuson-Stevens Fishery Conservation and Management Act* (MSFCMA, 16 U.S.C. 1801, et seq.) provides for the conservation and management of fisheries in federal waters. Protection of identified Essential Fish Habitat (EFH), (including the physical, chemical, and biological properties of aquatic areas and associated substrate currently or historically used by fishes for spawning, breeding, feeding, or growth to maturity) under the MSFCMA is administered by NOAA Fisheries. EFH fisheries are designated and managed under regional Federal Fisheries Management Plans (50 Code of Federal Regulations (CFR) 600). NOAA Fisheries evaluates potential impacts to fisheries resources through EFH consultation, where projects have potential to affect identified resources, mostly in-water activities or activities that would affect coastal vegetation or substrate.

4.9.2 Resource Study Area

The study area defined for biological resources encompasses a 1-mile radius from the outer boundary of the Project Area. The Project Area conservatively estimates a maximum envelope to assess the potential direct impacts of the proposed construction footprint. For purposes of this analysis, a desktop survey was performed for the study area, and onsite reconnaissance and potential direct impacts quantification is limited to within the defined Project Area.

A thorough review of publicly available resources, prior studies, and known site conditions was conducted to characterize biological resources within the study area and to provide comprehensive listing of the potential for species occurrence, including any special status species. Database searches included the following:

- USFWS National Wetlands Inventory (NWI) database
- City of Mobile Land Use and Future Land Use Map
- National Land Cover Database
- The MBNEP and The TNC 2019 Habitat Conservation and Restoration Plan for Coastal Alabama
- US Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS) Web Soil Survey
- USFWS Information for Planning and Consultation (IPaC) database
- USFWS Environmental Conservation Online System (ECOS)
- USFWS Critical Habitat Mapper
- ADCNR
- Alabama Natural Heritage Program (ALNHP)

A team of environmental scientists conducted onsite field surveys in March and April, 2021, to characterize the environmental/natural resources within the Project Area. These surveys included pedestrian surveys, site-specific delineations of wetlands and other surface waters, vegetative community identification, and habitat assessments/evaluations. Additionally, a preliminary listed species review was conducted within the Project Area and the one-mile study area.

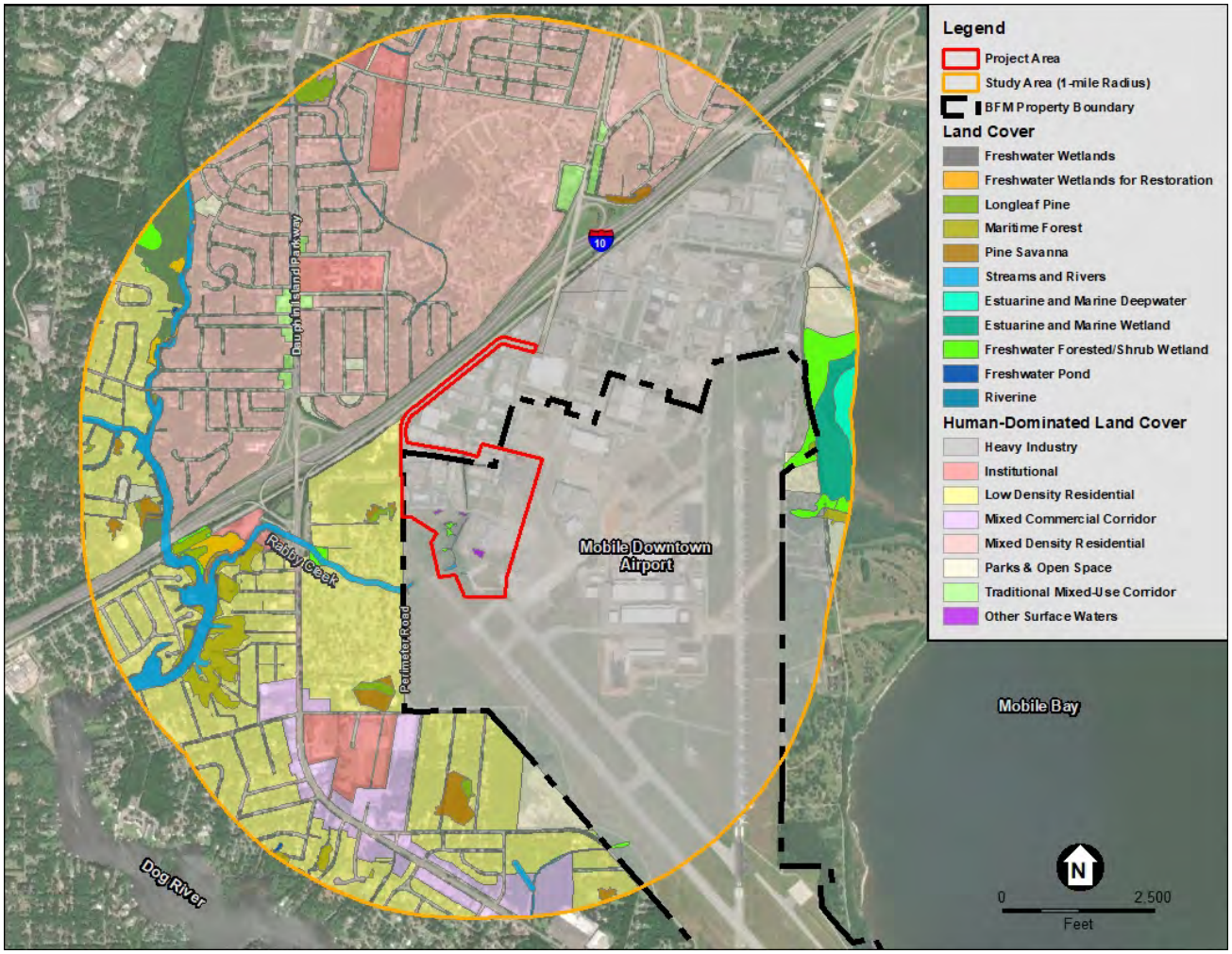
4.9.3 Existing Conditions

4.9.3.1 Land Cover and Habitats

As the BFM campus and surrounding area is heavily urbanized/industrial, many habitat types are defined by

human-dominated land uses, and natural habitat or vegetation communities are generally absent. Otherwise, in more natural areas, the dominant plant species composition typically defines the vegetative community type. Wetland and waterbody features identified within the study area are classified according to the Cowardin classification system (Cowardin, Carter, Golet, and LaRoe, 1979) and identified based on field delineations of the approximate wetland jurisdictional boundaries in accordance with federal and regional guidelines (USACE, 1987; EPA, USDA NRCS, USFWS, 1989; USACE, 2010; EPA, USACE 2020). Exhibit 4-7 illustrates the existing land cover and human-dominated land cover classifications within the study area and within the Project Area. The human-dominated land uses and upland habitats are further described below; wetland habitats and surface water systems are discussed in detail in Section 4.9.

Exhibit 4-7: Land Cover at BFM



Human-Dominated Land Uses (City of Mobile 2017)

The Heavy Industry land use includes all airport services and manufacturing, assembly, and processing of materials and products. The existing BFM campus and associated adjacent commercial/industrial park, including the entire Project Area, is designated as heavy industry use.

Institutional includes educational, religious, health, and military facilities and all infrastructure associated with the facility (e.g., buildings, grounds, and parking lots). This category exists in the northwest and southwest portion of the study area.

Low Density Residential includes areas that are often located in newly established sections of large urban areas, or within partially developed subdivisions or subdivisions. The majority of the land to the west and

southwest in the study area is low density residential.

The Mixed Commercial Corridor includes commercial areas associated with the provision of products and services. This category may include shopping centers and commercial strip mall development, such as those located south and southwest in the study area along Dauphin Island Parkway.

Mixed Density Residential may be comprised of single-family dwellings that may contain two to five homes per acre and higher density family dwellings. This land use is the dominant feature to the north/northwest of I-10 within the study area.

Parks and Open Space is associated with recreational areas including golf courses and parks. There is one park located directly west of the Project Area and another on the eastern boundary of the airport property.

The Traditional Mixed-Use Corridor includes developments along transportation routes and in cities, towns, and built-up areas where separate land uses cannot be individually mapped. Residential, commercial, industrial and, occasionally, other land uses would be included.

Land Cover: Upland Habitats

Longleaf Pine are native habitats of naturally-generated longleaf pine as the dominant vegetative cover sparsely, interspersed with xeric oaks, typically associated with upland grasses in a relatively open understory. This habitat does not exist within the Project Area, but small, isolated portions are interspersed infrequently within low density residential and mixed density residential land cover throughout the study area.

Pine Savanna may include pine communities of a mostly open canopy with scrub and herbaceous understories or areas of selective pine cutting where the tree densities were reduced and no hardwood understory is evident. This habitat does not exist within the Project Area but is interspersed infrequently throughout the study area in small, isolated portions within the low-density residential land cover and proximal to the longleaf pine habitat areas.

4.9.3.2 Wildlife

Birds, mammals, reptiles, amphibians, and invertebrates considered relatively common within the vicinity of the airport include those generally associated with and tolerant of highly developed, urban areas. Characteristic wildlife that would be expected in the vicinity of BFM include small to medium-sized prey mammals, such as rabbits, raccoons, opossum, armadillo, squirrels, native and nonnative anoles, and rodents; predatory animals such as coyotes, fox, and hawks; various bird guilds including doves, crows, sparrows, starlings, finches, swallows, and pigeons. Small mammal tracks (raccoon), minnows, a juvenile snapping turtle, and two unidentified black snakes were observed during field assessments.

4.9.3.3 Special Status Species

The federally listed or protected and state listed special status species with potential to occur in the Project Area, study area, or otherwise be impacted by the Proposed Action are listed in Table 4-12 (USFWS, 2021a) and a comprehensive list of potential species in the study area is available in Appendix C There are six threatened and three endangered fish and wildlife species within the study area. There are 28 migratory birds on the USFWS Birds of Conservation Concern (BCC) list (Appendix C). The USFWS provided comments regarding the MBTA and the BGEPA, noting that coastal areas are important migration points for migratory birds and utilized year-round by eagles (see letter from USFWS in Appendix D). Birds to be considered when assessing potential effects of airports include all protected MBTA species, avian species listed in the in BCC, and BGEPA. The USFWS referenced National Bald Eagle Management Guidelines 2007 and additional BMPs to be considered and stated that, as long as BMPS are implemented, no further endangered species consultation would be required for this portion of the project unless certain conditions change.

No federally listed plants or critical habitats are identified within the study area.

EFH designated by NOAA Fisheries occurs on the far eastern portion of the study area associated with estuarine marine deepwater and estuarine and marine wetlands (Appendix C) (NOAA, 2021). No EFH occurs within the

Project Area.

Each federally listed species listed in Table 4-12 was assigned a potential for occurrence based on quality of suitable habitat, species specific range, and known occurrences or direct observations within the study area and Project Area. The potential occurrence was defined in one of the following four categories:

- **None**—The area is outside the species' known range or the area is within the species' range but no suitable habitat is available, or no previous documentation of this species occurs and it was not observed during field reviews.
- **Low**—The area is located within the species' known range and minimal or marginal quality habitat is present within or adjacent to the area; however, there are no documented occurrences of the species in the vicinity and it was not observed during field reviews.
- **Moderate**—The area is within the species' range and suitable habitat exists within the area; however, there are no known occurrences of the species and it was not observed during field reviews.
- **High**—The project is within the species' known range, suitable habitat exists within the area, there is a minimum of one documented occurrence of the species within the area, and/or the species was observed during field reviews.

There are no additional state protected species in the study area. During project coordination with agencies, ADCNR provided a list of species known to occur in Mobile County and stated that "there appears to be no imminent threat to any known sensitive species within one mile of the project area" (see letter from ADCNR in Appendix D). The ALNHP also provided a list of potentially occurring state protected species within the study area (see letter from ALNHP in Appendix D). Although the ALNHP reported four potentially occurring plant species (scarlet hibiscus [*Hibiscus coccineus*], incised agrimony [*Agrimona incisa*], one flower cancer root [*Orobanche uniflora, Aphyllon uniflorum*], and American chaffseed [*Schwalbea americana*]), many of these species were last reported in the late 1800's and early 1900's and were not identified during the field surveys. A large majority of the Project Area is dominated by invasive, exotic plant species, and as a result, occurrence of special status state plant species within the Project Area is highly unlikely, and impacts to special status plant species is not further considered in this analysis.

Table 4-12: Potentially Occurring Special Status Wildlife Species

Species	Common Name	Federal Status	Jurisdiction	Potential Occurrence within the Study Area/Project Area
Marine Mammals				
Tricheus manatus	West Indian Manatee	Threatened	USFWS	Low / None – Low possibility for this species to occur within the study area. No habitat exists within the Project Area.
Birds				
Laterallus jamaicensis	Eastern Black Rail	Threatened	USFWS	Low / None – Low possibility for this species to occur within the study area. No habitat exists within the Project Area.
Mycteria americana	Wood Stork	Threatened	USFWS	Low /Low – Minimal habitat may exist within the study area. Extremely limited, minimal habitat exists within the Project Area.
Reptiles				
Pseudemys alabamensis	Alabama Red- Bellied Turtle	Endangered	USFWS	Low / None – Low possibility for this species to occur within the study area. No habitat exists within the Project Area.

Species	Common Name	Federal Status	Jurisdiction	Potential Occurrence within the Study Area/Project Area
Pituophis melanoleucus lodingi	Black Pine Snake	Threatened	USFWS	Low / None – Low possibility for this species to occur within the study area. No habitat exists within the Project Area.
Drymarchon corais couperi	Eastern Indigo Snake	Threatened	USFWS	Low / Low – Low possibility for this species to occur within the study area. No habitat exists within the Project Area.
Lepidochelys kempii	Kemp's Ridley Sea Turtle	Endangered	NOAA	Low / None – Minimal habitat may exist within the study area. No habitat exists within the Project Area.
Caretta	Loggerhead Sea Turtle	Endangered	NOAA	Low / None – Minimal habitat may exist within the study area. No habitat exists within the Project Area.
Fish				
Acipenser oxyrinchus desotoi	Atlantic Sturgeon	Threatened	NOAA	Low / None – Minimal habitat may exist within the study area. No habitat exists within the Project Area.

NOTE: Species were evaluated for their potential to occur within the study area and, therefore, their potential to be impacted by the Proposed Action. Potential to occur was based on a combination of baseline biological surveys and historical information. Potential to occur within the Project Area may also be influenced by occurrences in adjacent similar habitat, and this potential has been noted as appropriate.

NOAA = National Oceanic and Atmospheric Administration; USFWS = U.S. Fish and Wildlife Service

SOURCES:

- USFWS IPaC, accessed March 2021 at https://ecos.fws.gov/ipac/
- NatureServe Explorer, accessed in April 2021 at https://explorer.natureserve.org/
- ALDCNR 2021 website, accessed in April 2021
- USFWS, April 22, 2021. Letter from William Pearson, USFWS AL Ecological Services Field Office, to Russell Stallings, MAA, re: *2021-TA-0706*

While the majority of special status species have low to no likelihood of occurrence within the Project Area, the species that have some potential for occurrence within the Project Area or may be affected by the Proposed Action are discussed further below. This potential for occurrence is based upon habitat type, quality, and quantity that occurs onsite. No designated Critical Habitat occurs in the study area and these species were not documented onsite.

Wood Stork (Mycteria americana) – Federally-listed Threatened

Wood storks are large, bald-headed wading birds. Wood stork habitat typically includes freshwater and estuarine wetlands. They primarily nest in cypress or mangrove swamps and feed in shallow freshwater marshes, narrow tidal creeks, or flooded tidal pools. They prefer accessing aquatic feeding areas via shallow, open slopes. Minimal foraging and nesting habitat exists within the far eastern and western portions of the study area. Wet detention stormwater ponds (OSWs) within the Project Area are unlikely to support foraging habitat as they are lined with riprap or otherwise inaccessible through steep slopes or thick invasive vegetation. Due to the current developed commercial/industrial use surrounding the active airfield and habitat minimization per the Mobile Downtown Airport Wildlife Management Plan (2012), the potential for this species to utilize the site is extremely low.

Eastern Indigo Snake (Drymarchon couperi) – Federally-listed Threatened

The Eastern indigo snake is glossy, blue-black in color and may reach a length of 8.5 feet. A wide variety of habitats are utilized by this species; however, they are more greatly associated with xeric habitats. In more northerly portions of its range, the Eastern indigo snake occupies sandhills during the winter, using gopher

tortoise burrows as a retreat from cold temperatures. During the warmer months, snakes move to nearby wetland systems to forage. The Project Area may possibly support minimal, low-quality foraging wetland habitat, but the potential for this species to utilize the Project Area is extremely low due to the commercial/industrial use and lack of any signs of gopher tortoise presence.

4.9.4 Environmental Consequences

4.9.4.1 No Action Alternative

Under the No Action Alternative, there would be no affects to species. Current aircraft operations would continue under the No Action Alternative, including anticipated future increase in aircraft operations, which would not confer additional affects to species than those that currently exist onsite. The No Action Alternative would not affect existing, already disturbed and degraded habitats, and these areas would continue to provide negligible habitat value in the regional landscape.

4.9.4.2 Proposed Action

FAA Order 1050.1F identifies that factors to consider in a significance determination for biological resources include whether or not the action would have the potential for a long-term or permanent loss of unlisted plant or wildlife species; adverse impacts to special status species or their habitats; substantial loss, reduction, degradation, disturbance, or fragmentation of native species' habitats or their populations; or adverse impacts on a species' reproductive success rates, natural mortality rates, non-natural mortality, or ability to sustain the minimum population levels required for population maintenance.

Potential impacts to biological resources from construction, aircraft operations, and ongoing facility maintenance include direct impacts of habitat loss as natural areas are converted to airport use and ongoing disturbance to noise-sensitive species generated by operational noise.

Habitats, Including Wetlands

The Project Area comprises 99.45 acres. Land cover within the Project Area is predominately heavy industrial. Over 60% is paved and most of the remaining undeveloped space has been previously cleared of native vegetation and graded. Much of the land is used for stormwater management, and is currently either dominated by non-native, invasive/exotic vegetation, and ruderal plant species or maintained as grass. A small portion is covered by wetlands, streams, and OSW (e.g., ditches) land cover types. Impacts to existing habitats would be confined to BFM property and the adjacent access road right-of-way; potential impacts of the Proposed Action on non-maintained land cover types are listed in Table 4-13.

Table 4-13: Aquatic Habitat in the Project Area

Land Cover		Total Acres in Project Area
Wetlands	Wetland 1	0.48
	Wetland 2	0.08
	Wetlands Subtotal	**0.56**
Streams	Rabby Creek (SW1)	0.49
	Rabby Creek (SW2)	0.50
	Streams Subtotal	**0.99**
OSWs	OSW 1	0.48
	OSW 2	0.12
	OSW 3	0.09
	OSW 4	0.35
	OSW 5	0.02

Land Cover		Total Acres in Project Area
	OSWs Subtotal	**1.05**
	GRAND TOTAL	**2.61**

A total of 1.05 acres of OSW are present within the Project Area. The existing BFM on-site stormwater management systems (ditches, ponds, canals, swales) are constructed to move stormwater flow rapidly from the airfield and other paved or impervious surfaces and are treated and mowed on a regular basis to prevent wildlife hazard attractants (i.e., to prevent foraging habitat from establishing). FAA regulations require that all public airports holding a certificate under Title 14 CFR Part 139 maintain a safe operating environment, which specifically includes minimizing attractants to wildlife that may become hazardous in the operational environment. BFM maintains a Wildlife Management Plan (2012) as part of their Part 139 certification. Any stormwater features that would be constructed as part of the Proposed Action would be designed to reduce hazardous wildlife attractants on airport property in accordance with the BFM Wildlife Management Plan.

A total of 0.56 wetland acres and 0.99 stream acres that are considered jurisdictional to the USACE occur within the Project Area.[4] The portion of Rabby Creek noted as SW1 is proposed to be converted to a closed-culvert system, which would prevent use of that portion of the system by aquatic and associated terrestrial species. The portion of Rabby Creek noted as SW2 and all wetlands are anticipated to be avoided as part of the Proposed Action.

It is highly unlikely that the Proposed Action would impact designated EFH or any species protected under the Marine Mammal Protection Act, and during early project coordination NOAA Fisheries did not express any concerns related to EFH. There is no EFH within the Project Area; however, the Project Area may be hydrologically connected to EFH identified within the study area. The Proposed Action does not include new in-water activities or activities that would affect coastal vegetation or substrate, such as emergent vegetation.

Wildlife Species

The Proposed Action would permanently alter previously disturbed habitat within the Project Area. It is anticipated that during construction activities most mobile resident wildlife would be displaced, likely concentrating in remaining onsite natural areas and stormwater management features or utilizing adjacent natural areas as available in the fragmented commercial, industrial, and urbanized landscape. Surface water habitat would continue to be maintained per the BFM Wildlife Hazard Plan (2012), which would minimize the attractiveness and use of these habitats by birds and other species in the area. Ongoing aircraft operations would continue to displace some species that are likely to avoid the area due to noise and continued human presence/industrial activity.

The wood stork and the Eastern indigo snake are the only special status species with potential to occur in the Project Area or otherwise be affected by the Proposed Action construction, operation, or ongoing maintenance activities. Table 4-14 summarizes the effects determination for these species. USFWS responded to early coordination stating that, so long as relevant BMPs are implemented, no further endangered species consultation would be required for this project (see letter from USFWS in Appendix D). Early coordination with ADCNR and ALNHP yielded concurrence with this conclusion. A general list of relevant BMPs (USFWS, 2021) that would be protective of potential resident species and migrant species, including birds, includes:

- Implement a "no snake killing policy" during construction activities to be protective of any unexpected, but potentially Eastern indigo and black pine snake occurrences.
- Install water quality BMPs during and after construction to minimize erosion and sedimentation in

[4] Wetlands are determined as jurisdictional pursuant to Section 404 of the Clean Water Act and delineated per USACE, 1987; USACE, EPA, USDA NRCS, and USFWS, 1989; USACE, 2010; and EPA and USACE, 2020.

waterways.

- Immediately revegetate or clear land in phases to both minimize erosion and to minimize potential for plover nesting on exposed ground.

Table 4-14: Summary of Federally-Listed Species Potential Occurrence and Effect

Common Name	Scientific Name	Protected Status	Potential Occurrence	Effect Summary
Eastern Indigo Snake	*Drymarchon corais couperi*	Federal – Threatened	Unlikely	No Effect Conservation measures during construction
Wood stork	*Mycteria Americana*	Federal – Threatened	Unlikely	No Effect
SOURCE: Environmental Science Associates, 2021.				

Eastern Indigo Snake – Federally-listed Threatened. There were no gopher tortoise burrows within the Project Area, no onsite xeric habitat, and no Eastern indigo snakes were observed during the onsite field reviews. Despite the lack of criteria that would denote potential presence, BFM would implement the USFWS *Standard Protection Measures for the Eastern Indigo Snake* (USFWS, 2013) during construction as an additional conservation measure for this species (Appendix C). These measures include the inspection of holes or other refugia where a snake could reside prior to the initiation of construction activities. Based on the lack of gopher tortoise burrows, low quality wetlands dominated by invasive exotic plant species, industrial/commercial land use surrounding the Project Area, and implementation of protection measures, the Proposed Action would have *no effect* on the Eastern indigo snake. Additionally, no indirect effects to Eastern indigo snakes are anticipated.

Wood Stork – Federally-listed Threatened. No wood storks were observed in the vicinity of the Project Area during the field evaluations. While there are wetlands present, the wetlands located in Project Area are of low quality and dominated by invasive, exotic plant species, and OSWs and SW have inappropriate habitat that is too shrubby to support wood stork foraging habitat. Nominal areas that could be considered minimally Suitable Foraging Habitat (SFH) for wood stork include limited portions of drainage ditches and narrow littoral edges of shallow ponds; however, SFH is not regularly present in the Project Area as OSWs are maintained per the BFM Wildlife Habitat Plan (2012). Based on the limited potential SFH, this project would have *no effect* on the wood stork. Additionally, no indirect effects to wood storks are anticipated.

The Proposed Action would not significantly impact terrestrial and aquatic plant and animal species, game and non-game species, special status species, or environmentally sensitive or critical habitats. The Proposed Action would be constructed in a previously developed, heavy industrial area with no native and minimal natural habitat available. Up to 0.56 acres of wetlands may be filled and converted, and up to 3,035 linear feet of Rabby Creek may be routed into a closed culvert system as it is used to channel stormwater off paved surfaces of the Aeroplex. If mitigation is required, it would be completed offsite in accordance with FAA hazardous wildlife guidance and the 2003 Memorandum of Agreement (FAA, U.S. Airforce, U.S. Army, EPA, USFWS, USDA, 2003). Coordination with the USACE and ADEM would identify the amount and type of mitigation for wetland and stream conversion impacts, which would be completed in accordance with USACE and state regulatory guidance. No adverse impacts to special status species or their habitats or substantial loss or fragmentation of native species' habitats or their populations is anticipated. It is expected that the Proposed Action would have no effect on listed species or their habitats.

4.9.5 Mitigation, Avoidance, and Minimization Measures

As previously stated, BMPs would be implemented to avoid and minimize potential impacts to protected species. Impacts to wetlands have been avoided as well as to the southern segment of Rabby Creek (SW2).

4.10 COASTAL RESOURCES

4.10.1 Definition of Resource and Regulatory Setting

Coastal resources include natural resources occurring within coastal waters and their adjacent shorelands. Coastal resources include islands, transitional and intertidal areas, salt marshes, wetlands, floodplains, estuaries, beaches, dunes, barrier islands, coral reefs, as well as fish and wildlife and their respective habitats within these areas.

Relevant laws pertaining to coastal resources that are applicable to this project include the CZMA (16 U.S.C. §§ 1451-1466). Per the CZMA and its regulations (15 CFR 930), an applicant seeking a permit, license, or other authorization from a federal agency must consult the relevant state agency to ensure the project is consistent with the state coastal management program. More information about coastal resources can be found in Chapter 4 of the *FAA Order 1050.1F Desk Reference* (FAA, 2020).

Alabama exercises its authority to implement the Alabama Coastal Area Management Program (ACAMP) under the CZMA through the Code of Alabama 1975 §§9-7-10(8) & 16 and ADEM Administrative Code 335-8, which defines coastal resources as valuable human, natural, cultural, or historical assets within the coastal area, such as water quality, air quality, wetlands and submersed grassbeds, beaches and dunes, wildlife habitats, biological resources, and water resources. ACAMP is a joint effort between the ADCNR-State Lands Division and the ADEM Coastal Program. The ADCNR-State Lands Division is responsible for planning and policy development, while ADEM is responsible for permitting, monitoring, and enforcement activities. A Federal Consistency Review is conducted by ADEM when construction occurs within the Alabama coastal zone boundary.

4.10.2 Resource Study Area

The study area for coastal resources is the project footprint and any surrounding habitat that may be affected by the Proposed Action.

4.10.3 Existing Conditions

BFM is located adjacent to Mobile Bay, which is a coastal water under ACAMP. However, no coastal resources are located within the study area.

No resources protected under the Coastal Barrier Resources Act are present within the study area.

4.10.4 Environmental Consequences

4.10.4.1 No Action Alternative

Under the No Action Alternative, passenger service would not change; therefore, there would be no impact to coastal resources.

4.10.4.2 Proposed Action

The FAA has not established a significance threshold for coastal resources. Factors to consider when assessing the significance of potential impacts on coastal resources include situations in which the action would have the potential to:

- Be inconsistent with the relevant state coastal zone management plan(s);
- Impact a coastal barrier resources system unit (and the degree to which the resource would be impacted);
- Pose an impact on coral reef ecosystems (and the degree to which the ecosystem would be affected);
- Cause an unacceptable risk to human safety or property; or
- Cause adverse impacts on the coastal environment that cannot be satisfactorily mitigated.

The Proposed Action would take place in the coastal zone, but would not directly impact any coastal resources. The FAA has determined that the Proposed Action is consistent with the enforceable policies of the ACAMP. As part of the CZMA determination process, this EA has been sent to ADEM during the public review period. Therefore, the Proposed Action would not result in significant impacts to coastal resources.

4.10.5 Mitigation, Avoidance, and Minimization Measures

No mitigation is required, as coastal resources are not directly impacted. BMPs to minimize impact to water quality, as described in Section 4.8.5, would be implemented.

4.11 LAND USE

4.11.1 Definition of Resource and Regulatory Setting

Land use is the classification of activities occurring at a given location, whether the land is in a natural state or has been modified or developed. Land uses are often identified by general plans, management plans, and land use policies that determine the type and extend of land use allowable in specific areas, including protection of specially designated or environmentally sensitive areas. Ordinances regulate the types of activities determined to be acceptable within the identified land uses. More information about land use can be found in Chapter 9 of the *FAA Order 1050.1F Desk Reference* (FAA, 2020).

4.11.2 Resource Study Area

The study area for land use is the area where the terminal development program would occur.

4.11.3 Existing Conditions

The study area is within the City of Mobile, Mobile County. The city's Future Land Use Map (City of Mobile, 2017) identifies the airport as Heavy Industry, which is adjacent to Low Density Residential to the west and south, I-10 to the north, and Parks & Open Space to the east between the airport and Mobile Bay. The City's zoning map (City of Mobile, 2021) lists the airport as Single-Family Residential, but property owned by MAA is exempt from the zoning ordinance.

Existing land uses within the study area include the T1T terminal and nine buildings designated as "industrial" on the Master Plan's Existing Land Use Map. The T1T terminal was originally built as a warehouse and was retrofitted and used for low-cost carrier passenger travel (Frontier Airlines) until Summer 2020; it is currently used as meeting space for MAA staff. Some of the other buildings are used by MAA for uses related to air travel and administration, while others are rented out to other companies as office space.

Exhibit 4-8: Tenants in the Study Area

4.11.4 Environmental Consequences

4.11.4.1 No Action Alternative

Under the No Action Alternative, BFM would be anticipated to continue to develop in a manner consistent with its existing land use that supports the aviation industry and operations.

4.11.4.2 Proposed Action: Construction

Construction of the Proposed Action would occur entirely on BFM property and would take place in phases. Initially, the existing T1T terminal would continue to be utilized for a combination of low-cost carrier passenger travel and office space. However, through the timeframe of PAL 1 and PAL 2, this building may be converted to be used as belly cargo or other aviation related activities as the low-cost carriers are integrated into the new passenger terminal building.

The proposed passenger terminal, parking, and roads would require demolition of seven buildings (six used as offices and one storage shed) and would reconfigure existing parking and roads. This would displace existing tenants (Aero Star, Inc., Container Port Group, Bay Lines, Inc., Gulf Intermodal, Inc., and Shoreline Transportation, Inc.), some of which may be relocated to other buildings on the BFM airport, depending on their needs and availability.

The existing Penske truck operation center and the open-air structure used by Penske for fueling and/or maintaining vehicles may be utilized for different transportation uses (such as a rental car facility), but future uses would be closely aligned with existing uses.

4.11.4.3 Proposed Action: Operations

The Proposed Action is consistent with existing land uses and the Future Land Use Map. In addition, the

Proposed Action would not create a new wildlife attractant or create an obstruction to navigation airspace per 14 CFR Part 77, *Safe, Efficient, and Preservation of the Navigable Airspace*. Therefore, no impacts to land use would occur with implementation of the Proposed Action.

4.11.5 Mitigation, Avoidance, and Minimization Measures

Neither the No Action Alternative nor the Proposed Action would produce significant short-term or long-term land use impacts. BMPs would be implemented during construction to minimize impacts due to construction and operation of the Proposed Action.

4.12 HAZARDOUS MATERIALS, SOLID WASTE, AND POLLUTION PREVENTION

4.12.1 Definition of Resource and Regulatory Setting

Hazardous materials, solid waste, and pollution prevention as an impact category includes an evaluation of the following:

- Waste streams that would be generated by a project, including for the potential impact to environmental resources, and the impacts on waste handling and disposal facilities that would receive the waste;
- Potential hazardous materials that could be used during operation of a project, and applicable pollution prevention procedures;
- Potential to encounter existing hazardous materials at contaminated sites during operation and decommissioning of a project; and
- Potential to interfere with any ongoing remediation of existing contaminated sites at or in the immediate vicinity of a proposed project.

The terms hazardous material, hazardous waste, and hazardous substance are often used interchangeably when used informally to refer to contaminants, industrial wastes, dangerous goods, and petroleum products. Each of these terms has a specific technical meaning based on the relevant regulations.

Solid waste is defined by the implementing regulations of the Resource Conservation and Recovery Act (RCRA) generally as any discarded material that meets specific regulatory requirements, and includes items such as scrap metal, spent materials, chemical by-products, and sludge from wastewater and water treatment plants.

Hazardous material is any substance or material that has been determined to be capable of posing an unreasonable risk to health, safety, and property when transported in commerce. The term hazardous materials include both hazardous wastes and hazardous substances, as well as petroleum and natural gas substances and materials, as described in 49 CFR § 172.101.

Hazardous waste is a type of solid waste defined under the implementing regulations of RCRA that possesses at least one of the following four characteristics: ignitibility, corrosivity, reactivity, or toxicity as defined in 40 CFR Part 261 Subpart C, or included in USEPA deemed hazardous waste lists in 40 CFR Part 261 Subpart D. RCRA imposes stringent requirements on the handling, management, and disposal of hazardous waste, especially in comparison to the requirements for non-hazardous wastes.

Hazardous substance is broadly defined under Section 101(14) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). Hazardous substances include:

- Any element, compound, mixture, solution, or substance designated as hazardous under Section 102 of CERCLA;
- Any hazardous waste under Section 307(a) of the CWA;
- Any hazardous waste under Section 3001 of the RCRA;
- Any hazardous air pollutant listed under Section 112 of the CAA; and

- Any imminently hazardous chemical substance or mixture for which the USEPA has taken action under Section 7 of the Toxic Substances Control Act.

More information about hazardous materials, solid waste, and pollution prevention can be found in Chapter 7 of the *FAA Order 1050.1F Desk Reference* (FAA, 2020).

4.12.2 Resource Study Area

The study area for hazardous materials, solid waste, and pollution prevention is the Project Area, which encompasses the ground potentially directly affected by the Proposed Action.

4.12.3 Existing Conditions

BFM currently utilizes a 1,000-gallon gasoline tank, two 1,000-gallon diesel tanks, and a 250-gallon portable tank. A 275-gallon tote and a 55-gallon drum are on spill control pallets for automobiles. There is one 15,000-gallon and three 20,000-gallon Jet A storage tanks and one 12,0000-gallon AvGas storage tank. In 2020, a total of 5,308 gallons of gasoline and 6,007 gallons of diesel were used for automobiles and equipment at the BFM airport.

A Remedial Investigation Report (USACE 2004) completed on a portion of BFM (the former Brookley Air Force Base) identified two areas of concern within or adjacent to the project footprint that were potential former landfills (see Figure 21.1 in the MAA Master Plan for detail). Site 003 is adjacent to the T1T terminal building and Site 005 is adjacent to the Edgewood Villas apartments. Site 003 identified the following within groundwater: arsenic, barium, cadmium, and mercury. Site 005 identified the following within groundwater: arsenic, aluminum, cadmium, and to a lesser extent manganese, nickel, beryllium, and cobalt. Additionally, the arsenic levels within the groundwater at both sites were deemed to be an unacceptable carcinogenic risk to both adults and children if ingested, and human consumption of the groundwater at both sites was not determined to be likely. At Site 003, no human health risks were found from soil, sediment, or surface water contamination. At Site 005, no human health risks were found from soil contamination, and because the lack of evidence that the site was a former landfill no action was recommended.

As noted in the *MAA Master Plan* (MAA, 2021), monitoring wells are in place on most hazardous waste sites and have found contaminant levels to be declining.

BFM currently utilizes Republic Services' Timberlands Landfill to dispose of solid wastes off-site.

MAA has developed a Spill Prevention Control and Countermeasure (SPCC) Plan for the Aeroplex. The SPCC also covers above-ground storage tanks used by BFM, although tenants at the Aeroplex are responsible for the management of their own facilities and fuel storage tanks.

4.12.4 Environmental Consequences

4.12.4.1 No Action Alternative

Under the No Action Alternative, passenger service would not change; therefore, there would be no impact to hazardous material sites.

4.12.4.2 Proposed Action: Construction

During construction, contractors would use equipment that utilize fossil fuels and other potential hazardous materials. Construction activity would be subject to existing permit procedures for the handling, transportation, and disposal of hazardous materials. Procedures outlined in the MAA SPCC would be followed in the event of accidental release of hazardous materials.

As previously discussed, hazardous waste sites are currently monitored at BFM. If additional contaminated soil is encountered during construction, construction would be halted, and the contractor would coordinate with the appropriate local and/or state agency.

4.12.4.3 Proposed Action: Operations

The Proposed Action would result in an increase in use of hazardous materials, such as AvGas and Jet A, to support the relocated passenger operations at BFM. The Proposed Action would likely continue to use Republic Services to handle solid waste, but is not anticipated to exceed their existing capacity. The airport would continue to utilize an SPCC to avoid and mitigate potential impacts due to accidental release of hazardous materials. No significant impacts related to hazardous materials would occur due to operation of the Proposed Action. Operations would comply with local, state, and federal laws regarding the use, storage, and transportation of hazardous materials.

4.12.5 Mitigation, Avoidance, and Minimization Measures

The construction, design, and operation of the Proposed Action would adhere to federal and state regulations in addition to BMPs pertaining to the use of hazardous materials. As previously stated, BFM would continue to utilize an SPCC to avoid and mitigate potential impacts due to accidental release of hazardous materials.

4.13 NATURAL RESOURCES AND ENERGY SUPPLY

4.13.1 Definition of Resource and Regulatory Setting

Natural resources and energy supply provides an evaluation of a project's consumption of natural resources and use of energy supplies during construction, operation, and/or maintenance of a project. Executive Order 13693, *Planning for Federal Sustainability*, set goals for all federal agencies to promote energy conservation, efficiency, and management. More information about natural resources and energy supply can be found in Chapter 10 of the *FAA Order 1050.1F Desk Reference* (FAA, 2020).

4.13.2 Resource Study Area

The study area for natural resources and energy supply is the Project Area, which encompasses the area where the Proposed Action would occur.

4.13.3 Existing Conditions

BFM is supplied by electricity, sewer, and water. Electricity is provided by Alabama Power Company, while water is provided by Mobile Area Water and Sewer System. Fuel for aviation operations is provided by Signature Flight Support.

BFM has a new fuel farm with four 20,000-gallon tanks (a total of 80,000 gallons). A second fuel farm is dedicated to Defuel with three 20,000-gallon tanks and one 12,000-gallon tank (a total of 72,000 gallons). A third fuel farm has three 12,000-gallon tanks dedicated to Airbus, with one containing sustainable aviation fuel (SAF) (a total of 36,000 gallons). There is also one 12,000-gallon AvGas tank.

The airport utilized an average of approximately 34,000 gallons of AvGas and 2,000,000 gallons of Jet A annually between 2019 and 2020. Prior to operations reductions due to COVID-19, MAA received an average of two 8,000-gallon fuel transports per day.

4.13.4 Environmental Consequences

4.13.4.1 No Action Alternative

Under the No Action Alternative, resource consumption would initially remain at existing levels at both MOB and BFM. Natural resource and energy consumption would likely increase as projects are constructed at both sites to support development.

4.13.4.2 Proposed Action: Construction

Energy in the form of electricity and fuel would be consumed during construction of the Proposed Action. The use of natural resources such as water, sand, gravel, and paving materials would temporarily increase during the construction period. However, sufficient supply exists to meet the project demands and the use of natural resources in short supply is not anticipated. In addition, it is typical with paving projects at BFM that the

concrete is crushed and recycled, which may reduce the volume of new materials (concrete cement) required to construct the Proposed Action. Non-potable water would be used to control construction dust and would be provided using portable water tanks or water trucks supplied by the contractor. Therefore, the Proposed Action would not have a significant impact on natural resources or energy supply.

4.13.4.3 Proposed Action: Operations

The Proposed Action would include the construction of new facilities and would require electricity to power and light the buildings and parking areas, fuel consumption for aircraft operations, and water for use in the terminal.

While implementing the Proposed Action would increase the demand for electricity and water usage for the new facilities, these demands would be offset by the demolition of seven existing structures which are currently utilizing electricity and water. Due to the offset of use of resources and the availability of these resources in the region, the potential demand is not expected to exceed the existing and future supplies.

Additional aircraft operations as part of the Proposed Action would result in increase in fuel consumption. However, due to availability of fuel in the region, any increase in demand is expected to be minimal and would not exceed the existing supplies.

4.13.5 Mitigation, Avoidance, and Minimization Measures

No mitigation or avoidance measures are necessary.

4.14 SOCIOECONOMICS, ENVIRONMENTAL JUSTICE, AND CHILDREN'S ENVIRONMENTAL HEALTH AND SAFETY RISKS

4.14.1 Definition of Resource and Regulatory Setting

A socioeconomic analysis evaluates how elements of the human environment might be affected by the proposed action and alternative(s). Socioeconomic impacts are generally associated with employment, economic activity, population, housing availability, public services, and the potential for growth inducement. Environmental justice describes whether these or other environmental impacts are borne primarily by a low-income or minority group and whether all people have been provided the opportunity for meaningful involvement in project-related decisions. Environmental health and safety risks may disproportionately affect children due to exposure routes that differ from adult lifestyles or are attributable to products or substances that the child is likely to come in contact with or ingest.

EO 12898 (1994), *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, directs federal agencies to identify and address the disproportionately high and adverse human health or environmental effects of their actions on minority and low-income populations. DOT Order 5610.2 (1997*), Environmental Justice in Minority and Low-Income Populations*, implements EO 12898.

EO 13045, *Protection of Children from Environmental Health Risks and Safety Risks*, requires federal agencies to identify and assess environmental health and safety risks that may disproportionately affect children and ensure that its actions address any disproportionate risks.

4.14.2 Resource Study Area

The study area includes the City of Mobile and the communities surrounding BFM that would experience potential socioeconomic and physical environmental impacts as a result of the Proposed Action. For purposes of collecting demographic and economic data, these communities are identified by census tract boundaries; however, they correspond closely with neighborhoods. Both BFM and the Aeroplex, as well as the Neshota and Rosedale neighborhoods of Mobile, are located in Census Tract 74 on the southeast side of I-10. On the northeast side of I-10, the Maryvale neighborhood is represented by Census Tract 15.01 (east side) and Census Tract 23.02 (west side), the Arlington neighborhood corresponds to Census Tract 15.02, and the Riviera

neighborhood corresponds to Census Tract 23.01 (Exhibit 4-8).

The CEQ's *Environmental Justice: Guidance Under the National Environmental Policy Act* (CEQ, 1997) and EPA's *Final Guidance for Incorporating Environmental Justice Concerns in USEPA's NEPA Compliance Analyses* (EPA, 1998) were used to evaluate whether a minority and/or low-income community exists within the study area. "Minorities" are defined as individuals who are members of the following population groups: American Indian or Alaskan Native, Asian or Pacific Islander, Black not of Hispanic origin, or Hispanic. In addition to these population groups, the "total minority population" is calculated by subtracting the White Alone, Not Hispanic or Latino population from the total population. This approach helps avoid diluting the populations of individual minority groups when identifying minority populations. Minority populations should be identified if:

- A minority population percentage exceeds 50% of the population of the affected area; or
- The minority population percentage of the affected area is meaningfully greater than the minority population percentage in the general population or other appropriate unit of geographic analysis (for example, a governing body's jurisdiction, neighborhood census tract, or other similar unit).

CEQ guidance does not define the term "meaningfully greater;" however, the Federal Interagency Working Group on Environmental Justice suggests "the Meaningfully Greater analysis requires use of a reasonable, subjective threshold (e.g., ten or twenty percent greater than the reference community)" (Federal Interagency Working Group, 2016).

A comparative analysis is provided below for each resource area for which the project could result in impacts on the human environment, to determine whether the project's effects would be disproportionately high and adverse for identified environmental justice communities (EPA, 1998). Whether an adverse effect on minority and low-income populations is "disproportionately high" depends on whether either of the following would occur:

- The adverse effect would be borne predominantly by an environmental justice population, or
- The adverse effect would be suffered by the environmental justice population and would be appreciably more severe, or greater in magnitude, than the adverse effect that would be suffered by the non–environmental justice population.

Exhibit 4-9: Census Tracts in the Study Area

4.14.3 Existing Conditions

4.14.3.1 Socioeconomics

Population, Housing, and Community

Historical population estimates for the City of Mobile and Mobile County, as well as population projections for Mobile County, are summarized in the table below. Projections of future population were not available for the City of Mobile. As shown in Table 4-15, Mobile County experienced a small amount of population growth between 2000 and 2019, whereas the City of Mobile has seen a slight decline in population over the same time period. Mobile County's population is projected to grow by only about 1% every 5 years, reaching 431,909 by 2040 (University of Alabama, 2018).

Table 4-15: Historical and Projected Population of Selected Geographies in the Study Area

	U.S. Census		ACS 2019 (5-year estimate)	University of Alabama Projections		
Location	**2000**	**2010**	**2019**	**2025**	**2030**	**2040**
Mobile County	399,843	412,992	414,114	419,698	423,249	431,909
City of Mobile	198,915	195,111	190,432	n/a	n/a	n/a

SOURCES: U.S. Census Bureau, 2000; U.S. Census Bureau, 2010; U.S. Census Bureau 2019a, University of Alabama, 2018.

In 2019, the City of Mobile was estimated to have 92,883 housing units, of which 84.1% were occupied. The census tracts included in the study area have slightly lower occupancy rates compared to the city as a whole,

ranging from 58.9% in Census Tract 15.01 to 85.3% in Census Tract 74 (U.S. Census Bureau, 2019b). In recent years, the City of Mobile has faced issues of blight as the population of the City has declined (Sharp, 2020). Therefore, high levels of vacancies near the Project Area are likely due to this trend.

Employment and Economics

The top employers in the City of Mobile in 2020 included the Mobile County Public School System, the University of South Alabama, numerous hospitals and healthcare providers, and Austal USA (a ship manufacturer) (City of Mobile, 2020). The industries that account for the largest percentage of employment in Mobile County include the following: health care and social assistance (15.0% of employment), retail trade (12.2%), manufacturing (10.0%), and accommodation and food services (9.5%) (Alabama Department of Labor, 2019). Construction accounts for approximately 6.3% of employment in the County, which is approximately 11,120 jobs.

As demonstrated in Table 4-16, unemployment rates in most of the study area census tracts are higher than those for the County, with up to 21.3 % unemployment in Census Tract 23.02 and 14.8 % unemployment in Census Tract 15.02. Median household incomes in the study area are lower than those for the County, such as $12,981 in Census Tract 15.02 and $18,425 in Census Tract 15.01.

Table 4-16: Labor Force, Unemployment, and Median Household Income (5-Year Estimates 2015-2019)

Jurisdiction	Civilian Labor Force	Unemployment Rate *	Median Household Income
Mobile County	185,327	5.8%	$ 47,583
City of Mobile	88,397	6.2%	$ 42,321
Census Tract 74 (Neshota and Rosedale)	1,600	3.5%	$ 43,622
Census Tract 15.02 (Arlington)	351	14.8%	$12,981
Census Tract 15.01 (Maryvale – east)	521	11.5%	$18,425
Census Tract 23.02 (Maryvale – west)	600	21.3%	$25,446
Census Tract 23.01 (Riviera)	1,011	8.3%	$34,482

* Not seasonally adjusted.
SOURCE: U.S. Census Bureau, 2019.

4.14.2.2 Environmental Justice

Because the geographic scope of impacts differs by resource, the communities considered for the environmental justice analysis similarly vary by type of environmental or human health effect. Table 4-17 lists the resources with the potential for impacts on human health or the environment that could affect local populations. Other resources discussed in this analysis, such as biological resources, natural resources and energy supply, climate, and farmlands were determined to have no potential impacts on human health or the environment that could affect local populations and, therefore, were not reviewed further for potential environmental justice effects.

Table 4-17: Geographic Scope of Environmental Justice Analysis by Resource

Resource	Geographic Scope of Effects	Census Tracts Potentially Affected
Visual Effects	Communities within 1-mile radius	
Air Quality	500-foot radius around Project Area	74, 23.02, 15.01
Historical, Architectural, Archaeological, and Cultural Resources	0.5-mile radius around Project components	
Hazardous Materials, Solid Waste, and Pollution Prevention	Project Area	
Noise	0.5-mile radius from Project Area boundary	74, 23.02, 15.01, 23.01, 15.02
Socioeconomics	Communities near Project Area	74, 23.02, 15.01, 23.01, 15.02
Transportation	Communities near proposed transportation routes	

Minority Populations

Table 4-18 includes data on minority populations and incidences of poverty for Mobile County, the City of Mobile, and the study area census tracts. In each of these geographies, the percentage of residents identifying as American Indian and Alaska Native, Asian, Native Hawaiian and Other Pacific Islander, and/or Hispanic or Latino (of any race) is very low (no more than 3.1 % in any group) compared to the percentage of residents identifying as Black or African American. Therefore, the presence of minority populations is identified primarily by the percentage of residents identifying as Black or African American. Table 4-18 also shows the percent "total minority" as defined above.

Table 4-18: Select Racial and Income Characteristics for Residents within the Study Area, 2015-2019

	Total Population	Percent Black or African American[1]	Percent Total Minority[2]	Percent of People With Family Incomes Below Poverty Threshold
Mobile County	414,114	36.6	43.1	18.8
City of Mobile	190,432	52.6	58.2	20.7
Census Tract 74 (Neshota and Rosedale)	3,064	54.6	**57.7**	12.3
Census Tract 15.02 (Arlington)	1,358	100.0	**100**	**69.4**
Census Tract 15.01 (Maryvale – east)	1,386	99.0	**100**	**38.7**
Census Tract 23.01 (Maryvale – west)	2,247	93.0	**93.9**	24.1
Census Tract 23.02 (Riviera)	1,699	96.5	**97.2**	**42.8**

SOURCE: 2015-2019 American Community Survey 5-year survey estimates (U.S. Census Bureau, 2019a and 2019c).

NOTES: Bolded numbers indicate that these census tracts are identified as minority or low-income populations.

[1] Race alone or in combination with one or more races

[2] Other Than Non-Hispanic White

Within all of the geographies considered, the total minority population percentage is greater than 50 percent and greater than that of Mobile County. Furthermore, with the exception of Census Tract 74, representing

Neshota and Rosedale, each of the census tracts considered in the study area have twice the percent total minority residents as the county as a whole. Therefore, each of these census tracts is considered to have a minority population for the purposes of this analysis.

Low-Income Populations

The CEQ does not quantitatively define low-income populations, but indicates that they should be identified using the annual federal statistical poverty thresholds. Table 4-18 shows that the percentage of people with family incomes below the applicable federal poverty thresholds is 18.8% countywide. Using a threshold of "meaningfully greater" that is 20% greater than the reference population, all of the census tracts in the study area except Census Tract 74 are considered to have low-income populations. In particular, Census Tracts 15.01, 15.02, and 23.02 all have a percentage of people with family incomes below the poverty threshold that is double the percentage county wide.

4.14.2.3 Children's Environmental Health and Safety Risks

Children under 5 years of age make up approximately 6.6% of the population in Mobile County (U.S. Census Bureau, 2019a). Census Tracts 74 (7.5% children), 15.02 (20.8% children) and 15.01 (8.4% children) had a higher percentage of children (people under 5 years of age). Census Tract 15.02 has a percentage of young people that is over double the rate in Mobile County (U.S. Census Bureau, 2019a). Therefore, Census Tract 15.02 is considered to have particularly high concentration of children.

4.14.4 Environmental Consequences

The FAA has not established a significance threshold for socioeconomics, environmental justice, or children's environmental health and safety in FAA Order 1050.1F; however, the FAA has identified factors to consider when evaluating the context and intensity of potential environmental impacts for socioeconomics, including guidance regarding what data sources to use, how to determine the significance of impacts, and how to develop mitigation for significant impacts.

4.14.4.1 No Action Alternative

Under the No Action Alternative, there would be no change to the BFM property; therefore, there would be no potential for impacts related to socioeconomics, environmental justice, or children's health and safety.

4.14.4.2 Proposed Action

For the purposes of this analysis, the Proposed Action would have a major, adverse effect if it would result in major changes to population, housing, employment, or other socioeconomic factors that would adversely affect people in the study area, or if the Proposed Action would result in disproportionately high or adverse impacts on minority or low-income communities.

Socioeconomics

Population, Housing, and Community – The Proposed Action would not include the construction of housing, nor would it displace any existing housing. Therefore, the Proposed Action would have no direct effects on regional or local housing. While both construction and operation of the new commercial terminal would result in some new employment, most of the labor force necessary for construction and operation would be drawn from the local labor force. Therefore, construction and operation of the Proposed Action are not expected to result in the relocation of workers into the study area. Additionally, construction of a new commercial service terminal that is closer to downtown is not expected to result in enough new economic activity or be a significant enough amenity that it would induce substantial population growth or result in significant numbers of people relocating into the study area. As a result, construction and operation of the Proposed Action would not result in major direct or indirect changes to population and housing in the study area.

Operation of the Proposed Action would result in an increase in vehicle and passenger traffic in the Project Area. Operation of the Proposed Action is expected to lead to approximately 523,000 enplaned passengers by

2025 and over 588,000 enplaned passengers by 2030 in addition to the existing commercial, general aviation, cargo, and military operations at BFM. This increase in traffic could result in an increase in demand for police, fire, and emergency medical services during operation of the Proposed Action. Additionally, the influx of enplaned passengers may put pressure on local transportation systems or increase traffic volume in local neighborhoods. Part of the Proposed Action includes upgrades to the Airport Access Road from I-10, which are intended to improve egress in vicinity of the airport and alleviate some of this potential future congestion; nonetheless, the demand for community services may increase as a result of increased use of BFM.

Employment and Economic Activity – The Proposed Action would temporarily increase employment during the period of construction. However, due to the general nature of the construction anticipated, the demand for construction employment would likely be satisfied through the local and regional labor supply. Operation of the Proposed Action is also expected to create new jobs due to the development and operation of a new commercial service passenger terminal, the majority of which are expected to be filled by the local workforce. Therefore, the Project is expected to result in minor to moderate beneficial direct impacts related to employment in the local area.

The Proposed Action would shift existing commercial passenger traffic from MOB to BFM, which may also "recapture" passengers that currently use other regional airports. Increased passenger traffic in the area could spur commercial growth in proximity to BFM and the Mobile Aeroplex due to the increase in need for support businesses adjacent to the airport, such as hotels, restaurants, and local transportation services. As a result, the Proposed Action could result in a minor to moderate, indirect, beneficial impact on business activity near the Project Area. An increase in business activity may also result in an indirect, minor to moderate beneficial impact on local employment.

The Proposed Action would result in the temporary displacement of existing commercial tenants in the T1T terminal building during construction. The Mobile Airport Authority would work with the displaced tenants to find suitable temporary and permanent locations; however, the temporary displacement of tenants may result in a minor to moderate negative impact on employment and economic activity in the BFM area.

Environmental Justice

Aesthetics – As described in Section 4.6.4, the Proposed Action would result in construction of some additional buildings and other structures at BFM. Due to the intervening distance between the Project Area and surrounding residences, as well as structures, trees, and other landscape elements that provide visual screening, new buildings and roads associated with the Proposed Action would not create a significant amount of visual contrast discernable from residences. As a result, the Proposed Action would not result in visual effects that would be experienced disproportionately by minority or low-income communities.

Air Quality – As described in Section 4.3.4, construction and operation of the Proposed Action would result in an increase in pollutant concentrations including CO, VOC, NO_X, SO_2, $PM_{2.5}$, and PM_{10}. BFM is not located in a nonattainment or maintenance area for any criteria pollutant, meaning that existing pollutant concentrations do not exceed federal thresholds. Because the Proposed Action would not cause pollutant concentrations to exceed any of the NAAQS, it would not result in a significant air quality impact that would be disproportionately high or adverse for minority or low-income communities.

Noise – As described in Section 4.5.4, Proposed Action construction would cause noise in residential areas in Census Tract 74, which is considered a minority community. Due to the potential for noise impacts in communities adjacent to the Proposed Action construction area, the block groups within Census Tract 74 were analyzed for concentrations of minority of low-income individuals. Within Census Tract 74 there are four Block Groups (1, 2, 3, and 4). Block Group 3 is located outside the noise impact area and was not analyzed further. Block Groups 1, 2, and 4 all have minority populations that are above 50 percent, and; therefore, are considered minority populations similar to the Census Tract as a whole (U.S. Census Bureau, 2019e). Regarding the presence of low-income communities, the percentage of low income individuals in Block Groups 1 and 4 were below the threshold of 22.6% established above and are not considered low-income communities.

Within Block Group 2; however, 27% of individuals are reported to have a family income below the poverty threshold. This percentage of low-income individuals is above the threshold established above; therefore, Block Group 2 within Census Tract 74 is considered a low-income community in addition to being considered a minority community (U.S. Census Bureau, 2019e).

Construction would result in temporary, intermittent noise of approximately 80 dB at the closest receptor 90 feet from the Project Area, attenuating to 60 dB at the westernmost region of Neshota Drive. Temporary construction noise may be noticeable at these residences; however, construction crews would be required to conform to the local noise ordinance regulating construction noise, construction would occur daytime hours and would be intermittent and temporary over the course of 3-4 years, and the construction noise would generally blend with the industrial and aircraft noise already experienced at this location. Construction noise would not be a significant impact that would be disproportionately high and adverse for a minority population.

Aircraft operation associated with the Proposed Action would result in a maximum increase in noise levels of DNL 0.36 dB by 2030 at several residences along the northeastern edge of Census Tract 74 (shown in Exhibit 4-4). None of the residences would experience an increase in noise levels that would be considered significant. During construction activities associated with the Proposed Action, noise levels for sensitive receptors in this census tract would be around 65 dB, which is equivalent to the sound level of normal indoor conversation (see Table 4-5 for comparisons of common sounds on the A-weighted decibel scale). Therefore, operation of the Proposed Action would not result in a significant increase in noise levels compared to existing conditions. Due to the minor increase in noise that would be experienced by residences in this census tract, impacts from operation would not be considered disproportionately high or adverse for minority communities in this census tract.

Transportation – As described in 4.15.4.1, the Project could increase pressure on the local transportation network, but would not result in significant impacts to transportation. Therefore, the Project would not result in transportation impacts that would be disproportionately high or adverse for minority or low-income communities.

Hazardous Waste – As described in Section 4.13, the Proposed Action would result in no impacts to hazardous waste. Therefore, the Project would not result in hazardous waste impacts that would be disproportionately high or adverse for minority or low-income communities.

Children's Environmental Health and Safety Risks

Because most of the construction work would occur within the industrial area of the Aeroplex, and generally children do not occupy or have access to the Project Area, there would be minimal direct exposure risk of any additional health or safety effects on children.

Air Quality – As described above, construction and operation of the Proposed Action would result in an increase in emissions of CO, VOC, NO_X, SO_2, $PM_{2.5}$, and PM_{10}, which are regulated due to their potential to result in adverse human health impacts. However, the study area is not in non-attainment or maintenance of any of the NAAQS for these pollutants, indicating that existing concentrations are not of particular concern for human health effects. Furthermore, the Proposed Action's emissions would not cause concentrations of these pollutants to exceed one of the NAAQS, and therefore would not result in a significant air quality impact that would substantially impact children's health and safety.

Noise – As described above, operation of the Proposed Action would not result in noise impacts that would significantly increase existing levels of noise. Construction of the Proposed Action temporarily would result in intermittent periods of loud noise that would add to existing high levels of industrial noise. The incremental addition of noise from construction could impact children's health and safety if it were to cause sleep disruption, a restriction in opportunities for outdoor play, disruption of schoolwork, or other adverse effects. Limiting construction to daytime hours would substantially limit the potential for sleep disruption. The temporary and intermittent nature of construction noise would limit the potential for other adverse effects

and would not result in long-lasting impacts on children's health and safety. Similarly, the minor increase in aircraft operational noise at four residences near Perimeter Road would not substantially affect residents, including children.

Transportation – As described in 4.15.4.1, the Project could increase pressure on the local transportation network, but would not result in significant impacts to transportation. Therefore, the Proposed Action would not result in transportation impacts that would affect children's health or safety.

Hazardous Waste – As described in Section 4.13, the Proposed Action would result in no significant impacts to hazardous waste. Therefore, the Proposed Action would not result in hazardous waste impacts that would affect children's health or safety.

4.14.5 Mitigation, Avoidance, and Minimization Measures

The Proposed Action would not produce significant socioeconomic impacts, environmental justice impacts, or health and safety risks to children. Therefore, no mitigation would be required for these resources.

4.15 CUMULATIVE EFFECTS

4.15.1 Definition of Resource and Regulatory Setting

Cumulative impacts are those impacts on the environment that result form the incremental impact of an action 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 actions which are individually minor, but could be potentially significant when considered collectively over a period of time.

Cumulative impacts are defined by the CEQ in 40 C.F.R. § 1058.7 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." Additionally, the CEQ further explained in *Considering Cumulative Effects under the National Environmental Policy Act* that "each resource, ecosystem, and human community must be analyzed in terms of its ability to accommodate effects, based on its own time and space parameters." Therefore, a cumulative effects analysis normally encompasses geographic boundaries beyond the immediate area of the Proposed Action. The timeframe used for the assessment considers past, present, reasonably foreseeable future actions in order to capture these additional effects.

Specific thresholds for cumulative impacts are not established in FAA Order 1050.1F because the significance threshold varies according to the affected resources. In evaluating cumulative impacts, the impact of the Proposed Action has been added to the impacts of other past, present, and reasonably foreseeable future actions to determine if the significant impact threshold would be exceeded as a result of incremental impacts.

4.15.2 Resource Study Area and Timeframe

The FAA 1050.1F Desk Reference Section 15.2 states "The study area for cumulative impacts analysis is the same area defined for a project's direct and indirect impact analysis. Thus, the study area will be different for each impact category." The study area for cumulative impacts is consistent with the specific study areas identified in Section 4.2 through Section 4.14 for each resource category considered.

The timeframe considered for the cumulative effects assessment spans from 2011 (10 years prior to the current study) to 2030 (the design year for the Proposed Action).

4.15.3 Existing Conditions

A description of the past, present, and reasonably foreseeable future actions are included below.

4.15.3.1 Past Projects

To accommodate the increasing air cargo demand at BFM, improvement projects have been implemented

over the past 10 years, including adding fencing, constructing and reconstructing taxiways, rehabilitating aprons, and installing taxiway lighting.

4.15.3.2 Present/Current Projects

In addition to the Proposed Action, one other project is currently underway within the study area, an extension of the culvert on Rabby Creek south of the proposed new terminal. The section of Rabby Creek (noted as SW2 in Exhibit 4-6) is not anticipated to be affected by the Proposed Action. The culvert extension is anticipated to be constructed in late 2021.

4.15.3.3 Reasonably Foreseeable Future Actions

Reasonably foreseeable future actions at BFM would include other projects identified in the MAA Master Plan that are beyond the scope of this current EA. In addition to the improvements included in this EA, BFM proposes to implement various airport improvement and rehabilitation projects forecasted through the master planning process.

No projects proposed by the City of Mobile or Mobile County are within the study area used for the cumulative impact assessment.

4.15.4 Environmental Consequences

4.15.4.1 No Action Alternative

Under the No Action Alternative, passenger service would not change; therefore, there would be no addition to cumulative impacts within the study area.

4.15.4.2 Proposed Action

The Proposed Action is anticipated to be constructed from 2024 through the end of 2026. The projects that have taken place in the past 10 years were previously environmentally cleared and no significant impacts on any environmental resources were identified. These development projects have all taken place on airport property; therefore, they did not cause a change in area land use. The other project currently underway will be evaluated through a separate NEPA document. No reasonably foreseeable projects are known; if proposed, they would be addressed through separate NEPA documentation.

Under this alternative, there are certain environmental resources that would have no impacts to cumulatively add or assess in comparison to the past, the present, or the reasonably foreseeable future. Therefore, for some of the resources assessed in this EA, it can be assumed that there would be no cumulatively significant impacts. Environmental resources that could have potential cumulative impacts associated with past, present and foreseeable future projects at the Airport include air quality; noise; water resources; hazardous materials, solid waste and pollution prevention; and socioeconomic impacts. Following is an analysis of these potential cumulative impacts.

Air Quality

Air quality has been adversely affected as a result of human activities and development. In the past several years, application of federal and state emissions regulation and significant technological improvements aimed at reducing effects on air quality have acted to counter emission increases caused by population and development growth.

As discussed in Section 4.2.4, the construction and operations emissions associated with the Proposed Action would not cause or contribute to violations of the NAAQS for criteria pollutants in 2025 or 2030, and Mobile County is in attainment for all criteria pollutants. Thus, the Proposed Action would not cause significant impacts to air quality. Impacts during construction would be mitigated through BMPs to reduce emissions, particularly fugitive particle emissions. While the Proposed Action would contribute to the cumulative emissions of air pollutants in Mobile County, the cumulative effect of the net air emissions would not cause or contribute to any new violation of the NAAQS would not increase the frequency or severity of an existing

violation, and would not delay timely attainment of any standard. Therefore, the cumulative impact on air quality is not significant.

Noise

Based on the results of the noise analysis associated with the Proposed Action, there are residential uses and a park located within the 65 DNL noise contour; however, there are no significant impacts that would occur from implementation of the Proposed Action, as described in Section 4.4.4. The noise analysis conducted for this EA included operations associated with past, current, and reasonably foreseeable future actions at BFM. Therefore, the Proposed Action, in combination with other past, present, and reasonably foreseeable future projects, should not have a cumulatively significant noise impact.

Water Resources

Potential direct and indirect impacts to water quality are possible as a result of the Proposed Action. Construction activities (e.g., clearing of vegetation, re-grading existing ground surface, installing additional buildings and pavement, handling construction materials) are anticipated to change some pervious surfaces to impervious surfaces which could change the rate of infiltration. Compensatory measures for stormwater runoff control could be provided through construction of detention/retention basins. Other past, present, and/or reasonably foreseeable future projects could also increase impervious surfaces. Contaminant concentrations in stormwater coming from such surfaces would most likely not exceed State Water Quality standards due to treatment by selected BMPs. Further, there are no wetland or floodplain impacts associated with the Proposed Action, as described in Section 4.8.4. Therefore, cumulative effects would be negligible.

Hazardous Materials, Solid Waste, and Pollution Prevention

As described in Section 4.12.4, the Proposed Action would result in an increase in use of hazardous materials. Other past, present, and/or reasonably foreseeable future projects could also increase use of solid and hazardous materials and generate greater amounts of waste. However, no significant impacts related to hazardous materials would occur due to operation of the Proposed Action. Therefore, the Proposed Action, in combination with other past, present, and reasonably foreseeable future projects, should not have a cumulatively significant impact on the environment from increased use of solid and hazardous materials.

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

As described in Section 4.14.4, the Proposed Action would not include the construction of housing, would not displace any existing housing, and would not result in major direct or indirect changes to population and housing in the study area. Operation of the Proposed Action would result in an increase in vehicle and passenger traffic on the roads adjacent to BFM, which may result in an increase in the demand for community services. The Proposed Action would temporarily increase employment during the period of construction, which would likely be satisfied through the local and regional labor supply. The Proposed Action is not anticipated to result in disproportionately high and adverse effects on minority or low-income communities. The Proposed Action would not have a significant impact on children's health and safety.

Other past, present, and reasonably foreseeable future projects included in the cumulative impacts assessment are located on BFM property and would not have a significant impact on socioeconomics, environmental justice, or children's health and safety. Therefore, the Proposed Action, when combined with other past, present, or reasonably foreseeable future projects would not result in a significant impact related to socioeconomics, environmental justice, or children's health and safety.

4.15.5 Mitigation, Avoidance, and Minimization Measures

The Proposed Action is not anticipated to create a cumulatively significant impact on the environment. Therefore, no mitigation measures for cumulative impacts would be required.

5 PUBLIC INVOLVEMENT

Public outreach was conducted as part of the MAA Master Plan, which included the Proposed Action as part of the PAL 1 and PAL 2 phases described in that plan. Public meetings during development of the Master Plan were held in person in October 2019 (attended by approximately 125 people) and virtually in August 2020 (attended by approximately 380 people). The project team also met with a Technical Advisory Committee (TAC) and a Community Advisory Committee (CAC) several times throughout the process.

Include summary after August 3, 2021 public meeting.

6 LIST OF PREPARERS

Exhibit 6-1: List of Preparers

Name	Role
Teresa Gresham, Kimley-Horn	Senior QA/QC
Pam Keidel-Adams, Kimley-Horn	Senior QA
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Eric Schneider, ESA	Biological Resources Specialist
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Jessica O'Dell, ESA	Environmental Justice and Socioeconomics Specialist
Stephen Goetzinger, ESA	Air Quality and Noise Specialist
Michael Arnold, ESA	Noise Specialist
ESA = Environmental Science Associates	

7 LIST OF AGENCIES AND PERSONS CONSULTED

Coordination with public agencies ensures that appropriate local, state and federal governmental units have an opportunity to review the Proposed Action for conformance with the requirements of their jurisdictions and programs and to make known any concerns they may have.

Table 8-1 lists public agencies that received initial information for the Proposed Action:

Exhibit 7-1: Coordinating Agencies

Federal	
U.S. Army Corps of Engineers	Dylan Hendrix
U.S. Fish and Wildlife Service	Bruce Porter
U.S. Environmental Protection Agency	Christopher Militscher
U.S. Coast Guard*	Doug Blakemore
National Marine Fisheries Service/National Oceanic and Atmospheric Administration	Andy Strelcheck
State	
Alabama Historical Commission*	Lee Anne Wofford
Alabama Department of Public Safety*	Charles Ward
Alabama Department of Transportation*	Adam Anderson
Alabama Department of Conservation and Natural Resources	Patti Powell McCurdy
Alabama Department of Environmental Management	Steve Cobb
Alabama Department of Tourism and Travel*	Lee Sentell
Alabama Department of Soil and Water Conservation*	Tracy J.N. Hall
Alabama Department of Economic and Community Affairs*	Kenneth Boswell
Alabama Emergency Management Agency*	Ronnie Adair
Local	
City of Mobile Mayor's Office*	Sandy Stimpson
City of Mobile City Council*	Lisa Lambert
Tribes	
Alabama-Coushatta Tribe of Texas*	Bryant Celestine
Alabama-Quassarte Tribal Town*	Samantha Robison
Choctaw Nation of Oklahoma*	Ian Thompson
Coushatta Tribe of Louisiana *	Linda Langley
Mississippi Band of Choctaw Indians*	Ken Carleton
Muscogee (Creek) Nation*	Historic and Cultural Preservation Department

**Indicates no response was received*

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Appendix A:
Noise and Air Quality Data

Noise and Air Quality Modeling Technical Report

This report describes the noise and air quality modeling input parameters of the No Action and Proposed Action Alternatives, including a summary of the parameters used to prepare the operational noise and emissions calculated with the Aviation Environmental Design Tool (AEDT) model and the development of data used in support of the construction emissions calculations with the Airport Construction Emissions Inventory Tool (ACEIT) model.

A.1 Aircraft Noise and Air Quality (AEDT Modeling Parameters)

The Aviation Environmental Design Tool (AEDT) is the FAA's approved model for assessing noise and emissions at civilian airports, and the methodology used in AEDT analysis follows established FAA guidelines for both the development of a representative data model and the evaluation of environmental impacts. AEDT has been used for environmental review of aviation noise and emissions impacts for airport projects since 2015 and is used for 14 CFR Part 150 studies and Environmental Assessments and Environmental Impact Statements under NEPA.

As per Federal Aviation Administration (FAA) guidance, model input data are collected and aggregated into an operationally representative form known as an Annual Average Day (AAD), which indicates the expected mix of aircraft operations over the course of a representative "average" day. The model inputs, which consist of flight tracks and specific aircraft operations utilizing these tracks, are imported into the AEDT model and evaluated for noise exposure by using FAA-recommended AEDT settings. Key attributes of an aircraft operation relevant to noise modeling are the aircraft type, the operation type (arrival or departure), the runway, the ground track used, the time of day (day or night), and the stage length. Stage length is an indication of aircraft weight since the aircraft takeoff weight typically correlates with trip distance.

For this EA, AEDT version 3c was used to calculate No Action and Proposed Action noise contours and emissions analyses.

Fleet Mix, Ground Support Equipment/Auxiliary Power Unit, and Taxi Times

The fleet information for the Proposed Action was obtained directly from the Mobile Airport Authority Master Plan, and the No Action Alternative operational information was derived from AEDT data sheets prepared for the Mobile Airport Authority Master Plan. **Table A-1** shows the AEDT aircraft information for each aircraft in the fleet and the operations for an AAD of each aircraft for 2018 as the baseline year and 2025 and 2030 with the Proposed Action.

TABLE A-1
PROPOSED ACTION AEDT AIRCRAFT ASSIGNMENTS AND AAD OPERATIONS

AEDT Airframe	AEDT Engine	AEDT Engine Mod Code	2018 AAD Operations	2025 Proposed Action AAD Operations	2030 Proposed Action AAD Operations
1985 1-ENG COMP	TIO540	NONE	2.4329	2.5058	2.5425
Airbus A300B4-200 Series	3GE074	NONE	2.3452	3.6226	3.8200
Airbus A319-100 Series	3IA006	NONE	-	0.4110	-
Airbus A320-200 Series	1CM008	NONE	0.3918	3.0143	3.7047
Airbus A321-200 Series	1IA005	NONE	0.7315	1.1265	1.1879
Bell 206 JetRanger	250B17	NONE	7.4164	7.2340	7.2524
Boeing 737-300 Series	1CM007	NONE	0.0986	1.4596	1.8495
Boeing 737-700 Series	3CM032	NONE	0.2438	0.6221	0.6699
Boeing 737-800 Series	3CM034	NONE	1.2411	1.1973	1.1973
Boeing 757-300 Series	5RR039	NONE	0.4877	0.7510	0.7919
Boeing 767-300 Series	1PW043	NONE	0.1945	0.2996	0.3159
Boeing 777-200-ER	6GE090	NONE	0.3918	0.6033	0.6362
Bombardier Challenger 600	1TL001	NONE	3.3041	17.6772	17.6165
Bombardier CRJ-900	8GE107	NONE	-	11.0959	13.7260
Bombardier Learjet 25	CJ6106	NONE	2.7014	2.7824	2.8219
Cessna 172 Skyhawk	TSIO36	IO-360-L2A	8.5178	8.8035	8.9260
Cessna 208 Caravan	PT6A14	NONE	107.0767	104.9731	105.0992
Cessna 525 CitationJet	10PW099	NONE	6.0000	6.1800	6.2658
DeHavilland DHC-6-200 Twin Otter	PT6A27	NONE	4.2055	4.4717	4.5366
Dornier 328-100 Series	PW119C	NONE	2.4794	2.3919	2.3919
Eclipse 500 / PW610F	PW610F-A	NONE	6.2000	5.9812	5.9812
Embraer ERJ145	6AL008	NONE	-	16.0548	16.1096
Embraer ERJ175	8GE108	NONE	-	4.4384	5.6438
Eurocopter EC-130	TPE3	NONE	1.2164	1.2529	1.2713
Lockheed C-130 Hercules	T56A15	T56-A-15	1.2411	1.1973	1.1973
Piper PA-24 Comanche	TIO540	NONE	7.2986	7.5176	7.6219
Raytheon Beech Baron 58	TIO540	NONE	1.9671	2.0262	2.0548
Sikorsky SH-3 Sea King	T588F	NONE	1.2164	1.2529	1.2713
Sikorsky UH-60 Black Hawk	T70070	NONE	6.2000	5.9811	5.9811
Total Average Annual Day Operations			175.5999	226.9252	232.4842

NOTES: AAD = Average Annual Day; AEDT = Aviation Environmental Design Tool

The Master Plan fleet development data sheets were used to develop the No Action Alternatives. Certain commercial operations were removed to reflect the expected activity if the project were not implemented. The fleet differences between the Proposed Action and No Action scenarios are summarized in **Table A-2**. If an aircraft type is not listed, then the operations were not changed between the No Action and Proposed Action Alternatives. In some cases, the changes reflect a decrease in activity by a certain aircraft type, while in others the changes may reflect the removal of a specific aircraft type.

TABLE A-2
PROPOSED ACTION AND NO ACTION AEDT AIRCRAFT FLEET DIFFERENCES

Actual Aircraft	AEDT Airframe Assignment	AEDT Engine	AEDT Engine Mod	2030 Proposed Action Average Daily Operations	2030 No Action Average Daily Operations	2030 Proposed Action Average Daily Operations	2030 No Action Average Daily Operations
B737 - Boeing 737	Boeing 737-300 Series	1CM007	CFM56-3C-1	1.4670	0.1519	1.8588	0.1602
A321 - Airbus A321 All Series	Airbus A321-200 Series	1IA005	NONE	1.1265	1.1265	1.1879	1.1879
A220 - Airbus A220 All Series	Boeing 737-700 Series	20PW130	PW1524G	0.6221	0.3755	0.6699	0.3960
A306 - Airbus A300 B4-600	Airbus A300B4-200 Series	3GE074	NONE	3.6226	3.6226	3.8200	3.8200
A320 - Airbus A320 All Series	Airbus A320-200 Series	2CM018	CFM56-5B4/2	3.0143	0.6033	3.7047	0.6362
A319 - Airbus A319	Airbus A319-100 Series	3CM027	CFM56-5B5/P	0.4110	-	-	-
CRJ-700 Canadair Regional Jet 700	Bombardier CRJ-900	8GE107	CF34-8C5	0.9863	-	1.8904	-
CRJ-900 Canadair Regional Jet 900	Bombardier CRJ-900	8GE107	CF34-8C5	10.1096	-	11.8356	-
ERJ 175 Embraer 175	Embraer ERJ175	8GE105	CF34-8E5A1	4.4384	-	5.6438	-
CRJ-200 Candair Regional Jet 200	Bombardier Challenger 600	1TL001	NONE	14.2740	-	14.1644	-
ERJ 145 Embraer 145	Embraer ERJ145	6AL008	NONE	16.0548	-	16.1096	-

NOTES: AAD = Average Annual Day; AEDT = Aviation Environmental Design Tool

Ground service equipment (GSE) and auxiliary power units (APU) are expected to be used to support some of the aircraft identified in Proposed Action and No Action fleets. AEDT uses default assignments for GSE and APU, including a specific list of equipment and the number of minutes

per operation that each piece of equipment will operate. For this analysis, the default GSE and APU assignments were used in both the No Action and Proposed Action scenarios. While the noise produced by the equipment is not considered in AEDT noise modeling, GSE and APU are taken into account for air emissions modeling. (Note, AEDT does not contain any carbon dioxide emissions factors for any of the GSE equipment and therefore no carbon dioxide emissions for GSE are presented in the document).

Taxi emissions can also be a significant portion of the overall aircraft operational emissions. For this analysis, a default taxi-out time of 12 minutes, 18 seconds was used and a default taxi-in time of 6 minutes, 6 seconds was used. These default values came directly from the AEDT modeling already done as part of the Mobile Airport Authority Master Plan.

Runway Usage and Airport Layout

As reflected in the Master Plan, the runway usage by aircraft type is expected to remain constant through the scenarios and years. For example, as the operations of an individual aircraft type is increased from 2025 to 2030, the relative percentage of usage spread across the runways was kept constant. The arrival and departure operations are also equally split across each runway end. For example, the operations of the Bell 206 JetRanger assigned to the helicopter pad on Runway 14 are 50% arrivals and 50% departures. The runway usage percentages for each aircraft type for all scenario years is shown below in **Table A-3**.

TABLE A-3
PROPOSED ACTION AND NO ACTION RUNWAY USAGE

AEDT Airframe	AEDT Engine	AEDT Engine Mod Code	14 (HP14)	18 (HP18)	32 (HP32)	36 (HP36)	Grand Total
1985 1-ENG COMP	TIO540	NONE	48.0%	6.0%	41.0%	5.0%	100.0%
Airbus A300B4-200 Series	3GE074	NONE	55.0%	0.0%	45.0%	0.0%	100.0%
Airbus A319-100 Series	3IA006	NONE	55.0%	0.0%	45.0%	0.0%	100.0%
Airbus A320-200 Series	1CM008	NONE	55.0%	0.0%	45.0%	0.0%	100.0%
Airbus A321-200 Series	1IA005	NONE	55.0%	0.0%	45.0%	0.0%	100.0%
Bell 206 JetRanger	250B17	NONE	41.4%	10.8%	40.3%	7.5%	100.0%
Boeing 737-300 Series	1CM007	NONE	55.0%	0.0%	45.0%	0.0%	100.0%
Boeing 737-700 Series	3CM032	NONE	55.0%	0.0%	45.0%	0.0%	100.0%
Boeing 737-800 Series	3CM034	NONE	50.0%	0.0%	50.0%	0.0%	100.0%
Boeing 757-300 Series	5RR039	NONE	55.0%	0.0%	45.0%	0.0%	100.0%
Boeing 767-300 Series	1PW043	NONE	55.0%	0.0%	45.0%	0.0%	100.0%
Boeing 777-200-ER	6GE090	NONE	55.0%	0.0%	45.0%	0.0%	100.0%
Bombardier Challenger 600	1TL001	NONE	52.0%	2.0%	44.4%	1.6%	100.0%
Bombardier CRJ-900	8GE107	NONE	55.0%	0.0%	45.0%	0.0%	100.0%

AEDT Airframe	AEDT Engine	AEDT Engine Mod Code	14 (HP14)	18 (HP18)	32 (HP32)	36 (HP36)	Grand Total
Bombardier Learjet 25	CJ6106	NONE	52.0%	2.0%	46.0%	0.0%	100.0%
Cessna 172 Skyhawk	TSIO36	IO-360-L2A	48.0%	6.0%	41.0%	5.0%	100.0%
Cessna 208 Caravan	PT6A14	NONE	54.9%	8.5%	31.1%	5.5%	100.0%
Cessna 525 CitationJet	10PW099	NONE	50.0%	6.0%	40.0%	4.0%	100.0%
DeHavilland DHC-6-200 Twin Otter	PT6A27	NONE	47.2%	4.9%	44.0%	3.9%	100.0%
Dornier 328-100 Series	PW119C	NONE	50.0%	0.0%	50.0%	0.0%	100.0%
Eclipse 500 / PW610F	PW610F-A	NONE	60.0%	6.0%	30.0%	4.0%	100.0%
Embraer ERJ145	6AL008	NONE	52.0%	2.0%	44.0%	2.0%	100.0%
Embraer ERJ175	8GE108	NONE	55.0%	0.0%	45.0%	0.0%	100.0%
Eurocopter EC-130	TPE3	NONE	48.0%	5.0%	42.0%	0.0%	100.0%
Lockheed C-130 Hercules	T56A15	T56-A-15	50.0%	0.0%	50.0%	0.0%	100.0%
Piper PA-24 Comanche	TIO540	NONE	48.0%	6.0%	41.0%	5.0%	100.0%
Raytheon Beech Baron 58	TIO540	NONE	44.9%	7.7%	41.2%	6.1%	100.0%
Sikorsky SH-3 Sea King	T588F	NONE	48.0%	5.0%	42.0%	5.0%	100.0%
Sikorsky UH-60 Black Hawk	T70070	NONE	40.0%	12.0%	40.0%	8.0%	100.0%

The AEDT modeling used the standard airport parameters for BFM Airport included in the AEDT model, which includes the exact dimensions of the runways and locations of each runway end. It should be noted that the helicopter departure and arrival locations are different than those for the fixed wing aircraft. While the fixed wing aircraft arrive and depart at each corresponding runway end, each helipad is placed slightly closer to the interior of the airport than the runway end. These exact locations were based on the data from the Mobile Airport Authority Master Plan and are summarized in **Table A-4.**

TABLE A-4
HELIPAD LOCATIONS

Helipad	Latitude	Longitude	Altitude (feet)
HP14	30.630985	-88.77816	26.1
HP32	30.615287	-88.06189	18.5
HP18	30.639256	-88.065918	25.4
HP36	30.623358	-88.065908	24.9

Day/Night Modeling Splits

Another important component in developing the DNL contours is determining the day-night use percentages for each AEDT aircraft. This data is important because the DNL metric is a 24-hour, time-weighted energy average. The time-weighting refers to the fact that noise events occurring during certain noise-sensitive time periods receive an additional weighting. For the DNL metric, noise events occurring between the hours of 10:00:00 p.m. and 6:59:59 a.m. receive a 10-decibel (dB) weighting. These weightings attempt to account for the higher sensitivity to noise in the nighttime that would accompany the expected decrease in background noise levels compared to background noise levels during the day. Because noise is measured on a logarithmic scale, a 10-dB weighting means each nighttime noise event is weighted as equivalent to 10 daytime events. **Table A-5** shows the Day/night splits across each year of AEDT modeling. For the purposes of modeling the Proposed Action and No Action scenarios for a specific study year, the day-night splits were assumed to be constant.

TABLE A-5
AEDT MODELING DAY/NIGHT SPLITS BY YEAR

AEDT Airframe	AEDT Engine	AEDT Engine Mod Code	2018 Daytime	2018 Night
1985 1-ENG COMP	TIO540	NONE	98.00%	2.00%
Airbus A300B4-200 Series	3GE074	NONE	75.00%	25.00%
Airbus A319-100 Series	3IA006	NONE	-	-
Airbus A320-200 Series	1CM008	NONE	100.00%	0.00%
Airbus A321-200 Series	1IA005	NONE	100.00%	0.00%
Bell 206 JetRanger	250B17	NONE	98.00%	2.00%
Boeing 737-300 Series	1CM007	NONE	100.00%	0.00%
Boeing 737-700 Series	3CM032	NONE	100.00%	0.00%
Boeing 737-800 Series	3CM034	NONE	100.00%	0.00%
Boeing 757-300 Series	5RR039	NONE	100.00%	0.00%
Boeing 767-300 Series	1PW043	NONE	100.00%	0.00%
Boeing 777-200-ER	6GE090	NONE	100.00%	0.00%
Bombardier Challenger 600	1TL001	NONE	98.00%	2.00%
Bombardier CRJ-900	8GE107	NONE	-	-
Bombardier Learjet 25	CJ6106	NONE	98.00%	2.00%
Cessna 172 Skyhawk	TSIO36	IO-360-L2A	98.00%	2.00%
Cessna 208 Caravan	PT6A14	NONE	96.27%	3.73%
Cessna 525 CitationJet	10PW099	NONE	98.00%	2.00%
DeHavilland DHC-6-200 Twin Otter	PT6A27	NONE	97.48%	2.52%
Dornier 328-100 Series	PW119C	NONE	100.00%	0.00%
Eclipse 500 / PW610F	PW610F-A	NONE	98.00%	2.00%
Embraer ERJ145	6AL008	NONE	-	-
Embraer ERJ175	8GE108	NONE	-	-

Eurocopter EC-130	TPE3	NONE	98.00%	2.00%
Lockheed C-130 Hercules	T56A15	T56-A-15	100.00%	0.00%
Piper PA-24 Comanche	TIO540	NONE	100.00%	0.00%
Raytheon Beech Baron 58	TIO540	NONE	96.91%	3.09%
Sikorsky SH-3 Sea King	T588F	NONE	98.00%	2.00%
Sikorsky UH-60 Black Hawk	T70070	NONE	98.00%	2.00%

AEDT Airframe	AEDT Engine	AEDT Engine Mod Code	2025 Daytime	2018 Night
1985 1-ENG COMP	TIO540	NONE	98.00%	2.00%
Airbus A300B4-200 Series	3GE074	NONE	75.00%	25.00%
Airbus A319-100 Series	3IA006	NONE	100.00%	0.00%
Airbus A320-200 Series	1CM008	NONE	99.00%	1.00%
Airbus A321-200 Series	1IA005	NONE	100.00%	0.00%
Bell 206 JetRanger	250B17	NONE	98.00%	2.00%
Boeing 737-300 Series	1CM007	NONE	99.50%	0.50%
Boeing 737-700 Series	3CM032	NONE	100.00%	0.00%
Boeing 737-800 Series	3CM034	NONE	100.00%	0.00%
Boeing 757-300 Series	5RR039	NONE	100.00%	0.00%
Boeing 767-300 Series	1PW043	NONE	100.00%	0.00%
Boeing 777-200-ER	6GE090	NONE	100.00%	0.00%
Bombardier Challenger 600	1TL001	NONE	96.39%	3.61%
Bombardier CRJ-900	8GE107	NONE	97.27%	2.73%
Bombardier Learjet 25	CJ6106	NONE	98.00%	2.00%
Cessna 172 Skyhawk	TSIO36	IO-360-L2A	98.00%	2.00%
Cessna 208 Caravan	PT6A14	NONE	95.73%	4.27%
Cessna 525 CitationJet	10PW099	NONE	98.00%	2.00%
DeHavilland DHC-6-200 Twin Otter	PT6A27	NONE	97.56%	2.44%
Dornier 328-100 Series	PW119C	NONE	100.00%	0.00%
Eclipse 500 / PW610F	PW610F-A	NONE	98.00%	2.00%
Embraer ERJ145	6AL008	NONE	95.00%	5.00%
Embraer ERJ175	8GE108	NONE	100.00%	0.00%
Eurocopter EC-130	TPE3	NONE	98.00%	2.00%
Lockheed C-130 Hercules	T56A15	T56-A-15	100.00%	0.00%
Piper PA-24 Comanche	TIO540	NONE	100.00%	0.00%
Raytheon Beech Baron 58	TIO540	NONE	96.91%	3.09%
Sikorsky SH-3 Sea King	T588F	NONE	98.00%	2.00%
Sikorsky UH-60 Black Hawk	T70070	NONE	98.00%	2.00%

AEDT Airframe	AEDT Engine	AEDT Engine Mod Code	2030 Daytime	2030 Night
1985 1-ENG COMP	TIO540	NONE	98.00%	2.00%
Airbus A300B4-200 Series	3GE074	NONE	75.00%	25.00%
Airbus A319-100 Series	3IA006	NONE	-	-
Airbus A320-200 Series	1CM008	NONE	99.00%	1.00%
Airbus A321-200 Series	1IA005	NONE	100.00%	0.00%
Bell 206 JetRanger	250B17	NONE	98.00%	2.00%
Boeing 737-300 Series	1CM007	NONE	99.50%	0.50%
Boeing 737-700 Series	3CM032	NONE	100.00%	0.00%
Boeing 737-800 Series	3CM034	NONE	100.00%	0.00%
Boeing 757-300 Series	5RR039	NONE	100.00%	0.00%
Boeing 767-300 Series	1PW043	NONE	100.00%	0.00%
Boeing 777-200-ER	6GE090	NONE	100.00%	0.00%
Bombardier Challenger 600	1TL001	NONE	96.39%	3.61%
Bombardier CRJ-900	8GE107	NONE	97.41%	2.59%
Bombardier Learjet 25	CJ6106	NONE	98.00%	2.00%
Cessna 172 Skyhawk	TSIO36	IO-360-L2A	98.00%	2.00%
Cessna 208 Caravan	PT6A14	NONE	95.69%	4.31%
Cessna 525 CitationJet	10PW099	NONE	98.00%	2.00%
DeHavilland DHC-6-200 Twin Otter	PT6A27	NONE	97.56%	2.44%
Dornier 328-100 Series	PW119C	NONE	100.00%	0.00%
Eclipse 500 / PW610F	PW610F-A	NONE	98.00%	2.00%
Embraer ERJ145	6AL008	NONE	95.00%	5.00%
Embraer ERJ175	8GE108	NONE	100.00%	0.00%
Eurocopter EC-130	TPE3	NONE	98.00%	2.00%
Lockheed C-130 Hercules	T56A15	T56-A-15	100.00%	0.00%
Piper PA-24 Comanche	TIO540	NONE	100.00%	0.00%
Raytheon Beech Baron 58	TIO540	NONE	96.91%	3.09%
Sikorsky SH-3 Sea King	T588F	NONE	98.00%	2.00%
Sikorsky UH-60 Black Hawk	T70070	NONE	98.00%	2.00%

Flight Tracks/Stage Length

AEDT default flight tracks were used to model operations at BFM. For fixed wing aircraft, default flight tracks are a path extending straight out of each runway end for both arrivals and departures. For rotary aircraft, the default flight tracks extend directly to the north for each helipad for departures and directly to the south for each helipad for arrivals. This means that rotary aircraft

arrivals are modeled as approaching the airport from the south to each helipad and rotary aircraft departures are modeled as departing the airport to the north from each helipad.

An aircraft's stage length (or trip length) refers to the distance an aircraft flies from its origin airport to its intended destination. Stage length is important in noise modeling since the longer the distance an aircraft will fly to its destination, the greater the fuel load required and overall weight and, as a result, the lower its departure profile. Once the specific fleet mix was completed, departure destination information was analyzed to determine departure stage lengths. Stage lengths used in the AEDT include the following stages:

Stage Length 1:	0 to 500 miles
Stage Length 2:	500 to 1,000 miles
Stage Length 3:	1,001 to 1,500 miles
Stage Length 4:	1,501 to 2,500 miles
Stage Length 5:	2,501 to 3,500 miles
Stage Length 6:	3,501 to 4,500 miles
Stage Length 7:	4,501 to 5,500 miles
Stage Length 8:	5,501 to 6,500 miles
Stage Length 9:	6,500+ miles

For all scenarios, all aircraft were assigned to Stage Length 1, consistent with the Mobile Airport Authority Master Plan modeling.

All aircraft air quality and noise results are summarized in the Environmental Assessment / main body of this document.

A.2 Construction Emissions (ACEIT Modeling Parameters)

The Airport Construction Emissions Inventory Tool (ACEIT) was used for calculating emissions associated with construction activity. This tool was released with the Transportation Research Board's (TRB) Airport Cooperative Research Program (ACRP) Report 102, Guidance for Estimating Airport Construction Emissions. ACEIT contains construction emission factors from existing Environmental Protection Agency (EPA) regulatory models, such as the Motor Vehicle Emissions Simulator (MOVES) and NONROAD, as well as emission factors for fugitive emissions from EPA's Compilation of Air Pollution Emission Factors (AP-42). Through the user specification of high-level inputs such as project cost and project site weather, the ACEIT uses a series of assumptions to generate lists of emissions sources (such as construction equipment and employee on-road automobiles) and associated usage factors in order to calculate a construction emissions inventory.

The construction projects (project costs) captured in this air emissions analysis are as follows:

- Apron Pavement Reconstruction Program. This program will reconstruct the existing apron pavement with a new full-depth concrete apron pavement that will serve the current and future needs of the airport.
- Addition to Terminal. This project will add one new gate, expand the existing apron, adding a jet bridge along with supporting equipment at a total cost of $6.7 million.
- Construct Five Level Parking Garage. Proposed garage will have a 5.5-acre footprint and cover 240,500 square feet per floor.
- Construct Permanent Wash Rack at a proposed cost of $3.6 million.
- Construct Replacement Access Road to Existing Terminal at a proposed cost of $1.8 million.
- Construct Surface Parking Lots (4 acres) at a proposed cost of $7.1 million.
- Construct Terminal Access Loop Road at a proposed cost of $3.1 million.
- Construct Terminal Building at a proposed cost of $67.5 million.
- Expand Terminal Apron to the south for one Gate at a proposed cost of $3.6 million.
- Expand Terminal Apron at a proposed cost of $10.2 million.
- Relocate Terminal in order to construct GSE Buildings and Apron Area at a proposed cost of $1.4 million.
- Improve Perimeter Road from Michigan Avenue at a proposed cost of $2.2 million.
- Enclose Rabby Creek by constructing a concrete box culvert at a proposed cost of $3.1 million.
- Relocate existing business tenants in terminal footprint at a proposed cost of $10.6 million.

Project weather information loaded into ACEIT included a 30-year weather normal data from the BFM weather monitoring site spanning the period 1991 through 2020 (as available from the National Oceanic and Atmospheric Administration). The average temperature at BFM from April through September is 78.8 degrees Fahrenheit (°F), while the average temperature from October through March is 59.4 °F. From April through September, the monthly variation between low and high temperatures ranged 16.4° F to 19.3°F, while the monthly variation from October through March ranged 19.4° F to 21.7°F.

ACEIT automatically reduces construction vehicle emission factors over time, under the assumption that construction equipment emissions control technology will continue to advance; however, to reduce the likelihood of underestimating construction emissions levels, all construction activity was modeled using 2025 emission factors. Construction projects were all conservatively assumed to occur in the same calendar year (2025) due to the lack of more detailed information.

ACEIT uses a small number of inputs to estimate emissions for construction projects, and the number of required inputs varies by project type. The construction projects in the BFM emissions inventory required up to three inputs each. These inputs were developed based on information provided by BFM and are summarized in **Table A-6**. All construction emissions results are summarized in the Environmental Assessment / main body of this document.

TABLE A-6
LIST OF BFM PROPOSED ACTION CONSTRUCTION PROJECTS AND ACEIT MODELING PARAMETERS

Project Name	Type of ACEIT Project	Estimated Cost (Millions of $)	Parameter Input 1	Parameter Input 2	Parameter Input 3
Apron Pavement Reconstruction	Terminal Apron	112.819	19,854 (length feet)	150 (width feet)	NA
Addition to Terminal	Building & Terminal Apron	6.72	NA	NA	NA
Five Level Parking Garage	Parking Structure- 240000 sqft G+2	77.79	NA	NA	NA
Permanent Wash Rack		3.59	NA	NA	NA
Replacement Access Road	Access Road	1.797	2,550 (length feet)	30 (width feet)	NA
Surface Parking Lots	Open Parking Lot at Grade	7.07	NA	NA	NA
Terminal Access Loop	Access Road	3.1	3,380 (length feet)	40	NA
Terminal Building	Building- 100000 sq ft - 10 stories	67.5	NA	NA	NA
Expand Terminal Apron South	Terminal Apron	3.5712	372 (length feet)	150 (width feet)	NA
Expand Terminal Apron	Terminal Apron	10.15	2,316 (length feet)	114 (width feet)	NA
GSE Support Area	Building- 10000 sq ft - 1 story	0.825	NA	NA	NA
GSE Support Area	Open Parking Lot at Grade	0.162	NA	NA	NA
Improve Perimeter Road	Access Road	2.19	960 (length feet)	150 (width feet)	NA
Rabby Creek Culvert	Runway Drains	2.045	1,700 (length feet)	14 (width feet)	NA
Relocate Tenants	Demolition of Building	10.553	59,500 (square feet to be demolished)	15 (height feet)	15 (open space height)

Appendix B:
Cultural Resources Correspondence and Data

ALABAMA HISTORICAL COMMISSION

468 South Perry Street
Montgomery, Alabama 36130-0900

Lisa D. Jones
Executive Director
State Historic Preservation Officer

Tel: 334-242-3184
Fax: 334-242-1083

August 3, 2021

Brian Hendry
FAA
100 W. Cross Street Suite B
Jackson, MS 39208

Re: AHC 21-0653
Downtown Mobile Airport Terminal Expansion (Also AHC 21-0818)
Mobile County

Dear Mr. Hendry:

Upon review of the above referenced project, we concur that project activities will have no effect on cultural resources eligible for or listed on the National Register of Historic Places. Therefore, we concur with the proposed project activities.

Consultation with the State Historic Preservation Office does not constitute consultation with Tribal Historic Preservation Offices, other Native American tribes, local governments, or the public. If archaeological materials are encountered during construction, the procedures codified at 36 CFR 800.13(b) will apply. Archaeological materials consist of any items, fifty years old or older, which were made or used by man. These items include but are not limited to, stone projectile points (arrowheads), ceramic sherds, bricks, worked wood, bone and stone, metal, and glass objects. The federal agency or the applicant receiving federal assistance should contact our office immediately. If human remains are encountered, the provisions of the Alabama Burial Act (*Code of Alabama* 1975, §13A-7-23.1, as amended; Alabama Historical Commission Administrative Code Chapter 460-X-10 Burials) should be followed. This stipulation shall be placed on the construction plans to ensure contractors are aware of it.

We appreciate your commitment to helping us preserve Alabama's historic archaeological and architectural resources. Should you have any questions, please contact Eric Sipes at 334.230.2667 or Eric.Sipes@ahc.alabama.gov. Have the AHC tracking number referenced above available and include it with any future correspondence.

Sincerely,

Lee Anne Wofford
Deputy State Historic Preservation Officer

LAW/EDS/law

ALABAMA HISTORICAL COMMISSION

468 South Perry Street
Montgomery, Alabama 36130-0900

Lisa D. Jones
Executive Director
State Historic Preservation Officer

Tel: 334-242-3184
Fax: 334-242-1083

June 8, 2021

Brian Hendry
FAA
100 W. Cross Street Suite B
Jackson, MS 39208

Re: AHC 21-0653
Downtown Mobile Airport Terminal Expansion
Mobile County

Dear Mr. Hendry:

Thank you for providing the above-referenced information. We are reviewing our files and look forward to continued consultation with FAA regarding this undertaking.

Consultation with the State Historic Preservation Office does not constitute consultation with Tribal Historic Preservation Offices, other Native American tribes, local governments, or the public. If archaeological materials are encountered during construction, the procedures codified at 36 CFR 800.13(b) will apply. Archaeological materials consist of any items, fifty years old or older, which were made or used by man. These items include but are not limited to, stone projectile points (arrowheads), ceramic sherds, bricks, worked wood, bone and stone, metal, and glass objects. The federal agency or the applicant receiving federal assistance should contact our office immediately. If human remains are encountered, the provisions of the Alabama Burial Act (Code of Alabama 1975, §13A-7-23.1, as amended; Alabama Historical Commission Administrative Code Chapter 460-X-10 Burials) should be followed. This stipulation shall be placed on the construction plans to ensure contractors are aware of it.

We appreciate your commitment to helping us preserve Alabama's historic archaeological and architectural resources. Should you have any questions, please contact Amanda McBride at 334.230.2692 or Amanda.McBride@ahc.alabama.gov. Have the AHC tracking number referenced above available and include it with any future correspondence.

Sincerely,

Lee Anne Wofford
Deputy State Historic Preservation Officer

LAW/EDS/nj

ALABAMA HISTORICAL COMMISSION
STATE HISTORIC PRESERVATION OFFICE
SECTION 106 PROJECT REVIEW CONSULTATION FORM

Federal laws exist to ensure that federal agencies or their designated applicants carefully consider historic preservation in federally funded, licensed, or permitted projects. Section 106 of the National Historic Preservation Act of 1966, as amended directs this review. http://www.achp.gov/106summary.html. At a minimum, submission of this completed form and attachments constitutes a request for review by the Alabama Historical Commission, which is the Alabama State Historic Preservation Office (SHPO). **The responsibility for preparing documentation, including the identification of archaeological and architectural properties and the assessment of potential effects resulting from the project, rests with the federal or state agency, or its designated applicant.** The role of the Alabama SHPO is to review, comment, and consult with federal/state agencies or their designees. The Alabama SHPO's ability to complete a timely project review largely depends on the quality of the material submitted. Some applicants may find it advantageous to hire a professional consultant with expertise in archaeology, history and/or architectural history.

PROJECT NAME
Downtown Mobile Airport Terminal Expansion

FEDERAL AGENCY PROVIDING FUNDS, LICENSE, OR PERMIT
Federal Aviation Administration

FEDERAL PROJECT NUMBER

FEDERAL AGENCY CONTACT NAME AND E-MAIL/PHONE NUMBER
Graham Coffelt, P.E., MBA; graham.coffelt@faa.gov; 601-664-9898

STATE AGENCY PROVIDING FUNDS, LICENSE, OR PERMIT (IF APPLICABLE)

STATE AGENCY CONTACT NAME AND E-MAIL ADDRESS, PHONE NUMBER, MAILING ADDRESS

AHC NUMBER (If project has been previously submitted)

APPLICANT NAME:
Russell Stallings

APPLICANT MAILING ADDRESS:
8400 Airport Boulevard, Mobile, AL 36608

APPLICANT TELEPHONE:
251-438-7334

APPLICANT EMAIL:
russell@mobairport.com

CONTACT NAME (if different than applicant):
Teresa Gresham, P.E.

CONTACT MAILING ADDRESS:
421 Fayetteville Street, Suite 600, Raleigh, NC 27601

CONTACT TELEPHONE:
919-677-2194

CONTACT EMAIL (Person to whom AHC should email response letter):
teresa.gresham@kimley-horn.com

CONTRACTOR TYPE: ☐ ARCHAEOLOGIST; ☐ARCHITECTURAL HISTORIAN; ■NONE; ☐OTHER:

CONTRACTOR NAME:

CONTRACTOR MAILING ADDRESS:

CONTRACTOR TELEPHONE:

CONTRACTOR EMAIL:

PROJECT LOCATION

STREET ADDRESS	CITY
2455 Michigan Avenue	Mobile
COUNTY	**ZIP CODE**
Mobile County	36615

LATITUDE / LONGITUDE: USE DECIMAL DEGREES EXAMPLE: 32.3722N, -86.3083W

30.637068, -88.078768

PROJECT DESCRIPTION

Will the project involve any of the following? Check all that apply.

- ☐ exterior rehabilitation work;
- ☐ interior rehabilitation work;
- ☐ cellular equipment located on buildings;
- ☐ streetscape/sidewalks/lighting;
- ☐ new construction; and/or
- ☐ demolition

Describe the overall project in DETAIL. Be sure to describe any items checked above. Use additional pages if necessary.

The Proposed Action consists of the development and operation of a commercial service passenger terminal and associated infrastructure at the Mobile Downtown Airport ("BFM"). The proposed site is generally located on previously developed land east of the western Airport Perimeter Road and north of the existing T1T Terminal. The Proposed Action consists of:

1. Construct a commercial service passenger terminal with associated support facilities and infrastructure: The Proposed Action includes construction of a new up to 133,500 square foot passenger terminal with up to six aircraft gates. It is envisioned that current tenants of the existing T1T Terminal building would be relocated to the new terminal. All commercial flights would ultimately be relocated to the new passenger terminal complex in phases, and the T1T Terminal building would eventually be converted to other uses such as maintenance or belly cargo facility. While the configuration of the terminal building is still under final planning and design, a demand-based set of facility requirements were defined in the October 2020 Master Plan, based on the forecasted passenger volumes and aircraft operations. The Proposed Action includes installation of new 15,000- and 12,000-gallon Jet A tanks at the existing fuel farm; installation of new utilities to the new terminal building and relocation of existing utilities that would serve existing buildings near the new terminal; replacement and reconfiguration of airport drainage infrastructure, including enclosing of Rabby Creek; and construction of the ground service equipment maintenance area (approximately 5,000 square feet plus apron). The Proposed Action also includes relocating the existing wash rack and retrofitting the existing Penske truck operations facility to be converted into a rental car facility.

2. Expand the existing apron: The Proposed Action includes expansion of the apron area. This includes the construction of up to an approximately 35,500-square yard concrete aircraft parking apron, reconstruction of up to approximately 134,500 square yards of existing concrete apron pavement, and reconstruction of up to approximately 31,500 square yards of concrete apron taxilanes. This apron area will serve the new passenger terminal, the fixed base operator (FBO), overhaul and repair (MRO) facility, and cargo providers.

3. Construct paved employee and visitor vehicle parking garage/lots: The Proposed Action includes construction of up to approximately 12 acres of employee and visitor parking areas in addition to rental car ready/return parking lots and vehicle circulation areas for access to the terminal curbside and parking areas. These areas would include space for commercial vehicles delivering goods and products to the terminal and space for rental car Quick Turn-Around (QTA) facilities. This would be comprised of up to a 5-level parking garage (with up to a 5.5-acre footprint and 240,500 square feet per floor), with the rest as surface parking. The surface parking lot would be located between the terminal loop roads defined below to enable access from either road.

4. Construct a new terminal access loop road and access road to the existing T1T Terminal, and improve the existing Perimeter Road from Michigan Avenue to the new terminal access loop road: The Proposed Action includes construction of new access roads to the new commercial passenger terminal and the existing T1T Terminal. The loop roads would be connected to the existing Perimeter Road that would be improved to handle the new volume of traffic associated with the collective terminals. The T1T Terminal is currently accessed from Michigan Avenue, which would be truncated to enable implementation of the Terminal Development Program.

AREA OF POTENTIAL EFFECT (APE)

The APE varies with project types and can be direct or indirect (physical, visual, auditory, etc.). The APE is defined as "the geographic area or areas within which an undertaking may cause changes in the character of use of historic properties, if any such properties exist." Factors to consider when determining the APE include; topography, vegetation, existing development, orientation of an existing resource to the project, physical siting of a resource, and existing and planned future development. For example:

1) Rehabilitation, renovation, and/or demolition of a historic building or structure, or new construction: the APE might include the building itself and the adjacent setting.
2) Streetscapes: the APE might include the viewshed from the street.
3) Pedestrian/bicycle facilities: the APE might extend the length of the corridor and for some distance on both sides of the corridor.
4) Underground utilities: the APE would usually be limited to the area of ground disturbance.

Attach a map indicating the precise location of the project and the boundaries of the APE, preferably a clear color copy of a USGS topographic quadrangle map (7.5 minute). For projects in urban areas, also include a city map that shows more detail. USGS topographic maps can be printed from this website: https://ngmdb.usgs.gov/topoview/viewer/. City maps can be printed using www.google.com/maps.

Provide current, high resolution color photographs that illustrate the project area and the entire APE as defined above.

ARCHAEOLOGY (Ground Disturbing Activities)

Has the ground in the project area been disturbed other than by agriculture (i.e. grading, grubbing, clear cutting, filling, etc.)?
☒ Yes ☐ No ☐ Don't know ☐ N/A

If yes, describe in detail. Use additional pages as necessary. Photographs are helpful.

Ground disturbance is proposed primarily on previously disturbed and impervious land at the airport. The property has constantly been disturbed as the industrial, aviation, and military uses have grown over the years. A maintained grass area is present in the southwest portion of the project area. The APE encapsulates the 65 DNL noise contour, which extends slightly outside of airport property. No ground disturbance is proposed outside of airport property. Please reference the attached aerial map of the project vicinity.

Describe the present use and condition of the property. Use additional pages as necessary.

The property is actively used for aviation operations, commercial business that supports the aeronautical industry, and industrial use including the Airbus manufacturing facility. Construction at the property would take place within these existing land use areas. Please refer to the attached figure showing proposed terminal improvement locations.

To your knowledge, has a Cultural Resource Assessment (CRA) been conducted in the proposed project area?
☒ Yes ☐ No ☐ Don't know ☐ N/A

If yes, attach a copy of the cultural resources assessment report.

ARCHITECTURAL INFORMATION

Above-ground properties within the Area of Potential Effect (APE) should be evaluated for the eligibility for the National Register of Historic Places. It is the federal agency's (or their designee) responsibility to identify properties in the APE, apply the National Register (NR) criteria, and determine whether a property is eligible or not. Those determinations are sent to our office for review and comment. All properties evaluated should be accompanied by current photographs, and these locations should be keyed to a good quality USGS topographic map. Some applicants may find it advantageous to hire a historic preservation professional with expertise in history and/or architectural history to complete the identification and evaluation of historic properties. The Alabama Historical Commission publishes a GIS map of properties that have been documented by or through our office. The map includes properties listed in the National Register of Historic Places, Alabama Register of Landmarks & Heritage, Alabama Historic Cemetery Register, county architectural surveys, and other files. The GIS map can be accessed here: https://ahc.alabama.gov/historicpreservationmap.aspx The GIS map should function as a research tool, not an up-to-the-minute inventory about every historic and/or architecturally significant property in the state. This tool allows researchers to investigate and review potentially significant properties according to the best data that is available in the Alabama Historical Commission's files. The absence of a property from the map does not imply that an unidentified property lacks historic or architectural importance.

1) Within the APE, are there properties listed in or eligible for the National Register of Historic Places?

☐ YES If yes, identify the properties by name, address, and photo number.

☑ NO If no, identify the properties by name, address, and photo number. Provide an explanation as to why properties identified are not eligible for the National Register. A discussion of the National Register seven aspects of integrity and the applicable National Register criteria must be included. Refer to the National Park Service's website: https://www.nps.gov/subjects/nationalregister/upload/NRB-15_web508.pdf Use additional pages as necessary.

According to the Alabama Historical Commission GIS map, the existing terminal building located at 228 Commander Dr (now 2455 Michigan Ave) was surveyed May 25, 1988 and was not determined to be eligible for the National Register. An area adjacent to the runway with an identified address of 226 Commander Dr was also surveyed May 25, 1988 and was not determined to be eligible for the National Register. However, based on the addresses and descriptions included in the survey forms, it is assumed the GIS map shows these sites in the incorrect locations. These sites are actually believed to be located outside of the APE along Commanders Drive, originally established as part of Brookley Air Force Base. No other properties within the APE have been identified as listed on or eligible for the National Register. Pine Crest Cemetery and Lartigue Cemetery are adjacent to the project and included on the Alabama Historic Cemetery Register but have not been determined eligible or listed on the National Register.

An archaeological investigation associated with the Airbus Final Assembly Line Facility at Brookley Field was completed by Barry A. Vittor & Associates in April 2013. During that investigation, an excavation plan involving six slip trenches was developed to address the potential for undisturbed cultural deposits outside of the Airbus project area. No cultural features or artifacts were observed during the monitoring of the excavation of the trenches, and no further archaeological testing was recommended.

EFFECTS DETERMINATION

An effect occurs when an action alters the characteristics of a property that may qualify it for the National Register of Historic Places. How will this project affect any of the properties identified in the previous section? Will the project take away or change anything within the boundaries of a historic property? Will the project change the view from or the view to any historic properties? Will the project introduce any audible or atmospheric elements? Will the project result in the transfer, lease, or sale of any of the identified properties? Use additional sheets as necessary.

The proposed project would not adversely affect any properties eligible for or listed on the National Register. The project is consistent with existing land use at the airport and the adjacent Brookley Aeroplex. Pine Crest Cemetery is currently shielded from the airport by an existing tree line which will not be impacted by the proposed project. The atmosphere at Lartigue Cemetery would not noticeably change, as it currently has uninterrupted views of the runway and aviation facilities at BFM. The properties along Perimeter Road are generally shielded from the airport by the existing tree line. The properties that are adjacent to the runway and not shielded by the tree line would not be adversely affected by a change in view, as their current viewshed is dominated by aviation and industrial land use currently at BFM.

The project would not acquire property from or change a historic property. Operations from the terminal relocation project would not result in a significant change in noise level, as aviation operations are active at the site and the noise contours are primarily confined to the airport boundary. The 65 DNL noise contour extends into a small portion of Pine Crest Cemetery next to the runway.

CHECKLIST: Did you provide the following information?	
■ Completed form.	☐ Photographs* of current site conditions and all identified historic properties keyed to a site map.
■ Maps with project area, APE, and any historic properties marked and identified.	☐ For new construction, rehabilitations, etc., attach work plans, drawings, etc.
☐ Other supporting documents (if necessary to explain the project).	■ Description of present use and condition of the project area.

*A note about photographs: Digital photos must be current, high resolution, and adequately show the resource. Take photographs of the overall property and the exterior of each building on the property, including outbuildings. Include views of the overall setting, views of the building in its immediate surrounding showing the relationship of the building to neighboring buildings, and views of significant landscape features (i.e. tree lined approaches, stone walls, formal gardens, etc.). Exterior views of the building should include full views of each side (if possible) and views of important architectural details. Key all photographs to a site map.

If the project involves rehabilitation, include photographs of the building(s) involved and especially the areas of the building slated for rehab work. Label each exterior view to a site map and label all interior views. If the project involves new construction, include photographs of the surrounding area looking out from the project site. Include photographs of any buildings that are located on the project property or on adjoining property.

NOTE: Section 106 regulations provide for a 30-day response time by the Alabama SHPO from the date of receipt. Project activities may not begin until our office has reviewed this information and issued comments.

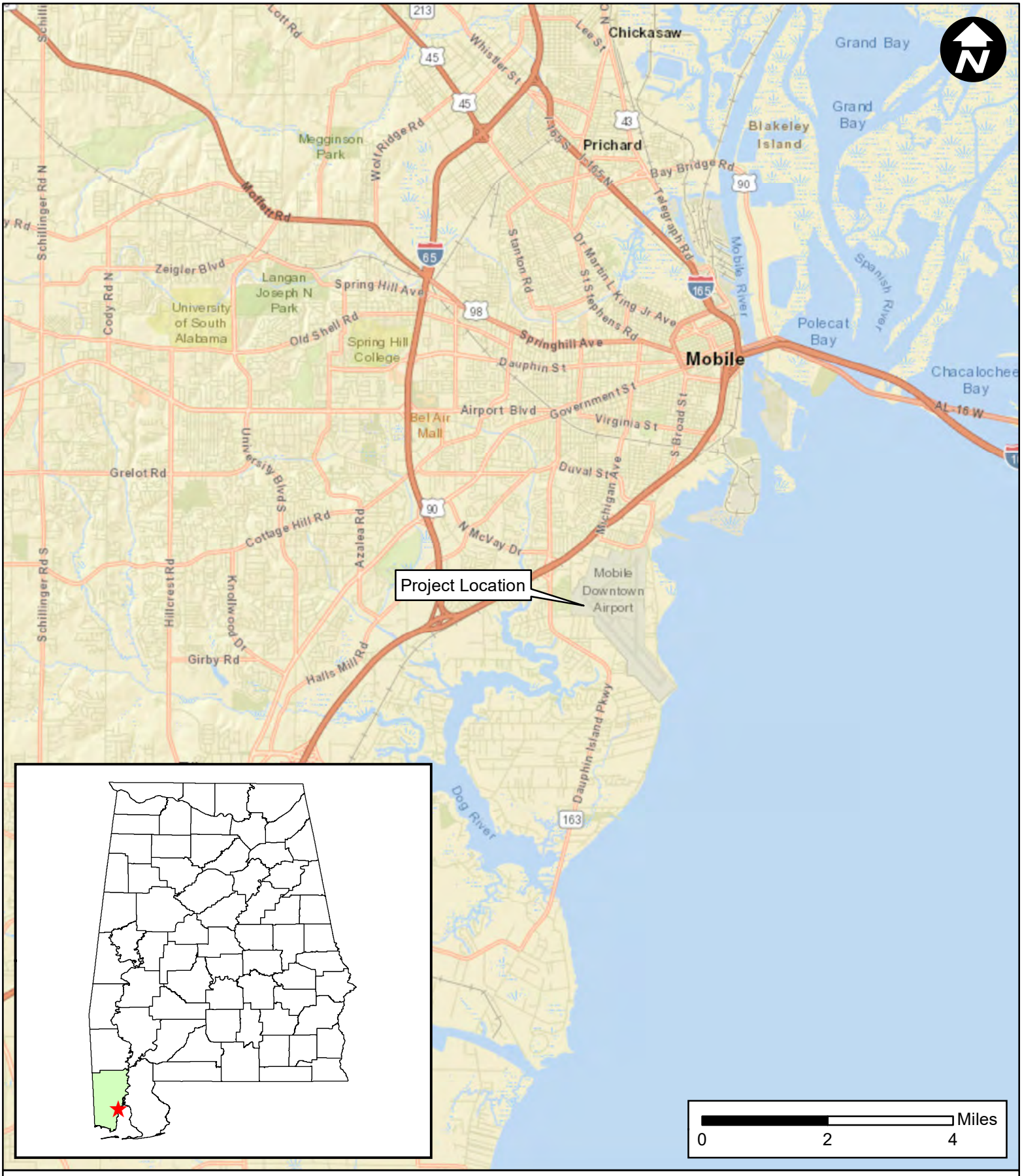
Upon receipt, applications and attachments become the property of the State of Alabama.

For questions regarding this form or the Section 106 Review Process, contact Amanda McBride, Section 106 Coordinator, at 334.230.2692 or Amanda.McBride@ahc.alabama.gov.

All projects must be submitted digitally

E-mail this form and supporting documents to Section.106@ahc.alabama.gov This is the only approved e-mail address for project submission. Projects sent to any other e-mail address will not be accepted. The attachment size cannot exceed 19 MB. Alternatively, you may submit projects with larger attachments through an online system to be determined by the AHC.
Please limit your submission to cultural resources information only.

Contact Amanda McBride for any questions on digital submissions



Kimley»Horn

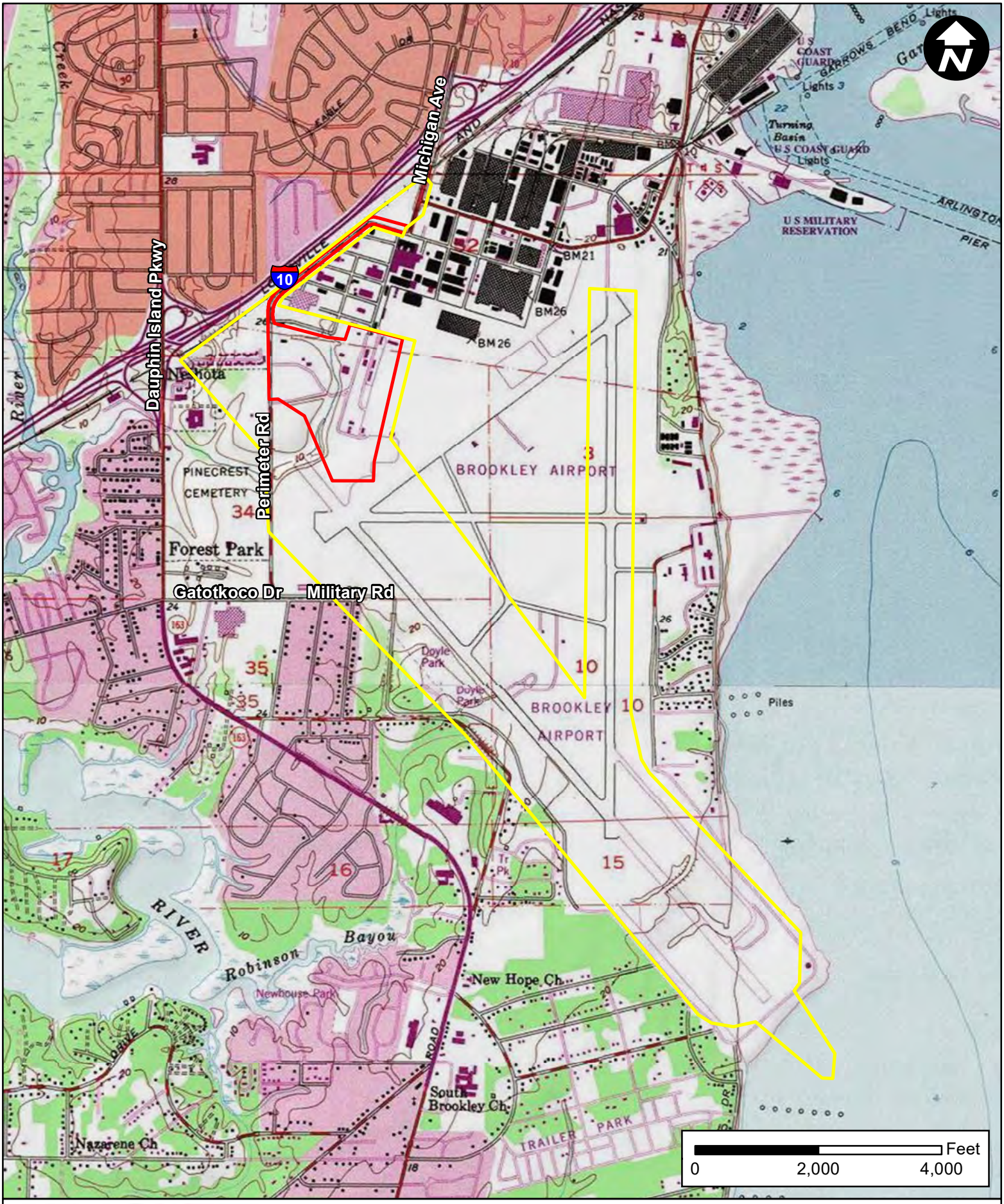
★ Project Location

Mobile County

Figure 1: Vicinity Map
Terminal Development
Mobile Downtown Airport
Mobile, Alabama

Area of Potential Effects
Project Area

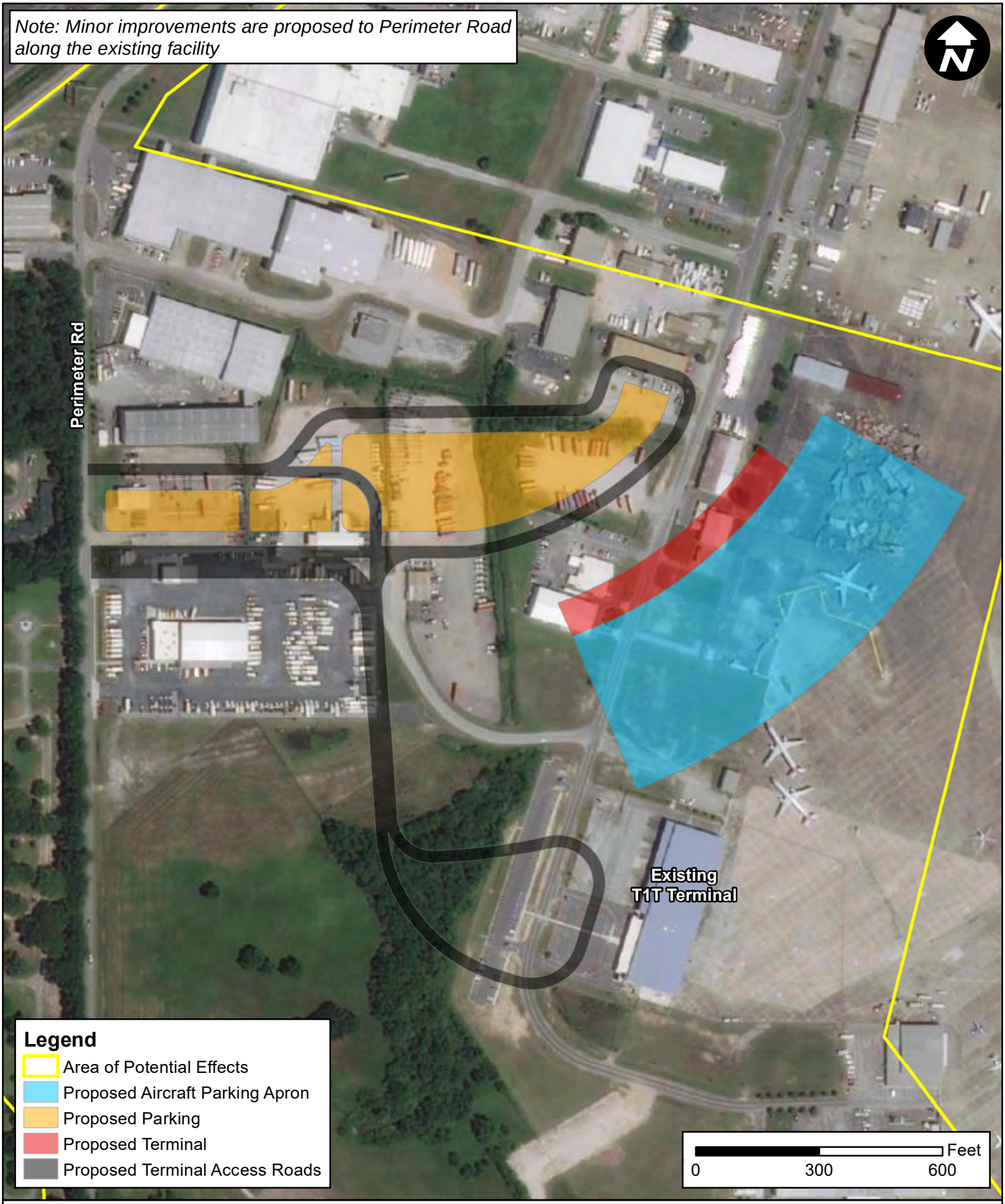
Figure 2: Aerial Map
Terminal Development
Mobile Downtown Airport
Mobile, Alabama



Area of Potential Effects

Project Area

Figure 3: USGS Map
Terminal Development
Mobile Downtown Airport
Mobile, Alabama



Kimley»Horn

Figure 4: Proposed Terminal Improvements
Terminal Development
Mobile Downtown Airport
Mobile, Alabama

Appendix C:
Biological Data

United States Department of the Interior

FISH AND WILDLIFE SERVICE
1208-B Main Street
Daphne, Alabama 36526

APR 22 2021

IN REPLY REFER TO:
2021-TA-0706

Mr. Russell L. Stallings
Mobile Airport Authority
1891 Ninth Street
Mobile, Alabama 36615

Dear Mr. Stallings:

Thank you for your letter, dated March 23, 2021, requesting comments on potential impacts to listed species and general recommendations to protect species and habitat for your proposed Mobile Downtown Airport Terminal Expansion project, in the City of Mobile, Mobile County, Alabama. We understand that the project consists of constructing a new 6-gate terminal with associated support facilities and infrastructure, a concrete aircraft parking apron, vehicle parking lots, parking garage, and a new terminal access loop road and access road. We have reviewed the information and are providing the following comments in accordance with the Migratory Bird Treaty Act (16 U.S.C. 703, *et seq.*), the Bald and Golden Eagle Protection Act of 1940, as amended (16 U.S.C. 668-668d), and Section 7 of the Endangered Species Act (Act), as amended (16 U.S.C. 1531-1543).

Endangered and Threatened Species

The following species may occur in this area of Mobile County:

- Wood stork (*Mycteria americana*) – Threatened
- West Indian Manatee (*Trichechus manatus*) – Threatened
- Eastern Indigo snake (*Drymarchon couperi*) – Threatened
- Black Pine snake (*Pituophis melanoleucus lodingi*) – Threatened
- Alabama red-bellied turtle (*Pseudemys alabamensis*) – Endangered

Site Specific Concerns

The Alabama red-bellied turtle is endangered due to habitat degradation in the form of water pollution and siltation from mining, forestry, agriculture, and industrial and municipal sewage effluents. This species is a large (carapace length reaching 13 inches) herbivorous, freshwater turtle. It inhabits streams, lakes, and sloughs associated with the lower part of the Mobile River

PHONE: 251-441-5181 FAX: 251-441-6222

System and adjacent coastal freshwater systems. Extensive beds of aquatic vegetation are considered to be the principal habitat of the species. Destruction of nesting habitat, sand banks and beaches, is the primary cause for the decline in species numbers. Other threats are from disturbances from human activities, loss of aquatic vegetation, and collection for food and pets. Between April and August female turtles leave the water to lay eggs. Nesting sites are frequently concentrated along banks, levees, or spoil banks. We recommend incorporating best management practices (BMPs) into plans for proposed projects that occur adjacent to waterways.

Regarding the eastern indigo snake and black pine snake, we would recommend a no snake killing policy in the project area to avoid impacts to the species.

Migratory Bird Treaty Act and The Bald and Golden Eagle Protection Act

Coastal areas are important migration points for migratory birds and utilized year-round by eagles. Birds to be considered when assessing potential effects of airports include all protected Migratory Bird Treaty Act (MBTA) species (50 CFR 10.13). These include individuals that are resident, breeding, overwintering, migrating, staging, roosting, feeding, resting, and otherwise transiting through potential project areas. Particularly, close attention should be paid to avian species listed in the Birds of Conservation Concern (BCC), a set of lists generated by the U.S Fish and Wildlife Service identifying migratory birds of high conservation priorities at a variety of spatial scales. The most recent BCC lists were revised in 2008 and can be accessed on-line at: https://www.fws.gov/migratorybirds/pdf/grants/BirdsofConservationConcern2008.pdf

Any bald or golden eagle found within the area is protected under The Bald and Golden Eagle Protection Act (BGEPA). The bald eagle is more common in Alabama. The National Bald Eagle Management Guidelines (Guidelines), 2007, found at:
http://www.fws.gov/northeast/ecologicalservices/eagle.html
provide recommendations to avoid adversely affecting bald eagles and their nests, especially during nesting season. Potential bald eagle nesting habitat includes large trees, often near river systems, reservoirs, lakes, bays and other fish-bearing bodies of water. Bald eagles are vulnerable to disturbance early in the nesting season, i.e., during courtship, nest building, egg laying, incubation, and brooding (roughly the first 12 weeks of the nesting cycle). Disturbance during this critical period may lead to nest abandonment and/or chilled or overheated eggs or young. Human activity near the nest later in the nesting cycle may cause the eaglet(s) to fledge prematurely, thereby reducing the likelihood of fledgling survival.

As long as best manage practices are implemented, no further endangered species consultation will be required for this portion of the project unless: 1) the identified action is subsequently modified in a manner that causes an effect on listed species or designated critical habitat; 2) new information reveals the identified action may affect Federally protected species or designated critical habitat in a manner or to an extent not previously considered; or 3) a new species is listed or critical habitat is designated under the Endangered Species Act that may be affected by the identified action. For information on best management practices specific to your project please go to http://www.fws.gov/daphne/section7/bmp.html.

We appreciate your efforts to further the conservation of federally listed species and look forward to working with you in the future. For further discussion, please contact Ms. Erin Lentz of my staff at erin_lentz@fws.gov. Please refer to the reference number located at the top of this letter in future phone calls or written correspondence.

Sincerely,

William J. Pearson
Field Supervisor
Alabama Ecological Services Field Office

IPaC Information for Planning and Consultation **U.S. Fish & Wildlife Service**

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

Mobile County, Alabama

Local office

Alabama Ecological Services Field Office

(251) 441-5181
(251) 441-6222

1208 B Main Street
Daphne, AL 36526-4419

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species

[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

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1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information. IPaC only shows species that are regulated by USFWS (see FAQ).
2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Mammals

NAME	STATUS
West Indian Manatee Trichechus manatus Wherever found There is **final** critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/4469	Threatened Marine mammal

Birds

NAME	STATUS
Eastern Black Rail Laterallus jamaicensis ssp. jamaicensis Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/10477	Threatened
Wood Stork Mycteria americana No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/8477	Threatened

Reptiles

NAME	STATUS
Alabama Red-bellied Turtle Pseudemys alabamensis Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/1494	Endangered
Black Pine Snake Pituophis melanoleucus lodingi Wherever found There is **final** critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/452	Threatened
Eastern Indigo Snake Drymarchon corais couperi Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/646	Threatened
Kemp's Ridley Sea Turtle Lepidochelys kempii Wherever found There is **proposed** critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/5523	Endangered

Loggerhead Sea Turtle Caretta caretta There is **final** critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/1110	Threatened

Fishes

NAME	STATUS
Atlantic Sturgeon (gulf Subspecies) Acipenser oxyrinchus (=oxyrhynchus) desotoi Wherever found There is **final** critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/651	Threatened

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act [1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php
- Measures for avoiding and minimizing impacts to birds http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php
- Nationwide conservation measures for birds http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)
American Kestrel Falco sparverius paulus This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Apr 1 to Aug 31
American Oystercatcher Haematopus palliatus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/8935	Breeds Apr 15 to Aug 31
Bald Eagle Haliaeetus leucocephalus This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Sep 1 to Jul 31

Black Scoter Melanitta nigra This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds elsewhere
Brown Pelican Pelecanus occidentalis This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/6034	Breeds Jan 15 to Sep 30
Clapper Rail Rallus crepitans This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Apr 10 to Oct 31
Common Loon gavia immer This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/4464	Breeds Apr 15 to Oct 31
Double-crested Cormorant phalacrocorax auritus This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/3478	Breeds Apr 20 to Aug 31
Dunlin Calidris alpina arcticola This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds elsewhere
Eastern Whip-poor-will Antrostomus vociferus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 1 to Aug 20
Herring Gull Larus argentatus This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds Apr 20 to Aug 31
Least Tern Sterna antillarum This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Apr 20 to Sep 10

Lesser Yellowlegs Tringa flavipes — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9679

Marbled Godwit Limosa fedoa — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9481

Northern Gannet Morus bassanus — Breeds elsewhere
This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

Prairie Warbler Dendroica discolor — Breeds May 1 to Jul 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Prothonotary Warbler Protonotaria citrea — Breeds Apr 1 to Jul 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Red-breasted Merganser Mergus serrator — Breeds elsewhere
This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

Red-headed Woodpecker Melanerpes erythrocephalus — Breeds May 10 to Sep 10
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Ring-billed Gull Larus delawarensis — Breeds elsewhere
This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

Royal Tern Thalasseus maximus — Breeds Apr 15 to Aug 31
This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

Ruddy Turnstone Arenaria interpres morinella This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds elsewhere
Short-billed Dowitcher Limnodromus griseus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9480	Breeds elsewhere
Swallow-tailed Kite Elanoides forficatus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/8938	Breeds Mar 10 to Jun 30
White-winged Scoter Melanitta fusca This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds elsewhere
Willet Tringa semipalmata This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Apr 20 to Aug 5
Wilson's Plover Charadrius wilsonia This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Apr 1 to Aug 20
Wood Thrush Hylocichla mustelina This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 10 to Aug 31

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

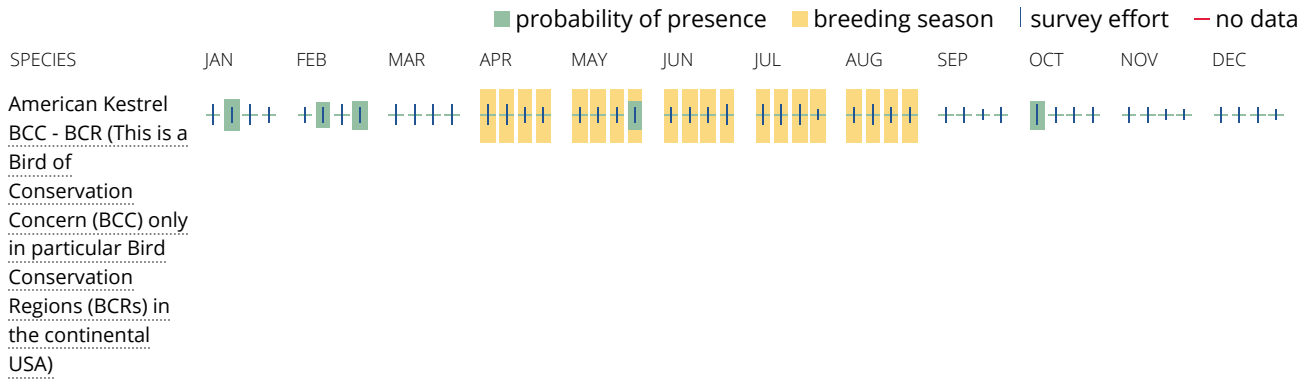
Breeding Season (▪)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

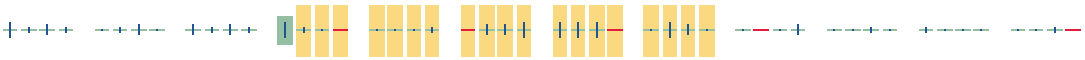
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

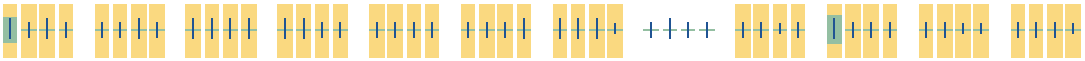
Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



American Oystercatcher BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



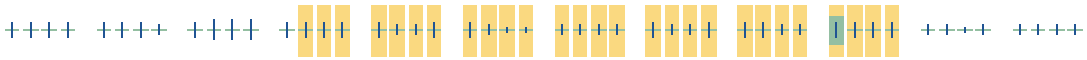
Bald Eagle Non-BCC Vulnerable (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)



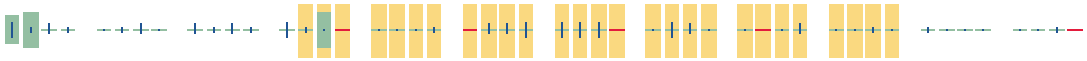
Black Scoter Non-BCC Vulnerable (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)

Brown Pelican Non-BCC Vulnerable (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)

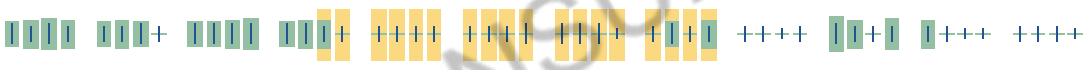
Clapper Rail
BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)



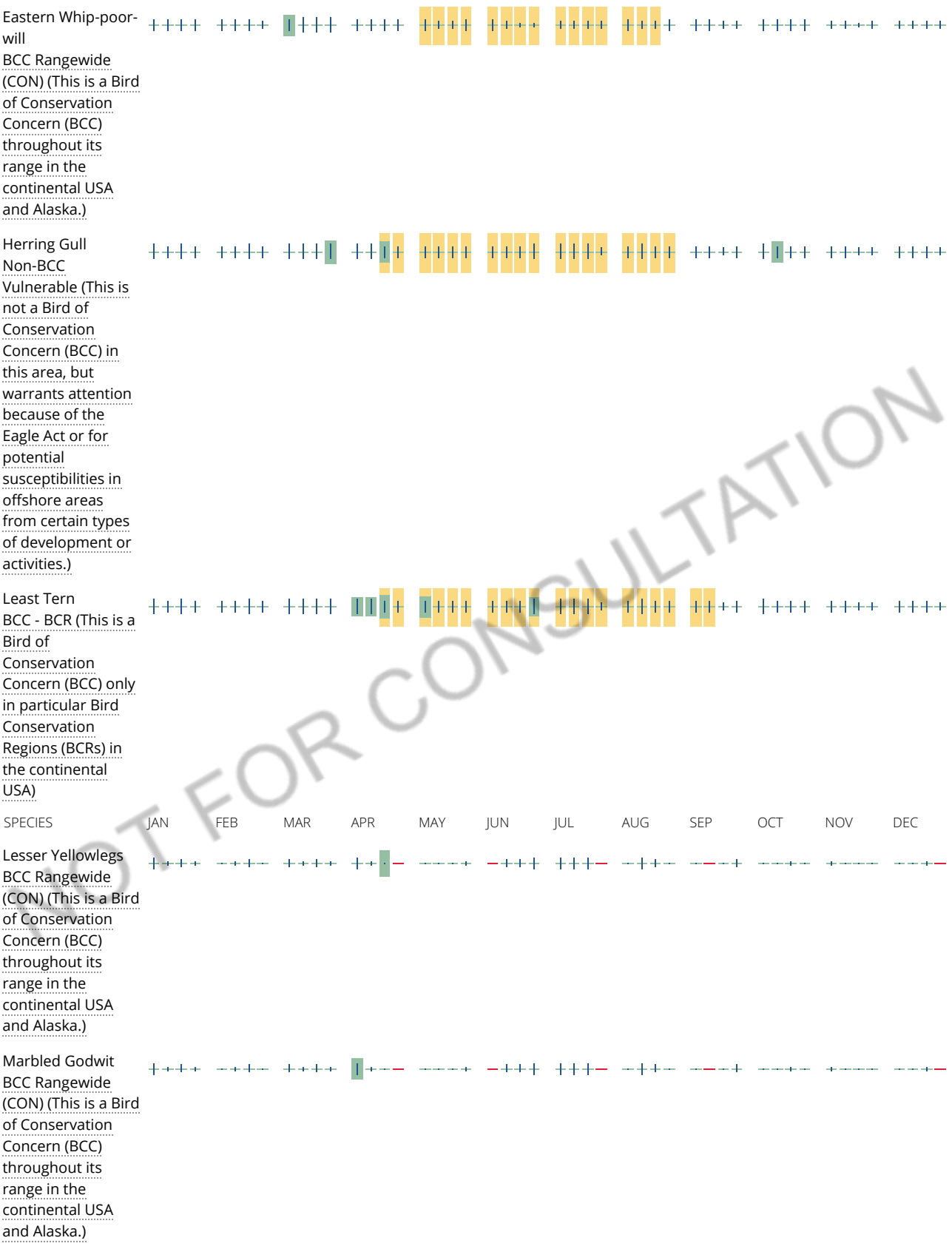
Common Loon
Non-BCC Vulnerable (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)



Double-crested Cormorant
Non-BCC Vulnerable (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)

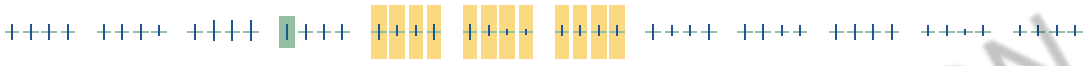


Dunlin
BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)

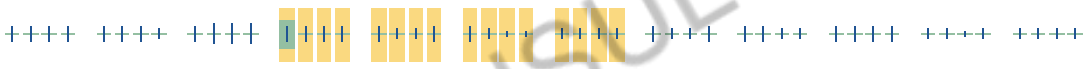


Northern Gannet Non-BCC Vulnerable (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)

Prairie Warbler BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

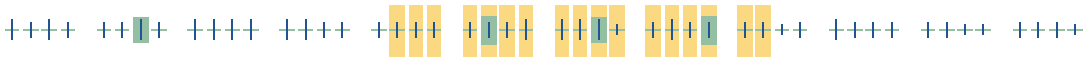


Prothonotary Warbler BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



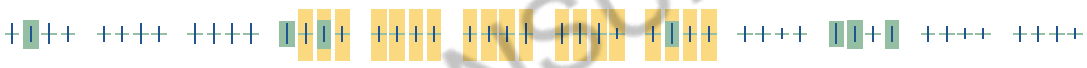
Red-breasted Merganser Non-BCC Vulnerable (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)

Red-headed Woodpecker BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

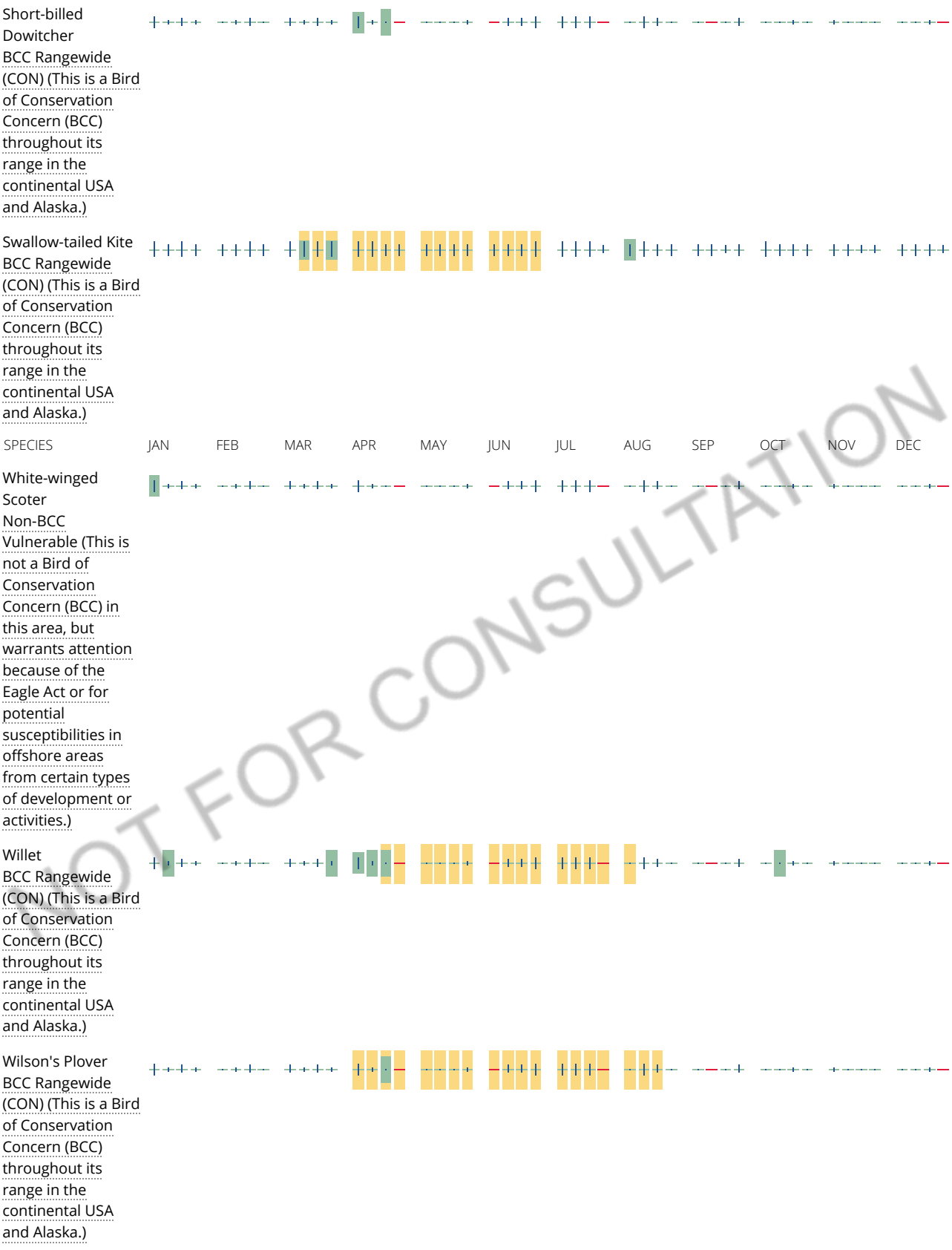


Ring-billed Gull Non-BCC Vulnerable (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)

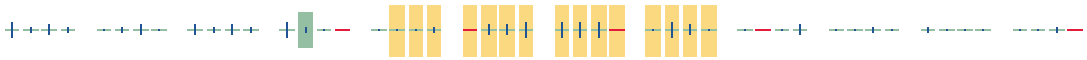
Royal Tern Non-BCC Vulnerable (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)



Ruddy Turnstone BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)



Wood Thrush
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the AKN Phenology Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets .

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: The Cornell Lab of Ornithology All About Birds Bird Guide, or (if you are unsuccessful in locating the bird of interest there), the Cornell Lab of Ornithology Neotropical Birds guide. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Marine mammals

Marine mammals are protected under the Marine Mammal Protection Act. Some are also protected under the Endangered Species Act

[1] and the Convention on International Trade in Endangered Species of Wild Fauna and Flora[2].

The responsibilities for the protection, conservation, and management of marine mammals are shared by the U.S. Fish and Wildlife Service [responsible for otters, walruses, polar bears, manatees, and dugongs] and NOAA Fisheries

[3] [responsible for seals, sea lions, whales, dolphins, and porpoises]. Marine mammals under the responsibility of NOAA Fisheries are **not** shown on this list; for additional information on those species please visit the Marine Mammals page of the NOAA Fisheries website.

The Marine Mammal Protection Act prohibits the take (to harass, hunt, capture, kill, or attempt to harass, hunt, capture or kill) of marine mammals and further coordination may be necessary for project evaluation. Please contact the U.S. Fish and Wildlife Service Field Office shown.

1. The Endangered Species Act (ESA) of 1973.
2. The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) is a treaty to ensure that international trade in plants and animals does not threaten their survival in the wild.
3. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following marine mammals under the responsibility of the U.S. Fish and Wildlife Service are potentially affected by activities in this location:

NAME

West Indian Manatee *Trichechus manatus*
https://ecos.fws.gov/ecp/species/4469

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

WETLAND INFORMATION IS NOT AVAILABLE AT THIS TIME

This can happen when the National Wetlands Inventory (NWI) map service is unavailable, or for very large projects that intersect many wetland areas. Try again, or visit the NWI map to view wetlands at this location.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or

local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

EFH Data Notice: Essential Fish Habitat (EFH) is defined by textual descriptions contained in the fishery management plans developed by the regional Fishery Management Councils. In most cases mapping data can not fully represent the complexity of the habitats that make up EFH. This report should be used for general interest queries only and should not be interpreted as a definitive evaluation of EFH at this location. A location-specific evaluation of EFH for any official purposes must be performed by a regional expert. Please refer to the following links for the appropriate regional resources.

Southeast Regional Office
Atlantic Highly Migratory Species Management Division

Query Results

Degrees, Minutes, Seconds: Latitude = 30º37'23" N, Longitude = 89º56'45" W
Decimal Degrees: Latitude = 30.62, Longitude = -88.05

The query location intersects with spatial data representing EFH and/or HAPCs for the following species/management units.

EFH

Show	Link	Data Caveats	Species/Management Unit	Lifestage(s) Found at Location	Management Council	FMP
			Red Drum	ALL	Gulf of Mexico	Red Drum Fishery
			Reef Fish (43 Species) **Balistidae - Triggerfishes** Gray triggerfish (*Balistes capriscus*) **Carangidae - Jacks** Greater amberjack (*Seriola dumerili*) Lesser amberjack (*Seriola fasciata*) Almaco jack (*Seriola rivoliana*) Banded rudderfish (*Seriola zonata*) **Labridae - Wrasses** Hogfish (*Lachnolaimus maximus*) **Lutjanidae - Snappers** Queen snapper (*Etelis oculatus*) Mutton snapper (*Lutjanus analis*) Schoolmaster (*Lutjanus apodus*) Blackfin snapper	ALL	Gulf of Mexico	Reef Fish Fishery

Show	Link	Data Caveats	Species/Management Unit	Lifestage(s) Found at Location	Management Council	FMP
			(*Lutjanus buccanella*) Red snapper (*Lutjanus campechanus*) Cubera snapper (*Lutjanus cyanopterus*) Gray (mangrove) snapper (*Lutjanus griseus*) Dog snapper (*Lutjanus jocu*) Mahogany snapper (*Lutjanus mahogoni*) Lane snapper (*Lutjanus synagris*) Silk snapper (*Lutjanus vivanus*) Yellowtail snapper (*Ocyurus chrysurus*) Wenchman (*Pristipomoides aquilonaris*) Vermilion snapper (*Rhomboplites aurorubens*) **Malacanthidae - Tilefishes** Goldface tilefish (*Caulolatilus chrysops*) Blackline tilefish (*Caulolatilus cyanops*) Anchor tilefish (*Caulolatilus intermedius*) Blueline tilefish (*Caulolatilus microps*) (Golden) Tilefish (*Lopholatilus chamaeleonticeps*) **Serranidae - Groupers** Dwarf sand perch (*Diplectrum bivittatum*) Sand perch (*Diplectrum formosum*) Rock hind (*Epinephelus adscensionis*)			

Show	Link	Data Caveats	Species/Management Unit	Lifestage(s) Found at Location	Management Council	FMP
			Speckled hind (*Epinephelus drummondhayi*) Yellowedge grouper (*Epinephelus flavolimbatus*) Red hind (*Epinephelus guttatus*) Goliath grouper (*Epinephelus itajara*) Red grouper (*Epinephelus morio*) Misty grouper (*Epinephelus mystacinus*) Warsaw grouper (*Epinephelus nigritus*) Snowy grouper (*Epinephelus niveatus*) Nassau grouper (*Epinephelus striatus*) Marbled grouper (*Epinephelus inermis*) Black grouper (*Mycteroperca bonaci*) Yellowmouth grouper (*Mycteroperca interstitialis*) Gag (*Mycteroperca microlepis*) Scamp (*Mycteroperca phenax*) Yellowfin grouper (*Mycteroperca venenosa*)			
			Coastal Migratory Pelagics	ALL	Gulf of Mexico	Coastal Migratory Pelagic Resources (Mackerels)

Show	Link	Data Caveats	Species/Management Unit	Lifestage(s) Found at Location	Management Council	FMP
			Shrimp (4 Species) Brown shrimp (*Penaeus aztecus*) White shrimp (*Penaeus setiferus*) Pink shrimp (*Penaeus duorarum*) Royal red shrimp (*Pleoticus robustus*)	ALL	Gulf of Mexico	Shrimp Fishery
			Bull Shark	Juvenile/Adult Neonate	Secretarial	Amendment 10 to the 2006 Consolidated HMS FMP: EFH
			Spinner Shark	Neonate	Secretarial	Amendment 10 to the 2006 Consolidated HMS FMP: EFH

HAPCs

No Habitat Areas of Particular Concern (HAPC) were identified at the report location.

EFH Areas Protected from Fishing

No EFH Areas Protected from Fishing (EFHA) were identified at the report location.

Spatial data does not currently exist for all the managed species in this area. The following is a list of species or management units for which there is no spatial data. ****For links to all EFH text descriptions see the complete data inventory: open data inventory -->**
Gulf of Mexico Dolphin Wahoo EFH, Dolphin

Mobile

Mobile Bay

Bon Secour Bay

Perdido Bay

8

DDD: 30.693 lat, -88.253 long

STATE OF ALABAMA
DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES
64 NORTH UNION STREET, SUITE 464
MONTGOMERY, ALABAMA 36130

KAY IVEY
GOVERNOR

CHRISTOPHER M. BLANKENSHIP
COMMISSIONER

EDWARD F. POOLOS
DEPUTY COMMISSIONER

STATE LANDS DIVISION
PATRICIA POWELL MCCURDY
DIRECTOR

HANK BURCH
ASSISTANT DIRECTOR

TELEPHONE (334) 242-3484
FAX (334) 242-0999

April 13, 2021

Mr. Eric Schneider
ESA
13 Palafox Place
Pensacola, FL 32502

RE: Sensitive Species Information request
Mobile Airport

Dear Mr. Schneider:

The Natural Heritage Section office received your e-mail dated 4/13/2021 addressed to Ashley Peters on 4/13/2021 and has since developed the following information pertaining to sensitive species (state protected, and federally listed candidate, threatened, and endangered species). I have enclosed a list of sensitive species which the Natural Heritage Section Database or the U.S. Fish and Wildlife Service have indicated occur or have occurred in Mobile County. Additionally, I have listed some potentially helpful and informative web sites at the end of this letter.

The Natural Heritage Section database contains numerous records of sensitive species in Mobile County. Our database indicates the area of interest has had no biological survey performed at the delineated location, by our staff or any individuals referenced in our database. Therefore, we can make no accurate assessment to the past or current inhabitancy of any federal or state protected species at that location. A biological survey conducted by trained professionals is the most accurate way to ensure that no sensitive species are jeopardized by the development activities.

There appears to be no imminent threat to any known sensitive species within one mile of the project area.

I hope this information will be useful to you. The provided information is to help you in fulfilling your necessary legal obligations. This does not constitute any form of Section 7

consultation. The Natural Heritage Section recommends that the U. S. Fish and Wildlife Service field office in Daphne be contacted for Section 7 consultations.

The information does not suggest that protected species are not at this location. The specific location of a sensitive species is considered confidential information by a State Lands Division Regulation and can be released only to individuals who enter into a confidentiality and indemnity contract with the State Lands Division.

The Natural Heritage Section provides this information as a service to the people of Alabama. The NHS acts as a clearing house for species distribution data. We happily accept any information environmental researchers are willing to donate. Sensitive species exact locations are kept confidential. If you would be willing to donate any information to this database, we will be better able to assist all individuals interested in environmental compliance.

Sincerely,

Ashley Peters

Ashley Peters
Database Manager
Natural Heritage Section

Enclosures

Potentially helpful web sites

Information about federally listed species
http://daphne.fws.gov/es/specieslst.htm
http://www.pfmt.org/wildlife/endangered/
http://www.natureserve.org/explorer/

State Protected Species Regulations:
http://www.outdooralabama.com/hunting/regulations/regs.cfm

STANDARD PROTECTION MEASURES FOR THE EASTERN INDIGO SNAKE
U.S. Fish and Wildlife Service
August 12, 2013

The eastern indigo snake protection/education plan (Plan) below has been developed by the U.S. Fish and Wildlife Service (USFWS) in Florida for use by applicants and their construction personnel. At least **30 days prior** to any clearing/land alteration activities, the applicant shall notify the appropriate USFWS Field Office via e-mail that the Plan will be implemented as described below (North Florida Field Office: jaxregs@fws.gov; South Florida Field Office: verobeach@fws.gov; Panama City Field Office: panamacity@fws.gov). As long as the signatory of the e-mail certifies compliance with the below Plan (including use of the attached poster and brochure), no further written confirmation or "approval" from the USFWS is needed and the applicant may move forward with the project.

If the applicant decides to use an eastern indigo snake protection/education plan other than the approved Plan below, written confirmation or "approval" from the USFWS that the plan is adequate must be obtained. At least 30 days prior to any clearing/land alteration activities, the applicant shall submit their unique plan for review and approval. The USFWS will respond via e-mail, typically within 30 days of receiving the plan, either concurring that the plan is adequate or requesting additional information. A concurrence e-mail from the appropriate USFWS Field Office will fulfill approval requirements.

The Plan materials should consist of: 1) a combination of posters and pamphlets (see **Poster Information** section below); and 2) verbal educational instructions to construction personnel by supervisory or management personnel before any clearing/land alteration activities are initiated (see **Pre-Construction Activities** and **During Construction Activities** sections below).

POSTER INFORMATION

Posters with the following information shall be placed at strategic locations on the construction site and along any proposed access roads (a final poster for Plan compliance, to be printed on 11" x 17" or larger paper and laminated, is attached):

DESCRIPTION: The eastern indigo snake is one of the largest non-venomous snakes in North America, with individuals often reaching up to 8 feet in length. They derive their name from the glossy, blue-black color of their scales above and uniformly slate blue below. Frequently, they have orange to coral reddish coloration in the throat area, yet some specimens have been reported to only have cream coloration on the throat. These snakes are not typically aggressive and will attempt to crawl away when disturbed. Though indigo snakes rarely bite, they should NOT be handled.

SIMILAR SNAKES: The black racer is the only other solid black snake resembling the eastern indigo snake. However, black racers have a white or cream chin, thinner bodies, and WILL BITE if handled.

LIFE HISTORY: The eastern indigo snake occurs in a wide variety of terrestrial habitat types throughout Florida. Although they have a preference for uplands, they also utilize some wetlands

and agricultural areas. Eastern indigo snakes will often seek shelter inside gopher tortoise burrows and other below- and above-ground refugia, such as other animal burrows, stumps, roots, and debris piles. Females may lay from 4 - 12 white eggs as early as April through June, with young hatching in late July through October.

PROTECTION UNDER FEDERAL AND STATE LAW: The eastern indigo snake is classified as a Threatened species by both the USFWS and the Florida Fish and Wildlife Conservation Commission. "Taking" of eastern indigo snakes is prohibited by the Endangered Species Act without a permit. "Take" is defined by the USFWS as an attempt to kill, harm, harass, pursue, hunt, shoot, wound, trap, capture, collect, or engage in any such conduct. Penalties include a maximum fine of $25,000 for civil violations and up to $50,000 and/or imprisonment for criminal offenses, if convicted.

Only individuals currently authorized through an issued Incidental Take Statement in association with a USFWS Biological Opinion, or by a Section 10(a)(1)(A) permit issued by the USFWS, to handle an eastern indigo snake are allowed to do so.

IF YOU SEE A <u>LIVE</u> EASTERN INDIGO SNAKE ON THE SITE:

- Cease clearing activities and allow the live eastern indigo snake sufficient time to move away from the site without interference;
- Personnel must NOT attempt to touch or handle snake due to protected status.
- Take photographs of the snake, if possible, for identification and documentation purposes.
- Immediately notify supervisor or the applicant's designated agent, **and** the appropriate USFWS office, with the location information and condition of the snake.
- If the snake is located in a vicinity where continuation of the clearing or construction activities will cause harm to the snake, the activities must halt until such time that a representative of the USFWS returns the call (within one day) with further guidance as to when activities may resume.

IF YOU SEE A <u>DEAD</u> EASTERN INDIGO SNAKE ON THE SITE:

- Cease clearing activities and immediately notify supervisor or the applicant's designated agent, **and** the appropriate USFWS office, with the location information and condition of the snake.
- Take photographs of the snake, if possible, for identification and documentation purposes.
- Thoroughly soak the dead snake in water and then freeze the specimen. The appropriate wildlife agency will retrieve the dead snake.

Telephone numbers of USFWS Florida Field Offices to be contacted if a live or dead eastern indigo snake is encountered:

North Florida Field Office – (904) 731-3336
Panama City Field Office – (850) 769-0552
South Florida Field Office – (772) 562-3909

PRE-CONSTRUCTION ACTIVITIES

1. The applicant or designated agent will post educational posters in the construction office and throughout the construction site, including any access roads. The posters must be clearly visible to all construction staff. A sample poster is attached.

2. Prior to the onset of construction activities, the applicant/designated agent will conduct a meeting with all construction staff (annually for multi-year projects) to discuss identification of the snake, its protected status, what to do if a snake is observed within the project area, and applicable penalties that may be imposed if state and/or federal regulations are violated. An educational brochure including color photographs of the snake will be given to each staff member in attendance and additional copies will be provided to the construction superintendent to make available in the onsite construction office (a final brochure for Plan compliance, to be printed double-sided on 8.5" x 11" paper and then properly folded, is attached). Photos of eastern indigo snakes may be accessed on USFWS and/or FWC websites.

3. Construction staff will be informed that in the event that an eastern indigo snake (live or dead) is observed on the project site during construction activities, all such activities are to cease until the established procedures are implemented according to the Plan, which includes notification of the appropriate USFWS Field Office. The contact information for the USFWS is provided on the referenced posters and brochures.

DURING CONSTRUCTION ACTIVITIES

1. During initial site clearing activities, an onsite observer may be utilized to determine whether habitat conditions suggest a reasonable probability of an eastern indigo snake sighting (example: discovery of snake sheds, tracks, lots of refugia and cavities present in the area of clearing activities, and presence of gopher tortoises and burrows).

2. If an eastern indigo snake is discovered during gopher tortoise relocation activities (i.e. burrow excavation), the USFWS shall be contacted within one business day to obtain further guidance which may result in further project consultation.

3. Periodically during construction activities, the applicant's designated agent should visit the project area to observe the condition of the posters and Plan materials, and replace them as needed. Construction personnel should be reminded of the instructions (above) as to what is expected if any eastern indigo snakes are seen.

POST CONSTRUCTION ACTIVITIES

Whether or not eastern indigo snakes are observed during construction activities, a monitoring report should be submitted to the appropriate USFWS Field Office within 60 days of project completion. The report can be sent electronically to the appropriate USFWS e-mail address listed on page one of this Plan.

Appendix D:
Agency
Correspondence

ALABAMA'S FEDERALLY LISTED AND STATE PROTECTED SPECIES (BY COUNTY)

This is a list of protected species that are believed to occur in the designated county and the legal protection status of each species. This list is a combination of the U.S. Fish and Wildlife Service (Daphne field office) federally listed species county and state lists and the Alabama State Lands Division's Natural Heritage Section (SLD-NHS) Database of species occurrence data. This list is continually being updated, and, therefore, it may be incomplete or inaccurate and is provided strictly for informational purposes. Site specific information can be provided by the Alabama SLD-NHS and/or the U.S. Fish and Wildlife Service (Daphne field office) prior to project activities. To be certain of occurrence, surveys should be conducted by qualified biologists to determine if a sensitive species occurs within a project area. Species not listed for a given county does not imply that they do not occur there, only that their occurrence there is as yet unrecorded by these two agencies. This list is currently under review and refects only our current understanding of species distributions. It also does not constitute any form of Section 7 consultation. The Alabama SLD-NHS recommends that the U.S. Fish and Wildlife Service field office in Daphne be contacted for Section 7 consultations.

Mobile

Protection Status	Common Name	Scientific Name	Applicable State Regulation
Threatened/State Protected	Alabama Heelsplitter	Potamilus inflatus	220-2-.98 (1) (a)
State Protected	Alabama Map Turtle	Graptemys pulchra	220-2-.92 (1) (c)
Endangered/State Protected	Alabama Red-Bellied Turtle	Pseudemys alabamensis	220-2-.92 (1) (c)
Threatened/State Protected	Black Pinesnake	Pituophis melanoleucus lodingi	220-2-.92 (1) (c)
Threatened/State Protected	Black Rail	Laterallus jamaicensis	220-2-.92 (1) (d)
State Protected	Black-knobbed Map Turtle delticola	Graptemys nigrinoda	220-2-.92 (1) (c)
State Protected	Brazilian Free-tailed Bat	Tadarida brasiliensis	220-2-.92 (1) (e)
State Protected	Brighteye Darter	Etheostoma lynceum	220-2-.92 (1) (a)
State Protected	Coachwhip	Coluber flagellum	220-2-.92 (1) (c)
State Protected	Coal Skink	Plestiodon anthracinus	220-2-.92 (1) (c)
State Protected	Diamond-backed Terrapin	Malaclemys terrapin	220-2-.92 (1) (c)
Endangered/State Protected	Dusky Gopher Frog	Lithobates sevosus	220-2-.92 (1) (b)
State Protected	Eastern Black Kingsnake	Lampropeltis nigra	220-2-.92 (1) (c)
Threatened/State Protected	Eastern Indigo Snake	Drymarchon couperi	220-2-.92 (1) (c)
State Protected	Eastern Spotted Skunk	Spilogale putorius	220-2-.92 (1) (e)
Threatened/State Protected	Gopher Tortoise (western)	Gopherus polyphemus	220-2-.92 (1) (c)
Threatened/State Protected	Green Sea Turtle	Chelonia mydas	220-2-.92 (1) (f)
State Protected	Gulf Saltmarsh Watersnake	Nerodia clarkii clarkii	220-2-.92 (1) (c)
Threatened/State Protected	Gulf Sturgeon	Acipenser oxyrinchus desotoi	220-2-.92 (1) (a)
State Protected	Harlequin Coralsnake	Micrurus fulvius	220-2-.92 (1) (c)
Endangered/State Protected	Hawksbill Sea Turtle	Eretmochelys imbricata	220-2-.92 (1) (f)
State Protected	Ironcolor Shiner	Notropis chalybaeus	220-2-.92 (1) (a)
Endangered/State Protected	Kemp's Ridley Sea Turtle	Lepidochelys kempii	220-2-.92 (1) (f)
Endangered/State Protected	Leatherback Sea Turtle	Dermochelys coriacea	220-2-.92 (1) (f)
Threatened/State Protected	Loggerhead Sea Turtle	Caretta caretta	220-2-.92 (1) (f)
State Protected	Long-tailed Weasel	Mustela frenata	220-2-.92 (1) (e)
State Protected	Mimic Glass Lizard	Ophisaurus mimicus	220-2-.92 (1) (c)

State Protected	Northern Yellow Bat	Lasiurus intermedius	220-2-.92 (1) (e)
State Protected	One-toed Amphiuma	Amphiuma pholeter	220-2-.92 (1) (b)
State Protected	Ouachita Map Turtle	Graptemys ouachitensis	220-2-.92 (1) (c)
State Protected	Paddlefish	Polyodon spathula	220-2-.94
State Protected	Pinesnake	Pituophis melanoleucus spp.	220-2-.92 (1) (c)
Threatened/State Protected	Piping Plover	Charadrius melodus	220-2-.92 (1) (d)
State Protected	Rafinesque's Big-eared Bat	Corynorhinus rafinesquii	220-2-.92 (1) (e)
State Protected	Rainbow Snake	Farancia erytrogramma	220-2-.92 (1) (c)
Threatened/State Protected	Red Knot	Calidris canutus	220-2-.92 (1) (d)
State Protected	River Frog	Lithobates heckscheri	220-2-.92 (1) (b)
State Protected	Southeastern Five-lined Skink	Plestiodon inexpectatus	220-2-.92 (1) (c)
State Protected	Southeastern Myotis	Myotis austroriparius	220-2-.92 (1) (e)
State Protected	Southern Dusky Salamander	Desmognathus auriculatus	220-2-.92 (1) (b)
State Protected	Southern Hog-nosed Snake	Heterodon simus	220-2-.92 (1) (c)
State Protected	Tiger Salamander	Ambystoma tigrinum	220-2-.92 (1) (b)
Threatened/State Protected	West Indian Manatee	Trichechus manatus	220-2-.92 (1) (e)
Threatened/State Protected	Wood Stork	Mycteria americana	220-2-.92 (1) (d)

Key to codes on list:

Endangered - Federally listed as an endangered species by the U. S. Fish and Wildlife Service

Threatened - Federally listed as a threatened species by the U. S. Fish and Wildlife Service

Candidate - Federally listed as a candidate species by the U. S. Fish and Wildlife Service

Experimental - Species is protected throughout its range, except for the nonessential experimental population, by the U. S. Fish and Wildlife Service

State Protected - It is unlawful to take, capture or kill; possess, sell or trade for anything of monetary value, or offer to sell or trade these species. Alabama Regulations relating to game, fish and furbearing animals. 2015-2016. Alabama Department of Conservation and Natural Resources. See http://www.outdooralabama.com/nongame-vertebrates-protected-alabama-regulations for more

Notes:
- Birds: The Nongame Species Regulation 220-2-.92 (1)(d) states: All nongame birds are protected under the provisions of this regulation except crows, starlings, blackbirds, English sparrows, Eurasian collared doves, pigeons and other non-native species.
- The Bald Eagle (Haliaeetus leucocephalus) has been delisted. This species is still protected by the Nongame Species Regulation and the Migratory Bird Act. This species is distributed statewide, but it is most likely to be observed near large rivers and reservoirs.
- Black Bear (Ursus americanus ssp.) may occur statewide.

LANCE R. LEFLEUR
DIRECTOR

KAY IVEY
GOVERNOR

Alabama Department of Environmental Management
adem.alabama.gov
1400 Coliseum Blvd. 36110-2400 • Post Office Box 301463
Montgomery, Alabama 36130-1463
(334) 271-7700 • FAX (334) 271-7950

April 19, 2021

ELECTRONICALLY TRANSMITTED

Mr. Russell L. Stallings
Mobile Airport Authority
1891 Ninth Street
Mobile, Alabama 36616

Re: **ADEM Review:**
Solicitation of Input for Mobile Downtown Airport Terminal Expansion Environmental Assessment in Mobile, Alabama, dated March 23, 2021

Dear Mr. Stallings:

The Alabama Department of Environmental Management (ADEM or the Department) has reviewed the Solicitation of Input for Mobile Downtown Airport Terminal Expansion Environmental Assessment in Mobile, Alabama, dated March 23, 2021.

The document indicates that new construction as well as reconstruction and conversion activities are proposed in the Mobile Downtown Airport (BFM). Planned new construction includes a 6 gate commercial service passenger terminal with associated support facilities and infrastructure, a 35,000 square yard concrete aircraft parking apron, approximately 12 acres of paved vehicle parking lots, a 5-level parking garage, a new terminal access loop road and access road to the existing terminal. Reconstruction and conversion activities are also included in the proposed project.

With the proposed activities detailed in the report, please be aware of the presence of environmental remedial project sites located on and near airport property. The Former Brookley Air Force Base is a Formerly Used Defense Site (FUDS) and the Alabama Army National Guard's Mobile Organizational Maintenance Shop #28 are managed by the United States Army Corps of Engineers (USACE) that contain various environmental contaminants in soil and groundwater. Additionally, Continental Aerospace Technologies manages an environmental remediation site for cyanide contamination in soil and groundwater. Any construction activities moving forward should be coordinated with ADEM, Continental Aerospace Technologies, and the USACE prior to implementation to ensure they do not impact remedial actions taking place at the sites mentioned above.

If you have any questions on this matter, please contact Ms. Samantha Downing of the Remediation Engineering Section at (334) 270-5687 or at rsdowning@adem.alabama.gov.

Sincerely,

Jason Wilson, Chief
Governmental Hazardous Waste Branch
Land Division

JJW/ATM/RSD/md

cc: Ashley T. Mastin, ADEM
Brandi Little, ADEM
Colin Mitchell, ADEM
Dorothea Graddy, Continental Aerospace
Melissa Shirley, USACE

Pownall, Brian

From: Russell Stallings <Russell@mobairport.com>
Sent: Friday, April 30, 2021 11:18 AM
To: Gresham, Teresa; Halina Koontz
Subject: FW: Scoping Comments for Mobile Downtown Airport Terminal Expansion Environmental Assessment

Categories: External

Halina -
Teresa –

… for your use; see below from EPA. Let me know if anything is needed on my end?

Thank you,

RS

From: Gissentanna, Larry <Gissentanna.Larry@epa.gov>
Sent: Thursday, April 29, 2021 11:24 AM
To: Russell Stallings <Russell@mobairport.com>
Cc: Kajumba, Ntale <Kajumba.Ntale@epa.gov>
Subject: Scoping Comments for Mobile Downtown Airport Terminal Expansion Environmental Assessment

Dear Mr Russell L. Stallings,

The U. S. Environmental Protection Agency (EPA) has received and has reviewed the above referenced scoping document, in accordance with Section 309 of the Clean Air Act and Section 102(2)(C) of the National Environmental Policy Act. The EPA understands that the Mobile Airport Authority (MAA), is the lead agency in coordination with the Federal Aviation Administration (FAA). The proposed project will consist of project development, environmental, and engineering studies for the relocation of commercial passenger service from the Mobile Regional Airport (MOB) to the Mobile Downtown Airport (BFM) in order to better service the City of Mobile and growing regional passenger demand. The relocation of commercial service to BFM will require the construction of a commercial service passenger terminal and associated infrastructure at BFM. We further understand that all construction areas are within airport boundaries.

Based on EPA's review of the scoping documents provided, we offer the following comments. The proposed improvements appear reasonably consistent with the current land use of this facility. It also appears that this project will not have a significant impact on human health and the environment. Additional comments are listed below.

Stormwater Management: This proposed action would disturb a considerable amount of soil on the airfield and Robinson Bayou Creek is located on the west side of the airport and the bay located to the east. A permit from the State of Alabama Department of Environmental Management will be required before construction can begin. Construction may impact these surface water bodies and best management practices should be applied to protect these resources before and after construction.

Air Quality: This project site is within an attainment area for air quality standards, however localized impacts to air quality could occur during construction due to equipment exhaust emissions and fugitive dust. The EPA recommends implementing measures to reduce diesel emissions, such as switching to cleaner fuels, retrofitting current equipment with emission reduction technologies, repowering older engines with newer cleaner engines, replacing older vehicles,

and reducing idling through operator training and/or contracting policies. We also encourage controlling fugitive dust by watering or the application of other controlled materials.

Environmental Justice: Consistent with Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (https://www.epa.gov/laws-regulations/summary-executive-order-12898-federal-actions-address-environmental-justice) , please ensure vulnerable populations are not disproportionately or adversely impacted by the project. We also encourage compliance with Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency within 0.5 miles of the proposed construction site, if applicable. There are also additional tools available at the following link: https://www.epa.gov/nepa/nepassist.

Energy and Recycling: Efforts should be made to divert any recyclable materials such as concrete, steel and asphalt away from landfills and repurpose the material instead. The appropriate NEPA document should also address potential environmental impacts to construction /airport workers, to include the hazards of demolishing older hangers and buildings which may include lead and asbestos latent materials. Also, please consider sustainable building practices that utilize variable forms of proven renewable energy for the proposed project, for example, solar power for supplemental electricity and lighting for the ramps, aprons, and any aircraft maintenance hangers, parking lots or special buildings that may be proposed in the various projects. Please see the attached link for additional information: http://www.wbdg.org/references/federal_mandates.php.

Please keep the local community informed and involved throughout the project development process. Due to COVID-19, the EPA requests that future communication regarding NEPA documents be in an electronic format from a downloadable weblink or email: Ms. Ntale Kajumba, Chief NEPA Section, Kajumba.Ntale@epa.gov. We also request that you continue to mail at least one hard copy of the Draft and or Final NEPA documents to the address below.

Thank you for the opportunity to comment. If you have any questions, please contact us via email or the information below.

Sincerely,

Sincerely,

Larry O. Gissentanna

Project Manager, DoD & Federal Facilities

U.S. Environmental Protection Agency/ Region 4
Strategic Programs Office, NEPA Section
61 Forsyth Street, SW
Atlanta, GA 30303-8960
Office: 404-562-8248
gissentanna.larry@epa.gov

Pownall, Brian

From: Brian Rosegger - NOAA Affiliate <brian.rosegger@noaa.gov>
Sent: Wednesday, April 28, 2021 11:04 AM
To: Gresham, Teresa; Cornell, Steven; Halina@mobairport.com
Cc: Andy Strelcheck - NOAA Federal; Noah Silverman - NOAA Federal; Rusty Swafford - NOAA Federal; january murray - NOAA Federal
Subject: Fwd: Solicitation of Input for Mobile Downtown Airport Terminal Expansion

Categories: External

Good morning,

Please see the correspondence below regarding the Mobile Downtown Airport Terminal Expansion.

Brian Rosegger
Environmental Compliance Marine Habitat Resource Specialist
Contractor with ERT in support of
NOAA Fisheries Directorate Office | U.S. Department of Commerce
Office: (727) 551-5735
Mobile: (863) 397-2786
www.fisheries.noaa.gov

---------- Forwarded message ---------
From: **January.Murray@noaa.gov** <january.murray@noaa.gov>
Date: Tue, Apr 27, 2021 at 4:19 PM
Subject: Re: Solicitation of Input for Mobile Downtown Airport Terminal Expansion
To: Brian Rosegger - NOAA Affiliate <brian.rosegger@noaa.gov>
Cc: Rusty Swafford - NOAA Federal <rusty.swafford@noaa.gov>, Noah Silverman - NOAA Federal <noah.silverman@noaa.gov>

Hello Brian,

I have reviewed the solicitation of input for the Mobile Downtown Airport terminal expansion. Based on the limited information provided, I can not determine if the project will impact EFH. The location is industrial as it currently is an airport. I would need to see the footprint of where the proposed project improvements will be built to determine if wetlands will be impacted. The solicitation mentions the replacement and reconfiguration of airport drainage infrastructure, including realignment/enclosure of Rabby Creek. I am not familiar with Rabby Creek. We would need the Mobile Airport Authority to provide a map indicating the changes to drainage in the project area.

Thanks,
January

On Tue, Apr 27, 2021 at 2:31 PM Brian Rosegger - NOAA Affiliate <brian.rosegger@noaa.gov> wrote:

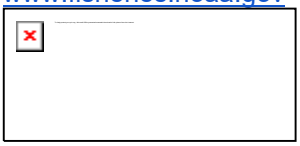
January and Rusty,

I'm forwarding you this letter from the Mobile Airport Authority requesting input on the Mobile Downtown Airport Terminal Expansion EA.

Of note:
• Replacement and reconfiguration of airport drainage infrastructure, including realignment/enclosure of Rabby Creek.

Rabby Creek empties to Dog River which empties to Mobile Bay.

Brian Rosegger
Environmental Compliance Marine Habitat Resource Specialist
Contractor with ERT in support of
NOAA Fisheries Directorate Office | U.S. Department of Commerce
Office: (727) 551-5735
Mobile: (863) 397-2786
www.fisheries.noaa.gov



---------- Forwarded message ---------
From: **Andy Strelcheck - NOAA Federal** <andy.strelcheck@noaa.gov>
Date: Tue, Apr 27, 2021 at 10:14 AM
Subject: Fwd: Solicitation of Input for Mobile Downtown Airport Terminal Expansion
To: Noah Silverman <noah.silverman@noaa.gov>, Brian Rosegger - NOAA Affiliate <brian.rosegger@noaa.gov>

I forwarded this several weeks back. Can you take a quick look and advise if we need to respond given it is not coming in from a federal action agency.

Andy

---------- Forwarded message ---------
From: **Gresham, Teresa** <Teresa.Gresham@kimley-horn.com>
Date: Tue, Apr 27, 2021 at 10:04 AM
Subject: RE: Solicitation of Input for Mobile Downtown Airport Terminal Expansion
To:
Cc: Cornell, Steven <Steven.Cornell@kimley-horn.com>, Halina Koontz <Halina@mobairport.com>

Good morning. Approximately 4 weeks ago, you received an email from Halina Koontz at the Mobile Airport Authority requesting input on the Downtown Airport's Terminal Expansion project. Our environmental document is nearing completion, and it is important for us to incorporate input from local, state, and federal agencies. We request your review and response to the attached letter, previously sent on March 24.

Thank you,

Teresa

Teresa Gresham, P.E. (NC, SC, UT)
Kimley-Horn | Direct: 919-677-2194 | Mobile: 919-274-5450

From: Halina Koontz <Halina@mobairport.com>
Sent: Wednesday, March 24, 2021 5:59 PM
Cc: Gresham, Teresa <Teresa.Gresham@kimley-horn.com>; Cornell, Steven <Steven.Cornell@kimley-horn.com>
Subject: Solicitation of Input for Mobile Downtown Airport Terminal Expansion

Good afternoon,

Attached please find a solicitation of input from your agency regarding the Mobile Downtown Terminal Expansion in Mobile, Alabama.

We look forward to your response and input regarding this project.

Thank you,

Halina Koontz

Construction Administrator/Assistant Project Manager

Mobile Airport Authority

1891 Ninth Street

Mobile, Alabama 36615

O 251.650.0280 | C 251.259.1583

--
Andrew Strelcheck
Acting Regional Administrator, Southeast Regional Office
NOAA Fisheries | U.S. Department of Commerce
Office: (727) 551-5702
www.fisheries.noaa.gov

--
January Murray
Fishery Biologist
Habitat Conservation Division
NOAA Fisheries | U.S. Department of Commerce
5757 Corporate Blvd, Suite 375
Baton Rouge, LA 70808
Office: (225) 380-0089
www.fisheries.noaa.gov

Pownall, Brian

From: Hendrix, Dylan C CIV USARMY CESAM (USA) <Dylan.C.Hendrix@usace.army.mil>
Sent: Thursday, April 29, 2021 10:45 AM
To: Gresham, Teresa
Cc: Halina Koontz; Cornell, Steven; Russell Stallings; Crosson, Steven B CIV USARMY CESAM (USA)
Subject: RE: MOB Relocation // USACE File SAM-2021-00400-DCH

Categories: External

Ms. Gresham,

Thank you for the response. We will follow-up with FAA to ensure both agencies have properly established our respective NEPA roles and responsibilities.

Respectfully,

Dylan C. Hendrix
Senior Project Manager, South Alabama Branch
Mobile District, Regulatory Division
U.S. Army Corps of Engineers
Phone: 251-694-3772
Email: dylan.c.hendrix@usace.army.mil

From: Gresham, Teresa <Teresa.Gresham@kimley-horn.com>
Sent: Tuesday, April 27, 2021 10:40 AM
To: Hendrix, Dylan C CIV USARMY CESAM (USA) <Dylan.C.Hendrix@usace.army.mil>
Cc: Halina Koontz <Halina@mobairport.com>; Cornell, Steven <Steven.Cornell@kimley-horn.com>; Russell Stallings <Russell@mobairport.com>; Crosson, Steven B CIV USARMY CESAM (USA) <Steven.B.Crosson@usace.army.mil>
Subject: [Non-DoD Source] FW: MOB Relocation // USACE File SAM-2021-00400-DCH

Dylan, the FAA's primary point of contact is Graham Coffelt, who is the FAA Airports Program Manager:

Graham Coffelt, P.E., MBA
Program Manager, Jackson ADO
100 West Cross St., Suite B
Jackson, MS 39208
graham.coffelt@faa.gov
601-664-9886

We will follow up with you soon regarding confirmation of our field delineations, which will start the permit coordination process.

Thanks,
Teresa

Teresa Gresham, P.E. (NC, SC, UT)
Kimley-Horn | Direct: 919-677-2194 | Mobile: 919-274-5450

From: Hendrix, Dylan C CIV USARMY CESAM (USA) <Dylan.C.Hendrix@usace.army.mil>
Sent: Tuesday, March 30, 2021 8:33 AM
To: Halina Koontz <Halina@mobairport.com>
Cc: Gresham, Teresa <Teresa.Gresham@kimley-horn.com>; Cornell, Steven <Steven.Cornell@kimley-horn.com>; russell@mobairport.com; Crosson, Steven B CIV USARMY CESAM (USA) <Steven.B.Crosson@usace.army.mil>
Subject: MOB Relocation // USACE File SAM-2021-00400-DCH

Ms. Koontz,

Good afternoon, and thank you for providing notification on behalf of Mobile Airport Authority (MAA) regarding the relocation of commercial passenger service from the Mobile Regional Airport to the Mobile Downtown Airport. The proposed work may require permit authorization from the Corps of Engineers under Section 404 of the Clean Water Act or Section 10 of the Rivers and Harbors Act, if the activities would involve the discharge of fill material into jurisdictional streams/wetlands and/or work in Navigable Waters of the United States. It is our expectation that the Federal Aviation Administration (FAA) would be the lead federal agency responsible for documenting compliance with NEPA and other applicable environmental laws. As part of the Corps' responsibility, we must evaluate the lead agency's supporting documentation to determine if the findings can be adopted as part of our permit decision. We may also need to assess project compliance with the Clean Water Act Section 404(b)(1) guidelines, which require a different approach in evaluating project alternatives than prescribed under NEPA. At your convenience, please provide contact information for the appropriate FAA staff who will be reviewing this request, so that our office can coordinate with MAA and FAA regarding the potential Corps permit(s) that will be required and any supplemental information that could be included in the EA to address Corps requirements and streamline the overall environmental review and permitting process.

Please feel free to contact me via telephone at (251) 509-5376 or by email at dylan.c.hendrix@usace.army.mil.

Very Respectfully,

Dylan C. Hendrix
Senior Project Manager, South Alabama Branch
Mobile District, Regulatory Division
U.S. Army Corps of Engineers
Phone: 251-694-3772
Email: dylan.c.hendrix@usace.army.mil

United States Department of the Interior

FISH AND WILDLIFE SERVICE
1208-B Main Street
Daphne, Alabama 36526

APR 22 2021

IN REPLY REFER TO:
2021-TA-0706

Mr. Russell L. Stallings
Mobile Airport Authority
1891 Ninth Street
Mobile, Alabama 36615

Dear Mr. Stallings:

Thank you for your letter, dated March 23, 2021, requesting comments on potential impacts to listed species and general recommendations to protect species and habitat for your proposed Mobile Downtown Airport Terminal Expansion project, in the City of Mobile, Mobile County, Alabama. We understand that the project consists of constructing a new 6-gate terminal with associated support facilities and infrastructure, a concrete aircraft parking apron, vehicle parking lots, parking garage, and a new terminal access loop road and access road. We have reviewed the information and are providing the following comments in accordance with the Migratory Bird Treaty Act (16 U.S.C. 703, *et seq.*), the Bald and Golden Eagle Protection Act of 1940, as amended (16 U.S.C. 668-668d), and Section 7 of the Endangered Species Act (Act), as amended (16 U.S.C. 1531-1543).

Endangered and Threatened Species

The following species may occur in this area of Mobile County:

- Wood stork (*Mycteria americana*) – Threatened
- West Indian Manatee (*Trichechus manatus*) – Threatened
- Eastern Indigo snake (*Drymarchon couperi*) – Threatened
- Black Pine snake (*Pituophis melanoleucus lodingi*) – Threatened
- Alabama red-bellied turtle (*Pseudemys alabamensis*) – Endangered

Site Specific Concerns

The Alabama red-bellied turtle is endangered due to habitat degradation in the form of water pollution and siltation from mining, forestry, agriculture, and industrial and municipal sewage effluents. This species is a large (carapace length reaching 13 inches) herbivorous, freshwater turtle. It inhabits streams, lakes, and sloughs associated with the lower part of the Mobile River

PHONE: 251-441-5181 FAX: 251-441-6222

System and adjacent coastal freshwater systems. Extensive beds of aquatic vegetation are considered to be the principal habitat of the species. Destruction of nesting habitat, sand banks and beaches, is the primary cause for the decline in species numbers. Other threats are from disturbances from human activities, loss of aquatic vegetation, and collection for food and pets. Between April and August female turtles leave the water to lay eggs. Nesting sites are frequently concentrated along banks, levees, or spoil banks. We recommend incorporating best management practices (BMPs) into plans for proposed projects that occur adjacent to waterways.

Regarding the eastern indigo snake and black pine snake, we would recommend a no snake killing policy in the project area to avoid impacts to the species.

Migratory Bird Treaty Act and The Bald and Golden Eagle Protection Act

Coastal areas are important migration points for migratory birds and utilized year-round by eagles. Birds to be considered when assessing potential effects of airports include all protected Migratory Bird Treaty Act (MBTA) species (50 CFR 10.13). These include individuals that are resident, breeding, overwintering, migrating, staging, roosting, feeding, resting, and otherwise transiting through potential project areas. Particularly, close attention should be paid to avian species listed in the Birds of Conservation Concern (BCC), a set of lists generated by the U.S Fish and Wildlife Service identifying migratory birds of high conservation priorities at a variety of spatial scales. The most recent BCC lists were revised in 2008 and can be accessed on-line at: https://www.fws.gov/migratorybirds/pdf/grants/BirdsofConservationConcern2008.pdf

Any bald or golden eagle found within the area is protected under The Bald and Golden Eagle Protection Act (BGEPA). The bald eagle is more common in Alabama. The National Bald Eagle Management Guidelines (Guidelines), 2007, found at:
http://www.fws.gov/northeast/ecologicalservices/eagle.html
provide recommendations to avoid adversely affecting bald eagles and their nests, especially during nesting season. Potential bald eagle nesting habitat includes large trees, often near river systems, reservoirs, lakes, bays and other fish-bearing bodies of water. Bald eagles are vulnerable to disturbance early in the nesting season, i.e., during courtship, nest building, egg laying, incubation, and brooding (roughly the first 12 weeks of the nesting cycle). Disturbance during this critical period may lead to nest abandonment and/or chilled or overheated eggs or young. Human activity near the nest later in the nesting cycle may cause the eaglet(s) to fledge prematurely, thereby reducing the likelihood of fledgling survival.

As long as best manage practices are implemented, no further endangered species consultation will be required for this portion of the project unless: 1) the identified action is subsequently modified in a manner that causes an effect on listed species or designated critical habitat; 2) new information reveals the identified action may affect Federally protected species or designated critical habitat in a manner or to an extent not previously considered; or 3) a new species is listed or critical habitat is designated under the Endangered Species Act that may be affected by the identified action. For information on best management practices specific to your project please go to http://www.fws.gov/daphne/section7/bmp.html.

We appreciate your efforts to further the conservation of federally listed species and look forward to working with you in the future. For further discussion, please contact Ms. Erin Lentz of my staff at erin_lentz@fws.gov. Please refer to the reference number located at the top of this letter in future phone calls or written correspondence.

Sincerely,

William J. Pearson
Field Supervisor
Alabama Ecological Services Field Office

Appendix E:
Public Outreach Material

PLACEHOLDER

TO BE ADDED AFTER PUBLIC MEETING