Appendix A: Resource Documentation DCAT Extreme Weather and Climate Change Hazard Report Record of Non-Applicability (RONA) National Wetlands Inventory NEPA Assist - Map of Bodies of Water



Arlington National Cemetery

Background



Historical Extreme Weather and Climate Change Exposure

Historical Extreme Weather Event Occurrence

The following table shows whether this site experienced any of the listed extreme events during their respective base periods (see the indicator fact sheets under the "Manuals / Indicators" tab for more details).

Event Type	Has Occurred
Tornado Frequency	Х
Hurricane Frequency	Х
Ice Storms Occurrence	Х
Hurricane Wind > 50 Knots	Х
Hurricane Maximum Precipitation	Х
Ice Jam Occurrence	

Damaging Extreme Weather and Wildfire Events, 2000-2021

This shows the damage sustained in the county or counties (for Alaska, NOAA forecast zone) in which Arlington National Cemetery is located. The first table shows the total damage by event type since 2000. The second table shows the largest fifteen events across all types recorded at this location since 2000. The data for these tables come from the NOAA Storm Events Database (https://www.ncdc.noaa.gov/stormevents/).

Many NWS storm event types (<u>https://www.nws.noaa.gov/directives/sym/pd01016005curr.pdf</u>) are broadly similar in impact, but differ along a continuum of magnitudes or geographies (marine vs. land, for instance). In order to provide a readily accessible assessment of damages by type of damage, some NWS storm event type categories are combined for presentation in the Installation Report. More information about the event types represented by the categories below, and event types that were excluded from this analysis, can be found in *Documentation of and Justification for Collapsing NOAA Storm Event Categories* located in the "Manuals / Indicators" tab of this tool.

Damages from Extreme Weather and Wildfire, 2000-2021

Administrative Unit(s): Arlington,VA	
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Туре	# of Events	Property Damage Estimate	Direct Deaths
Riverine and Lakeshore Flooding	24	\$3,150,000.00	1
Tornadoes and Waterspouts	3	\$1,500,000.00	0
Wind Damage	101	\$1,347,000.00	0
Cold Temperature Extremes	5	\$15,000.00	0
Hail	10	\$0.00	0
Drought	7	\$0.00	0
Hurricanes, Typhoons and Tropical Storms	1	\$0.00	0
Ice Storms, Freezing Fog and Sleet	5	\$0.00	0
Heavy Rain	8	\$0.00	0
Snowstorms	12	\$0.00	0

Top Property Damaging Storm Events, 2000-2021 Administrative Unit(s): Arlington,VA

Rank	Date	Туре	Property Damage Estimate	Direct Deaths
1	06/25/2006	Riverine and Lakeshore Flooding	\$3,000,000.00	0
2	09/24/2001	Tornadoes and Waterspouts	\$1,000,000.00	0
3	08/07/2000	Wind Damage	\$500,000.00	0
4	07/01/2021	Tornadoes and Waterspouts	\$500,000.00	0
5	07/01/2021	Wind Damage	\$226,000.00	0
6	07/17/2018	Riverine and Lakeshore Flooding	\$100,000.00	0
7	08/05/2010	Wind Damage	\$52,000.00	0
8	07/04/2006	Wind Damage	\$50,000.00	0
9	04/02/2016	Wind Damage	\$50,000.00	0
10	07/25/2018	Riverine and Lakeshore Flooding	\$50,000.00	0
11	08/26/2021	Wind Damage	\$42,000.00	0
12	09/01/2021	Wind Damage	\$27,000.00	0
13	06/04/2008	Wind Damage	\$25,000.00	0
14	07/12/2006	Wind Damage	\$25,000.00	0
15	06/28/2013	Wind Damage	\$22,000.00	0

Dominant Climate Change Hazards

This section explores the dominant climate hazards that Arlington National Cemetery is likely to be exposed to in the future, compared to its exposure based on the modeled historical baseline (1950-2005) data. To bracket the range of potential future conditions, the data are presented for two climate epochs (a 30-year average centered on 2050 [2035-2064] and another centered on 2085 [2070-2099]). For each epoch, information for two future scenarios* is provided: a Higher emissions scenario that assumes minimal greenhouse gas mitigation and, therefore, higher rates of warming and a Lower emissions scenario that assumes more aggressive greenhouse gas mitigation and, therefore, lower rates of warming.

* The Higher scenario corresponds to Representative Concentration Pathway (RCP) 8.5, and the Lower scenario corresponds to RCP4.5. Both of these RCPs are used in climate modeling studies.

Ranked Climate Exposure Hazards for the Higher Scenario (and the hazard's greatest contributing indicator)

Rank	2050-Higher	2085-Higher
1	Drought (Mean Annual Runoff)	Drought (Mean Annual Runoff)
2	Energy Demand (5-Day Maximum Temperature)	Energy Demand (5-Day Maximum Temperature)
3	Riverine Flooding (Extreme Precipitation Days)	Riverine Flooding (Extreme Precipitation Days)
4	Extreme Temperature (5-Day Maximum Temperature)	Extreme Temperature (5-Day Maximum Temperature)
5	Wildfire (Flash Drought Frequency)	Wildfire (Flash Drought Frequency)
6	Land Degradation (Aridity)	Land Degradation (Aridity)
7	Historical Extreme Conditions (Tornado Frequency)	Historical Extreme Conditions (Tornado Frequency)

Heat Exposure Hazard

Changing temperatures are the driving force behind all climate change hazards, both directly (through factors such as excess morbidity and mortality) and indirectly (through changes to drought, wildfire, flooding, coastal inundation, and other hazards).

Indicator ID	Indicator Name		2050 Lower	2050 Higher	2085 Lower	2085 Higher
402	5-Day Maximum Temperature (°F)	94	99	101	101	105
401	Days Above 95°F (days/year)		23	32	31	64
405	High Heat Index Days* (days/year)	29	69	76	78	107

* The Wet Bulb Globe Temperature cannot be calculated with the data available from climate models, so the National Weather Service Heat Index is provided as an estimate of the combined effects of heat and humidity on people working and exercising outdoors.

DoD Observed Threatened and Endangered Species on Arlington National Cemetery

The following table lists the Threatened and Endangered Species (TES) observed on this site from the DoD's TES list.

Endangered Species Report

Observed Threatened and Endangered Species (TES) data from the DoD TES list is not currently available for this site and may be provided in a future release.

Climate Change Vulnerability of Natural Resources

The following figure summarizes the anticipated vulnerability of natural resources on this installation to seven climate-related hazards (drought, wildfire, extreme temperature, coastal flooding, riverine flooding, land degradation, and historical extreme conditions).

For the purposes of this analysis, natural resources are defined as the subset of highly imperiled species that are known or predicted to occur on the installation – these are referred to as potential Threatened, Endangered, and At-Risk Species (TER-S).

- On the left side of the figure, a single bar shows the percent of species that are vulnerable to at least one climate-related hazard (red) versus the percent that are not vulnerable to any climate-related hazard (blue).
- In the center of the figure, the list of potential TER-S is provided (including their broad taxonomic group, common, and scientific names) and the climate-related hazards to which each species is vulnerable are indicated by small colored boxes (colors indicate the corresponding climate-related hazard shown on the right of the figure).
- On the right side of the figure, vulnerability to each climate hazard is summarized using the number and percentage of all species vulnerable across all hazards.

Vulnerability of each potential TER-S to each climate-related hazard has been assessed based on a combination of: 1) known threats to the species, as highlighted during the NatureServe conservation status ranking process; 2) the particular habitats the species is associated with and their known susceptibility to climate-related hazards, 3) ecological characteristics of the species and their implied effect on vulnerability to climate-related hazards.

Please note that certain restrictions on the identity of species may apply in this figure, based on the restrictions placed by the local NatureServe Network program. Evidence of the occurrence of species indicated with "(Restricted Species)" is based on restricted data, which do not allow the precise identity of the species to be shared.

All data collected and/or compiled, analyzed, and visualized by NatureServe. For a more detailed breakdown of the conservation status and distribution of actual and potential TER-S on this installation, please contact NatureServe's Applied Data Science team(<u>ada_science@natureserve.org</u>) to get access to NatureServe's DoD TER-S Explorer (<u>https://natureserve.shinyapps.io/explorer_dod</u>)).



Figure generated on 2023-08-16

Additional Resources

The Climate Mapping for Resilience and Adaptation (CMRA) tool is an interactive application that provides statistics, maps, and reports that can help people document their climate exposure, now and in the future. (<u>https://resilience.climate.gov/</u>)

The FEMA Flood Map Service Center (MSC) is the official public source for flood hazard information produced in support of the National Flood Insurance Program (NFIP). Use the MSC to find your official flood map, access a range of other flood hazard products, and take advantage of tools for better understanding flood risk. (<u>https://msc.fema.gov/portal/home</u>)

The National Flood Hazard Layer (NFHL) is a geospatial database that contains current effective flood hazard data. FEMA provides the flood hazard data to support the National Flood Insurance Program. (<u>https://www.fema.gov/flood-maps/national-flood-hazard-layer</u>)

The National Hydrography Dataset (NHD) represents the water drainage network of the United States with features such as rivers, streams, canals, lakes, ponds, coastline, dams, and streamgages. The NHD is the most up-to-date and comprehensive hydrography dataset for the Nation. (https://www.usgs.gov/national-hydrography/national-hydrography-dataset)

Climate Change Exposure Overview

This section provides an overview of the key climate change concerns of the region in which Arlington National Cemetery is located.

UNITED STATES



NOAA State Climate Summaries

https://statesummaries.ncics.org/

Regional Exposure

Southeast Summary

Global Exposure

Global Climate Summary

RECORD OF NON-APPLICABILITY (RONA)

Project/Action Name: Environmental Impact Statement for the Removal of Confederate Memorial at Arlington National Cemetery, Arlington Virginia

Proposed Project Period: January 2024

- The project above has been evaluated for Section 176 of the Clean Air Act. Project related emissions were estimated to evaluate the applicability of General Conformity regulations (40 CFR Part 93 Subpart B). The regulations apply to Federal actions occurring in regions designated as nonattainment or areas subject to maintenance plans that exceed *de minimis* emission thresholds established for actions with the potential to have significant air quality impacts.
- 2. Arlington National Cemetery is in Arlington County, Virginia, which is part of the National Capital Interstate Air Quality Control Region. This area is designated as being in moderate nonattainment for the 2015 8-hour ozone National Ambient Air Quality Standard (NAAQS) and maintenance area for the 2008 8-hour ozone NAAQ and the carbon monoxide NAAQS. It is unclassified or in attainment for all other criteria pollutants. The area is also within the Ozone Transport Region. Federal *de minimis* thresholds applicable to the project area are 100 tons nitrogen oxides (NOx) per year, 50 tons volatile organic compounds (VOCs) per year, and 100 tons carbon monoxide (CO) per year.
- 3. Total direct and indirect emissions of carbon monoxide and ozone precursors NOx and VOCs from this project have been estimated (see attached supporting calculations and assumptions). Estimates of nitrogen oxides (0.050 tons per year) volatile organic compounds (0.068 tons per year), and carbon monoxide (0.996 tons per year) are significantly less than the respective *de minimis* threshold values.
- 4. A Record of Non-Applicability has been prepared for this action since proposed emissions are clearly de minimis and a conformity determination is not required.

Emission Source Data								
Construction Activity/Equipment Type Power Rating $(Hp)^1$ Load Factor ² # Active Engines Hrs per Day Days of operation Hrs of operation								
Crane (100 Ton)	262	0.43	1	8	21	168		
Highway Truck (Peterbilt 579, Class 8)	605	0.59	6	11	1	11		
Telehandler (12 Ton)	130	0.21	1	8	21	168		
Portable Trailer Mounted Generator Set	67	0.43	2	8	21	168		
Handheld Concrete Ring Saw	7.4	0.78	1	8	21	168		

1. Horsepower (hp) from equipment data sheets and EP1110-1-8 Construction Equipment Ownership and Operating Expense Schedule-Region II, USACE, 2022.

2. Equipment Load Factors (LF) from Median Life, Annual Activity, and Load Factor Values for Nonroad Engine Emissions Modeling, EPA-420-R-10-016, revised July 2010.

Emission Source Data							
Construction Activity/Equipment TypeHp-Hrs ³ Gallons of fuel ⁴							
Crane (100 Ton)	18927	980.34					
Highway Truck (Peterbilt 579, Class 8)	23559	1220.26					
Telehandler (12 Ton)	4586	237.56					
Portable Trailer Mounted Generator Set	9680	557.41					
Handheld Concrete Ring Saw	970	93.83					

3. hp-hr = hp*LF*# of engines*days of operation*hrs/day

4. Gallons of fuel (gal) = Brake-specific fuel consumption rate (BSFC) (g/hp-hr)*horsepower-hours (hp-hr)/fuel density (g/gal)

BSFC = 166.47 g diesel/hp-hr for crane, truck, telehandler and 185.7 g diesel/hp-hr for generators (EPA 420-R-10-018) and 275.79 g gasoline/hp-hr for saw (EPA-420R-10-19). Fuel density assumed to be 3214 g diesel/gal and 2850 g gasoline/gal.

Construction Activity / Equipment Type	Emission Factors for Construction Equipment ⁵						
construction Activity/Equipment Type	VOC (g/hp-hr)	CO (g/hp-hr)	NOx (g/hp-hr)	PM10 (g/hp-hr)	PM2.5 (g/hp-hr)	SO2 (g/hp-hr)	
Crane (100 Ton)	0.15	2.61	0.30	0.015	0.014	0.0035	
Highway Truck (Peterbilt 579, Class 8)	0.15	15.50	0.20	0.01	0.01	0.0035	
Telehandler (12 Ton)	0.15	3.73	0.30	0.015	0.014	0.0035	
Portable Trailer Mounted Generator Set	0.19	3.73	3.33	0.022	0.022	0.0039	
Handheld Concrete Ring Saw	54.38	449.48	1.07	7.7	7.08	0.0344	

Construction Activity/Equipment Type	Emission Factors for Construction Equipment ⁵					
construction Activity/Equipment Type	CO2 (kg/gal)	CH4 (g/gal)	N2O (g/gal)			
Crane (100 Ton)	10.21	1.01	0.94			
Highway Truck (Peterbilt 579, Class 8)	10.21	0.0095 (g/mile)	0.0431 (g/mile)			
Telehandler (12 Ton)	10.21	1.01	0.94			
Portable Trailer Mounted Generator Set	10.21	1.01	0.94			
Handheld Concrete Ring Saw	8.78	7.12	0.50			

5. See end of last table for emission factor notes and references.

General Conformity Applicability Analysis and Emission Estimates for Memorial Removal in Arlington County, VA 10-Oct-2023

Construction Activity / Equipment Type	Total Criteria Pollutant Emissions from Construction Activities ⁶						
construction Activity/Equipment Type	VOC (lbs)	CO (lbs)	NOx (lbs)	PM10 (lbs)	PM2.5 (lbs)	SO2 (lbs)	
Crane (100 Ton)	6.32	108.86	12.44	0.63	0.58	0.15	
Highway Truck (Peterbilt 579, Class 8)	7.79	805.04	10.39	0.52	0.52	0.18	
Telehandler (12 Ton)	1.53	37.68	3.01	0.15	0.14	0.04	
Portable Trailer Mounted Generator Set	4.00	79.54	71.03	0.47	0.47	0.08	
Handheld Concrete Ring Saw	116.25	960.90	2.29	16.46	15.14	0.07	
Total Project Emissions (lbs)	135.90	1992.02	99.16	18.23	16.85	0.52	
Total Project Emissions (tons)	0.068	0.996	0.050	0.009	0.008	0.0003	
De Minimis Thresholds (tons/year) ⁷	50	100	100	NA	NA	NA	
Conformity Determination Required?	No	No	No	No	No	No	

6. Total Pollutant Emissions (lbs) = Emission Source Data (hp-hrs) * Emission Factors (g/hp-hr) * (0.0022 lbs/g).

7. General Conformity de minimis thresholds do not apply to projects located in attainment areas for pollutants.

Construction Activity/Equipment Type	Total GHG Emissions from Construction Activities ⁸					
construction Activity/Equipment Type	CO2 (lbs)	CH4 (lbs)	N2O (lbs)	CO2e (lbs) ⁹		
Crane (100 Ton)	22066.73	2.18	2.03	22835.58		
Highway Truck (Peterbilt 579, Class 8)	27466.94	0.10	0.46	28410.41		
Telehandler (12 Ton)	5347.25	0.53	0.49	5544.87		
Portable Trailer Mounted Generator Set	12546.88	1.24	1.16	13001.68		
Handheld Concrete Ring Saw	1816.26	1.47	0.10	2844.81		
Total Project Emissions (lbs)	69244.06	5.53	4.24	72637.34		
Total Project Emissions (tons)	34.62	0.0028	0.0021	36.32		

8. Total Pollutant Emissions (lbs) = Emission Source Data (gal or miles) * Emission Factors (kg/gal, g/gal, or g/mile) * (2.2 lb/kg or 0.0022 lbs/g).

9. Carbon dioxide equivalent (CO2e)=xCO+xCO2+yN2O+zCH4: x=100 yr global warming potential (GWP) for CO and CO 2=1, y=100 yr GWP for N2O=298, z=100 yr GWP for CH4=25 No Federal significance threshold has been established for construction-related mobile source GHG emissions from a project

Emission factor notes and references:

- Nonroad Compression-Ignition Engines: Exhaust Emission Standards, EPA-420-B-16-022 March 2016 (Tier 4 VOC, CO, NOx, PM standards for crane, telehandler, and generator). Assume 95% NOx for standard given in NMHC+NOx (generator).

- Heavy-Duty Highway Compression-Ignition Engines and Urban Buses: Exhaust Emission Standards, EPA-420-B-16-018, March 2016. (2007 VOC, CO, NOx, PM standards for highway truck).

-40 CFR Part 1054.103 - Phase 3 Emission Standards for Handheld Engines (Phase 3 VOC, CO, NOx standards for handheld saw). Assume 2% NOx for standard given in HC+NOx. - Exhaust Emission Factors for Nonroad Engine Modeling: Spark-Ignition, EPA 420-R-10-019, July 2010 (Phase 2 PM emissions and BSFC for handheld saw; 0.92 weight fraction of PM from gasoline fueled engines assumed to be smaller than 2.5 microns; 0.03 weight fraction of fuel sulfur assumed to be converted to direct PM in gasoline engines).

- Exhaust and Crankcase Emission Factors for Nonroad Engine Modeling - Compression Ignition, EPA 420-R-10-018, July 2010 (BSFC rate for crane, truck, telehandler, generator;

0.97 fraction of PM from diesel fueled engines assumed to be smaller than 2.5 microns; 0.30 fraction of fuel sulfur assumed assumed to be conversed to direct PM in diesel engine) - Conversion Factors for Hydrocarbon Emission Components, EPA420-R-05-015, December 2005 (conversions used for VOC emission factors: 1.07 VOC/NMHC for diesel and

1.034 VOC/THC for 2-stroke gasoline engine).

General Conformity Applicability Analysis and Emission Estimates for Memorial Removal in Arlington County, VA 10-Oct-2023

Emission factors notes and references (continued):

- Gasoline Sulfur Standards, EPA-420-B-16-004, March 2016 (80 ppm for handheld saw: assume 0.00008 weight fraction of sulfur in gasoline fuel).

- Highway and Nonroad, Locomotive, and Marine Eisel Fuel Sulfur Standards (15 ppm for crane, highway truck, telehandler, generator set: assume 0.000015 weight fraction of sulfur in nonroad diesel fuel).

- Sulfur dioxide emmission factor (g/hp-hr)=(BSFC(g/hp-hr)*(1-fraction of fuel sulfur converted to direct PM)-hydrocarbon emissions (g/hp-hr))*weight fraction of sulfur in fuel *2 (g SO2 formed/g S).

⁻Lead is not a significant pollutant generated from this type of action.

- 2023 Greenhouse Gas (GHG) Emission Factors Hub, EPA, September 2023. Emission factors for mobile combusion of diesel fuel and motor gasoline (CO 2),

on-road heavy duty diesel vehicle (year 2007-2020) and non-road construction/mining diesel and industrial/commercial gasoline (2-stroke) equipment (CH4, N2O).

Project Assumptions

Project duration: 1 month (January 2024)

Actual working days (21) = Project days (31) - weekend days (8) - holidays (2)

8-hour work days for offroad construction equipment

All offroad equipment operating concurrently every working hour of project for a worst-case emissions scenario.

800-mile (11-hr) onroad truck trips from ANC to disposition at Anniston, AL. Assume all onroad emissions take place in Arlington County for worst-case scenario. Note: Anniston's Calhoun County is unclassified or in attainment for all NAAQSs, thus General Conformity Rule requirements do not apply at disposition location.



U.S. Fish and Wildlife Service National Wetlands Inventory

ANC NWI download 091123



September 11, 2023

Wetlands



Estuarine and Marine Deepwater

Estuarine and Marine Wetland

- arine Wetland
- Freshwater Pond

Freshwater Emergent Wetland

Freshwater Forested/Shrub Wetland

Lake Other Riverine This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

NEPA Assist 091323





United States Department of the Interior

FISH AND WILDLIFE SERVICE Virginia Ecological Services Field Office 6669 Short Lane Gloucester, VA 23061-4410 Phone: (804) 693-6694 Fax: (804) 693-9032



In Reply Refer To: Project code: 2024-0013575 Project Name: Monument removal November 07, 2023

Federal Nexus: yes Federal Action Agency (if applicable): Army

Subject: Record of project representative's no effect determination for 'Monument removal'

This letter records your determination using the Information for Planning and Consultation (IPaC) system provided to the U.S. Fish and Wildlife Service (Service) on November 07, 2023, for 'Monument removal' (here forward, Project). This project has been assigned Project Code 2024-0013575 and all future correspondence should clearly reference this number. **Please carefully review this letter.**

Ensuring Accurate Determinations When Using IPaC

The Service developed the IPaC system and associated species' determination keys in accordance with the Endangered Species Act of 1973 (ESA; 87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.) and based on a standing analysis. All information submitted by the Project proponent into IPaC must accurately represent the full scope and details of the Project.

Failure to accurately represent or implement the Project as detailed in IPaC or the Northern Long-eared Bat Rangewide Determination Key (Dkey), invalidates this letter. *Answers to certain questions in the DKey commit the project proponent to implementation of conservation measures that must be followed for the ESA determination to remain valid.*

Determination for the Northern Long-Eared Bat

Based upon your IPaC submission and a standing analysis, your project has reached the determination of "No Effect" on the northern long-eared bat. To make a no effect determination, the full scope of the proposed project implementation (action) should not have any effects (either positive or negative), to a federally listed species or designated critical habitat. Effects of the action are all consequences to listed species or critical habitat that are caused by the proposed action. A

consequence is caused by the proposed action if it would not occur but for the proposed action and it is reasonably certain to occur. Effects of the action may occur later in time and may include consequences occurring outside the immediate area involved in the action. (See § 402.17).

Under Section 7 of the ESA, if a federal action agency makes a no effect determination, no consultation with the Service is required (ESA §7). If a proposed Federal action may affect a listed species or designated critical habitat, formal consultation is required except when the Service concurs, in writing, that a proposed action "is not likely to adversely affect" listed species or designated critical habitat [50 CFR §402.02, 50 CFR§402.13].

Other Species and Critical Habitat that May be Present in the Action Area

The IPaC-assisted determination for the northern long-eared bat does not apply to the following ESA-protected species and/or critical habitat that also may occur in your Action area:

- Monarch Butterfly *Danaus plexippus* Candidate
- Tricolored Bat *Perimyotis subflavus* Proposed Endangered

You may coordinate with our Office to determine whether the Action may affect the animal species listed above and, if so, how they may be affected.

Next Steps

Based upon your IPaC submission, your project has reached the determination of "No Effect" on the northern long-eared bat. If there are no updates on listed species, no further consultation/ coordination for this project is required with respect to the northern long-eared bat. However, the Service recommends that project proponents re-evaluate the Project in IPaC if: 1) the scope, timing, duration, or location of the Project changes (includes any project changes or amendments); 2) new information reveals the Project may impact (positively or negatively) federally listed species or designated critical habitat; or 3) a new species is listed, or critical habitat designated. If any of the above conditions occurs, additional coordination with the Service should take place to ensure compliance with the Act.

If you have any questions regarding this letter or need further assistance, please contact the Virginia Ecological Services Field Office and reference Project Code 2024-0013575 associated with this Project.

Action Description

You provided to IPaC the following name and description for the subject Action.

1. Name

Monument removal

2. Description

The following description was provided for the project 'Monument removal':

Removal of bronze elements of a monument on top of a granite base. Granite base will remain undisturbed.

The approximate location of the project can be viewed in Google Maps: <u>https://www.google.com/maps/@38.8761451,-77.077252409945,14z</u>



DETERMINATION KEY RESULT

Based on the information you provided, you have determined that the Proposed Action will have no effect on the Endangered northern long-eared bat (Myotis septentrionalis). Therefore, no consultation with the U.S. Fish and Wildlife Service pursuant to Section 7(a)(2) of the Endangered Species Act of 1973 (87 Stat. 884, as amended 16 U.S.C. 1531 *et seq.*) is required for those species.

QUALIFICATION INTERVIEW

1. Does the proposed project include, or is it reasonably certain to cause, intentional take of the northern long-eared bat or any other listed species?

Note: Intentional take is defined as take that is the intended result of a project. Intentional take could refer to research, direct species management, surveys, and/or studies that include intentional handling/encountering, harassment, collection, or capturing of any individual of a federally listed threatened, endangered or proposed species?

No

2. Does any component of the action involve construction or operation of wind turbines?

Note: For federal actions, answer 'yes' if the construction or operation of wind power facilities is either (1) part of the federal action or (2) would not occur but for a federal agency action (federal permit, funding, etc.). *No*

3. Is the proposed action authorized, permitted, licensed, funded, or being carried out by a Federal agency in whole or in part?

Yes

4. Is the Federal Highway Administration (FHWA), Federal Railroad Administration (FRA), or Federal Transit Administration (FTA) funding or authorizing the proposed action, in whole or in part?

No

5. Are you an employee of the federal action agency or have you been officially designated in writing by the agency as its designated non-federal representative for the purposes of Endangered Species Act Section 7 informal consultation per 50 CFR § 402.08?

Note: This key may be used for federal actions and for non-federal actions to facilitate section 7 consultation and to help determine whether an incidental take permit may be needed, respectively. This question is for information purposes only.

Yes

6. Is the lead federal action agency the Environmental Protection Agency (EPA) or Federal Communications Commission (FCC)? Is the Environmental Protection Agency (EPA) or Federal Communications Commission (FCC) funding or authorizing the proposed action, in whole or in part?

No

- 7. Is the lead federal action agency the Federal Energy Regulatory Commission (FERC)? *No*
- 8. Have you determined that your proposed action will have no effect on the northern longeared bat? Remember to consider the <u>effects of any activities</u> that would not occur but for the proposed action.

If you think that the northern long-eared bat may be affected by your project or if you would like assistance in deciding, answer "No" below and continue through the key. If you have determined that the northern long-eared bat does not occur in your project's action area and/or that your project will have no effects whatsoever on the species despite the potential for it to occur in the action area, you may make a "no effect" determination for the northern long-eared bat.

Note: Federal agencies (or their designated non-federal representatives) must consult with USFWS on federal agency actions that may affect listed species [50 CFR 402.14(a)]. Consultation is not required for actions that will not affect listed species or critical habitat. Therefore, this determination key will not provide a consistency or verification letter for actions that will not affect listed species. If you believe that the northern long-eared bat may be affected by your project or if you would like assistance in deciding, please answer "No" and continue through the key. Remember that this key addresses only effects to the northern long-eared bat. Consultation with USFWS would be required if your action may affect another listed species or critical habitat. The definition of Effects of the Action can be found here: https://www.fws.gov/media/northern-long-eared-bat-assisted-determination-key-selected-definitions

Yes

PROJECT QUESTIONNAIRE

Will all project activities by completed by April 1, 2024?

Yes

IPAC USER CONTACT INFORMATION

Agency: Army

Address:1 Memorial AvenueCity:ArlingtonState:VAZip:22211