# FINAL

# ENVIRONMENTAL ASSESSMENT OF MISSISSIPPI CYBER AND TECHNOLOGY CENTER ENHANCED USE LEASE (UNIQUE IDENTIFICATION NUMBER 00152)

# KEESLER AIR FORCE BASE BILOXI, MISSISSIPPI



PREPARED FOR: Department of the Air Force

ON BEHALF OF:

# Mississippi State University Research and Technology Corporation

September 2024

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#### Environmental Assessment of Mississippi Cyber and Technology Center Enhanced Use Lease (Unique Identification Number 00152)

# Keesler Air Force Base Biloxi, Mississippi

**Responsible Agencies:** Air Education and Training Command, 81st Training Wing, Keesler Air Force Base (AFB), Mississippi

Affected Location: Keesler AFB, Harrison County, Mississippi

**Proposed Action:** Execution of an Enhanced Use Lease and Subsequent Development of the Mississippi Cyber and Technology Center

Report Designation: Environmental Assessment

**Responsible Agency:** Department of the Air Force

**Keesler AFB Point of Contact:** 2nd Lt Agata A Jastrzebska, 81 TRW/PA, 709 H Street, Bldg. 902, Keesler AFB, MS 39534; 81trw.pamain@us.af.mil

**Abstract:** This environmental assessment (EA) considers potential environmental effects of implementing the Proposed Action on the human environment, including the natural environment. It documents the analysis of effects associated with the Department of the Air Force (DAF) entering an enhanced use lease with Mississippi State University Research and Technology Corporation (MSU RTC) for an approximately 15-acre parcel on Keesler Air Force Base in Biloxi, MS, and MSU RTC building and operating the new Mississippi Cyber and Technology Center (MCTC) on the leased parcel. The EA analyzes two action alternatives to the Proposed Action and the No Action Alternative. The EA analysis finds that implementing the Proposed Action would have no significant impacts under either of the action alternatives. The No Action Alternative also would have no significant impacts.

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# ABBREVIATIONS AND ACRONYMS

°F	degrees Fahrenheit
81 TRW	81st Training Wing
AADT	average annual daily traffic
ACAM	Air Conformity Applicability Model
ACM	asbestos-containing materials
ACTC	Air Traffic Control Tower
AFB	Air Force base
AFI	Air Force instruction
AFMAN	Air Force manual
ANO	airport noise overlay
APE	area of potential effects
AQCR	air quality control region
BASH	bird/wildlife aircraft strike hazard
BGEPA	Bald and Golden Eagle Protection Act
BMP	best management practice
CAA	Clean Air Act
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CGP	Construction General Permit
СО	carbon monoxide
CO <sub>2</sub> e	carbon dioxide equivalent
COC	community of comparison
CSU	Colorado State University
CWA	Clean Water Act
CZMA	Coastal Zone Management Act
DAF	Department of the Air Force
dB	decibels
dBA	A-weighted decibels
dbh	diameter at breast height
DNL	day-night sound level
DoD	Department of Defense
EA	environmental assessment
EBS	environmental baseline survey
EIAP	Environmental Impact Analysis Process
EIS	environmental impact statement
EISA	Energy Independence and Security Act

EJScreen	Environmental Justice Screening and Mapping Tool
EO	executive order
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
EUL	enhanced use lease
FEMA	Federal Emergency Management Agency
FONSI	finding of no significant impact
ft	foot, feet
GHG	greenhouse gas
GPR	ground penetrating radar
HASP	Health and Safety Plan
HUC	hydrologic unit code
HWMP	Hazardous Waste Management Plan
I-	Interstate
IICEP	Interagency and Intergovernmental Coordination for Environmental Planning
IMPLAN	Impact Analysis for Planning
INRMP	integrated natural resources management plan
IPAC	U.S. Fish and Wildlife Service Information for Planning and Consultation
LBP	lead-based paint
L <sub>eq</sub>	equivalent sound level
LID	low impact development
LOS	level of service
µg/m³	micrograms per cubic meter
MCI	Mississippi Cyber Initiative
MCL	maximum contaminant level
MCP	Mississippi Coastal Program
MCTC	Mississippi Cyber and Technology Center
MDAH	Mississippi Department of Archives and History
MDEQ	Mississippi Department of Environmental Quality
mgd	million gallons per day
MNHP	Mississippi Natural Heritage Program
MOU	Memorandum of Understanding
MS	Mississippi
MS4	municipal separate storm sewer system
MSA	metropolitan statistical area
MSU	Mississippi State University
MSU CIA	Mississippi State University Cobb Institute of Archaeology

MSU RTC	Mississippi State University Research and Technology Corporation
mtpy	metric tons per year
MW	megawatts
N/A	not applicable
NAAQS	National Ambient Air Quality Standards
NAGPRA	Native American Graves Protection and Repatriation
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NO <sub>2</sub>	nitrogen dioxide
NOA	notice of availability
NO <sub>x</sub>	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
NSR	New Source Review
O <sub>3</sub>	ozone
OSHA	Occupational Safety and Health Administration
Pb	lead
PCB	polychlorinated biphenyl
PCPI	per capita personal income
PGA	peak ground acceleration
PM <sub>2.5</sub>	particulate matter less than or equal to 2.5 microns in diameter
PM <sub>10</sub>	particulate matter less than or equal to 10 microns in diameter
POL	petroleum, oils, and lubricants
ppb	parts per billion
PPE	personal protective equipment
ppm	parts per million
ROI	region of influence
SCC	social cost of carbon
SDS	Safety Data Sheet
SF	square foot, square feet
SHPO	State Historic Preservation Officer
SO <sub>2</sub>	sulfur dioxide
SOPs	standard operating procedures
SWMP	Stormwater Management Plan
SWPPP	Stormwater Pollution Prevention Plan
TCP	Traditional Cultural Property
TPI	total personal income

U.S. United States (adjective only)
UIN Unique Identification Number
U.S.C. United States Code
UFC Unified Facilities Criteria
USACE U.S. Army Corps of Engineers
USFWS U.S. Fish and Wildlife Service
USGS U.S. Geological Survey
VOC volatile organic compound
VSI visual site inspection
WOTUS waters of the United States

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# 1.0 PURPOSE OF AND NEED FOR ACTION

#### 1.1 Introduction

Pursuant to the National Environmental Policy Act of 1969, as amended (NEPA) (Title 42 of the *United States Code* [U.S.C.] §§ 4321–4347), Council on Environmental Quality (CEQ) NEPA implementing regulations (Title 40 of the Code of Federal Regulations [CFR] parts 1500–1508) and guidance, and the Environmental Impact Analysis Process (EIAP) regulations (32 CFR Part 989), the Department of the Air Force (DAF) has prepared this environmental assessment (EA) to evaluate potential environmental effects associated with entering into an enhanced use lease (EUL) with Mississippi State University Research and Technology Corporation (MSU RTC). The CEQ Final Rule dated May 1, 2024, *National Environmental Policy Act Implementing Regulations Revisions Phase 2*, revises CEQ's regulations for implementing the procedural provisions of NEPA, including the amendments to NEPA in the Fiscal Responsibility Act of 2023. Phase 2 of the CEQ regulations update went into effect on July 1, 2024. Phase 2 revisions require each EA to include a unique identification number (UIN) that can be used for tracking purposes, which the agency would then carry forward to all other documents related to the environmental review of the action. The UIN for this EA is 00152.

The EUL would be for an approximately 15-acre parcel on Keesler Air Force Base (AFB) in Biloxi, MS, and MSU RTC would build and operate a 100,000-square foot (-SF), 3-story building on the leased parcel. The new building under Phase 1 of the Mississippi Cyber and Technology Center (MCTC), which is central to the Mississippi Cyber Initiative (MCI), would be a cuttingedge facility providing capabilities, services, and training space. The MCTC would serve as a hub for promoting and integrating cyber and technology talent. Additionally, it would offer event space for cyber experts to collaborate on addressing cybersecurity challenges across federal, state, private, and industry sectors. MCTC Phase 2 would provide future expansion opportunities to potentially build two additional buildings on the 15-acre parcel. The DAF will ensure the appropriate level of NEPA evaluation of MCTC Phase 2 when it becomes ripe for analysis. Throughout the remainder of this EA, any reference to the MCTC facility pertains to MCTC Phase 1.

As specified in 10 U.S.C. § 2667, *Leases: Non-Excess Property of Military Departments and Defense Agencies*, the Secretary of Defense and Secretary of the Air Force have outlease authority to lease DAF-owned, non-excess real property. Non-excess property, to some degree, meets a Department of Defense (DoD) need and would not be removed from DoD's inventory. Other requirements for DAF outlease are the property not being needed for public use and being under the control of the Secretary of the Air Force.

Per 10 U.S.C. § 2667, DoD exercises non-excess real property outlease authority through EULs, which have longer than typical lease periods, must support activities compatible with adjacent DAF uses, and may include development terms beneficial to the military installation. DoD's outlease authority also permits in-kind consideration in addition to, or in lieu of, cash payments, if generally equivalent to fair market value of the lease interest. The DoD uses EULs for underutilized real property, to be able to repair and maintain existing facilities, and to construct new facilities that promote the national defense or are in the public interest.

### 1.2 Background

#### 1.2.1 Keesler AFB

Keesler AFB is home to the 81st Training Wing (81 TRW) of the Air Education and Training Command, the base's host wing, which comprises the 81st Training Group, 81st Medical Group, and 81st Mission Support Group. Also home to the Second Air Force, it is a lead Joint Training Installation for the DAF and DoD, providing combat-ready Airmen and Guardians for Air and Space Force Expeditionary Forces. The base is a lead Joint Training Installation, instructing DAF, Army, Navy, Marine Corps, Coast Guard, National Guard, and civilian federal agency personnel. The base also hosts the 403rd Wing (Air Force Reserve Command), the 85th Engineering Installation Squadron, the Mathies Noncommissioned Officer Academy, and a Marine Corps detachment.

Keesler AFB was established in 1941 as an Army Air Corps Station Aviation Mechanics School with over 1,500 acres of land donated by Biloxi, MS, officials to the U.S. Army Corps of Engineers (USACE) and officially redesignated as an AFB in 1948 (Keesler AFB 2021a). The development of installation property has been continual since Keesler AFB's establishment. That ongoing process provides the base with facilities and infrastructure meeting DAF goals for mission capability, sustainability, readiness, and modernization.

Keesler AFB is located on the Mississippi Gulf Coast, within the City of Biloxi in Harrison County, MS (Figure 1-1). The base occupies 1,719 acres on a narrow peninsula bordered by the Biloxi Back Bay on the north and the Gulf of Mexico on the south. The main base consists of 1,447 acres and is densely developed. U.S. Highway (U.S.) 90 parallels the southern border of the base and provides access to Interstate (I-) 10 via U.S. 49 and I-110. Keesler AFB is a significant economic engine for the surrounding regional area and is one of the largest employers in the City of Biloxi and Harrison County (GRPC 2017).

Keesler AFB's primary mission as the DAF's Electronics Training Center of Excellence is to provide technical training. The 81 TRW provides training in over 160 career field specialties (Keesler AFB 2024a), including weather; basic electronics; communications-electronic systems; communications-computer systems; air traffic control; airfield management; command post; air weapons control; precision measurement; information management; manpower and personnel; and radar, ground radio, and cyber systems technical coursework (Keesler AFB 2015a). Specific to cyber training, the 81 TRW trains DoD's cyber forces and is a leader in cyber development and training, graduating approximately 6,000 cyber professionals each year (Keesler AFB 2023a). Overall, Keesler AFB trains more than 30,000 students annually with a daily average of 3,000-plus students (Keesler AFB 2024a).

#### 1.2.2 Proposed EUL

Executive Order (EO) 13327, Federal Real Property Asset Management, directs efficient and economical use of real property assets. Additionally, the 2007 DAF memorandum Pursuing "Value-Based" Transactions Involving Air Force Real Property Assets directs the DAF to optimize the value of real property assets using authorized tools, such as the EUL program. Keesler AFB does not anticipate requiring the use of the non-excess property for the duration of the EUL but will retain it in DAF ownership for mission reasons. In July 2022, in accordance with Secretary of the Air Force policy, the DAF, via the Air Force Civil Engineer Center, Installations Directorate, made a courtesy Congressional Notification for the proposed EUL (Martin 2024). Communicating through the courtesy Congressional Notification with key leaders in Congress provides transparency on the proposed EUL transaction.



Figure 1-1. Keesler AFB Location Map.

# 1.2.3 Mississippi Cyber Initiative

Keesler AFB and Mississippi State University (MSU) are implementing partners in the MCI, a statewide effort established in 2021 to support cybersecurity training needs in the state and the nation (Keesler AFB 2023a; MSU MCI 2022). As an implementing partner in the MCI and a leader in DoD cyber training, Keesler AFB anchors the initiative and creates a unique opportunity for the state to enhance collaborations with federal partners across the state, region, and nation (MSU MCI 2022).

# 1.3 Purpose and Need

The purpose of the Proposed Action is for the DAF to:

- 1. Make the best use of an approximately 15-acre, underutilized non-excess real property asset on the installation (see Figure 1-2);
- Provide statewide leadership in addressing cybersecurity and workforce needs for Mississippi into the future;
- 3. Attract innovative cyber and advanced technology industries;
- 4. Provide cybersecurity training for Keesler AFB and the Mississippi Army National Guard; and
- 5. Support its strategic goal of optimizing the value of its existing real property assets.

The proposed EUL is needed to support the DAF's strategic goals of optimizing DAF nonexcess assets. The MCTC is needed to support Keesler AFB's training mission and other government needs as well as to provide training and workforce development services. By bringing together expertise from academia, government, law enforcement, defense, the National Guard, and the private sector, the MCTC will accelerate advanced education, research, and innovation.



Figure 1-2. EUL Parcel at Keesler AFB.

# 1.4 Decision to be Made

The DAF must decide whether the effects of implementing the Proposed Action would support a finding of no significant impact (FONSI) or would require publishing in the *Federal Register* a notice of intent to prepare an environmental impact statement (EIS). The DAF will publish a notice of intent if the potential adverse effects associated with implementing the Proposed Action would remain significant even after all reasonable mitigation measures have been implemented.

### **1.5** Agencies and Intergovernmental Coordination / Consultation

#### 1.5.1 Cooperating Agencies

As specified in CFR §1501.8, a "cooperating agency" can be any federal, state, tribal, or local agency with jurisdiction by law or special expertise with respect to any environmental impact resulting from a major federal action that may significantly affect the quality of the human environment, including the natural environment. A cooperating agency supports and participates in the NEPA process.

At this time, the DAF anticipates no cooperating agency involvement with the Proposed Action because it would affect only DAF property or resources; it would take place on previously disturbed lands; and the DAF is committed to coordinating with and consulting other agencies and implementing appropriate mitigation.

#### **1.5.2** Interagency and Intergovernmental Coordination and Consultations

Consistent with NEPA implementing regulations, the DAF will notify concerned federal, state, tribal, and local agencies and allow them sufficient time to evaluate potential environmental effects of the Proposed Action.

On May 3, 2024, the DAF distributed Interagency and Intergovernmental Coordination for Environmental Planning (IICEP) letters to the agencies, including the Mississippi Department of Archives and History (MDAH), Mississippi State Historic Preservation Officer (SHPO), and U.S. Fish and Wildlife Service (USFWS), other interested agencies and organizations, and stakeholders. A complete list of the agencies is included in Appendix A.

Also on May 3, 2024, the DAF distributed government-to-government consultation letters signed by the deputy base civil engineer and tribal liaison officer to four federally recognized Native American Tribes known to have a historical connection to the land on the base. They are the Choctaw Nation of Oklahoma, Jena Band of Choctaw Indians, Mississippi Band of Choctaw Indians, and Tunica-Biloxi Tribe of Louisiana.

Consistent with National Historic Preservation Act of 1966, as amended (NHPA) (54 U.S.C. § 300101 *et seq.*) and NHPA implementing regulations (36 CFR Part 800); DoD Instruction 4710.02, *DoD Interactions with Federally Recognized Tribes*; DAF Instruction 90-2002, *Interactions with Federally Recognized Tribes*; and Air Force Manual (AFMAN) 32-7003, *Environmental Conservation*, federally recognized Tribes that are historically affiliated with the geographic region or might have potentially affected tribal properties of cultural, historical, or religious significance have been invited to consult on the Proposed Action.

The DAF received responses from the MDAH; Mississippi Department of Environmental Quality (MDEQ); Mississippi Department of Wildlife, Fisheries, and Parks; and Mississippi Natural Heritage Program (MNHP); USACE; and USFWS. USFWS responded the proposed EUL site falls within the range of the tricolored bat and that the USFWS anticipates publishing the Final

Rule for the species in the summer of 2024. MDAH responded that there would be no adverse effects on archaeological resources, provided Phase I cultural resource survey results are negative. In April 2024, the Mississippi State University Cobb Institute of Archaeology (MSU CIA), under an MSU RTC contract, conducted a Phase I cultural resources survey in the area of potential effects (APE). In June 2024, on behalf of MSU RTC and the DAF, MSU CIA submitted the Phase I cultural resources survey draft report to MDAH for concurrence and comment. In June 2024, based on the report, the DAF provided MDAH and the Tribes its proposed determination of no historic properties affected by the Proposed Action and alternatives for concurrence and comment. In July and August 2024, MDAH provided comments on the report and MSU CIA revised and submitted the report for MDAH's review. On September 5, 2024, the Choctaw Nation of Oklahoma concurred with the DAF assessment that no historic properties would be affected by the proposed undertaking and requested that work be stopped and their office contacted immediately if Native American artifacts or human remains are encountered. In a September 11, 2024, letter to MSU CIA, MDAH concurred with the survey report that no resources eligible for listing in the National Register of Historic Places (NRHP) were identified within the project area or are likely to be affected by the project and stated it had no objection to the proposed undertaking. Appendix A provides all correspondence and responses.

#### **1.6 Public and Agency EA Review**

On August 1 and 2, 2024, the DAF distributed a notice of availability (NOA) of the Draft EA and Draft FONSI to the agencies and to the four federally recognized Native American Tribes.

On August 3 and 5, 2024, the DAF published the NOA in the *Biloxi Sun-Herald*. The August 3, 2024, NOA publication initiated the 30-day public review period of the Draft EA and Draft FONSI. During the 30-day public review period, which ended on September 2, 2024, the documents were available for review and comment at https://www.keesler.af.mil/about-us/resources/environmental-information/. Copies of the Draft EA and Draft FONSI also were available for review and comment at the Biloxi Library at 580 Howard Avenue, Biloxi, MS 39530.

The DAF received three responses from agencies and a response from the Choctaw Nation of Oklahoma. The DAF did not receive any responses or comments from the public. None of the responses received raised concerns about the Proposed Action and alternatives, the EA, or the FONSI. The NOA and responses received are provided in Appendix B, and following is a summary of the responses received:

- The Choctaw Nation of Oklahoma provided no further comments on the project and concurred with the DAF assessment that the proposed undertaking does not have the potential to affect historic properties and requested that work be stopped and their office contacted immediately if Native American artifacts or human remains are encountered.
- The USFWS concurred with the DAF's determination that, with the implementation of the best management practice (BMP) of any tree removal for the project occurring between July 16 and April 30, outside the May 1–July 15 tricolored bat (*Perimyotis subflavus*) pup season, the Proposed Action may affect, but is not likely to adversely affect, the bat.
- The Southern Mississippi Planning and Development District responded that they did not have any comments.
- The USACE responded that the Proposed Action would not require a Department of the Army permit pursuant to Section 404 of the CWA or Section 10 of the Rivers and Harbors Act of 1899.

As discussed in Section 1.5.2, MDAH concurred with the Phase I cultural resources survey report that no resources eligible for listing in the NRHP were identified within the project area or are likely to be affected by the project and stated it had no objection to the proposed undertaking.

Final

### **1.7** Applicable Laws and Environmental Requirements

#### 1.7.1 National Environmental Policy Act

Under NEPA, a federal agency must prepare an EA to analyze potential effects on the human environment, including the natural environment, of the proposed action, other reasonable alternatives, and the No Action Alternative. A FONSI synopsizing why a proposed action does not have a significant effect on the human or natural environment is prepared if EA analyses indicate it is appropriate. An EIS would be prepared or the proposed action would be abandoned if significant, unmitigable environmental issues are identified.

#### 1.7.2 Integration of Other Environmental Statutes, Regulations, and Requirements

The DAF must decide whether to proceed with the Proposed Action based on factors such as mission requirements, schedule, resource availability, private interests, and environmental considerations. In addressing environmental considerations, the DAF is guided by several applicable statutes, statute-implementing regulations, EOs, and directives, which establish standards and provide direction on environmental and natural resources management and planning. They include the following:

- Air Force Policy Directive 32-70, Environmental Considerations in Air Force Programs and Activities
- American Indian Religious Freedom Act of 1978 (42 U.S.C. § 1996)
- Archaeological Resources Protection Act of 1979, as amended (16 U.S.C. § 470aa et seq.)
- Bald and Golden Eagle Protection Act (BGEPA) (16 U.S.C. § 668 et seq.)
- Clean Air Act (CAA) of 1963, as amended (42 U.S.C. § 7401 et seq.)
- Clean Water Act (CWA) (33 U.S.C. § 1251 et seq.)
- Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended (42 U.S.C. § 9601 *et seq.*)
- Emergency Planning and Community Right-to-Know Act (42 U.S.C. §§ 11001–11050)
- ESA
- Intergovernmental Cooperation Act (31 U.S.C. §§ 6501–6508)
- Leases: non-excess property of military departments and Defense Agencies (10 U.S.C. § 2667)
- Migratory Bird Treaty Act 1918 (16 U.S.C. §§ 703–712)
- NHPA
- National Pollutant Discharge Elimination System (NPDES) (40 CFR Part 122)
- Native American Graves Protection and Repatriation Act of 1990 (NAGPRA) (25 U.S.C. § 3001 et seq.)
- Noise Control Act of 1972 (42 U.S.C. § 4901 et seq.)
- Resource Conservation and Recovery Act of 1976 (42 U.S.C. § 6901 et seq.)
- Safe Drinking Water Act of 1974 (42 U.S.C. § 300f et seq.)
- Sikes Act of 1960, as amended (16 U.S.C. §§ 670a- 670o)
- Toxic Substances Control Act (15 U.S.C. Chapter 53)
- EO 11988, Floodplain Management

- EO 11990, Protection of Wetlands
- EO 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations
- EO 13045, Protection of Children from Environmental Health Risks and Safety Risks
- EO 13175, Consultation and Coordination with Indian Tribal Governments
- EO 13186, Responsibilities of Federal Agencies to Protect Migratory Birds
- EO 13751, Safeguarding the Nation from the Impacts of Invasive Species
- EO 13985, Advancing Racial Equity and Support for Undersized Communities through the Federal Government
- EO 13990, Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis
- EO 14008, Tackling the Climate Crisis at Home and Abroad
- EO 14030, Climate-Related Financial Risk
- EO 14057, Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability
- EO 14091, Further Advancing Racial Equity and Support for Undersized Communities Through the Federal Government
- EO 14096, Revitalizing Our Nation's Commitment to Environmental Justice for All

To further understanding of the content of this EA, key provisions of these statutes and other requirements are discussed in more detail in the text as appropriate.

# 2.0 DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES

This section of the EA describes the Proposed Action, site selection requirements, action alternatives, and the No Action Alternative.

# 2.1 Proposed Action

The DAF would enter into a 50-year EUL with the MSU RTC to lease a 15-acre parcel on which to build and operate the MCTC (MSU RTC and SAF 2023).

The MCTC would be a 100,000-SF, 3-story building of approximately 33,333 SF per floor (Figure 2-1). The facility would house event space, classrooms, administration facilities, parking for 271 vehicles, and associated infrastructure. It would occupy approximately 5 acres of the EUL site. Of those 5 acres, 1.2 acres would be green space after construction, resulting in approximately 3.8 acres of impervious surface.

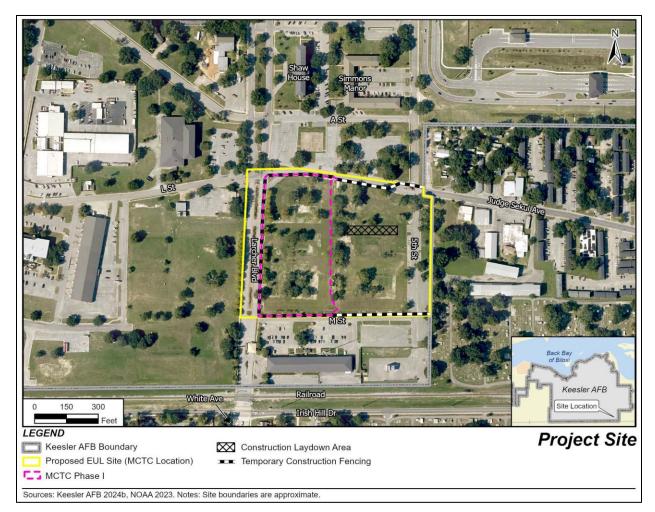


Figure 2-1. Proposed EUL Site.

The MCTC facility would be connected to the City of Biloxi's utility services, except for stormwater drainage, for which it would be connected to the Keesler AFB drainage system. Tieins to existing city utility lines are readily available for water, electricity, natural gas, sewer, and telecommunications. Existing Keesler AFB utilities lines in the vicinity of the parcel would be abandoned and capped in place.

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Approximately one-quarter acre of temporary construction laydown and parking area would be located east of the MCTC within the 15-acre parcel. Prior to initiating construction activities, MSU RTC would place approximately 2,100 feet (ft) of temporary fencing to enclose the EUL site (Figure 2-1). The temporary fencing would run along the east side of Larcher Boulevard on the west, M Street on the south, and the southside of L Street on the north and tie into the existing base fence east of 5th Street. Access from Judge Sekul Avenue would be only to the closed-off EUL site. Approval of Keesler AFB Security is required for the temporary fence construction traffic would be routed via Judge Sekul Avenue.

The MCTC building would have a maximum occupancy of approximately 1,200 including administrative personnel, instructors, and students between offices, classrooms, and event space (Polen 2024, personal communication). Keesler AFB personnel and students would be able to walk to and from the MCTC. The site and lobby of the MCTC would be open to public access, with secured access to certain areas of the building. MSU RTC would employ approximately 10 full-time permanent MCTC staff (McGee 2024, personal communication). The MSU Cyber Range would have approximately 300 students per year for Cyber Range training and an additional 300 participants per year for at least two multiday symposia (McGee 2024, personal communication). Approximately 33 percent of these students would travel from outside the four coastal counties of Mississippi.

The MSU RTC anticipates MCTC construction to be initiated in early 2025 and inauguration of the building in early 2026.

# 2.2 Site Selection Requirements

As specified in AFI 32-9003, *Granting Temporary Use of Air Force Real Property, any proposed outlease of DAF-owned properties must meet the following conditions to be advanced for proposal for leasing under the DAF EUL program:* 

- The property is not excess to DAF needs.
- The DAF is not currently using the property.
- The proposed use will not interfere with the mission.
- The proposed use is not at the expense of the DAF, unless otherwise exempt.
- The proposed use is compatible with DAF security and safety requirements.

To identify candidate sites for the EUL and the MCTC, the DAF evaluated available sites on Keesler AFB against DAF and MCTC requirements, as presented in Table 2-1.

Requirement	Definition			
Developable Parcel				
Non-Excess Property	Another need for the parcel is not anticipated for the duration of the lease, but property will remain in DAF ownership.			
Currently Available and Suitable for Development	The parcel is development ready with infrastructure support and can be leased at this time.			
Sufficient Operations Size	The parcel is large enough to accommodate executing and implementing the Proposed Action.			
Sufficient Construction Size	The parcel is large enough to support construction activities associated with the Proposed Action.			
Sufficient Future Expansion Size	The parcel has sufficient capacity to accommodate future expansion.			
No DAF Plans for Future Development	The parcel is not scheduled for another use or slated for development in the Keesler AFB Installation Development Plan.			
Land Use				
Compatible with Adjacent and Nearby Property	Executing and implementing the Proposed Action would not conflict with or create conditions that unreasonably would impose upon nearly land use and activities.			
No Impacts on Existing or Planned DAF Mission	The Proposed Action does not interfere with DAF missions, activities, or development.			
Benefits Existing or Planned DAF Mission	The Proposed Action enhances DAF missions, activities, or development.			
No Airfield Impacts (Clear Zone and Transverse Slope)–Facility Height Restriction	The parcel is not located in the Airfield District planning designation and does not interfere with airfield activities or encroach on runway protection zones.			
Base Access				
Near Base Perimeter	The parcel is adjacent to the base perimeter.			
Access by Civilian Personnel without Going through Security Gate	The parcel would allow practical relocation of a secure perimeter for access by civilian personnel without going through a security gate.			
Direct Access via Existing Street Network	The parcel is located on-base where it can be accessed directly via an existing street network to a perimeter gate.			
Avoids Commercial Vehicle Access Gate	The parcel is outside the commercial vehicle access gate blast zone.			
No Development Constraints				
Elevation at or above Katrina Storm Surge <sup>a</sup> Line	The parcel is located at or above the Katrina Storm Surge line.			
Fill Not Required	The parcel does not require fill to achieve an appropriate first-floor elevation for flood. If fill is required, fill placement would not result in increased flows onto or have other impacts on adjacent or nearby property.			
No Other Known Environmental Constraints	The parcel avoids environmental constraints such as wetlands, critical habitat of protected species, cultural resources, explosives safety arcs, and Installation Restoration Program sites.			

#### **Table 2-1. Site Selection Requirements**

*Note*: <sup>a</sup> The storm surge produced by Hurricane Katrina in 2005.

The DAF identified and evaluated the following five candidate sites on Keesler AFB, which are shown in Figure 2-2:

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• Site 1, Oak Park Location

of MCTC Enhanced Use Lease (UIN 00152)

• Site 2, C Street Location

Environmental Assessment

- Site 3, Harrison Court Location
- Site 4, Heritage Park Area
- Site 5, Permanent Party Dorm Location (Preferred Site)

The DAF applied the site selection requirements to the five sites, as shown in Table 2-2, and identified Site 5 as the preferred site for implementing the Proposed Action because Site 5 meets all site selection requirements (81 TRW 2020).



Source: 81 TRW 2020.



Requirement	Site 1: Oak Park Location	Site 2: C Street Location	Site 3: Harrison Court Location	Site 4: Heritage Park Area	Site 5: Permanent Party Dorm Location
Developable Parcel					
Non-Excess Property	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	✓
Currently Available and Suitable for Development	$\checkmark$	$\checkmark$	~	$\checkmark$	✓

Table 2-2.	Application	of Site	Selection	Requirements
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#### Environmental Assessment of MCTC Enhanced Use Lease (UIN 00152)

Requirement	Site 1: Oak Park Location	Site 2: C Street Location	Site 3: Harrison Court Location	Site 4: Heritage Park Area	Site 5: Permanent Party Dorm Location
Sufficient Operations Size	$\checkmark$	~	$\checkmark$	$\checkmark$	$\checkmark$
Sufficient Construction Size		~	✓	✓	~
Sufficient Future Expansion Size	~		✓		~
No DAF Plans for Future Development					✓
Land Use	1	1			L
Compatible with Adjacent and Nearby Property		~			✓
No Impacts on Existing or Planned DAF Mission					✓
Benefits to Existing or Planned DAF Mission				~	✓
No Airfield Impacts (Clear Zone and Transverse Slope)–Facility Height Restriction		~	✓	×	×
Base Access	l	l			
Near Base Perimeter	$\checkmark$	$\checkmark$	$\checkmark$		✓
Access by Civilian Personnel without Going through Security Gate			~		~
Direct Access via Existing Street Network	~		√		~
Avoids Commercial Vehicle Access Gate			√		~
No Development Constraints	1	1		1	1
Elevation at or above Katrina Storm Surge Line					✓
Fill Not Required					~
No Other Known Environmental Constraints	~	~	$\checkmark$	~	✓

Source: 81 TRW 2020.

### 2.3 Detailed Description of the Alternatives

#### 2.3.1 No Action Alternative

Under the No Action Alternative, the DAF would not enter into the 50-year EUL with MSU RTC. Therefore, MSU RTC would not construct MCTC. The parcel would remain vacant and underutilized. The purpose and need for the Proposed Action, therefore, would not be met.

The No Action Alternative is included in the analysis as prescribed by CEQ regulations and the DAF EIAP. It is carried forward for analysis and serves as the baseline against which the effects of implementing Proposed Action alternatives are evaluated.

#### 2.3.2 Action Alternatives

As described in Section 2.2, applying site selection requirements, the DAF identified Site 5, Permanent Party Dorm Location (Figures 2-2 and 2-3), as the preferred site for implementing the Proposed Action, because Site 5 meets all the site selection requirements. Therefore, the DAF is carrying Site 5 forward for detailed analysis.

The parcel is referred to as "the proposed EUL site" throughout the remainder of the EA. The proposed EUL site is bounded by L Street to the north, partially bounded by M Street to the south, Larcher Boulevard to the west, and 5th Street to the east. The 81st Contracting Squadron Building (Building 4605), former Weighing Scale (Building 4606), and Fireman Training Facility (Building 4607) are located to the south. The base access points closest to the proposed EUL site are the Larcher Boulevard-White Avenue Gate on the south and the Judge Sekul Avenue Gate on the east. At the time this EA was being prepared, Keesler AFB was not operating either gate.

The DAF identified Site 5 as the proposed EUL site because the DAF has no development plans for the site. It is located on the base perimeter, which would allow access to the location without base security. Furthermore, the site is not within the 100-year floodplain or at or above the Katrina Storm Surge line (Figures 2-2 and 2-3). Similarly, the site elevation of 21 ft would require less site preparation for construction. Additionally, the site is not within the Airfield District planning designation and does not interfere with airfield activities or encroach on runway protection zones. Finally, the site is large enough to accommodate MCTC Phase 1 and future expansion in MCTC Phase 2.

Both the Federal Emergency Management Agency (FEMA) and Colorado State University (CSU) floodplain databases are presented in Figure 2-3. The DAF contracted with CSU to update or provide floodplain geospatial data beyond what is available from FEMA (CSU 2021). For Keesler AFB, CSU's floodplain modeling also accounts for flooding from exceptionally high tides and storm surges. FEMA endorsed CSU-generated models and methodology. The proposed EUL site is not in a floodplain under either FEMA or CSU floodplain extents.

The proposed EUL site previously housed eight 1950s dormitories, all of which have since been demolished. Four of the eight dormitories were demolished between 2010 and 2017 and the remaining four were demolished between 2022 and 2023.

The proposed EUL site is currently vacant, comprising mowed areas and a parking lot (Figure 2-4). The site also contains 156 trees, 52 of which are live oaks (*Quercus virginiana*). The City of Biloxi designates live oak trees older than 150 years as "Heritage Trees" (CEMML 2019). Live oaks of 37 inches diameter at breast height (dbh) or more are estimated to be 150 years old or older (Seal 2021). Approval of the Wing Commander is required to remove any live oak tree from Keesler AFB that is larger than 24 inches dbh (Keesler AFB 2010). On the proposed EUL site, there are 18 live oaks 24 dbh inches or more, five of which are more than 37 inches dbh and estimated to be over 150 years. Within the proposed area for the MCTC, approximately 80 trees would be removed, including three live oaks. One live oak to be removed is 5-inch dbh and two are 24-inch dbh (Altsman 2024a, personal communication).

No prehistoric or historic Native American sites and/or Traditional Cultural Properties (TCPs) identified on the installation or NRHP-eligible or listed cultural resources are known to be on the proposed EUL site. Additionally, in April 2024, personnel of the MSU CIA conducted a Phase I cultural resources survey of the proposed EUL site. The survey did not identify intact archaeological deposits or Native American Tribal resources on the site and MDAH concurred with the survey results (see Appendix A) (MSU CIA 2024).

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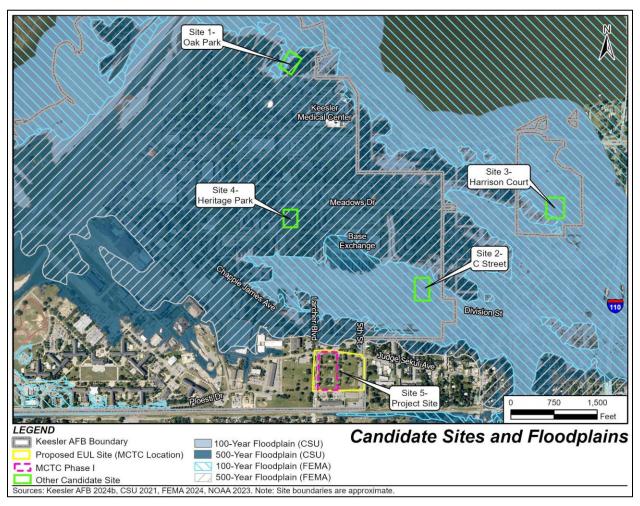


Figure 2-3. Candidate Sites and Floodplains.

In June–August 2023, USFWS personnel conducted bat monitoring at Keesler AFB and detected tricolored bats on the proposed EUL site. The bat is proposed for federal listing as an endangered species. Per IICEP correspondence, the USFWS has established that the proposed EUL site falls within the range of the tricolored bat (Necaise 2024a). The USFWS concurred with the DAF's determination that, with the implementation of the BMP of any tree removal for the project occurring between July 16 and Apr 30, outside the May 1–July 15 pup season, the Proposed Action may affect, but is not likely to adversely affect, the bat (Necaise 2024b).

While Site 5 is the site proposed for the EUL, the DAF identified two access alternatives: Alternative 1: Larcher Boulevard-White Avenue Gate and Alternative 2: Judge Sekul Avenue Gate. The two alternatives are discussed in Section 2.3.2.1 and Section 2.3.2.2 and evaluated in this EA.

# 2.3.2.1 Alternative 1, MCTC Access from Larcher Boulevard-White Avenue

Under Alternative 1, the DAF would lease the approximately 15-acre proposed EUL site to MSU RTC to build the MCTC. As discussed in Section 2.1, the facility would be a 100,000-SF, 3-story building with approximately 33,333 SF per floor.

The access into the proposed EUL site would be from the Larcher Boulevard-White Avenue Gate (Figure 2-4). The entrance to the MCTC building would be on Larcher Boulevard. This is the DAF's preferred alternative because it provides a well-established access point with direct access to U.S. 90.

### 2.3.2.2 Alternative 2, MCTC Access from Judge Sekul Avenue

The only difference between Alternative 2 and Alternative 1 would be the access into the proposed EUL site from Judge Sekul Avenue (Figure 2-4). The entrance to the MCTC building would also be on Larcher Boulevard. This route would require upgrading on-base street(s) to create the appropriate entry to the MCTC and likely require upgrades to Judge Sekul Avenue to accommodate the increase in traffic.

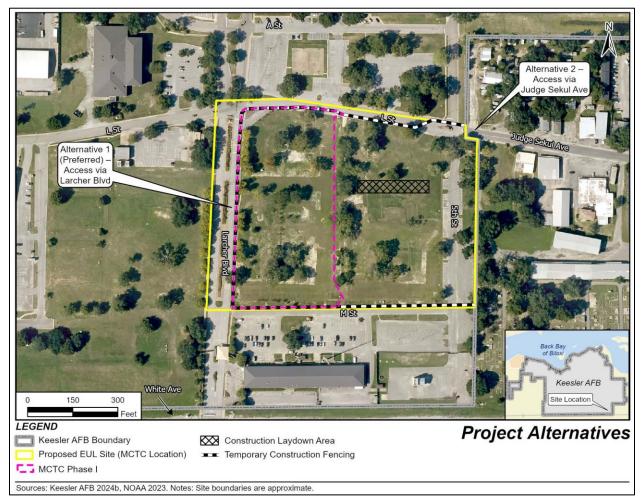


Figure 2-4. MCTC Project Alternatives.

#### 2.4 Alternatives Eliminated from Further Consideration

The DAF applied the site selection requirements discussed in Section 2.2 in evaluating the five candidate sites for the site on which to build the MCTC (Figure 2-1) (81 TRW 2020). This section discusses the four candidate sites considered for the Proposed Action that were not carried forward for detailed analysis in this EA.

#### 2.4.1 Site 1, Oak Park Location

Site 1, Oak Park, is located in the northern portion of Keesler AFB near the Biloxi Back Bay, with Devon Way to the east and Yorkshire Drive to the south. Site 1 is not being carried forward for analysis because it:

- Is in the 100-year floodplain and within the approximate storm surge line;
- Has historically been submerged 0–11 ft during coastal storms;
- Requires significant amounts of fill to achieve a minimum 18-ft finished elevation;
- Is close to the airfield in a clear zone and transverse slope and would restrict facility height; and
- Has construction limitations because of its location and size.

#### 2.4.2 Site 2, C Street Location

Site 2, C Street, is located southeast of the Keesler Base Exchange and south of Building 6223, Biloxi Hall, between Forest Avenue and Sixth Street, where Division Street transitions to A Street. Site 2 is not being carried forward for analysis because it:

- Is in the 100-year floodplain and within the approximate storm surge line;
- Has historically been submerged 0–20 ft during historical coastal storms;
- Is within the Commercial Vehicle Access Gate blast radius;
- Would interfere with other Keesler AFB planned development if the MCTC was constructed on it;
- Would require significant amounts of fill to achieve a minimum 18-ft finished elevation; and
- Has base access restrictions.

#### 2.4.3 Site 3, Harrison Court Location

Site 3, Harrison Court, is a former DAF family housing area and a geographically separated area east of the main base. The area where Harrison Court is located is used for Fam Camp and recreation and is bounded by Benachi Avenue, Park Court, and LaSalle Drive. Site 3 is not being carried forward for analysis because it:

- Is within the approximate storm surge line;
- Has historically been submerged 0–11 ft during historical coastal storms;
- Impacts future Keesler AFB development; and
- Would require significant amounts of fill to achieve a minimum 20-ft finished elevation.

#### 2.4.4 Site 4, Heritage Park Area

Site 4, the Heritage Park area, is bounded by C Street, Third Street, Meadows Drive, and Larcher Boulevard. Site 4 is not being carried forward for analysis because it:

- Is within the approximate storm surge line;
- Has historically been submerged 0–11 ft during historical coastal storms;
- Would require significant amounts of fill to achieve a minimum 21-ft elevation;
- Has base access restrictions; and
- Would be required to be multipurpose and include ground floor retail/fitness. Because of its location next to the base exchange and lodging, the site also would need to provide services for enlisted Airmen and retirees.

# 2.5 Summary of Potential Environmental Consequences

Table 2-3 summarizes the potential effects associated with alternatives 1 and 2 and the No Action Alternative. The summary is based on information discussed in detail in Section 3.0, *Affected Environment and Environmental Consequences*, which includes a concise definition of each issue addressed and the potential environmental effects associated with each alternative.

Resource Area	Alternative 1, MCTC Access from Larcher Boulevard-White Avenue	Alternative 2, MCTC Access from Judge Sekul Avenue	No Action Alternative
Land Use and Visual Resources	Negligible, short-term adverse effects from land-clearing and construction activities. Negligible, long-term effects; use of previously developed land.	Same as Alternative 1.	No effects.
Air Quality	Short-term, less-than significant adverse effects from construction activities; negligible, long-term changes in operational emissions. Air emissions would not exceed the DAF's significance indicators or contribute to a violation of any federal, state, or local air regulation.	Similar to Alternative 1.	No effects.
Noise	Less-than-significant effects from temporary and intermittent construction activities. Long-term, less-than-significant effects from reopening of Larcher-Boulevard-White Avenue Gate.	Similar to Alternative 1.	No effects.
Earth Resources	Short-term, less-than-significant adverse effects on soils and topography during construction; final restoration of excavated areas would be backfilled to grade, and the site topography would be restored to allow drainage of stormwater to the Keesler AFB system.	Same as Alternative 1.	No effects.
Water Resources	Short-term, less-than-significant adverse effects on water resources during construction; CGP and stormwater management requirements would minimize soil loss and sediment discharges from the site. Total of approximately 5 acres would be disturbed, with 3.8 acres of impervious surface and 1.2 acres of green space after construction. Facility design would incorporate LID controls to maintain flow rates, flow volumes, and durations present before development.	Same as Alternative 1.	No effects.

Table 2-3. Summary of Environmental Consequences by Resource Area

Resource Area	Alternative 1, MCTC Access from Larcher Boulevard-White Avenue	Alternative 2, MCTC Access from Judge Sekul Avenue	No Action Alternative	
Biological Resources	Long-term, less-than-significant adverse effects; approximately 80 trees removed, including two live oaks over 25 inches dbh (which would require Wing Commander's approval); but tree removal would not substantially reduce or affect the viability of local populations of the affected tree species. The USFWS concurred with the DAF's determination that, with the implementation of the BMP of any tree removal for the project occurring between July 16 and Apr 30, outside the May 1–July 15 pup season, the Proposed Action may affect, but is not likely to adversely affect, the tricolored bat.	Same as Alternative 1.	No effects.	
Cultural Resources	No historic properties would be affected; therefore, no effects on cultural resources are anticipated under Alternative 1. No intact archaeological deposits were identified from Phase I cultural resources survey of the APE. GPR investigation did not indicate that the Old Biloxi Cemetery extends into the proposed EUL site. MDAH concurred with the survey report that no resources eligible for listing in the NRHP were identified within the project area or are likely to be affected by the project and stated it had no objection to the proposed undertaking. The Choctaw Nation of Oklahoma concurred with the DAF's finding of no historic properties affected.	Same as Alternative 1.	No effects.	
Hazardous Materials and Wastes	Short-term, less-than-significant adverse effects during construction; all activities would be conducted in compliance with established management plans for hazardous materials and wastes, and spill prevention and response. Construction BMPs would be implemented at all sites.	Similar to Alternative 1.	No effects.	

Resource Area	Alternative 1, MCTC Access from Larcher Boulevard-White Avenue	Alternative 2, MCTC Access from Judge Sekul Avenue	No Action Alternative	
Infrastructure and Utilities	Less-than-significant effects on local utilities and the Keesler AFB stormwater system; the MCTC would use the City of Biloxi's existing infrastructure, which has sufficient available capacity to meet the increased demand. Keesler AFB stormwater system has sufficient capacity to process stormwater from the proposed EUL site. Reduction in infiltration and runoff increase would be similar to or less than the previous development at the site	Same as Alternative 1.	No effects.	
Transportation and Traffic	Short-term, less-than significant adverse effects by construction activities would be minimized by implementing established base requirements. Long-term operations traffic on Larcher Boulevard-White Avenue would marginally increase; however, the Larcher Boulevard-White Avenue Gate historically served as the main gate, and it is equipped to process the traffic increase.	Effects from construction activities similar to Alternative 1. Long-term operations traffic on Judge Sekul Avenue would marginally increase; however, the Judge Sekul Avenue Gate has historically served as an alternative option when other gates on-base were closed for improvements, and it is equipped to process the traffic increase.	No effects.	
Safety and Occupational Health	Short-term, less-than significant adverse effects from construction activities would be minimized by implementing established industry- accepted safety practices and SOPs. No long-term effects following industry-accepted safety practices and SOPs.	Effects from construction activities similar to Alternative 1. Long-term operations access would be from Judge Sekul Avenue.	No effects	
Greenhouse Gas Emissions and Climate Change	Less-than-significant adverse effects on GHG emissions and climate change. Estimated GHG emissions from a year of MCTC construction would be 1,120 mtpy and 11,400 mtpy from operation over an estimated 25- year life, both of which would be considerably less than the DAF's insignificance indicator for the annual threshold of 75,000 tpy of CO2e (or 68,039 mtpy). Social cost of carbon would be roughly \$805,000 from MCTC's projected GHG emissions over a 25-year life cycle.	Same as Alternative 1.	No effects.	

Resource Area	Alternative 1, MCTC Access from Larcher Boulevard-White Avenue	Alternative 2, MCTC Access from Judge Sekul Avenue	No Action Alternative
Sustainability and Greening	Short-term generation of waste to landfills would occur during construction. MSU RTC would incorporate sustainability and greening practices by identifying opportunities to reduce waste to landfills from construction to be consistent with federal regulations and EOs. Opportunities to minimize waste include reusing, recycling, and composting materials or purchasing items produced from recycled materials.	Same as Alternative 1.	No effects.
Environmental Justice, and Protection of Children	Short-term, less-than significant adverse effects from construction activities on environmental justice or the protection of children. Construction activities would be required to comply with applicable federal and state air quality, noise, and water quality regulations and established industry-accepted safety practices to protect workers and the general public, and effects would be less than significant. The proposed EUL site is separated from the off- base community by the installation boundary fence and from on-base family housing by the airfield. The EUL construction site would be secured with temporary construction fencing. Adverse effects from construction on transportation and traffic would be temporary and end with the construction phase and with the use of construction traffic management measures. Operation of the MCTC facility would have long-term, less- than-significant effects on transportation and traffic and water resources, negligible effects on air quality and noise, and no effects on safety.	Same as Alternative 1.	No effects.

*Notes*: APE = area of potential effects; CGP = Construction General Permit; GHGs = greenhouse gases; GPR = ground penetrating radar; LID = low impact development; MDAH = Mississippi Department of Archives and History; mtpy = metric tons per year; NRHP = National Register of Historic Places; SOPs = standard operating procedures; ton per year = tpy.

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# 3.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

This section describes relevant existing environmental conditions at Keesler AFB and potential effects resulting from implementing the Proposed Action and alternatives. In accordance with guidelines established by NEPA, CEQ regulations, and the EIAP, the impact analysis in this EA focuses only on aspects of the environment potentially subject to effects resulting from the Proposed Action and alternatives. This EA evaluates those effects and environmental consequences on the following resources: land use and visual resources, air quality, noise, earth resources, water resources, biological resources, cultural resources, hazardous materials and wastes, infrastructure and utilities, transportation and traffic, safety and occupational health, greenhouse gas emissions and climate change, sustainability and greening, environmental justice, and protection of children.

In accordance with 40 CFR § 1501.3, the DAF analyzed the affected environment and degree of the potential effects of the Proposed Action to determine whether they would be significant. The analysis of effects includes considering short- and long-term effects; whether they are beneficial or adverse; their impact on public health and safety; and whether the action would violate federal, state, tribal, or local laws or regulations that protect the environment. This EA characterizes the level of effects as follows:

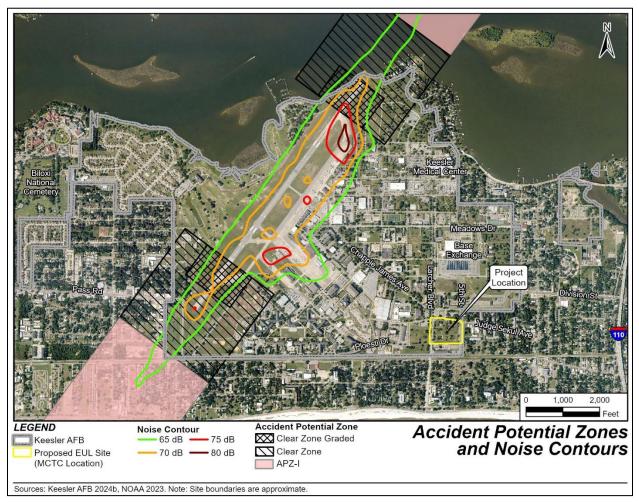
- None—No effects are expected to occur.
- Negligible—The effect would not be readily perceptible when compared to existing conditions.
- Less than significant—The effect would be readily perceptible when compared to existing conditions, but not severe, widespread, or prolonged.
- Significant—The effect would be severe, widespread, or prolonged or exceed a regulatory threshold. The effect would be considered significant unless mitigable to a less-than-significant level.

# 3.1 Resource Areas Dismissed from Further Analysis

CEQ regulations in 40 CFR § 1501.9 state that the lead agency shall identify and eliminate from detailed study the issues or resources that are not significant or that have been covered by prior environmental reviews, narrowing the discussion of those issues in the document to a brief justification that demonstrates a less-than-significant effect on the human environment, including the natural environment.

After considering information gathered, factors used to evaluate the potentially affected environment, and the degree of effect of the alternatives, the DAF determined that the following resources would not experience any measurable effects: airspace and airfield operations, geology (earth resources), or wetlands (water resources), as described below. Accordingly, no further discussion of these resource areas is included in the EA analysis.

**Airspace and Airfield Operations.** Air traffic in the region is managed through the establishment of controlled airspace by the Federal Aviation Administration. Keesler AFB's regional military airspace is composed of military operations areas, military training routes, and restricted areas. The proposed EUL site is approximately 1 mile east of the Keesler AFB airfield (Figure 3-1). The site is not within runway clear zones, which are areas on the ground located at the ends of each runway. Clear zones possess a high potential for accidents, and their use is restricted to be compatible with aircraft operations.



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Figure 3-1. Accident Potential Zone and Noise Contours.

*Earth Resources—Geology.* The project area is essentially flat and previously disturbed from past development activity. Additionally, the Proposed Action would not alter the geology of the area.

*Water Resources—Wetlands.* There are no wetlands on the proposed EUL site. All wetlands on the base occur along the Back Bay of Biloxi, more than 1 mile northwest of the proposed EUL site (CEMML 2019).

# 3.2 Land Use and Visual Resources

The region of influence (ROI) for land use and visual resources encompasses the land within Keesler AFB and surrounding communities in the immediate vicinity. Effects on land use would be considered significant if the Proposed Action violated an applicable federal, state, or local land use or zoning regulation or created an environment incompatible with an existing land use to the extent that public health or safety was threatened. Effects on visual and aesthetic resources would be considered significant if the Proposed Action violated an applicable federal, state, or local building, landscape, street, or transportation standard or regulation, introduced an incompatible element, or removed an existing feature within sight of an existing visually sensitive resource.

## 3.2.1 Affected Environment

Keesler AFB is located on the Mississippi coast approximately 90 miles east of New Orleans, LA, and 60 miles west of Mobile, AL. The installation is sited in the City of Biloxi, MS, and includes pockets of privatized housing separate from the base operational area within the city limits and Harrison County. The base opened as an airfield and technical training school in 1941 and has been in continuous operation since its formal establishment. The 81 TRW replaced Keesler Training Center in July 1993, taking on the mission of specialized technical training for the DAF, Air Force Reserve, Air National Guard, other DoD agencies, and foreign nations. Today Keesler AFB is the single largest employer on the Mississippi Gulf Coast (Keesler AFB 2024a).

The total land area of Keesler AFB and its privatized housing developments is 1,719 acres. The main base operational area features a single runway and encompasses approximately 2.3 square miles (1,447 acres) on a narrow coastal peninsula between the Mississippi Sound and the Back Bay of Biloxi. The Back Bay is an 8.1-square-mile estuary, fed by the freshwater of the Biloxi and Tchoutacabouffa rivers and the brackish water of the Mississippi Sound.

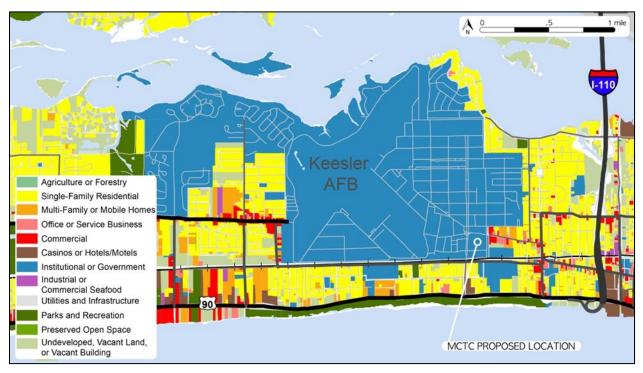
The base is located north of U.S. 90 and west of I-110. The nearest population center is the surrounding city of Biloxi. Keesler AFB abuts the City of Biloxi to its east, south, and west; the Back Bay of Biloxi forms the base's northern boundary. The Proposed Action spans the "housing unaccompanied" and "administration" land use types at the southeasternmost perimeter of the base. Figure 3-2 shows the land use categories on Keesler AFB.



Source: CEMML 2019.



The primary land use adjoining and in the immediate vicinity of the base is "single-family residential" (see Figure 3-3). Commercial districts and higher density residential development are located along U.S. 90. Pass Road and Judge Sekul Avenue to the west and east of the base, respectively, feature lower density commercial development. Running along the southern boundary of Keesler AFB is the CSX Transportation rail line, which separates the installation from the residential area on the south side of Irish Hill Drive. Land uses adjacent to the proposed EUL site include historic cemeteries on lands owned by the City of Biloxi, low-density commercial, and single-family residential. Development in the greater Biloxi area offers a blend of residential, commercial, and public uses, providing residents and visitors access to parks and recreation preserved open space.

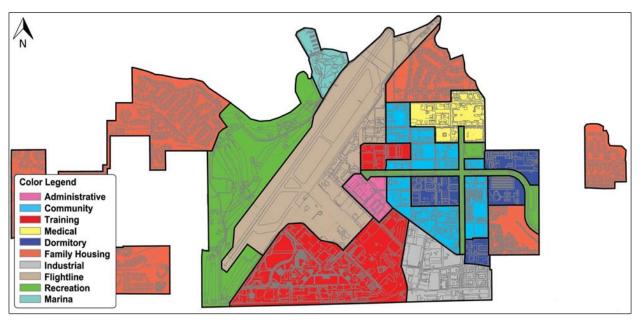


Source: City of Biloxi 2009.

# Figure 3-3. Existing Off-Base Land Use Types.

Visual resources are natural and man-made features that give a particular "landscape" (visible features of an area of land) or "viewshed" (view on an area from a vantage point) its character and aesthetic quality. Special consideration is given to actions within visually sensitive locations and viewpoints from visually sensitive locations. An example of a visually sensitive location would be a protected area, such as a national park, national monument, or historic district. The five remaining buildings on Keesler AFB that require consultation under Section 106 of the NHPA—buildings 4116, 4330, 4331, 6901, and potentially 1002—are within the base's interior with no line of sight to the proposed EUL site (Keesler AFB 2022). The proposed EUL site at the southeastern boundary of the base lies within the industrial visual district, as outlined in Figure 3-4. Figure 3-5 shows an aerial view of the base's boundaries and surrounding private development between the Mississippi Sound and the Back Bay of Biloxi.

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Source: Reed 2023, personal communication.





Source: Google Maps 2024.

# Figure 3-5. Aerial View of Keesler AFB Boundaries and MCTC Proposed Location.

# 3.2.2 Environmental Consequences

# 3.2.2.1 Alternative 1, Larcher Boulevard-White Avenue Access

**Land Use.** Under Alternative 1, construction of the Proposed Action would result in negligible short-term adverse effects. These effects would stem from additional land clearing and construction on previously disturbed land, including areas for temporary construction laydown

and parking. The approximately 15 acres of land needed for the proposed EUL represent 1 percent of the total land area of the main base operational area.

Post-construction and during operations, land use at the project site would transition from vacant industrial to training space. As the facility would be similar to existing development within Keesler AFB and would be consistent with the base's mission, long-term effects on land use would be negligible.

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**Visual Resources.** Construction would result in short-term, less-than-significant adverse visual effects because of the presence of construction equipment, support structures, and infrastructure in various stages of construction. Those activities would not be out of character for a military installation and the site's location within the industrial visual district. Therefore, site visitors and employees observing the construction would find it consistent with past construction activities. Post-construction, equipment and temporary construction office trailers would be removed and construction laydown areas would be restored.

Negligible, long-term adverse effects are anticipated because the MCTC facility would be in a developed area and would cause no visual changes to other areas within Keesler AFB.

# 3.2.2.2 Alternative 2, Judge Sekul Avenue Access

Alternative 2 would access the MCTC development site from the east at Judge Sekul Avenue. The effects on land use and visual resources from Alternative 2 would be equivalent to those described for Alternative 1. There would be no discernable effects on land use or visual resources from implementing this alternative.

#### 3.2.2.3 No Action Alternative

Under the No Action Alternative, the DAF would not enter into the 50-year EUL with MSU RTC and the MCTC would not be constructed. Land use and visual resources would remain unchanged when compared to existing conditions.

# 3.3 Air Quality

The air quality ROI is the Mobile-Pensacola-Panama City-Southern Mississippi Interstate Air Quality Control Region (AQCR), within which Keesler AFB is located. Effects on air quality would be considered significant if the Proposed Action were to generate emissions that did not meet CAA conformity determination requirements or contribute to a violation of any federal, state, or local air regulation.

# 3.3.1 Affected Environment

Air quality is defined by the level of overall air pollution. As a resource, it includes air pollution within a region, sources of air emissions, and regulations governing air emissions. Air pollution is the presence of one or more contaminants (e.g., dust, fumes, gas, mist, odor, smoke, or vapor) in the outdoor atmosphere in quantities and duration that could harm human, plant, or animal life or unreasonably interfere with the enjoyment of life and property. This section includes a regulatory overview of air quality, describes existing conditions, and discusses the environmental consequences of the action.

#### 3.3.1.1 National Ambient Air Quality Standards and Attainment Status

The U.S. Environmental Protection Agency (EPA) Region 4 and MDEQ regulate air quality in Mississippi. The CAA assigns EPA the responsibility for establishing the primary and secondary National Ambient Air Quality Standards (NAAQS) (40 CFR Part 50), which specify acceptable

concentration levels of six criteria pollutants: particulate matter (measured as both particulate matter less than or equal to 10 microns in diameter  $[PM_{10}]$  and particulate matter less than or equal to 2.5 microns in diameter  $[PM_{2.5}]$ ), sulfur dioxide (SO<sub>2</sub>), carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), ozone (O<sub>3</sub>), and lead (Pb) (see Table 3-1). Short-term NAAQS (1-, 8-, and 24-hour periods) have been established for pollutants contributing to acute health effects, while long-term NAAQS (annual averages) have been established for pollutants contributing to chronic health effects. While each state has the authority to adopt standards stricter than those established under the federal program, the State of Mississippi has accepted the federal standards (MDEQ 2024).

Pollut	ant	Primary/ Secondary	Averaging Time	Level	Form
CO	I	Primary	8 hours	9 ppm	Not to be exceeded
			1 hour	35 ppm	more than once a year
NO <sub>2</sub>		Primary	1 hour	100 ppb	98th percentile of 1-hour daily maximum concentrations, averaged over 3 years
		Primary and secondary	Annual	53 ppb	Annual mean
O <sub>3</sub>	O <sub>3</sub>		8 hours	0.070 ppm	Annual fourth highest daily maximum 8-hour concentration, averaged over 3 years
	PM <sub>2.5</sub>	Primary	Annual	9 µg/m³	Annual mean, averaged over 3 years
Dontiouloto		Secondary	Annual	15 µg/m³	Annual mean, averaged over 3 years
Particulate matter		Primary and secondary	24 hours	35 µg/m³	98th percentile, averaged over 3 years
	<b>PM</b> <sub>10</sub>	Primary and secondary	24 hours	150 μg/m³	Not to be exceeded more than once per year on average over 3 years
Pb		Primary and secondary	Rolling 3-month average	0.15 µg/m³	Not to be exceeded
SO <sub>2</sub>	2	Primary	1 hour	75 ppb	99th percentile of 1-hour daily maximum concentrations, averaged over 3 years
		Secondary	3 hours	0.5 ppm	Not to be exceeded more than once per year

#### Table 3-1. National Ambient Air Quality Standards

Sources: 40 CFR Chapter 50; USEPA 2024a.

*Notes*:  $\mu g/m^3$  = micrograms per cubic meter; ppb = parts per billion; ppm = parts per million.

# 3.3.1.2 Existing Emissions and Permitting

Federal regulations designate AQCRs in violation of the NAAQS as "nonattainment areas." Federal regulations designate AQCRs with levels below the NAAQS as "attainment areas." Harrison County (and, therefore, all areas associated with the Proposed Action) is within the Mobile-Pensacola-Panama City-Southern Mississippi Interstate AQCR (40 CFR § 81.68). EPA has designated Harrison County (and, therefore, all areas associated with the action) as in attainment for all criteria pollutants (USEPA 2022a). Since the area is in attainment for all criteria pollutants, the General Conformity rule does not apply. The General Conformity rule ensures that federal actions cause no new violations of the CAA in nonattainment areas.

Keesler AFB operates under a Synthetic-Minor Operating Permit granted by MDEQ (Permit No. 1020-00006), which was renewed November 20, 2023. Primary sources of air emissions include boilers, generators, and paint booths. The permit requirements include annual periodic inventory of all significant stationary sources of air emissions for each of the criteria pollutants of concern as well as monitoring and recordkeeping. Table 3-2 lists annual emissions from significant stationary sources.

Pollutant	Emissions (tpy)
СО	10.32
NO <sub>2</sub>	13.75
VOCs	2.86
PM <sub>2.5</sub>	0.99
<b>PM</b> <sub>10</sub>	0.98
SO <sub>2</sub>	0.07

# Table 3-2. Keesler AFB Annual Emissions forSignificant Stationary Sources Last Reported for 2023

Source: APIMS 2023.

*Notes:* tpy = tons per year; VOCs = volatile organic compounds.

New stationary sources of air emissions, such as boilers or backup generators, would require permits to construct. If not subject to major source requirements, new sources of air emissions are required to be evaluated against state regulations and applicability to those standards.

# 3.3.2 Environmental Consequences

# 3.3.2.1 Alternative 1, Larcher Boulevard-White Avenue Access

Short- and long-term, less-than-significant adverse effects on air quality would be expected from implementing Alternative 1. Short-term effects would be caused by air emissions generated during construction, and long-term effects would be caused by operational emissions from the new MCTC facility and supporting infrastructure. Alternative 1 would not (1) generate emissions that would exceed the General Conformity rule *de minimis* threshold values or (2) contribute to a violation of any federal, state, or local air regulation.

The DAF's Air Conformity Applicability Model (ACAM) was used to perform a net change in emissions analysis to assess the potential air quality impact/s associated with the action. ACAM is a robust computer model developed and used primarily by DAF planners in analyzing environmental effects. The analysis was performed in accordance with AFMAN 32-7002, *Environmental Compliance and Pollution Prevention*; the EIAP (32 CFR 989); the General Conformity Rule (GCR) (40 CFR 93 Subpart B); and the DAF Air Quality EIAP Guide.

Construction emissions were estimated for fugitive dust, on- and off-road diesel equipment and vehicles, worker trips, trenching, architectural coatings, and paving off-gases. Emissions were estimated for site clearing and grading of the full 15 acres with roughly 1,000 cubic yards of debris estimated to be hauled off-site. The grading estimate is three times the estimated acres of Phase 1 of 5 acres, this gives room for laydown and extra utility work if required. Emissions also were estimated for new construction of a 100,000-SF, 3-story building of approximately 33,333 SF per floor with parking for 271 vehicles and associated infrastructure.

Although the area is in attainment and the General Conformity rule does not apply, the *de minimis* thresholds were carried forward to determine the level of effect under NEPA. The estimated emissions from Alternative 1 would be below the *de minimis* thresholds; therefore, the level of effect would be less than significant. Appendix C provides a record of non-applicability of the General Conformity rule calculations. In conducting the analysis for this EA, the DAF assumed all construction activities would be compressed into a 12-month period. Small changes in facilities' site and final design, and moderate changes in quantity and types of equipment used would not substantially change these emission estimates and would not change the determination under the General Conformity rule or level of effects under NEPA.

Steady-state operational emissions were estimated for heating the MCTC facility's full 100,000 SF for approximately 900 hours per year. Emissions also were estimated for 200 hours of runtime for emergency generator by applying default assumptions in the model. The emergency generator would require a new source review (NSR) evaluation based on engine size and type of use. The NSR is a CAA program that requires industrial facilities to install modern pollution control equipment when they are built or when a change is made that increases emissions significantly. This equipment may require permitting if emissions or runtime hours are above the permitting threshold. If the permitting threshold is triggered when generator specifications become known, a permit must be obtained before construction.

The indirect emissions from 10 full-time MCTC staff commuting were not included in the model. Based on the availability of the extrapolated data from average commuting data published by EPA, the employee commute would be negligible when compared to commutes to the installation operational emissions.

Table 3-3 presents the estimated annual net emissions associated with Alternative 1. Emissions are below the insignificance indicators; therefore, the action would not be expected to cause or contribute to an exceedance of one or more NAAQS and would have a negligible effect on air quality.

# Table 3-3. Maximum MCTC Air Emissions during Construction and Operations of the Proposed Action Compared to *de minimis* Thresholds

Pollutant	Construction Operationa		INSIGNIFICA	NCE INDICATOR	
	Emissions (tpy)	Emissions (tpy)	Indicator (tpy)	Exceedance (Yes or No)	
NOT IN A R	EGULATORY AREA	l			
VOC	0.75	0.03	250	No	
NO <sub>x</sub>	3.2	0.4	250	No	
CO	3.7	0.4	250	No	
SOx	0.01	0.01	250	No	
PM <sub>10</sub>	27	0.04	250	No	
PM <sub>2.5</sub>	0.11	0.04	250	No	
Pb	0.00	0.0	25	No	
NH <sub>3</sub>	0.01	0.0	250	No	

Notes:  $NH_3$  = ammonia;  $NO_x$  = nitrogen oxides; tpy = tons per year; VOC = volatile organic compound.

# 3.3.2.2 Alternative 2, Judge Sekul Avenue Access

Short- and long-term, less-than-significant adverse effects on air quality would be expected from implementing Alternative 2, similar to those expected from Alternative 1. Alternative 2 would not (1) generate emissions that would exceed the General Conformity rule *de minimis* threshold values or (2) contribute to a violation of any federal, state, or local air regulation.

#### 3.3.2.3 No Action Alternative

No effects on air quality would result under the No Action Alternative. The DAF would not enter into the 50-year EUL with MSU RTC, the MCTC would not be constructed, and ambient air quality would remain unchanged compared to existing conditions.

# 3.4 Noise

Keesler AFB and off-base areas adjacent to the proposed EUL site would comprise the ROI for noise. Effects would be considered significant if noise from construction and operations activities violated a federal, state, or local noise ordinance; created a noise environment incompatible with an existing land use; or produced sound that could harm people wearing safety equipment.

# 3.4.1 Affected Environment

Sound is a physical phenomenon consisting of vibrations traveling through a medium such as air that are sensed by the human ear. Undesirable sound is noise. Noise interferes with communication, is intense enough to damage hearing, or is otherwise intrusive. Human response to noise varies depending on the type and characteristics of the noise, distance between the noise source and the receptor, receptor sensitivity, and time of day. Noise is often generated by activities essential to a community's quality of life, such as construction or vehicular traffic.

Sound varies by both intensity and frequency. Sound pressure level, described in decibels (dB), is used to quantify sound intensity. The dB is a logarithmic unit that expresses the ratio of a sound pressure level to a standard reference level. Hertz are used to quantify sound frequency. The human ear responds differently to different frequencies. "A-weighing," measured in A-weighted decibels (dBA), approximates a frequency response expressing the perception of sound by humans. Table 3-4 provides sounds encountered in daily life and their dBA levels.

Section 3.0 Affected Environment

Outdoor Sound	Sound Level (dBA)	Indoor Sound
Jet flyover at 1,000 ft	100	Rock band
Tractor	90	Garbage disposal
Noisy restaurant	85	Blender
Downtown (large city)	80	Ringing telephone
Freeway traffic	70	TV audio
Normal conversation	60	Sewing machine
Rainfall	50	Refrigerator

Table 3-4	Common	Sounds and	their Levels
	COMMON	oounus anu	

Source: Harris 1998.

The dBA noise metric describes steady noise levels, although very few noises are, in fact, constant. Therefore, A-weighted day-night sound level (DNL) has been developed. DNL is defined as the average sound energy in a 24-hour period with a 10-dB penalty added to the nighttime levels (10 p.m. to 7 a.m.). DNL is a useful descriptor for noise because it (1) averages ongoing yet intermittent noise and (2) measures total sound energy over a 24-hour period. In addition, equivalent sound level ( $L_{eq}$ ) is often used to describe the overall noise environment.  $L_{eq}$  is the average sound level in dB.

This section includes a regulatory overview of the noise environment, describes existing conditions, and discusses the environmental consequences of the action.

The Noise Control Act of 1972 directs federal agencies to comply with applicable federal, state, and local noise control regulations. In 1974, EPA provided information suggesting continuous and long-term noise levels in excess of DNL 65 dBA are normally unacceptable for noise-sensitive land uses, such as residences, schools, churches, and hospitals.

Both Harrison County and the City of Biloxi maintain noise ordinances. Harrison County limits sound levels to 68 dBA in residential areas during daytime hours and prohibits the use of power tools before 7:00 a.m. (HCC 2008). The City of Biloxi limits sound levels to 65 dBA in residential areas during daytime hours; however, construction noise is exempt between the hours of 7:00 a.m. and 6:00 p.m. (City of Biloxi 2024a). The City of Biloxi also has three airport noise overlay (ANO) districts, which are established and intended to provide public notice of those areas of the city in which people may be exposed to the higher-than-average noise levels and risk of aircraft accidents associated with proximity to the airport at Keesler AFB (City of Biloxi 2024b). ANO-3 applies to an approximately 1-square-mile area southwest of Keesler AFB. ANO-1 applies to the areas outside of ANO-3 that are exposed to a yearly DNL of 65–70 dB, and ANO2 applies to areas outside of ANO-3 that are exposed to a yearly DNL of 70–75 dB. The ANOs also are intended to ensure that new buildings include an appropriate level of exterior-to-interior reduction of noise levels associated with overhead aircraft. A reduction of 25–30 dB, depending on proximity to the airfield, is required for areas exposed to a yearly DNL above 65 dBA (City of Biloxi 2024b).

The primary source of noise at Keesler AFB are activities at the airfield. Other sources of noise include operation of civilian and military vehicles, lawn and landscape equipment, construction activities, and vehicle maintenance operations. Approximately 250 ft south of the proposed EUL site, a CSX railroad line runs parallel to Irish Hill Drive. The proposed EUL site is approximately

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1 mile east of the Keesler AFB airfield (Figure 3-1). Notably, the Noise Control Act exempts aircraft noise from all state and local noise regulations.

The affected environment for noise is the areas immediately surrounding the proposed EUL site. On-base, sensitive receptors, such as lodging facilities Shaw House and Simmons Manor, are located approximately 600 ft north of the proposed EUL site (Figure 2-1). Off-base, the nearest residential area would be approximately 500 ft northeast of the proposed EUL site.

Background noise levels without airport operations (L<sub>eq</sub> and DNL) were estimated for the surrounding areas using the techniques specified in the American National Standard Institute (ANSI) *Quantities and Procedures for Description and Measurement of Environmental Sound Part 3: Short-Term Measurements with an Observer Present* (ANSI S12.9-2013/Part 3). Table 3-5 outlines the land use categories and the estimated background noise levels for nearby noise-sensitive areas. Most environments include near-constant, long-term sound sources that create a background sound level and intermittent, intrusive sources that create sound peaks that are noticeably higher than the background levels. In suburban areas, human activities make up the background sound level. The extent to which an intrusive sound affects a given receptor in the environment depends upon the degree to which it exceeds the background sound level. Both background and intrusive sound may affect the quality of life in a given environment.

		L <sub>eq</sub> (dBA)	
Land Use Category	DNL	Daytime	Nighttime
Suburban residential (4 people per acre)	52	53	47
Quiet commercial, industrial, and normal urban residential (20 people per acre)	59	58	52

# Table 3-5. Estimated Background Noise Levels

Sources: ANSI S12.9-2013/Part 3; NYCSCA 2012.

# 3.4.2 Environmental Consequences

Alternatives 1 and 2 both would have short-term, less-than-significant effects on noise. Shortterm effects would be caused by heavy equipment use during site preparation and construction activities. The Proposed Action would not create appreciably long-term increases in noise because the operation of the MCTC would not lead to a violation of any federal, state, or local noise regulation.

# 3.4.2.1 Alternative 1, Larcher Boulevard-White Avenue Access

Short-term increases in noise would be caused by construction activities. Construction is expected to occur between the hours of 7:00 a.m. and 6:00 p.m. Table 3-6 presents typical noise levels (dBA at 50 ft) that EPA has estimated for the main phases of outdoor construction. Individual pieces of construction equipment typically generate noise levels of 80–90 dBA at a distance of 50 ft. With multiple items of equipment operating concurrently, noise levels can be relatively high during daytime periods at locations within several hundred feet of active construction sites. The zone of relatively high construction noise typically extends to distances of 400–800 ft from the site of major equipment operations. Construction activities would be temporary, however, and, therefore, effects would be less than significant. Similarly, noise from construction traffic along Judge Sekul Avenue and at the proposed EUL site would be temporary and intermittent, and, therefore, effects would be less than significant.

Section 3.0 Affected Environment

and Environmental Consequences

Construction Phase	L <sub>eq</sub> (dBA)
Ground clearing	84
Excavation, grading	89
Foundations	78
Structural	85
Finishing	89

#### Table 3-6. Noise Levels Associated with Outdoor Construction

Source: USEPA 1971.

The MCTC building would not be within any of the three Biloxi ANO districts. Figure 3-1 illustrates the noise contours for Keesler AFB's airfield, which extend linearly from the airfield runway to the north and south. The noise reduction requirement for new buildings applies primarily to those areas.

The Larcher Boulevard-White Avenue Gate would be reopened; however, because of a minimal increase in traffic, there would be long-term, less-than-significant effects on the noise environment. Section 3.11 provides a detailed description of the effects on traffic and transportation resources.

#### 3.4.2.2 Alternative 2, Judge Sekul Avenue Access

Under Alternative 2, noise effects of construction activities and facility operation would be similar to those under Alternative 1. The Judge Sekul Avenue Gate would be reopened for operation; however, because of a minimal increase in traffic, there would be less-than-significant effects on the noise environment. Section 3.11 provides a detailed description of the effects on traffic and transportation resources.

#### 3.4.2.3 No Action Alternative

No effects on the noise environment would be expected under the No Action Alternative. The DAF would not enter into the 50-year EUL with MSU RTC, the MCTC would not be constructed, and the overall noise environment would remain unchanged compared to existing conditions.

# 3.5 Earth Resources

The ROI for earth resources is generally limited to the MCTC construction footprint and area immediately adjacent to the parcel that could potentially be affected by the Proposed Action. Effects would be considered significant if the Proposed Action resulted in loss of farmland, impacts on unique soil features, or soil losses that impair or prevent plant growth. In addition, effects would be considered significant if altered topography and stormwater drainage resulted in excessive erosion within the site and adjacent area or excessive entrainment of sediment in stormwater leading to degradation of receiving waters.

# 3.5.1 Affected Environment

Keesler AFB is within the Coastal Meadows (Flatwoods) topographical division of the Gulf Coast region. Terrain is generally flat or gently undulating with elevations averaging from 5 ft to 30 ft above mean sea level (CEMML 2019). Local relief is primarily the result of past depositional and more recent erosional processes. The elevation at the proposed EUL site ranges from 20 ft to

25 ft above mean sea level. Surficial geology at Keesler AFB consists of unconsolidated coastal deposits comprised primarily of sand, gravel, loam, and clay (USGS 2021a).

The coastal area of Mississippi has not been seismically active in recent times, with only four minor earthquakes recorded since 1900 (USGS 2024a). No faults are identified within or in the vicinity of the site (USGS 2021b). U.S. Geological Survey (USGS) data indicate that an earthquake with a 2 percent likelihood of occurring in the next 50 years would have a peak ground acceleration (PGA) of 0.05 times the acceleration of gravity (g), or 0.05g, and an earthquake with a 10 percent likelihood of occurring in the next 50 years would have a PGA of 0.02g (USGS 2024b). Earthquakes of that magnitude would be unlikely to cause any damage (FEMA 2020).

The dominant soil types at the base were formed from sandy or loamy upland materials. These sandy soils have good-to-fair drainage capacity and an estimated weight-bearing capacity of 3,000–5,000 pounds per square foot (Keesler AFB 2015b). Soil at the proposed EUL site consists of the Pactolus-Urban land complex. The proposed EUL site formerly contained dormitories that occupied most of the site. In recent years, the buildings were demolished and the site was restored to level grade. Most of the site, however, was disturbed at some time for construction or demolition.

The Pactolus-Urban land complex has the following characteristics: no frequency of flooding or ponding, depth to restrictive layer of 80 inches or more, depth to saturated soils between 22 inches and 41 inches below grade, low runoff potential, non-hydric, and moderately well-drained. This soil unit has low susceptibility to water erosion but is susceptible to wind erosion. The Pactolus-Urban land complex covers the entire site and consists of loamy sand. The Pactolus-Urban land complex is not prime farmland; however, it is classified as farmland of statewide importance. Under the Farmland Protection Policy Act (7 USC §§ 4201–4209), federal programs are required to minimize the extent to which farmland is unnecessarily and irreversibly converted to nonagricultural uses. The Farmland Protection Act, however, does not apply to soils on military installations (NRCS 2021; Keesler AFB 2015b).

There are no oil or gas fields or active mining within the proposed EUL site or its immediate vicinity (MDEQ 2009; USGS 2024c).

# 3.5.2 Environmental Consequences

# 3.5.2.1 Alternative 1, Larcher Boulevard-White Avenue Access

During construction, short-term, less-than-significant adverse effects on soils would be expected from implementing Alternative 1. The construction footprint would cover approximately 5 acres, and soil disturbance would occur across most of the site during construction. Soils would be protected from erosion during construction, however, in accordance with the terms of the Large Construction General Permit (CGP) issued by the MDEQ. Stormwater runoff from construction activities (e.g., clearing, grading, excavating, and other land-disturbing activities) of 5 acres or more must be permitted under the CGP. The permit also requires listing and describing site-specific controls appropriate for the construction activities, including measures to minimize the amount of soil exposed during construction activity, minimize sediment discharges from the site, minimize soil compaction, and preserve topsoil (Keesler AFB 2015b; MDEQ 2021). With the implementation of requirements under the CGP, soil loss through wind and water erosion would not be significant.

Topsoil would be stripped, segregated, and stabilized at the beginning of construction to preserve existing topsoil. During site restoration, all topsoil would be reused within the site to

reestablish green space. As part of restoration, areas to be revegetated would be de-compacted as necessary; topsoil would be spread; and seed, lime, and fertilizer would be applied as necessary to promote revegetation.

Final

Effects on the topsoil resource would be less than significant with proper segregation and preservation during construction and reuse across the site to promote revegetation during final site restoration. Of the 5 acres disturbed for construction, approximately 1.2 acres would be green space after construction.

During construction, short-term, less-than-significant adverse effects on topography would be expected from implementing Alternative 1. Topsoil stripping and grading of the site would create temporary minor changes to the site's topographic contours, which could temporarily impact site drainage, as stormwater collection within excavated areas would likely increase. Implementing CGP requirements, however, would minimize soil loss and sediment discharges from the site.

During final restoration, excavated areas would be backfilled to grade and the site topography would be restored to allow drainage of stormwater to the Keesler AFB stormwater system, consistent with existing conditions. As a result, no permanent effects on site topography would be expected from Alternative 1.

# 3.5.2.2 Alternative 2, Judge Sekul Avenue Access

The effects on soils and topography of implementing Alternative 2 would be similar to those expected under Alternative 1.

#### 3.5.2.3 No Action Alternative

The No Action Alternative would have no effects on earth resources. The DAF would not enter into the 50-year EUL with MSU RTC and the MCTC would not be constructed.

#### 3.6 Water Resources

The ROI for water resources includes the wetlands, streams, ponds, and coastal zone resources in the Mississippi Coastal watershed, Citronelle and Miocene aquifers, and FEMA-designated floodplains in the area. Effects on water resources would be considered significant if the proposed activities would reduce water availability or supply, exceed safe annual yield of water supplies, adversely affect water quality, damage or threaten hydrology, or violate water resources laws or regulations.

#### 3.6.1 Affected Environment

Water resources at Keesler AFB include wetlands, streams, ponds, and coastal zone resources in the Mississippi Coastal watershed (USGS Hydrologic Unit Code [HUC] 03170009). Specifically, the proposed EUL site is within the Back Bay of Biloxi watershed, which drains the majority of Keesler AFB, and Beach Drainage, which drains the southwest corner of the installation (Figure 3-6) (USGS 2021c; CEMML 2019).

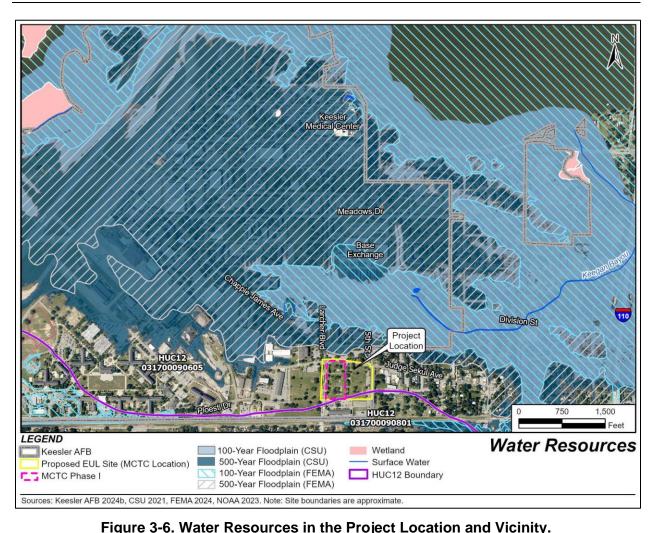
Water resources at Keesler AFB also include floodplains and stormwater. Figure 3-6 shows the extents of a 100-year floodplain (an area with a 1.0 percent annual chance of flood hazard) and a 500-year floodplain (an area with a 0.2 percent annual chance of flood hazard) on Keesler AFB. The proposed EUL site is not in a floodplain under either FEMA or CSU floodplain extents.

The base has a municipal separate storm sewer system (MS4) permit (Permit No. MSRMS4023), which, at the time this EA was being prepared, was under administrative continuance under MDEQ general coverage.

The MS4 permit authorizes the discharge of stormwater as well as defined non-stormwater to waters of the United States (WOTUS). Permit No. MSRMS4023 requires the development of a Stormwater Management Plan (SWMP), which describes BMPs and goals to reduce the discharge of pollutants to stormwater (Keesler AFB 2024c). MDEQ is authorized by EPA Region 4 to regulate discharges into surface waterbodies in Mississippi. The NPDES permit program was created in 1972 under the CWA to regulate point sources discharging into WOTUS. Water from facilities at Keesler AFB discharges through NPDES-permitted outfalls (Keesler AFB 2024c). These outfalls discharge to the Back Bay of Biloxi and the Mississippi Sound. The proposed EUL site drains into the Mississippi Sound via the City of Biloxi stormwater system.

The SWMP defines the stormwater requirements for construction and post-construction activities as well as compliance education and monitoring for illicit discharges. Keesler AFB relies on MDEQ guidance in review of all plans and stormwater-related activities. BMPs, to reduce discharges to stormwater of sediment and other potential pollutants from construction sites, are required for all construction activities at Keesler AFB, regardless of the footprint size of the project. Example construction site runoff control BMPs include (Keesler AFB 2024c):





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- Establishing an ordinance, regulatory mechanism, or other binding agreement, as appropriate, requiring erosion and sediment control.
- Implementing erosion and sediment control measure.
- Establishing procedures for controlling construction waste.
- Developing a procedure to review construction site plans for proper sediment control.
- Developing a procedure for collecting and considering installation personnel information and feedback.
- Conducting inspections and enforcing stormwater requirements at construction sites.

Projects disturbing more than 5 acres are required to comply with MDEQ's Large CGP. Developers also are required to develop a site-specific Stormwater Pollution Prevention Plan (SWPPP). The SWPPP is a self-implementing plan for compliance with the CGP. It requires development of pollution prevention measures, including BMPs, to reduce and control pollutants in stormwater discharge.

Additionally, projects larger than 5,000 SF are required to comply with Section 438 of the Energy Independence and Security Act of 2007 (EISA) (42 U.S.C. § 17094) to reduce runoff from projects to protect water resources during construction and after construction ends. Implementing post-construction BMPs is intended to maintain predevelopment runoff volumes and water quality. Example post-construction runoff control BMPs include (Keesler AFB 2024c):

- Developing strategies for implementing both structural and non-structural BMPs in development projects.
- Establishing an ordinance, regulatory mechanism, or other binding agreement, as appropriate, addressing post-construction runoff
- Implementing a program to ensure adequate long-term operation and maintenance of BMPs.

On Keesler AFB, monthly stormwater outfall assessments are performed during or after significant rain events and during dry weather events to detect illicit discharges; additional outfall sampling may be conducted up to twice per year.

MDEQ is responsible for assessing waters of the state to determine if they meet water quality standards set for the waterbody consistent with CWA Section 303(d). Every 2 years, states submit to EPA a list of impaired waters not meeting water quality standards based on their designated use (USEPA 2022b; MDEQ 2022). No waterbodies in HUC 03170009 or on Keesler AFB were identified as impaired in 2022 (MDEQ 2022).

# 3.6.1.2 Groundwater

Groundwater in Harrison County is stored in surficial coastal deposits, including the Citronelle and Miocene aquifers. Keesler AFB's primary water source is the Miocene aquifer system (CEMML 2019).

#### 3.6.1.3 Floodplains

EO 11988 includes requirements that, to the extent possible, the long- and short-term adverse impacts associated with the occupancy and modification of floodplains be avoided as well as direct or indirect support of floodplain development wherever a practicable alternative exists. Section 2 of the EO states that:

...each agency has a responsibility to evaluate the potential impacts of any actions it may take in a floodplain; to ensure that its planning programs and budget requests

reflect consideration of flood hazards and floodplain management; and to prescribe procedures to implement the policies and requirements of this Order.

FEMA Flood Insurance Rate Maps show flood hazard areas of high, moderate, and low degrees of risk and are used to determine the effects of development on floodplains. The proposed EUL site is located outside the 500-year floodplain and has minimal flood risk (Figure 3-6).

The National Storm Surge Hazard Maps of the National Oceanic and Atmospheric Administration illustrate portions of Keesler AFB that experience storm surge from the Back Bay of Biloxi (NHC 2024). These areas are along the coast and to the northeast in tidally influenced wetlands. The proposed EUL site area is outside the historic storm surge area (81 TRW 2020).

#### 3.6.1.4 Coastal Zone

Actions involving federal activities, federal licenses or permits, and federal assistance programs that affect coastal resources are required to be consistent with enforceable policies of approved state management programs to the "maximum extent practicable," in accordance with the federal Coastal Zone Management Act of 1972, as amended (CZMA) (16 U.S.C. § 1451 *et seq*). The goal of the CZMA is to "preserve, protect, develop, and where possible, to restore or enhance the resources of the nation's coastal zone."

Harrison County is one of three Mississippi counties within the designated coastal zone. Therefore, Keesler AFB must determine whether its activities are reasonably likely to affect any coastal use or resource and to conduct those activities in a manner that is compliant to the maximum extent practicable with the Mississippi Coastal Program (MCP). The DAF must submit a Consistency Determination and supporting materials no later than 90 days before final approval of the Federal activity unless both the Federal agency and the State agency agree to a different schedule. Appendix D provides an assessment of the consistency of the proposed activities with the enforceable policies of the MCP.

# 3.6.2 Environmental Consequences

#### 3.6.2.1 Alternative 1, Larcher Boulevard-White Avenue Access

**Surface Water.** Short- and long-term, less-than-significant adverse effects on surface water would be expected. The proposed EUL site would be within easterly flowing MS4 drainages that discharge to surface water through Outfall 6 (Figure 3-6). Outfall 6 is approximately 1,500 ft northeast of the site and discharges through Keegan Bayou into the Back Bay of Biloxi (Keesler AFB 2024c). No modifications would be expected to be made to the existing MS4 permit, BMPs, or monitoring programs.

Construction would have short-term effects on surface water with the use of standard sediment and erosion control BMPs. These effects would be the result of tree removal, construction site preparation, and the operation of heavy equipment associated with construction. Stormwater runoff during construction can contain high sediment loads and cause localized areas of erosion because of the lack of vegetation cover. Heavy machinery can leak oil that would be carried in runoff after storm events. Stormwater can carry sediment and other pollutants into receiving waters, such as ponds, lakes, and streams, resulting in turbidity and other effects on water quality. MSU RTC's contractor would file an MDEQ Large Construction Notice of Intent (LCNOI) for coverage under the Large Construction Storm Water General NPDES Permit as required for construction activities of more than 5 acres in the State of Mississippi. This application would include a site-specific SWPPP detailing BMPs and erosion control features to reduce potential soil erosion, minimize effects on surface waters, and prevent contaminated stormwater from leaving the construction site. MSU RTC's contractor also would be required to comply with the Keesler AFB SWMP.

Alternative 1 would have long-term, less-than-significant adverse effects on surface water resources with the use of post-development stormwater BMPs. Stormwater runoff potentially affects the quantity and quality of water entering surface waterbodies. The MCTC would result in approximately 3.8 acres of impervious surface; however, it is an already developed site, and, therefore, reduction in infiltration and increase in runoff would be less than significant. Inspections, maintenance, and monitoring would be conducted consistent with the Keesler AFB SWMP to comply with the existing MS4 permit. These effects would be minimized through implementing BMPs, as described in the Keesler AFB SWMP (Keesler AFB 2024c).

Additionally, EISA Section 438 and the Air Force Corporate Facilities Standards both require that stormwater runoff from new development emulate the site's predevelopment hydrology through passive and active design features that infiltrate, store, and evaporate runoff close to its source of origin (AFCEC 2018). By implementing those requirements, facility design would incorporate low impact development (LID) controls to maintain flow rates, flow volumes, and durations present before development. Examples of appropriate controls include vegetated swales, infiltration basins, permeable pavement, vegetated strips, rain barrels, and cisterns. The goal would be to manage runoff through infiltration, evapotranspiration, and harvest and reuse. Implementing the CGP, SWPPP, and LID controls would minimize potential erosion, impacts on stormwater quality from sediment, and alteration of existing drainage patterns during construction and operations.

**Groundwater.** No construction or operational effects on groundwater would be expected because the area drains to MS4 Outfall 6 discharging to Keegan Bayou and Back Bay of Biloxi surface waters.

**Floodplains.** Negligible effects on the floodplain would be expected from construction and operations of the proposed MCTC because the project is outside the 500-year floodplain, would not alter floodplain or project area elevation, and would not change the overall landscape. Elevations in the project area average 22 ft above mean sea level. Consistent with the 2019 integrated natural resources management plan (INRMP), the structure's finished first floor would be at or above 20-ft above mean sea level (CEMML 2019).

**Coastal Zone.** The DAF prepared a Consistency Determination and supporting materials, which are provided in Appendix D, and has determined that the Proposed Action is compliant with the enforceable policies of the MCP. The DAF will provide the Consistency Determination to the MCP with the Draft EA and Draft FONSI during the public review period.

# 3.6.2.2 Alternative 2, Judge Sekul Avenue Access

The nature and overall effects of Alternative 2 on water resources would be similar to those of Alternative 1. All regulations and BMPs applicable to Alternative 1 would be applicable to Alternative 2.

#### 3.6.2.3 No Action Alternative

No adverse effects on water resources would be expected under the No Action Alternative. The DAF would not enter into the 50-year EUL with MSU RTC and the MCTC would not be constructed. Water resources would remain unchanged compared to existing conditions.

# 3.7 Biological Resources

The ROI for biological resources is Keesler AFB. Effects on biological resources would be considered significant if the Proposed Action resulted in substantial permanent conversion or net loss of habitat, long-term loss or impairment of local habitat (species-dependent), loss of populations of species, or unpermitted or unlawful "take" of federally protected species.

# 3.7.1 Affected Environment

The following sections describe existing conditions for vegetation, wildlife, invasive species, and threatened and endangered species known or suspected to occur on Keesler AFB. Per Sikes Act requirements, Keesler AFB developed and implemented an INRMP outlining how it manages natural resources on the base. The Keesler AFB INRMP discusses in detail the vegetative communities, wildlife, and protected species associated with the base (CEMML 2019).

#### 3.7.1.1 Vegetation

Keesler AFB lies within the Outer Coastal Plain Mixed Forest Province ecological area. Vegetation in the province is characteristic of a temperate rainforest and includes evergreen and laurel forests (CEMML 2019). The vegetation on Keesler AFB is characterized by urban and suburban flora, with a few naturally vegetated wetlands bordering the Back Bay of Biloxi. Most of Keesler AFB is developed and occupied by buildings, runways, roadways, and parking. Underdeveloped portions of the base are grassed areas, coastal wetlands, and urban forest. There are no coastal wetlands in the proposed EUL site. Undeveloped but maintained open areas are dominated by Bermuda grass (*Cynodon dactylon*), centipede grass (*Eremochloa ophiuroides*), and St. Augustine grass (*Stenotaphrum secundatum*).

There are approximately 8,000 trees on Keesler AFB that include live oaks and slash pine (*Pinus elliottii*) in open areas between buildings and semi-improved areas (Keesler AFB 2021b). Other common native trees include green ash (*Fraxinus pennsylvanica*), northern red oak (*Quercus rubra*), river birch (*Betula nigra*), sweetgum (*Liquidambar styraciflua*), turkey oak (*Quercus laevis*), and water oak (*Quercus nigra*). Common nonnative trees include Callery pear (*Pyrus calleryana*) and crepe myrtle (*Lagerstroemia indica*).

Forests of the iconic live oaks draped with Spanish moss (*Tillandsia usneoides*) on Keesler AFB are representative of the maritime forest along the U.S. Gulf Coast (CEMML 2019). More than 200 of the larger live oaks on Keesler AFB have a diameter at breast height of more than 44 inches and are estimated to be more than 200–250 years old. The City of Biloxi designates live oak trees older than 150 years as "Heritage Trees" (CEMML 2019). Live oaks of 37 inches dbh or more are estimated to be 150 years old or older (Seal 2021). They are removed only when they have been damaged permanently by lightning, disease, or wind or if they pose a safety hazard to aircraft.

A tree inventory conducted on the proposed EUL site in 2021 identified 156 trees within the boundaries of the project site, including 52 live oak trees (Keesler AFB 2024d). Table 3-7 lists the tree species on the site. On the proposed EUL site, there are 18 live oaks 24 dbh inches or more, five of which are more than 37 inches dbh and estimated to be older than 150 years.

Common Name	Scientific Name	Number On-Site
Crepe myrtle	Lagerstroemia indica	67
Live oak	Quercus virginiana	52
Chinese elm	Ulmus parvifolia	13
Water oak	Quercus nigra	7
Willow oak	Quercus phellos	5
American holly	llex opaca	3
Sycamore	Platanus occidentalis	2
Palm	Arecaceae (family)	2
Tulip tree	Liriodendron tulipifera	2
Black gum	Nyssa sylvatica	1
Bradford pear	Pyrus calleryana	1
Carolina laurel cherry	Prunus caroliniana	1

#### Table 3-7. Tree Species on Project Site by Abundance

Source: Keesler AFB 2024d.

#### 3.7.1.2 Wildlife

Fish and wildlife management on Keesler AFB focuses on the coastal salt marsh wetlands along the Back Bay of Biloxi (CEMML 2019). Hunting and trapping are not permitted on the base. Issues concerning fish and wildlife management include the licensing program for fishing, wetland habitat conservation, managing nuisance wildlife species, and the bird/ wildlife aircraft strike hazard (BASH) program. Keesler AFB manages grass height near the flight line and flight safety zones through the base's BASH Plan (81st Training Wing 2016a, cited in CEMML 2019). The grass in those areas is mowed to a standard height of 7–10 inches, which effectively discourages birds from using the aircraft takeoff and landing areas (Lanier 2024). The proposed EUL site is not located in the flight line or flight safety zones.

Common wildlife occurring on Keesler AFB and the proposed EUL site include eastern gray squirrel (*Sciurus carolinensis*), European starling (*Sturnus vulgaris*), house sparrow (*Passer domesticus*), rock pigeon (*Columba livia*), raccoon (*Procyon lotor*), and Virginia opossum (*Didelphis virginiana*).

#### 3.7.1.3 Invasive Species

EO 13751 calls for actions "to prevent the introduction of invasive species and provide for their control and to minimize the economic, plant, animal, ecological, and human health impacts that invasive species cause" using federal laws, including NEPA and the ESA. Invasive plants on Keesler AFB include cogon grass (*Imperata cylindrica*), Chinese tallow tree (*Triadica sebifera*), and black elderberry (*Sambucus nigra*) in the wetlands (CEMML 2019).

# 3.7.1.4 Threatened and Endangered Species and Species of Concern

The ESA established measures for the protection of plant and animal species federally listed as threatened or endangered and for the conservation of habitats critical to the continued existence of those species. Under the ESA, an "endangered species" is defined as any species in danger of extinction throughout all, or a large portion, of its range. A "threatened species" is defined as any species likely to become an endangered species in the foreseeable future. The USFWS

maintains a list of species considered to be candidates for possible listing under the ESA. The ESA also allows the designation of geographic areas as critical habitat for threatened or endangered species. It should be noted that the 2004 National Defense Authorization Act amended the ESA to preclude critical habitat designation on lands or geographical areas controlled or owned by the DoD that are subject to an INRMP under the Sikes Act; however, this does not exclude DoD from compliance with consultation requirements set forth in Section 7 of the ESA. Although candidate species receive no statutory protection under the ESA, the USFWS has attempted to advise government agencies, industry, and the public that these species are at risk and may warrant protection under the ESA.

No federally endangered or threatened species are known to occur on Keesler AFB and there are no critical habitats present. However, one species proposed as endangered under the ESA, the tricolored bat, is documented to be present on-base, and several federally and state-listed species and state species of concern are known to occur in the vicinity of the base (CEMML 2019, USFWS 2023). Potential habitats for the bald eagle (*Haliaeetus leucocephalus*), federally protected under the BGEPA, were found near the base. Habitats for the golden eagle (*Aquila chrysaetos*) have not been identified on or in the vicinity of the base (CEMML 2019). Habitat for other federally listed species and state species of concern might occur in areas adjacent to Keesler AFB, including the open waters of the Back Bay of Biloxi, Keegan Bayou, and other wetlands.

In 2023, USFWS biological science technicians from Red River National Wildlife Refuge conducted surveys at Keesler AFB to monitor the alligator snapping turtle (*Macrochelys temminckii*), little brown bat (*Myotis lucifugus*), and tricolored bat populations (USFWS 2023). Tricolored bats were detected at high enough confidence levels to confirm their presence, while little brown bats will need manual identification to confirm. Between seven and twenty-three tricolored bats were detected by Anabat Swift passive detectors at the proposed EUL Site. This species primarily roosts among leaf clusters of live or recently dead deciduous hardwood trees as well as Spanish moss (*Tillandsia usneoides*) (USFWS 2024b). Alligator snapping turtle, proposed for federal listing as a threatened species, was not found along the Back Bay of Biloxi coastline.

Information specific to the Proposed Action and the proposed EUL site was obtained via USFWS's Information for Planning and Consultation (IPAC) website and the IICEP correspondence with the USFWS and MNHP (USFWS 2024c; Necaise 2024a; MNHP 2024). The IPAC identified the following species as potentially affected by activities at the proposed EUL site: two mammals (northern long-eared bat [*Myotis septentrionalis*] and tricolored bat); two birds (eastern black rail [*Laterallus jamaicensis*] and rufa red knot [*Calidris canutus rufa*]); four reptiles (Alabama red-bellied turtle [*Pseudemys alabamensis*], alligator snapping turtle, gopher tortoise [*Gopherus polyphemus*], and Kemp's Ridley sea turtle [*Lepidochelys kempii*]), one insect (monarch butterfly [*Danaus plexippus*]), and one plant (Louisiana quillwort [*Isoetes louisianensis*]).

Per the USFWS, the proposed EUL site falls within the range of the tricolored bat and the USFWS anticipates publishing the Final Rule for the species in summer 2024 (Necaise 2024a). The protections of the ESA for the tricolored bat will go into effect at the publication of the Final Rule (Necaise 2024a). MNHP's review of the Proposed Action indicated no state-listed species or species of concern at the proposed EUL site but identified 50 federally and state-listed species and state species of concern that occur within 2 miles of the site (MNHP 2024). Appendix A includes the agency correspondence, and the IPAC results are listed in Appendix E.

Table 3-8 presents the federally and state-listed species and species of concern on and in the vicinity of Keesler AFB. The information in Table 3-8 is derived from the Keesler AFB INRMP, IPAC, USFWS monitoring program, USFWS and MNHP IICEP correspondence, and MNHP Special Animals Tracking List.

Table 3-8. Federally and State-Listed Species and Species of Concern at and in the
Vicinity of Keesler AFB

Common Name	Scientific Name	Federal Status	State Status	Occurrence at Keesler AFB
Fishes	I			
Giant ocean manta ray	Manta birostris	Т	None	Not likely to occur in Back Bay
Gulf sturgeon	Acipenser oxyrhynchus desotoi	Т	E	May occur in Back Bay
Smalltooth sawfish	Pristis pectinata	E	None	Not likely to occur in Back Bay
Reptiles				
Eastern indigo snake	Drymarchon corais couperi	Т	E	Not likely to occur on-base
Alabama red-bellied turtle	Pseudemys alabamensis	E	E	May occur in Back Bay, Keegan Bayou, and adjacent wetlands
Alligator snapping turtle	Macrochelys temminckii	PT	SOC	Not observed in Back Bay
Black pine snake	Pituophis melanoleucus lodingi	Т	E	Not likely to occur on base
Gopher tortoise	Gopherus polyphemus	Т	E	Not likely to occur on-base
Green sea turtle	Chelonia mydas	Т	E	May occur in Back Bay, but no habitat exists for nesting on the base
Gulf salt marsh snake	Nerodia clarkii clarkii	None	SOC	May occur in Back Bay, Keegan Bayou, and adjacent wetlands
Hawksbill sea turtle	Eretmochelys imbricata	E	E	May occur in Back Bay, but no habitat exists for nesting on the bas
Kemp's Ridley sea turtle	Lepidochelys kempii	E	E	May occur in Back Bay, but no habitat exists for nesting on the base
Leatherback sea turtle	Dermochelys coriacea	E	E	May occur in Back Bay, but no habitat exists for nesting on the bas
Loggerhead sea turtle	Caretta caretta	Т	E	May occur in Back Bay, but no habitat exists for nesting on the bas
Mississippi diamondback terrapin	Malaclemys terrapin pileata	None	SOC	May occur in Back Bay, Keegan Bayou, and adjacent wetlands
Rainbow snake	Farancia erytrogramma	None	E	May occur in Back Bay, Keegan Bayou, and adjacent wetlands
Southern hognose snake	Heterodon simus	None	E	Not likely to occur on-base
Amphibians	1	1	1	T
Dusky gopher frog	Rana Capito sevosa	E	E	Not likely to occur on-base
Birds				
Red-cockaded woodpecker	Picoides borealis	E	E	Not likely to occur on-base
Bald eagle	Haliaeetus leucocephalus	None <sup>a</sup>	SOC	May forage on Back Bay
Bewick's wren	Thryomanes bewickii	None	E	May forage along the coast of Back Bay in winter
Brown pelican	Pelecanus occidentalis	None	E	Observed on Back Bay
Mississippi sandhill crane	Antigone canadensis pulla	E	E	Not likely to occur on-base

Common Name	Scientific Name	Federal Status	State Status	Occurrence at Keesler AFB
Piping plover	Charadrius melodus	Т	E	May forage along sandy area of Back Bay in winter
Red knot	Calidris canutus	Т	SOC	Not likely to occur on-base
Wood stork	Mycteria americana	Т	E	Not likely to occur on-base
Mammals				•
Tricolored bat	Perimyotis subflavus	PE	SOC	Detected on-base
West Indian manatee	Trichechus manatus	Т	E	May occasionally occur in Back Bay
Plants		•		
Louisiana quillwort	Isoetes louisianensis	E	SOC	Not likely to occur on-base

Sources: CEMML 2019; MNHP 2018, 2024; Necaise 2024a; USFWS 2023, 2024c.

*Notes*: E = endangered; PE = proposed endangered; PT = proposed threatened; SOC – species of concern; T = threatened. <sup>a</sup> Protected by the Bald and Golden Eagle Protection Act.

#### 3.7.2 Environmental Consequences

#### 3.7.2.1 Alternative 1, Larcher Boulevard-White Avenue Access

**Vegetation**. Long-term, less-than-significant adverse effects on biological resources would be expected from implementing Alternative 1. The proposed EUL site has been altered substantially from its predevelopment state by previous activity. The northern and central portions of the site have a variety of trees on maintained lawn.

Implementing Alternative 1 would remove approximately 80 trees including three live oak trees. One live oak to be removed is 5-inch dbh and two are 24-inch dbh (see Table 3-9). The Proposed Action would result in a loss of approximately 4 percent of the live oak trees on the site. Approval of the Wing Commander would be required to remove the two live oak trees that are larger than 24 inches dbh (Keesler AFB 2010).

Diameter Range (inches at dbh)	Number of Live Oaks	Number of Live Oaks to Be Removed	Age Estimate (years)	
4–9	3	1	16–36	
10–19	22	0	40–76	
20–25	14	2	80–100	
26–29	6	0	104–116	
30–36	2	0	120–144	
37ª–39	0	0	148–156	
40–49	4	0	160–196	
50+	1	0	200+ <sup>b</sup>	

 Table 3-9. Sizes of Live Oak Trees on the Proposed EUL Site

Sources: Altsman 2024a, personal communication; Keesler AFB 2024d; Seal 2021.

Notes:

<sup>a</sup> Live oak trees of 37 inches dbh or more are estimated to be 150 years old or older.

 $^{\rm b}$  The largest live oak on the site has a 52-inch dbh and is estimated to be 208 years.

Removal of the trees would not substantially reduce the local population of any tree species, including live oak, or affect the viability of the local population of any tree species.

**Wildlife.** The proposed EUL site supports common species of wildlife adapted to human-altered environments. Removal of tree species found on the site would reduce the value of the site to the local wildlife (Arbor Day Foundation 2022; NWF 2024). These species would be temporarily

displaced during construction, but once those activities are completed, the species are expected to return, resulting in short-term and less-than-significant adverse effects on wildlife.

Final

**Invasive Species.** During construction activities, invasive species could get propagated by construction machinery. Short-term, less-than-significant adverse effects would be anticipated, however, because MSU RTC construction contractors would be required to follow the requirements of Installation Pest Management Plan to prevent the introduction of invasive species to the extent possible.

**Threatened and Endangered Species and Species of Concern.** Tree removal and construction activities could affect the tricolored bats that have been detected on the proposed EUL site. The site is a developed area with continued human activities, making it less attractive for roosting and foraging. As recommended by the USFWS in their IICEP correspondence and per BMPs recommended for the species, any tree removal activities required for the Proposed Action would be conducted July 16 through April 30, outside the pup season of May 1–July 15. Tree removal includes three live oak trees, one of 5 inches dbh and two of 24 inches dbh. Sixteen live oaks of 24 dbh inches or more, five of which are more than 37 inches dbh, would not be removed. Therefore, the Proposed Action may affect but is not likely to adversely affect the species proposed for listing. The USFWS concurred with the DAF's proposed determination that, with the implementation of the tree removal BMP, the Proposed Action may affect, but is not likely to adversely affect, the bat (Appendix B) (Necaise 2024b).

# 3.7.2.2 Alternative 2, Judge Sekul Avenue Access

The effects of Alternative 2 for all biological resources analyzed would be the same as those of Alternative 1.

# 3.7.2.3 No Action Alternative

No effects on biological resources would result under the No Action Alternative. The DAF would not enter into the 50-year EUL with MSU RTC, the MCTC would not be constructed, and no changes to the site would occur.

# 3.8 Cultural Resources

The cultural resources on Keesler AFB and in the vicinity of the proposed EUL site comprise the ROI for cultural resources. Effects on cultural resource would be considered significant if the Proposed Action resulted in adverse effects, as defined by the NHPA: impacts on the traditional use of sacred or ceremonial sites or resources by Native American Tribes.

# 3.8.1 Affected Environment

Cultural resources include prehistoric or historic districts, prehistoric or historic sites, historic buildings, historic structures, TCPs, or historic objects considered important to a culture, subculture, or community for scientific, traditional, religious, or other purposes. They include archaeological, architectural, and traditional resources. Archaeological resources comprise artifacts, features, and other archaeological indications of past human life or activities from which archaeologists interpret information about history or prehistory. Architectural resources include buildings, structures, landscapes, and objects that document the history of an area. TCPs are resources of traditional, religious, or cultural significance to Tribes and may include traditionally used plants and animals, trails, and certain geographic areas. The cultural resources APE for the Proposed Action is the area subject to direct earth-moving activities and adjacent areas subject to direct and indirect effects, including, but not limited to, visual effects, dust from construction, and noise.

Sections 106 and 110 of the NHPA require federal agencies to determine whether any archaeological, historic, or architectural resources listed or eligible for listing in the NRHP could potentially be affected by the Proposed Action. Generally, a historic property must be more than 50 years old to be considered for inclusion in the NRHP; however, under Criterion Consideration G, a property—a district, site, building, structure, or object—that has achieved "exceptional" significance within the last 50 years can be considered eligible for the NRHP. Examples of a Criterion Consideration G property might include a Cold War-era resource (constructed prior to 1990) or a Native American cultural property.

#### 3.8.1.1 Historic Resources

None of the historic properties on Keesler AFB are located within the proposed APE, which is the entire 15 acres proposed for the EUL. Additionally, the nearest historic property on-base is approximately one-half mile northwest of the proposed EUL site.

Within the APE, Keesler AFB consulted with MDAH on the demolition of four dormitory buildings previously located on the site: buildings 4904, 4908, 5020, and 5022. Built in the early 1950s, the dormitories were considered ineligible for listing in the NRHP because of their extensive alterations. The buildings also were deemed to no longer retain the architectural integrity to convey either their Cold War-era significance or their architectural significance. Keesler AFB received MDAH concurrence for the demolition of the four dormitories (MDAH 2021b, 2021c, 2022a).

Keesler AFB completed demolition of Building 5022 in 2022 and of buildings 4904, 4908, and 5020 in 2023.

A search of MDAH online records determined there are architectural and historic sites near the proposed EUL Site, although located on public land and not on the base. Ten historic sites are within 1 mile of the APE; however, only two of those previously recorded historic resources have been evaluated as eligible for the NRHP: the Biloxi Lighthouse keeper's house and the lighthouse bluff (Table 3-10) (MDAH 2024a). No historic districts are located within 1 mile of the APE.

Site Number	Site Name	NRHP Eligibility
HR0142	New Orleans, Mobile & Chattanooga Railroad	Unknown
HR513	Old Fort Louis site	Unevaluated
HR998	Chamber of Commerce site	Unknown
HR1021	Historic Rouse Ceramic	Unknown
HR1026	Biloxi Lighthouse keeper's house	Eligible
HR1036	Las Guti Terrace	Ineligible
HR1042	Lighthouse bluff	Eligible
HR1084	Rupert Pass Plain	Ineligible
HR1448	FS 1	Ineligible
HR1449	FS 2	Ineligible

Table 3-10. H	listoric Sites	within One	Mile of the APE
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Source: MDAH 2024a.

*Note:* In addition to the NRHP evaluations of eligible, ineligible, and unevaluated, Mississippi Historic Resources Inventory Form includes an "Unknown" category if a site's eligibility for the NRHP is not known (MDAH 2019). MDAH accepts the "Unknown" designation only for non-federal projects. "Unknown" could be treated as unevaluated and, therefore, potentially eligible as these resources had not been ruled ineligible at that time.

## 3.8.1.2 Archaeological Resources

The Center for Archaeological Research at the University of Mississippi was contracted by the National Park Service in August 1993 to conduct a baseline archaeological survey of Keesler AFB. Because of the extensive land disturbance that had occurred over most of the base, the study concluded there is very little likelihood that any unknown archaeological deposits remain on Keesler AFB (Keesler AFB 2022).

A search of MDAH online records determined there are archaeological resources near the project area both on- and off-base. Within the base boundaries, a 2022 archaeological survey identified two archaeological sites at the Pass Road Gate area. In 2023, MDAH concurred that those sites were not eligible for listing in the NRHP (MDAH 2023). They are the only recorded archaeological sites on the base and are not located within the APE. Off-base and within 1 mile of the APE, there are 11 archaeological sites. Most of them in the area around Keesler AFB are along the coastline. Of the 11 sites, only two of them, Joe Moran and Dantzler House, have been evaluated by MDAH as eligible for the NRHP (Table 3-11). None of the sites are within the viewshed of the proposed structure; therefore, the proposed undertaking would have no adverse effects on them.

Site Number	Site Name	NRHP Eligibility	
HR509	Back Bay Beach Ineligibl		
HR510	Lopez Place	Unevaluated	
HR511	Joe Moran	Eligible	
HR516	Brodie I	Unevaluated	
HR529	Jim Parker Ineligi		
HR551	Michelle I Unknow		
HR554	Jaycee Hill	Jaycee Hill Unevaluated	
HR647	Biloxi Beach Loop Unknown		
HR1009	Damphman Site Unknown		
HR1020	Bay George Levee Unknown		
HR1027	Dantzler House Eligible		

#### Table 3-11. Archaeological Sites within One Mile of the APE

Source: MDAH 2024a.

The Old Biloxi Cemetery (1811–present) is immediately adjacent to the eastern boundary of the proposed EUL site in the southeast corner (Figure 3-7). It also covers the area across the railroad to the south. The cemetery is not a recorded site and has not been evaluated for NRHP eligibility. Marked graves are present within a few meters of the proposed EUL site. It is common for cemeteries of this size and age to have unmarked graves that exist outside the marked cemetery boundaries. Such unmarked graves may be present within the proposed EUL site. As stated in the *Mississippi Standards for Archaeological Practices* (MDAH 2019), the NHPA considers a cemetery that "derives its primary significance from graves of persons of

transcendent importance, from age, from distinctive design features, or from association with historic events" to be potentially eligible for inclusion in the NRHP.

Final

In April 2024, the MSU CIA completed a Phase I cultural resources survey of the APE, under an MSU RTC contract. During that survey, MSU CIA also conducted a ground penetrating radar (GPR) investigation. The survey did not identify any intact archaeological deposits in the APE of the undertaking (MSU CIA 2024). Only two artifacts of note, a small piece of whiteware with an unidentifiable red transfer-print design and a military button, were found. Both artifacts came from disturbed contexts, indicating that they did not come from intact archaeological deposits.

No Native American Tribal resources were recorded during survey.

Additionally, the GPR investigation did not indicate that the Old Biloxi Cemetery extends into the proposed EUL site.

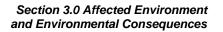
Based on these findings, MSU CIA recommended no further research is required for cultural resources within the APE. On June 10, 2024, MSU CIA, on behalf of MSU RTC and the DAF, provided the draft survey report to MDAH for concurrence and comment. On July 3, 2024, MDAH provided comments on the draft report. On July 10, 2024, MSU CIA submitted a revised report addressing MDAH comments. On August 9, 2024, MDAH provided further comments, and, on the same day, MSU CIA submitted the report with additional revisions. In a September 11, 2024, letter to MSU CIA, MDAH concurred with the survey report that no resources eligible for listing in the NRHP were identified within the project area or are likely to be affected by the project and stated it had no objection to the proposed undertaking (see Appendix A).

Also on June 10, 2024, the DAF provided the draft survey report to the four affiliated Tribes for concurrence and comment. On July 10, 2024, the Choctaw Nation of Oklahoma responded that they concur with the findings in the report. On August 1, 2024, the DAF provided the Tribes with the revised report along with the NOA of the Draft EA and Draft FONSI. On September 5, 2024, the Choctaw Nation of Oklahoma stated no further comments on the project and concurred with the DAF's finding that no historic properties would be affected. The Choctaw Nation of Oklahoma requested, however, that work be stopped and their office contacted immediately if Native American artifacts or human remains are encountered.

The DAF provided the final report to the Tribes in September 2024.

#### 3.8.1.3 Concerns of Native American Tribes

In 1995, a Legacy Study was conducted at Keesler AFB that determined no prehistoric or historic Native American archaeological or sacred sites are present on Keesler AFB (Keesler AFB 2022). During preparation of the 2013 cultural resources management plan (CRMP), which provides the current data on known cultural resources on the base, Keesler AFB contacted four federally recognized Native American Tribes known to have a historical connection to the land on the base—the Choctaw Nation of Oklahoma, Jena Band of Choctaw Indians, Mississippi Band of Choctaw Indians, and Tunica-Biloxi Tribe of Louisiana—to meet the intent of the American Indian Religious Freedom Act of 1978 and NAGPRA to identify any concerns the Tribes might have about resources of religious or cultural importance located on the installation. No Native American sacred sites or resources were identified (or have since been identified as of the time this EA was being prepared).



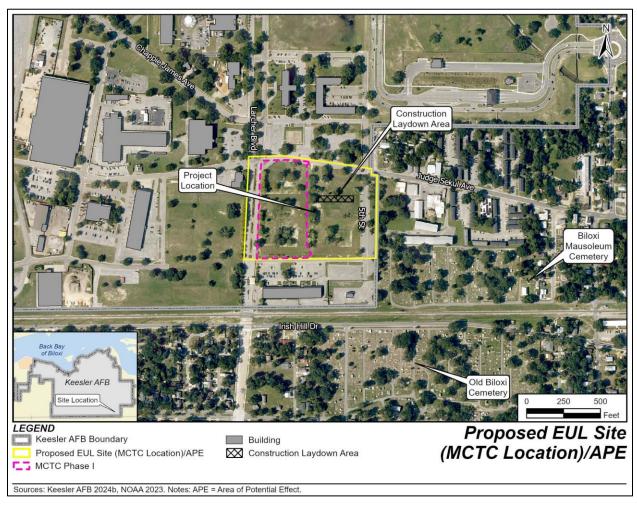


Figure 3-7. Proposed EUL Site and APE.

# 3.8.2 Environmental Consequences

# 3.8.2.1 Alternative 1, Larcher Boulevard-White Avenue Access

Alternative 1 is not anticipated to have any effect on cultural resources.

The DAF initiated the NHPA Section 106 consultation process on May 3, 2024, with MDAH and four federally recognized Tribes affiliated with the installation—the Choctaw Nation of Oklahoma, Jena Band of Choctaw Indians, Mississippi Band of Choctaw Indians, and Tunica-Biloxi Tribe of Louisiana.

On June 5, 2024, MDAH responded that there would be no adverse effects on archaeological resources, provided Phase I cultural resources survey results are negative (MDAH 2024b). In a September 11, 2024, letter to MSU CIA, MDAH concurred with the survey report that no resources eligible for listing in the NRHP were identified within the project area or are likely to be affected by the project and stated it had no objection to the proposed undertaking (see Appendix A).

The Choctaw Nation of Oklahoma responded, concurring with the DAF assessment that no historic properties would be affected by the proposed undertaking and requesting that work be

stopped and their office contacted immediately if Native American artifacts or human remains are encountered (see Appendix A).

The Phase I cultural resources survey did not identify any intact archaeological deposits in the APE of the undertaking (MSU CIA 2024). No Native American tribal resources were recorded during survey. Additionally, the GPR investigation did not indicate that the Old Biloxi Cemetery extends into the proposed EUL site. MDAH concurred with the survey report that no resources eligible for listing in the NRHP were identified within the project area or are likely to be affected by the project and stated it had no objection to the proposed undertaking. Furthermore, there are no historic sites or structures within the viewshed of the site. Therefore, no effects on cultural resources are anticipated under Alternative 1.

Additionally, the DAF is coordinating with MDAH to establish a Memorandum of Understanding (MOU) to curate with MDAH the artifacts that may result from Keesler AFB's archaeological surveys. The DAF will ensure the two artifacts of note from MSU CIA's Phase I cultural resources survey are curated with MDAH, per pending MOU (Lanier 2024b).

According to the Keesler AFB CRMP contingency plan for archaeological discoveries, if an archaeological resource was discovered during excavation or construction, activity in the area would be ceased immediately and a reasonable effort would be made to protect the discovered items. The construction manager would contact the base civil engineer and the Keesler AFB cultural resources manager, who would in turn contact the SHPO / MDAH and the Native American Tribes known to have a historical connection to the land on the base as well as other appropriate individuals and agencies (Keesler AFB 2022a).

# 3.8.2.2 Alternative 2, Judge Sekul Avenue Access

The effects of implementing Alternative 2 would be the same as those of implementing Alternative 1. The same procedures would be followed in the event of an inadvertent discovery.

# 3.8.2.3 No Action Alternative

No effects on cultural resources would result under the No Action Alternative. The DAF would not enter into the 50-year EUL with MSU RTC, the MCTC would not be constructed, and no changes to the site would occur.

# 3.9 Hazardous Materials and Hazardous Wastes

The proposed EUL site and the MCTC are the ROI for hazardous materials and hazardous wastes. Effects from hazardous materials and hazardous wastes would be considered significant if the Proposed Action resulted in substantial risks to human health or safety, such as direct human exposure to or a substantial increase in an environmental contamination.

# 3.9.1 Affected Environment

Hazardous materials are used throughout Keesler AFB for various routine functions, including shop operations and maintenance; ground support equipment maintenance; and facilities maintenance and repair. Sources of these materials may include electrical components; heating and cooling systems; generators; storage tanks; chemical pest control; and petroleum, oils, and lubricants (POL) (e.g., fuels, grease, lubricating oil, solvents, and coolants).

Keesler AFB has a Hazardous Waste Management Plan that guides management of hazardous waste on-base. Under these guidelines, all individuals who process hazardous waste must complete an initial training program for hazardous waste, followed by annual refresher training.

In 2021, Keesler AFB prepared an environmental baseline survey (EBS) of the proposed EUL site. The 2021 EBS was recertified and published in November 2023, following visual site inspections (VSIs) conducted from November 2021 through November 2023 (AFCEC 2023). The records search, VSI, and interviews provided no evidence of the release or improper storage of hazardous substances at or on the proposed EUL site. There also was no evidence of hazardous or petroleum waste being generated, stored, or disposed of on the site.

Final

# 3.9.2 Environmental Consequences

#### 3.9.2.1 Alternative 1, Larcher Boulevard-White Avenue Access

Alternative 1 would have short-term, less-than-significant adverse effects from the use of hazardous materials and generation of hazardous wastes. Short-term effects would be realized by hazardous materials used or hazardous wastes generated during construction activities. While the use of hazardous materials and generation of hazardous wastes would occur at the construction areas, the increase in hazardous materials and hazardous wastes would be limited and temporary. General construction activities involve hazardous materials such as POLs, batteries, and pesticides for site maintenance. Use of hazardous materials and management of hazardous wastes would involve minor risk of spills and human exposure; however, MSU RTC or construction contractors would minimize those risks by complying with established management plans for hazardous materials and wastes, and spill prevention and response. Construction BMPs would be implemented at the site, including personnel safety training, proper storage of and signage of containers, routine inventory, and readily available Safety Data Sheets (SDSs) for all hazardous materials used on-site. In addition, equipment would receive regular maintenance and vehicles would use drip pans when stationary to prevent contamination from leaks.

Contractors on-site would comply with local, state, and federal regulations for the use, handling, and disposal of hazardous materials and hazardous wastes. The construction site would have a designated Health and Safety Officer on-site to ensure compliance with applicable regulations and the Health and Safety Plan (HASP). The HASP is a site-specific document required by the Occupational Safety and Health Administration that details items such as job hazard analysis, employee training, required personal protective equipment (PPE), exposure monitoring, and contamination response for the site. A printed copy would be kept at the site for reference and would be updated if changes occur.

Any hazardous material used or hazardous wastes generated through the operation and maintenance of the MCTC facility would be processed appropriately in accordance with federal and local regulations.

# 3.9.2.2 Alternative 2, Judge Sekul Avenue Access

The effects of implementing Alternative 2 would be the same as those of implementing Alternative 1.

#### 3.9.2.3 No Action Alternative

Under the No Action Alternative, there would be no effects on hazardous materials usage or hazardous wastes management. The DAF would not enter into the 50-year EUL with MSU RTC, the MCTC would not be constructed, and no changes to the site would occur.

# 3.10 Infrastructure and Utilities

The installation and the immediate surrounding communities of City of Biloxi are the ROI for infrastructure and utilities. Effects would be considered significant if the Proposed Action impaired service to the installation and local communities.

## 3.10.1 Affected Environment

Infrastructure and utilities include basic resources and services required to support planned construction and operations and the continued operation of existing facilities. For the purposes of this EA, "infrastructure" is defined as potable water supply, energy, central heating and cooling, communications, sanitary sewer, stormwater systems, and solid waste.

Access to City of Biloxi utility services, including water, sewer, electrical, and communications systems, are available near the northeast corner of the proposed MCTC at the junction of L Street and Judge Sekul Avenue (Altsman 2024b, personal communication).

#### 3.10.1.1 Potable Water Supply System

The City of Biloxi maintains its own potable water system. The principal source of drinking water for the city is groundwater from the Miocene aquifer system. The potable water system includes a network of 13 active water supply wells with production capacities of 346–1,237 gallons per minute (gpm). The total well capacity is 11,338 gpm, total elevated storage is 2,750,000 gallons, and the design capacity is 22,676 gpm. The total average water use is 116,893,000 gallons per month. Access to an existing 8-inch water main is located near the northeast corner of the proposed EUL site (Altsman 2024b, personal communication).

## 3.10.1.2 Energy Systems

The proposed MCTC facility would use natural gas and electricity supplied from private power companies. Natural gas is purchased from Center Point Energy and is distributed to the City of Biloxi through a 14-mile long, welded steel, high-pressure main from Gulfport. Natural gas service lines are located near the proposed MCTC.

The proposed MCTC would receive electricity from Mississippi Power, which serves the peninsula and provides power generation for the entire Mississippi Gulf Coast. An underground 8-megawatt (-MW) electrical service line is located near the northeast corner of the proposed MCTC.

#### 3.10.1.3 Central Heating and Cooling

The proposed MCTC would use an independent heating and cooling system. A chilled water system associated with the Keesler AFB system, however, is located at the proposed EUL site, and it will be kept intact for use by adjacent Keesler AFB properties but would not be used by the proposed MCTC.

#### 3.10.1.4 Communications System

Phone service is provided to the City of Biloxi by AT&T. The communication system includes telephone feeder cable, fiber optic lines, and cable television. Underground telephone lines are located near the northeast corner of the proposed MCTC.

#### 3.10.1.5 Sanitary Sewer System

Sanitary sewer service for the proposed MCTC would be provided by the City of Biloxi. Sewer service lines are maintained by the City and connect to large transmission lines maintained by

the Harrison County Utility Authority, which operates wastewater treatment plants in the County. Sanitary wastewater from the City of Biloxi is pumped to the Keegan Bayou Wastewater Treatment Plant (with treatment capacity of 8.5 million gallons per day [mgd]) and West Biloxi Sewage Treatment Plant (with treatment capacity of 11 mgd). The sanitary sewer facilities have adequate capacity to meet future demands (City of Biloxi 2009). An 8-inch sewer line is accessible near the northeast corner of the proposed MCTC.

Final

#### 3.10.1.6 Stormwater System

Stormwater from the proposed EUL site would be within easterly flowing MS4 drainages that discharge to surface water through Outfall 6. The proposed MCTC facility would tie-in to an existing Keesler AFB 48-inch stormwater main. The stormwater drainage system consists of open channels and covered drainage culverts. The main base has nearly 500,000 linear feet of concrete storm drainage pipe (Keesler AFB 2015a).

Stormwater drainage within the base is divided into 10 drainage areas, the majority of which encompass small residential or commercial areas not associated with industrial activities. These drainage areas discharge to the Back Bay of Biloxi through 11 outfalls located on the base, as does most of the stormwater drainage from Keesler AFB. A portion of the base stormwater, however, flows south through the City of Biloxi's storm drainage system to the Mississippi Sound (CEMML 2019).

#### 3.10.1.7 Solid Waste Management

Harrison County Utility Authority contractors provide solid waste pickup service to the City of Biloxi. Disposal of construction debris for a specific project are processed by the contractor through the project specifications. Debris is removed from the site and hauled off the installation in accordance with the general provisions of the project specifications and is included in the cost of the project.

# 3.10.2 Environmental Consequences

# 3.10.2.1 Alternative 1, Larcher Boulevard-White Avenue Access

The proposed MCTC facility would be connected to utility services from the City of Biloxi, except for stormwater drainage, for which it would be connected to the Keesler AFB drainage system.

Under Alternative 1, demand from construction activities would result in negligible and shortterm effects on infrastructure and utilities. The City of Biloxi infrastructure and utilities have sufficient capacity to process demands during construction, which are expected to be low. During construction, electricity would likely be provided by portable generators and portable toilets would be used for sanitary waste. Water would be used during construction, but there is sufficient available capacity. Natural gas would not be required.

Utilities for the MCTC facility would be tied into existing City of Biloxi service lines at the junction of L Street and Judge Sekul Avenue located northeast of the proposed EUL site. During construction, water, sewer, electric, and communications lines would be installed within a single corridor between the proposed MCTC and the tie-in area. The proposed MCTC would use an independent, newly installed heating and cooling system, and there would be no effects on Keesler AFB's existing chilled water system. In addition, stormwater drainage laterals from the proposed MCTC would be installed and tied in with Keesler AFB's existing 48-inch stormwater main. As described in Section 3.6, approved construction BMPs, as required in the CGP,

SWPPPs, and erosion control specifications would be installed, to minimize effects on stormwater and surface waters during construction.

The MCTC would use the City of Biloxi's existing infrastructure. Once operational, utilities usage from the MCTC would increase demands on the existing infrastructure. Water, electricity, natural gas, and sanitary sewer demands would increase. The existing infrastructure, however, has sufficient available capacity to meet the increased demand from operation of the proposed MCTC facility (Altsman 2024b, personal communication). Therefore, less-than-significant effects on local utilities would occur from implementing the Proposed Action. Table 3-12 shows available utility capacities compared to the projected utility demands for the MCTC.

Utility Service	Existing Capacity	Baseline Demand	Available Capacity	MCTC Projected Demand
Domestic water (gpm)	22,676	11,655	11,021	150
Sanitary wastewater (gallons per day)	11,000,000ª	1,366,000	9,634,000	17,000
Electrical System (MW)	8 <sup>b</sup>	N/A	N/A	2.25 <sup>d</sup>
Natural gas (cubic feet/year)	С	N/A	N/A	2,4000,000 <sup>e</sup>

#### Table 3-12. Available Utility Capacities Compared to Projected Demands for the MCTC

*Sources*: Keesler AFB 2015a; MSDH 2016; Altsman 2024b, personal communication. *Notes*: N/A = not applicable.

<sup>a</sup> West Biloxi Sewage Treatment Plant (treatment capacity).

<sup>b</sup> The proposed MCTC facility would tie in to an existing 8-MW service line.

<sup>c</sup> Dependent on Center Point Energy contract.

<sup>d</sup> Based on 22.5 kilowatt-hours/square foot, the MCTC facility would be 100,000 SF.

<sup>e</sup> Based on 24 cubic feet/square foot/year.

Increased stormwater generation would be expected from increased impervious surfaces, such as asphalt and concrete used for the building and parking areas, amounting to approximately 3.8 acres. However, facility design would incorporate LID controls to maintain flow rates, flow volumes, and durations present before development, per EISA Section 438 and Air Force Corporate Facilities Standards (AFCEC 2018). Lateral lines from the MCTC and parking lot would tie in to the existing 48-inch stormwater main, which drains to the Back Bay. The Keesler AFB stormwater system has sufficient capacity to process stormwater from the site (Keesler AFB 2015a). Additionally, reduction in infiltration and runoff increase would be similar to or less than the previous development at the site. Therefore, a less-than-significant adverse effect would be expected from increased stormwater.

Construction and operations would generate solid waste requiring collection and disposal by an MSU RTC contractor. Construction activities clearing and grading would generate debris that would be hauled off-site. The disposal of construction-derived wastes would be the responsibility of the construction contractor involved and is not anticipated to adversely impact solid waste collection and disposal services currently provided at Keesler AFB and in the surrounding communities. The construction contractor would be required to verify and document that sufficient landfill capacity exists prior to clearing activities. As discussed in Section 3.14, *Sustainability and Greening*, MSU RTC, following Institutions of Higher Learning Sustainability Policy, would seek opportunities to minimize waste by purchasing items produced from recycled materials and using construction materials.

# 3.10.2.2 Alternative 2, Judge Sekul Avenue Access

Utility demands during construction and operation of Alternative 2 would not be notably different than those of Alternative 1. Therefore, less-than-significant effects are expected from implementing Alternative 2.

#### 3.10.2.3 No Action Alternative

No effects on infrastructure or utilities would be expected under the No Action Alternative. The DAF would not enter into the 50-year EUL with MSU RTC, the MCTC would not be constructed, and the demand for utility services would remain the same.

# 3.11 Transportation and Traffic

The roads on the installation and roads providing access to the installation are the ROI for transportation and traffic. Effects would be considered significant if the Proposed Action created a safety hazard for motorists, bicyclists, or pedestrians; caused a reduction by more than two levels of service (LOSs) at roads and intersections within the ROI; substantially degraded traffic flow during peak hours; or substantially exceeded road capacity and design.

#### 3.11.1 Affected Environment

Transportation systems near Keesler AFB comprise mainly road and street networks and pedestrian walkways. Regional access is provided by I-110 (State Route 15), which connects to I-10 north of Biloxi and provides east-west access to other locations in Mississippi and other states (Figure 3-8).



Figure 3-8. Major Roadways.

**Traffic.** The average annual daily traffic (AADT) is the average number of vehicles traveling along a roadway each day. A LOS is a measure of the operational conditions on a roadway or at an intersection. LOS ranges from A to F, with "A" representing the best operating conditions (free flow, little delay) and "F" the worst conditions (congestion, long delays). LOSs A, B, and C are typically considered good operating conditions. Table 3-13 summarizes the routes near the proposed EUL site and in the area, their AADT, and their estimated existing LOSs. Notably, all nearby intersections operate at a LOS of C or better and are not congested during the peak traffic periods.

Estimated Existing LOS <sup>a</sup>	
A-B	
В	
В	
В	
A-C	
B-C	
A	
<b>AADT</b> <sup>b</sup>	
8,700	
5,600	
2,000	
4,000	
3,600	

Sources: (a)Gannett Fleming 2020; (b) MDOT 2024.

*Air, Rail, and Public Transportation.* Keesler AFB has an airstrip for official DAF use only (AirNav 2022b). The closest international airport, Gulfport-Biloxi International Airport, is 9 miles away and has 156 operations per day (AirNav 2022a). The closest Amtrak rail station is 53 miles away in Picayune, MS (Amtrak 2022). A CSX railroad line separates the Larcher Boulevard-White Avenue Gate from Irish Hill Drive. Coast Transit Authority offers bus transportation to designated locations throughout Harrison County. Route 34 (Blue Route) travels from Gulfport to Biloxi and has stops at the Veterans Administration building near the Pass Road Gate, the Department of Public Safety building near the Division Street Gate, and near the Larcher Boulevard-White Avenue Gate on the southern side of Irish Hill Drive. Service is offered Monday through Saturday from 5:09 a.m. to 7:24 p.m. with a reduced schedule on Sundays (CTA 2021).

# 3.11.2 Environmental Consequences

Alternatives 1 and 2 both would have short- and long-term, less-than-significant effects on transportation and traffic. The effects would be caused by additional vehicles on nearby roadways during both construction and operation of the MCTC facility. Neither alternative would have an appreciable effect on air, rail, or public transportation. The City of Biloxi does not require a traffic study for this project (Creel 2024, personal communication).

# 3.11.2.1 Alternative 1, Larcher Boulevard-White Avenue Access

Alternative 1 would have long-term, less-than-significant effects on transportation and traffic. These effects would be caused by additional vehicles trips on nearby roadways during the construction and operation of the MCTC facility.

Final

Construction activities would have short-term, less-than-significant effects on transportation and traffic primarily resulting from construction traffic taking Judge Sekul Avenue to the proposed EUL site. The effects would be temporary and end with the construction phase. Although the effects would be less than significant, construction vehicles would be, when practicable, scheduled so as not to conflict with other off-base traffic and staging areas would be located to minimize traffic effects. All construction vehicles would be equipped with backing alarms, two-way radios, and "Slow Moving Vehicle" signs, as appropriate.

Operation of the MCTC facility would have long-term, less-than-significant effects on transportation and traffic. The Larcher Boulevard-White Avenue Gate would be used by all traffic to access the MCTC. Keesler AFB personnel and students would be able to walk to and from the MCTC.

The MSU Cyber Range would have approximately 300 students per year for Cyber Range training from outside of Keesler AFB, and an additional 300 participants per year for at least two multiday symposia. Approximately 33 percent of these students would travel from outside the four coastal counties of Mississippi. Cyber Range training sessions would have a class size of 30 and there would be about 10 permanent university employees working at the MCTC. There would be about 40 new vehicles per day accessing the facility, each making one to two trips per day, with as many as 160 vehicles accessing the facility for one symposium. Therefore, traffic on Larcher Boulevard-White Avenue would marginally increase, particularly during symposia. These increases, however, would not appreciably change the overall number of vehicles or the LOS on nearby roadways and intersections, as they were designed for much higher volumes of traffic and would continue to function at or below capacity.

There would be no additional vehicles or traffic at the Bayview Avenue, Division Street, Meadows Drive, or Pass Road gates from the operation of the MCTC.

The proximity of the White Avenue bus stop to the Larcher Boulevard-White Avenue Gate may slightly increase the number of bus riders in this area. In addition, periodic trains on the nearby rail line may cause occasional traffic delays for individuals using that gate.

Two-hundred and seventy-one parking spaces would be built adjacent to the facility and would be adequate for the anticipated daily and symposium parking requirements. Additionally, approximately 83 overflow parking spaces exist on the east side of the property. The base does not currently use the parking spots. The City of Biloxi determined that parking requirements per the City's Land Development Ordinance would not be applicable to the project because the proposed EUL site would be on leased Keesler AFB property (Altsman 2024c, personal communication).

#### 3.11.2.2 Alternative 2, Judge Sekul Avenue Access

Alternative 2 would have short- and long-term, less-than-significant effects on transportation and traffic. Short-term effects on traffic resulting from construction would be the same as for Alternative 1.

Long-term effects on traffic resulting from operation of the MCTC would be similar to those under Alternative 1; however, the Judge Sekul Avenue Gate would be used by all traffic to

access the MCTC instead of the Larcher Boulevard-White Avenue Gate. Both the day-to-day and symposium traffic would be similar to Alternative 1, and increases would not appreciably change the overall number of vehicles or the LOS on nearby roadways and intersections, as they were designed for much higher volumes of traffic and would continue to function at or below capacity. Effects on public transit and parking would be the same as under Alternative 1.

Long-term effects would result from increased AADT; however, the Judge Sekul Avenue Gate has historically served as an alternative option when other gates on-base were closed for improvements (Keesler AFB 2024e) and it is equipped to process the traffic increase that would result from this project.

#### 3.11.2.3 No Action Alternative

Under the No Action Alternative, the DAF would not enter into the 50-year EUL with MSU RTC and the MCTC would not be constructed. There would be no effects because the traffic and transportation network would remain unchanged.

# 3.12 Safety and Occupational Health

Keesler AFB and surrounding communities are the ROI for safety and occupational health. Significant effects would occur if the Proposed Action posed a serious threat of harm to anyone or created an uncontrolled hazard to health, safety, or property.

# 3.12.1 Affected Environment

Construction jobsite safety and the prevention of accidents is an ongoing activity on any DAF jobsite. All contractors performing construction activities are responsible for complying with DAF safety and OSHA regulations and are required to conduct construction activities in a manner that poses no undue risk to workers or other personnel. Industrial hygiene programs address exposure to hazardous materials and hazardous wastes, use of PPE, and use and availability of material SDSs. Industrial hygiene is the responsibility of contractors, as applicable. Contractor responsibilities are to review potentially hazardous workplaces; monitor exposure to workplace chemicals (e.g., hazardous materials and hazardous wastes), physical stressors (e.g., noise propagation), and biological agents (e.g., infectious waste); recommend and evaluate controls (e.g., ventilation and respirators); ensure personnel are properly protected or unexposed; and ensure a medical surveillance program is in place to perform occupational health physicals for workers subjected to any accidental chemical exposures or engaged in hazardous waste work.

#### 3.12.2 Environmental Consequences

#### 3.12.2.1 Alternative 1, Larcher Boulevard-White Avenue Access

Short-term, less-than significant adverse effects on safety and occupational health would be expected from implementing Alternative 1.

MSU RTC-contracted construction workers and equipment operators would be exposed to risks associated with construction and equipment maintenance activities; however, those risks would be minimized using established industry-accepted safety practices and standard operating procedures (SOPs). Additionally, the proposed EUL site would be restricted from the rest of the base during construction; the construction contractors would not interact with base traffic or personnel.

Similarly, short-term, less-than-significant adverse effects on safety and occupational health would be expected to result from construction traffic. As discussed in Section 3.11.2.1,

construction traffic would be restricted to Judge Sekul Avenue Gate. All construction vehicles would be equipped with appropriate safety measures. Traffic-related safety and occupational health effects would be temporary and end with the construction phase.

No long-term effects on safety and occupational health are anticipated. MSU RTC-contracted workers would be exposed to risks with associated operational activities such as facility maintenance activities. Additionally, students and visitors would be exposed to risks with associated classroom activities such those associated with computer hardware maintenance. However, those risks would be minimized using established industry-accepted safety practices and SOPs.

# 3.12.2.2 Alternative 2, Judge Sekul Avenue Access

Under Alternative 2, safety and occupational health effects associated with construction activities and facility operations would be similar to those under Alternative 1.

Similar to Alternative 1, no long-term effects on safety and occupational health would be expected. Under Alternative 2, all traffic would use the Judge Sekul Avenue Gate to access the MCTC instead of the Larch Boulevard-White Avenue Gate. Same as under Alternative 1,

#### 3.12.2.3 No Action Alternative

Under the No Action Alternative, the DAF would not enter into the 50-year EUL with MSU RTC and the MCTC would not be constructed. There would be no safety or occupational health effects as use of the site would remain unchanged.

# 3.13 Greenhouse Gas Emissions and Climate Change

The GHG ROI is a global effect. The analysis for this action was reduced to only large facilities in the State of Mississippi, Harrison, and all surrounding counties. A gross comparison analysis was completed for the Proposed Action based on a percentage of the total contribution to GHG in the ROI.

Greenhouse gases (GHGs) are gases in the atmosphere with the ability to affect the Earth's atmospheric temperature through physical processes involving sunlight and thermal energy. Natural processes such as evaporation, decomposition of organic matter, wildfires, and volcanic activity are responsible for most of the GHGs. Natural processes such as evaporation, decomposition of organic matter, wildfires, and volcanic activity also add GHGs to the atmosphere. Human activities that involve the combustion of fossil fuels (e.g., gasoline, diesel, oil, coal, and natural gas) and farming, however, also have added substantial amounts of GHGs to the atmosphere over time, and it is these additional GHGs that have changed the overall makeup of the atmosphere, leading to what is known as the "greenhouse effect" and climate change.

EO 14008 outlines policies to reduce GHG emissions and to bolster resilience to the effects of climate change. In January 2023, CEQ issued its interim guidance to assist agencies in analyzing GHG and climate change effects of their proposed actions under NEPA, *National Environmental Policy Act Guidance on Consideration of Greenhouse Gas Emissions and Climate Change* (CEQ 2023). When considering GHG emissions and their significance, agencies should use appropriate tools and methodologies for quantifying GHG emissions and comparing GHG quantities across alternative scenarios. The CEQ guidance specifically recommends that federal agencies quantify GHG emissions in NEPA assessments and review federal actions in the context of future climate scenarios and resiliency.

In addition, EO 13990 provides it is essential that federal agencies to capture the full costs of GHG emissions as accurately as possible, including taking global damages into account. Doing so facilitates sound decision-making, recognizes the breadth of climate effects, and supports the international leadership of the United States on climate issues. The social cost of carbon (SCC) is an estimate of the monetized damages associated with incremental increases in GHG emissions, such as reduced agricultural productivity, human health effects, property damage from increased flood risk, and the value of ecosystem services.

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# 3.13.1 Affected Environment

GHGs (i.e., carbon dioxide  $[CO_2]$ , methane  $[CH_4]$ , and nitrous oxide  $[N_2O]$ ) are components of the atmosphere that trap heat near the surface of the Earth and contribute to climate change. Most GHGs occur naturally in the atmosphere but increases in their concentration result from human activities such as burning fossil fuels. Global temperatures are expected to continue to rise as human activities continue to add GHGs to the atmosphere. Mississippi is in the Southeast climate region of the United States, where the effects of changing climate are being experienced through increased flooding, warming temperatures, and growing wildfire risk (Carter et al. 2018).

The City of Biloxi has an average high temperature of 90 degrees Fahrenheit (°F) in the hottest month of July and an average low temperature of 43 °F in the coldest month of January. Biloxi has an average annual precipitation of 64.83 inches per year. The wettest month of the year is July, with an average rainfall of 7.13 inches (U.S. Climate Data 2022). Due to its location on the on the Gulf of Mexico Gulf Coast, Keesler AFB and its neighboring communities experience catastrophic weather events. The storm surge line from 2004 Hurricane Katrina reached close to the northern area of the proposed EUL site (AETC 2006).

The DAF Climate Campaign Plan implements a Climate Action Plan, which defines goals to preserve a more resilient, combat-credible force. The plan outlines three major priorities: (1) maintaining air and space dominance in the face of climate risks; (2) making climate-informed decisions; and (3) optimizing energy use and pursuing alternate energy sources. The plan also establishes a goal for DAF installations to have net zero emissions by fiscal year 2046and reduce 2008 emissions by half by fiscal year 2033 (DAF 2023).

# 3.13.2 Environmental Consequences

On January 9, 2023, CEQ issued interim guidance to assist federal agencies in analyzing the GHG and climate change effects of their proposed actions under NEPA (88 FR 1196). The CEQ guidance recommends that agencies quantify the reasonably foreseeable direct and indirect gross GHG emissions increases and reductions for the proposed action, no action alternative, and any reasonable alternatives over the action's projected lifetime, using reasonably available information and data. These gross emissions should be calculated individually by GHG and aggregated in terms of total carbon dioxide equivalent (CO<sub>2</sub>e) by factoring each pollutant's global warming potential. The CEQ guidance proposes to advise federal agencies to consider, in scoping their NEPA analysis, whether analysis of the direct and indirect GHG emissions from their proposed actions might provide meaningful information to decision-makers and the public. The guidance goes on to state that "they [agencies] should apply the best available estimates of SC-GHG to the incremental metric tons of each individual GHG emission," referring to the *Technical Support Document: Social Cost of Carbon, Methane, and Nitrous Oxide Interim Estimates under Executive Order 13990* released by the Interagency Working Group on Social Cost of Greenhouse Gases (IWG-SCGHG 2021).

DAF's GHG & Climate Change Assessment Guide details how installations assess GHGs and climate change based on the 2023 CEQ interim guidance. They have adopted 75,000 tons per year (tpy) of CO2e (or 68,039 metric ton per year, mtpy) as an indicator or "threshold of insignificance" for NEPA air quality impacts in all areas. Therefore, actions with worst-case year GHG emissions less than 75,000 tpy are considered insignificant and need no further analysis (DAF 2023).

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The DAF also provides installations with tools to navigate the complexities of EPA's Mandatory Greenhouse Gas Reporting Rule (MGHGRR) and the GHG Tailoring Rule. The document describes, in general terms, the requirements of the MGHGRR and the application of the Tailoring Rule as it pertains to GHGs (i.e., NSR and Title V permitting requirements for GHGs). Keesler AFB GHG emissions are below 25,000 mtpy CO<sub>2</sub>e from all stationary fuel combustion sources. Therefore, Keesler AFB is not required to report GHG emissions (DAF 2019).

The DAF's ACAM also was applied to Alternative 1 to estimate construction-related GHG emissions in this EA. The ACAM model accommodates all these activities, provides a consistent method for evaluating potential emissions, and meets the requirements of the CEQ interim guidance on analyzing GHG and climate change effects of agencies' proposed actions under NEPA (88 FR 1196).

# 3.13.2.1 Alternative 1, Larcher Boulevard-White Avenue Access

Short- and long-term, less-than-significant effects would be expected from construction and operations of the facility. Estimated GHG emissions generated by the MCTC construction activities would be 1,120 mtpy, below the insignificance indicator for the annual threshold of 75,000 tpy of CO2e (or 68,039 mtpy). Operational GHG emissions from an estimated 25-year life cycle of the proposed MCTC building would be approximately 11,400 mtpy, considerably less than the DAF's insignificance indicator of the annual threshold of 75,000 tpy of CO2e (or 68,039 mtpy) (Table 3-14). These GHG emissions were compared with large facilities in the State of Mississippi, Harrison County, and surrounding counties. In 2022, 107 facilities in the County reported nearly 42 million metric tons (USEPA 2022a). GHG emissions associated with the Alternative 1's operation would be less than 0.00001 percent of the 2022 GHG emissions for Harrison County.

Table 3-14 summarizes the Alternative 1 GHG emissions for construction and operations. Construction was assumed to occur in a single year, the worst-case projected construction timeline of the action. All construction activities were assumed to be compressed into a 12month period. Small changes in the MCTC's site and final design and moderate changes in quantity and types of equipment used would not substantially change the emission estimates. Additionally, construction GHG emissions during construction could be reduced by implementing BMPs such as using construction equipment and vehicles with low-emission engines, scheduling to reduce vehicle trips, ensuring proper equipment maintenance, offering and promoting alternative transportation options for construction workers, and implementing policies to minimize engine idling for construction equipment.

Year	CO <sub>2</sub>	CH₄	N₂O	CO <sub>2</sub> e
Construction	721	0.03	0.02	729
Operations	389	0.007	0.007	391

# Table 3-14. Alternative 1-Related Annual GHG Emissions (mtpy)

The SCC is an estimate of the monetized damages associated with incremental increases in GHG emissions, such as reduced agricultural productivity, human health effects, property damage from increased flood risk, and the value of ecosystem services. GHG emissions of the proposed MCTC were applied to a 3 percent annual discount rate of the SCC. Annual rates of the CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O from the *Technical Support Document: Social Cost of Carbon, Methane, and Nitrous Oxide Interim Estimates under Executive Order 13990* were applied to the emissions in Table 3-14. Applying direct emissions from construction, the SCC for the Alternative 1 would be roughly \$56,000. Applying these per-metric ton costs to Alternative 1's projected GHG emissions over a 25-year life cycle yields, the SCC would be roughly \$805,000.

# 3.13.2.2 Alternative 2, Judge Sekul Avenue Access

Short- and long-term, less-than-significant effects on GHG emissions would be expected from implementing the Alternative 2, similar to those from implementing Alternative 1.

#### 3.13.2.3 No Action Alternative

The No Action Alternative would have no effects on GHG emissions and climate change. The DAF would not enter into the 50-year EUL with MSU RTC and the MCTC would not be constructed.

# 3.14 Sustainability and Greening

The MSU RTC facility and specific procedures for operations, construction, landscaping, procurement, recycling, and transportation are the ROI for sustainability and greening. Those procedures are outlined Institutions of Higher Learning Sustainability Policy, which MSU RTC follows. Sustainability and greening would be significantly affected if implementing the Proposed Action would reduce the sustainability of resources, ecosystems, or human communities.

Federal regulations and EOs require federal agencies to incorporate sustainability and greening practices into construction projects. EO 14057 is intended to catalyze private sector investment and expand the economy and American industry. Implementing the EO will reduce emissions across federal operations by transforming how the federal government builds, buys, and manages electricity, vehicles, and buildings to be clean and sustainable.

MSU also follows the Institutions of Higher Learning Sustainability Policy, which outlines specific procedures for facility operations, landscaping, recycling, and transportation. Specifically, all new construction must meet energy-efficient goals, follow low maintenance landscape standards, and consider life-cycle costs during procurement (MSU 2019).

# 3.14.1 Affected Environment

The DAF has prioritized making climate-informed decisions, establishing a goal of:

...an established culture of incorporating climate change considerations across our processes, plans, and decisions to build a more climate resilient force while also reducing future climate risk (DAF 2022).

Keesler AFB has incorporated applicable UFC guidance to achieve sustainable buildings, as appropriate for federal operational plan goals and objectives consistent with building a more climate-resilient force.

#### 3.14.2 Environmental Consequences

#### 3.14.2.1 Alternative 1, Larcher Boulevard-White Avenue Access

Short-term, less-than-significant adverse effects would be expected from the construction debris transported to landfills. Opportunities to minimize waste by purchasing items produced from recycled materials and using construction materials that reduce embodied carbon would be sought.

Long-term, negligible effects would be expected from building operations. The new facility would be implemented using sustainable design concepts and MSU RTC's energy-efficient goals. MSU RTC would use products and procurement practices to incorporate sustainability and greening practices consistent with EO 14057, including consideration of the *2020 Guiding Principles for Sustainable Federal Buildings* and the *Federal Building Performance Standard* (CEQ 2022a, 2022b). Optimizing energy performance and protecting and considering building resilience are two of the six guiding principles fundamental in sustainable design practices (CEQ 2020). MSU RTC also would follow the Institutions of Higher Learning Sustainability Policy.

#### 3.14.2.2 Alternative 2, Judge Sekul Avenue Access

The effects of Alternative 2 would be similar to those of Alternative 1. Short-term, less-thansignificant adverse effects would be expected from the construction debris transported to landfills. Long-term, negligible effects would be expected from building operations because the facility would be implemented using sustainable design concepts and MSU RTC's energyefficient goals.

#### 3.14.2.3 No Action Alternative

The No Action Alternative would have no effects on sustainability and greening. The DAF would not enter into the 50-year EUL with MSU RTC and the MCTC would not be constructed.

# 3.15 Socioeconomics

The socioeconomic ROI is a geographic area selected as a basis on which social and economic effects of project alternatives are analyzed. The socioeconomic ROI for this Proposed Action is defined as the Gulfport-Biloxi Metropolitan Statistical Area (MSA), which consists of the following Mississippi Gulf Coast counties: Hancock, Harrison, Jackson, and Stone.

#### 3.15.1 Affected Environment

In this section, socioeconomic indicators are provided for the MSA, with data for Mississippi and the United States presented for comparative purposes.

The MSA is the state's second largest region, with a growing economy and population (TKC 2023). On the basis of population, Harrison and Jackson counties are the second and fifth largest counties in the state, respectively, and Gulfport and Biloxi are the second and fourth largest cities in the state, respectively (Cubit 2024). The MSA economy is driven by defense, shipbuilding, and tourism (beaches and casinos) (TKC 2023).

The MSA's population increased from 416,263 in 2020 to 420,782 in 2022, an increase of about 1 percent (4,519 people). During the same period, Mississippi's population decreased by 0.8 percent and the U.S. population increased by 0.5 percent (USCB 2024a).

The MSA's 2022 labor force was 171,796, which included 164,935 people employed and 6,861 unemployed. The labor force increased by 1 percent (1,716 people) between 2020 and 2022. During the same period, Mississippi's labor force increased by 0.3 percent and the U.S. labor force increased by about 2 percent. The county, state, and national annual unemployment rates declined between 2010 and 2019, increased in 2020 because of the coronavirus disease 2019 pandemic, and then decreased as the economy recovered. Unemployment rates have returned to pre-pandemic levels. As of December 2023, the MSA's unemployment rate was 2.7 percent, Mississippi's rate was 2.6 percent, and the U.S. rate was 3.5 percent (BLS 2024).

The largest MSA industries (on the basis of employment by industry) were government and government enterprises (federal civilian, military, and state and local government); accommodation and food services; retail trade; manufacturing; and construction. Together those industry sectors accounted for almost 60 percent of the MSA's employment. The government was the largest sector, accounting for almost 20 percent of the MSA's total employment, followed by accommodation and food services at about 13 percent (BEA 2023a). Keesler AFB is one of the largest employers in the region, directly employing more than 12,200 military and civilian personnel, accounting for 7 percent of the people employed in the MSA (Keesler AFB 2023b). Keesler AFB had a Fiscal Year 2022 total adjusted economic impact on the region of almost \$1.1 billion (Keesler AFB 2023b).

The MSA's total personal income (TPI) was about \$19.2 billion in 2022, an 11 percent increase from 2020. Mississippi's TPI increased by 8 percent and the U.S. TPI increased by 11 percent during the same period (BEA 2023b). MSA per capita personal income (PCPI) was nearly the same as the state's PCPI and lower than the nation's PCPI. The MSA's 2022 PCPI of \$45,604 was 98 percent of the state PCPI of \$46,370 and 70 percent of the national PCPI of \$65,470 (BEA 2023b).

Keesler AFB has family, unaccompanied, and temporary base housing. Hunt Military Communities manages about 1,000 privatized family housing units in five neighborhoods (KFH 2024; MOS 2024). Four of the neighborhoods are on the west side of the base, and one is about 15 miles northeast of the base in Vancleave in Jackson County. The housing is available to lease by military Active Duty, Guard, Reserve, and retirees and civilians (KFH 2024; MOS 2024). Keesler AFB also has dormitories for unaccompanied personnel and temporary lodging units (MOS 2024).

Off-base, the MSA had an estimated 185,213 housing units as of 2022 (USCB 2022a). About 87 percent (161,467) of the housing units were occupied and 13 percent (23,746) were vacant (USCB 2022a). Of the vacant units, an estimated 5,232 were for rent and 1,708 were for sale (USCB 2022b). The MSA had a homeowner vacancy rate of 1.6 percent, compared to 1.3 percent for Mississippi and 1.1 percent for the United States. The MSA had a rental vacancy rate of 8.8 percent, compared to 8.9 percent for the state and 5.5 percent for the nation (USCB 2022a). The Mississippi Gulf Coast has nearly 13,000 hotel rooms (Red Star Digital 2024).

Keesler AFB does not have primary or secondary schools on-base. The counties in the MSA have 13 public school districts with a 2022–2023 student enrollment of 62,325 (NCES 2024). The districts have a total of 116 schools, with 60 elementary schools, four elementary/middle schools, 17 middle schools, one middle/high school, 17 high schools, eight vocational schools, and nine alternative schools (NCES 2024). Families living on-base have the option of enrolling their children in one of several adjacent public school districts: Gulfport School District in Harrison County, Harrison County School District, Jackson County School District, and Ocean Springs School District in Jackson County (DAF CYES 2023). Families also have the option of private schools and home schooling.

Keesler AFB provides commercial, health and safety, recreational, and other support services to its Air Force and civilian personnel and their families. The base has an automotive services shop, bank and credit union, barber shop and beauty salon, commissary, exchange, food court, post office, and shoppette. Health care is available at the Keesler Medical Center Hospital and dental clinic. The base has its own ambulance service, fire department, and security services. The Air Force offers financial planning, military and family member support, and new parent support programs. On-base recreational facilities include a bowling alley, fitness center, golf course, and marina. The base is adjacent to the Back Bay of Biloxi and less than one-half mile from the Mississippi Gulf Coast beaches. Keesler AFB Child and Youth Services has a Child Development Center that provides daycare for infants to 5-year-olds; an in-home family childcare program for infants to 12-year-olds; before and after-school care, holiday camps, and summer camps for kindergarten through seventh grade; a Youth Program and Services Center with arts and crafts, board games, pool, table tennis, and video games; and Youth Sport and Fitness baseball, flag football, and soccer teams (MOS 2024).

#### 3.15.2 Environmental Consequences

#### 3.15.2.1 Alternative 1, Larcher Boulevard-White Avenue Access

A quantitative estimate of economic effects on the ROI from the Alternative 1 was developed using the Impact Analysis for Planning (IMPLAN) model. IMPLAN is an economic model originally developed in 1976 by the U.S. Forest Service for natural resource planning, but later updated and adapted by other government agencies and private sector analysts to use in economic impact analysis. It is now owned by the IMPLAN Group, LLC. IMPLAN is a regional input-output model derived by using local data combined with national input-output accounts. The model uses the most currently available data obtained from the U.S. Bureau of Economic Analysis, U.S. Bureau of Labor Statistics, U.S. Census Bureau, and other federal and state agencies. IMPLAN uses trade flow characteristics to trace economic changes in a regional economy arising from fluctuations in the level of activity in one or more identified industry sectors.

IMPLAN estimates direct and indirect economic changes for a defined region. "Direct effects" are the initial production changes or expenditures made by producers and consumers as a result of an activity or policy; "indirect effects" include the secondary effects of business-tobusiness transactions—local industries buying goods and services from other local industries and the tertiary "induced effects" from household spending of labor income (e.g., consumer spending by the workforce for entertainment, food, healthcare, housing, transportation, and so forth). The IMPLAN model estimates changes in regional employment, labor income, value added, and output as a result of a proposed action. "Employment" includes full-time, part-time, and seasonal workers, including wage and salaried employees and proprietors (self-employed individuals). "Labor income" is the sum of all forms of employment income, including employee compensation (wages, salaries, and benefits) and proprietors' income. "Value added" is the difference between an industry's or establishment's total output and the cost of its intermediate inputs. "Output" is the value of industry production, which is equal to revenue less net inventory change (IMPLAN 2024a).

The DAF used the IMPLAN model to estimate the total multiplier effect on the ROI's economy from Alternative 1's construction expenditures, operations jobs, and expenditures by visitors. MSU RTC estimated the construction expenditures would be \$45 million over an approximately 2-year construction period (MSU MCI 2022). The estimated construction cost was divided evenly across the build-out period at \$22.5 million per year and was entered into the IMPLAN

model as the change in industry output for 1 year to construct the MCTC (the IMPLAN model is designed to evaluate on an annual basis). MSU RTC would employ 10 full-time, permanent staff at the MCTC, and that was entered into the IMPLAN model as the change in industry employment to operate the MCTC (McGee 2024a, personal communication). For visitor stays, MSU estimated that about 300 students annually would attend classes at the MCTC and that the university would hold two annual conferences with about 300 attendees per conference (McGee 2024b, personal communication). MSU estimated that one-third of the participants would be visiting from outside the MSA; the average student training class would be 3 days; and the conferences would each be about 5 days (McGee 2024c, personal communication). The Government Services Administration 2024 per diem rates for Biloxi and Gulfport lodging (\$107 per night), meals (\$54 per day), and incidentals (\$5 per day) were used to estimate visitor expenditures in the MSA (GSA 2024). The magnitude and duration of regional economic effects of the Alternative 1 would differ across the construction, operation, and visitor stays and are discussed separately.

Short-term, less-than-significant beneficial socioeconomic effects would be expected from Alternative 1 construction activity. The benefits would diminish as the project reaches completion. The project is estimated to directly employ about 228 people annually in construction-related industries during the 2-year construction period (Table 3-15). Total annual direct, indirect, and induced employment generated by construction is estimated to be about 294 jobs per year, with direct jobs in the construction sector and indirect and induced jobs being created in sectors such as architectural and engineering and related services, commercial and industrial machinery equipment rental and leasing businesses, food and beverage, health services, retail trade, ready-mix concrete and stone product manufacturing, truck transportation, and wholesale trade. The increase in employment and income would be minor relative to the size of the ROI's economy and workforce. The ROI had 164,935 people employed in 2022, so the total employment of 294 would be a 0.2 percent increase over that baseline. Income would increase by about \$14 million, or 0.07 percent over the ROI 2022 TPI of \$19.2 billion.

Impact Type	Employment	Labor Income	Value Added	Output
Direct effect	228	\$11,121,622	\$12,051,783	\$22,500,000
Indirect effect	24	\$1,252,757	\$2,242,918	\$5,155,232
Induced effect	42	\$1,658,197	\$3,706,280	\$6,643,732
Total effect	294	\$14,032,576	\$18,000,981	\$34,298,964

Table 3-15. IMPLAN Model Output – Annual Construction Effects
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Source: IMPLAN 2024b.

Long-term, negligible beneficial economic effects would be expected from Alternative 1 operations activity. Alternative 1 would create 10 permanent, direct jobs for the operation of the MCTC facility. A total of about 14 jobs (direct, indirect, and induced) would be created by operations activity (Table 3-16). The indirect and induced jobs would be in sectors such as building services, employment services, financial institutions, food and beverage, healthcare, insurance services, real estate services, and retail trade. New jobs would have a long-term beneficial effect on the regional economy, increasing personal income, expenditures at local businesses, and tax revenues. The increase in employment would be negligible relative to the size of the ROI's economy and workforce. The ROI had 164,935 people employed in 2022, so

the total employment of 14 would be a 0.01 percent increase over that baseline. Income would increase by about \$860,000, or 0.004 percent over the ROI 2022 TPI of \$19.2 billion.

Impact Type	Employment	Labor Income	Value Added	Output
Direct effect	10	\$667,867	\$712,765	\$1,206,600
Indirect effect	2	\$95,806	\$178,275	\$398,742
Induced effect	2	\$96,544	\$215,648	\$386,756
Total effect	14	\$860,217	\$1,106,688	\$1,992,098

Source: IMPLAN 2024b.

Long-term, negligible beneficial economic effects would be expected on population, housing, and schools. Alternative 1 would have a negligible increase in population, demand for housing, and the number of students enrolled in public schools. To evaluate the potential maximum effect of the proposed increase in MCTC operations, the analyst assumed that the 10 MCTC employees would move into the MSA from outside the region, representing 10 new households. Using the 2023 U.S. mean household size of 2.51 (USCB 2023), the estimated total increase in population would be about 25 people, a negligible increase of 0.01 percent over the ROI baseline population of 420,782. The incoming personnel would create a negligible increase in demand for housing. Using the 2023 U.S. mean of 0.55 people under age 18 per household (USCB 2023), there would be an estimated increase of about six children in the ROI. This would be a negligible increase (0.01 percent) from the MSA baseline public school enrollment of 62,325 students. The new population would increase tax revenues, including funding for schools.

**Visitors.** Long-term, negligible beneficial economic effects would be expected from visitors attending classes and conferences at the MCTC. The students and conference attendees would increase travel-related demand in the MSA with expenditures on food, gas, lodging, and other incidental expenses and generate tax revenue for the area. A total of about three jobs would be created (Table 3-17). The jobs would be in sectors such as convenience stores and gasoline stations; hotels, motels, and other accommodations; restaurants; and retail stores. The increase in employment would be negligible relative to the size of the ROI's economy and workforce. The ROI had 164,935 people employed in 2022, so the total employment of three would be a 0.002 percent increase over that baseline. Income would increase by about \$101,000, or 0.001 percent over the ROI 2022 TPI of \$19.2 billion.

Impact Type	Employment	Labor Income	Value Added	Output
Direct effect	2	\$69,732	\$135,854	\$250,828
Indirect effect	0.5	\$19,896	\$36,653	\$79,122
Induced effect	0.3	\$11,331	\$25,312	\$45,393
Total effect	3	\$100,959	\$197,819	\$375,343

Source: IMPLAN 2024b.

# 3.15.2.2 Alternative 2, Judge Sekul Avenue Access

Effects would be the same as those for Alternative 1.

# 3.15.2.3 No Action Alternative

Long-term, less-than-significant socioeconomic effects would be expected. Under the No Action Alternative, the DAF would not enter into the 50-year EUL with MSU RTC and the MCTC would not be constructed. The parcel would remain vacant and underutilized. The No Action Alternative would forgo meeting a DAF goal of optimizing the value of its existing real property assets.

# 3.16 Environmental Justice and Protection of Children

Keesler AFB and the immediate surrounding communities are the ROI for environmental justice and protection of children. Environmental justice and protection of children would be significantly affected if implementing an alternative would result in (1) disproportionate and adverse environmental or human health effects or hazards on an identified population of people of color or low-income population, which appreciably exceed those on the general population around the project area; or (2) disproportionately high and adverse environmental health or safety risks to an identified population of children, such as the increase in a child's risk of exposure to an environmental hazard (through contact, ingestion, or inhalation) or the risk of potential substantial harm to the safety of children.

# 3.16.1 Affected Environment

#### 3.16.1.1 Environmental Justice

The intent of environmental justice EOs 12898 and 14096 is to avoid the placement of disproportionate and adverse human health and environmental effects and hazards from federal policies and actions on communities with environmental justice concerns. Such communities can be found in places with a significant proportion of people of color and of people who have low incomes or are affected by persistent poverty. It is noted that EO 12898 and its accompanying guidance uses the terminology "minority populations," but the more recent EO 14096 uses the terminology "people of color," which is used in this analysis.

This environmental justice analysis was conducted using data from EPA's Environmental Justice Screening and Mapping Tool (EJScreen) and the U.S. Census Bureau. EJScreen is a web application developed by EPA to provide a nationally consistent dataset and approach that combines environmental and demographic indicators in maps and reports (USEPA 2023). EJScreen's socioeconomic data source is U.S. Census Bureau's American Community Survey 2021 5-year estimates, using census block groups as the basic geographic unit (USEPA 2023). A "block group" is a statistical subdivision of a census tract, which is a subdivision of a county, and is generally defined to contain between 600 and 3,000 people (USCB 2024b). In EJScreen, EPA defines the "percent people of color" as all people other than non-Hispanic white-alone individuals. The word "alone" in this case indicates that an individual is of a single race, not multiracial (USEPA 2023). EPA defines the "percent low-income" as the percent of the population in households where the household income is less than or equal to twice the federal poverty level (USEPA 2023).

Populations of people of color of the affected area are identified where the percentage is greater than 50 percent or greater than or equal to that of an appropriate unit of geographic analysis (AFCEC 2014; CEQ 1997). The appropriate unit of geographic analysis is called the Community

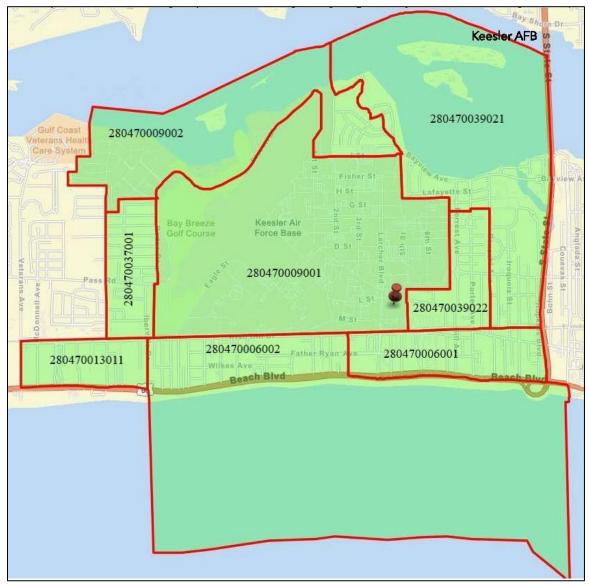
Environmental Assessment

 of MCTC Enhanced Use Lease (UIN 00152)
 and Environmental Consequence

 of Comparison (COC). The COC encompasses the affected area and is the demographic area

used to compare and analyze potential environmental justice effects (AFCEC 2014). For this analysis, the affected area is the census block group where the Proposed Action would be implemented and the adjacent block groups (Figure 3-9), and the COC is Harrison County.

Final



Source: USEPA 2024b.

# Figure 3-9. Map of Census Block Groups.

Low-income populations are identified using poverty data from the U.S. Census Bureau (CEQ 1997), which defined the poverty level for 2021 as an annual income of \$13,788 or less for an individual and \$27,470 or less for a family of four (USCB 2022c). Low-income communities in the affected area are identified where the percentage of people in a census block group who are experiencing low-income is greater than or equal to the COC (AFCEC 2014).

EJScreen reports were produced for the census block group containing the proposed EUL site (block group 280470009001), the adjacent block groups, and Harrison County. Appendix F provides the EJScreen reports. As shown by the data presented in Table 3-18, low-income populations or populations of people of color are identified in all but two of the census block groups.

Location	Percent People of Color	Identified Populations of People of Color Present	Percent Low Income	Identified Low-Income Populations Present
United States	39%		31%	
Mississippi	45%		43%	
COC				
Harrison County	37%		39%	
Census Block Group				
280470006001	36%	No	47%	Yes
280470006002	12%	No	23%	No
280470009001	48%	Yes	0%	No
280470009002	31%	No	10%	No
280470013011	57%	Yes	73%	Yes
280470037001	59%	Yes	38%	No
280470039021	37%	Yes	45%	Yes
280470039022	26%	No	57%	Yes

Source: USEPA 2024b.

*Note:* A block group is determined to have an identified population of people of color if the percentage of people of color is greater than or equal to that of the COC or is greater than 50 percent. A block group is determined to have an identified population of people who have low-income if the percentage of people who have low-income is greater than or equal to that of the COC.

# 3.16.1.2 Protection of Children

EO 13045 seeks to protect children from disproportionately incurring environmental health or safety risks that might arise as a result of federal policies, programs, activities, or standards. It recognizes scientific knowledge that demonstrates children might suffer disproportionately from environmental health and safety risks. Those risks arise because children's bodily systems are not fully developed; children breathe, drink, and eat more in proportion to their body weight than adults; their size and weight might diminish protection from standard safety features; and their behavior patterns might make them more susceptible to accidents than adults.

Children are present on Keesler AFB as residents and visitors (e.g., residing in base family housing, using recreational facilities, and attending events) and in the neighboring residential communities. The DAF takes precaution for child safety through using fencing and signage, limiting access to certain areas, and requiring adult supervision. The base perimeter is secured by a fence with base access limited to the controlled entry gates.

Final

Data from EPA's EJScreen shows the census block group containing the project site (block group 280470009001) has no children because it does not include any family housing (Table 3-19). Census block group 280470009002 has a notably higher percentage of children than the other geographic areas. This block group includes Keesler AFB family housing areas.

No facilities where children would typically be present (e.g., homes, parks, and schools) are at or adjacent to the proposed EUL site. The base housing nearest to the project site is about 1.5 miles to the northwest and is separated from the project site by the airfield. The off-base housing nearest to the project site is less than 1 mile to the east and south. The off-base residential areas are separated from the project site by the installation boundary fence, 5th Street to the east, and railroad tracks and Irish Hill Drive to the south.

Location	Total Population (2021)	Percent People under Age 18	Number of People under Age 18
United States	329,725,481	23%	75,836,861
Mississippi	2,967,023	24%	712,086
COC			
Harrison County	207,382	24%	49,772
Census Block Group	)		
280470006001	846	15%	127
280470006002	595	17%	101
280470009001	2,667	0%	0
280470009002	1,014	35%	355
280470013011	404	22%	89
280470037001	1,444	29%	419
280470039021	848	21%	178
280470039022	1,381	26%	359

# Table 3-19. People Under 18 Years of Age

Source: USEPA 2024b.

Note: The number of people under age 18 was calculated by multiplying the total population by the percent of people under age 18.

# 3.16.2 Environmental Consequences

# 3.16.2.1 Alternative 1, Larcher Boulevard-White Avenue Access

**Environmental Justice.** Implementing Alternative 1 to construct and operate an administrative building on Keesler AFB that would host educational and training services would not result in disproportionately adverse environmental or health effects on low-income or minority populations. The Proposed Action would not result in excluding anyone, denying anyone benefits or opportunities, subjecting anyone to discrimination, and it would not result in the physical or economic displacement of underserved communities affected by persistent poverty and inequality, per EOs 13985 and 14091. The MCTC construction activities would occur on Keesler AFB within secure temporary construction fencing. Construction activities would be required to comply with applicable federal and state air quality, noise, and water quality regulations and established industry-accepted safety practices to protect workers and the general public, and effects would be less than significant. The proposed EUL site is separated

from the off-base community by the installation boundary fence and from on-base family housing by the airfield. The construction activities would have short-term, less-than-significant construction noise effects during the daytime hours. Air quality effects (including GHG costs and emissions under EOs 13990 and 14008; see Section 3.13) during construction would be less than significant, temporary, and localized (e.g., dust during site grading and combustion of diesel fuel and gasoline from construction equipment) and would not exceed the DAF's significance indicators or contribute to a violation of any federal, state, or local air regulation. Required sediment and erosion control BMPs would be implemented during construction to control runoff from the construction site and minimize effects on surface waters. Effects on transportation and traffic would be from construction traffic taking Judge Sekul Avenue to the proposed EUL site. To address effects on traffic and transportation, construction traffic management measures such as routing and scheduling construction activities and vehicles to minimize conflicts with other traffic and strategically locating staging areas would be implemented. Adverse effects from construction on transportation and traffic would be temporary and end with the construction phase, and, with the use of construction traffic management measures, would be short-term and less-than-significant.

In the long term, operation of the MCTC would not result in disproportionately adverse environmental or health effects on low-income or minority populations. The operation of the facility would be similar to that of a university academic building or an office building. Operation of the MCTC facility would have long-term, less-than-significant effects on transportation and traffic and water resources, negligible effects on air quality (including GHG costs and emissions; see Section 3.13) and noise, and no effects on safety.

**Protection of Children.** For the same reasons as discussed for environmental justice, MCTC construction and operation would result in short-term, less-than-significant adverse effects on the protection of children.

Alternative 2, Judge Sekul Avenue Access.

Effects would be the same as those for Alternative 1.

#### 3.16.2.2 No Action Alternative

The DAF would not enter into the 50-year EUL with MSU RTC and the MCTC would not be constructed. No effects would be expected.

# 4.0 CUMULATIVE EFFECTS

Cumulative effects analysis is required to assess effects on the environment that result from the incremental effects of the proposed action when added to the effects of other past, present, and reasonably foreseeable actions that would affect the same resource element(s) at approximately the same time (temporal) and place (geographical) as the Proposed Action, regardless of what entity is implementing the other project(s).

The DAF reviewed other past, present, and reasonably foreseeable actions within the base and identified the following three reasonably foreseeable future projects for cumulative effects review in this EA (Table 4-1). The projects listed in Table 4-1 are in the area of the proposed EUL site and/or could potentially occur during the same time as MCTC construction, which is anticipated to be initiated in early 2025 and completed by early 2026.

Project	Description	Temporal Overlap with Proposed Action	Geographical Overlap with Proposed Action
Project #1, Permanent Fence Relocation	Permanently relocate the current base perimeter fence to close off access onto the base from the Larcher Boulevard-White Avenue and Judge Sekul Avenue gates. The existing guard booth also would be removed as part of the project. The relocated fence would be approximately 1,600 linear feet and would have a secured pedestrian access point to provide on-base Keesler AFB personnel direct access to and from the MCTC.	Potentially	Yes
Project #2, Building 4605 Demolition	Demolish the 25,152-SF Building 4605, the former visitor center for the Larcher Boulevard-White Avenue Gate.	Potentially	Yes
Project #3, Radio Frequency Tower Relocation	Build a new radio frequency tower to replace the current one located at Building 4605. The new location would be immediately adjacent to Building 1101, 81st Communications Squadron (H and 2nd streets). The tower would have a 150-ft-tall antenna.	Potentially	No

# Table 4-1. Cumulative Projects

Sources: Keesler AFB 2024f, 2024g, 2024h.

Similarly, the DAF reviewed major projects in the City of Biloxi to identify any that should be analyzed for cumulative effects in this EA. Based on the locations and status of major public improvement projects as of January 2023, no projects were identified in the vicinity of the Larcher Boulevard-White Avenue and Judge Sekul Avenue gates (City of Biloxi 2023).

Projects #1 and #2 listed in Table 4-1 are in geographic proximity to the proposed EUL site and could occur at the same time as the MCTC construction. Project #3 could occur at the same time as MCTC construction but is not in the same area as the proposed EUL site. Therefore, those projects could contribute to cumulative effects on the resource areas.

# 4.1 Alternative 1, MCTC Access from Larcher Boulevard-White Avenue

Short-term, less-than-significant cumulative effects would be expected from MCTC construction under Alternative 1. No cumulative effects on biological or cultural resources would be expected. Cumulative effects could be expected, however, on the resource areas discussed in this section.

# 4.1.1 Land Use and Visual Resources

No cumulative effects on land use would be expected because land use would continue to be similar to existing development within Keesler AFB and would be consistent with the base's mission. Construction would result in short-term, less-than-significant adverse cumulative visual effects because construction projects are inherently visually unappealing, but the adverse visual effects of construction projects would disappear once a construction project has been completed and an area has been revegetated and landscaped.

# 4.1.2 Air Quality

Short-term, less-than-significant adverse cumulative effects on air quality would be expected. The combined emissions from multiple pieces of construction equipment at multiple construction projects would generate criteria pollutants emissions more than any one of the projects alone. Estimated emissions generated by MCTC construction would be *de minimis* and, therefore, would not contribute significantly to cumulative emissions.

#### 4.1.3 Noise

Short-term, less-than-significant adverse cumulative effects on the noise environment could result. Simultaneous construction projects also would contribute to traffic noise on local roads. Because construction noise is short term and intermittent, the potential cumulative effects on the noise environment would be less than significant.

#### 4.1.4 Earth Resources

No cumulative effects on earth resources would be expected. Individual construction projects would cause ground and soil disturbance at the construction site only, but, cumulatively, each construction project, particularly those on previously undisturbed areas, alters natural soils and can convert previously permeable ground into impermeable surfaces. The soils in areas of the cumulative projects have been previously disturbed. Cumulative effects on surface waters, therefore, would be less than significant.

#### 4.1.5 Water Resources

Short-term, less-than-significant adverse cumulative effects on water resources would be expected. Individual construction projects would cause soil disturbance that would contribute sediment to stormwater runoff, and any spillage of petroleum, oils, lubricants, or other hazardous materials at construction sites would likely contaminate stormwater runoff. Most stormwater at Keesler AFB drains to the Back Bay, so simultaneous construction projects would be expected to have cumulative effects on surface water quality. Stormwater runoff and spills and leakage from equipment for the MCTC during construction would be controlled through implementation of BMPs in accordance with the CGP, and post-construction runoff from each new development would be controlled in accordance with the SWPPP. The other cumulative projects would adhere to Keesler AFB SWMP BMPs. Cumulative effects on surface waters, therefore, would be less than significant.

# 4.1.6 Hazardous Materials and Hazardous Wastes

Short-term, less-than-significant adverse cumulative effects from the use of hazardous materials and generation of hazardous wastes would be expected. Construction projects involve the use of hazardous materials and generation of hazardous wastes. The potential for adverse effects from hazardous materials and hazardous wastes would be minimized with implementation of BMPs and compliance with established management plans.

# 4.1.7 Infrastructure and Utilities

Short-term, less-than-significant adverse and long-term, less-than-significant cumulative effects on infrastructure and utilities would be expected. Each construction project creates a net effect on utility demand using utilities during construction, the creation of new demand after construction, and a reduction in demand if old facilities are taken offline and demolished as part of the project.

# 4.1.8 Traffic and Transportation

Short-term, less-than-significant adverse cumulative effects on traffic and transportation would be expected, primarily because of the construction traffic generated on-base and on local roads. No projects foreseen to be undertaken at Keesler AFB would increase or decrease the average daily population at the base; therefore, no long-term cumulative effects on traffic and transportation would be expected. Additionally, as necessary, Keesler AFB would manage material deliveries, construction work hours, and other factors affecting gate queues and traffic flow near and on the base to minimize wait times and roadway congestion.

#### 4.1.9 Safety and Occupational Health

Short-term, less-than-significant adverse cumulative effects on safety and occupational health would be expected because contractors would comply with health and safety plans for the projects and minimize potential significant safety hazards to construction workers and the public.

#### 4.1.10 Greenhouse Gas Emissions and Climate Change

Short-term, less-than-significant adverse cumulative effects from GHG emissions would be expected. GHG emissions from multiple pieces of construction equipment at multiple construction projects would be more than any one of the projects alone. Estimated GHG emissions generated by the MCTC construction activities in one year would be 1,120 mtpy, below the insignificance indicator for the annual threshold of 75,000 tpy of CO2e (or 68,039 mtpy). Additionally, construction GHG emissions during construction could be reduced by implementing BMPs, such as using construction equipment and vehicles with low-emission engines, scheduling to reduce vehicle trips, ensuring proper equipment maintenance, offering and promoting alternative transportation options for construction workers, and implementing policies to minimize engine idling for construction equipment.

# 4.1.11 Sustainability and Greening

Beneficial cumulative effects would be expected from implementing sustainability and greening practices into the projects. Additionally, removal of old, outdated structures with energy-inefficient systems and their replacement with new, energy-efficient systems would be expected to have a long-term, beneficial cumulative effect.

#### 4.1.12 Socioeconomics

Short-term, less-than-significant beneficial cumulative effects on socioeconomics would be expected. Individual cumulative projects would each have an effect in a less-than-significant way on the economy of the region.

# 4.1.13 Environmental Justice and Protection of Children

The short-term, less-than-significant adverse effects from the Proposed Action would not result in disproportionately adverse environmental or health effects on low-income or minority populations. Similarly, there would be short-term, less-than-significant adverse effects on the protection of children. Therefore, the Proposed Action would not contribute to significant effects on these populations when considered with the cumulative projects.

# 4.2 Alternative 2, Judge Sekul Avenue Access

Effects would be the same as those for Alternative 1.

## 4.3 No Action Alternative

The DAF would not enter into the 50-year EUL with MSU RTC and the MCTC would not be constructed. No cumulative effects would be expected.

# 5.0 PERMIT AND APPROVAL REQUIREMENTS AND BEST MANAGEMENT PRACTICES

This section summarizes the permit and approval requirements and BMPs discussed in the preceding sections.

# 5.1 **Permit Requirements**

# 5.1.1 MDEQ Large CGP

The MSU RTC or its contractor would file an MDEQ LCNOI for coverage under the Large Construction Storm Water General NPDES Permit as required for construction activities of more than 5 acres in the State of Mississippi. This application would include a site-specific SWPPP detailing BMPs and erosion control features to reduce potential soil erosion, minimize effects on surface waters, and prevent contaminated stormwater from leaving the construction site.

# 5.1.2 Air Quality – New Source Review

Emergency generator or boilers would require an NSR and may require permitting if emissions or forecasted runtime hours are above the permitting threshold. If the permitting threshold is triggered, a permit must be obtained prior to construction.

# 5.2 Approval Requirements

#### 5.2.1 Removal of Live Oak Trees

The MSU RTC or its contractor would coordinate with the base to obtain the Wing Commander's approval to remove live oak trees larger than 24 inches dbh.

# 5.2.2 Temporary Fence Construction

The MSU RTC or its contractor would coordinate with the base to obtain approval of the Keesler AFB Security for the construction of the temporary fence.

# 5.3 BMPs

#### 5.3.1 Air Quality

The MSU RTC or its contractors would apply BMPs, such as using water to control dust from building construction, road grading, and land clearing, to prevent fugitive dust from becoming airborne.

#### 5.3.2 Noise

The MSU RTC or its contractors would implement the following BMPs to minimize the potential for adverse effects from construction noise:

- Scheduling construction activities primarily during normal weekday business hours.
- Properly maintaining construction vehicles and other heavy equipment.
- Using adequate personal hearing protection to limit exposure and ensure compliance with federal health and safety regulations.

#### 5.3.3 Earth and Water Resources

Facility design would incorporate LID controls to maintain flow rates, flow volumes, and durations present before development, in accordance with EISA Section 438 and Air Force Corporate Facilities Standards. The MSU RTC or its contractors would prepare and adhere to a

site-specific SWPPP detailing BMPs and erosion control features to reduce potential soil erosion, minimize effects on surface waters, and prevent contaminated stormwater from leaving the construction site. Example LID controls and stormwater management BMPs are listed in Section 3.6, *Water Resources*.

# 5.3.4 Biological Resources

The USFWS-recommended tree clearing timeframe is July 16–April 30, to fall outside the tricolored bat pup season of May 1–July 15.

# 5.3.5 Cultural Resources

The DAF will ensure the two artifacts of note from the Phase I cultural resources survey are curated with MDAH, per pending MOU.

The MSU RTC or its contractors would adhere to the Keesler AFB CRMP contingency plan:

- If an archaeological resource was discovered during excavation or construction, activity in the area would be ceased immediately and a reasonable effort would be made to protect the discovered items.
- The construction manager would contact the base civil engineer and the Keesler AFB cultural resources manager, who would in turn contact the MDAH and the Native American Tribes known to have a historical connection to the land on the base as well as other appropriate individuals and agencies.

# 5.3.6 Hazardous Materials and Hazardous Wastes

The MSU RTC or its contractors would comply with established management plans for hazardous materials and hazardous wastes and spill prevention and response. Additionally, the following BMPs would be implemented to minimize the potential for adverse effects of hazardous materials and hazardous wastes:

- Personnel safety training, proper storage and signage of containers, routine inventory, and readily available SDSs for all hazardous materials used on-site.
- Regular maintenance of equipment and using drip pans for vehicles when they are stationary to prevent contamination from leaks.

# 5.3.7 Transportation and Traffic

The MSU RTC or its contractors would implement the following BMPs to minimize adverse effects on transportation and traffic during construction:

- Routing and scheduling construction vehicles to minimize conflicts with other traffic and strategically locating staging areas to minimize traffic effects.
- Equipping all construction vehicles with backing alarms, two-way radios, and "Slow Moving Vehicle" signs, as appropriate.

# 5.3.8 Safety and Occupational Health

Adherence by the MSU RTC or its contractors to BMPs to minimize adverse effects of hazardous materials and wastes and on transportation and traffic also would address safety and occupational health.

# 5.3.9 Greenhouse Gas Emissions and Climate Change

Adherence by the MSU RTC or its contractors to BMPs, such as using construction equipment and vehicles with low-emission engines, scheduling to reduce vehicle trips, ensuring proper equipment maintenance, offering, and promoting alternative transportation options for construction workers, and implementing policies to minimize engine idling for construction equipment.

## 5.3.10 Sustainability and Greening

The MSU RTC or its contractors would incorporate sustainability and greening practices into implementing the project by identifying opportunities to reduce the amount of waste disposed of at landfills, such as by reusing, recycling, and composting materials or purchasing items produced from recycled materials.

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# 7.0 LIST OF PREPARERS

Table 7-1 lists the individuals who contributed to the preparation of this EA.

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Jamie Childers	MS, Natural Resources Administration and Policy, University of Florida	Air quality, greenhouse gas, climate change, sustainability, and greening	23
Dewey Cooper	BS, Chemistry	Air quality, greenhouse gases	26
Sierra DeVanie	MPS, Cultural and Heritage Resource Management, University of Maryland	Cultural resources	10
Penelope Garver	BS, Journalism, University of Maryland	Technical editing, EA QA	30
Beverly Hayes	MEM, Resource Ecology, Duke University	Water	43
Jennifer Jarvis	BS, Environmental Resource Management, Virginia Tech	Geographic information systems	23
Tim Lavallee, PE	M.S., Civil and Environmental Engineering	Transportation and traffic QC	31
Rowan McConville	BA, Environmental Studies, Tulane University	Biological resources, hazardous materials and waste management, transportation, and traffic	5
Sean Rose	MPS, Real Estate Development, Georgetown University	Land use, aesthetics, and visual resources	10
Joel Rudewicz	MA, History, The University of Nottingham	Historic and cultural resources	19
Suni Shrestha	BS, Environmental Analysis and Planning, Frostburg State University	Project management, EA QC	26
David Wertz	MS, Geophysics, Boston College	Earth resources, infrastructure, and utilities	21

# Table 7-1. List of Preparers

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Final

# APPENDIX A: INTERAGENCY AND INTERGOVERNMENTAL COORDINATION/CONSULTATION

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Final

#### Appendix A – Agencies

The following letter was sent to the federal, state, and local agencies listed below. Responses received follow the letter sent.

Agency	Name, Title	Response Received
City of Biloxi	Jerry Creel, Director of Community Development	
CSX Railroad	Scott Willis, Project Manager	
Gulf Regional Planning Commission	Kenneth Yarrow, Executive Director	
Harrison County	Jaclyn Turner, Engineer	
Harrison County, Utility Authority	David Perkins, O&M Manager	
MS Dept. of Environmental Quality, Env. Enforcement and Compliance Division	Michelle Clark, Chief	Х
MS Dept. of Marine Resources, Wetlands Permitting	Willa Brantley, Bureau Director	
MS Dept. of Wildlife, Fisheries & Parks, Mississippi Natural Heritage Program	Lynn Posey, Executive Director	Х
MS Dept. of Wildlife, Fisheries, & Parks	Dennis Riecke, Fisheries Coordinator	Х
Southern Mississippi Planning and Development District	Leonard Bentz, II, Executive Director	
US Army Corps of Engineers, Regulatory Division, Mobile District	Dylan C. Hendrix, Chief South MS Branch	Х
US Fish and Wildlife Service, Mississippi Field Office – Ecological Services	Paul Necaise, Section 7 Biologist	х
USEPA Region 4, NEPA Program Office	Ntale Kajumba, NEPA Program Office Manager	

The Department of the Air Force Correspondence



#### DEPARTMENT OF THE AIR FORCE HEADQUARTERS 81ST TRAINING WING (AETC)

02 May 2024

Robert T. Moseley III Deputy Base Civil Engineer 81st Civil Engineer Squadron 500 Fisher Street, Bldg 701 Keesler AFB, MS 39534

U.S. Army Corps of Engineers - Regulatory Division Biloxi Satellite Office Attn: Sir/Madam Field Supervisor 1141 Bayview Ave Suite 104 Biloxi, MS 39530 CESAM-RD@sam.usace.army.mil

Dear Sir/Madam

The Department of the Air Force (DAF) is preparing an environmental assessment (EA) to evaluate potential environmental impacts of proposed out lease non-excess land on Keesler Air Force Base (AFB) in Biloxi, Mississippi (MS) to MS State University Research and Technology Corporation (MSU RTC) using an enhanced use lease (EUL). MSU RTC would construct and operate the MS Cyber and and Technology Center (MCTC) on the leased land. The proposed EUL is needed to support the DAF's strategic goals of optimizing DAF non-excess assets. The proposed MCTC is needed to meet regional and national cybersecurity training requirements and to support Keesler AFB's and Mississippi Army National Guard's technical cyber systems training mission. A copy of the Draft EA will be made available for your review and comment when complete.

As presented in the attachment, Description of Proposed Action and Alternatives, the Proposed Action will include execution of an EUL and subsequent development of the MCTC as well as related utilities and infrastructure. The EA will analyze two alternatives for the Proposed Action (Alternative 1 [Preferred Alternative] and Alternative 2) and the No Action Alternative. The two Proposed Action alternatives differ only in the access to the MCTC from outside of the base.

If you have any comments or concerns you would like to provide regarding the proposed action or its environmental impacts, please respond to us within 30 days of receipt of this letter. Please send your written responses via e-mail (preferred) to: for the proposed or by regular mail to: Janet Lanier, HDR EMS Coordinator Support, 508 L Street-Bldg 4705, Keesler AFB, MS 39534; or by phone at the proposed proposed of the proposed

Sincerely

MOSELEY.ROBERT Digitally signed by MOSELEY.ROBERT.I.III.1230764782 .T.III.1230764782 Date: 2024.05.01 13:44:51 -05'00' ROBERT T. MOSELEY III Deputy Base Civil Engineer

Attachment: Description of Proposed Action and Alternatives



#### DEPARTMENT OF THE AIR FORCE HEADQUARTERS 81 ST TRAINING WING (AETC)

02 May 2024

Robert T. Moseley III Deputy Base Civil Engineer 81st Civil Engineer Squadron 500 Fisher Street, Bldg 701 Keesler AFB, MS 39534

U.S. Fish and Wildlife Service Mississippi Field Office - Ecological Services Attn: Mr. Paul Necaise Section 7 Biologist / Coastal Biologist 6578 Dogwood View Parkway, Suite A Jackson, MS 39213

Dear Mr. Necaise

The Department of the Air Force (DAF) is preparing an environmental assessment (EA) to evaluate potential environmental impacts of proposed out lease non-excess land on Keesler Air Force Base (AFB) in Biloxi, Mississippi (MS) to MS State University Research and Technology Corporation (MSU RTC) using an enhanced use lease (EUL). MSU RTC would construct and operate the MS Cyber and Technology Center (MCTC) on the leased land. The proposed EUL is needed to support the DAF's strategic goals of optimizing DAF non-excess assets. The proposed MCTC is needed to meet regional and national cybersecurity training requirements and to support Keesler AFB's and Mississippi Army National Guard's technical cyber systems training mission. A copy of the Draft EA will be made available for your review and comment when complete.

As presented in the attachment, Description of Proposed Action and Alternatives (DOPAA), the Proposed Action will include execution of an EUL and subsequent development of the MCTC as well as related utilities and infrastructure. The EA will analyze two alternatives for the Proposed Action (Alternative 1 [Preferred Alternative] and Alternative 2) and the No Action Alternative. The two Proposed Action alternatives differ only in the access to the MCTC from outside of the base.

USFWS (biological science technicians from Red River National Wildlife Refuge [NWR]) conducted monitoring in June-August 2023 detected tricolored bats (*Perimyotis subflavus*) on the proposed EUL site. The bat is proposed for Federal listing as an endangered species. Keesler AFB understands that as part of continuing monitoring program, USFWS is planning to survey the base again next month.

If you have any comments or concerns you would like to provide regarding the proposed action or its environmental impacts, please respond to us within 30 days of receipt of this letter. Please send your written responses via e-mail (preferred) to: for the proposed or by regular mail to: Janet Lanier, HDR EMS Coordinator Support, 508 L Street-Bldg 4705, Keesler AFB, MS 39534; or by phone at for the proposed set of the propo

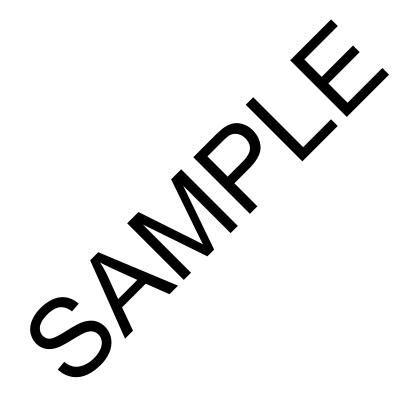
Sincerely

Digitally signed by MOSELEY.ROBERT MOSELEY.ROBERT.T.III.1230764 782 .T.III.1230764782 Date: 2024.05.01 13:43:01 05'00'

ROBERT T. MOSELEY III Deputy Base Civil Engineer

Attachment: Description of Proposed Action and Alternatives

# ATTACHMENT – DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES



### ENVIRONMENTAL ASSESSMENT OF MISSISSIPPI CYBER AND TECHNOLOGY CENTER ENHANCED USE LEASE

### DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES

### KEESLER AIR FORCE BASE BILOXI, MISSISSIPPI



### **Department of the Air Force**

ON BEHALF OF:

Mississippi State University Research and Technology Corporation

April 2024

### Environmental Assessment of Mississippi Cyber and Technology Center Enhanced Use Lease

#### Keesler Air Force Base Biloxi, Mississippi

**Responsible Agency:** Department of the Air Force, Air Education and Training Command, 81st Training Wing, Keesler Air Force Base, Mississippi

Affected Location: Keesler Air Force Base, Harrison County, Mississippi

**Proposed Action:** Execution of an Enhanced Use Lease and Subsequent Development of the Mississippi Cyber and Technology Center

Report Designation: Environmental Assessment

Keesler AFB Point of Contact: Janet Lanier, HDR EMS Cook inate Support, 508 L Street-Bldg 4705, Keesler AFB, MS 39534; janet.lanier.ctr@us.af.mil

Abstract: This environmental assessment (EA) consider potential environmental effects of the Proposed Action on the human and natural environ docur ents the analysis of effects ts. ase win Mississuppi State University Researce oproximately 15-acre, non-excess parcel on Appi State University Research associated with entering into an enhanced use and Technology Corporation (MSU RTC) for an Keesler Air Force Base in Biloxi, MS, and M s building and operating the Mississippi JR se arcel. The EA analyzes two action Cyber and Technology Center (MCTC) at th alternatives of the Proposed Action and the N tion Alternative. The action alternatives differ only in the access to the MCTC, whit Id be in the same location and layout for both alternatives. [Preparer's note: to be up r impact analysis is complete]

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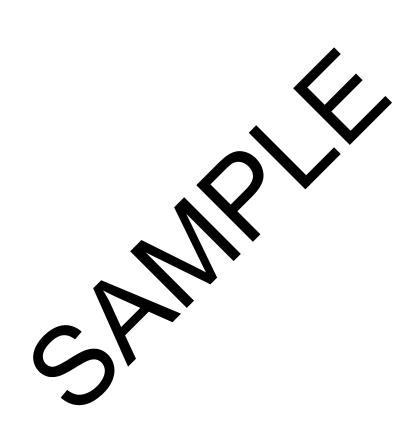
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#### ABBREVIATIONS AND ACRONYMS

81 TRW	81st Training Wing
AFB	Air Force base
AFI	Air Force Instruction
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
DAF	Department of the Air Force
dbh	diameter at breast height
DoD	Department of Defense
EA	environmental assessment
EIAP	Environmental Impact Analysis Process
EIS	environmental impact statement
EO	Executive Order
EUL	enhanced use lease
ESA	Endangered Species Act
FONSI	finding of no significant impact
l-	Interstate
MCI	Mississippi Cyber Initiative
MCTC	Mississippi Cyber and Archarlos y Center
MDAH	Mississippi Department of Archives and History
MS	Mississippi
MSARNG	Mississi pr Army N tional Guard
MSU RTC	Missis ppicate University Research and Technology Corporation
NEPA	National Environmental Policy Act of 1969
NHPA	National Historic Preservation Act
NOI	notice of intent
SF	square feet
U.S.	United States (adjective only)
U.S.C.	United States Code
USFWS	U.S. Fish and Wildlife Service

#### 1.0 PURPOSE OF AND NEED FOR ACTION

#### 1.1 Introduction

Pursuant to the National Environmental Policy Act of 1969 (NEPA) (Title 42 of the United States Code [U.S.C.] §§ 4321–4347) and its implementing policies and guidance, the Department of the Air Force (DAF) has prepared this environmental assessment (EA) to evaluate potential environmental effects associated with entering into an enhanced use lease (EUL) with Mississippi State University Research and Technology Corporation (MSU RTC) of an approximately 15-acre parcel on Keesler Air Force Base (AFB) in Biloxi, MS, and MSU RTC's building and operating a 100,000-square-foot (-SF) building, under Phase 1 of the Mississippi Cyber and Technology Center (MCTC) on the leased parcel. The MCTC, central to the Mississippi Cyber Initiative (MCI), will be a cutting-edge facility providing capabilities, services, and training space. It will serve as a hub for promoting and integrating cyber and technology talent. Additionally, the MCTC will offer event space for cyber experts to collaborate on addressing cybersecurity challenges across federal, state, private and public sectors. The MCTC Phase 2 would include future expansion opportunities to potent ally build two additional buildings on the 15-acre parcel. The DAF will ensure appropriate Je. el of NEPA evaluation of MCTC Phase 2 when it becomes ripe for analysis. Throughout the emain der of the EA, any reference to MCTC facility pertains to MCTC Phase 1.

Property of Military Departments and As specified in 10 U.S.C. § 2667 Leases: Non-Exp Defense Agencies, the Secretary of Defense an Air Force have outlease Secre arv o authority to lease DAF-owned, non-excess real ope y. Non-excess property, to some degree, meets a Department of Defense (DoD) nee nd Id not be removed from DoD's inventory. Other requirements for DAF outlease are the not being needed for public use and pert under the control of the Secretary of the Air F rci

Per 10 U.S.C. § 2667, DoD exercises s real property outlease authority through EULs, which have longer than pical lease periods, must support activities compatible with adjacent DAF uses, and may in luce levelopment terms beneficial to the military installation. DoD's outlease authority also permit in-kild consideration in addition to, or in lieu of, cash payments, if generally **Jun alent** fair market value of the lease interest. The DoD uses EULs for underutilized real b able to repair and maintain existing facilities, or to construct roperty new facilities that pro tional defense or are in the public interest. me n

#### 1.2 Background

#### 1.2.1 Keesler AFB

Keesler AFB is home to the 81st Training Wing (81 TRW) of the Air Education and Training Command, comprising 81st Training Group, 81st Medical Group, and 81st Mission Support Group, and the base's host wing. Keesler AFB, also home to the Second Air Force, is an integral training center for the DAF and DoD, providing combat-ready Airmen and Guardians for Air and Space Force Expeditionary Forces. The base is a lead Joint Training Installation, instructing DAF, Army, Navy, Marine Corps, Coast Guard, National Guard, and civilian federal agency personnel. The base also hosts the 403rd Wing (Air Force Reserve Command), the 85th Engineering Installation Squadron, the Mathies Noncommissioned Officer Academy, and a Marine Corps detachment.

Keesler AFB was established in 1941 as an Army Air Corps Station Aviation Mechanics School with over 1,500 acres of land donated by Biloxi, MS, officials to the U.S. Army Corps of Engineers and officially redesignated as an AFB in 1948 (Keesler AFB 2021). Developing

installation property has been continual since Keesler AFB's establishment. The ongoing development process at Keesler AFB provides the base with facilities and infrastructure meeting DAF goals for mission capability, sustainability, readiness, and modernization.

Keesler AFB is located on the Mississippi Gulf Coast, within the City of Biloxi in Harrison County, MS (Figure 1-1). The base occupies 1,719 acres on a narrow peninsula bordered by the Biloxi Back Bay on the north and the Gulf of Mexico on the south. The main base consists of 1,447 acres and is densely developed. U.S. Highway (U.S.) 90 parallels the southern border of the base and provides access to Interstate (I-) 10 via U.S. 49 and I-110. Keesler AFB is a significant economic engine for the surrounding regional area and is one of the largest employers in the City of Biloxi and Harrison County (GRPC 2017).



Figure 1-1. Keesler Air Force Base Location Map.

Keesler AFB's primary mission, as the DAF's Electronics Training Center of Excellence, is to provide technical training. The 81 TRW provides training in over 160 career field specialty training courses (Keesler AFB 2024a), including weather; basic electronics; communications-electronic systems; communications-computer systems; air traffic control; airfield management;

command post; air weapons control; precision measurement; information management; manpower and personnel; and radar, ground radio, and cyber systems technical coursework (Keesler AFB 2015). Specific to cyber training, the 81 TRW trains DoD's cyber forces and is a leader in cyber development and training, graduating approximately 6,000 cyber professionals each year (Keesler AFB 2023). Overall, Keesler AFB trains more than 30,000 students annually with a daily average of 3,000-plus students (Keesler AFB 2024a).

#### 1.2.2 Proposed EUL

Executive Order (EO) 13327, *Federal Real Property Asset Management*, directs efficient and economical use of real property assets. Additionally, the 2007 DAF memorandum Pursuing "Value-Based" Transactions Involving Air Force Real Property Assets directs the DAF to optimize the value of real property assets using authorized tools, such as the EUL program. Keesler AFB does not anticipate requiring the non-excess property for the duration of the EUL but will retain it in DAF ownership for mission reasons. In July 2022, per Secretary of the Air Force Installations Division policy, the DAF via Air Force Civil Engineer Center, Installations Directorate, made a courtesy Congressional Notification for the proposed EUL (Martin 2024).

#### 1.2.3 Mississippi Cyber Initiative

Keesler AFB and MSU are implementing partners in the MCI, a surewide effort established in 2021 to support cybersecurity training needs in the state and the native (Keesler AFB 2023; MSU MCI 2022). As an implementing partner in the MCI and a leader in DoD cyber training, Keesler AFB anchors the initiative and creates a unique opportunity for the state to enhance collaborations with federal partners across the mate, region, and nation (MSU MCI 2022).

#### 1.3 Purpose and Need

The purpose of the Proposed Action is for the DAT to:

- 1. Make the best use of an approximately 5-acre, underutilized, non-excess real property asset on the installation (see Figure 1-2).
- 2. Provide statewide leade sharin addressing cybersecurity and workforce needs for Mississippi into the future
- 3. Attract innovative the analysis advanced technology industries,
- 4. Provide cyber ecurity training for Keesler AFB and Mississippi Army National Guard (MSARNG), a
- 5. Support the DAF's strategic goal of optimizing the value of its existing real property assets.

The proposed EUL is needed to support the DAF's strategic goals of optimizing DAF nonexcess assets. The MCTC is needed to support Keesler AFB's training mission and other government needs, as well as provide training and workforce development services. By bringing together expertise from academia, government, law enforcement, defense, the National Guard, and the private sector, it will accelerate advanced education, research, and innovation.



Figure 1-2 EU Tercel at Keesler Air Force Base.

#### 1.4 Decision to be Wade

The DAF must decide whener the social and environmental effects of implementing the Proposed Action would support a Finding of No Significant Impact (FONSI) or would require publishing in the *Federal Conter* a Notice of Intent (NOI) to prepare an Environmental Impact Statement. The DAF will publish an NOI if the potential adverse social and environmental effects associated with implementing the Proposed Action remain significant even after all reasonable mitigation measures have been implemented.

#### **1.5** Agencies and Intergovernmental Coordination / Consultation

#### 1.5.1 Cooperating Agencies

As specified in 40 CFR §1501.8, a "cooperating agency" can be any federal, state, tribal, or local agency with jurisdiction by law or special expertise with respect to any environmental impact resulting from a major federal action that might significantly affect the quality of the human environment. A cooperating agency supports and participates in the NEPA process.

At this time, the DAF anticipates no cooperating agency involvement for the Proposed Action because it would not impinge on other than DAF property or resources; it would take place on

previously disturbed lands; and the DAF is committed to coordinating with and consulting other agencies and implementing appropriate mitigation.

#### **1.5.2** Interagency and Intergovernmental Coordination and Consultations

The Intergovernmental Cooperation Act (29 CFR § 1902.5) and EO 12372, *Intergovernmental Review of Federal Programs*, requires an action's proponent to issue intergovernmental notifications before making any detailed statement of environmental effects. Following Air Force Instruction (AFI) 32-7060 *Interagency and Intergovernmental Coordination for Environmental Planning*, the DAF will notify concerned federal, state, and local agencies and allow them sufficient time to evaluate potential environmental effects of the Proposed Action.

The Mississippi Department of Archives and History (MDAH), Mississippi State Historic Preservation Officer (SHPO), U.S. Fish and Wildlife Service (USFWS), Tribes, interested agencies and organizations, and stakeholders will be invited to comment on the Proposed Action. Findings of effect and a request for concurrence will be transmitted to the MDAH in accordance with Section 106 of the National Historic Preservation Lct (NHPA) and 36 CFR Part 800 and to the USFWS in keeping with Section 7 of the Endangued Species Act (ESA) and 50 CFR Part 17.

EO 13175, Consultation and Coordination with Indian Tribal Gove, ment, directs federal agencies to coordinate and consult with Native America, tribal government, directs federal might be directly and substantially affected by activities of federally administered lands. Federally recognized Tribes that are historically atmated with the geographic region or that might have potentially affected tribal properties of cultural, historical, or religious significance will be invited to consult on the Proposed Action

Appendix A includes comments and correspondence egarding findings, concurrence or nonconcurrence, and resolution of adverge effect. [*A spaler's note: the information will be included after coordination and correspondence as ur*]

#### 1.6 Applicable Laws and Environmental Regulations

#### 1.6.1 National Environmental Protect Act

This document has been prepared in accordance with NEPA, the President's Council on Environmental Quality (CFC), noticeal Environmental Policy Act Implementing Regulations (Title 40 Code of Federal Regulations (CFR] parts 1500–1508); the DAF Environmental Impact Analysis Process (EIAP) Regulations (32 CFR Part 989); and other supporting DAF guidance.

Under NEPA, a federal agency must prepare an EA to analyze potential effects of the Proposed Action, other reasonable alternatives, and the No Action Alternative on the human and natural environments. A FONSI synopsizing why a proposed action does not have a significant effect on the human or natural environment is prepared if EA analyses indicate it is appropriate. An EIS would be prepared, or the Proposed Action abandoned when significant, unmitigable environmental issues are identified.

#### **1.6.2** Integration of Other Environmental Statutes and Regulations

The DAF must decide whether to proceed with the Proposed Action based on numerous factors, such as mission requirements, schedule, resource availability, private interests, and environmental considerations. In addressing environmental considerations, the DAF is guided by several applicable statutes, statute-implementing regulations, and EOs. These statutes, guidance, and EOs establish standards and provide direction on environmental and natural resources management and planning. They include the following:

- Air Force Policy Directive 32-70, *Environmental Quality*
- American Indian Religious Freedom Act (42 U.S.C. § 21 *et seq.*)
- Archaeological Resources Protection Act of 1979 (16 U.S.C. § 470aa et seq.)
- Bald and Golden Eagle Protection Act (16 U.S.C. § 668 et seq.)
- Clean Air Act (42 U.S.C. § 7401)
- Clean Water Act (33 U.S.C. § 1251)
- Community Environmental Response Facilitation Act (P.L. 102-426)
- Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) (42 U.S.C. § 9601 *et seq.*)
- Emergency Planning and Community Right-to-Know Act (42 U.S.C. §§ 11001–11050)
- Endangered Species Act (16 U.S.C. §§ 1531–1543)
- Intergovernmental Cooperation Act (29 U.S.C. § 1902.5)
- Leases: non-excess property of military departments and Defense Agencies (10 U.S.C. § 2667)
- Migratory Bird Treaty Act, as amended (16 U.S.C. §§ 703–712
- NHPA (16 U.S.C. § 470 et seq., as amended)
- National Pollutant Discharge Elimination System (40 CFR 1 prt 1)
- Native American Graves Protection and Repatriation Act (25, 5.C. \$ 5001 et seq.)
- Noise Control Act (42 U.S.C. § 4901 et seq.)
- Resource Conservation and Recovery Act (42 U.S.C. 6901)
- Safe Drinking Water Act (42 U.S.C. § 300f et cg.)
- Toxic Substances Control Act (15 U.S.C. § 2601-
- EO 11988, Floodplain Management
- EO 11990, Protection of Wetlands
- EO 12372, Intergovernmental Review of Neo ral Programs
- EO 12898, Federal Actions to Adverse Environmental Justice in Minority Populations and Low-Income Populations

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- EO 13045, Protection of Clarken from Environmental Health Risks and Safety Risks
- EO 13175, Consultation and Coord Section with Indian Tribal Governments
- EO 13186, Responsibilities or Enderal Agencies to Protect Migratory Birds
- EO 13834, Regaring Efficient Federal Operations
- EO 14008, Tackling the Crisis at Home and Abroad
- EO 14096, Revitalizing Our Jation's Commitment to Environmental Justice for All

To further understanding on a content, key provisions of these statutes and other guidance documents are discussed in more detail in the text as appropriate.

#### 2.0 DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES

This section of the EA describes the Proposed Action and alternatives and the No Action alternative. It addresses the DAF entering the EUL agreement with the MSU RTC and the state entity building and operating the MCTC on the parcel. The proposed EUL and building and operation of the MCTC is the basis for analysis.

#### 2.1 Proposed Action

The DAF would enter into a 50-year EUL agreement with the MSU RTC to lease a 15-acre parcel on which to build and operate the MCTC (MSU RTC and SAF 2023).

The MCTC would be a 100,000-SF, 3-story building of approximately 33,333 SF per floor (see Figure 2-1). The facility would house event space, classrooms, administration facilities, parking for 270 vehicles, and associated infrastructure. The MCTC would occupy approximately 5 acres of the EUL site. Of the 5 acres, 1.2 acres would be greenspace post construction.

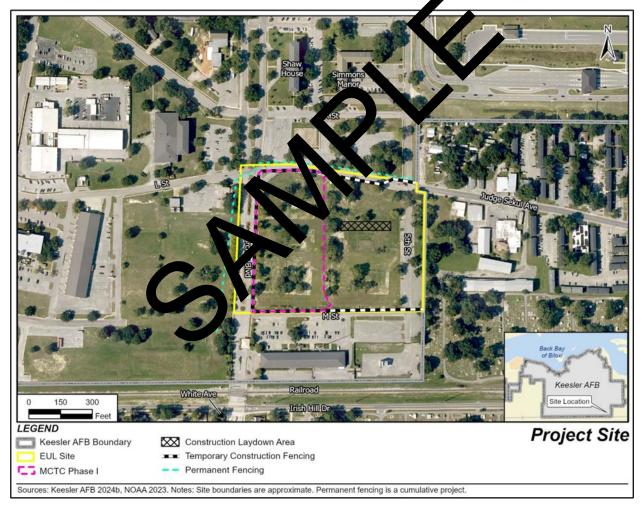


Figure 2-1. Proposed Project Site.

The MCTC would connect to City of Biloxi utility services, except for stormwater drainage, which would use the Keesler AFB drainage system. Tie-ins to existing city utility lines are readily

available for water, electricity, natural gas, sewer, and telecommunications. Existing Keesler AFB utilities lines would be abandoned and capped in place.

Approximately 0.25 acres of temporary construction laydown and parking would be located within the 15-acre parcel, to the east of the MCTC. Prior to starting the construction activities, MSU RTC would construct approximately 2,100 feet temporary fencing to enclose the EUL site (Figure 2-1). The temporary fencing would run along east side of Larcher Boulevard on the west, M Street on the south, southside of L Street on the north, and tie into the existing base fence east of 5<sup>th</sup> Street. Access from Judge Sekul would only be to the closed off EUL site. Keesler AFB security's approval is required for the temporary fence construction. Construction traffic would be routed via Porter Avenue and Judge Sekul.

Under a separate action, Keesler AFB would permanently relocate the current base perimeter fence (Figure 2-1). The relocated fence would close off access into the base from White Avenue and Judge Sekul Avenue gates. The relocated fence would have a secured pedestrian access point to allow on base Keesler AFB personnel direct access to approve MCTC. The project will be described in detail and analyzed in the Cumulative Effects section of the EA, which will be provided for review during the public comment period.

The MCTC building would have a maximum occupancy of approxim 1,200 administration, event space (Polen 2024, personal instructors and students between offices, classrooms, and communication). The site and lobby of the MCTC bè nen the public and access, with JOU. secured access to building areas. MSU RTC wald em loy approximately 10 full-time, permanent MCTC staff (McGee 2024, personal mr unication). The MSU Cyber Range would have approximately 300 students per year i Cybe Range, and an additional 300 participants CG. 2024, personal communication). per year for at least two multi-day symposiun avel from outside of the four coastal Approximately 33 percent of these st ulà onts w counties of Mississippi.

The MSU RTC anticipates MC 10 to structure to initiate in early 2025 and inauguration in early 2026.

### 2.2 Conditions for Outleasing DAF Property

As specified in AFI 32, 2003, *Granting Temporary Use of Air Force Real Property, any proposed outlease of DAF-owned properties must meet the following conditions to be advanced for proposal for leasing under the EUL program:* 

- The property is not excess to DAF needs.
- The DAF is not currently using the property.
- The proposed use will not interfere with the mission.
- The proposed use is not at the expense of the DAF, unless otherwise exempt.
- The proposed use is compatible with DAF security and safety requirements.

#### 2.3 Site Selection Requirements

To identify candidate sites for the EUL and the MCTC, the DAF evaluated sites that met DAF and MCTC requirements, as presented in Table 2-1.

Requirement	Definition			
Developable Parcel				
Non-Excess Property	Another need for the parcel is not anticipated for the lease duration but property will remain in DAF ownership.			
Currently Available and Suitable for Development	The parcel is development ready with infrastructure support and can be leased at this time.			
Sufficient Operations Size	The parcel is large enough to execute and implement the Proposed Action.			
Sufficient Construction Size	The parcel is large enough to support construction activities associated with the Proposed Action.			
Sufficient Future Expansion Size	The parcel has sufficient capacity to accommodate future expansion.			
No DAF Plans for Future Development	The parcel is not scheduled to another use or slated for development in the Keeslew FB Installation Development Plan.			
Land Use				
Compatible with Adjacent and Nearby Property	Execution and implementation on the proposed Action would not conflict with or crisice conditions the unreasonably impose upon nearby land ups and activities.			
No Impacts on Existing or Planned DAF Mission	The Processed Action does not interfere with DAF missions, activities or development.			
Benefits to Existing or Planned DAF Mission	The popose Action enhances DAF missions, activities, or development.			
No Airfield Impacts (Clear Zone and Transverse Slope)–Facility Height Restriction	The proceeding of located in the Airfield District planning designation and down not interfere with airfield activities or encroach on runway roteon zones.			
Base Access				
Near Base Perimeter	The parcel is adjacent to the base perimeter.			
Access by Civilian Personnel without Quing through Security Gate	The parcel would allow practical relocation of a secure perimeter for access by civilian personnel without going through a security gate.			
Direct Access via Existing Street etwork	The parcel is located on-base where it can be accessed directly via an existing street network to a perimeter gate.			
Avoids Commercial Vehicle Access Gate	The parcel is outside the commercial vehicle access gate blast zone.			
No Development Constraints				
Elevation at or above Katrina Storm Surge Line	The parcel is located at or above Katrina Storm Surge Line.			
Fill Not Required	The parcel does not require fill to achieve an appropriate first-floor elevation for flood. If fill is required, fill placement would not result in increased flows onto or have other impacts on adjacent or nearby property.			
No other Known Environmental Constraints	The parcel avoids environmental constraints such as wetlands, critical habitat of protected species, cultural resources, explosives safety arcs, and Installation Restoration Program (IRP) sites.			

#### **Table 2-1: Selection Requirements**

The DAF evaluated the following five candidate sites on Keesler AFB, which are shown in Figure 2-2:

- Site 1, Oak Park Location
- Site 2, C Street Location
- Site 3, Harrison Court Location
- Site 4, Heritage Park Area
- Site 5, Permanent Party Dorm Location (Preferred)

The DAF applied the site selection requirements to the five sites, as shown in Table 2-2, and identified Site 5 as the preferred site for implementing the Proposed Action (81st TRW 2020).



-Igure 2-2. Candidate Sites Evaluated.

Table 2-2:	Application	of Site	Selection	Requirements
	Application		OCICCUION	Requirements

Requirement	Site 1: Oak Park Location	Site 2: C Street Location	Site 3: Harrison Court Location	Site 4: Heritage Park Area	Site 5: Permanent Party Dorm Location
Developable Parcel					
Non-Excess Property	$\checkmark$	√	✓	$\checkmark$	✓
Currently Available and Suitable for Development	✓	~	~	~	~
Sufficient Operations Size	~	~	✓	✓	✓
Sufficient Construction Size		~	✓	✓	✓

Requirement	Site 1: Oak Park Location	Site 2: C Street Location	Site 3: Harrison Court Location	Site 4: Heritage Park Area	Site 5: Permanent Party Dorm Location
Sufficient Future Expansion Size	~		$\checkmark$		$\checkmark$
No DAF Plans for Future Development					~
Land Use	L	1			
Compatible with Adjacent and Nearby Property		$\checkmark$			~
No Impacts on Existing or Planned DAF Mission					~
Benefits to Existing or Planned DAF Mission				~	~
No Airfield Impacts (Clear Zone and Transverse Slope)–Facility Height Restriction		$\checkmark$	Č		✓
Base Access					
Near Base Perimeter	✓	✓	<ul> <li>✓</li> </ul>		√
Access by Civilian Personnel without Going through Security Gate		$\mathbf{O}$	V		✓ ✓
Direct Access via Existing Street Network	✓ ✓		$\checkmark$		~
Avoids Commercial Vehicle Access Gate			$\checkmark$		✓
No Development Constraints					•
Elevation at or above Katrina Strom Surge Line					<b>√</b>
Fill Not Required					✓
No other Known Envil	✓	~	√	~	✓

#### 2.4 Alternatives

#### 2.4.1 No Action Alternative

Under the No Action Alternative, the DAF would not enter into the 50-year EUL with MSU RTC. Therefore, MSU RTC would not construct MCTC. The parcel would remain vacant and underutilized. The purpose and need for the Proposed Action, therefore, would not be met.

The No Action Alternative is included in the analysis as prescribed by CEQ regulations and the DAF EIAP. It is carried forward for analysis and serves as the baseline against which the effects of implementing Proposed Action alternatives are evaluated.

#### 2.4.2 Action Alternatives

Applying the site selection requirements, the DAF and MSU RTC selected Site 5, Permanent Party Dorm Location (Figures 2-2, 2-3).

The parcel is referred to as "the EUL site" throughout the remainder of the EA. The EUL site is bounded by L Street to the north, partially bounded by M Street to the south, Larcher Boulevard to the west, and 5th Street to the east. The 81st Contracting Squadron Building (Building 4605), Weighing Scale (Building 4606), and Fireman Training Facility (Building 4607) are located to the south. Nearest base access points to the EUL site are White Avenue gate on the south and Judge Sekul Avenue gate on the east. Keesler AFB currently does not operate either gate.

The DAF and MSU RTC selected the site for EUL because the DAF does not have any development plans for the site. It is located on base perimeter, which would allow access into the location without base security. Furthermore, the site is not within the 100-year floodplain nor at or above Katrina Storm Surge line (Figures 2-2 and 2-3). Similarly, site elevation of 21-foot would require less site preparation for construction. Additionally, the site is not within the Airfield District planning designation and does not interfere with airfield activities or encroach on runway protection zones. Finally, the site is large enough for MCTC Phase 1 and future expansion.

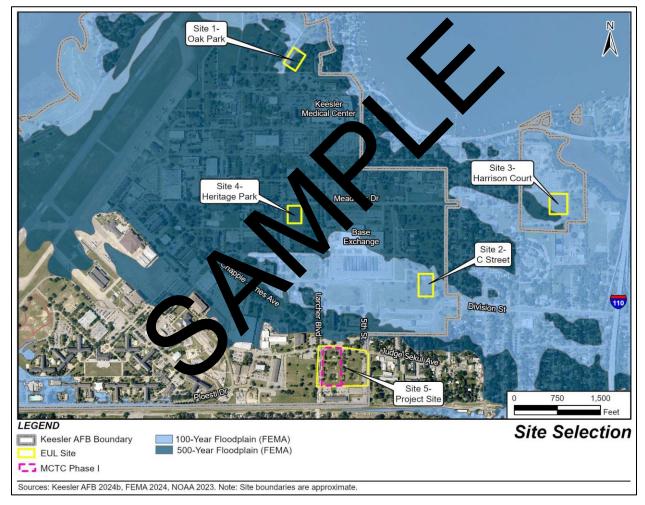


Figure 2-3. Candidate Sites and Floodplains.

The EUL site is in the Base Support District and previously housed eight 1950s dormitories, which have all since been demolished. Four of the eight dormitories were demolished between 2010 and 2017 and the remaining four were demolished between 2022 and 2023.

The EUL site is currently vacant, comprising mowed area with parking (Figure 2-4). The site also contains 156 trees, 52 of which are live oaks (*Quercus virginiana*). The city of Biloxi designates live oaks older than 150 years as "Heritage Trees" (CEMML 2019). Live oak of 37 inches diameter at breast height (dbh) or more are estimated to be 150 years old or older (Seal 2021). Wing Commander's approval is required to remove any live oak tree on Keesler AFB that is larger than 24 inches dbh. On the EUL site, there are 18 live oaks 24 dbh inches or larger; five of which are above 37 inches dbh and estimated to be over 150 years. Within the proposed area for MCTC, approximately 80 trees would be removed, including two live oaks over 24-inch DBH. Removal of those two live oaks will require the Wing Commander's approval (Keesler AFB 2010).

No prehistoric or historic Native American Indian sites and/or Traditional Cultural Properties identified on the installation or National Register of Historic Places- (NRHP-) eligible or listed cultural resources are known to be on the EUL site. Additionally, in April 2024, MSU Cobb Institute of Archaeology conducted a Phase I Archaeological Survey of the EUL site. Preliminary field results indicate absence of archaeological deposits on the site MSU Cobb Institute of Archaeology is processing the survey data and will produce a survey report. Per NHPA and EO 13175, Keesler AFB will use the report to continue consultation with MDAH and Tribes on potential effects resulting from the Proposed Action.

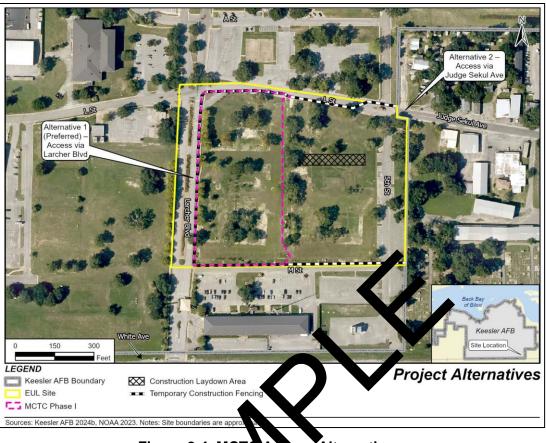
In June-August 2023, USFWS conducted bat monitoring at Keesler, Fe detected tricolored bats (Perimyotis subflavus) on the EUL site. The bat is proposed for Federal listing as an endangered species. Per ESA, Keesler AFB is contain ting with the USFWS on potential effects resulting from the Proposed Action.

## 2.4.2.1 Alternative 1, MCTC Access from trche soulevard-White Avenue (Preferred Alternative)

Under Alternative 1, the DAF would for the cophysimately 15-acre EUL site to MSU RTC to build the facility. As discussed in Section 2.1, the facility would be a 100,000-SF, 3-story building with approximately 33,233 SF perform.

The entrance to the MCTC would be a sub-larcher Boulevard with access through the White Avenue gate (Figure 2-4). This would be MSU RTC's preferred alternative because it provides a well-established access point with lirect access to U.S. Highway 90.

As discussed in Section 1, Keysler AFB, under a separation action, would permanently relocate the current base perimeter fence, closing off access into the base from White Avenue and Judge Sekul gates. The relocated fence would have a secured pedestrian access point to allow on base Keesler AFB personnel direct access to and from MCTC. The project will be described in detail and analyzed in the Cumulative Effects section of the EA, which will be provided for review during the public comment period.



#### Figure 2- MCTO Access Alternatives.

#### 2.4.2.2 Alternative 2, MCTC Access from Judge Sekul Avenue

Under Alternative 2, the only diversion from Alternative 1 would be the entrance from Judge Sekul Avenue (Figure 2-4). This but would require upgrading on-base street(s) to create the appropriate entry to the use IC an ulkely require upgrades to Judge Sekul Avenue to accommodate the increase in traffic. Providing access to the MCTC from Judge Sekul Avenue also would require release of the base perimeter fence. As discussed in Section 2.1, Keesler AFB, under a separation action would relocate the current fence. The project will be described in detail and analyzed in the sumulative Effects section of the completed EA, which will be provided for review during the public review period. A secured pedestrian access to and from the base to MCTC.

#### 2.5 Alternatives Eliminated from Further Consideration

The DAF applied the selection standards discussed in Section 2.3 to evaluate candidate sites (Figure 2-1) for the EUL to build the MCTC. Because the MSU RTC building the MCTC would require a lease agreement, all alternatives were assumed to be under an EUL. This section discusses the four candidate sites considered for the Proposed Action that were not carried forward in the EA for detailed analysis.

#### 2.5.1 Site 1, Oak Park Location

Site 1, Oak Park, is located in the northern portion of Keesler AFB near the Biloxi Back Bay, with Devon Way to the east and Yorkshire Drive to the south. Site 1 is not being carried forward for analysis because the site:

- Is in the 100-year floodplain and within the approximate storm surge line;
- Has historically been submerged 0–11 feet during coastal storms;
- Requires significant amounts of fill to achieve a minimum 18-foot finished elevation;
- Is close to the airfield in a clear zone and transverse slope and would restrict facility height; and
- Has construction limitations due to location and size.

#### 2.5.2 Site 2, C Street Location

Site 2, C Street, is located southeast of Keesler Base Exchange and south of Building 6223, Biloxi Hall, between Forest Avenue and Sixth Street, where Division Street transitions to A Street. Site 2 is not being carried forward for analysis because the site:

- Is in the 100-year floodplain and within the approximate store surge line;
- Has historically been submerged 0-20 feet during historic coast storms;
- Is within the Commercial Vehicle Access Gate last radius;
- Would interfere with other Keesler AFB planned a velopment if the MCTC was constructed on it;
- Would require significant amounts of fill a achieve a maximum 18-foot finished elevation;
- Has base access restrictions; and
- Is located within the Community Supplet Distict planning designation.

#### 2.5.3 Site 3, Harrison Court Loca

Site 3, Harrison Court, is a former DAP annu, busing area and a geographically separated area east of the main base. The area when Harrison Court is located is used for Fam Camp and recreation and is bounded by Bounchi Avenue, Park Court, and LaSalle Drive. Site 3 is not being carried forward for analysis breaks the site:

- Is within the ar proximate surm surge line;
- Has historical, be a successful of 11 feet during historical coastal storms;
- Impacts future Keesler / B development; and
- Would require significant amounts of fill to achieve a minimum 20-foot finished elevation.

#### 2.5.4 Site 4, Heritage Park Area

Site 4, the Heritage Park area, is bounded by C Street, Third Street, Meadows Drive, and Larcher Boulevard. Site 4 is not being carried forward for analysis because the site:

- Is within the approximate storm surge line;
- Has historically been submerged 0–11 feet during historical coastal storms;
- Would require significant amounts of fill to achieve a minimum 21-foot elevation;
- Has base access restrictions; and
- Would be required to be multipurpose and include ground floor retail/fitness.

#### 2.6 Summary of Potential Environmental Consequences

Table 2-3 summarizes the potential effects associated with alternatives 1 and 2 and the No Action Alternative. The summary is based on information discussed in detail in Section 3.0,

Affected Environment and Environmental Consequences, and includes a concise definition of each issue addressed and the potential environmental effects associated with each alternative.

#### Table 2-3. Summary of Environmental Consequences by Resource Area

[Preparer's Notes: this table will be populated when the impact analysis is complete.]

Resource Area	Alternative 1 MCTC Access from Larcher Boulevard- White Avenue (Preferred)	Alternative 2, MCTC Access from Judge Sekul Avenue	No Action Alternative
		· ·	

#### 3.0 REFERENCES

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Responses



### State of Mississippi

#### TATE REEVES Governor

#### MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

CHRIS WELLS, EXECUTIVE DIRECTOR

May 15, 2024

Janet Lanier, HDR EMS Coordinator Support 508 L Street-Bldg 4705 Keesler AFB, MS 39534

Re: Environmental Assessment Mississippi Cyber and Technology Center, Enhanced Use Lease Keesler Air Force Base Biloxi, Mississippi

Dear Ms. Lanier:

The Mississippi Department of Environmental Quality (MDEQ) has completed review of the referenced document (ESA) submitted on behalf of the Mississippi State University Research and Technology Corporation, which provides site characteristics and description of proposed activities within a designated portion of Keesler Air Force Base. The review of the ESA by MDEQ focused on environmental, ecological, and logistical impacts of said proposed activities.

MDEQ finds this Draft ESA to be a satisfactory preliminary presentation of the above aspects of the site, accepts it as presented, and concludes that it has no objections to said proposed activities as described at this time. MDEQ expects to receive the Final ESA, with all sections completed upon its availability.

Thank you for your attention in this matter; MDEQ appreciates the continued cooperation of the Air Force and its partners. Any questions or comments may be directed to Jimmy Crellin at **Example 1** or

Sincerely,

Sam C. Cur

James C. Crellin, RPG Project Manager

cc: Jan Patton, KAFB Robert Moseley, KAFB Jim Martin, MSU Michelle Clark, MDEQ Russ Graham, Cherokee Federal



### Mississippi Department of Wildlife, Fisheries, and Parks

Lynn Posey Executive Director

May 22, 2024

Tetra Tech, Inc. 107 St. Francis Street Bldg 4705 Mobile, Alabama 36602

Re: Environmental Assessment of Mississippi Cyber and Technology Center Enhanced Use Lease, Keesler AFB, MS Harrison County, MS Project # Internal Id 21941

#### To SUNI SHRESTHA:

In response to your request for information dated **May 03, 2024**, we have searched our database for occurrences of state or federally listed species and species of special concern that occur within 2 miles of the site of the proposed project. Please find our concerns and recommendations below.

Scientific Name	Common Name	Federal Status	State Status	State Rank
Accipiter striatus	Sharp-shinned Hawk	PS		S1?B,S3N
Agalinis maritima var. grandiflora	Saltmarsh False Foxglove			S3S4
Ammodramus maritimus	Seaside Sparrow	PS		S2
Ammodramus nelsoni	Nelson's Sharp-tailed Sparrow			S2N
Andropogon perangustatus	Elliott's Bluestem (Var.2)			S1S2

Scientific Name	Common Name	Federal Status	State Status	State Rank
Anthoceros punctatus	a hornwort			S2
Asclepias humistrata	Pinewoods Milkweed			S3S4
Caretta caretta	Loggerhead Sea Turtle	LT	LE	S1B
Charadrius melodus	Piping Plover	LT	LE	S2N
Charadrius nivosus	Snowy Plover	PS:LT	LE	S2
Chasmanthium ornithorhynchum	Bird-bill Spikegrass			S3
Crocanthemum arenicola	Coastal-sand Frostweed			S1S2
Crocanthemum georgianum	Georgia Frostweed			S3S4
Cyperus lecontei	Le Conte's Flatsedge			S1
Dalea mountjoyae	White-tassels			S2S3
Dalea pinnata var. trifoliata	Tansy Prairie-clover			S3S4
Drepanolejeunea mosenii	a liverwort			S1
Egretta thula	Snowy Egret			S2B,S1N
Eleocharis albida	White Spikerush			S1
Enallagma concisum	Cherry Bluet			S2
Erythrodiplax umbrata	Band-winged Dragonlet			S1
Falco columbarius	Merlin			S1N
Falco sparverius	American Kestrel			S3B,S4S5N
Fimbristylis castanea	Marsh Fimbry			S3
Fimbristylis puberula var. puberula	Hairy Fimbry			S3S4
Fuirena scirpoidea	Southern Umbrella-sedge			S2S3
Fundulus jenkinsi	Saltmarsh Topminnow	SC		S3
Haematopus palliatus	American Oystercatcher			S2
Juniperus silicicola	Southern Red Cedar			S2
Lepidochelys kempii	Kemp's Ridley Sea Turtle	LE	LE	S1N,S1B

Scientific Name	Common Name	Federal Status	State Status	State Rank
Limosa fedoa	Marbled Godwit			S2N
Malaclemys terrapin pileata	Mississippi Diamondback Terrapin			S2
Nerodia clarkii clarkii	Gulf Salt Marsh Snake			S2
Ophisaurus attenuatus	Slender Glass Lizard			S2
Paronychia erecta var. corymbosa	Beach Sand-squares			S1S2
Pelecanus occidentalis	Brown Pelican		LE	S3
Physalis angustifolia	Coast Ground-cherry			S3
Polygala hookeri	Hooker's Milkwort			S2
Rhynchospora harveyi	Harvey's Beakrush			S2
Rhynchospora plumosa	Plume Beakrush			S3S4
Rhynchospora rariflora	Few-flowered Beakrush			S3S4
Ruellia noctiflora	Night-flowering Wild-petunia			S2
Schlotheimia rugifolia	Rugged-leaf Schlotheimia Moss			S3S4
Scleria ciliata var. elliottii	Broad-leaved Hairy Nutrush			S2
Scleria muehlenbergii	Muehlenberg's Nutrush			S3S4
Scleria nitida	Shining Nutrush			S1
Setophaga cerulea	Cerulean Warbler			S2B
Sternula antillarum	Least Tern	PS:LE		S3B
Thalasseus maximus	Royal Tern			S1B,S4N
Trifolium carolinianum	Carolina Clover			S1

#### State Rank

**S1** - Critically imperiled in Mississippi because of extreme rarity (5 or fewer occurrences or vey few remaining individuals or acres) or because of some factor(s) making it vulnerable to extirpation.

**S2** - Imperiled in Mississippi because of rarity (6 to 20 occurrences or few remaining individuals or acres) or because of some factor(s) making it vulnerable to extirpation.

S3 - Rare or uncommon in Mississippi (on the order of 21 to 100 occurrences).

Based on the information provided, we conclude that if best management practices are properly implemented, monitored, and maintained (particularly measures to prevent, or at least, minimize negative impacts to water quality), the proposed project likely poses no threat to listed species or their habitats.

#### **Recommendations:**

As listed above, there are 50 species of concern in our database within a 2-mile radius of the Mississippi Cyber and Technology Center project on the enhanced use lease of Keesler Airforce Base in Biloxi, MS (30.400008760, -88.909400739). Of the species listed above, the Kemp's Ridley Sea Turtle is listed as federally endangered and state endangered; the Loggerhead Sea Turtle, Piping Plover, and Snowy Plover are listed as federally threatened; and state endangered, and the Brown Pelican is listed as state endangered. Many of the state's listed species are on the decline because of degradation or destruction of essential habitat needed to support them. Due to the nature of this project, our primary concern for this project is the possibility of sediment deposition, turbidity, exhaust runoff from roads, increased herbicide and pesticide load, and other unintentional introduction of pollutants being introduce to the nearby bodies of water that runs through the project site. These factors may negatively impact habitat conditions by detrimentally affecting respiration, feeding, and reproduction of amphibians, bats, birds, crayfishes, fishes, insects, mussels, turtles, and vegetation. Sea turtles spend most of their life cycle in marine environments, coming ashore only to lay eggs. Depending on the species, nesting can occur April through November. Development on nesting beaches is detrimental. Human activity and artificial lighting on developed beaches may deter nesting females and disorient hatchlings. In Mississippi, Southeastern Snowy Plover is not listed federally, but is listed as state endangered. They nest on the barrier islands and occasionally on mainland beaches in Harrison County from April to July. Southeastern Snowy Plovers can be found yearround in Mississippi in expanses of flat, dry sand along seacoast beaches. We recommend that important habitats such as tidal flats and adjacent sandy sand beaches should be protected from development. If destruction is unavoidable, appropriate mitigation should be implemented. Piping Plover is listed as federally threatened and state endangered in Mississippi. They can be found in Mississippi much of the year on coastal beaches and barrier islands. We recommend that important habitats, such as tidal flats and adjacent sandy beaches, should be protected from development. If destruction is unavoidable, appropriate mitigation should be implemented. Brown Pelicans are listed as state endangered and have been documented within two miles of your project site. Coastal development and loss and disturbance of roost can negatively impact this species. Since this site is already within a developed disturbed area, impact to the listed species above is probably minimum. We recommend that best management practices (BMPs) be properly implemented, maintained, and monitored regularly for compliance. Specific emphasis should be placed on measures that help look for signs of increased erosion, and minimize the occurrence of excess sedimentation, suspended particulate matter, and contaminants at all project sites and surrounding areas from leaving in stormwater run-off or from direct entry into nearby streams and waterbodies. If such signs are discovered, then appropriate actions to address the issue should be taken. Please check MS Department of Environmental Quality and the Mississippi Forestry Commission for BMPs and SMZs.

Please feel free to contact us if we can provide any additional infromation, resources, or assistance that will help minimize negative impacts to the species and/or ecological communities identified in this review. We are happy to work with you to ensure that our state's precious natural heritage is conserved and preserved for future Mississippians.

Completed by Quentin Fairchild

The Mississippi Natural Heritage Program (MNHP) has compiled a database that is the most complete source of information about Mississippi's rare, threatened, and endangered plants, animals, and ecological communities. The quantity and quality of data collected by MNHP are dependent on the research and observations of many individuals and organizations. In many cases, this information is not the result of comprehensive or site-specific field surveys; most natural areas in Mississippi have not been thoroughly surveyed and new occurrences of plant and animal species are often discovered. Heritage reports summarize the existing information known to the MNHP at the time of the request and cannot always be considered a definitive statement on the presence, absence or condition of biological elements on a particular site. RE: Scoping Letter - Environmental Assessment of Mississippi Cyber and Technology Center Enhanced Use Lease, Keesler AFB, MS

Dennis Riecke	
Fri 5/3/2024 1:18 PM	
To:Shrestha, Suni ·	Quentin Fairchild
Cc:MOSELEY, ROBERT T III CIV USAF AETC 81 CES/CL <	robert.moseley@us.af.mil>;LANIER, JANET L CTR USAF AFMC
AFCEC/CZOM ;Martin, Jim	>;McGee, Marc
:McConville, Rowar	

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Janet,

While I don't think there will be any state listed threatened, endangered or species of concern within the proposed site location, I recommend that you seek a project review from the Mississippi Department of Wildlife, Fisheries, and Parks Natural Heritage Program. Here is how you can do that. It will take approximately 5 minutes:

We recommend that the project applicant or their agent use the links below to request a Mississippi Natural Heritage Program review to determine the impacts this development project may have on state endangered, threatened and special concern species.

Federal project reviews furnished by US Fish and Wildlife Service - Mississippi Ecological Services office focus only on assessing project impacts to the 55 federally threatened or endangered species on a countywide basis. To provide the State's perspective and a more localized assessment, it is recommended that an additional review be performed by the Mississippi Department of Wildlife, Fisheries, and Parks' - Mississippi Natural Heritage Program. The Natural Heritage Program will review a proposed project for potential impacts to the 85 species known from its database that are listed as federal or state threatened, endangered, or of special concern species. The official response would provide to the applicant, a list of these species found within a 2-mile buffer of the project and an assessment of potential project impacts (if applicable) to those species and their habitats. The response will also recommend best management practices that may be implemented and maintained throughout the project to minimize any adverse impacts to these species.

The Mississippi Natural Heritage Program initiated a mandatory online project review application submission system in March 2019 for all project evaluations and reviews. To request a review, the applicant, or their agent, may only submit the project files using the online system. Requests are processed in the order in which they are received. Response time depends on the number of other requests being processed at the time the request is received; however, requests are usually filled within 14 business days. There is processing fee of \$45/quad associated with each project review.

More information on requesting Natural Heritage information can be found at <u>https://www.mdwfp.com/museum/seek-study/natural-heritage-program/request-natural-heritage-information/</u>.

To enter a project for review in the online system click on <u>https://xnet2.mdwfp.com/Environmental\_Public/Account/Login?</u> <u>ReturnUrl=%2FEnvironmental\_Public%2F&\_ga=2.95474517.839880902.1681337780-173439052.1641325346</u> to create a user account. The longitude and latitude information must be entered in decimal d

to create a user account. The longitude and latitude information must be entered in decimal degrees.

A two page tutorial on how to use this online system is provided at <u>https://www.mdwfp.com/media/256525/mississippi-natural-heritage-program-web-app-for-environmental-review-requests.pdf</u>.

Please contact Quentin Fairchild 601-576-6000 or <u>Quentin.Fairchild@mmns.ms.gov</u> if you have any questions.

Dennis Riecke Certified Fisheries Professional Certified Public Manager Fisheries Coordinator Mississippi Dept. of Wildlife, Fisheries, and Parks 1505 Eastover Drive Jackson, MS 39211-6374

From: Shrestha, Suni <	>	
Sent: Friday, May 3, 2024 11:56 A	M	
<b>To:</b> Dennis Riecke <	>	
Cc: MOSELEY, ROBERT T III CIV US	AF AETC 81 CES/CL	LANIER, JANET L CTR USAF
AFMC AFCEC/CZOM	; Martin, Jim	; McGee, Marc
	: McConville, Rowan	

Subject: Scoping Letter - Environmental Assessment of Mississippi Cyber and Technology Center Enhanced Use Lease, Keesler AFB, MS

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Good afternoon,

On behalf Keesler Air Force Base (AFB), please see attached letter with the base's request for your organization's preliminary comments and input for the Environmental Assessment of Mississippi Cyber and Technology Center Enhanced Use Lease at Keesler AFB, MS. Please respond per attached letter, via email (preferred) at

br by regular mail to: Janet Lanier, HDR EMS Coordinator Support, 508 L Street-Bldg 4705, Keesler AFB, MS 39534.

Thank you for your attention to this matter.

Suni Shrestha | Project Manager Pronouns: she, her, hers

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#### DEPARTMENT OF THE ARMY U.S. ARMY CORPS OF ENGINEERS, MOBILE DISTRICT P.O. BOX 2288 MOBILE, AL 36628-0001

May 22, 2024

South Mississippi Branch Regulatory Division

SUBJECT: Department of the Army, No Permit Required, File Number SAM-2024-00471-SMP, Department of the Air Force, Keesler Air Force Base, Harrison County, Mississippi

Department of the Air Force Attention: Janet Lanier

508 L Street, Bldg. 4705 Keesler AFB, Mississippi 39534

Dear Ms. Lanier:

Reference is made to your request for a Department of the Army (DA) review of Keesler Air Force Base Mississippi Cyber and Technology Center (MCTC) in Biloxi, Mississippi. This project has been assigned File Number **SAM-2024-00471-SMP**, which should be referred to in all future correspondence with this office concerning this project. The project is located at Larcher Boulevard and West Howard Avenue; within Section 29, Township 7S, Range 9W; Latitude 30.4005° North and Longitude 88.9104° West; Biloxi, Mississippi.

A review of the information you submitted indicates a DA Permit pursuant to Section 404 of the Clean Water Act or Section 10 of the Rivers and Harbors Act of 1899 **will not be required** for construction of the MCTC at Keesler Air Force Base. This determination is based on the nature of the proposed activities, as described in the attached project description/plans dated May 2, 2024. Any proposed modifications to the project location or scope of work, or anticipated ground disturbance or discharge of fill material in streams and/or wetland areas, should be coordinated with our office prior to commencing the activity.

The statements contained herein do not convey any property rights or any exclusive privileges, and do not authorize any injury to property nor shall it be construed as excusing you from compliance with other Federal, State, or local statutes, ordinances, or regulations that may affect proposed work.

Electronic copies of this letter are being provided to your agent, Tetra Tech, Attention: Suni Shrestha at the second sec

If you have any questions, please contact me at (**Contact of a**), or . For additional information about our Regulatory Program, visit our web site at <u>www.sam.usace.army.mil/Missions/Regulatory.aspx</u>. Also, please take a moment to complete our customer satisfaction survey located near the bottom of the webpage. Your responses are appreciated and will help us improve our services.

Sincerely,

Sanahfierco

Date: 2024.05.22 11:41:34 -05'00'

Sarah M. Piesco Project Manager South Mississippi Branch Regulatory Division

Attachments

From: To: Cc:	LANIER, JANET L CTR USAF AFMC AFCEC/CZOM Shrestha, Suni TRAWEEK, NEAL J CIV USAF AETC 81 CES/CEI; BURMASTER, AUSTIN L CTR USAF AETC BOS/CEV; HARRIS, MARCIA B CIV USAF AFCEC CZOW/CZOW
Subject: Date:	FW: [EXTERNAL] FW: Scoping Letter - Environmental Assessment of Mississippi Cyber and Technology Center Enhanced Use Lease, Keesler AFB, MS
	Thursday, June 27, 2024 12:41:12 PM

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#### FYI

From: Necaise, Paul Sent: Thursday, June 27, 2024 11:46 AM
To: LANIER, JANET L CTR USAF AFMC AFCEC/CZOM
Subject: [Non-DoD Source] Re: [EXTERNAL] FW: Scoping Letter - Environmental Assessment of
Mississippi Cyber and Technology Center Enhanced Use Lease, Keesler AFB, MS

Janet,

The US Fish and Wildlife Service (Service) has reviewed the Environmental Assessment (EA) and proposed alternatives for the subject project. Ecosphere project number 2024-0109713. As stated in your EA, the tri-colored bat is known to be located in the project area and is proposed for listed as a federally listed species.

The project falls within the range of the proposed to be federally listed Tricolored bat (Perimyotis subflavus; TCB). On September 13, 2022, the Service announced a proposal to list the TCB as endangered. The Service anticipates the Final Rule for the tricolored bat to publish in the summer of 2024, at which time the protections of the ESA will go into effect for this species. Once the final rule has published, project proponents will need to consult for this species.

As a best management practice for the TCB, the Service recommends that any tree removal activities required for this project be conducted outside of the pup season (May 1 - July 15). **Recommended tree clearing timeframe: July 16 - Apr 30.** 

The Service does not anticipate impacts to any other federally listed species as a result of the proposed project. The Service appreciates the opportunity to comment on this project. Should you have any questions, you may contact me at the telephone number listed below. Fish and Wildlife Biologist U.S. Fish and Wildlife Service Mississippi Ecological Services Field Office 6578 Dogwood View Parkway Jackson, MS 39213

NOTE: This email correspondence and any attachments to and from this sender is subject to the Freedom of Information Act (FOIA) and may be disclosed to third parties.

From: LANIER, JANET L CTR USAF AFMC AFCEC/CZOM Sent: Tuesday, June 25, 2024 11:26 AM

To: Necaise, Paul

**Subject:** [EXTERNAL] FW: Scoping Letter - Environmental Assessment of Mississippi Cyber and Technology Center Enhanced Use Lease, Keesler AFB, MS

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FYI

From: Shrestha, Suni <	>	
Sent: Friday, May 3, 2024 10:17 AM		
To:		
Cc: MOSELEY, ROBERT T III CIV USAF	AETC 81 CES/CL <	>; LANIER, JANET L
CTR USAF AFMC AFCEC/CZOM <	>; Martin, Jim	5.95 29
<	; McGee, Marc <	>; McConville,
Rowan <		

**Subject:** [Non-DoD Source] Scoping Letter - Environmental Assessment of Mississippi Cyber and Technology Center Enhanced Use Lease, Keesler AFB, MS

Good morning,

On behalf Keesler Air Force Base (AFB), please see attached letter with the base's request for your organization's preliminary comments and input for the Environmental Assessment of Mississippi Cyber and Technology Center Enhanced Use Lease at Keesler AFB, MS. Please respond per attached letter, via email (preferred) at the technology between the provide the provide the technology Center Enhanced Content of the technology between the technology between the technology between the technology between tech

Thank you for your attention to this matter.

Suni Shrestha | Project Manager Pronouns: she, her, hers

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The Department of the Air Force Correspondence

#### Appendix A – Mississippi Department of Archives and History

The following letter was sent to the Mississippi Department of Archives and History, Historic Preservation Division. Responses received follow the letter sent.

Agency	Name, Title	Response Received
Mississippi Department of Archives and History, State Historic Preservation Division	Jennifer Baughn, Chief Architectural Historian	Х



## DEPARTMENT OF THE AIR FORCE HEADQUARTERS 81 ST TRAINING WING (AETC)

02 May 2024

Robert T. Moseley III Deputy Base Civil Engineer 81<sup>st</sup> Civil Engineer Squadron 500 Fisher Street, Bldg 701 Keesler AFB, MS 39534

Jennifer Baughn Historic Preservation Division Chief Architectural Historian Mississippi Department of Archives and History 100 S. State Street P.O. Box 571 Jackson, MS 39201 section106@mdah.ms.gov

#### Dear Ms. Baughn

The Department of the Air Force (DAF) proposes to out lease non-excess land on Keesler Air Force Base (AFB) in Biloxi, Mississippi (MS) to MS State University Research & Technology Corporation (MSU RTC) using an enhanced use lease (EUL). MSU RTC would construct and operate the MS Cyber and Technology Center (MCTC) on the leased land. The proposed undertaking is described in the Description of Proposed Action and Alternatives (DOPAA) (Attachment 1). The DAF is preparing an environmental assessment (EA) to evaluate the potential environmental impacts associated with the Proposed Action. The purpose of this letter is to initiate consultation under Section 106 of the National Historic Preservation Act (NHPA) for the proposed project. Please note, Keesler AFB is not officially requesting concurrence on the proposed undertaking at this time. A determination of effect regarding the proposed undertaking will be recommended by Keesler AFB in follow-on consultation.

The DAF has reviewed the undertaking and defined the area of potential effect (APE) to encompass all potential effects from the execution of either of the two alternatives for the Proposed Action (Alternative 1 [Preferred Alternative] and Alternative 2). Therefore, the APE includes those areas proposed for construction, associated laydown/staging areas, and access (Attachment 2).

Beginning in 1988, Keesler AFB began identification and documentation of buildings/sites of potential historical and cultural significance. As of 2013, Keesler AFB in collaboration with Mississippi Department of Archives & History (MDAH) determined there are only five remaining

buildings that warrant consultation under Section 106 of the NHPA; 6901, 4116, 4330, 4331, and potentially 1002. Additionally, buildings 7503, 7504, and 7505 were determined eligible for the National Register of Historic Places (NRHP) in 2021 and mitigated for adverse effects resulting from project work unrelated to this undertaking. None of these facilities are located within the proposed APE. A figure of these facility locations is provided in Attachment 2.

Within the APE, Keesler AFB consulted with your office for the demolition of four dormitory buildings, 4904, 4908, 5020, and 5022, previously located on the site. The dormitories, built in the early 1950s, were considered not eligible for the NRHP due to extensive alterations. The buildings were also deemed to no longer retain architectural integrity to convey either its Cold War-era significance or its architectural significance. Keesler AFB received MDAH concurrence for the demolition of the four dormitories in letters dated:

- January 5, 2022: Proposed Demolition of Dorm VQ, Building 5022, at 203 5th Street, Biloxi, Keesler AFB, Biloxi, (USAF) MDAH Project Log #09-079-20, Harrison County
- September 22, 2021: Proposed Demolition of Ocean Springs Hall and Gulfport Hall and Construction of a New Dormitory Building, Keesler Air Force Base (USAF), MDAH Project Log #08-153-21, Harrison County
- October 6, 2021: Proposed Demolition of Building 5020, Dorm VQ, 201 5th Street, Keesler Air Force Base, (USAF) MDAH Log #12-027-21, Harrison County

Keesler AFB completed demolition of Building 5022 in 2022 and Buildings 4904, 4908 and 5020 in 2023.

There have been no prehistoric or historic Native American Indian sites and/or Traditional Cultural Properties identified on the installation (Keesler AFB ICRMP 2018). However, those Native American Tribes that affiliate with Keesler AFB (Jena Band of Choctaw Indians, Choctaw Nation of Oklahoma, Mississippi Band of Choctaw Indians, and Tunica-Biloxi Tribe of LA) will be notified in the event of any unanticipated discoveries. The Native American Tribes are being included in the Section 106 consultation effort for the proposed project.

A search of MDAH online records determined there are architectural and archaeological resources on and off-base near the project area. The Old Biloxi Cemetery (1811-present) is the closest, immediately adjacent to the eastern boundary of the APE, in the southeastern corner. In addition, there are four eligible sites within a 1-mile radius of the site; Joe Moran, Dantzler House, Biloxi Light Keeper's House, and Lighthouse Bluff. Of these, the Old Biloxi Cemetery is the only cultural resource that is within the immediate vicinity of the proposed undertaking.

In April 2024, MSU Cobb Institute of Archaeology conducted an archaeological survey of the proposed EUL site. Additionally, because of proximity to the cemetery, MSU Cobb Institute of Archaeology conducted a ground penetrating radar investigation. Preliminary field results indicate absence of archaeological deposits on the site. MSU RTC will coordinate with your office for the archaeological report of the findings. Keesler AFB will use the results of this survey to continue consulting with your office on potential effects resulting from the proposed undertaking.

If you have any comments or concerns you would like to provide regarding the proposed undertaking, please respond to us within 30 days of receipt of this letter. Please send your written responses via e-mail (preferred) to: **Sector Concerns** or by regular mail to: Janet Lanier, HDR EMS Coordinator Support, 508 L Street-Bldg 4705, Keesler AFB, MS 39534; or by phone at (**Concerns**).

Sincerely

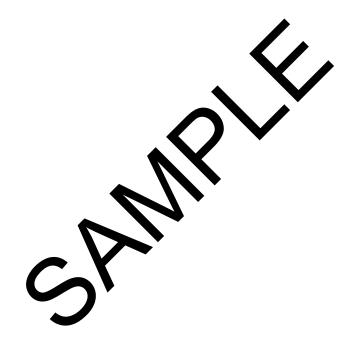
MOSELEY.ROBERT Digitally signed by MOSELEY.ROBERT.T.III.12307647 82 Date: 2024.05.01 13:45:38 -05'00'

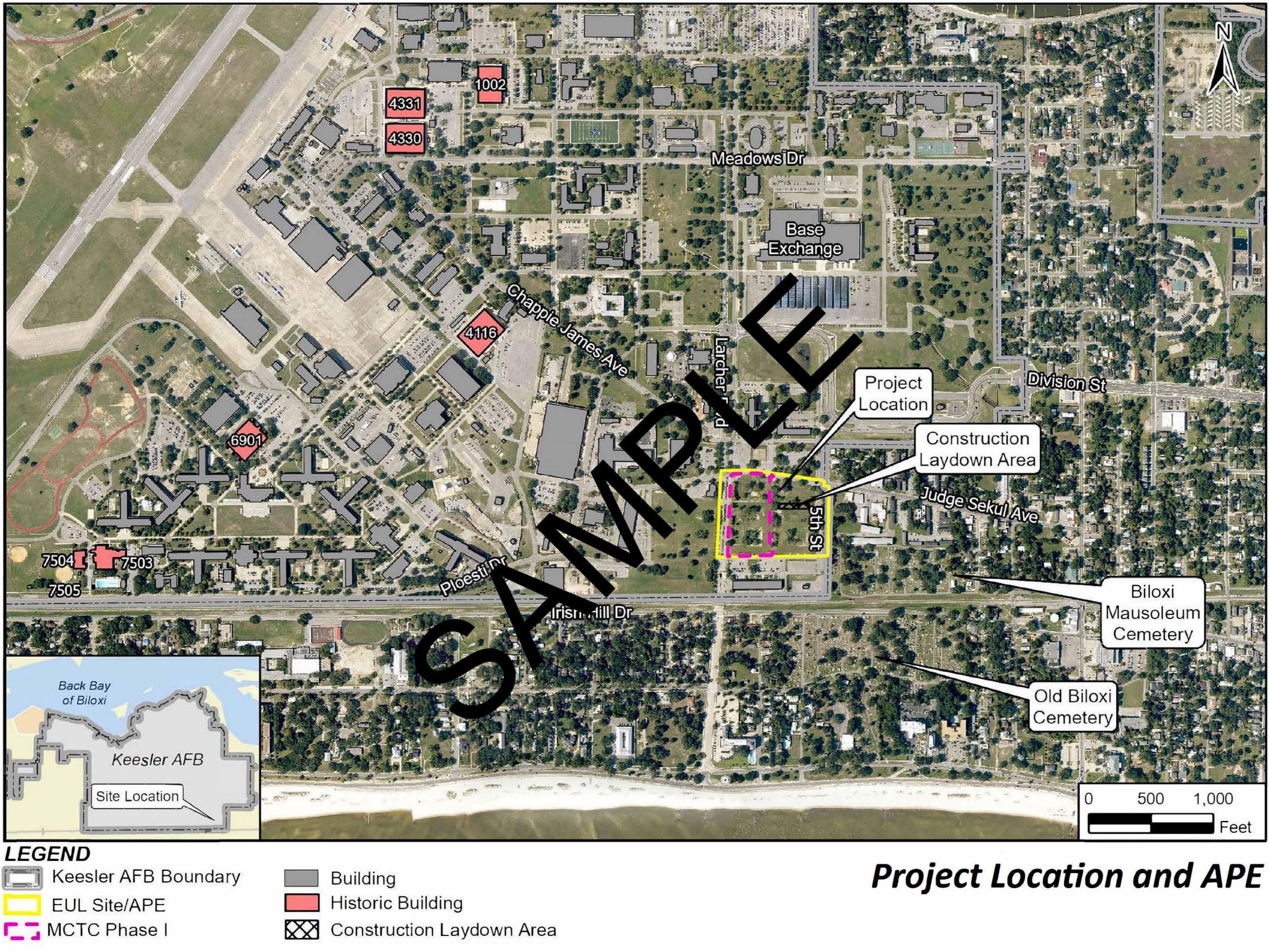
ROBERT T. MOSELEY III Deputy Base Civil Engineer

2 Attachments:

- 1. Draft DOPAA
- 2. Location and APE Figure

# **ATTACHMENT 2 – Project Location and APE**





Sources: Keesler AFB 2024b, NOAA 2023. Notes: APE = Area of Potential Effect, NRHP = National Register of Historic Places. Bldgs 7503, 7504, and 7505 determined eligible and mitigated per 2021 Section 106 Consultation with MS Department of History and Archives.



P.O. Box 571 Jackson, MS 39205-0571 601-576-6850 mdah.ms.gov

June 5, 2024

Ms. Janet Lanier 81 ID/IDP 500 Fisher Street, Building 701 Keesler AFB, Mississippi 39534

RE: Proposed Lease and Construction of Cyber and Tech Center, Keesler AFB, (USFS) MDAH Project Log #05-046-24, Harrison County

Dear Ms. Lanier:

We have reviewed the request for cultural resources assessment, received on May 3, 2024, for the above referenced project in accordance with our responsibilities under Section 106 of the National Historic Preservation Act and 36 CFR Part 800. After review, MDAH archaeology cannot provide final comment under Section 106 at this time; however, the project as described will not adversely affect archaeological resources provided that the Phase I archaeology survey is negative. We look forward to receiving the report.

If you have any questions, please contact us at

Sincerely,

Hal Bell

Hal Bell Review and Compliance Officer

FOR: Katie Blount State Historic Preservation Officer



P.O. Box 571 Jackson, MS 39205-0571 601-576-6850 mdah.ms.gov

September 11, 2024

Mr. Edmond Boudreax Cobb Institute of Archaeology 340 Lee Boulevard, #9451 Mississippi State, Mississippi 39762

RE: Revised Phase I Cultural Resources Survey of the Proposed Location of the Mississippi Cyber and Technology Center, Keesler Air Force Base, (USAF) MDAH Project Log #06-040-24, Report #24-0257, Harrison County

Dear Mr. Boudreaux:

We have reviewed the August 9, 2024, cultural resources survey for the above referenced undertaking, pursuant to our responsibilities under Section 106 of the National Historic Preservation Act and 36 CFR Part 800. After reviewing the information provided, we concur that no resources eligible for listing in the National Register of Historic Places were identified within the project area or are likely to be affected by the project. Therefore, we have no objection with the proposed undertaking.

Should there be additional work in connection with the project, or any changes in the scope of work, please let us know in order that we may provide you with appropriate comments in compliance with the above referenced regulations.

If you have any questions, please contact us at the second s

Sincerely,

or S

Amy D. Myers Review and Compliance Officer

FOR: Katie Blount State Historic Preservation Officer

#### Appendix A – Native American Tribes

The following letters were sent to the federally recognized Native American Tribes listed below. The attachments sent with the letters were the same as shown for the Mississippi Department of Archives and History. Responses received follow the letter sent.

Tribe	Name	Response Received
Choctaw Nation of Oklahoma	Dr. Ian Thompson, THPO	Х
Jena Band of Choctaw Indians	Johnna Flynn, THPO	
Mississippi Band of Choctaw Indians	Melanie Carson, THPO	
Tunica-Biloxi Tribe of Louisiana	Early J. Barbry, Jr., THPO	



## DEPARTMENT OF THE AIR FORCE HEADQUARTERS 81ST TRAINING WING (AETC)

02 May 2024

Robert T. Moseley III Deputy Base Civil Engineer Tribal Liaison Officer 81<sup>st</sup> Civil Engineer Squadron 500 Fisher Street, Bldg 701 Keesler AFB, MS 39534

THPO Johnna Flynn Jena Band of Choctaw Indians PO Box 14 Jena, LA 71342

Dear THPO Flynn

The Department of the Air Force (DAF) proposes to out lease non-excess land on Keesler Air Force Base (AFB) in Biloxi, Mississippi (MS) to MS State University Research and Technology Corporation (MSU RTC) using an enhanced use lease (EUL). MSU RTC would construct and operate the MS Cyber and Technology Center (MCTC) on the leased land. The proposed undertaking is described in the Description of Proposed Action and Alternatives (DOPAA) (Attachment 1). The DAF is preparing an environmental assessment (EA) to evaluate the potential environmental impacts associated with the Proposed Action. The purpose of this letter is to initiate consultation under Section 106 of the National Historic Preservation Act (NHPA) for the proposed project. Please note, while comments are welcome, Keesler AFB is not officially requesting comments on the proposed undertaking at this time. A determination of effect regarding the proposed undertaking will be recommended by Keesler AFB in follow-on consultation.

The DAF has reviewed the undertaking and defined the area of potential effect (APE) to encompass all potential effects from the execution of either of the two alternatives for the Proposed Action (Alternative 1 [Preferred Alternative] and Alternative 2). Therefore, the APE includes those areas proposed for construction, associated laydown/staging areas, and access (Attachment 2).

Beginning in 1988, Keesler AFB began identification and documentation of buildings/sites of potential historical and cultural significance. As of 2013, Keesler AFB in collaboration with Mississippi Department of Archives & History (MDAH) determined there are only five remaining buildings that warrant consultation under Section 106 of the NHPA; 6901, 4116, 4330, 4331, and potentially 1002. Additionally, buildings 7503, 7504, and 7505 were determined eligible for the

National Register of Historic Places (NRHP) in 2021 and mitigated for adverse effects resulting from project work unrelated to this undertaking. None of these facilities are located within the proposed APE. A figure of these facility locations is provided in Attachment 2.

Within the APE, Keesler AFB consulted with MDAH for the demolition of four dormitory buildings 4904, 4908, 5020, and 5022, previously located on the site. The dormitories, built in the early 1950s, were considered not eligible for the NRHP due to extensive alterations. The buildings were also deemed to no longer retain architectural integrity to convey either its Cold War-era significance or its architectural significance. Keesler AFB received MDAH concurrence for the demolition of the four dormitories in letters dated:

- January 5, 2022: Proposed Demolition of Dorm VQ, Building 5022, at 203 5th Street, Biloxi, Keesler AFB, Biloxi, (USAF) MDAH Project Log #09-079-20, Harrison County
- September 22, 2021: Proposed Demolition of Ocean Springs Hall and Gulfport Hall and Construction of a New Dormitory Building, Keesler Air Force Base (USAF), (MDAH Project Log #08-153-21, Harrison County)
- October 6, 2021: Proposed Demolition of Building 5020, Dorm VQ, 201 5th Street, Keesler Air Force Base, (USAF) MDAH Log #12-027-21, Harrison County

Keesler AFB completed demolition of Building 5022 in 2022 and Buildings 4904, 4908 and 5020 in 2023.

There have been no prehistoric or historic Native American Indian sites and/or Traditional Cultural Properties identified on the installation (Keesler AFB ICRMP 2018). However, Jena Band of Choctaw Indians will be notified in the event of any unanticipated discoveries.

A search of MDAH online records determined there are architectural and archaeological resources on and off-base near the project area. The Old Biloxi Cemetery (1811-present) is the closest, immediately adjacent to the eastern boundary of the EUL APE, in the southeastern corner. In addition, there are four eligible sites within a 1-mile radius of the site; Joe Moran, Dantzler House, Biloxi Light Keeper's House, and Lighthouse Bluff. Of these, the Old Biloxi Cemetery is the only cultural resource that falls within the immediate vicinity of the proposed undertaking.

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If you have questions, please contact Janet Lanier, HDR EMS Coordinator Support, via email (preferred) to: or by regular mail to: Janet Lanier, HDR EMS Coordinator Support, 508 L Street-Bldg 4705, Keesler AFB, MS 39534; or by phone at (

Sincerely

MOSELEY.ROBERT Digitally signed by MOSELEY.ROBERT.T.III.12307647 2.T.III.1230764782 2.Date: 2024.05.01 13:46:29 05'00'

ROBERT T. MOSELEY III Deputy Base Civil Engineer Tribal Liaison Officer

2 Attachments:

- 1. Draft DOPAA
- 2. Location and APE Figure



## DEPARTMENT OF THE AIR FORCE HEADQUARTERS 81ST TRAINING WING (AETC)

02 May 2024

Robert T. Moseley III Deputy Base Civil Engineer Tribal Liaison Officer 81<sup>st</sup> Civil Engineer Squadron 500 Fisher Street, Bldg 701 Keesler AFB, MS 39534

THPO Dr. Ian Thompson Choctaw Nation of Oklahoma PO Box 1210 Durant, OK 74702-1210

Dear THPO Thompson

The Department of the Air Force (DAF) proposes to out lease non-excess land on Keesler Air Force Base (AFB) in Biloxi, Mississippi (MS) to MS State University Research and Technology Corporation (MSU RTC) using an enhanced use lease (EUL). MSU RTC would construct and operate the MS Cyber and Technology Center (MCTC) on the leased land. The proposed undertaking is described in the Description of Proposed Action and Alternatives (DOPAA) (Attachment 1). The DAF is preparing an environmental assessment (EA) to evaluate the potential environmental impacts associated with the Proposed Action. The purpose of this letter is to initiate consultation under Section 106 of the National Historic Preservation Act (NHPA) for the proposed project. Please note, while comments are welcome, Keesler AFB is not officially requesting comments on the proposed undertaking at this time. A determination of effect regarding the proposed undertaking will be recommended by Keesler AFB in follow-on consultation.

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There have been no prehistoric or historic Native American Indian sites and/or Traditional Cultural Properties identified on the installation (Keesler AFB ICRMP 2018). However, Choctaw Nation of Oklahoma will be notified in the event of any unanticipated discoveries.

A search of MDAH online records determined there are architectural and archaeological resources on and off-base near the project area. The Old Biloxi Cemetery (1811-present) is the closest, immediately adjacent to the eastern boundary of the EUL APE, in the southeastern corner. In addition, there are four eligible sites within a 1-mile radius of the site; Joe Moran, Dantzler House, Biloxi Light Keeper's House, and Lighthouse Bluff. Of these, the Old Biloxi Cemetery is the only cultural resource that falls within the immediate vicinity of the proposed undertaking.

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Sincerely

MOSELEY.ROBERT Digitally signed by MOSELEY.ROBERT.T.III.12307647 2.T.III.1230764782 2.Date: 2024.05.01 13:46:29 05'00'

ROBERT T. MOSELEY III Deputy Base Civil Engineer Tribal Liaison Officer

2 Attachments:

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- 2. Location and APE Figure



## DEPARTMENT OF THE AIR FORCE HEADQUARTERS 81ST TRAINING WING (AETC)

02 May 2024

Robert T. Moseley III Deputy Base Civil Engineer Tribal Liaison Officer 81<sup>st</sup> Civil Engineer Squadron 500 Fisher Street, Bldg 701 Keesler AFB, MS 39534

THPO Melanie Carson Mississippi Band of Choctaw Indians 101 Industrial Road Choctaw, MS 39350

Dear THPO Carson

The Department of the Air Force (DAF) proposes to out lease non-excess land on Keesler Air Force Base (AFB) in Biloxi, Mississippi (MS) to MS State University Research and Technology Corporation (MSU RTC) using an enhanced use lease (EUL). MSU RTC would construct and operate the MS Cyber and Technology Center (MCTC) on the leased land. The proposed undertaking is described in the Description of Proposed Action and Alternatives (DOPAA) (Attachment 1). The DAF is preparing an environmental assessment (EA) to evaluate the potential environmental impacts associated with the Proposed Action. The purpose of this letter is to initiate consultation under Section 106 of the National Historic Preservation Act (NHPA) for the proposed project. Please note, while comments are welcome, Keesler AFB is not officially requesting comments on the proposed undertaking at this time. A determination of effect regarding the proposed undertaking will be recommended by Keesler AFB in follow-on consultation.

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There have been no prehistoric or historic Native American Indian sites and/or Traditional Cultural Properties identified on the installation (Keesler AFB ICRMP 2018). However, Mississippi Band of Choctaw Indians will be notified in the event of any unanticipated discoveries.

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MOSELEY.ROBERT Digitally signed by MOSELEY.ROBERT.T.III.12307647 2.T.III.1230764782 2.Date: 2024.05.01 13:46:29 05'00'

ROBERT T. MOSELEY III Deputy Base Civil Engineer Tribal Liaison Officer

2 Attachments:

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- 2. Location and APE Figure



### DEPARTMENT OF THE AIR FORCE HEADQUARTERS 81ST TRAINING WING (AETC)

02 May 2024

Robert T. Moseley III Deputy Base Civil Engineer Tribal Liaison Officer 81<sup>st</sup> Civil Engineer Squadron 500 Fisher Street, Bldg 701 Keesler AFB, MS 39534

THPO Earl J. Barbry, Jr. Tunica-Biloxi Tribe of LA 150 Melacon Drive <u>Marksville, LA</u> 71351

Dear THPO Barbry, Jr.

The Department of the Air Force (DAF) proposes to out lease non-excess land on Keesler Air Force Base (AFB) in Biloxi, Mississippi (MS) to MS State University Research and Technology Corporation (MSU RTC) using an enhanced use lease (EUL). MSU RTC would construct and operate the MS Cyber and Technology Center (MCTC) on the leased land. The proposed undertaking is described in the Description of Proposed Action and Alternatives (DOPAA) (Attachment 1). The DAF is preparing an environmental assessment (EA) to evaluate the potential environmental impacts associated with the Proposed Action. The purpose of this letter is to initiate consultation under Section 106 of the National Historic Preservation Act (NHPA) for the proposed project. Please note, while comments are welcome, Keesler AFB is not officially requesting comments on the proposed undertaking at this time. A determination of effect regarding the proposed undertaking will be recommended by Keesler AFB in follow-on consultation.

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Sincerely

MOSELEY.ROBERT Digitally signed by MOSELEY.ROBERT.T.III.12307647 2.T.III.1230764782 2.Date: 2024.05.01 13:46:29 05'00'

ROBERT T. MOSELEY III Deputy Base Civil Engineer Tribal Liaison Officer

2 Attachments:

- 1. Draft DOPAA
- 2. Location and APE Figure

Response

From:	Lindsey Bilyeu
To:	Shrestha, Suni
Subject:	RE: RE: Section 106 Initiation Letter, Environmental Assessment of Mississippi Cyber and Technology Center
	Enhanced Use Lease, Keesler AFB, MS
Date:	Wednesday, August 7, 2024 3:54:29 PM

CAUTION: This email originated from an external sender. Verify the source before opening links or attachments.

Suni,

Thank you for providing the cultural resources survey report for our review. Our office has reviewed the report, and we concur with the finding of "no historic properties affected". However, we ask that work be stopped, and our office contacted immediately, in the event that Native American artifacts or human remains are encountered.

If you have any questions, please contact me.

Yakoke (Thank you),

Lindsey D. Bilyeu, MS Program Coordinator NHPA Compliance Review Historic Preservation Choctaw Nation of Oklahoma

From: Shrestha, Suni <

Sent: Monday, July 8, 2024 8:21 AM

To: Lindsey Bilyeu <

Cc: LANIER, JANET L CTR USAF AFMC AFCEC/CZOM

**Subject:** RE: RE: Section 106 Initiation Letter, Environmental Assessment of Mississippi Cyber and Technology Center Enhanced Use Lease, Keesler AFB, MS

You don't often get email from <u>Example 1 and the second s</u>

Thank you, Ms. Bilyeu.

Please see attached email with the Phase I Archaeological Survey Report at the APE and DAF's proposed determination of effects, with the request for your organization's comments.

The Draft EA/FONSI will be published in a few weeks and will also be transmitted for your review and comments.

Please let me know if you need additional information.

Vr, Suni

Suni Shrestha | Project Manager Pronouns: she, her, hers

From: Lindsey Bilyeu

Sent: Saturday, July 6, 2024 4:49 PM

**To:** Shrestha, Suni <

**Subject:** RE: RE: Section 106 Initiation Letter, Environmental Assessment of Mississippi Cyber and Technology Center Enhanced Use Lease, Keesler AFB, MS

 $\triangle$  CAUTION: This email originated from an external sender. Verify the source before opening links or attachments.  $\triangle$ 

Good afternoon, Suni,

Thank you for providing the GIS shapefiles. We don't have any known sites showing up in our system within the proposed APE, however, that doesn't mean that sites don't exist. Additional testing will need to be completed to rule out the presence of cultural resources.

Thank you for updating us about the EA and cultural resources survey. We look forward to reviewing these documents and working with you.

If you have any questions, please let me know.

Yakoke (Thank you),

Lindsey D. Bilyeu, MS Program Coordinator NHPA Compliance Review Historic Preservation Choctaw Nation of Oklahoma



From: Shrestha, Suni < Sent: Thursday, June 6, 2024 10:41 AM
To: Lindsey Bilyeu < Sent: Thursday > Cc: MOSELEY, ROBERT T III CIV USAF AETC 81 CES/CL < Sent: Sent:

**Subject:** RE: RE: Section 106 Initiation Letter, Environmental Assessment of Mississippi Cyber and Technology Center Enhanced Use Lease, Keesler AFB, MS

Good morning Ms. Bilyeu,

As requested, attached please find GIS layer of the project area/APE.

Additional information on the location: *County:* Harrison *Latitude / Longitude:* 30.400008760 / -88.909400739 *Section / Township / Range:* 26 / 7S / 9W

Please let me know if you need additional information.

Vr, Suni

Suni Shrestha | Project Manager Pronouns: she, her, hers

From: LANIER, JANET L CTR USAF AFMC AFCEC/CZOM <

**Subject:** RE: RE: Section 106 Initiation Letter, Environmental Assessment of Mississippi Cyber and Technology Center Enhanced Use Lease, Keesler AFB, MS

▲ CAUTION: This email originated from an external sender. Verify the source before opening links or attachments. ▲

Ms. Bilyeu:

Thank you for your response. Our consultant that is preparing the EA will be getting you the

data as requested. As soon as we get a copy of the archaeology report, we will forward to you. Please let me know if you have any more questions and we look forward to working with you.

Janet Lanier HDR EMS Coordinator Support Keesler AFB, MS 39534

 From: Lindsey Bilyeu <</td>
 >

 Sent: Wednesday, June 5, 2024 4:44 PM
 To: LANIER, JANET L CTR USAF AFMC AFCEC/CZOM 

 Subject: [Non-DoD Source] RE: Section 106 Initiation Letter, Environmental Assessment of Mississippi Cyber and Technology Center Enhanced Use Lease, Keesler AFB, MS

You don't often get email from . Learn why this is important

Ms. Lanier,

The Choctaw Nation of Oklahoma thanks Kessler Air Force Base for the correspondence regarding the above referenced project. This project lies in our area of historic interest.

Would it be possible for you to provide the GPS coordinates, or shapefiles, of the proposed APE? Also, we would like to see a copy of the survey report that is mentioned in the letter.

If you have any questions, please contact me.

Yakoke (Thank you),

Lindsey D. Bilyeu, MS Program Coordinator NHPA Compliance Review Historic Preservation Choctaw Nation of Oklahoma



This message is intended only for the use of the individual or entity to which it is addressed and may contain information that is privileged, confidential and exempt from

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# APPENDIX B: NOTICE OF AVAILABILITY AND PUBLIC/AGENCY REVIEW

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Final

## Appendix B – Publication of Notice of Availability of Draft EA and Draft FONSI, August 2024

The following Notification of Availability (NOA) of the Draft Environmental Assessment (EA) and Draft Finding of No Significant Impact (FONSI) of Mississippi Cyber and Technology Center Enhanced Use Lease, Keesler Air Force Base, MS, was published in the Biloxi Sun Herald on August 3 and 5, 2024. The NOA served to notify the public of the publication of the draft EA and FONSI for 30-day public review, and how the public could access and comment on the documents.

# McClatchy

The Beaufort Gazette The Belleville News-Democrat Bellingham Herald Centre Daily Times Sun Herald Idaho Statesman Bradenton Herald The Charlotte Observer The State Ledger-Enquirer Durham | The Herald-Sun Fort Worth Star-Telegram The Fresno Bee The Island Packet The Kansas City Star Lexington Herald-Leader The Telegraph - Macon Merced Sun-Star Miami Herald El Nuevo Herald The Modesto Bee The Sun News - Myrtle Beach Raleigh News & Observer Rock Hill | The Herald The Sacramento Bee San Luis Obispo Tribune Tacoma | The News Tribune Tri-City Herald The Wichita Eagle The Olympian

## **AFFIDAVIT OF PUBLICATION**

Account #	Order Number	Identification	Order PO	Amount	Cols	Depth
125117	579996	Print Legal Ad-IPL01862940 - IPL0186294		\$97.52	2	28 L

Attention: Suni Shrestha

Tetra Tech 63 South Royal Street Suite 1106 Suite 1106 Mobile, AL 36602

#### NOTICE OF AVAILABILITY

#### Notice of Availability for the Draft Environmental Assessment and Draft Finding of No Significant Impact of Mississippi Cyber and Technology Center Enhanced Use Lease at Keesler Air Force Base, Biloxi, Mississippi

The Department of the Air Force (DAF) announces the availability of the draft Environmental Assessment (EA) and draft Finding of No Significant Impact (FON-SI), which documents the analysis of environmental impacts associated with the DAF entering an enhanced use lease with Mississippi State University Research and Technology Corporation (MSU RTC) for an approximately 15-acre parcel on Keesler Air Force Base (AFB) in Biloxi, MS, and MSU RTC building and operating the new Mississippi Cyber and Technology Center (MCTC) on the leased parcel. The EA analyzes two action alternatives of the Proposed Action and the No Action Alternative. The draft EA demonstrates that the Proposed Action would not significantly impact the human environment, including the natural environment, and supports a FONSI. Keesler AFB invites the public to comment on the draft EA and draft FONSI during the 30-day public comment period beginning August 03, 2024 through September 02, 2024. The draft EA and draft FONSI are available for review at: https://www.keesler.af.mil/about-us/resources/environmental-information/. The documents are also available for review at the Biloxi Public Library at 580 Howard Ave, Biloxi, MS 39530 and upon request by contacting Keesler AFB Environmental at 228-377-1262. Comments should be submitted by September 02, 2024, via email to 81trw.pamain@us.af.mil or via U.S. Mail to Agata A. Jastrzebska, 2nd Lt, 81TRW/PA, 709 H Street, Bldg. 902, Keesler AFB, MS 39534 IPL0186294

Aug 3,5 2024

#### STATE OF MISSISSIPPI COUNTY OF HARRISON

Before me, the undersigned Notary of Dallas County, Texas personally appeared Mary Castro, who, being by me first duly sworn, did depose and say that she is a clerk of The Sun Herald, a daily newspaper published in the city of Gulfport, in Harrison County, Mississippi and the publication of the notice, a copy of which is hereto attached, has been made in said paper in the issue(s) of:

2 insertion(s) published on: 08/03/24, 08/05/24

Affidavit further states on oath that said newspaper has been established and published continuously in said county for a period of more than twelve months next prior to the first publication of said notice.

Mary Castro

Sworn to and subscribed before me this 5th day of August in the year of 2024

Stephanie Hatcher

Notary Public

\* The Sun Herald has been deemed eligible for publishing legal notices in Jackson County to meet the requirements of Miss. Code 1972 Section 13-3-31 and 13-3 -32.



STEPHANIE HATCHER My Notary ID # 133534406 Expires January 14, 2026

Extra charge for lost or duplicate affidavits. Legal document please do not destroy!

#### Appendix B – Agencies

The following Notice of Availability of the Draft EA and Draft Finding of No Significant Impact was distributed to the agencies. Responses received follow the notice sent.

Agency	Name, Title	Response Received
City of Biloxi	Jerry Creel, Director of Community	
	Development	
CSX Railroad	Scott Willis, Project Manager	
Gulf Regional Planning Commission	Kenneth Yarrow, Executive Director	
Harrison County	Jaclyn Turner, Engineer	
Harrison County, Utility Authority	David Perkins, O&M Manager	
MS Dept. of Environmental Quality, Env. Enforcement and Compliance Division	Michelle Clark, Chief	
MS Dept. of Marine Resources, Wetlands Permitting	Willa Brantley, Bureau Director	
MS Dept. of Wildlife, Fisheries & Parks, Mississippi Natural Heritage Program	Lynn Posey, Executive Director	
MS Dept. of Wildlife, Fisheries, & Parks	Dennis Riecke, Fisheries Coordinator	
Southern Mississippi Planning and Development District	Leonard Bentz, II, Executive Director	X
US Army Corps of Engineers, Regulatory Division, Mobile District	Dylan C. Hendrix, Chief South MS Branch	X
US Fish and Wildlife Service, Mississippi Field Office – Ecological Services	Paul Necaise, Section 7 Biologist	x
USEPA Region 4, NEPA Program Office	Ntale Kajumba, NEPA Program Office Manager	

The Department of the Air Force Correspondence



## DEPARTMENT OF THE AIR FORCE HEADQUARTERS 81ST TRAINING WING (AETC)

31 July 2024

# MEMORANDUM FOR ALL INTERESTED GOVERNMENT AGENCIES, PUBLIC OFFICIALS, ORGANIZATIONS, AND INDIVIDUAL PARTIES

FROM: AETC 81st Civil Engineer Squadron 500 Fisher Street, Bldg. 701 Keesler AFB, MS 39534

- SUBJECT: Draft Environmental Assessment (EA) and Draft Finding of No Significant Impact (FONSI) of Mississippi Cyber and Technology Center Enhanced Use Lease, Keesler Air Force Base (AFB), Biloxi, MS
- 1. As public and agency notification, to comply with the National Environmental Policy Act of 1969, and the President's Council on Environmental Quality's implementing regulations, this memorandum announces the availability of the Draft EA and Draft FONSI of Mississippi Cyber and Technology Center (MCTC) Enhanced Use Lease (EUL) at Keesler AFB, Biloxi, MS.
- This Draft EA and Draft FONSI are available for review at: <u>https://www.keesler.af.mil/about-us/resources/environmental-information/</u> and at the Biloxi Public Library, 580 Howard Ave, Biloxi, MS 39530.
- 3. The Proposed Action is the Department of the Air Force (DAF) entering an EUL with Mississippi State University Research and Technology Corporation (MSU RTC) for an approximately 15-acre parcel on Keesler AFB in Biloxi, MS, and MSU RTC building and operating the new MCTC on the leased parcel. The EA analyzes two action alternatives of the Proposed Action and the No Action Alternative.
- 4. The EA considers potential environmental effects of implementing the Proposed Action on the human environment, including the natural environment. The EA evaluates those effects and environmental consequences on the following resources: land use and visual resources, air quality, noise, earth resources, water resources, biological resources, cultural resources, hazardous materials and hazardous wastes, infrastructure and utilities, transportation and traffic, safety and occupational health, greenhouse gas emissions and climate change, sustainability and greening, environmental justice, and protection of children. The Draft EA and Draft FONSI concludes that there will be no significant impacts resulting from the two action alternatives or the No Action Alternative.

5. The 30-day public comment period for this Draft EA and Draft FONSI is August 3 to September 2, 2024. Please send your written responses via e-mail (preferred) to:
1 or by regular mail to: Janet Lanier, HDR EMS Coordinator Support, 508 L Street-Bldg 4705, Keesler AFB, MS 39534; or by phone at 
1. Thank you in advance for your assistance in this effort.

MOSELEY.ROBERT Digitally signed by MOSELEY.ROBERT.T.III.1230764782 .T.III.1230764782 ROBERT T. MOSELEY III Deputy Base Civil Engineer Responses



## **BUILDING A STRONGER MISSISSIPPI**

August 12, 2024

Ms. Janet Lanier HDR EMS Coordinator Support United States Air Force 508 L Street, Bldg 4705 Keesler AFB, MS 39534

#### RE: Environmental Assessment of Mississippi Cyber and Technology Center Enhanced Use Lease at Keesler AFB, MS -- SMPDD #2408-00 01

Dear Ms. Lanier,

I have enclosed the review and comments from the Southern Mississippi Planning and Development District Regional Clearinghouse for Federal Programs regarding your application for the work stated above. This project will be located at **Keesler AFB, MS**.

If you require further information concerning the regional review and comments, please do not hesitate to contact me.

Sincerely,

Front Wolly

Grant Wesley Clearinghouse Coordinator

Attachment

#### SOUTHERN MISSISSIPPI PLANNING AND DEVELOPMENT DISTRICT REGIONAL CLEARINGHOUSE FOR FEDERAL PROGRAMS REVIEW AND COMMENTS

August 12, 2024

Ms. Janet Lanier HDR EMS Coordinator Support United States Air Force 508 L Street, Bldg 4705 Keesler AFB, MS 39534

#### RE: Environmental Assessment of Mississippi Cyber and Technology Center Enhanced Use Lease at Keesler AFB, MS -- SMPDD #2408-00 01

(X) I. The Regional Clearinghouse has received notification of intent to apply for Federal assistance as described above. (X) NO COMMENTS () NO CLEARINGHOUSE NEEDED.

() 2. The Regional Clearinghouse has reviewed the application(s) for Federal assistance described above.

() 3. The Regional Clearinghouse has notified the appropriate metropolitan, local, and regional organizations and is awaiting notification of their interest on the project.

() 4. After proper notification, no local or regional agency (or other appropriate organization) has expressed an interest in conferring with the applicant(s) or commenting on the proposed project.

() 5. The proposed project is () consistent () inconsistent with the Comprehensive Economic Development Strategy for the Southern Mississippi Planning and Development District.

() 6. Although a \_\_\_\_\_\_plan does not presently exist for \_\_\_\_\_, the proposed project appears to be () consistent () inconsistent with the regional goals and objectives.

COMMENTS: This project is consistent with the policies and objectives of the Southern Mississippi Planning and Development District.

Leonard Bentz, Executive Director



#### DEPARTMENT OF THE ARMY U.S. ARMY CORPS OF ENGINEERS, MOBILE DISTRICT P.O. BOX 2288 MOBILE, AL 36628-0001

May 22, 2024

South Mississippi Branch Regulatory Division

SUBJECT: Department of the Army, No Permit Required, File Number SAM-2024-00471-SMP, Department of the Air Force, Keesler Air Force Base, Harrison County, Mississippi

Department of the Air Force Attention: Janet Lanier Email Address: 508 L Street, Bldg. 4705 Keesler AFB, Mississippi 39534

Dear Ms. Lanier:

Reference is made to your request for a Department of the Army (DA) review of Keesler Air Force Base Mississippi Cyber and Technology Center (MCTC) in Biloxi, Mississippi. This project has been assigned File Number **SAM-2024-00471-SMP**, which should be referred to in all future correspondence with this office concerning this project. The project is located at Larcher Boulevard and West Howard Avenue; within Section 29, Township 7S, Range 9W; Latitude 30.4005° North and Longitude 88.9104° West; Biloxi, Mississippi.

A review of the information you submitted indicates a DA Permit pursuant to Section 404 of the Clean Water Act or Section 10 of the Rivers and Harbors Act of 1899 **will not be required** for construction of the MCTC at Keesler Air Force Base. This determination is based on the nature of the proposed activities, as described in the attached project description/plans dated May 2, 2024. Any proposed modifications to the project location or scope of work, or anticipated ground disturbance or discharge of fill material in streams and/or wetland areas, should be coordinated with our office prior to commencing the activity.

The statements contained herein do not convey any property rights or any exclusive privileges, and do not authorize any injury to property nor shall it be construed as excusing you from compliance with other Federal, State, or local statutes, ordinances, or regulations that may affect proposed work.

Electronic copies of this letter are being provided to your agent, Tetra Tech, Attention: Suni Shrestha at

If you have any questions, please contact me at **sectors**, or . For additional information about our Regulatory Program, visit our web site at <u>www.sam.usace.army.mil/Missions/Regulatory.aspx</u>. Also, please take a moment to complete our customer satisfaction survey located near the bottom of the webpage. Your responses are appreciated and will help us improve our services.

Sincerely,

Sanahfierco

Date: 2024.05.22 11:41:34 -05'00'

Sarah M. Piesco Project Manager South Mississippi Branch Regulatory Division

Attachments



## DEPARTMENT OF THE AIR FORCE HEADQUARTERS 81 ST TRAINING WING (AETC)

02 May 2024

Robert T. Moseley III Deputy Base Civil Engineer 81st Civil Engineer Squadron 500 Fisher Street, Bldg 701 Keesler AFB, MS 39534

U.S. Army Corps of Engineers - Regulatory Division Biloxi Satellite Office Attn: Sir/Madam Field Supervisor 1141 Bayview Ave Suite 104 Biloxi, MS 39530 CESAM-RD@sam.usace.army.mil

Dear Sir/Madam

The Department of the Air Force (DAF) is preparing an environmental assessment (EA) to evaluate potential environmental impacts of proposed out lease non-excess land on Keesler Air Force Base (AFB) in Biloxi, Mississippi (MS) to MS State University Research and Technology Corporation (MSU RTC) using an enhanced use lease (EUL). MSU RTC would construct and operate the MS Cyber and and Technology Center (MCTC) on the leased land. The proposed EUL is needed to support the DAF's strategic goals of optimizing DAF non-excess assets. The proposed MCTC is needed to meet regional and national cybersecurity training requirements and to support Keesler AFB's and Mississippi Army National Guard's technical cyber systems training mission. A copy of the Draft EA will be made available for your review and comment when complete.

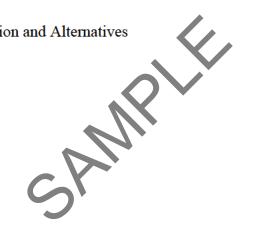
As presented in the attachment, Description of Proposed Action and Alternatives, the Proposed Action will include execution of an EUL and subsequent development of the MCTC as well as related utilities and infrastructure. The EA will analyze two alternatives for the Proposed Action (Alternative 1 [Preferred Alternative] and Alternative 2) and the No Action Alternative. The two Proposed Action alternatives differ only in the access to the MCTC from outside of the base.

If you have any comments or concerns you would like to provide regarding the proposed action or its environmental impacts, please respond to us within 30 days of receipt of this letter. Please send your written responses via e-mail (preferred) to: **Sector** or by regular mail to: Janet Lanier, HDR EMS Coordinator Support, 508 L Street-Bldg 4705, Keesler AFB, MS 39534; or by phone at **Sector** 

Sincerely

MOSELEY.ROBERT Digitally signed by MOSELEY.ROBERT.T.III.1230764782 .T.III.1230764782 Date: 2024.05.01 13:44:51 -05'00' ROBERT T. MOSELEY III Deputy Base Civil Engineer

Attachment: Description of Proposed Action and Alternatives



installation property has been continual since Keesler AFB's establishment. The ongoing development process at Keesler AFB provides the base with facilities and infrastructure meeting DAF goals for mission capability, sustainability, readiness, and modernization.

Keesler AFB is located on the Mississippi Gulf Coast, within the City of Biloxi in Harrison County, MS (Figure 1-1). The base occupies 1,719 acres on a narrow peninsula bordered by the Biloxi Back Bay on the north and the Gulf of Mexico on the south. The main base consists of 1,447 acres and is densely developed. U.S. Highway (U.S.) 90 parallels the southern border of the base and provides access to Interstate (I-) 10 via U.S. 49 and I-110. Keesler AFB is a significant economic engine for the surrounding regional area and is one of the largest employers in the City of Biloxi and Harrison County (GRPC 2017).



Figure 1-1. Keesler Air Force Base Location Map.

Keesler AFB's primary mission, as the DAF's Electronics Training Center of Excellence, is to provide technical training. The 81 TRW provides training in over 160 career field specialty training courses (Keesler AFB 2024a), including weather; basic electronics; communications-electronic systems; communications-computer systems; air traffic control; airfield management;

#### 2.0 DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES

This section of the EA describes the Proposed Action and alternatives and the No Action alternative. It addresses the DAF entering the EUL agreement with the MSU RTC and the state entity building and operating the MCTC on the parcel. The proposed EUL and building and operation of the MCTC is the basis for analysis.

#### 2.1 Proposed Action

The DAF would enter into a 50-year EUL agreement with the MSU RTC to lease a 15-acre parcel on which to build and operate the MCTC (MSU RTC and SAF 2023).

The MCTC would be a 100,000-SF, 3-story building of approximately 33,333 SF per floor (see Figure 2-1). The facility would house event space, classrooms, administration facilities, parking for 270 vehicles, and associated infrastructure. The MCTC would occupy approximately 5 acres of the EUL site. Of the 5 acres, 1.2 acres would be greenspace post construction.

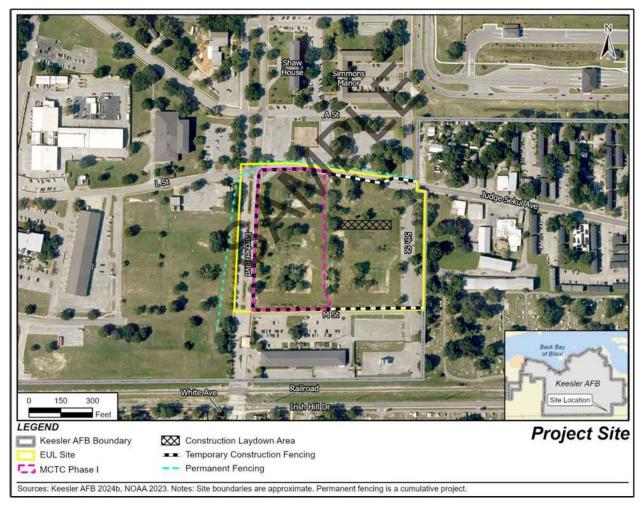


Figure 2-1. Proposed Project Site.

The MCTC would connect to City of Biloxi utility services, except for stormwater drainage, which would use the Keesler AFB drainage system. Tie-ins to existing city utility lines are readily

The Department of the Air Force Correspondence



#### DEPARTMENT OF THE AIR FORCE HEADQUARTERS 81ST TRAINING WING (AETC)

31 July 2024

Robert T. Moseley III Deputy Base Civil Engineer 81st Civil Engineer Squadron 500 Fisher Street, Bldg 701 Keesler AFB, MS 39534

U.S. Fish and Wildlife Service Mississippi Field Office – Ecological Services Attn: Mr. Paul Necaise Section 7 Biologist / Coastal Biologist 6578 Dogwood View Parkway, Suite A Jackson, MS 39213

RE: Draft Environmental Assessment (EA) and Draft Finding of No Significant Impact (FONSI) of Mississippi Cyber and Technology Center Enhanced Use Lease, Keesler Air Force Base (AFB), Biloxi, MS (Ecosphere Project Number – 2024-0109713)

Dear Mr. Necaise

By letter dated May 3, 2024, the Department of the Air Force (DAF) informed the U.S. Fish and Wildlife Service (USFWS) of its preparation of an Environmental Assessment (EA) for the Proposed Action of entering an enhanced use lease (EUL) with Mississippi State University Research and Technology Corporation (MSU RTC) for an approximately 15-acre parcel on Keesler Air Force Base in Biloxi, MS, and MSU RTC building and operating the new Mississippi Cyber and Technology Center (MCTC) on the leased parcel. The letter also noted that a 2023 USFWS conducted monitoring on base detected the tri-colored bat (*Perimyotis subflavus*; TCB), which is a species proposed for federal listing as an endangered, at the proposed EUL site (Attachment 1).

No other federally endangered or threatened species are known to occur on Keesler AFB and there are no critical habitats present.

In an email dated June 27, 2024, your office acknowledged the information in the May 3, 2024 DAF letter and stated that the project area falls within the range of TCB and the USFWS anticipates the species Final Rule publication in the summer of 2024. The email stated that once the Final Rule is published (and if the species is listed), the project proponents will need to consult with the USFWS for it. The email also recommended that as a best management practice (BMP) for the TCB, any tree removal for the project be conducted between July 16 and Apr 30, outside

the May 1–July 15 pup season. Additionally, the email noted that the USFWS does not anticipate impacts to any other federally listed species from the Proposed Action.

The Proposed Action includes tree removal and construction activities that could affect the TCB detected on the proposed EUL site. However, the site is a developed area with continued human activities, making it less attractive for roosting and foraging. As recommended by the USFWS and per BMPs for the species, any tree removal activities required for the Proposed Action would be conducted July 16 through April 30, outside the pup season of May 1–July 15. Proposed tree removal includes three live oak trees, one of 5 inches diameter at breast height (dbh) and two of 24 inches dbh. Sixteen live oaks of 24 dbh inches or more, five of which are more than 37 inches dbh, would not be removed. Therefore, the DAF has determined that the Proposed Action may affect but is not likely to adversely affect the TCB.

I am requesting your written concurrence on DAF's determination on the TCB. Please provide your concurrence and/or comments within 30 days of receipt of this letter. Please send your written responses via e-mail to:

Additionally, the Draft EA and Draft FONSI are available for viewing or download at <u>https://www.keesler.af.mil/about-us/resources/environmental-information/.</u> The 30-day public comment period is August 3 to September 2, 2024. Thank you in advance for your assistance in this effort.

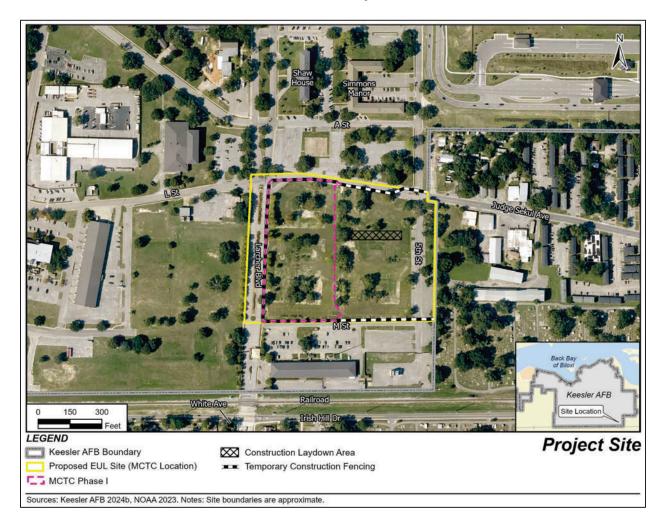
Sincerely

MOSELEY.ROBERT Digitally signed by MOSELEY.ROBERT.T.III.1230764782 Date: 2024.07.31 13:01:45 - 05'00' ROBERT T. MOSELEY III Deputy Base Civil Engineer

Attachment:

1. Project Site Map

#### **Attachment – Project Site**



Responses

From:	Necaise, Paul
To:	LANIER, JANET L CTR USAF AFMC AFCEC/CZOM
Cc:	Shrestha, Suni
Subject:	Re: [EXTERNAL] FW: Ecosphere project number 2024-0109713 - Draft EA and Draft FONSI of Mississippi Cyber and Technology Center Enhanced Use Lease, Keesler AFB, MS
Date:	Friday, September 6, 2024 11:45:52 AM

**CAUTION:** This email originated from an external sender. Verify the source before opening links or attachments.

Hey Janet,

The US Fish and Wildlife Service (Service) has reviewed your letter dated July 31, 2024, regarding the Draft EA and Draft FONSI for the Mississippi Cyber and Technology Center Enhanced Use Lease located at Keesler Air Force Base in Biloxi, MS (Ecosphere Project Number 2024-0109713).

The Department of the Air Force (DAF) is proposing per above-referenced letter, as a best management practice (BMP) for the TCB, any tree removal for the project be conducted between July 16 and Apr 30, outside the May 1–July 15 pup season. Provided the DAF performs tree removal during the recommended time frame, the Service concurs that the proposed project may affect, but is not likely to adversely affect the TCB. Further, the Service does not anticipate any impacts to any other federally listed species as a result of the proposed project.

This concludes consultation on this project. If you need anything else from the Service on this project you can contact me at the telephone number listed below.

Paul Necaise Fish and Wildlife Biologist U.S. Fish and Wildlife Service Mississippi Ecological Services Field Office 6578 Dogwood View Parkway Jackson, MS 39213

NOTE: This email correspondence and any attachments to and from this sender is subject to the Freedom of Information Act (FOIA) and may be disclosed to third parties.

From: LANIER, JANET L CTR USAF AFMC AFCEC/CZOM <janet.lanier.ctr@us.af.mil>
Sent: Monday, August 19, 2024 11:26 AM
To: Necaise, Paul <paul\_necaise@fws.gov>
Cc: Shrestha, Suni <SUNI.SHRESTHA@tetratech.com>
Subject: [EXTERNAL] FW: Ecosphere project number 2024-0109713 - Draft EA and Draft FONSI of Mississippi Cyber and Technology Center Enhanced Use Lease, Keesler AFB, MS

This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.

#### Paul:

Can we please get a response back on this letter. We need documentation that the letter attached is an acceptable response to you for our proposed actions. Thanks so much for your help.

From: Shrestha, Suni	m>	
Sent: Thursday, August 1, 2024 5:16	PM	
То:		
Cc: MOSELEY, ROBERT T III CIV USAF	AETC 81 CES/CL ; TRAWEEK	K, NEAL J
CIV USAF AETC 81 CES/CEI <	>; LANIER, JANET L CTR USAF AFMC	
AFCEC/CZOM <	>; Martin, Jim < >;	McGee,
Marc <	u>; McConville, Rowan	
<	>	

**Subject:** Ecosphere project number 2024-0109713 - Draft EA and Draft FONSI of Mississippi Cyber and Technology Center Enhanced Use Lease, Keesler AFB, MS

#### Good afternoon,

On behalf of Keesler Air Force Base (AFB), please see attached letter with the base's request for the Service's concurrence on the Department of the Air Force's determination of effect on the tri-colored bat (*Perimyotis subflavus*) from the Proposed Action. The base also requests the Service's review and comment on the Draft Environmental Assessment (EA) and Draft Finding of No Significant Impact (FONSI) of Mississippi Cyber and Technology Center Enhanced Use Lease at Keesler AFB, MS. The 30-day public comment period for the Draft EA and Draft FONSI is August 3 to September 2, 2024.

Please respond per attached letter, via email to junction and the second second

Thank you for your attention to this matter.

Suni Shrestha | Project Manager Pronouns: she, her, hers

**Tetra Tech** | Complex World, Clear Solutions™ | 107 St. Francis Street, Suite 2370, Mobile, AL 36602| tetratech.com

This message, including any attachments, may include privileged, confidential and/or inside information. Any distribution or use of this communication by anyone other than the intended

#### Appendix B – Mississippi Department of Archives and History

The following letter was sent to the Mississippi Department of Archives and History, Historic Preservation Division. Responses received follow the letter sent.

Agency	Name, Title	Response Received
Mississippi Department of Archives and History, State Historic Preservation Division	Jennifer Baughn, Chief Architectural Historian	X*

\*See Appendix A.

The Department of the Air Force Correspondence



## DEPARTMENT OF THE AIR FORCE HEADQUARTERS 81ST TRAINING WING (AETC)

31 July 2024

Robert T. Moseley III Deputy Base Civil Engineer Tribal Liaison Officer 81<sup>st</sup> Civil Engineer Squadron 500 Fisher Street, Bldg. 701 Keesler AFB, MS 39534

Jennifer Baughn Historic Preservation Division Chief Architectural Historian Mississippi Department of Archives and History 100 S. State Street P.O. Box 571 Jackson, MS 39201 https://www.mdah.ms.gov/historic-preservation/section-106-review

## **RE:** Revised Section 106 and 110 Consultation, Mississippi Cyber and Technology Center Enhanced Use Lease, Keesler AFB, MS, MDAH Project No. 05-046-24, Harrison County

Dear Ms. Baughn

In accordance with Section 106 of the National Historic Preservation Act of 1966 (NHPA), as amended (16 U.S.C. 470f), and its implementing regulation, 36 CFR Part 800, the United States Department of the Air Force (DAF) initiated consultation with your office in a letter dated May 3, 2024 for the proposed action of out-leasing non-excess land on Keesler Air Force Base (AFB) in Biloxi, Mississippi (MS) to MS State University Research and Technology Corporation (MSU RTC) using an enhanced use lease (EUL). MSU RTC would construct and operate the new MS Cyber and Technology Center (MCTC) on the leased land. We appreciate your response to the Section 106 initiation correspondence.

As discussed in the May 3, 2024 letter, MSU Cobb Institute of Archaeology (CIA), on behalf of MSU RTC, conducted an archaeological survey of the proposed EUL site in April 2024. Additionally, MSU CIA conducted a ground penetrating radar (GPR) investigation in the area southeast of the proposed EUL site because of its proximity to the off-base Old Biloxi Cemetery.

On June 10, 2024, in accordance with Section 106 and Section 110 of the NHPA, the DAF transmitted to your office 1) Draft Archaeological Survey Technical Report, which MSU CIA also submitted to your office on June 10, 2024, and 2) the proposed determination of effect for the project. Confirmation number of MSU CIA's submittal is: 202406100927448977556106. In response to your office's July 3, 2024 comments on the survey report, MSU CIA submitted the revised version on July 10, 2024.

Therefore, the DAF revised the following discussion to provide the updates made to the survey report. The survey did not identify intact archaeological materials in the Area of Potential Effects (APE) of the undertaking. Only two artifacts of note, a small piece of whiteware with an unidentifiable red transfer-print design and a military button, were found. Both artifacts came from disturbed contexts, indicating that they did not come from intact archaeological deposits. The DAF is coordinating with your office to establish a Memorandum of Understanding (MOU) to curate with MDAH the artifacts that may result from Keesler AFB's archaeological surveys. The DAF will ensure the two artifacts of note from MSU CIA's archaeological survey are curated with MDAH, per pending MOU. Additionally, GPR investigation did not indicate that the Old Biloxi Cemetery extends into the proposed EUL site. Based on these findings, MSU CIA recommends no further research is required for cultural resources within the APE.

As discussed in the May 3, 2024, letter, there are also no National Register of Historic Places-eligible or listed buildings within nor with visibility to the APE, and no known sites of interest to affiliated American Indian Tribes within the APE.

Consequently, the DAF proposes a finding of no historic properties affected (36 CFR 800.4(d)(1)) and requests your concurrence on the proposed undertaking. If we do not receive your comments and/or concurrence within the required 30 days, we will assume concurrence and proceed with the undertaking as described. Please send your written responses via e-mail to:

Sincerely

MOSELEY.ROBERT Digitally signed by MOSELEY.ROBERT.T.III.1230764782 Date: 2024.07.31 13:02:27 -05'00' ROBERT T. MOSELEY III Deputy Base Civil Engineer

Additionally, the Draft EA and Draft Finding of Significant Impact (FONSI) are available for viewing or download at https://www.keesler.af.mil/about-us/resources/environmental-information/. The 30-day public comment period is August 3 to September 2, 2024. Thank you in advance for your assistance in this effort.

#### Appendix B – Native American Tribes

The following Notice of Availability of the Draft EA and Draft Finding of No Significant Impact was distributed to the four federally recognized Native American Tribes.

Tribe	Name, Title	<b>Response Received</b>
Choctaw Nation of Oklahoma	Dr. Ian Thompson, THPO	X
Jena Band of Choctaw Indians	Alina J. Shively, THPO	
Mississippi Band of Choctaw Indians	Melanie Carson, THPO	
Tunica-Biloxi Tribe of Louisiana	Earl J. Barbry, Jr., THPO	

The Department of the Air Force Correspondence



## DEPARTMENT OF THE AIR FORCE HEADQUARTERS 81ST TRAINING WING (AETC)

31 July 2024

Robert T. Moseley III Deputy Base Civil Engineer Tribal Liaison Officer 81<sup>st</sup> Civil Engineer Squadron 500 Fisher Street, Bldg. 701 Keesler AFB, MS 39534

THPO Dr. Ian Thompson Choctaw Nation of Oklahoma PO Box 1210 Durant OK 74702-1210

**RE:** Draft Environmental Assessment (EA) and Draft Finding of No Significant Impact (FONSI) of Mississippi Cyber and Technology Center Enhanced Use Lease, Keesler Air Force Base (AFB), Biloxi, MS

Dear THPO Dr. Thompson

In accordance with Section 106 of the National Historic Preservation Act of 1966 (NHPA), as amended (16 U.S.C. 470f), and its implementing regulation, 36 CFR Part 800, the United States Department of the Air Force (DAF) initiated government-to-government consultation with your office in a letter dated May 3, 2024 for the Proposed Action of the DAF entering an enhanced use lease (EUL) with Mississippi State University Research and Technology Corporation (MSU RTC) for an approximately 15-acre parcel on Keesler AFB in Biloxi, MS, and MSU RTC building and operating the new Mississippi Cyber and Technology Center (MCTC) on the leased parcel. On June 10, 2024, in accordance with Section 106 and Section 110 of NHPA, the DAF requested review and comment from your office on 1) Draft Archaeological Survey Technical Report for the proposed project and 2) DAF's the proposed determination of effect for the project. We appreciate the July 10, 2024 response and concurrence from your office. A revised version of the report is enclosed.

To comply with the National Environmental Policy Act of 1969, the President's Council on Environmental Quality's implementing regulations, and the NHPA and its implementing regulations, this letter is to inform you of the availability of the Draft EA and Draft FONSI for the Proposed Action for review at: <u>https://www.keesler.af.mil/about-us/resources/environmental-information/</u> and at the Biloxi Public Library at 580 Howard Ave, Biloxi, MS 39530.

The EA analyzes two action alternatives of the Proposed Action and the No Action Alternative. The EA considers potential environmental effects of implementing the Proposed Action on the human environment, including the natural environment. The EA evaluates those effects on the following resources: land use and visual resources, air quality, noise, earth resources, water resources, biological resources, cultural resources, hazardous materials and wastes, infrastructure and utilities, transportation and traffic, safety and occupational health, greenhouse gas emissions and climate change, sustainability and greening, environmental justice, and protection of children. The Draft EA and Draft FONSI concludes that there will be no significant environmental impacts resulting from the two action alternatives or the No Action Alternative.

The public comment period for this Draft EA and Draft FONSI will be August 3 to September 2, 2024. Please send your written responses via e-mail (preferred) to: 1 or by regular mail to: Janet Lanier, HDR EMS Coordinator Support, 508 L Street-Bldg 4705, Keesler AFB, MS 39534. Thank you in advance for your assistance in this effort.

Sincerely

MOSELEY.ROBERT.T Digitally signed by MOSELEY.ROBERT.T.III.1230764782 III.1230764782 Date: 2024.07.31 13:00:23 -05'00' ROBERT T. MOSELEY III Deputy Base Civil Engineer Tribal Liaison Officer

Enclosure:

Phase I Archaeological Survey for the Mississippi Cyber and Technology Center, Keesler Air Force Base, MS, Revised July 10, 2024



## DEPARTMENT OF THE AIR FORCE HEADQUARTERS 81ST TRAINING WING (AETC)

31 July 2024

Robert T. Moseley III Deputy Base Civil Engineer Tribal Liaison Officer 81<sup>st</sup> Civil Engineer Squadron 500 Fisher Street, Bldg 701 Keesler AFB, MS 39534

THPO Johnna Flynn Jena Band of Choctaw Indians PO Box 14 Jena, LA 71342

# **RE:** Draft Environmental Assessment (EA) and Draft Finding of No Significant Impact (FONSI) of Mississippi Cyber and Technology Center Enhanced Use Lease, Keesler Air Force Base (AFB), Biloxi, MS

Dear THPO Flynn

In accordance with Section 106 of the National Historic Preservation Act of 1966 (NHPA), as amended (16 U.S.C. 470f), and its implementing regulation, 36 CFR Part 800, the United States Department of the Air Force (DAF) initiated government-to-government consultation with your office in a letter dated May 3, 2024 for the Proposed Action of the DAF entering an enhanced use lease (EUL) with Mississippi State University Research and Technology Corporation (MSU RTC) for an approximately 15-acre parcel on Keesler AFB in Biloxi, MS, and MSU RTC building and operating the new Mississippi Cyber and Technology Center (MCTC) on the leased parcel. On June 10, 2024, in accordance with Section 106 and Section 110 of the NHPA, the DAF requested review and comment from your office on 1) Draft Archaeological Survey Technical Report for the proposed project and 2) DAF's the proposed determination of effect for the project. A revised version of the report is enclosed.

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Sincerely

MOSELEY.ROBERT Digitally signed by MOSELEY.ROBERT.T.III.1230764782 Date: 2024.07.31 13:03:07 -05'00' ROBERT T. MOSELEY III Deputy Base Civil Engineer Tribal Liaison Officer

Enclosure:

Phase I Archaeological Survey for the Mississippi Cyber and Technology Center, Keesler Air Force Base, MS, Revised July 10, 2024



## DEPARTMENT OF THE AIR FORCE HEADQUARTERS 81ST TRAINING WING (AETC)

31 July 2024

Robert T. Moseley III Deputy Base Civil Engineer Tribal Liaison Officer 81<sup>st</sup> Civil Engineer Squadron 500 Fisher Street, Bldg 701 Keesler AFB, MS 39534

THPO Melanie Carson Mississippi Band of Choctaw Indians 101 Industrial Road Choctaw, MS 39350

# **RE:** Draft Environmental Assessment (EA) and Draft Finding of No Significant Impact (FONSI) of Mississippi Cyber and Technology Center Enhanced Use Lease, Keesler Air Force Base (AFB), Biloxi, MS

Dear THPO Carson

In accordance with Section 106 of the National Historic Preservation Act of 1966 (NHPA), as amended (16 U.S.C. 470f), and its implementing regulation, 36 CFR Part 800, the United States Department of the Air Force (DAF) initiated government-to-government consultation with your office in a letter dated May 3, 2024 for the Proposed Action of the DAF entering an enhanced use lease (EUL) with Mississippi State University Research and Technology Corporation (MSU RTC) for an approximately 15-acre parcel on Keesler AFB in Biloxi, MS, and MSU RTC building and operating the new Mississippi Cyber and Technology Center (MCTC) on the leased parcel. On June 10, 2024, in accordance with Section 106 and Section 110 of the NHPA, the DAF requested review and comment from your office on 1) Draft Archaeological Survey Technical Report for the proposed project and 2) DAF's the proposed determination of effect for the project. A revised version of the report is enclosed.

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Sincerely

MOSELEY.ROBER Digitally signed by MOSELEY.ROBERT.T.III.1230764782 T.T.III.1230764782 Date: 2024.07.31 13:01:02 -05'00' ROBERT T. MOSELEY III Deputy Base Civil Engineer Tribal Liaison Officer

Enclosure:

Phase I Archaeological Survey for the Mississippi Cyber and Technology Center, Keesler Air Force Base, MS, Revised July 10, 2024



### DEPARTMENT OF THE AIR FORCE HEADQUARTERS 81ST TRAINING WING (AETC)

31 July 2024

Robert T. Moseley III Deputy Base Civil Engineer Tribal Liaison Officer 81<sup>st</sup> Civil Engineer Squadron 500 Fisher Street, Bldg 701 Keesler AFB, MS 39534

THPO Earl J. Barbry, Jr. Tunica-Biloxi Tribe of LA 150 Melacon Drive Marksville, LA 71351

# **RE:** Draft Environmental Assessment (EA) and Draft Finding of No Significant Impact (FONSI) of Mississippi Cyber and Technology Center Enhanced Use Lease, Keesler Air Force Base (AFB), Biloxi, MS

Dear THPO Barbry, Jr.

In accordance with Section 106 of the National Historic Preservation Act of 1966 (NHPA), as amended (16 U.S.C. 470f), and its implementing regulation, 36 CFR Part 800, the United States Department of the Air Force (DAF) initiated government-to-government consultation with your office in a letter dated May 3, 2024 for the Proposed Action of the DAF entering an enhanced use lease (EUL) with Mississippi State University Research and Technology Corporation (MSU RTC) for an approximately 15-acre parcel on Keesler AFB in Biloxi, MS, and MSU RTC building and operating the new Mississippi Cyber and Technology Center (MCTC) on the leased parcel. On June 10, 2024, in accordance with Section 106 and Section 110 of the NHPA, the DAF requested review and comment from your office on 1) Draft Archaeological Survey Technical Report for the proposed project and 2) DAF's the proposed determination of effect for the project. A revised version of the report is enclosed.

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Sincerely

MOSELEY.ROBERT Digitally signed by MOSELEY.ROBERT MOSELEY.ROBERT.T.III.1230764782 2 Date: 2024.07.31 13:03:49 -05'00' ROBERT T. MOSELEY III Deputy Base Civil Engineer Tribal Liaison Officer

Enclosure:

Phase I Archaeological Survey for the Mississippi Cyber and Technology Center, Keesler Air Force Base, MS, Revised July 10, 2024

Responses

Dale.	וועמץ, שבעונוושבו ט, 202ד ס.דד.צד אויו
Date:	Friday, September 6, 2024 8:44:24 AM
Subject:	FW: [Non-DoD Source] RE: Draft Environmental Assessment and Draft Finding of No Significant Impact of Mississippi Cyber and Technology Center Enhanced Use Lease, Keesler AFB, MS
Cc:	TRAWEEK, NEAL J CIV USAF AETC 81 CES/CEI
То:	<u>Shrestha, Suni</u>
From:	LANIER, JANET L CTR USAF AFMC AFCEC/CZOM

**CAUTION:** This email originated from an external sender. Verify the source before opening links or attachments.

>

FYI

From: Lindsey Bilyeu <

Sent: Thursday, September 5, 2024 3:36 PM

**To:** LANIER, JANET L CTR USAF AFMC AFCEC/CZOM <

**Subject:** [Non-DoD Source] RE: Draft Environmental Assessment and Draft Finding of No Significant Impact of Mississippi Cyber and Technology Center Enhanced Use Lease, Keesler AFB, MS

	You don't often get email from	Learn why this is important
I	Ms. Lanier,	

The Choctaw Nation of Oklahoma thanks Keesler Air Force Base for the correspondence regarding the above referenced project. We have reviewed the updated survey report, we do not have any further comments on the project. Our office still concurs with the finding of "no historic properties affected". However, we ask that work be stopped, and our office contacted immediately, in the event that Native American artifacts or human remains are encountered.

If you have any questions, please contact me.

Yakoke (Thank you),

Lindsey D. Bilyeu, MS Program Coordinator NHPA Compliance Review Historic Preservation Choctaw Nation of Oklahoma

This message is intended only for the use of the individual or entity to which it is addressed and may contain information that is privileged, confidential and exempt from disclosure. If you have received this message in error, you are hereby notified that we do not consent to any reading, dissemination, distribution or copying of this message. If you have received this communication in error, please notify the sender immediately and destroy the transmitted information. Please note that any view or opinions presented in this email are solely those of the author and do not necessarily represent those of the Choctaw Nation.

### APPENDIX C: AIR CONFORMITY ANALYSIS, CLIMATE, AND GREENHOUSE GAS EMISSIONS

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#### APPENDIX C. AIR CONFORMITY APPLICABILITY MODEL REPORT AND RECORD OF AIR ANALYSIS

#### C.1. General Information

The Department of the Air Force (DAF) Air Conformity Applicability Model (ACAM) was used to perform a net change in emissions analysis to assess the potential air quality impacts associated with the Proposed Action. The analysis was performed in accordance with Air Force Manual 32-7002, *Environmental Compliance and Pollution Prevention*; the Air Force Environmental Impact Analysis Process (EIAP) (Title 32 of the Code of Federal Regulations [CFR] Part 989); and the General Conformity Rule (GCR) (40 CFR §§ 93.150–93.165). This report provides a summary of the ACAM analysis.

Report generated with ACAM Version 5.0.23a.

- Action Location:
- State: Mississippi
- County(s): Harrison
- Regulatory Area(s): Not in a regulatory area
- Action Title: Environmental Assessment of Keesler Air Force Base (AFB) Mississippi Cyber and Technology Center (MCTC) Enhanced Use Lease (EUL)
- Project Number/s (if applicable): Keesler AFB EUL and MCTC EA
- Projected Action Start Date: November 2024 estimated
- Action Description: Keesler AFB EUL MCTC facility construction and operations
- Assumptions:
  - 1. For ease of analysis, all construction was compressed into a single calendar year. This represents a reasonable upper bound of annual emissions. Regardless of the time required to construct the facility or the construction schedule, the annual emissions would be less than those shown herein.
  - 2. Construction: The proposed MCTC design concept is for a 100,000-square foot (-SF), 3-story building of approximately 33,333 SF per floor that would house event space, classrooms, and administration facilities.
  - 3. Site Grading: Assumed the full 15 acres would be graded 653,400 SF, about three times the estimated acres of Phase 1, this provides enough room for laydown and extra utility work, if required. Material from percent of the area at less than one-half-foot depth, roughly 1,000 cubic yards of debris will be hauled off-site. Occurs over 4 months. Debris includes tree removal and removal of other material that might be discovered during site work.
  - 4. Trenching: Assumed trenching for utilities, drainage, and building structures (i.e., footings, maintenance, and an elevator), assumed trenching would take place for the full footprint of the 33,333-SF MCTC, 10,000 cubic yards a rough estimate and assumed 6 feet in depth average. No material will be hauled on- or off-site. Occurs over 3 months.
  - 5. Architectural Coatings: 100,000 SF nonresidential facility. Occurs over 3 months.
  - 6. Paving (Asphalt): 410,000 SF paved over 12 months.
  - 7. Heating Activity: Assumed to be Heat Energy Requirement Method for 100,000 SF.
  - 8. One diesel backup generator assumed.

#### C.2. Air Impact Analysis

Based on the attainment status at the action location, the requirements of the GCR are not applicable.

Total reasonably foreseeable net direct and indirect emissions associated with the action were estimated through ACAM on a calendar-year basis for the start of the action through achieving "steady state" emissions (no net gain/loss in emission stabilized and the action is fully implemented). The ACAM analysis uses the latest and most accurate emission estimation techniques available; all algorithms, emission factors, and methodologies used are described in detail in Air Emissions Guide for Air Force Stationary Sources, the Air Emissions Guide for Air Force Mobile Sources, and Air Emissions Guide for Air Force Transitory Sources.

"Insignificance indicators" were used in the analysis to provide an indication of the significance of the Proposed Action's potential impacts on local air guality. The insignificance indicators are trivial (de minimis) rate thresholds that have been demonstrated to have little-to-no impact on air guality. These indicators are the 250-ton per year (-tpy) Prevention of Significant Deterioration major source threshold and 25 tpy for lead (Pb) for actions occurring in areas that are in attainment (not exceeding any of the National Ambient Air Quality Standards [NAAQS]). They do not define a significant impact; however, they do provide a threshold by which to identify actions that are insignificant. Any action with net emissions below the insignificance indicators for all criteria pollutants is considered so insignificant, that the action will not cause or contribute to an exceedance of any NAAQS.

Table C-1: Construction Emissions				
Pollutant	Action emissions	Insignificance Indicator		
	(tpy)	Indicator (tpy)	Exceedance (Yes or No)	
NOT IN A REGULATOR	Y AREA			
VOC	0.8	250	No	
NOx	3	250	No	
CO	4	250	No	
CO SO <sub>x</sub>	0.01	250	No	
PM <sub>10</sub>	27	250	No	
PM <sub>2.5</sub>	0.11	250	No	
Pb	0.00	25	No	
NH <sub>3</sub>	0.01	250	No	

Tables C-1 and C-2 summarize the action's net emissions for every year through achieving a steady-state condition were compared against the insignificance indicators.

Notes: CO = carbon monoxide; NH<sub>3</sub> = ammonia; NO<sub>x</sub> = nitrogen oxides; PM<sub>2.5</sub> = fine inhalable particles, with diameters generally 2.5 micrometers and smaller;  $PM_{10}$  = inhalable particles, with diameters generally 10 micrometers and smaller;  $SO_x$  = sulfur oxides; VOC = volatile organic compound.

Table C-2: Operations–Direct			
Pollutant Action emissions Insignificance Indicator			ince Indicator
	(tpy)	Indicator (tpy)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	0.03	250	No
NOx	0.4	250	No

Appendix C Air Conformity Analysis,	Climate, And GHGs
Appendix C All Contonnity Analysis;	Chinale, And Onos

Pollutant	Action emissions	Insignificance Indicator		
	(tpy)	Indicator (tpy)	Exceedance (Yes or No)	
CO	0.3	250	No	
SO <sub>x</sub>	0.01	250	No	
<b>PM</b> <sub>10</sub>	0.04	250	No	
PM <sub>2.5</sub>	0.04	250	No	
Pb	0.0	25	No	
NH <sub>3</sub>	0.0	250	No	

Note: Indirect emissions would be from other sources of power generation contributing to new infrastructure.

None of the estimated annual net emissions associated with this action are above the insignificance indicators; therefore, the action will not cause or contribute to an exceedance of one or more of the NAAQS and will have an insignificant impact on air quality. No further air assessment is needed.

The emergency generator would require a new source review (NSR) evaluation based on engine size and type of use. The NSR is a Clean Air Act program that requires industrial facilities to install modern pollution control equipment when they are built or when a change is made that increases emissions significantly. This equipment may require permitting if emissions or runtime hours are above the permitting threshold. If the permitting threshold is triggered when generator specifications become known, a permit must be obtained before construction.

#### C.3. Climate/Meteorology

The City of Biloxi has an average high temperature of 90 degrees Fahrenheit (°F) in the hottest month of July, and an average low temperature of 43 °F in the coldest month of January. Biloxi has average annual precipitation of 64.83 inches per year. The wettest month of the year is July, with an average rainfall of 7.13 inches (U.S. Climate Data 2022).

Tropical cyclones, or hurricanes, bring heavy rain, strong winds, and high tides to Keesler AFB even when they make landfall far from Biloxi. In 2020, hurricanes Zeta and Sally made landfall in Louisiana and Alabama, respectively, and brought heavy rain, strong winds, and high tides to the base. Historically, two hurricanes have made landfall in Biloxi. Hurricane Elena made landfall in 1985, with a maximum wind speed of 100 knots as a Category 3 storm. Hurricane Camille made landfall in Biloxi as a Category 5 storm in 1969, with a maximum wind speed of 150 knots (NOAA 2022).

Mississippi is in the southeast climate region of the United States, where the effects of changing climate are being experienced through increased flooding, warming temperatures, and growing wildfire risk (Carter et al. 2018). The DAF Climate Campaign Plan implements a Climate Action Plan that defines goals to preserve a more resilient, combat-credible force. The plan outlines three major priorities: (1) Maintain air and space dominance in the face of climate risks, (2) make climate-informed decisions, and (3) build resilience. The plan also establishes a goal for DAF installations to be net-zero by 2046 and reduce 2008 emissions by half by 2033 (DAF 2023).

The storm surge line of Hurricane Katrina reached close to the northern area of the proposed project area (AETC 2006).

#### C.4. Greenhouse Gas Emissions

Greenhouse gases (GHGs) are gases in the atmosphere with the ability to affect the Earth's atmospheric temperature through physical processes involving sunlight and thermal energy. Natural processes such as evaporation, decomposition of organic matter, wildfires, and volcanic activity are responsible for most of the GHGs. Human activities that involve the combustion of fossil fuels (e.g., gasoline, diesel, oil, coal, and natural gas) and farming, however, also have added substantial amounts of GHGs to the atmosphere over time, and it is these additional GHGs that have changed the overall makeup of the atmosphere, leading to what is known as the "greenhouse effect" and to climate change.

The three main GHGs are carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), and nitrous oxide (N<sub>2</sub>O). These gases can be addressed in terms of "carbon dioxide equivalent" (CO<sub>2</sub>e). The global warming potentials (GWPs) for CH<sub>4</sub> and N<sub>2</sub>O, respectively, are 25 times and 298 times higher than CO<sub>2</sub>. GHGs presented as CO<sub>2</sub>e equate to CO<sub>2</sub> emissions plus 25 times CH<sub>4</sub> emissions plus 298 times N<sub>2</sub>O emissions.

The following executive orders (EOs) relevant to National Environmental Policy Act (NEPA) clearly indicate that GHG emissions and climate change are issues that need to be considered:

- EO 13990, Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis
- EO 14008, Tackling the Climate Crisis at Home and Abroad
- EO 14030, Climate-Related Financial Risk

On January 9, 2023, the Council on Environmental Quality (CEQ) issued interim guidance to assist federal agencies in analyzing the GHG and climate change effects of their proposed actions under NEPA (88 FR 1196). The CEQ guidance recommends that agencies quantify the reasonably foreseeable direct and indirect gross GHG emissions increases and reductions for the proposed action, no action alternative, and any reasonable alternatives over the action's projected lifetime, using reasonably available information and data. These gross emissions should be calculated individually by GHG and aggregated in terms of total CO<sub>2</sub>e by factoring each pollutant's GWP. The CEQ guidance proposes to advise federal agencies to consider, in scoping their NEPA analysis, whether analysis of the direct and indirect GHG emissions from their proposed actions might provide meaningful information to decision-makers and the public. The guidance goes on to state that "they [agencies] should apply the best available estimates of SC-GHG to the incremental metric ton of each individual GHG emission," referring to the *Technical Support Document: Social Cost of Carbon, Methane, and Nitrous Oxide Interim Estimates under Executive Order 13990* released by the Interagency Working Group on Social Cost of Greenhouse Gases (IWG-SCGHG 2021).

*DAF's GHG & Climate Change Assessment Guide* details how installations assess GHGs and climate change based on the 2023 CEQ interim guidance. They have adopted a 75,000 tons per year (tpy) of CO2e (or 68,039 metric ton per year, mtpy) as an indicator or "threshold of insignificance" for NEPA air quality impacts in all areas. Therefore, actions with worst-case year GHG emissions of less than 75,000 tpy are considered insignificant and need no further analysis (DAF 2023).

The DAF also provides installations with tools to navigate the complexities of EPA's Mandatory Greenhouse Gas Reporting Rule (MGHGRR) and the GHG Tailoring Rule. The document describes, in general terms, the requirements of the MGHGRR and the application of the Tailoring Rule as it pertains to GHGs (New Source Review and Title V permitting requirements)

for GHGs). Keesler AFB GHG emissions are below 25,000 mtpy  $CO_2e$  from all stationary fuel combustion sources. Therefore, Keesler AFB is not required to report GHG emissions (DAF 2023).

GHG emissions from implementing Alternative 1 would be generated from direct sources. Shortterm direct emissions would be expected to be generated from construction of the MCTC. Longterm direct emissions would be expected from backup generators, heating, and cooling.

ACAM was applied to Alternative 1 to estimate construction-related GHG emissions in this EA. ACAM also was used to quantify emissions of NAAQS criteria pollutants. ACAM is a robust computer model developed and used primarily by DAF planners in analyzing environmental impacts. The ACAM model accommodates all these activities, provides a consistent method for evaluating potential emissions, and meets the requirements of the CEQ interim guidance on analyzing GHG and climate change effects of agencies' proposed actions under NEPA (88 FR 1196).

Table C-3 summarizes the action-related GHG emissions for a year, the worst-case projected construction timeline of the action. All construction activities were assumed to be compressed into a 12-month period to ensure that the actual annual emissions would be less than the estimates specified in this EA. Estimated GHG emissions generated by the MCTC construction activities would be 1,120 mpty, below the insignificance indicator for the annual threshold of 75,000 tpy of CO2e (or 68,039 mtpy). Small changes in facilities' site and final design and moderate changes in quantity and types of equipment used would not substantially change the emission estimates.

Long-term insignificant effects would be expected from the operations of the facility. Operational GHG emissions from an estimated 25-year life cycle of the proposed MCTC building would be approximately11,400 mtpy, considerably less than the DAF's insignificance indicator of the annual threshold of 75,000 tpy of CO2e (or 68,039 mtpy). These GHG emissions were compared with those of large facilities in the State of Mississippi, Harrison County, and surrounding counties. In 2022, 107 facilities in the county reported nearly 42 million metric tons (USEPA 2022). GHG emissions associated with Alternative 1's operation would be less than 0.00001 percent of the 2022 GHG emissions for Harrison County.

The social cost of carbon (SCC) is an estimate of the monetized damages associated with incremental increases in GHG emissions, such as reduced agricultural productivity, human health effects, property damage from increased flood risk, and the value of ecosystem services. GHG emissions of the Proposed Action were applied to a 3 percent annual discount rate of the SCC. Annual rates of CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O from the *Technical Support Document: Social Cost of Carbon, Methane, and Nitrous Oxide Interim Estimates under Executive Order 13990* were applied to the emissions in Table C-3. Applying direct emissions from construction, the SCC for Alternative 1 would be roughly \$56,000. Applying these per-metric ton costs to Alternative 1's projected GHG emissions over a 25-year life cycle yields \$805,000 in the SCC.

14				1
Year	CO <sub>2</sub>	CH₄	N <sub>2</sub> O	CO <sub>2</sub> e
Construction	721	0.03	0.02	729
Operations	389	0.007	0.007	391

#### Table C-3. Alternative 1-Related Annual GHG Emissions (mtpy)

#### C.5. References

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### APPENDIX D: FEDERAL CONSISTENCY DETERMINATION

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### MISSISSIPPI COASTAL ZONE MANAGEMENT PROGRAM FEDERAL CONSISTENCY DETERMINATION OF MISSISSIPPI CYBER AND TECHNOLOGY CENTER ENHANCED USE LEASE

#### KEESLER AIR FORCE BASE, BILOXI, MISSISSIPPI

The consistency of the Proposed Action with the enforceable goals and policies of the Mississippi Coastal Management Program is summarized below for each applicable goal and policy. Further information is provided in the text of the environmental assessment. This action does *not* propose the location and design of new or enlarged defense installations within the coastal zone (Title 22 of the Mississippi Administrative Code Part 23 Chapter 14 Section 100.03.01).

#### 1.0 Mississippi Coastal Program Enforceable Policies

**GOAL 1:** To provide for reasonable industrial expansion in the coastal area and to ensure the efficient utilization of waterfront industrial sites so that suitable sites are conserved for water dependent industry.

<u>Consistency of the Proposed Action</u>: The Proposed Action is fully consistent with this goal. No aspect of the proposed project would limit industrial expansion or affect a waterfront industrial site.

**GOAL 2:** To favor the preservation of the coastal wetlands and ecosystems, except where a specific alteration of specific coastal wetlands would serve a higher public interest in compliance with the public purposes of the public trust in which the coastal wetlands are held.

<u>Consistency of the Proposed Action</u>: The Proposed Action is fully consistent with this goal. No aspect of the Proposed Action would affect a coastal wetland. Stormwater runoff from the proposed project area would be within permitted municipal separate storm sewer system (MS4) (Permit No. MSRMS4023) drainages discharging from Outfall 6 through Keegan Bayou into the Back Bay of Biloxi. The MS4 permit requires the development of a Stormwater Management Plan (SWMP), which describes best management practices (BMPs) and goals to reduce the discharge of pollutants to stormwater for construction and post-construction activities. In accordance with Energy Independence and Security Act Section 438 and the Air Force Corporate Facilities Standards, facility design would incorporate low impact development controls to emulate the site's predevelopment hydrology through passive and active design features that infiltrate, store, and evaporate runoff close to its source of origin. Therefore, the Proposed Action would not affect coastal ecosystems.

**GOAL 3:** To protect, propagate, and conserve the state's seafood and aquatic life in connection with the revitalization of the seafood industry of the State of Mississippi.

<u>Consistency of the Proposed Action</u>: The Proposed Action is fully consistent with this goal. No aspect of the Proposed Action would affect the state's seafood and aquatic life or seafood industry.

**GOAL 4:** To conserve the air and waters of the state, and to protect, maintain, and improve the quality thereof for public use, for the propagation of wildlife, fish, and aquatic life, and for domestic, agricultural, industrial, recreational, and other legitimate beneficial uses.

<u>Consistency of the Proposed Action</u>: The Proposed Action is fully consistent with this goal. The air emissions and stormwater runoff attributable to the Proposed Action would not be sufficient to affect the propagation of wildlife, fish, and aquatic life or any legitimate beneficial use.

**GOAL 5:** To put to beneficial use to the fullest extent of which they are capable the water resources of the state, and to prevent the waste, unreasonable use, or unreasonable method of use of water.

<u>Consistency of the Proposed Action</u>: The Proposed Action is fully consistent with this goal. The Proposed Action would not waste or unreasonably use the water resources of the state.

**GOAL 6:** To preserve the state's historical and archaeological resources, to prevent their destruction, and to enhance these resources wherever possible.

<u>Consistency of the Proposed Action</u>: No effects on cultural resources are anticipated from the Proposed Action. No intact archaeological deposits or Native American tribal resources were recorded during a Phase I cultural resources survey of the proposed project site. A ground penetrating radar investigation did not indicate that the Old Biloxi Cemetery extends into the proposed EUL site. The survey report was provided to Mississippi Department of Archives and History (MDAH) and affiliated Native American Tribes along with the DAF's proposed determination of no historic properties affected by the Proposed Action and alternatives for concurrence and comment. MDAH concurred with the Phase I cultural resources survey report that no resources eligible for listing in the NRHP were identified within the project area or are likely to be affected by the project and stated it had no objection to the proposed undertaking. The Choctaw Nation of Oklahoma concurred with the DAF assessment that the proposed action does not have the potential to affect historic properties and requested that work be stopped and their office contacted immediately if Native American artifacts or human remains are encountered.

GOAL 7: To encourage the preservation of natural scenic qualities in the coastal area.

<u>Consistency of the Proposed Action</u>: The Proposed Action is fully consistent with this goal. The Proposed Action would not affect natural scenic qualities in the coastal area.

**GOAL 8:** To assist local governments in the provision of public facilities services in a manner consistent with the coastal program.

Consistency of the Proposed Action: The goal is not applicable to the Proposed Action.

#### 2.0 Coastal Preserves Program Goals (MSDMR 2022)

**GOAL 1:** Restore, enhance, protect, and manage Mississippi's remaining coastal estuarine marsh ecosystems.

Objective: Acquire and protect coastal habitats.

<u>Consistency of the Proposed Action</u>: The Proposed Action is fully consistent with this goal. The Proposed Action would not affect the state's coastal estuarine marsh ecosystems.

**GOAL 2:** Protect and preserve habitat of any rare, threatened, or endangered species of plants and animals present on Coastal Preserves.

Objective: Protect and preserve habitat critical for rare, threatened, and endangered species.

<u>Consistency of the Proposed Action</u>: The Proposed Action is fully consistent with this goal. The Proposed Action would not affect the habitat of any rare, threatened, or endangered species of plant or animal on Coastal Preserves.

**GOAL 3:** Promote increased opportunities for public appreciation and enjoyment of Mississippi's coastal estuarine wetlands that are compatible with protecting, preserving, and enhancing the natural resources.

Objective: Provide public access and use of resources on state-owned lands within the Coastal Preserves Program.

Objective: Actively promote access and enjoyment opportunities of public wetland sites.

<u>Consistency of the Proposed Action</u>: The goal is not applicable to the Proposed Action.

**GOAL 4:** Acquire, restore, and protect unique habitats associated with plant and animal communities.

Objective: Identify unique habitats within the Coastal Preserve sites.

Objective: Acquire and protect unique habitats and communities.

Consistency of the Proposed Action: The goal is not applicable to the Proposed Action.

**GOAL 5:** Monitor populations of non-indigenous species and protect native species from deleterious effects of non-indigenous species.

Objective: Identify, document location of, and monitor populations and effects of nonindigenous species on native flora and fauna.

<u>Consistency of the Proposed Action</u>: The Proposed Action is fully consistent with this goal. The Proposed Action would not expand the distribution of non-indigenous species.

**GOAL 6:** Contribute to the viability and natural biodiversity of coastal estuarine marsh ecosystems through management.

Objective: Manage Coastal Preserves to support priority habitats and species and to promote environmental education and public use.

Consistency of the Proposed Action: The goal is not applicable to the Proposed Action.

**GOAL 7:** Develop coastal preserve management strategies that foster improved coordination among federal, state, and local entities with jurisdiction and interests in coastal wetland protection.

Objective: Gather and make available information needed by reserve managers and coastal decision-makers for improved understanding and management of coastal resources.

Objective: Make Coastal Preserve management processes visible, coherent, accessible, and acceptable to the people of Mississippi.

<u>Consistency of the Proposed Action</u>: The goal is not applicable to the Proposed Action.

**GOAL 8:** Increase public awareness and interest in the values and functions of coastal wetlands, their habitats, and the ecosystems they are dependent upon.

Objective: Develop and deliver educational materials and programs to inform the public about wetland species, their habitats, and their value to human beings.

Consistency of the Proposed Action: The goal is not applicable to the Proposed Action.

### 3.0 Title 22 Part 23 Chapter 08: Requirements for Conducting Regulated Activities

100: Docks, Piers, Boat Shelters (including boathouses), and Hoists.

<u>Consistency of the Proposed Action</u>: The Proposed Action does not involve the construction of a dock or pier.

101: Boat Ramps.

<u>Consistency of the Proposed Action</u>: The Proposed Action does not involve the installation or use of a boat ramp.

102: Marinas, Boat Basins, and Boat Slips.

<u>Consistency of the Proposed Action</u>: The Proposed Action does not involve the installation of a marina or boat slip.

103: Bulkheads, Seawalls, Breakwaters, Groins and Jetties.

<u>Consistency of the Proposed Action</u>: The Proposed Action does not involve the installation of a bulkhead or seawall.

104: Cables, Pipelines and Transmission Lines.

<u>Consistency of the Proposed Action</u>: The Proposed Action is consistent with these policies. The Proposed Action does not involve the installation of a cable, pipeline, or transmission line through coastal wetlands.

#### 105: Transportation.

<u>Consistency of the Proposed Action</u>: The Proposed Action is consistent with these policies. The Proposed Action does not involve the construction of a transportation route through or across a coastal wetland. Stormwater runoff from the Proposed Action area would be within the MS4 drainages discharging to the Back Bay of Biloxi through Outfall 6. The MS4 permit requires the development of an SWMP describing BMPs and goals to reduce the discharge of pollutants to stormwater for construction and post-construction activities.

106: Channels and Access Canals.

<u>Consistency of the Proposed Action</u>: The Proposed Action does not involve the construction of a channel or access canal.

107: Dredged Material Disposal.

<u>Consistency of the Proposed Action</u>: The Proposed Action does not involve the removal or disposal of dredged material.

108: Tidal Marsh and Watershed Impoundment.

<u>Consistency of the Proposed Action</u>: The Proposed Action does not involve the construction of a watershed impoundment or impacts on tidal marshes.

109: Drainage Canals or Ditches.

<u>Consistency of the Proposed Action</u>: The Proposed Action is consistent with these policies. The Proposed Action does not involve the installation of a drainage canal or ditch. Stormwater runoff from the proposed project area would be within the MS4 drainages discharging from Outfall 6 through Keegan Bayou into the Back Bay of Biloxi. The MS4 permit requires the development of an SWMP that describes BMPs and goals to reduce the discharge of pollutants to stormwater for construction and post-construction activities.

110: Oil and Gas Exploration and Production.

<u>Consistency of the Proposed Action</u>: The Proposed Action does not involve oil and gas exploration and production activities.

111: Other Mineral Extraction.

<u>Consistency of the Proposed Action</u>: The Proposed Action does not involve any mineral extraction activities.

112: Facilities Requiring Water for Cooling and Heating.

<u>Consistency of the Proposed Action</u>: The Proposed Action does not involve facilities that require water for cooling or heating.

113: Activities Affecting Coastal Wetlands.

<u>Consistency of the Proposed Action</u>: The Proposed Action is consistent with these policies. The Proposed Action would not affect any area of coastal wetlands, either directly or indirectly. Stormwater runoff from the proposed project area would be within the MS4 drainages discharging through Outfall 6. The MS4 permit requires the development of an SWMP that describes BMPs and goals to reduce the discharge of pollutants to

stormwater for construction and post-construction activities. Therefore, the Proposed Action would not affect coastal wetlands or disrupt drainage patterns.

114: Filling Other Than Dredged Material Disposal.

<u>Consistency of the Proposed Action</u>: The Proposed Action does not involve dredged material.

115: Dockside Casinos.

<u>Consistency of the Proposed Action</u>: The Proposed Action does not involve a dockside casino.

116: Intake and Discharge Structures.

<u>Consistency of the Proposed Action</u>: The Proposed Action does not involve an intake or discharge structure.

117: Dredging/Excavation.

<u>Consistency of the Proposed Action</u>: The Proposed Action does not involve dredging or excavation.

118: Variances to the Requirements for Regulated Activities.

<u>Consistency of the Proposed Action</u>: No variances are anticipated given that the Proposed Action occurs in an upland area away from coastal wetlands and the project would drain to an outfall regulated by an existing MS4 permit.

### APPENDIX E: USFWS INFORMATION FOR PLANNING AND CONSULTATION

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Final

## IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to astrust 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

Harrison County, Mississippi



### Local office

Mississippi Ecological Services Field Office

**\$** (601) 965-4900

6578 Dogwood View Parkway, Suite A

Jackson, MS 39213-7856

NOTFORCONSULTATION

## 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<sup>1</sup> and their critical habitats are managed by the <u>Ecological Services Program</u> of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries<sup>2</sup>).

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

1. Species listed under the <u>Endangered Species Act</u> are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the <u>listing status page</u> for more information. IPaC only shows species that are regulated by USFWS (see FAQ). 2. <u>NOAA Fisheries</u>, 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
<ul> <li>Northern Long-eared Bat Myotis septentrionalis</li> <li>Wherever found</li> <li>This species only needs to be considered if the following condition applies:</li> <li>This species only needs to be considered if the project includes wind turbine operations.</li> <li>No critical habitat has been designated for this species.</li> </ul>	Endangered
https://ecos.fws.gov/ecp/species/9045	TATIO
<ul> <li>Tricolored Bat Perimyotis subflavus</li> <li>Wherever found</li> <li>This species only needs to be considered if the following condition applies:</li> <li>This species only needs to be considered if the project includes wind turbine operations.</li> <li>No critical habitat has been designated for this species.</li> </ul>	Proposed Endangered
https://ecos.fws.gov/ecp/species/10515	
West Indian Manatee Trichechus manatus Wherever found There is final critical habitat for this species.Your location does not overlap the critical habitat. <u>https://ecos.fws.gov/ecp/species/446</u> 9	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

### Piping Plover Charadrius melodus

Threatened

There is **final** critical habitat for this species. Your location does not overlap the critical habitat. <u>https://ecos.fws.gov/ecp/species/6039</u>

### Rufa Red Knot Calidris canutus rufa

Threatened

Wherever found There is proposed critical habitat for this species. <u>https://ecos.fws.gov/ecp/species/1864</u>

### Reptiles

NAME	STATUS
Alabama Red-bellied Turtle Pseudemys alabamensis Wherever found No critical habitat has been designated for this species. <u>https://ecos.fws.gov/ecp/species/1494</u>	Endangered
Alligator Snapping Turtle Macrochelys temminckii Wherever found No critical habitat has been designated for this species. <u>https://ecos.fws.gov/ecp/species/4658</u>	Proposed Threatened
Gopher Tortoise Gopherus polyphemus No critical habitat has been designated for this species. <u>https://ecos.fws.gov/ecp/species/6994</u>	Threatened
Hawksbill Sea Turtle Eretmochelys imbricata Wherever found There is final critical habitat for this species. Your location does not overlap the critical habitat. <u>https://ecos.fws.gov/ecp/species/3656</u>	Endangered
Kemp's Ridley Sea Turtle Lepidochelys kempii Wherever found There is proposed critical habitat for this species. <u>https://ecos.fws.gov/ecp/species/5523</u>	Endangered

Leatherback Sea Turtle Dermochelys coriacea Wherever found There is final critical habitat for this species. Your location does not overlap the critical habitat. <u>https://ecos.fws.gov/ecp/species/1493</u>	Endangered
Loggerhead Sea Turtle Caretta caretta There is final critical habitat for this species. Your location does not overlap the critical habitat. <u>https://ecos.fws.gov/ecp/species/1110</u>	Threatened
Fishes	1
NAME	STATUS
Gulf Sturgeon Acipenser oxyrinchus (=oxyrhynchus) desotoi Wherever found There is final critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/651	Threatened
Insects NAME	STATUS
Monarch Butterfly Danaus plexippus Wherever found No critical habitat has been designated for this species. <u>https://ecos.fws.gov/ecp/species/9743</u>	Candidate
Ferns and Allies	
NAME	STATUS
Louisiana Quillwort Isoetes louisianensis	Endangered

Wherever found No critical habitat has been designated for this species.

https://ecos.fws.gov/ecp/species/7756

### **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.

You are still required to determine if your project(s) may have effects on all above listed species.

## Bald & Golden Eagles

Bald and golden eagles are protected under the Bald and Golden Eagle Protection Atand the Migratory Bird Treaty Act.

Any person or organization who plans or conducts activities that may result in impacts to bald or golden eagles, or their habitat<sup>3</sup>, should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the<u>"Supplemental Information on Migratory Birds and Eagles</u>"

Additional information can be found using the following links:

- Eagle Managementhttps://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds <u>https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-tak</u>e-<u>migratory-birds</u>
- Nationwide conservation measures for birds <a href="https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf">https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf</a>
- Supplemental Information for Migratory Birds and Eagles in IPaC <a href="https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action">https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action</a>

There are likely bald eagles present in your project area. For additional information on bald eagles, refer to <u>Bald Eagle Nesting and Sensitivity to Human Activity</u>

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

Breeds Sep 1 to Jul 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

### 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 "Supplemental Information on Migratory Birds and Eagles" specifically the FAQ section titled "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.

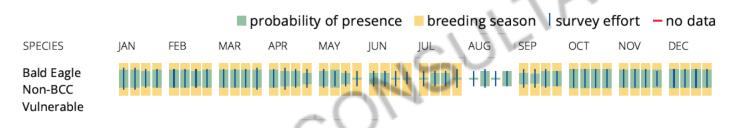
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

### 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.



## What does IPaC use to generate the potential presence of bald and golden eagles in my specified location?

The potential for eagle presence is derived from data provided by th<u>Avian Knowledge Network (AKN</u>) The AKN data is based on a growing collection o<u>Survey</u>, <u>banding</u>, <u>and citizen science dataset</u>s 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 <u>Eagle Act</u> requirements may apply). To see a list of all birds potentially present in your project area, please visit the<u>Rapid Avian Information Locator (RAIL) Too</u>l

## What does IPaC use to generate the probability of presence graphs of bald and golden eagles in my specified location?

The Migratory Bird Resource List is comprised of USFW<u>Sirds of Conservation Concern (BCC)</u> 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 th<u>avian Knowledge</u> <u>Network (AKN)</u>. The AKN data is based on a growing collection o<u>survey</u>, <u>banding</u>, <u>and citizen science</u> <u>datasets</u> 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 <u>Kagle Act</u> 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 <u>Rapid Avian Information Locator (RAIL) Too</u>l

### 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 <u>Eagle Act</u> should such impacts occur. Please contact your local Fish and Wildlife Service Field Office if you have questions.

## Migratory birds

Certain birds are protected under the Migratory Bird Treaty Actand the Bald and Golden Eagle Protection Act.

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitat<sup>3</sup> should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the<u>"Supplemental Information on Migratory Birds and Eagles</u>"

- 1. The <u>Migratory Birds Treaty Act</u> of 1918.
- 2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Eagle Management<u>https://www.fws.gov/program/eagle-management</u>
- Measures for avoiding and minimizing impacts to birds <u>https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds</u>
- Nationwide conservation measures for birdshttps://www.fws.gov/sites/default/files/
- documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC <u>https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action</u>

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 FAQbelow. 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 <u>below</u>.

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

NAME	BREEDING SEASON
American Oystercatcher Haematopus palliatus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <u>https://ecos.fws.gov/ecp/species/8935</u>	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. <u>https://ecos.fws.gov/ecp/species/1626</u>	Breeds Sep 1 to Jul 31
Black Skimmer Rynchops niger This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <u>https://ecos.fws.gov/ecp/species/5234</u>	Breeds May 20 to Sep 15
<b>Brown-headed Nuthatch</b> Sitta pusilla This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Mar 1 to Jul 15
Chimney Swift Chaetura pelagica This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 15 to Aug 25
<b>Chuck-will's-widow</b> Antrostomus carolinensis This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds May 10 to Jul 10
Coastal (wayne s) Black-throated Green Warbler Setophaga virens waynei This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds May 1 to Aug 15

Gull-billed Tern Gelochelidon nilotica This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <u>https://ecos.fws.gov/ecp/species/9501</u>	Breeds May 1 to Jul 31
King Rail Rallus elegans This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <u>https://ecos.fws.gov/ecp/species/8936</u>	Breeds May 1 to Sep 5
Lesser Yellowlegs Tringa flavipes This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <u>https://ecos.fws.gov/ecp/species/9679</u>	Breeds elsewhere
Marbled Godwit Limosa fedoa This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <u>https://ecos.fws.gov/ecp/species/9481</u>	Breeds elsewhere
Painted Bunting Passerina ciris This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Apr 25 to Aug 15
<b>Pectoral Sandpiper</b> Calidris melanotos This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds elsewhere
<b>Prothonotary Warbler</b> Protonotaria citrea This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Apr 1 to Jul 31
Red-headed Woodpecker Melanerpes erythrocephalus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 10 to Sep 10
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. <u>https://ecos.fws.gov/ecp/species/9480</u>	Breeds elsewhere
Southeastern American Kestrel Falco sparverius paulus This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA <u>https://ecos.fws.gov/ecp/species/4076</u>	Breeds Apr 1 to Aug 31
Swallow-tailed Kite Elanoides forficatus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <u>https://ecos.fws.gov/ecp/species/8938</u>	Breeds Mar 10 to Jun 30
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 <u>"Supplemental Information on Migratory Birds and Eagles"</u>, specifically the FAQ section titled "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.

			pr	obabilit	y of pre	sence	breed	ding sea	son Is	urvey e	ffort –	no data
SPECIES	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
American Oystercatcher BCC Rangewide (CON)		<b>#</b> ##+	****	+ <mark>+</mark> +∎	+#8+	++++	++∎∔	1111	1100	++###	844+	****

Bald Eagle Non-BCC Vulnerable		1111		111	∎∎∎+	<b>##</b> ++	+##+	+#+#	\$ <b>\$</b> \$			1111
Black Skimmer BCC Rangewide (CON)	****		<b>I</b> +##	***	1111	1111		IIII				1111
Brown-headed Nuthatch BCC - BCR	<b>+</b> + <b>+</b> +	+#+#	++++	<b>##</b> ++	++++	<b>#</b> +++	++++	++++	+##+	++#+	₩₩₩+	<b>₩</b> +₩+
Chimney Swift BCC Rangewide (CON)	++++	++++	┼ <mark>╡╡</mark> ╏		1111			1114		<b>#</b> ###	<b>#</b> +++	++++
Chuck-will's- widow BCC - BCR	++++	++++	++++	++++	+∎++	++++	<mark>++</mark> ++	++++	++++	++++	++++	++++
Coastal (wayne s) Black-throated Green Warbler BCC - BCR	++++	++++	++++	****	<b>#</b> +++	++++	++++	++++	++++ <\	6867	<del>↓</del> ∔±±	++++
Gull-billed Tern BCC Rangewide (CON)	++++	++++	++++	+###		1111	<u>m)</u>	+++++	<b>##</b> ++	++++	++++	++++
King Rail BCC Rangewide (CON)	++++	<del>111</del> #	++++	++++	H	)1++	++++	++++	++++	++++	+++#	++++
Lesser Yellowlegs BCC Rangewide (CON)	###+	++++#	++++	**#*	<b>#</b> +++	++++	++++	┼┼║┼	<b>###</b> +	+++∎	₩₩┼₩	++++
Marbled Godwit BCC Rangewide (CON)		iini		₩₩₩₩	+#++	++∎+	++#+	#++#	***8			8484
Painted Bunting BCC - BCR	++++	+++	++++	+## <mark>+</mark>	++++	++++	++++	++++	++++	++++	+++++	++++
SPECIES	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Pectoral Sandpiper BCC Rangewide (CON)	++++	++++	\$\$\$	+++++	++++	++++	++++	++++	<b>#∥∥</b> +	++++	++++	++++
Prothonotary Warbler BCC Rangewide (CON)	++++	++++	+++	1111	++++	++++	++++	++++	+++++	++++	++++	++++

Red-headed Woodpecker BCC Rangewide (CON)	++++ ++++ ++++ +#### # <mark>188</mark> <b>KKK KKK KKK KKK KKK KKK KKK KKK KKK</b>
Ruddy Turnstone BCC - BCR	NANK NANK NANK NANK NANK NANK NANK NANK
Short-billed Dowitcher BCC Rangewide (CON)	<u>\$</u>
Southeastern American Kestrel BCC - BCR	****
Swallow-tailed Kite BCC Rangewide (CON)	<u>++++</u> ++++ ++++ +++++ +++++ ++++++++++
Willet BCC Rangewide (CON)	I I I I I I I I I I I I I I I I I I I
Wilson's Plover BCC Rangewide (CON)	<u>++++</u> ++++
Wood Thrush BCC Rangewide (CON)	<u>++++</u> +++++ <b>**************</b>

# 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.<u>Additional measures</u> or<u>permits</u> 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 list of migratory birds that potentially occur in my specified location?

The Migratory Bird Resource List is comprised of USFW<u>Sirds of Conservation Concern</u> (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 th<u>evian Knowledge</u> <u>Network (AKN)</u>. The AKN data is based on a growing collection o<u>furvey</u>, <u>banding</u>, <u>and citizen science</u> <u>datasets</u> 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 (<u>Eagle Act</u> 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 <u>Rapid Avian Information Locator (RAIL) Tool</u>.

# 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 <u>Avian Knowledge Network (AKN)</u>. This data is derived from a growing collection of <u>survey</u>, <u>banding</u>, <u>and</u> <u>citizen science datasets</u>.

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 or migrating in my 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 query your location using the <u>RAIL Tool</u> and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. 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 <u>Birds of Conservation Concern</u> (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 <u>Eagle Act</u> 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 <u>Northeast Ocean Data</u> <u>Portal</u>. 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 <u>NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird</u> <u>Distributions and Abundance on the Atlantic Outer Continental Shelf</u> 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 <u>Diving Bird Study</u> and the <u>nanotag studies</u> or contact <u>Caleb Spiegel</u> or <u>Pam Loring</u>.

#### What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to <u>obtain a permit</u> 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 <u>Marine Mammal Protection Act</u>. Some are also protected under the Endangered Species Act<sup>1</sup> and the Convention on International Trade in Endangered Species of Wild Fauna and Flora<sup>2</sup>.

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<sup>3</sup> [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 <u>Marine</u> <u>Mammals</u> 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 <u>Convention on International Trade in Endangered Species of Wild Fauna and Flora</u> (CITES) is a treaty to ensure that international trade in plants and animals does not threaten their survival in the wild.
- 3. <u>NOAA Fisheries</u>, 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 <u>National Wildlife Refuge</u> 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 (NWI)

Impacts to <u>NWI wetlands</u> 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>U.S. Army Corps of</u> <u>Engineers District</u>.

## 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 <u>NWI map</u> 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

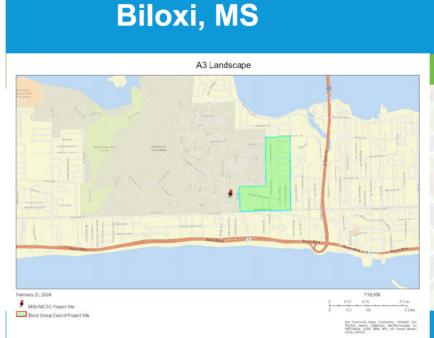
JIFON

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.

# APPENDIX F: EJSCREEN REPORTS

# **\$EPA EJScreen Community Report**

This report provides environmental and socioeconomic information for user-defined areas, and combines that data into environmental justice and supplemental indexes.

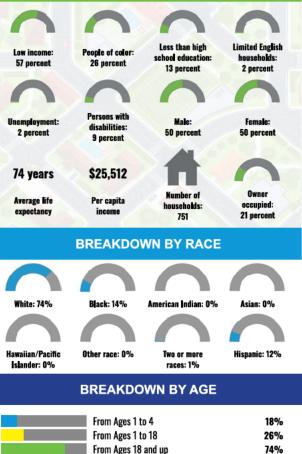


#### LANGUAGES SPOKEN AT HOME

LANGUAGE	PERCENT
English	94%
Spanish	5%
Vietnamese	1%
Total Non-English	6%

#### Blockgroup: 280470039022 Population: 1,381 Area in square miles: 0.23

#### **COMMUNITY INFORMATION**



#### LIMITED ENGLISH SPEAKING BREAKDOWN

9%

From Ages 65 and up

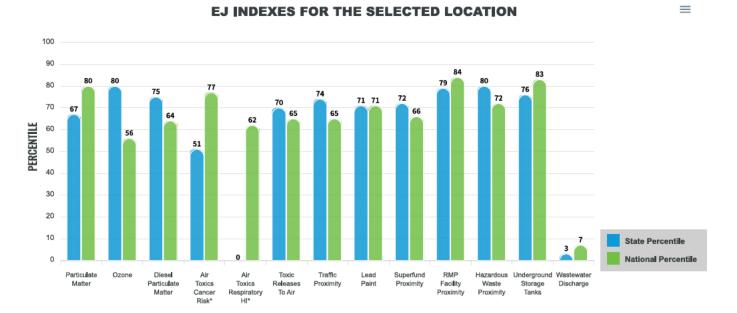
Speak Spanish	100%
Speak Other Indo-European Languages	0%
Speak Asian-Pacific Island Languages	0%
Speak Other Languages	0%

Notes: Numbers may not sum to totals due to rounding. Hispanic population can be of any race. Source: U.S. Census Bureau, American Community Survey (ACS) 2017-2021. Life expectancy data comes from the Centers for Disease Control.

## **Environmental Justice & Supplemental Indexes**

The environmental justice and supplemental indexes are a combination of environmental and socioeconomic information. There are thirteen EJ indexes and supplemental indexes in EJScreen reflecting the 13 environmental indicators. The indexes for a selected area are compared to those for all other locations in the state or nation. For more information and calculation details on the EJ and supplemental indexes, please visit the EJScreen website.

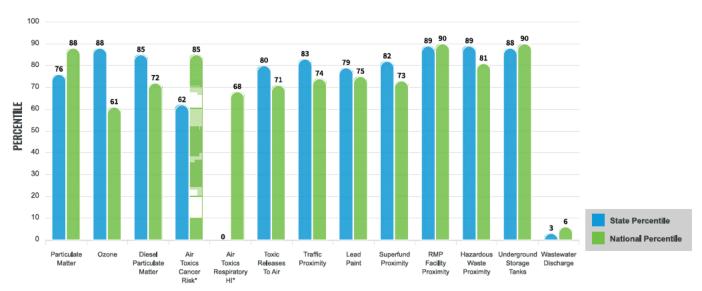
#### **EJ INDEXES**



The EJ indexes help users screen for potential EJ concerns. To do this, the EJ index combines data on low income and people of color populations with a single environmental indicator.

#### SUPPLEMENTAL INDEXES

The supplemental indexes offer a different perspective on community-level vulnerability. They combine data on percent low-income, percent linguistically isolated, percent less than high school education, percent unemployed, and low life expectancy with a single environmental indicator.



#### SUPPLEMENTAL INDEXES FOR THE SELECTED LOCATION

These percentiles provide perspective on how the selected block group or buffer area compares to the entire state or nation.

 $\equiv$ 

SELECTED VARIABLES	VALUE	STATE Average	PERCENTILE In state	USA AVERAGE	PERCENTILE In USA
POLLUTION AND SOURCES					
Particulate Matter (µg/m <sup>3</sup> )	9.14	9	60	8.08	76
Ozone (ppb)	59.4	57.9	86	61 <u>.</u> 6	35
Diesel Particulate Matter (µg/m <sup>3</sup> )	0.208	0.136	85	0.261	47
Air Toxics Cancer Risk* (lifetime risk per million)	30	30	4	25	52
Air Toxics Respiratory HI*	0.3	0.38	0	0.31	31
Toxic Releases to Air	470	2,100	68	4,600	45
Traffic Proximity (daily traffic count/distance to road)	85	44	83	210	52
Lead Paint (% Pre-1960 Housing)	0.26	0.16	78	0.3	54
Superfund Proximity (site count/km distance)	0.055	0.069	68	0.13	47
RMP Facility Proximity (facility count/km distance)	1.3	0.33	94	0.43	92
Hazardous Waste Proximity (facility count/km distance)	1.1	0.31	94	1.9	63
Underground Storage Tanks (count/km <sup>2</sup> )	12	2.9	95	3.9	91
Wastewater Discharge (toxicity-weighted concentration/m distance)	7.7E-08	0.023	2	22	3
SOCIOECONOMIC INDICATORS					
Demographic Index	42%	44%	50	35%	66
Supplemental Demographic Index	20%	18%	63	14%	78
People of Color	26%	45%	34	39%	45
Low Income	57%	43%	72	31%	86
Unemployment Rate	2%	7%	37	6%	36
Limited English Speaking Households	2%	1%	90	5%	66
Less Than High School Education	13%	15%	49	12%	68
Under Age 5	18%	6%	97	6%	98
Over Age 64	9%	17%	16	17%	21
Low Life Expectancy	25%	23%	68	20%	89

\*Diesel particulate matter, air toxics cancer risk, and air toxics respiratory hazard index are from the EPA's Air Toxics Data Update, which is the Agency's ongoing, comprehensive evaluation of air toxics in the United States. This effort aims to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that the air toxics data presented here provide broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. Cancer risks and hazard indices from the Air Toxics Data to the ountry, not definitive risks to specific individuals or locations. Cancer risks and hazard indices from the Air Toxics Data to the ountry not definitive risks to specific individuals or locations. Cancer risks and hazard indices from the Air Toxics Data to the ountry not definitive risks to specific individuals or locations. Cancer risks and hazard indices from the Air Toxics Data to respect to one significant figure and any additional significant figures here are due to rounding. More information on the Air Toxics Data Update can be found at: <a href="https://www.epa.gov/haps/air-toxics-data-update">https://www.epa.gov/haps/air-toxics-data-update</a>.

#### Sites reporting to EPA within defined area:

Superfund 0	
Hazardous Waste, Treatment, Storage, and Disposal Facilities	
Water Dischargers 0	
Air Pollution	
Brownfields 0	
Toxic Release Inventory	

#### Other community features within defined area:

Schools
Hospitals 0
Places of Worship

#### Other environmental data:

Air Non-attainment	No
Impaired Waters	No

Selected location contains American Indian Reservation Lands*	No
Selected location contains a "Justice40 (CEJST)" disadvantaged community	Yes
Selected location contains an EPA IRA disadvantaged community	Yes

HEALTH INDICATORS											
INDICATOR VALUE STATE AVERAGE STATE PERCENTILE US AVERAGE US PERCENTILE											
Low Life Expectancy	25%	23%	68	20%	89						
Heart Disease	8_2	7.3	70	6.1	86						
Asthma	9.8	10.2	43	10	49						
Cancer	5.5	6.1	23	6.1	35						
Persons with Disabilities	9.9%	17.6%	11	13.4%	31						

CLIMATE INDICATORS								
INDICATOR VALUE STATE AVERAGE STATE PERCENTILE US AVERAGE US PERCENTILE								
Flood Risk	63%	15%	96	12%	97			
Wildfire Risk	2%	23%	53	14%	79			

CRITICAL SERVICE GAPS								
INDICATOR VALUE STATE AVERAGE STATE PERCENTILE US AVERAGE US PERCENTILE								
Broadband Internet	15%	24%	34	14%	61			
Lack of Health Insurance	17%	12%	78	9%	87			
Housing Burden	No	N/A	N/A	N/A	N/A			
Transportation Access	Yes	N/A	N/A	N/A	N/A			
Food Desert	No	N/A	N/A	N/A	N/A			

# **EJScreen Community Report**

This report provides environmental and socioeconomic information for user-defined areas, and combines that data into environmental justice and supplemental indexes.

#### Blockgroup: 280470039021 **Biloxi, MS** Population: 848 Area in square miles: 1.37 A3 Landscape **COMMUNITY INFORMATION Limited English** Less than high People of color: Low income: school education: households: 37 percent 45 percent 7 percent **O** percent Persons with Unemployment: Male Female disabilities: **16 percent** 52 percent **48** percent 16 percent \$32,623 74 years Owner Number of Average life Per capita households: occupied: February 23, 2024 136,112 expectancy income 371 65 percent MSUMCTC Pr 0.75 1.5 # Block Group East-NE of Project Site CONNP, Ew. TortTon, Gamai SaleGran, Geolectrologies, Inc. METruktik, USIS, EPA, NPS, US Onnua Bureu, USDA, UPV/S **BREAKDOWN BY RACE**

#### LANGUAGES SPOKEN AT HOME

LANGUAGE	PERCENT
English	94%
Spanish	5%
Vietnamese	1%
Total Non-English	6%

#### White: 63% Black: 25% American Indian: 0% Acian: 6% Hawaiian/Pacific Other race: 0% Two or more Hispanic: 1% slander: 0% races: 5% **BREAKDOWN BY AGE**

From Ages 1 to 4	7%
From Ages 1 to 18	21%
From Ages 18 and up	79%
From Ages 65 and up	25%

#### LIMITED ENGLISH SPEAKING BREAKDOWN

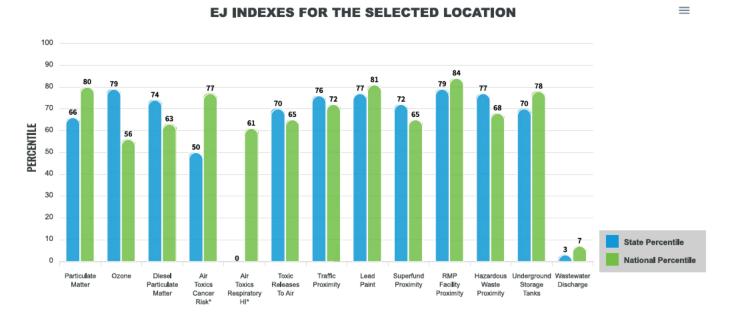
Speak Spanish Speak Other Indo-European Languages	0% 0%
Speak Asian-Pacific Island Languages	0%
Speak Other Languages	0%

Notes: Numbers may not sum to totals due to rounding. Hispanic population can be of any race. Source: U.S. Census Bureau, American Community Survey (ACS) 2017-2021. Life expectancy data comes from the Centers for Disease Control.

## **Environmental Justice & Supplemental Indexes**

The environmental justice and supplemental indexes are a combination of environmental and socioeconomic information. There are thirteen EJ indexes and supplemental indexes in EJScreen reflecting the 13 environmental indicators. The indexes for a selected area are compared to those for all other locations in the state or nation. For more information and calculation details on the EJ and supplemental indexes, please visit the EJScreen website.

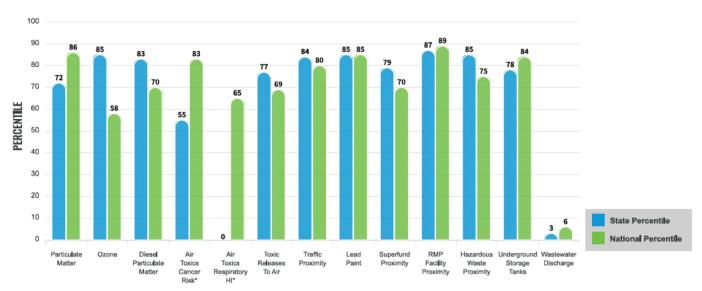
#### **EJ INDEXES**



The EJ indexes help users screen for potential EJ concerns. To do this, the EJ index combines data on low income and people of color populations with a single environmental indicator.

#### SUPPLEMENTAL INDEXES

The supplemental indexes offer a different perspective on community-level vulnerability. They combine data on percent low-income, percent linguistically isolated, percent less than high school education, percent unemployed, and low life expectancy with a single environmental indicator.



#### SUPPLEMENTAL INDEXES FOR THE SELECTED LOCATION

These percentiles provide perspective on how the selected block group or buffer area compares to the entire state or nation.

 $\equiv$ 

SELECTED VARIABLES	VALUE	STATE Average	PERCENTILE In state	USA AVERAGE	PERCENTILE In USA
POLLUTION AND SOURCES					
Particulate Matter (µg/m <sup>3</sup> )	9.14	9	60	8.08	76
Ozone (ppb)	59.4	57.9	86	61 <u>.</u> 6	35
Diesel Particulate Matter (µg/m <sup>3</sup> )	0.208	0.136	85	0.261	47
Air Toxics Cancer Risk* (lifetime risk per million)	30	30	4	25	52
Air Toxics Respiratory HI*	0.3	0.38	0	0.31	31
Toxic Releases to Air	480	2,100	69	4,600	46
Traffic Proximity (daily traffic count/distance to road)	150	44	92	210	67
Lead Paint (% Pre-1960 Housing)	0.58	0.16	96	0.3	78
Superfund Proximity (site count/km distance)	0.055	0.069	68	0.13	46
RMP Facility Proximity (facility count/km distance)	1.9	0.33	97	0.43	95
Hazardous Waste Proximity (facility count/km distance)	0.75	0.31	87	1.9	56
Underground Storage Tanks (count/km <sup>2</sup> )	5.3	2.9	80	3.9	78
Wastewater Discharge (toxicity-weighted concentration/m distance)		0.023	2	22	3
SOCIOECONOMIC INDICATORS					
Demographic Index	41%	44%	49	35%	65
Supplemental Demographic Index	19%	18%	56	14%	74
People of Color	37%	45%	46	39%	56
Low Income	45%	43%	54	31%	75
Unemployment Rate	16%	7%	87	6%	93
Limited English Speaking Households	0%	1%	0	5%	0
Less Than High School Education	7%	15%	27	12%	46
Under Age 5	7%	6%	67	6%	71
Over Age 64	25%	17%	82	17%	81
Low Life Expectancy	25%	23%	68	20%	89

\*Diesel particulate matter, air toxics cancer risk, and air toxics respiratory hazard index are from the EPA's Air Toxics Data Update, which is the Agency's ongoing, comprehensive evaluation of air toxics in the United States. This effort aims to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that the air toxics data presented here provide broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. Cancer risks and hazard indices from the Air Toxics Data deta are reported to one significant figure and any additional significant figures here are due to rounding. More information on the Air Toxics Data Update can be found at: <u>https://www.epa.gov/haps/air-toxics-data-update</u>.

#### Sites reporting to EPA within defined area:

Superfund	0
Hazardous Waste, Treatment, Storage, and Disposal Facilities	0
Water Dischargers	
Air Pollution	0
Brownfields	0
Toxic Release Inventory	0

#### Other community features within defined area:

Schools0
Hospitals 1
Places of Worship

#### Other environmental data:

Air Non-attainment	. No
Impaired Waters	. Yes

Selected location contains American Indian Reservation Lands*	No
Selected location contains a "Justice40 (CEJST)" disadvantaged community	Yes
Selected location contains an EPA IRA disadvantaged community	Yes

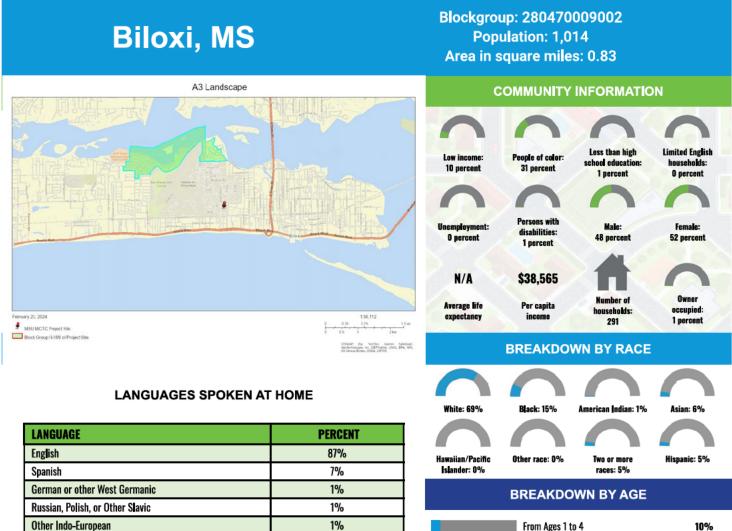
HEALTH INDICATORS								
INDICATOR VALUE STATE AVERAGE STATE PERCENTILE US AVERAGE US PERCENTILE								
Low Life Expectancy	25%	23%	68	20%	89			
Heart Disease	8_2	7.3	70	6.1	86			
Asthma	9.8	10.2	43	10	49			
Cancer	5.5	6.1	23	6.1	35			
Persons with Disabilities	9.9%	17.6%	11	13.4%	31			

CLIMATE INDICATORS								
INDICATOR	NDICATOR VALUE STATE AVERAGE STATE PERCENTILE US AVERAGE US PERCENTILE							
Flood Risk	78%	15%	97	12%	97			
Wildfire Risk	11%	23%	63	14%	81			

CRITICAL SERVICE GAPS					
INDICATOR VALUE STATE AVERAGE STATE PERCENTILE US AVERAGE US PERCENTILE					
Broadband Internet	22%	24%	50	14%	11
Lack of Health Insurance	17%	12%	78	9%	87
Housing Burden	No	N/A	N/A	N/A	N/A
Transportation Access	Yes	N/A	N/A	N/A	N/A
Food Desert	No	N/A	N/A	N/A	N/A

# SEPA EJScreen Community Report

This report provides environmental and socioeconomic information for user-defined areas, and combines that data into environmental justice and supplemental indexes.



1%

1%

1%

1%

13%

Chinese (including Mandarin, Cantonese)

Tagalog (including Filipino) Other Asian and Pacific Island

Other and Unspecified

Total Non-English

From Ages 1 to 4	10%
From Ages 1 to 18	35%
From Ages 18 and up	65%
From Ages 65 and up	1%

#### LIMITED ENGLISH SPEAKING BREAKDOWN

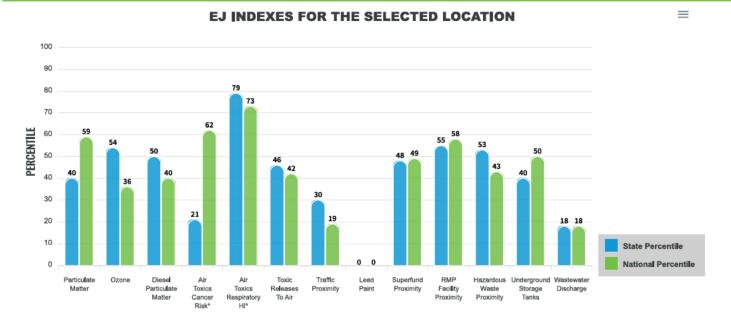
Speak Spanish	0%
Speak Other Indo-European Languages	0%
Speak Asian-Pacific Island Languages	0%
Speak Other Languages	0%

Notes: Numbers may not sum to totals due to rounding. Hispanic population can be of any race. Source: U.S. Census Bureau, American Community Survey (ACS) 2017-2021. Life expectancy data comes from the Centers for Disease Control.

## **Environmental Justice & Supplemental Indexes**

The environmental justice and supplemental indexes are a combination of environmental and socioeconomic information. There are thirteen EJ indexes and supplemental indexes in EJScreen reflecting the 13 environmental indicators. The indexes for a selected area are compared to those for all other locations in the state or nation. For more information and calculation details on the EJ and supplemental indexes, please visit the EJScreen website.

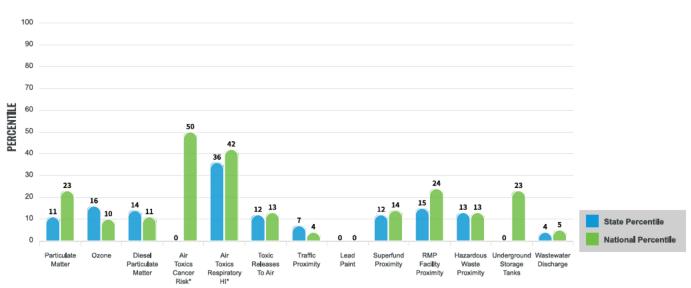
#### **EJ INDEXES**



The EJ indexes help users screen for potential EJ concerns, To do this, the EJ index combines data on low income and people of color populations with a single environmental indicator,

#### SUPPLEMENTAL INDEXES

The supplemental indexes offer a different perspective on community-level vulnerability. They combine data on percent low-income, percent linguistically isolated, percent less than high school education, percent unemployed, and low life expectancy with a single environmental indicator.



#### SUPPLEMENTAL INDEXES FOR THE SELECTED LOCATION

These percentiles provide perspective on how the selected block group or buffer area compares to the entire state or nation

 $\equiv$ 

SELECTED VARIABLES	VALUE	STATE Average	PERCENTILE In state	USA AVERAGE	PERCENTILE In USA
POLLUTION AND SOURCES					
Particulate Matter (µg/m <sup>3</sup> )	9.15	9	60	8.08	76
Ozone (ppb)	59.4	57.9	86	61 <u>.</u> 6	35
Diesel Particulate Matter (µg/m <sup>3</sup> )	0.181	0.136	11	0.261	40
Air Toxics Cancer Risk* (lifetime risk per million)	30	30	4	25	52
Air Toxics Respiratory HI*	0.5	0.38	93	0.31	92
Toxic Releases to Air	450	2,100	67	4,600	44
Traffic Proximity (daily traffic count/distance to road)	8.7	44	39	210	15
Lead Paint (% Pre-1960 Housing)	0	0.16	0	0.3	0
Superfund Proximity (site count/km distance)	0.067	0.069	73	0.13	53
RMP Facility Proximity (facility count/km distance)	0.56	0.33	84	0.43	78
Hazardous Waste Proximity (facility count/km distance)	0.4	0.31	78	1.9	46
Underground Storage Tanks (count/km <sup>2</sup> )	1.4	2.9	57	3.9	53
Wastewater Discharge (toxicity-weighted concentration/m distance)	7.2E-06	0.023	22	22	16
SOCIOECONOMIC INDICATORS					
Demographic Index	21%	44%	18	35%	34
Supplemental Demographic Index	3%	18%	0	14%	1
People of Color	31%	45%	41	39%	51
Low Income	10%	43%	6	31%	18
Unemployment Rate	0%	7%	0	6%	0
Limited English Speaking Households	0%	1%	0	5%	0
Less Than High School Education	1%	15%	6	12%	13
Under Age 5	10%	6%	84	6%	87
Over Age 64	1%	17%	1	17%	0
Low Life Expectancy	N/A	23%	N/A	20%	N/A

\*Diesel particulate matter, air toxics cancer risk, and air toxics respiratory hazard index are from the EPA's Air Toxics Data Update, which is the Agency's ongoing, comprehensive evaluation of air toxics in the United States. This effort aims to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that the air toxics data presented here provide broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. Cancer risks and hazard indices from the Air Toxics Data ere reported to one significant figure and any additional significant figures here are due to rounding. More information on the Air Toxics Data Update can be found at: <u>https://www.epa.gov/haps/air-toxics-data-update</u>.

#### Sites reporting to EPA within defined area:

Superfund 0	
Hazardous Waste, Treatment, Storage, and Disposal Facilities	
Water Dischargers 0	
Air Pollution	
Brownfields	
Toxic Release Inventory	

#### Other community features within defined area:

Schools
Hospitals 0
Places of Worship 0

#### Other environmental data:

Air Non-attainment	No
Impaired Waters	No

Selected location contains American Indian Reservation Lands*	No
Selected location contains a "Justice40 (CEJST)" disadvantaged community	No
Selected location contains an EPA IRA disadvantaged community	No

HEALTH INDICATORS						
INDICATOR VALUE STATE AVERAGE STATE PERCENTILE US AVERAGE US PERCENTILE						
Low Life Expectancy	N/A	23%	N/A	20%	N/A	
Heart Disease	0.9	7.3	0	6.1	0	
Asthma	7.7	10.2	1	10	3	
Cancer	0.8	6.1	0	6.1	0	
Persons with Disabilities	1.4%	17.6%	0	13.4%	0	

CLIMATE INDICATORS							
INDICATOR	VALUE	VALUE STATE AVERAGE STATE PERCENTILE US AVERAGE US PERCENTILE					
Flood Risk	70%	15%	97	12%	97		
Wildfire Risk	0%	23%	0	14%	0		

CRITICAL SERVICE GAPS					
INDICATOR VALUE STATE AVERAGE STATE PERCENTILE US AVERAGE US PERCENTILE					
Broadband Internet	0%	24%	0	14%	0
Lack of Health Insurance	5%	12%	7	9%	34
Housing Burden	No	N/A	N/A	N/A	N/A
Transportation Access	Yes	N/A	N/A	N/A	N/A
Food Desert	No	N/A	N/A	N/A	N/A

# SEPA EJScreen Community Report

This report provides environmental and socioeconomic information for user-defined areas, and combines that data into environmental justice and supplemental indexes.

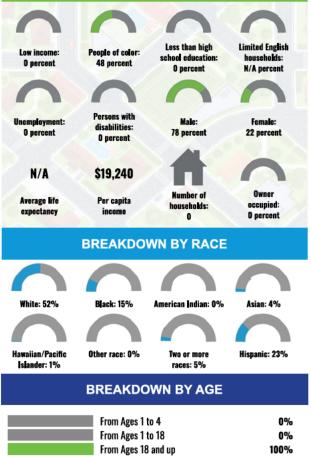
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#### LANGUAGES SPOKEN AT HOME

LANGUAGE	PERCENT
English	87%
Spanish	7%
German or other West Germanic	1%
Russian, Polish, or Other Slavic	1%
Other Indo-European	1%
Chinese (including Mandarin, Cantonese)	1%
Tagalog (including Filipino)	1%
Other Asian and Pacific Island	1%
Other and Unspecified	1%
Total Non-English	13%

#### Blockgroup: 280470009001 Population: 2,667 Area in square miles: 1.72

#### COMMUNITY INFORMATION



#### LIMITED ENGLISH SPEAKING BREAKDOWN

0%

From Ages 65 and up

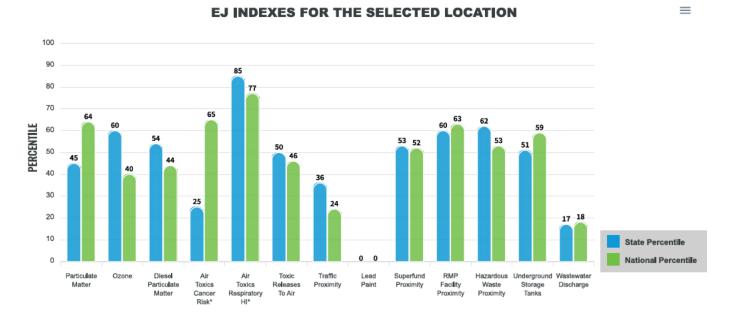
Speak Spanish	0%
Speak Other Indo-European Languages	0%
Speak Asian-Pacific Island Languages	0%
Speak Other Languages	0%

Notes: Numbers may not sum to totals due to rounding. Hispanic population can be of any race. Source: U.S. Census Bureau, American Community Survey (ACS) 2017-2021. Life expectancy data comes from the Centers for Disease Control.

## **Environmental Justice & Supplemental Indexes**

The environmental justice and supplemental indexes are a combination of environmental and socioeconomic information. There are thirteen EJ indexes and supplemental indexes in EJScreen reflecting the 13 environmental indicators. The indexes for a selected area are compared to those for all other locations in the state or nation. For more information and calculation details on the EJ and supplemental indexes, please visit the EJScreen website.

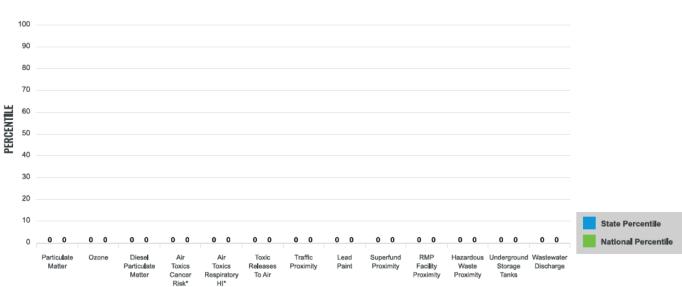
#### **EJ INDEXES**



The EJ indexes help users screen for potential EJ concerns, To do this, the EJ index combines data on low income and people of color populations with a single environmental indicator,

#### SUPPLEMENTAL INDEXES

The supplemental indexes offer a different perspective on community-level vulnerability. They combine data on percent low-income, percent linguistically isolated, percent less than high school education, percent unemployed, and low life expectancy with a single environmental indicator.



#### SUPPLEMENTAL INDEXES FOR THE SELECTED LOCATION

These percentiles provide perspective on how the selected block group or buffer area compares to the entire state or nation.

 $\equiv$ 

SELECTED VARIABLES	VALUE	STATE Average	PERCENTILE In state	USA AVERAGE	PERCENTILE In USA			
POLLUTION AND SOURCES								
Particulate Matter (µg/m <sup>3</sup> )	9.15	9	60	8.08	76			
Ozone (ppb)	59.4	57.9	86	61 <u>.</u> 6	35			
Diesel Particulate Matter (µg/m <sup>3</sup> )	0.181	0.136	11	0.261	40			
Air Toxics Cancer Risk* (lifetime risk per million)	30	30	4	25	52			
Air Toxics Respiratory HI*	0.5	0.38	93	0.31	92			
Toxic Releases to Air	450	2,100	67	4,600	44			
Traffic Proximity (daily traffic count/distance to road)	11	44	43	210	17			
Lead Paint (% Pre-1960 Housing)	0	0.16	0	0.3	0			
Superfund Proximity (site count/km distance)	0.062	0.069	71	0.13	51			
RMP Facility Proximity (facility count/km distance)	0.62	0.33	85	0.43	80			
Hazardous Waste Proximity (facility count/km distance)	0.81	0.31	89	1.9	57			
Underground Storage Tanks (count/km <sup>2</sup> )	2.8	2.9	69	3.9	65			
Wastewater Discharge (toxicity-weighted concentration/m distance)	5.4E-06	0.023	19	22	14			
SOCIOECONOMIC INDICATORS								
Demographic Index	24%	44%	23	35%	40			
Supplemental Demographic Index	0%	18%	0	14%	0			
People of Color	48%	45%	56	39%	65			
Low Income	0%	43%	0	31%	0			
Unemployment Rate	0%	7%	0	6%	0			
Limited English Speaking Households	0%	1%	0	5%	0			
Less Than High School Education	0%	15%	0	12%	0			
Under Age 5	0%	6%	0	6%	0			
Over Age 64	0%	17%	0	17%	0			
Low Life Expectancy	N/A	23%	N/A	20%	N/A			

\*Diesel particulate matter, air toxics cancer risk, and air toxics respiratory hazard index are from the EPA's Air Toxics Data Update, which is the Agency's ongoing, comprehensive evaluation of air toxics in the United States. This effort aims to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that the air toxics data presented here provide broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. Cancer risks and hazard indices from the Air Toxics Data ere reported to one significant figure and any additional significant figures here are due to rounding. More information on the Air Toxics Data Update can be found at: <u>https://www.epa.gov/haps/air-toxics-data-update</u>.

#### Sites reporting to EPA within defined area:

Superfund	0
Hazardous Waste, Treatment, Storage, and Disposal Facilities	1
Water Dischargers	
Air Pollution	1
Brownfields	0
Toxic Release Inventory	2

#### Other community features within defined area:

Schools
Hospitals 1
Places of Worship 0

#### Other environmental data:

Air Non-attainment	No
Impaired Waters	No

Selected location contains American Indian Reservation Lands*	No
Selected location contains a "Justice40 (CEJST)" disadvantaged community	No
Selected location contains an EPA IRA disadvantaged community	No

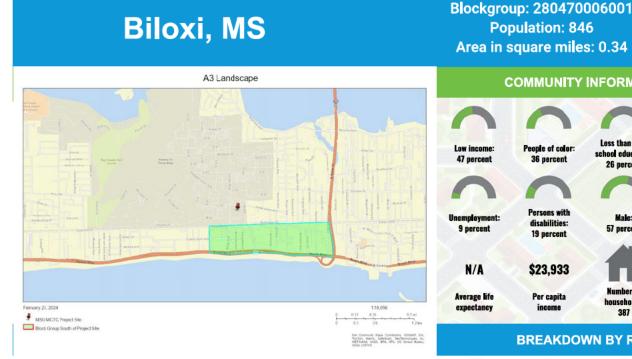
HEALTH INDICATORS					
INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Low Life Expectancy	N/A	23%	N/A	20%	N/A
Heart Disease	0.9	7.3	0	6.1	0
Asthma	7.7	10.2	1	10	3
Cancer	0.8	6.1	0	6.1	0
Persons with Disabilities	1.4%	17.6%	0	13.4%	0

CLIMATE INDICATORS						
INDICATOR VALUE STATE AVERAGE STATE PERCENTILE US AVERAGE US PERCENTILE						
Flood Risk	0%	15%	0	12%	0	
Wildfire Risk	0%	23%	0	14%	0	

CRITICAL SERVICE GAPS					
INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Broadband Internet	0%	24%	0	14%	0
Lack of Health Insurance	5%	12%	7	9%	36
Housing Burden	No	N/A	N/A	N/A	N/A
Transportation Access	Yes	N/A	N/A	N/A	N/A
Food Desert	No	N/A	N/A	N/A	N/A

# **EJScreen Community Report**

This report provides environmental and socioeconomic information for user-defined areas, and combines that data into environmental justice and supplemental indexes.

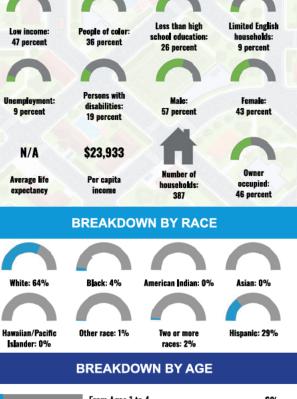


#### LANGUAGES SPOKEN AT HOME

LANGUAGE	PERCENT
English	80%
Spanish	20%
Total Non-English	20%

# Area in square miles: 0.34

#### **COMMUNITY INFORMATION**



From Ages 1 to 4	6%
From Ages 1 to 18	15%
From Ages 18 and up	85%
From Ages 65 and up	17%

#### LIMITED ENGLISH SPEAKING BREAKDOWN

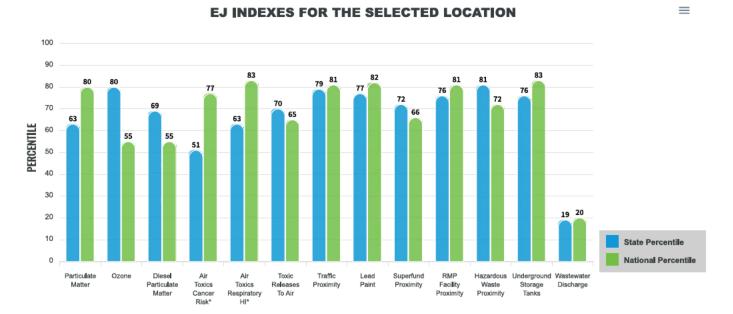
Speak Spanish	100%
Speak Other Indo-European Languages	0%
Speak Asian-Pacific Island Languages	0%
Speak Other Languages	0%

Notes: Numbers may not sum to totals due to rounding. Hispanic population can be of any race. Source: U.S. Census Bureau, American Community Survey (ACS) 2017-2021. Life expectancy data comes from the Centers for Disease Control.

## **Environmental Justice & Supplemental Indexes**

The environmental justice and supplemental indexes are a combination of environmental and socioeconomic information. There are thirteen EJ indexes and supplemental indexes in EJScreen reflecting the 13 environmental indicators. The indexes for a selected area are compared to those for all other locations in the state or nation. For more information and calculation details on the EJ and supplemental indexes, please visit the EJScreen website.

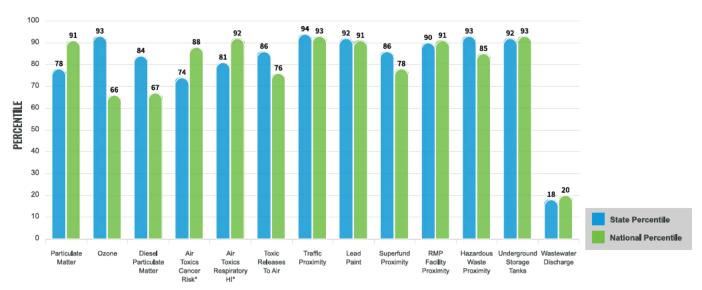
#### **EJ INDEXES**



The EJ indexes help users screen for potential EJ concerns. To do this, the EJ index combines data on low income and people of color populations with a single environmental indicator.

#### SUPPLEMENTAL INDEXES

The supplemental indexes offer a different perspective on community-level vulnerability. They combine data on percent low-income, percent linguistically isolated, percent less than high school education, percent unemployed, and low life expectancy with a single environmental indicator.



#### SUPPLEMENTAL INDEXES FOR THE SELECTED LOCATION

These percentiles provide perspective on how the selected block group or buffer area compares to the entire state or nation.

 $\equiv$ 

SELECTED VARIABLES	VALUE	STATE AVERAGE	PERCENTILE In state	USA AVERAGE	PERCENTILE In USA
POLLUTION AND SOURCES					
Particulate Matter (µg/m <sup>3</sup> )	9.09	9	55	8.08	75
Ozone (ppb)	59.4	57.9	85	61 <u>.</u> 6	34
Diesel Particulate Matter (µg/m <sup>3</sup> )	0.164	0.136	71	0.261	35
Air Toxics Cancer Risk* (lifetime risk per million)	30	30	4	25	52
Air Toxics Respiratory HI*	0.4	0.38	31	0.31	70
Toxic Releases to Air	470	2,100	68	4,600	45
Traffic Proximity (daily traffic count/distance to road)	460	44	99	210	89
Lead Paint (% Pre-1960 Housing)	0.6	0.16	96	0.3	80
Superfund Proximity (site count/km distance)	0.055	0.069	68	0.13	47
RMP Facility Proximity (facility count/km distance)	0.77	0.33	88	0.43	84
Hazardous Waste Proximity (facility count/km distance)	1.2	0.31	95	1.9	64
Underground Storage Tanks (count/km <sup>2</sup> )	14	2.9	96	3.9	92
Wastewater Discharge (toxicity-weighted concentration/m distance)	1.4E-06	0.023	12	22	9
SOCIOECONOMIC INDICATORS					
Demographic Index	42%	44%	50	35%	66
Supplemental Demographic Index	23%	18%	76	14%	85
People of Color	36%	45%	45	39%	55
Low Income	47%	43%	57	31%	78
Unemployment Rate	9%	7%	69	6%	78
Limited English Speaking Households	9%	1%	97	5%	83
Less Than High School Education	26%	15%	85	12%	88
Under Age 5	6%	6%	55	6%	57
Over Age 64	17%	17%	55	17%	56
Low Life Expectancy	N/A	23%	N/A	20%	N/A

\*Diesel particulate matter, air toxics cancer risk, and air toxics respiratory hazard index are from the EPA's Air Toxics Data Update, which is the Agency's ongoing, comprehensive evaluation of air toxics in the United States. This effort aims to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that the air toxics data presented here provide broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. Cancer risks and hazard indices from the Air Toxics Data ere reported to one significant figure and any additional significant figures here are due to rounding. More information on the Air Toxics Data Update can be found at: <u>https://www.epa.gov/haps/air-toxics-data-update</u>.

#### Sites reporting to EPA within defined area:

Superfund	
Hazardous Waste, Treatment, Storage, and Disposal Facilities	
Water Dischargers 4	ł
Air Pollution	
Brownfields	
Toxic Release Inventory	1

#### Other community features within defined area:

Schools 0	
Hospitals O	
Places of Worship 1	

#### Other environmental data:

Air Non-attainment	No
Impaired Waters	No

Selected location contains American Indian Reservation Lands*	No
Selected location contains a "Justice40 (CEJST)" disadvantaged community	Yes
Selected location contains an EPA IRA disadvantaged community	Yes

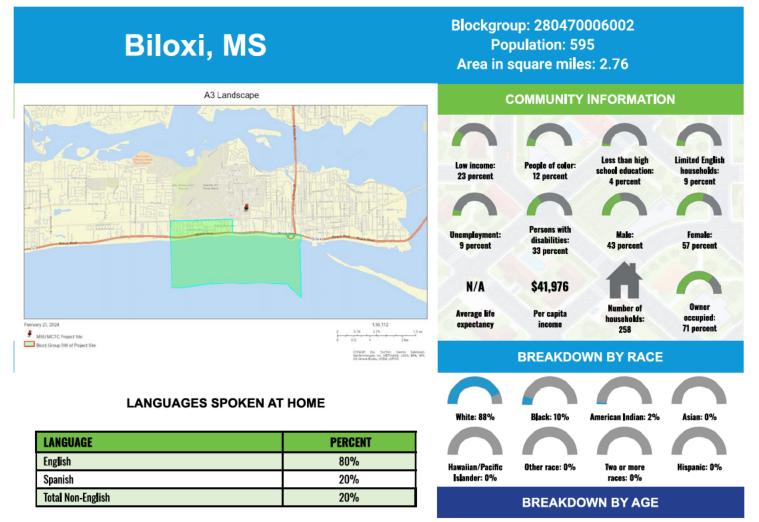
HEALTH INDICATORS						
INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE	
Low Life Expectancy	N/A	23%	N/A	20%	N/A	
Heart Disease	7.7	7.3	59	6.1	80	
Asthma	8.5	10.2	5	10	13	
Cancer	7.4	6.1	94	6.1	78	
Persons with Disabilities	22.8%	17.6%	78	13.4%	92	

CLIMATE INDICATORS							
INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE		
Flood Risk	22%	15%	87	12%	87		
Wildfire Risk	26%	23%	70	14%	83		

CRITICAL SERVICE GAPS						
INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE	
Broadband Internet	5%	24%	13	14%	28	
Lack of Health Insurance	24%	12%	97	9%	95	
Housing Burden	No	N/A	N/A	N/A	N/A	
Transportation Access	Yes	N/A	N/A	N/A	N/A	
Food Desert	No	N/A	N/A	N/A	N/A	

# SEPA EJScreen Community Report

This report provides environmental and socioeconomic information for user-defined areas, and combines that data into environmental justice and supplemental indexes.



From Ages 1 to 4	8%
From Ages 1 to 18	17%
From Ages 18 and up	83%
From Ages 65 and up	24%

#### LIMITED ENGLISH SPEAKING BREAKDOWN

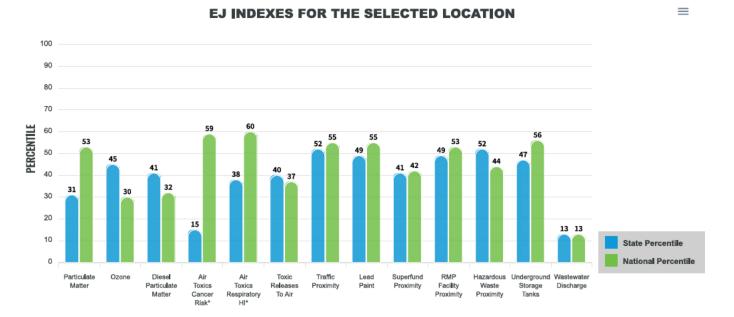
Speak Spanish	100%
Speak Other Indo-European Languages	0%
Speak Asian-Pacific Island Languages	0%
Speak Other Languages	0%

Notes: Numbers may not sum to totals due to rounding. Hispanic population can be of any race. Source: U.S. Census Bureau, American Community Survey (ACS) 2017-2021. Life expectancy data comes from the Centers for Disease Control.

## **Environmental Justice & Supplemental Indexes**

The environmental justice and supplemental indexes are a combination of environmental and socioeconomic information. There are thirteen EJ indexes and supplemental indexes in EJScreen reflecting the 13 environmental indicators. The indexes for a selected area are compared to those for all other locations in the state or nation. For more information and calculation details on the EJ and supplemental indexes, please visit the EJScreen website.

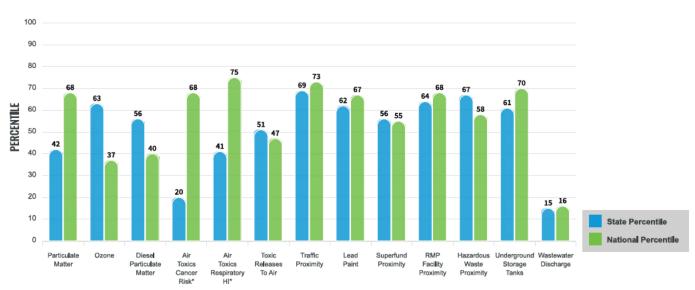
#### **EJ INDEXES**



The EJ indexes help users screen for potential EJ concerns. To do this, the EJ index combines data on low income and people of color populations with a single environmental indicator.

#### SUPPLEMENTAL INDEXES

The supplemental indexes offer a different perspective on community-level vulnerability. They combine data on percent low-income, percent linguistically isolated, percent less than high school education, percent unemployed, and low life expectancy with a single environmental indicator.



#### SUPPLEMENTAL INDEXES FOR THE SELECTED LOCATION

These percentiles provide perspective on how the selected block group or buffer area compares to the entire state or nation.

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SELECTED VARIABLES	VALUE	STATE Average	PERCENTILE In state	USA AVERAGE	PERCENTILE In USA
POLLUTION AND SOURCES					
Particulate Matter (µg/m <sup>3</sup> )	9.09	9	55	8.08	75
Ozone (ppb)	59.4	57.9	85	61 <u>.</u> 6	34
Diesel Particulate Matter (µg/m <sup>3</sup> )	0.164	0.136	71	0.261	35
Air Toxics Cancer Risk* (lifetime risk per million)	30	30	4	25	52
Air Toxics Respiratory HI*	0.4	0.38	31	0.31	70
Toxic Releases to Air	450	2,100	68	4,600	45
Traffic Proximity (daily traffic count/distance to road)	520	44	99	210	90
Lead Paint (% Pre-1960 Housing)	0.58	0.16	96	0.3	78
Superfund Proximity (site count/km distance)	0.062	0.069	71	0.13	51
RMP Facility Proximity (facility count/km distance)	0.54	0.33	83	0.43	78
Hazardous Waste Proximity (facility count/km distance)	0.84	0.31	89	1.9	58
Underground Storage Tanks (count/km <sup>2</sup> )	6.7	2.9	84	3.9	82
Wastewater Discharge (toxicity-weighted concentration/m distance)	5.5E-06	0.023	20	22	14
SOCIOECONOMIC INDICATORS					
Demographic Index	17%	44%	12	35%	26
Supplemental Demographic Index	11%	18%	18	14%	42
People of Color	12%	45%	18	39%	26
Low Income	23%	43%	21	31%	43
Unemployment Rate	9%	7%	69	6%	78
Limited English Speaking Households	9%	1%	97	5%	83
Less Than High School Education	4%	15%	16	12%	32
Under Age 5	8%	6%	72	6%	76
Over Age 64	24%	17%	80	17%	79
Low Life Expectancy	N/A	23%	N/A	20%	N/A

\*Diesel particulate matter, air toxics cancer risk, and air toxics respiratory hazard index are from the EPA's Air Toxics Data Update, which is the Agency's ongoing, comprehensive evaluation of air toxics in the United States. This effort aims to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that the air toxics data presented here provide broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. Cancer risks and hazard indices from the Air Toxics Data ere reported to one significant figure and any additional significant figures here are due to rounding. More information on the Air Toxics Data Update can be found at: <u>https://www.epa.gov/haps/air-toxics-data-update</u>.

#### Sites reporting to EPA within defined area:

Superfund 0	
Hazardous Waste, Treatment, Storage, and Disposal Facilities	
Water Dischargers 0	
Air Pollution	
Brownfields	
Toxic Release Inventory	

#### Other community features within defined area:

Schools	
Hospitals 0	
Places of Worship 1	

#### Other environmental data:

Air Non-attainment	No
Impaired Waters	Yes

Selected location contains American Indian Reservation Lands*	No
Selected location contains a "Justice40 (CEJST)" disadvantaged community	Yes
Selected location contains an EPA IRA disadvantaged community	Yes

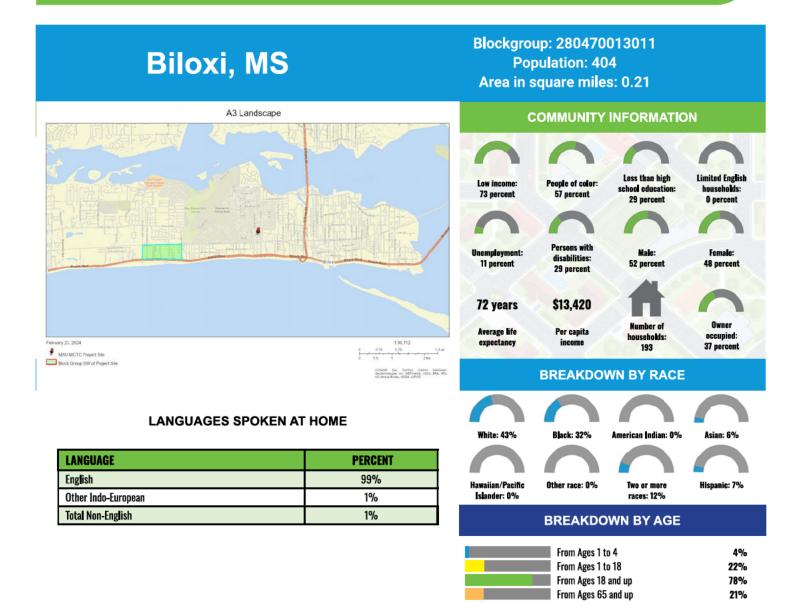
HEALTH INDICATORS					
INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Low Life Expectancy	N/A	23%	N/A	20%	N/A
Heart Disease	7.7	7.3	59	6.1	80
Asthma	8.5	10.2	5	10	13
Cancer	7.4	6.1	94	6.1	78
Persons with Disabilities	22.8%	17.6%	78	13.4%	92

CLIMATE INDICATORS							
INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE		
Flood Risk	32%	15%	92	12%	92		
Wildfire Risk	1%	23%	49	14%	78		

CRITICAL SERVICE GAPS					
INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Broadband Internet	20%	24%	46	14%	73
Lack of Health Insurance	25%	12%	97	9%	96
Housing Burden	No	N/A	N/A	N/A	N/A
Transportation Access	Yes	N/A	N/A	N/A	N/A
Food Desert	Yes	N/A	N/A	N/A	N/A

# **\$EPA EJScreen Community Report**

This report provides environmental and socioeconomic information for user-defined areas, and combines that data into environmental justice and supplemental indexes.



#### LIMITED ENGLISH SPEAKING BREAKDOWN

Speak Spanish	0%
Speak Other Indo-European Languages	0%
Speak Asian-Pacific Island Languages	0%
Speak Other Languages	0%

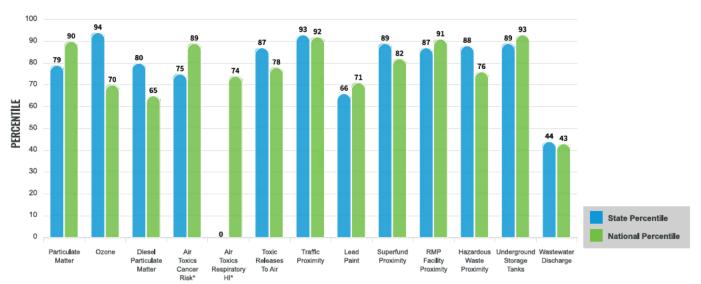
Notes: Numbers may not sum to totals due to rounding. Hispanic population can be of any race. Source: U.S. Census Bureau, American Community Survey (ACS) 2017-2021. Life expectancy data comes from the Centers for Disease Control.

## **Environmental Justice & Supplemental Indexes**

The environmental justice and supplemental indexes are a combination of environmental and socioeconomic information. There are thirteen EJ indexes and supplemental indexes in EJScreen reflecting the 13 environmental indicators. The indexes for a selected area are compared to those for all other locations in the state or nation. For more information and calculation details on the EJ and supplemental indexes, please visit the EJScreen website.

#### **EJ INDEXES**

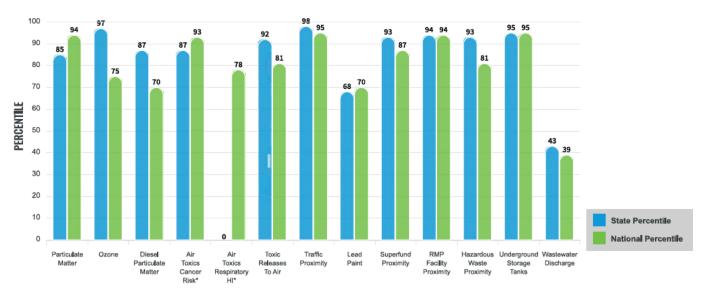
The EJ indexes help users screen for potential EJ concerns. To do this, the EJ index combines data on low income and people of color populations with a single environmental indicator.



#### EJ INDEXES FOR THE SELECTED LOCATION

#### SUPPLEMENTAL INDEXES

The supplemental indexes offer a different perspective on community-level vulnerability. They combine data on percent low-income, percent linguistically isolated, percent less than high school education, percent unemployed, and low life expectancy with a single environmental indicator.



#### SUPPLEMENTAL INDEXES FOR THE SELECTED LOCATION

These percentiles provide perspective on how the selected block group or buffer area compares to the entire state or nation.

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SELECTED VARIABLES	VALUE	STATE AVERAGE	PERCENTILE In state	USA AVERAGE	PERCENTILE IN USA		
POLLUTION AND SOURCES							
Particulate Matter (µg/m <sup>3</sup> )	9.07	9	53	8.08	75		
Ozone (ppb)	59.4	57.9	86	61 <u>.</u> 6	35		
Diesel Particulate Matter (µg/m <sup>3</sup> )	0.149	0.136	65	0.261	31		
Air Toxics Cancer Risk* (lifetime risk per million)	30	30	4	25	52		
Air Toxics Respiratory HI*	0.3	0.38	0	0.31	31		
Toxic Releases to Air	420	2,100	66	4,600	43		
Traffic Proximity (daily traffic count/distance to road)	280	44	98	210	82		
Lead Paint (% Pre-1960 Housing)	0.096	0.16	44	0.3	34		
Superfund Proximity (site count/km distance)	0.067	0.069	73	0.13	53		
RMP Facility Proximity (facility count/km distance)	0.56	0.33	83	0.43	78		
Hazardous Waste Proximity (facility count/km distance)	0.38	0.31	77	1.9	46		
Underground Storage Tanks (count/km <sup>2</sup> )	7.8	2.9	87	3.9	85		
Wastewater Discharge (toxicity-weighted concentration/m distance)	7E-06	0.023	22	22	15		
SOCIOECONOMIC INDICATORS							
Demographic Index	65%	44%	77	35%	87		
Supplemental Demographic Index	28%	18%	91	14%	92		
People of Color	57%	45%	63	39%	71		
Low Income	73%	43%	90	31%	95		
Unemployment Rate	11%	7%	75	6%	84		
Limited English Speaking Households	0%	1%	0	5%	0		
Less Than High School Education	29%	15%	89	12%	91		
Under Age 5	4%	6%	41	6%	41		
Over Age 64	21%	17%	71	17%	71		
Low Life Expectancy	26%	23%	80	20%	93		

\*Diesel particulate matter, air toxics cancer risk, and air toxics respiratory hazard index are from the EPA's Air Toxics Data Update, which is the Agency's ongoing, comprehensive evaluation of air toxics in the United States. This effort aims to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that the air toxics data presented here provide broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. Cancer risks and hazard indices from the Air Toxics Data to the ountry, not definitive risks to specific individuals or locations. Cancer risks and hazard indices from the Air Toxics Data to the ountry not definitive risks to specific individuals or locations. Cancer risks and hazard indices from the Air Toxics Data to the ountry not definitive risks to specific individuals or locations. Cancer risks and hazard indices from the Air Toxics Data to respect to one significant figure and any additional significant figures here are due to rounding. More information on the Air Toxics Data Update can be found at: <a href="https://www.epa.gov/haps/air-toxics-data-update">https://www.epa.gov/haps/air-toxics-data-update</a>.

#### Sites reporting to EPA within defined area:

Superfund 0	
Hazardous Waste, Treatment, Storage, and Disposal Facilities	
Water Dischargers 0	
Air Pollution	
Brownfields	
Toxic Release Inventory	

#### Other community features within defined area:

Schools
Hospitals 0
Places of Worship 2

#### Other environmental data:

Air Non-attainment	No
Impaired Waters	No

Selected location contains American Indian Reservation Lands*	No
Selected location contains a "Justice40 (CEJST)" disadvantaged community	Yes
Selected location contains an EPA IRA disadvantaged community	Yes

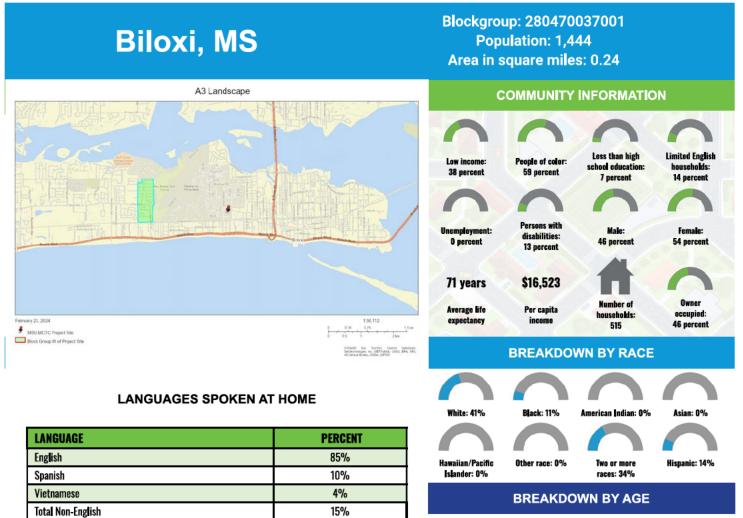
HEALTH INDICATORS							
INDICATOR VALUE STATE AVERAGE STATE PERCENTILE US AVERAGE US PERCENTILE							
Low Life Expectancy	26%	23%	80	20%	93		
Heart Disease	5.3	7.3	11	6.1	35		
Asthma	9.1	10.2	15	10	27		
Cancer	4.5	6.1	8	6.1	18		
Persons with Disabilities	22.2%	17.6%	76	13.4%	91		

CLIMATE INDICATORS								
INDICATOR	DICATOR VALUE STATE AVERAGE STATE PERCENTILE US AVERAGE US PERCENTILE							
Flood Risk	7%	15%	21	12%	51			
Wildfire Risk	0%	23%	0	14%	0			

CRITICAL SERVICE GAPS								
INDICATOR VALUE STATE AVERAGE STATE PERCENTILE US AVERAGE US PERCENTILE								
Broadband Internet	45%	24%	88	14%	96			
Lack of Health Insurance	19%	12%	89	9%	91			
Housing Burden	No	N/A	N/A	N/A	N/A			
Transportation Access	Yes	N/A	N/A	N/A	N/A			
Food Desert	Yes	N/A	N/A	N/A	N/A			

# SEPA EJScreen Community Report

This report provides environmental and socioeconomic information for user-defined areas, and combines that data into environmental justice and supplemental indexes.



From Ages 1 to 4	7%
From Ages 1 to 18	29%
From Ages 18 and up	71%
From Ages 65 and up	13%

#### LIMITED ENGLISH SPEAKING BREAKDOWN

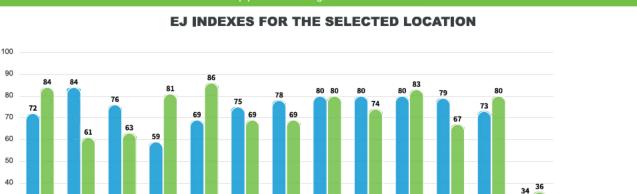
Speak Spanish	91%
Speak Other Indo-European Languages	0%
Speak Asian-Pacific Island Languages	9%
Speak Other Languages	0%

Notes: Numbers may not sum to totals due to rounding. Hispanic population can be of any race. Source: U.S. Census Bureau, American Community Survey (ACS) 2017-2021. Life expectancy data comes from the Centers for Disease Control.

## **Environmental Justice & Supplemental Indexes**

The environmental justice and supplemental indexes are a combination of environmental and socioeconomic information. There are thirteen EJ indexes and supplemental indexes in EJScreen reflecting the 13 environmental indicators. The indexes for a selected area are compared to those for all other locations in the state or nation. For more information and calculation details on the EJ and supplemental indexes, please visit the EJScreen website.

#### **EJ INDEXES**



PERCENTILE

30 20 10

0

Particulate

Matter

Ozone

Diese

Particulate

Matter

Air

Toxics

Cancer

Risk<sup>4</sup>

Air

Toxics

Respiratory HI\*

The EJ indexes help users screen for potential EJ concerns, To do this, the EJ index combines data on low income and people of color populations with a single environmental indicator,

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State Percentile

National Percentile

 $\equiv$ 

#### SUPPLEMENTAL INDEXES

Lead

Paint

Traffic

Proximity

Toxic

Releases

To Air

The supplemental indexes offer a different perspective on community-level vulnerability. They combine data on percent low-income, percent linguistically isolated, percent less than high school education, percent unemployed, and low life expectancy with a single environmental indicator.

RMF

Facility

Proximity

Hazardous

Waste

Proximity

Underground Waste

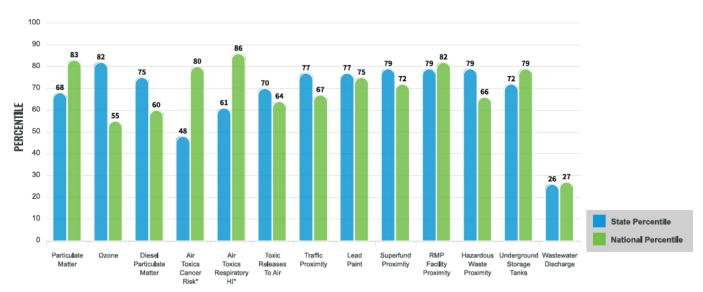
Discharge

Storage

Tanks

Superfund

Proximity



#### SUPPLEMENTAL INDEXES FOR THE SELECTED LOCATION

These percentiles provide perspective on how the selected block group or buffer area compares to the entire state or nation.

SELECTED VARIABLES	VALUE	STATE Average	PERCENTILE In state	USA AVERAGE	PERCENTILE In USA
POLLUTION AND SOURCES					
Particulate Matter (µg/m <sup>3</sup> )	9.13	9	60	8.08	76
Ozone (ppb)	59.4	57.9	86	61 <u>.</u> 6	35
Diesel Particulate Matter (µg/m <sup>3</sup> )	0.176	0.136	76	0.261	39
Air Toxics Cancer Risk* (lifetime risk per million)	30	30	4	25	52
Air Toxics Respiratory HI*	0.4	0.38	31	0.31	70
Toxic Releases to Air	430	2,100	66	4,600	44
Traffic Proximity (daily traffic count/distance to road)	82	44	82	210	51
Lead Paint (% Pre-1960 Housing)	0.36	0.16	87	0.3	63
Superfund Proximity (site count/km distance)	0.067	0.069	73	0.13	53
RMP Facility Proximity (facility count/km distance)	0.57	0.33	84	0.43	79
Hazardous Waste Proximity (facility count/km distance)	0.43	0.31	79	1.9	47
Underground Storage Tanks (count/km <sup>2</sup> )	3.7	2.9	74	3.9	71
Wastewater Discharge (toxicity-weighted concentration/m distance)		0.023	22	22	16
SOCIOECONOMIC INDICATORS					
Demographic Index	48%	44%	59	35%	73
Supplemental Demographic Index	17%	18%	48	14%	69
People of Color	59%	45%	65	39%	72
Low Income	38%	43%	44	31%	67
Unemployment Rate	0%	7%	0	6%	0
Limited English Speaking Households	14%	1%	98	5%	89
Less Than High School Education	7%	15%	28	12%	47
Under Age 5	7%	6%	63	6%	67
Over Age 64	13%	17%	37	17%	39
Low Life Expectancy	27%	23%	88	20%	96

\*Diesel particulate matter, air toxics cancer risk, and air toxics respiratory hazard index are from the EPA's Air Toxics Data Update, which is the Agency's ongoing, comprehensive evaluation of air toxics in the United States. This effort aims to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that the air toxics data presented here provide broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. Cancer risks and hazard indices from the Air Toxics Data deta are reported to one significant figure and any additional significant figures here are due to rounding. More information on the Air Toxics Data Update can be found at: <u>https://www.epa.gov/haps/air-toxics-data-update</u>.

#### Sites reporting to EPA within defined area:

Superfund	0
Hazardous Waste, Treatment, Storage, and Disposal Facilities	. 0
Water Dischargers	0
Air Pollution	1
Brownfields	0
Toxic Release Inventory	0

#### Other community features within defined area:

Schools	
Hospitals 0	
Places of Worship 1	

#### Other environmental data:

Air Non-attainment	No
Impaired Waters	No

Selected location contains American Indian Reservation Lands*	No
Selected location contains a "Justice40 (CEJST)" disadvantaged community	Yes
Selected location contains an EPA IRA disadvantaged community	Yes

HEALTH INDICATORS							
INDICATOR VALUE STATE AVERAGE STATE PERCENTILE US AVERAGE US PERCENTILE							
Low Life Expectancy	27%	23%	88	20%	96		
Heart Disease	7.3	7.3	49	6.1	74		
Asthma	9.9	10.2	45	10	52		
Cancer	5.8	6.1	31	6.1	41		
Persons with Disabilities	16.1%	17.6%	44	13.4%	71		

CLIMATE INDICATORS								
INDICATOR	DICATOR VALUE STATE AVERAGE STATE PERCENTILE US AVERAGE US PERCENTILE							
Flood Risk	28%	15%	90	12%	90			
Wildfire Risk	0%	23%	0	14%	0			

CRITICAL SERVICE GAPS								
INDICATOR VALUE STATE AVERAGE STATE PERCENTILE US AVERAGE US PERCENTILE								
Broadband Internet	23%	24%	54	14%	80			
Lack of Health Insurance	17%	12%	83	9%	88			
Housing Burden	No	N/A	N/A	N/A	N/A			
Transportation Access	No	N/A	N/A	N/A	N/A			
Food Desert	Yes	N/A	N/A	N/A	N/A			

# SEPA EJScreen Community Report

This report provides environmental and socioeconomic information for user-defined areas, and combines that data into environmental justice and supplemental indexes.

# Harrison County, MS

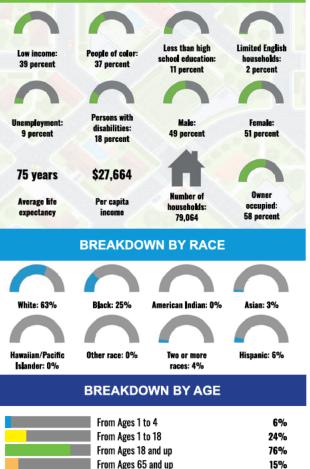


#### LANGUAGES SPOKEN AT HOME

LANGUAGE	PERCENT
English	94%
Spanish	3%
Vietnamese	1%
Total Non-English	6%

#### County: Harrison Population: 207,382 Area in square miles: 984.68

#### COMMUNITY INFORMATION



#### LIMITED ENGLISH SPEAKING BREAKDOWN

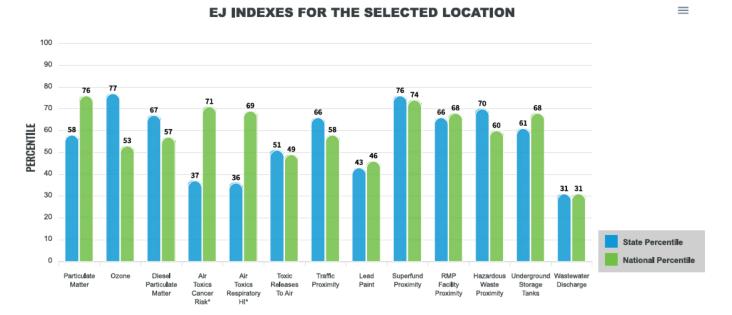
Speak Spanish Speak Other Indo-European Languages	68% 2%
Speak Asian-Pacific Island Languages	2% 30%
Speak Other Languages	1%

Notes: Numbers may not sum to totals due to rounding. Hispanic population can be of any race. Source: U.S. Census Bureau, American Community Survey (ACS) 2017-2021. Life expectancy data comes from the Centers for Disease Control.

## **Environmental Justice & Supplemental Indexes**

The environmental justice and supplemental indexes are a combination of environmental and socioeconomic information. There are thirteen EJ indexes and supplemental indexes in EJScreen reflecting the 13 environmental indicators. The indexes for a selected area are compared to those for all other locations in the state or nation. For more information and calculation details on the EJ and supplemental indexes, please visit the EJScreen website.

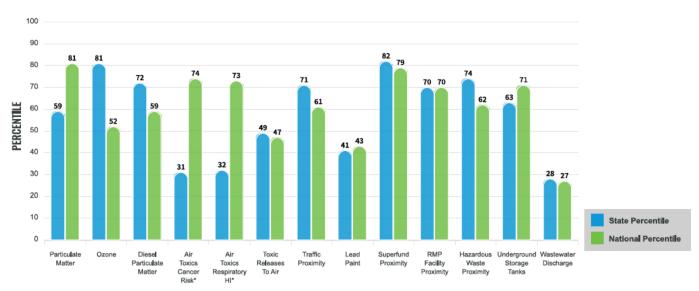
#### **EJ INDEXES**



The EJ indexes help users screen for potential EJ concerns. To do this, the EJ index combines data on low income and people of color populations with a single environmental indicator.

#### SUPPLEMENTAL INDEXES

The supplemental indexes offer a different perspective on community-level vulnerability. They combine data on percent low-income, percent linguistically isolated, percent less than high school education, percent unemployed, and low life expectancy with a single environmental indicator.



#### SUPPLEMENTAL INDEXES FOR THE SELECTED LOCATION

These percentiles provide perspective on how the selected block group or buffer area compares to the entire state or nation.

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Report for County: Harrison

SELECTED VARIABLES		STATE AVERAGE	PERCENTILE In state	USA AVERAGE	PERCENTILE In USA
POLLUTION AND SOURCES					
Particulate Matter (µg/m <sup>3</sup> )	9.03	9	51	8.08	74
Ozone (ppb)	59.3	57.9	84	61 <u>.</u> 6	34
Diesel Particulate Matter (µg/m <sup>3</sup> )	0.172	0.136	74	0.261	37
Air Toxics Cancer Risk* (lifetime risk per million)	28	30	0	25	5
Air Toxics Respiratory HI*	0.33	0.38	0	0.31	31
Toxic Releases to Air	230	2,100	55	4,600	34
Traffic Proximity (daily traffic count/distance to road)	77	44	81	210	50
Lead Paint (% Pre-1960 Housing)	0.11	0.16	48	0.3	37
Superfund Proximity (site count/km distance)	0.13	0.069	87	0.13	75
RMP Facility Proximity (facility count/km distance)	0.35	0.33	76	0.43	70
Hazardous Waste Proximity (facility count/km distance)	0.6	0.31	84	1.9	52
Underground Storage Tanks (count/km <sup>2</sup> )	3.4	2.9	72	3.9	69
Wastewater Discharge (toxicity-weighted concentration/m distance)		0.023	42	22	27
SOCIOECONOMIC INDICATORS					
Demographic Index	38%	44%	45	35%	62
Supplemental Demographic Index	17%	18%	45	14%	67
People of Color	37%	45%	46	39%	56
Low Income	39%	43%	45	31%	68
Unemployment Rate	9%	7%	70	6%	79
Limited English Speaking Households	2%	1%	88	5%	62
Less Than High School Education	11%	15%	40	12%	61
Under Age 5	6%	6%	61	6%	64
Over Age 64	15%	17%	47	17%	48
Low Life Expectancy	22%	23%	43	20%	76

\*Diesel particulate matter, air toxics cancer risk, and air toxics respiratory hazard index are from the EPA's Air Toxics Data Update, which is the Agency's ongoing, comprehensive evaluation of air toxics in the United States. This effort aims to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that the air toxics data presented here provide broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. Cancer risks and hazard indices from the Air Toxics Data Update are reported to one significant figure and any additional significant figures here are due to rounding. More information on the Air Toxics Data Update can be found at: <u>https://www.epa.gov/haps/air-toxics-data-update</u>.

Sites reporting to EPA within defined area:	
Superfund	1
Hazardous Waste, Treatment, Storage, and Disposal Facilities Water Dischargers	
· ·	364
Air Pollution Brownfields .	
Toxic Release Inventory	

#### Other community features within defined area:

Schools	55
Hospitals	11
Places of Worship 2	63

#### Other environmental data:

Air Non-attainment	No
Impaired Waters	Yes

Selected location contains American Indian Reservation Lands*	No
Selected location contains a "Justice40 (CEJST)" disadvantaged community	Yes
Selected location contains an EPA IRA disadvantaged community	Yes

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HEALTH INDICATORS								
INDICATOR VALUE STATE AVERAGE STATE PERCENTILE US AVERAGE US PERCENTILE								
Low Life Expectancy	22%	23%	43	20%	76			
Heart Disease	6.6	7.3	28	6.1	60			
Asthma	9.4	10.2	27	10	36			
Cancer	5.7	6.1	27	6.1	37			
Persons with Disabilities	17.5%	17.6%	51	13.4%	77			

CLIMATE INDICATORS									
INDICATOR	DICATOR VALUE STATE AVERAGE STATE PERCENTILE US AVERAGE US PERCENTILE								
Flood Risk	26%	15%	89	12%	89				
Wildfire Risk	44%	23%	75	14%	85				

CRITICAL SERVICE GAPS								
INDICATOR VALUE STATE AVERAGE STATE PERCENTILE US AVERAGE US PERCENTILE								
Broadband Internet	15%	24%	36	14%	63			
Lack of Health Insurance	14%	12%	65	9%	82			
Housing Burden	Yes	N/A	N/A	N/A	N/A			
Transportation Access	Yes	N/A	N/A	N/A	N/A			
Food Desert	Yes	N/A	N/A	N/A	N/A			

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