

REQUEST FOR ENVIRONMENTAL IMPACT ANALYSIS

Report Control Symbol
RCS: **Log ID 34949**

INSTRUCTIONS: Section I to be completed by Proponent. Sections II and III to be completed by Environmental Planning Function. Continue on separate sheets as necessary. Reference appropriate item number(s).

SECTION I – PROPONENT INFORMATION

1. TO (Environmental Planning Function)	2. FROM (Proponent Organization and functional address symbol)	2a. TELEPHONE NO.
AFMC/A4C	78 OSS/OSA	(478) 926-2081

3. TITLE OF PROPOSED ACTION
Removal and Harvesting of Trees along the North and South Ends of Runway, Robins AFB, GA

4. PURPOSE AND NEED FOR ACTION (Identify decision to be made and need date)
(see attached)

5. DESCRIPTION OF ACTION AND ALTERNATIVES (DOPAA) (Provide sufficient details for evaluation of the total action)
(see attached)

6. PROPONENT APPROVAL (Name and Grade)	6a. SIGNATURE	6b. DATE
GS-12 Clyde Byrd	\\ ELECTRONICALLY SIGNED \\	1/21/2020 12:18:46 PM

SECTION II – PRELIMINARY ENVIRONMENTAL SURVEY (Check appropriate box and describe potential environmental effects including cumulative effects) (+=positive effect; 0=no effect; - = adverse effect; U=unknown effect)

	+	0	-	U
7. AIR INSTALLATION COMPATIBLE USE ZONE/LAND USE (Noise, accident potential, encroachment, etc.)	X			
8. AIR QUALITY (Emissions, attainment status, state implementation plan, etc.)			X	
9. WATER RESOURCES (Quality, quantity, source, etc.)		X		
10. SAFETY AND OCCUPATIONAL HEALTH (Asbestos/radiation/chemical exposure, explosives safety quantity distance, bird/wildlife aircraft hazard, etc.)	X			
11. HAZARDOUS MATERIALS/WASTE (Use/storage/generation, solid waste, etc.)		X		
12. BIOLOGICAL RESOURCES (Wetlands/floodplains, threatened or endangered species, etc.)			X	
13. CULTURAL RESOURCES (Native American burial sites, archaeological, historical, etc.)			X	
14. GEOLOGY AND SOILS (Topography, minerals, geothermal, Installation Restoration Program, seismicity, etc.)			X	
15. SOCIOECONOMIC (Employment/population projections, school and local fiscal impacts, etc.)	X			
16. OTHER (Potential impacts not addressed above.)		X		

SECTION III – ENVIRONMENTAL ANALYSIS DETERMINATION

17.	X	PROPOSED ACTION QUALIFIES FOR CATEGORICAL EXCLUSION (CATEX) # A2.3.11 (see attached for description); OR
		PROPOSED ACTION DOES NOT QUALIFY FOR A CATEX; FURTHER ENVIRONMENTAL ANALYSIS IS REQUIRED.

18. REMARKS
This action qualifies for CATEX A2.3.11 "Actions similar to other actions which have been determined to have an insignificant impact in a similar setting as established in an environmental impact statement or an environmental assessment (EA) resulting in a finding of no significant impact (FONSI)". Robins AFB conducted similar actions in 2011 and 2017 where selective trees were removed from the clear zone and accident potential zones documented within two EAs; Clear Zone / Accident Potential Zone Selective Tree Removal and Southern Frangibility Zone and Graded Clear Zone (EAs CZ & APZ, 2011; SFZ & CZ, 2017). FONSI were signed by the Senior Command Civil Engineer at Air Force Materiel Command (AFMC) on 30 Jun 11 and 30 May 17. See attached continuation sheet.

19. ENVIRONMENTAL PLANNING FUNCTION CERTIFICATION (Name and Grade) Ronald J. Onderko, P.E., NH-4 AFMC Command Senior Civil Engineer	19 a. SIGNATURE	19 b. DATE

4. PURPOSE AND NEED FOR ACTION

Portions of the Clear Zone (CZ) and Accident Potential Zone I (APZI) at the north end (150 degrees runway/Runway 15) and the south end (330 degrees runway/Runway 33) of the runway at Robins AFB, GA, do not meet the obstructions to air navigation requirements of the Unified Facilities Criteria (UFC) 3-260-01, *Airfield and Heliport Planning and Design*. The height of certain existing trees interferes with the runway imaginary approach-departure clearance surface (or "glide slope"). UFC 3-260-01 states runways must have approaches free and clear of obstructions (paragraph 2-7.4.1), and no man made or natural object shall penetrate the primary or approach- departure clearance surfaces (paragraph 3-14). Tree height must be a minimum distance of 10 feet below the elevation of the imaginary glide slope per UFC 3-260-01 Table 3-8. Robins AFB currently operates under two temporary obstruction waivers (Nos. R-TW-9A & R-TW-9B; description - trees violating approach/departure criteria to be removed), which expires in FY21.

The purpose of the Proposed Action is to remove natural obstructions surrounding the north and south ends of the Robins AFB runway, to include the CZ, APZI, and APZII, and the Streamside Management Zone (SMZ). The need for the action is to comply with UFC 3-260-01 minimum vertical clearance requirements for eliminating potential obstructions to air navigation in the CZ and APZI and to protect the public, pilots, aircrew, aircraft, and other USAF real property assets on Robins AFB. In addition, the larger area proposed for harvest outside the CZ, APZI and APZII is necessary to facilitate a commercially viable operation with the U.S. Army Corps of Engineers (USACE) in order to address airfield encroachment issues at Robins AFB over the long term.

5. DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES

Proposed Action

Total acreage of trees encroaching the CZ and the APZs is estimated to be 25 acres on the north end and 35 acres on the south end of Robins AFB runway (Atchs 1, 2, & 3). This area consists predominately of bottomland hardwoods (e.g. red maple, sweetgum, yellow poplar, willow, water tupelo trees, etc.). Under the Proposed Action, trees within a 404-acre area surrounding the north and south ends of the runway, to include the CZ, APZs I & II, and the SMZ will be cut and removed for harvest. All trees, regardless of height and diameter, will be harvested, and all stumps will remain in place. The stump height will vary depending on the structure of the vegetation. Trees in the SMZ have been designated and mapped with a 75'+ (foot) orange flagged buffer along all creek banks. The sales contract will specify that all trees with a 16" (inch) diameter, or greater, at ground height (4"-8" height stump) will be cut within the SMZ for harvest with minimal damage to the residual stand.

The estimated acreage of harvested trees is 90 acres on the north end and 270 acres on the south end of the runway (Atch 4). Trees harvested will be used for chips (fuel wood), pulpwood, and saw timber that is supported by a strong local market from multiple mills in the area. Through consultation with the Georgia Forestry Commission (GFC) and USAF foresters, timber sale will occur over 1 to 3 years, addressing crucial areas closest to the CZ and APZs within the first 6 months and move outward as weather and timber sale markets permit. Increased acreage for harvesting is necessary to facilitate a commercially viable operation with USACE. Commercial harvest will be managed by the USACE Savannah District, through a cooperative agreement with Robins AFB, and executed in accordance with 10 United States Code 2665, *Sale of certain interests in land; logs* as well as USAF Instruction (AFI) 32-7064, *Integrated Natural Resources Management*. All stumps will remain in place and vary depending on vegetation structure. Trees located in the SMZ will be cut 16" (inch) diameter, or greater, at ground height (4"-8" height stump) with minimal damage to the residual stand. Ingress and egress routes for vehicles, hauling trucks, and timbering equipment will be by corduroy roads. Corduroy roads are built by laying together the logs of cut trees taken from the Proposed Action area to form a haul road/skid trail. The number, width, and total length of the corduroy roads will be minimized to meet operational needs and local conditions. In addition, each site, staging areas for vehicles, equipment, and personnel would be created. As sites are completed, the corduroy roads and staging areas would be removed. Temporary log bridges, portable spans, or mats would be used for stream crossing and removed upon project completion.

The Robins airfield is located within Ocmulgee River 100-year floodplain and surrounded by jurisdictional wetland areas (~19.5 acres) associated with the Echeconnee Creek, Horse Creek, and Ocmulgee River. Because of proximity to and orientation of the runway and associated CZ and APZs, there is no practicable alternative that will meet the underlying purpose and need; therefore, implementation of the Proposed Action will impact these

resource areas.

No Action Alternative

Trees would not be cut and harvested in the north and south ends of the Robins AFB runway, to include the CZ, API, APZII, and the SMZ under the No Action. Robins AFB would continue to operate under their two existing temporary obstruction waivers, with renewal required by FY21. If, in the future, these waivers are denied, the airfield would not meet minimum vertical clearance requirements for potential obstructions to air navigation; and eventually, airfield and/or mission operations at Robins AFB would be adversely affected.

Alternatives Dismissed from Further Review

Alternative 1: Displace (relocate) the Robins AFB runway threshold from the beginning of the runway, north and south ends, to where the trees that exceed the minimum distance of 10 feet below the elevation of the imaginary glide slope are not a factor. This alternative was not carried forward for analysis, as it would result in the Robins AFB airfield being too short and thereby unsuitable for the current and future missions.

Alternative 2: Harvest only the trees encroaching the CZ and the APZs. Acreage is estimated to be 25 acres on the north end and 35 acres on the south end of Robins AFB runway. This alternative was dismissed as it could not support a sustainable forestry operation with USACE. Without a long-term solution to address tree growth throughout the airfield area, Robins AFB will continually have to address tree growth in order to comply with UFC 3-260-01.

Section II (Environmental Analysis)

Comparison of Alternatives Receiving Detailed Evaluation

Environmental Component		Proposed Action	No-Action Alternative
		+ = Beneficial Effect, --- = Insignificant Adverse Effect, X = Adverse Effect, O = No Effect	
Physical	Topography	O	O
	Surface Waters	---	O
	Floodplains and Wetlands	---	O
	Storm Water	O	O
	Soils	---	O
	Groundwater	O	O
	Water Supply and Drinking Water	O	O
Air Quality		---	O
Waste Mgt. and Toxic Materials	Wastewater	O	O
	Solid Waste	O	O
	Hazardous Materials and Waste	O	O
	Toxic Materials	O	O
Noise		---	O
Biological Resources		---	O
Cultural Resources		---	O
Socioeconomic		+	O
Safety		+	X
Transportation		---	O
Cumulative Impacts		---	O

7. AICUZ/Land Use

Noise (EA CZ and APZ Selective Tree Removal §4.4.2)

The Proposed Action will result in temporary noise increases from the use of vehicles, hauling trucks, and timbering equipment utilized in the immediate vicinity of the proposed project area. This temporary increase is

insignificant in comparison to the existing environment dominated by noise generated from aircraft departures/landings as well as during maintenance-related engine runs (up to 85-decibel day/night levels and above). Noise generated from forestry operations will not add significant levels of noise to the runway area and surrounding forested area.

8. Air Quality (EA CZ and APZ Selective Tree Removal §4.2.2)

Robins AFB is located within Houston County, which is classified as in attainment for all criteria air pollutants under the National Ambient Air Quality Standards. Conformity analysis under the Clean Air Act (CAA) is not required. Operation of timbering equipment and transport of cut trees from the Proposed Action will temporarily increase carbon monoxide, hydrocarbons, nitrogen oxides, and particulate matter emission, which will cease once the action is completed. Air Conformity Applicability Modeling (ACAM) ran for recent tree removal taken along the southern frangibility/graded clear zones calculated air emission below de minimis levels (EA SFZ and CZ, 2017, Appendix E). Based on the quantities estimated, emissions from the Proposed Action would also be below de minimis levels. There are no permanent air emission sources associated with the Proposed Action that require inclusion into the existing Robins AFB CAA Title V operating permit.

9. Water Resources

Surface Waters (EA CZ and APZ Selective Tree Removal §4.1.2.2)

The Proposed Action will result in temporary impacts on surface waters from minor land disturbance immediately adjacent to active work areas. However, the Proposed Action will not cause significant adverse impacts to surface waters in or near the Proposed Action area. The timber contractor selected by the USACE will adhere to the State of Georgia BMP (GA BMPs) for forestry (GFC, 2009), as well as all federal and state environmental requirements applicable to forestry operations in waters of the U.S. and waters of the State of Georgia to control erosion from storm water runoff during the course of day-to-day tree removal operations. These requirements will be met prior to and during harvest activities. All woody debris resulting from the harvest operations will be removed from floodplain/wetland areas. The corduroy roads and staging areas will be located at a sufficient distant from streams or other water bodies, except for portions of roads that must cross water bodies. Vegetation disturbance will be kept to a minimum. Approaches to any necessary stream crossings will be at right angles to stream flow where practicable. Temporary log bridges, portable spans, or mats will be used for stream crossings and removed when operations are completed. Any disturbance to the soil or stream bank will be stabilized when the temporary crossing is removed. No impervious surfaces that would increase storm water runoff will result from implementation of the Proposed Action.

Floodplains (EA CZ and APZ Selective Tree Removal §4.1.3.2)

The CZ extends 915 meters (3,000 feet) from the end of the runway primary surface into the floodplain and APZs extend more than 3,600 meters (11,000 feet) beyond the CZ. The Proposed Action will have temporary impacts on the floodplain in the immediate work area from the presence and operation of vehicles, hauling trucks, and timbering equipment. However, implementation of the Proposed Action will not cause significant adverse impacts to floodplain characteristics. As discussed in the 2011 and 2017 EAs, the floodplain and flood zone characteristics within the Proposed Action area will not change from the removal of trees since the stumps will be left in place. There will be no effect on the function of surface water conveyance or flood storage capacity. Robins AFB will require the timber contractor to use GA BMPs to control erosion from storm water runoff as discussed within the wetland section.

Storm Water (EA CZ and APZ Selective Tree Removal §4.1.5.2)

The Proposed Action will not create any additional impervious area(s) allowing the storm water volume to remain unchanged. Robins AFB will require the timber contractor to use GA BMPs to control erosion from storm water runoff as discussed within the biological section below. To minimize soil disturbance and associated soil erosion/runoff, stumps of all cut trees will remain in place. In addition, the timber contractor selected by the USACE will adhere to GA BMPs for forestry (GFC, 2009) as well as other federal and state environmental requirements applicable to forestry operations in waters of the U.S. and waters of the State of Georgia to control erosion from storm water runoff so as not to cause significant adverse impacts. Overall, there will be no significant impact on storm water.

Groundwater (EA CZ and APZ Selective Tree Removal §4.1.7.2)

Robins AFB Environmental Restoration Program (ERP) maintains groundwater monitoring wells in the Proposed Action area. The USACE will be notified of each ERP groundwater monitoring well location prior to the start of the Proposed Action. In addition, the USACE will be advised to take care while operating vehicles and equipment in these areas to avoid damage or destruction to the ERP groundwater monitoring wells. As long as the integrity of the groundwater wells are protected, there will be no adverse impact on groundwater monitoring to the ERP.

Water Supply and Drinking Water (EA CZ and APZ Selective Tree Removal §4.1.8.1)

There are no potable water supply wells or systems located in or near the Proposed Action area. Implementation of the Proposed Action will not require significant use of Robins AFB potable water supply.

10. Safety/Bird Aircraft Strike Hazard (BASH) (EA CZ and APZ Selective Tree Removal §4.5.2)

Overall, there will be a positive impact on airfield safety with implementation of the Proposed Action. Robins airfield will be compliant with the UFC 3-260-01 minimum vertical clearance requirement for eliminating potential obstructions to air navigation and thereby protect the public, pilots, aircrew, aircraft, and other USAF real property assets on the installation.

Bird/aircraft strikes pose a considerable hazard to aircraft and their crews. A primary focus of wildlife management at Robins AFB is the elimination or minimization of aircraft exposure to potentially hazardous bird strikes, as well as strikes of terrestrial animals on the runway. The Robins *BASH Plan* (RAFB, 2015) provides guidance in achieving this goal. The *BASH Plan* is based on hazards from both permanent (non-migratory) and seasonal (migratory) bird populations, and other animals that may wander onto the runway. While air navigation safety would be improved by eliminating potential obstructions, creating more open wetland areas would result in deeper, more open water areas that would attract wading birds and wintering waterfowl. The indirect consequence of creating more attractive habitat under the runway approach would negatively impact BASH management by potentially attracting larger birds to the area.

11. Hazardous Materials/Waste

Waste Management & Toxic Materials (EA CZ and APZ Selective Tree Removal §§4.3.3.2 and 4.3.4.2)

No asbestos containing material, lead-based paint, polychlorinated biphenyls containing equipment or other toxic material will be used in or affected by the Proposed Action. No toxic waste will be encountered during or generated after completion of the Proposed Action. There will be no significant impacts from toxic materials.

Wastewater (EA CZ and APZ Selective Tree Removal §4.3.1.2)

The Proposed Action will not generate industrial wastewater or sanitary wastewater; therefore, there will be no impact to this resource area.

Solid Waste (EA CZ and APZ Selective Tree Removal §4.3.2.2)

The Proposed Action will generate little to no solid waste since trees will be harvested for forestry purposes. If any solid waste should be generated, it will be handled, managed, and disposed of in accordance with §01560 Environmental Requirements and the Robins AFB Integrated Solid Waste Management Plan posted at <https://cs1.eis.af.mil/sites/edash-ins1/robins/Shared%20Documents/Solid%20Waste/Robins%20AFB%20ISWMP%20-%202016.pdf>.

12. Biological Resources

Wildlife (EA CZ and APZ Selective Tree Removal §4.5.2)

The principal effects from the Proposed Action will be temporary increase in noise and traffic from equipment and habitat alteration from harvesting trees in the bottomland forest within the CZ and APZs. Wildlife in the immediate area of the airfield is accustomed to the significant noise from aircraft departure and landing that dominates the noise environment in the Proposed Action area. No federally-listed endangered, threatened, or sensitive species are present on or near Robins AFB. State plant species of concern do occur on base, but no populations have been identified within the CZ or APZs and would not be affected by the Proposed Action. Care will be exercised to avoid impact to the state-protected Ocmulgee skullcap population on the upland bluff west of Hannah Road. Target trees in this forested area will be cut and removed when vegetative portions of this plant are not present. Soil disturbance will be minimized by leaving stumps in place.

Wetlands (EA CZ and APZ Selective Tree Removal §4.1.4.2)

The Proposed Action area is in undeveloped wetland and floodplain areas associated with the Echeconnee Creek, Horse Creek, and Ocmulgee River floodplain complex. Prior to performing projects within a wetland, the USAF must investigate and exhaust all potential alternatives that will avoid or minimize impact to wetland resources and compensate for unavoidable wetland impacts. This requirement is consistent with EO 11990, *Protection of Wetlands*, Section 404 of the Clean Water Act (CWA), and the wetlands compliance responsibilities of AFI 32-7064, *Integrated Natural Resources Management*. The Proposed Action is needed to meet UFC 3-260-01 minimum vertical clearance requirement for eliminating potential obstructions to the CZ and APZ glide slope and to protect the public, pilots, aircrew, aircraft, and other USAF real property assets on Robins AFB. The proposed acreage for harvest exceeds the acreage of trees that are encroaching the CZ and APZ of Runway 15 and 33. The increased acreage is necessary to facilitate a commercially viable forestry operation with the USACE. In addition, the increased acreage will address encroachment issue in the long term. All trees identified for harvest are within jurisdictional wetlands; therefore, there is no practicable alternative that would meet the purpose and need of the Proposed Action. Consequently, the proposed harvest must be executed within this location.

The Proposed Action has been coordinated with the USACE Savannah District and the State of Georgia Forestry Commission to ensure compliance with federal and state environmental requirements. Per 33 CFR 323.4, *Discharges not requiring permits*, paragraph (a)(1)(ii), if an activity takes place outside the waters of the United States, or if it does not involve a discharge, a CWA Section 404 Permit is not required, whether or not it is part of an established farming, silviculture, or ranching operation. Due to no discharge of dredged material associated with this project, Robins AFB has determined this project does not require a Section 404 Permit and is not subject to these regulations. In addition, if there is any unanticipated discharge of dredge or fill material that may result from the proposed activity, it is not prohibited by or otherwise subject to regulation under Section 404 since the criteria per 33 CFR §323.4 has been satisfied.

Robins AFB has previously utilized silviculture to address glide slope and frangibility requirements within the CZ and APZs. The CZ and APZs have evidence of prior silviculture operations, including stumps from previous harvests and successional vegetation within the footprint of the project. The Proposed Action will have temporary effects on wetlands in the immediate work area from the presence/operation of heavy equipment. In developing forested wetlands Best Management Practices (BMPs), states in the southeast have recognized certain silvicultural site preparation techniques are more effective when conducted in areas that have drier water regimes. The BMPs stated below represent a composite of state expertise to protect water quality from silvicultural impacts. These BMPs also address the location, as well as the nature of activities. The USACE and USEPA believe these forested wetlands BMPs are effective in protecting water quality and therefore are adopting them to protect these functions and values considered under Section 404 of CWA. The following federally mandated BMPs are designed to minimize the impacts associated with mechanical silvicultural site preparation activities in circumstances where these activities do not require a permit. The timber contractor will apply these BMPs, at a minimum, as part of the Proposed Action; therefore, implementation of silviculture activities will not cause significant impacts in or near the wetlands within the CZ or APZs.

- 1) Position shear blades or rakes at or near the soil surface and windrow, pile, and otherwise move logs and logging debris by methods that minimize dragging or pushing through the soil to minimize soil disturbance associated with shearing, raking, and moving trees, stumps, brush, and other unwanted vegetation;
- 2) Conduct activities in such a manner as to avoid excessive soil compaction and maintain soil tilth;
- 3) Arrange windrows in such a manner as to limit erosion, overland flow, and runoff;
- 4) Prevent disposal or storage of logs or logging debris in streamside management zones -- defined areas adjacent to streams, lakes, and other waterbodies -- to protect water quality;

- 5) Maintain the natural contour of the site and ensure that activities do not immediately or gradually convert the wetland to a non-wetland; and
- 6) Conduct activities with appropriate water management mechanisms to minimize off-site water quality impacts.

References:

Application of BMPs to Mechanical Silvicultural Site Preparation Activities for the Establishment of Pine Plantations in the Southeast

<https://www.epa.gov/cwa-404/memorandum-application-best-management-practices-mechanical-silvicultural-site-preparation>

U.S. Code of Federal Regulations

https://www.govregs.com/regulations/expand/title33_chapterII_part323_section323.4

Guidelines for Silviculture Exemptions under the CWA in the state of Georgia dated August 6, 2010

https://www.sas.usace.army.mil/Portals/61/docs/regulatory/Silviculture_SAS_Guidelines.pdf

13. Cultural Resources (EA CZ and APZ Selective Tree Removal §4.6.2)

Based on the archeological survey conducted in accordance with the Robins AFB Integrated Cultural Resources Management Plan (ICRMP, 2016), there is little potential for undiscovered archaeological sites at the Proposed Action area. Although the Proposed Action area is in close proximity/vicinity to the Strategic Air Command (SAC) Alert Apron site, which is an archaeological site eligible for the National Registry of Historic Places (NRHP), there will be no direct disturbance or ground disturbance of the SAC Alert Apron. There is the potential the Proposed Action would impact the view shed of the SAC Alert Apron; however, the impact is short-term and not permanent as the vegetation will grow back. There would be no impact on cultural resources.

If inadvertent discoveries of cultural items, including traditional cultural properties, human remains or archaeological resources are discovered during the course of this project, personnel are directed to avoid the site of discovery and immediately contact the Robins AFB Cultural Resource Manager (CRM). All work in the area of discovery must stop until it can be investigated. The CRM will send a qualified representative to visit the discovery site. The resource will then be recorded and evaluated, and the effects mitigated as necessary.

14. Geology and Soils

Soils (EA CZ and APZ Selective Tree Removal §4.1.6.2)

The Proposed Action will not involve grading or other major types of soil disturbance. All stumps of cut trees will remain in place. As discussed in the 2011 EA, Robins AFB uses GA BMPs during the course of day-to-day operations, and will use GA BMPs for the Proposed Action to control erosion from storm water runoff. There would be no significant impact on soils.

Topography (EA CZ and APZ Selective Tree Removal §4.1.1.2)

The Proposed Action will not significantly disturb the ground surface. Low impact timbering equipment will travel on a corduroy road made from the stems of cut trees laid together to form a haul/skid road and distribute the weight of the timbering equipment. The number, width, and total length of skid trails or haul roads will be minimized consistent with silviculture operational needs and local conditions. No debris will be left in the floodplain, and the corduroy road and staging areas will be removed as selective cuts are completed. There will be no significant adverse or significant positive impact on topography.

15. Socioeconomic (EA CZ and APZ Selective Tree Removal §4.7.2)

The Proposed Action area is largely undeveloped land in the Echeconnee Creek, Horse Creek, and Ocmulgee River floodplains. A sparsely developed area of light commercial/residential structures is present just outside the northwestern boundary of the northern CZ boundary immediately adjacent to the western base property boundary. The southern CZ and APZ I are entirely on base property and there is no private residential or commercial development within the area.

A short-term, minor beneficial impact will occur to socioeconomics as a result of the employment of local contractors for construction activities on Robins AFB. No significant adverse environmental impacts will occur as a result of the Proposed Action nor would adverse impacts disproportionate to minority, low-income, or other populations occur.

16. Other, Transportation (EA CZ and APZ Selective Tree Removal §4.8.2)

The Proposed Action will result in a temporary increase in traffic from the use of vehicles, hauling trucks, and timbering equipment. Contractors and heavy equipment operators will adhere to all applicable safety regulations and guidelines. There will be no significant impacts on transportation.

Cumulative Impacts

No recently completed projects that would have a similar impact on environmental resources were identified. Two future actions were identified as potentially producing cumulative environmental effects to floodplain and wetland areas but after further review, it was determined there would be no cumulative impacts to these resource areas. No other projects were identified that would have any other incremental environmental effects.

Southern Frangibility Zone and Graded Clear Zone Compliance Improvements: The Proposed Action includes filling and grading the southern mandatory frangibility zone and graded clear zone boundaries along the Robins airfield. Much of the area is undeveloped wetlands associated with the Ocmulgee River floodplain. There will be short-term impacts during construction but these and the long-term cumulative impacts are offset through the purchase of wetland credits from a regulatory approved wetland mitigation bank. While the cumulative impacts may be considered adverse, the mitigation, due in part to the salutary net effect, indicates that such impacts would not be considered significant.

Warner Robins Solar Project Robins Air Force Base, Georgia: The proposed solar array power plant will utilize both fixed-tilt and single-axis tracker modules, totaling 464,800 modules located on an approximately 650-acre site. The arrays will be oriented to avoid reflections that could impact aircraft operations at Robins AFB and the Middle Georgia Regional Airport (MGRA). Floodplain and wetland areas are outside the construction area of the solar array and no construction will take place in the floodplain and jurisdictional wetlands. To protect these resources further, Georgia Power will maintain a buffer of 25 feet or more around jurisdictional waters.

18. Remarks

The projects documented within EA CZ and APZ, 2011 and EA SFZ and CZs, 2017 were for selective cutting and removal of trees within the CZ and portions of the southern APZI where heights extended higher than 15 feet below the elevation of the glide slope. The project area for both these actions occurred within floodplain and wetland areas. The current proposal also includes the removal of trees contained within the same floodplain and wetland areas. However, this proposal is to cut all trees, regardless of tree height or diameter, with the exception of the trees located in the SMZ, where only all trees with a 16" (inch) diameter, or greater, at ground height (4"-8" height stump) will be harvested. Based on the physical location and similar activities to be conducted, the environmental analyses within the EA CZ and APZI, 2011 and SFZ and CZs, 2017 are both relevant and applicable and have been incorporated by reference.

FINDING OF NO PRACTICABLE ALTERNATIVE. Based on the analysis contained here and within the 2011 and 2017 EAs, and pursuant to Executive Orders 11988, *Floodplain Management*, and 11990, *Protection of Wetlands*, I find there is no practicable alternative to conducting tree harvesting within the Ocmulgee River 100-year floodplain and surrounding jurisdictional wetland areas, and that the Proposed Action includes all practicable measures to minimize harm to the environment. This fulfills both the requirements of the referenced EOs and the USAF Environmental Impact Analysis Process (32 CFR Part §989.14) for a Finding of No Practicable Alternative.

4 Attachments:

- (1) Robins AFB Accident Potential Zone North Map
- (2) Robins AFB Accident Potential Zone South Map
- (3) Robins AFB Airspace Imaginary Surfaces Map
- (4) Robins AFB 2018 Lidar Trees Acreage Maps