Research, Education, and Economics Agricultural Research Service

#### FINDING OF NO SIGNIFICANT IMPACT

#### BELTSVILLE AREA RESEARCH CENTER APU FORCE MAIN REPLACEMENT

#### Finding of No Significant Impact (FONSI)

In accordance with the requirements of the National Environmental Policy Act (NEPA) and implementing procedures, an environmental assessment (EA) was prepared to analyze the potential impacts of replacing a damaged sewer force main line to prevent damage to water quality and human health. The EA was performed by Wetland Studies and Solutions, and is attached at the end of this FONSI letter.

#### **Purpose and Need**

This project is needed to replace a damaged sewer force main line. The existing pipe is exposed in the stream bed and has been damaged. The damaged pipe is allowing the release of sewage into Beaver Dam Creek, which has been recognized as a High Quality (Tier II) water by the Maryland Department of the Environment (MDE). In addition to the water quality impacts, the sewage leak poses a threat to human health.

#### **Proposed Action and Alternatives**

The US Department of Agriculture (USDA), Agricultural Research Service (ARS) considered two alternatives plus a "No Action" alternative in this EA:

- Under the Proposed Action Alternative 1, The project will replace the existing, damaged line using HDD construction methodology to reduce ground disturbance. The installation will be located within the existing sewer easement, which is maintained frequently as herbaceous vegetation. The replacement of the existing line will serve to support the sewage treatment needs of the USDA Beltsville facility while maintaining water quality.
- Under the Proposed Action Alternative 2, the sewer line would be replaced using open trench construction methodology. This alternative would result in significant ground disturbance, including disturbance to State and Federally regulated wetlands and waterways.
- Under the No Action alternative, the proposed action to replace the existing, damaged sewer line would not be implemented. Sewage would continue to damage water quality and would pose a threat to human health in downstream communities..

#### **Public Engagement**

ARS will publish a Notice of Availability (NOA) for the final EA and FONSI. The NOA will be published on the USDA Northeast Area website once this FONSI has been executed. The final EA and FONSI will be available upon request.

#### **Potential Impacts**

The EA considered the potential environmental impacts of the Proposed Action including cumulative impacts. The analysis completed in the EA found that no significant impacts on environmental resources would result from the implementation of the Proposed Action. The Proposed Action will be implemented in compliance with the following best management practices and mitigation measures:

| Impacts Summary                     |  |   |  |  |
|-------------------------------------|--|---|--|--|
| Resource Area                       | Alternatives   | Mitigation Measures / Best<br>Practices for Proposed Action |  |  |
| Land Use, Zoning, and Aesthetics    | <b>Proposed Action:</b> No significant impacts identified. | Mitigation Measures: None. Best Practices: None.            |  |  |
|                                     | <b>Alternative 2:</b> No significant impacts identified.   |   |  |  |
|                                     | <b>No Action Alternative:</b> No impacts identified.       |   |  |  |
| Transportation and Parking          | <b>Proposed Action:</b> No significant impacts identified. | Mitigation Measures: None. Best Practices: None.            |  |  |
|                                     | <b>Alternative 2:</b> No significant impacts identified.   |   |  |  |
|                                     | <b>No Action Alternative:</b> No impacts identified.       |   |  |  |
| Recreation                          | <b>Proposed Action:</b> No significant impacts identified. | Mitigation Measures: None. Best Practices: None.            |  |  |
|                                     | <b>Alternative 2:</b> No significant impacts identified.   |   |  |  |
|                                     | No Action Alternative: No impacts identified.              |   |  |  |
| Utilities: Energy                   | Proposed Action: No significant impacts identified.        | Mitigation Measures: None. Best Practices: None.            |  |  |
|                                     | <b>Alternative 2:</b> No significant impacts identified.   |   |  |  |
|                                     | <b>No Action Alternative:</b> No impacts identified.       |   |  |  |
| Utilities: Water and Sewer Capacity | <b>Proposed Action:</b> No significant impacts identified. | Mitigation Measures: None. Best Practices: None.            |  |  |
|                                     | Alternative 2: No significant impacts identified.          |   |  |  |
|                                     | No Action Alternative: No impacts identified.              |   |  |  |

# USDA – AGRICULTURAL RESEARCH SERVICES

| Impacts Summary            |  |   |  |  |
|----------------------------|--|---|--|--|
| Resource Area              | Alternatives   | Mitigation Measures / Best<br>Practices for Proposed Action |  |  |
| Noise                      | <b>Proposed Action:</b> No significant impacts identified. | Mitigation Measures: None. Best Practices: None.            |  |  |
|                            | Alternative 2: No significant impacts identified.          |   |  |  |
|                            | No Action Alternative: No impacts identified.              |   |  |  |
| Solid and Hazardous Waste  | <b>Proposed Action:</b> No significant impacts identified. | Mitigation Measures: None.  Best Practices: None.           |  |  |
|                            | Alternative 2: No significant impacts identified.          |   |  |  |
|                            | <b>No Action Alternative:</b> No impacts identified.       |   |  |  |
| Air Quality                | Proposed Action: No significant impacts identified.        | Mitigation Measures: None. Best Practices: None.            |  |  |
|                            | Alternative 2: No significant impacts identified.          |   |  |  |
|                            | No Action Alternative: No impacts identified.              |   |  |  |
| Geology, Topography, Soils | <b>Proposed Action:</b> No significant impacts identified. | Mitigation Measures: None. Best Practices: None.            |  |  |
|                            | Alternative 2: No significant impacts identified.          |   |  |  |
|                            | No Action Alternative: No impacts identified.              |   |  |  |
| Farmland                   | Proposed Action: No significant impacts identified.        | Mitigation Measures: None.  Best Practices: None.           |  |  |
|                            | Alternative 2: No significant impacts identified.          |   |  |  |
|                            | No Action Alternative: No impacts identified.              |   |  |  |

# USDA – AGRICULTURAL RESEARCH SERVICES

| Impacts Summary                   |  |   |  |  |  |
|-----------------------------------|--|---|--|--|--|
| Resource Area Alternatives        |  | Mitigation Measures / Best<br>Practices for Proposed Action   |  |  |  |
| Water Resources: Surface<br>Water | Proposed Action: Minor temporary impacts identified including ground disturbance.  Alternative 2: Significant impacts identified including ground disturbance  No Action Alternative: Continuous impacts identified due to ongoing sewage leak into Beaverdam Creek. | Mitigation Measures: Restore area to pre-construction conditions.  Best Practices: Follow MDE's Best Management Practices for Working in Nontidal Wetlands, Wetland Buffers, Waterways, and 100-Year Floodplains. |  |  |  |
| Water Resources:<br>Floodplains   | Proposed Action: Minor temporary impacts identified including ground disturbance.  Alternative 2: Significant impacts identified including ground disturbance.   | Mitigation Measures: Restore area to pre-construction conditions.  Best Practices: Follow MDE's Best Management Practices for Working in Nontidal Wetlands, Wetland Buffers, Waterways, and 100-Year Floodplains. |  |  |  |
|                                   | No Action Alternative: No impacts identified.  |   |  |  |  |
| Water Resources: Wetlands         | <b>Proposed Action:</b> Minor temporary impacts identified including ground disturbance.   | Mitigation Measures: Restore area to pre-construction conditions.  Best Practices: Follow MDE's Best Management Practices for Working in Nontidal Wetlands, Wetland Buffers, Waterways, and 100-Year              |  |  |  |
|                                   | <b>Alternative 2:</b> Significant impacts identified including ground disturbance.   | Floodplains.  |  |  |  |
|                                   | No Action Alternative: Continuous impacts identified due to ongoing sewage leak into Beaverdam Creek.  |   |  |  |  |

| Impacts Summary   |  |  |  |  |
|---|--|--|--|--|
| Resource Area   | Alternatives   | Mitigation Measures / Best<br>Practices for Proposed Action  |  |  |
| Water Resources: Federally Protected Water Resources      | <b>Proposed Action:</b> Minor temporary impacts identified including ground disturbance.                     | <b>Mitigation Measures:</b> Restore area to pre-construction conditions.   |  |  |
|   | Alternative 2: Significant impacts identified including ground disturbance.                                  | Best Practices: Follow MDE's Best Management Practices for Working in  |  |  |
|   | <b>No Action Alternative:</b> Continuous impacts identified due to ongoing sewage leak into Beaverdam Creek. | Nontidal Wetlands, Wetland Buffers,<br>Waterways, and 100-Year<br>Floodplains.   |  |  |
| Biological Resources:<br>Vegetation, Wildlife,<br>Habitat | <b>Proposed Action:</b> Minor temporary impacts identified including herbaceous vegetation clearing.         | Mitigation Measures: Restore impacted areas using native seed mixes.  Best Practices: Restore impacted areas using native seed mixes.  |  |  |
|   | Alternative 2: Minor temporary impacts identified including herbaceous vegetation clearing.                  | areas using native seed mixes  |  |  |
|   | <b>No Action Alternative:</b> Continuous impacts identified due to ongoing sewage leak into Beaverdam Creek. |  |  |  |
| Biological Resources:<br>Vegetation, Wildlife,<br>Habitat | Proposed Action: Minor temporary impacts identified including herbaceous vegetation clearing.                | Mitigation Measures: None Best Practices: Although not anticipated, if any federally protected species were identified during ground disturbing construction activities, all work would be halted and the Facilities, Safety, and Real Property Team would be notified immediately. Work in the sensitive area would not resume until all appropriate measures to ensure compliance with the ESA were implemented. |  |  |
|   | Alternative 2: Minor temporary impacts identified including herbaceous vegetation clearing.                  |  |  |  |
|   | <b>No Action Alternative:</b> Continuous impacts identified due to ongoing sewage leak into Beaverdam Creek. |  |  |  |

| Impacts Summary                                   |  |  |  |  |
|---|--|--|--|--|
| Resource Area                                     | Alternatives   | Mitigation Measures / Best Practices for Proposed Action |  |  |
| Cultural Resources:<br>Historic Districts, Sites, | <b>Proposed Action:</b> No significant impacts identified. | Mitigation Measures: None. Best Practices: None.         |  |  |
| Buildings, Structures                             | <b>Alternative 2:</b> No significant impacts identified.   |  |  |  |
|   | <b>No Action Alternative:</b> No impacts identified.       |  |  |  |
| Cultural Resources:<br>Archaeological Resources   | Proposed Action: No significant impacts identified.        | Mitigation Measures: None.  Best Practices: None.        |  |  |
|   | Alternative 2: No significant impacts identified.          |  |  |  |
|   | No Action Alternative: No impacts identified.              |  |  |  |
| Environmental Justice                             | Proposed Action: No significant impacts identified.        | Mitigation Measures: None.  Best Practices: None.        |  |  |
|   | Alternative 2: No significant impacts identified.          |  |  |  |
|   | No Action Alternative: No impacts identified.              |  |  |  |
| Socioeconomic Resources                           | Proposed Action: No significant impacts identified.        | Mitigation Measures: None.  Best Practices: None.        |  |  |
|   | Alternative 2: No significant impacts identified.          |  |  |  |
|   | <b>No Action Alternative:</b> No impacts identified.       |  |  |  |

#### **Finding of No Significant Impact**

After careful review of the Final EA, I have concluded that implementation of the Proposed Action will not generate significant controversy or have a significant impact on the quality of the human or natural environment. Therefore, as evidenced by my signature below, I determine that the Proposed Action will have no significant impact and the action will be implemented. This analysis fulfills the requirements of NEPA and the CEQ regulations. An Environmental Impact Statement will not be prepared, and the USDA ARS is issuing this FONSI.

| Signed:                        |      |
|--------------------------------|------|
| Thomas Shanower                | Date |
| Area Director                  |      |
| Agricultural Research Service  |      |
| U.S. Department of Agriculture |      |

# Environmental Assessment

USDA Beltsville Force Main USDA Beltsville Terminus of Road E Beltsville, MD 20770

# U.S. Department of Agriculture Agricultural Research Service

August 15, 2024

Prepared By:



1131 Benfield Boulevard, Suite L Millersville, Maryland 21108 Tel: 410-672-5990 Email: contactus@wetlands.com



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# **Acronyms**

0.2PFA 0.2-percent-annual-chance Flood Approach

ARS Agricultural Research Service

BARC Beltsville Agricultural Research Center

BFE Base Flood Elevation

CBCA Chesapeake Bay Critical Area
CFR Code of Federal Requirements
CISA Climate-informed Science Approach

COMAR Code of Maryland Regulations

CWA Clean Water Act

EA Environmental Assessment

EO Executive Order

EPA Environmental Protection Agency

ESA Endangered Species Act

FEMA Federal Emergency Management Agency
FFRMS Federal Flood Risk Management Standard

FONSI Finding of No Significant Impact
FVA Freeboard Value Approach
HDD Horizontal Directional Drilling

IPaC Information for Planning and Conservation

MBTA Migratory Bird Treaty Act

MDE Maryland Department of the Environment

NEPA National Environmental Policy Act NFIP National Flood Insurance Program

NPDES National Pollutant Discharge Elimination System

NRI Nationwide River Inventory

NWSRS National Wild and Scenic Rivers System

T&E Threatened & Endangered

USACE United States Army Corps of Engineers

USC United States Code

USDA United States Department of Agriculture USFWS United States Fish and Wildlife Service

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| FIGURE 1.1 EXPOSED SEWER PIPE WITHIN STREAM. SOURCE: WETLAND STUDIES AND SOLUTIONS, INC 6     |
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# 1 Purpose and Need

1

2

# 1.1 Purpose of the Environmental Assessment

- 3 This Environmental Assessment (EA) is being prepared to evaluate the effects associated with
- 4 this proposed action and complies with the National Environmental Policy Act (NEPA) in
- 5 accordance with Council on Environmental Quality regulations (40 CFR 1500-1509) and
- 6 Department of Agriculture (7 CFR 1b) and Agricultural Research Service (7 CFR 520)
- 7 implementing procedures.
- 8 The purpose of this EA is to evaluate the potential environmental impacts of replacing a
- 9 damaged sewer force main line to prevent damage to water quality and human health.
- 10 NEPA requires that federal agencies consider the effects of a proposed action and any
- reasonable alternatives on the human environment. This EA evaluates the impacts of actions
- 12 resulting from the implementation of the proposed action as compared to the No Action
- 13 alternative. This report also evaluates the impact of open trench construction, as compared to
- 14 the proposed method (Horizontal Directional Drilling (HDD)). The information presented in this
- document will serve as the basis for deciding whether implementing the proposed action
- would result in a significant impact on the environment, requiring the preparation of an
- 17 Environmental Impact Statement or that no significant impacts would occur, which would
- therefore result in a Finding of No Significant Impact (FONSI).

## 1.2 Background

- 20 The Agricultural Research Service (ARS) is the U.S. Department of Agriculture's (USDA) chief
- 21 scientific in-house research agency. ARS delivers scientific solutions to national and global
- 22 agricultural challenges. ARS provides scientific tools and innovative solutions for American
- 23 farmers, producers, industry, and communities to support the nourishment and well-being of
- 24 all people, sustain the Nation's agroecosystems and natural resources, and ensures economic
- competitiveness and excellence of the Nation's agriculture. Approval of projects (e.g., research,
- 26 construction, real property) requires ARS to comply with the National Environmental Policy Act
- 27 (NEPA).

19

- 28 This project is located at the USDA Beltsville location in Beltsville, Prince George's County,
- 29 Maryland. The sewer line replacement will impact a swath of land between the terminus of
- 30 Road E and an unnamed road south of Beaver Dam Road.

#### 1.3 Purpose and Need

- 32 This project is needed to replace a damaged sewer force main line. The existing pipe is exposed
- 33 in the stream bed and has been damaged (Figure 1.1). The damaged pipe is allowing the
- release of sewage into Beaver Dam Creek, which has been recognized as a High Quality (Tier II)
- 35 water by the Maryland Department of the Environment (MDE). In addition to the water quality
- impacts, the sewage leak poses a threat to human health.

31



Figure 1.1 Exposed and damaged sewer pipe within stream. Source: Wetland Studies and Solutions, Inc.

# 1.4 Incomplete and Unavailable Information

- 42 The Council on Environmental Quality regulations implementing NEPA (40 CFR 1502.21)
- 43 require that an agency preparing a NEPA analysis indicate when information is incomplete or
- 44 unavailable and explain the relevance of the missing information to the analysis. Statements
- 45 to that effect have been included in this EA, where appropriate.

#### 1.5 Public Notice and Participation

- 47 No public participation activities have been undertaken at this time. This project will need a
- 48 Wetlands and Waterways Permit from MDE. This permit process may include a public notice
- 49 and public hearing.

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# **2 Description of Alternatives**

## 2.1 Alternative 1: Proposed Action

- 52 Under this alternative, ARS would approve funds for the replacement of the sewer line using
- 53 HDD construction methods.
- 54 Project Location

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61

- 55 This project is located at the USDA Beltsville location in Beltsville, Prince George's County,
- 56 Maryland. The sewer line replacement will impact a swath of land between the terminus of
- 57 Road E (39.019629, -76.885743) and an unnamed road south of Beaver Dam Road (39.025009,
- 58 -76.884671). The linear project area traverses maintained utility easements agricultural fields
- and a forested stream valley on property owned by the USDA.



Figure 2.1: Location of proposed activity. Source: Wetland Studies and Solutions, Inc.

- 62 Construction Activities
- 63 The proposed sewer line replacement will take place within the yellow polygon shown in
- 64 **Figure 2.1**. The project will replace the existing, damaged line using HDD construction
- 65 methodology to reduce ground disturbance. The installation will be located within the existing
- sewer easement, which is maintained frequently as herbaceous vegetation.
- 67 Operations
- The replacement of the existing line will serve to support the sewage treatment needs of the
- 69 USDA Beltsville facility while maintaining water quality.

## 70 **2.2 Alternative 2: Open Trench Construction**

- 71 Under this alternative, the sewer line would be replaced using open trench construction
- 72 methodology. This alternative would result in significant ground disturbance, including
- 73 disturbance to State and Federally regulated wetlands and waterways.

#### 74 2.3 Alternative 2: No Action

- 75 Under the No Action alternative, the proposed action to replace the existing, damaged sewer
- 76 line would not be implemented. Sewage would continue to damage water quality and would
- pose a threat to human health in downstream communities.

# **3 Affected Environment and Environmental Impacts**

This section describes the existing conditions of the environmental resources that have the potential to be impacted by the proposed action. The Affected Environment includes the existing properties, land, and environmental resources in the area of the proposed action location. Boundaries of the Affected Environment are limited to the confined structures present at the locations where work under the proposed action would occur and the immediate surroundings. The boundaries of the affected environment are limited to the proposed Limit of Disturbance, as represented by the yellow polygon shown on **Figure 2.1.** 

Impacts to the Affected Environment for each resource area are analyzed in this chapter. The impacts of any construction or research activities associated with the proposed action will be included in this analysis. This chapter also describes the resource areas that have been dismissed from further analysis.

The impacts analysis review addresses the duration and intensity of the impact on the resource. The duration of the impact will include both short and long-term impacts. Impact intensity is the degree to which the proposed action would beneficially or adversely affect a resource. Impact intensities are quantified as negligible, minor, moderate, or significant. As part of the impacts analysis, mitigation measures and best management practices are identified to lessen the intensity of impact on some resource areas.

The following resources are considered in this EA:

#### Resources

#### Water Resources

- Surface Water
- Floodplains
- Wetlands
- Federally Protected Water Resources

#### **Biological Resources**

- Vegetation, Wildlife, and Habitat
- Federally Protected Species

# **3.1 Resource Areas Dismissed from Analysis**

The following resource areas have been dismissed from further analysis because the proposed action was found not to have any potential to impact these resources.

### Land Use, Zoning, and Aesthetics:

This project utilizes an existing sewer easement, which is currently mowed several times a year to prevent woody growth from damaging the existing sewer line. There will be no changes to Land Use or Zoning and only temporary impacts to Aesthetics. The area will be restored using native seed mixes post-construction, maintaining the long-term aesthetics of the area.

#### **Transportation and Parking:**

This project will not result in long-term changes to transportation or for the facility.

#### Recreation:

This project will not result in long-term changes to recreation opportunities for the facility.

#### **Utilities: Energy:**

This project will not result in long-term changes to energy consumption for the facility.

#### **Utilities: Sewer and Water:**

This project will not result in long-term changes to water and sewer usage for the facility. The purpose of this project is to replace a damaged, existing sewer line to allow the facility to maintain its existing sewer utilization. There will be no long-term impacts to the utility service of the facility.

#### Noise:

This project will not result in long-term changes to the noise experienced by the surrounding environment. Temporary increases in noise associated with construction are limited, and not outside of the range of sound experienced by the surrounding environment on a normal basis.

#### **Solid and Hazardous Waste:**

This project will neither produce nor result in long-term changes to solid or hazardous waste produced by the facility. The purpose of this project is to replace a damaged sewer pipe and by completing this project, solid and hazardous waste impacts on the surrounding environment will be reduced.

#### Air Quality:

This project will not result in long-term changes to the air quality experienced by the surrounding environment. Temporary impacts to air quality associated with construction are limited, and not outside of the range of sound experienced by the surrounding environment on a normal basis.

#### Geology, Topography, Soils:

This project will not result in long-term changes to the geology, topography, and or soils within or near the project area. Any long-term impacts to these resources occurred at the initial installation of the existing sewer pipe. Any temporary changes to topography because of construction will be restored to the original condition. The use of HDD construction methodology minimizes the potential impacts by limiting ground disturbance.

#### **Farmland**

Upland portions of the project area (non-wetland areas) are defined as Prime Farmland. Temporary impacts are associated with construction, but the area will be restored when the

project is completed. Impacts to Prime Farmland would have occurred during the initial installation of the existing sewer line and no new impacts are anticipated.

# **Geologic Hazards**

There are no known geologic hazards within the project area.

#### Cultural Resources: Historic Districts, sites, buildings, structures

According to the National Register of Historic Places, there are no cultural Resources within the project area. This project is located within the boundaries of the Beltsville Agricultural Research Center (BARC), which is listed on the Maryland Inventory of Historic Places. The project area is near the BARC Swine Research Barn, BARC Swine Research Laboratory, and BARC Trichinosis Laboratory, which are listed individually on the Maryland Inventory of Historic Places. The project will not result in long-term changes to the viewshed of these resources. Temporary impacts are associated with construction, but viewsheds will be restored when the project is completed.

#### **Cultural Resources: Archaeological**

Impacts to archaeological resources would have occurred during the initial installation of the existing sewer line and no new impacts are anticipated.

#### **Environmental Justice:**

This project entails the replacement of an existing sewer pipe and will not have any new environmental justice implications. The project will protect water quality and reduce threats to human health downstream of the project site, resulting in a net benefit.

#### Socioeconomic Resources:

This project may have minor, temporary socioeconomic benefits in terms of supporting jobs in the construction industry, however, there are no long-term socioeconomic impacts associated with this project.

#### 3.2 Water Resources

#### **Definition of the Resource**

- Water quality standards are provisions of State or Federal law which consist of a designated use or uses for the waters of the United States and water quality criteria for such waters based upon such uses. Water quality standards are to protect the public health or welfare, enhance the quality of water and serve the purposes of the Clean Water Act (40 CFR 131.3).
- **Stormwater** comes from rain or melting snow that runs off land and hard surfaces such as parking lots, and eventually soaks into the ground or discharges to surface water (USGS 2022a).

#### 3.2.1 Surface Water Quality

<u>Federal Requirements:</u> The Clean Water Act (CWA) regulates the water quality of all discharges into waters of the United States. The CWA establishes permit programs to regulate and restrict

pollution from both singular (defined under CWA as "point") and multiple (defined under CWA as "non-point") sources. Point sources are discrete sources of discharge such as pipes or manmade ditches, whereas non-point sources are diffuse sources of discharge such as sediment from improperly managed construction sites, crop and forest lands, and eroding streambanks (33 USC §1251).

The National Pollutant Discharge Elimination System (NPDES) Permit Program regulates point source pollution (33 USC §1342). Nonpoint sources are regulated at the state level (see below in *State Requirements*).

An NPDES Stormwater General Construction Permit is required for construction activities that would disturb more than one (1) acre of land (33 USC §1342).

<u>State Requirements:</u> The State of Maryland regulates surface water quality under the Code of Maryland (COMAR) Sections 26.08.01 and 26.08.02. Additional water quality and pollution standards are found in the Annotated Code of Maryland Section 9.

#### Affected Environment

One perennial stream, one intermittent stream, and several wetlands are located within the project area. The perennial stream is recognized by the MDE as a High-Quality Water (Tier II), however, the quality of this water is being impaired by sewage from the existing, damaged sewer line.

#### **Environmental Impacts**

#### **Evaluation Criteria**

Impacts to water resources would be considered significant if the proposed action would result in runoff, sedimentation, or other contamination that would lead to or contribute to the degradation of waters that do not meet the standards established under the CWA, interfere with state water quality standards, or violate Total Maximum Daily Load targets. Impacts would also be considered significant if the proposed action resulted in significant changes in the availability of surface or groundwater, or changes in discharge or recharge patterns of groundwater.

#### **Alternative 1: Proposed Action**

#### Construction Impacts

The proposed action would temporarily impact the wetlands and waterways located within the project boundary. The use of HDD construction methodology was selected to minimize impacts to wetlands by drilling the replacement pipe under the existing wetlands and waterways, as opposed to replacing the pipe by digging a trench through surface waters. Impacts will be minimized further using Best Management Practices. Impacted areas will be restored to pre-construction conditions in terms of topography and vegetation after the sewer pipe is replaced.

The proposed action would eliminate a pollution source that is negatively impacting water quality, providing a long-term benefit to the waterways.

#### **Alternative 2: Open Trench Construction**

Under this alternative, the pipe will be replaced by digging a trench through wetlands and streams to install the proposed pipe. This would result in a significant amount of temporary impacts to streams and wetlands. Although the impact would be temporary and the areas would be restored after the pipe is installed, a lower impact alternative is available.

This alternative would eliminate a pollution source that is negatively impacting water quality, providing a long-term benefit to the waterways.

#### Alternative 3: No Action

Under the No Action alternative, the proposed action would not be implemented. There would be no temporary impacts to water resources; however, the broken pipe would still be a source of pollution, so the No Action Alternative represents an overall negative impact to water quality.

#### 3.2.2 Floodplains

#### **Definition of the Resource**

**Floodplains** are land areas susceptible to being inundated by water from any source (44 CFR 59.1)

- A 100-year floodplain is a lowland and relatively flat area, adjacent to a river or adjoining
  inland and coastal waters, subject to a one percent or greater chance of flooding any given
  year (42 USC §4004).
- A **500-year floodplain** is an area of minimal flood hazard; a designated area that has a 1 in 500 (0.2%) chance of being met or exceeded in any given year (42 USC §4004).
- The **FFRMS floodplain** is the area subject to flooding as determined by one of the following approaches (EO 13690):
  - Climate-informed Science Approach (CISA) Utilizing the best-available, actionable data and methods that integrate current and future changes in flood based on science.
  - Freeboard Value Approach (FVA) Two (2) or three (3) feet of elevation above the 100-year, or 1 percent-annual changes, base flood elevation (BFE). Three (3) feet is used for critical actions and two (2) feet is used for other actions.
  - 0.2-percent-annual-chance Flood Approach (0.2PFA) 0.2 percent annual chance flood (also known as the 500-year food).

<u>Federal Requirements:</u> Executive Order (EO) 11988 (Floodplain Management) requires federal agencies to ensure proposed actions would not adversely affect floodplains, and to avoid development in floodplains wherever there is a practicable alternative.

EO 13690 (Establishing a Federal Flood Risk Management Standard and a Process for Further Soliciting and Considering Stakeholder Input) amended EO 11988 to establish a more protective standard for evaluating flood risk to ensure projects funded by the Federal government are more resilient to the impacts of flooding. The Federal Flood Risk Management Standard (FFRMS) requires agencies to expand management from the current base flood level

to a higher vertical elevation and corresponding horizontal floodplain. The FFRMS ensures projects funded through taxpayer dollars last as long as intended by addressing current and future flood risks. The FFRMS applies to actions where federal funds are used for new construction, substantial improvement, or to address substantial damage to structures or facilities.

The National Flood Insurance Program (NFIP) provides access to federally backed insurance to local communities in exchange for adopting floodplain management ordinances and regulations to reduce future flood risks. To support the NFIP, the Federal Emergency Management Agency (FEMA) identifies flood hazard areas throughout the country on maps called Flood Insurance Rate Maps. These maps identify Special Flood Hazard Areas and other areas of flood hazards (42 UCS Ch. 50).

<u>State Requirements:</u> The State of Maryland and Prince George's County follow FEMA recommendations and regulate impacts to floodplains under their respective regulations.

#### Affected Environment

A large floodplain associated with Beaverdam Creek is located within the project area. Although the stream is incised, the presence of wetlands within the floodplain and the overall urbanized condition of the watershed indicate that the floodplain is active.

#### **Environmental Impacts**

#### **Evaluation Criteria**

Impacts to floodplains would be considered significant if the floodplain is directly or indirectly altered enough to present a substantial increased flood danger to the area or if the proposed action is noncompliant with applicable state or local floodplain ordinances.

#### **Alternative 1: Proposed Action**

The proposed action would temporarily impact floodplains associated with construction access; however, all impacted areas will be restored to original grades and vegetative conditions after the proposed pipe is installed. Further, the choice of HDD as the preferred construction methodology further minimizes the impact to the floodplain. The project will utilize Best Management Practices for working in floodplains to reduce the effects of disturbance.

#### Alternative 2: Open Trench Construction

Under this alternative, the pipe will be replaced by digging a trench through the floodplain to install the proposed pipe. This would result in a significant amount of temporary impacts to the floodplain. Although the impact would be temporary and the areas would be restored after the pipe is installed, a lower impact alternative is available.

#### **Alternative 3: No Action**

Under the No Action alternative, the proposed action would not be implemented. There would be no temporary impacts to the floodplain.

#### 3.2.3 Wetlands

#### **Definition of the Resource**

A **wetland** is an area inundated by surface or ground water with a frequency sufficient to support and under normal circumstances does or would support a prevalence of vegetative or aquatic life that requires saturated or seasonally saturated soil conditions for growth and reproduction. Wetlands generally include swamps, marshes, bogs, and similar areas such as sloughs, potholes, wet meadows, river overflows, mud flats, and natural ponds (EO 11990).

<u>Federal Requirements:</u> Under Section 404 of the CWA, the United States Army Corps of Engineers (USACE) regulates the discharge of dredged or filled material into waters and wetlands of the United States. Activities that are regulated under Section 404 include residential development, infrastructure development (highways, roads), and mining projects.

EO 11990 (Protection of Wetlands) requires federal agencies to consider alternatives to wetland sites when planning a proposed action and to limit potential damage if an activity affecting a wetland cannot be avoided.

<u>State Requirements:</u> Maryland regulates impacts to wetland and a 25' buffer under COMAR 26.23.

#### Affected Environment

Jurisdictional waters of the U.S. within the project area include Beaverdam Creek (a USGS-mapped perennial stream), which flows eastward through the center of the project area, and one unnamed intermittent tributary of Beaverdam Creek, located just outside of the project area. Additionally, one PEM and one PFO wetland are in the southern portion of the project area along the eastern and western boundaries, respectively, and two PEM wetlands are located north of Beaverdam Creek in the northern portion of the project area.

#### **Environmental Impacts**

#### **Evaluation Criteria**

Impacts to wetlands would be considered significant if the proposed action would result in the direct or indirect alteration of the soil, structure, hydrology, or the vegetation to a wetland or its buffer and the action was not carried out in compliance with permit requirements.

#### **Alternative 1: Proposed Action**

#### **Construction Impacts**

The proposed action would temporarily impact the wetlands and waterways located within the project boundary. The use of HDD construction methodology was selected to minimize impacts to wetlands by drilling the replacement pipe under the existing wetlands and waterways, as opposed to replacing the pipe by digging a trench through wetlands and surface waters. Impacts will be minimized further using Best Management Practices. Impacted areas

will be restored to pre-construction conditions in terms of topography and vegetation after the sewer pipe is replaced.

The proposed action would eliminate a pollution source that is negatively impacting water quality, providing a long-term benefit to the wetlands.

#### **Alternative 2: Open Trench Construction**

Under this alternative, the pipe will be replaced by digging a trench through wetlands and streams to install the proposed pipe. This would result in a significant amount of temporary impacts to streams and wetlands. Although the impact would be temporary and the areas would be restored after the pipe is installed, a lower impact alternative is available.

This alternative would eliminate a pollution source that is negatively impacting water quality, providing a long-term benefit to the wetlands.

#### Alternative 3: No Action

Under the No Action alternative, the proposed action would not be implemented. There would be no temporary impacts to water resources; however, the broken pipe would still be a source of pollution, so the No Action Alternative represents an overall negative impact to water quality.

# 3.2.4 Federally Protected Water Resources (Coastal Zones, Coastal Barrier Resource Systems, Wild & Scenic Rivers, and Nationwide River Inventory Rivers)

#### **Definition of the Resource**

- **Coastal Zones** are the coastal waters (including the lands therein and thereunder) and the adjacent shorelands (including the waters therein and thereunder), strongly influenced by each other and in proximity to the shorelines of the several coastal states, and includes islands, transitional and intertidal areas, salt marshes, wetlands, and beaches (16 USC §1453).
- **Coastal Barriers** are depositional geological features that are subject to wave, tidal, and wind energies, and protects landward aquatic habitats from direct wave attack (16 USC §3502).
- Wild and Scenic Rivers System (16 USC §1273)
  - **Wild Rivers** are free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted.
  - **Scenic Rivers** are free of impoundments, with shorelines or watersheds still largely primitive and shorelines largely undeveloped, but accessible in places by roads.
  - The **NRI** is a listing of free-flowing river segments in the United States that have been identified as having one or more "outstandingly remarkable" natural or cultural value(s). NRI river segments are potential candidates for inclusion in the NWSRS (16 USC §1276).

<u>Federal Requirements:</u> The Coastal Zone Management Act provides for the management of coastal resources (marine resources, wildlife, and nutrient-rich areas) in coastal and Great Lakes states, with the objective of preventing additional loss of living marine resources; alterations in ecological systems; and decreases in undeveloped areas available for public use (16 USC §1451).

The Coastal Barrier Resources Act restricts the development of the designated areas of the Coastal Barrier Resources System (16 USC §3501).

The Wild and Scenic Rivers Act (WSRA) created the National Wild and Scenic Rivers System (NWSRS). WSRA provides for the protection, preservation, and enhancement of designated wild and scenic rivers by prohibiting or restricting uses that would affect the river's "free flowing" condition. The WSRA recognizes and allows for appropriate use and development of the NWSRS. The WSRA also requires that projects receiving federal assistance look to avoid or mitigate potential impacts to river segments with Nationwide Rivers Inventory (NRI) designation (16 USC §1271).

<u>State Requirements:</u> Maryland regulates impacts to tidal wetlands under the Annotated Code of Maryland Section 5. Maryland also regulates impacts to natural resources within 1000' of tidal waters under the Chesapeake Bay Critical Area (CBCA) Act, Natural Resources Article, Annotated Code of Maryland, Section 8. Maryland Department of Natural Resources identifies Wetlands of Special State Concern, which are defined as wetlands of exceptional quality or habitat value. These wetlands are offered special protections under Maryland's wetland protection regulations (COMAR 26.23).

#### Affected Environment

There are no Wild & Scenic rivers, NRI rivers, coastal zones as defined by the CZMA, coastal barrier resource systems, as defined by the CBRA or Chesapeake Bay Critical Areas as defined by the CBCA Act. All wetlands within the project area are defined as Wetlands of Special State Concern.

#### **Environmental Impacts**

#### **Evaluation Criteria**

Impacts to coastal barrier resources and coastal zones would be considered significant if the recreational, ecological, historical, or aesthetic values of these resources were degraded. Impacts to Wild and Scenic Rivers and NRI segments would be considered significant if the proposed action led to the deterioration of any of the "Outstandingly Remarkable Values" of these rivers. Impacts to all of these resources could be considered significant if activities violated applicable state or Federal Requirements for federally protected waters.

#### **Alternative 1: Proposed Action**

#### **Construction Impacts**

The proposed action would temporarily impact Wetlands of Special State Concern located within the project boundary. The use of HDD construction methodology was selected to minimize impacts to Wetlands of Special State Concern by drilling the replacement pipe under the existing Wetlands of Special State Concern, as opposed to replacing the pipe by digging a trench through Wetlands of Special State Concern. Impacts will be minimized further using Best Management Practices. Impacted areas will be restored to pre-construction conditions in terms of topography and vegetation after the sewer pipe is replaced.

The proposed action would eliminate a pollution source that is negatively impacting water quality, providing a long-term benefit to the Wetlands of Special State Concern.

#### **Alternative 2: Open Trench Construction**

Under this alternative, the pipe will be replaced by digging a trench through Wetlands of Special State Concern to install the proposed pipe. This would result in a significant amount of temporary impacts to Wetlands of Special State Concern. Although the impact would be temporary and the areas would be restored after the pipe is installed, a lower impact alternative is available.

This alternative would eliminate a pollution source that is negatively impacting water quality, providing a long-term benefit to the Wetlands of Special State Concern.

#### Alternative 3: No Action

Under the No Action alternative, the proposed action would not be implemented. There would be no temporary impacts to Wetlands of Special State Concern; however, the broken pipe would still be a source of pollution, so the No Action Alternative represents an overall negative impact to Wetlands of Special State Concern.

### 3.3 Biological Resources

#### 3.3.1 Vegetation, Wildlife, and Habitat

#### **Definition of the Resource**

- **Vegetation** is defined as the plant life in an area.
- **Wildlife** is defined as any animal species that is native or introduced and is characteristic of a region.
- **Habitats** are defined as environments or ecosystems that provide food, water, shelter (trees, shrubs, vegetation), and space to support the needs of wildlife, and provide ecological functions such as water purification and nutrient cycling (NRCS 2022c).

<u>State Requirements:</u> The State of Maryland regulates impacts to vegetation, wildlife, and habitats under Natural Resources Article, Annotated Code of Maryland, Section 8.

#### Affected Environment

The project area is a maintained utility easement dominated by herbaceous vegetation. The area is flanked by forest. These habitats would be utilized by typical suburban species including deer, foxes, racoons, various small rodents, songbirds, turtles, frogs, and small fish. Other than deer, no game species were observed.

#### **Environmental Impacts**

#### **Evaluation Criteria**

Impacts to vegetation, wildlife, or habitat would be considered significant if the proposed action would result in the disruption or disturbance of nearby wildlife populations; the introduction of invasive or exotic species; the permanent loss of natural vegetation communities; or violate tribal, local, state, or Federal Requirements related to wildlife and their habitats.

#### **Alternative 1: Proposed Action**

#### **Construction Impacts**

The proposed action would temporarily impact vegetation and habitat located within the project boundary. Impacted areas will be restored to pre-construction conditions using native seed mixes.

No forest clearing is proposed.

#### **Alternative 2: Open Trench Construction**

This action would temporarily impact vegetation and habitat located within the project boundary. Impacted areas will be restored to pre-construction conditions using native seed mixes.

No forest clearing is proposed.

#### Alternative 3: No Action

Under the No Action alternative, the proposed action would not be implemented. There would be no activities with the potential to impact vegetation, wildlife, or habitat. Therefore, there would be no impacts on these biological resources under the No Action alternative.

#### 3.3.2 Federally Protected Species

#### **Definition of the Resource**

- T&E species and their critical habitats are designated by the USFWS under the ESA.
- **Critical habitats** are defined as sensitive ecological areas that contain the physical or biological features that are needed by a threatened or endangered species (6 USC §1531-1544).
- Migratory Birds are any birds, whatever their origin and whether or not raised in captivity, which belong to a species listed in § 10.13, or which is a mutation or a hybrid of any such species, including any part, nest, or egg of any such bird, or any product, whether or not manufactured, which consists, or is composed in whole or part, of any such bird or any part, nest, or egg thereof (50 CFR 10.12).

<u>Federal Requirements:</u> The Endangered Species Act (ESA) establishes a national program for the conservation of threatened and endangered (T&E) species. Under the ESA, species that are, or are likely to become in danger of extinction are listed as "endangered" or "threatened." Section 7 of the ESA requires federal agencies to ensure that actions do not jeopardize listed species or destroy or adversely affect the critical habitat of the species. Section 7 includes

requirements for when a federal agency must consult with USFWS to help determine a proposed action's effect on a listed species and its critical habitat(s).

The Bald Eagle Protection Act of 1940 (16 USC §668-668c) prohibits anyone, without a permit issued by the Secretary of Interior, from "taking" bald or golden eagles, including their parts (including feathers), nests, or eggs.

#### **Endangered Species Act Definitions (50 CFR 402.2)**

- **Endangered:** The classification provided to an animal or plant in danger of extinction throughout all or a significant portion of its range.
- **Threatened:** Any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.
- **Jeopardize the continued existence:** To engage in an action that reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species.
- **Destruction or adverse modification of critical habitat:** A direct or indirect alteration that appreciably diminishes the value of critical habitat for both the survival and recovery of a listed species. Such alterations include, but are not limited to, alterations adversely modifying any physical or biological features that make the basis for determining the habitat to be critical.
- **No Effect:** The appropriate conclusion when the action agency and/or USFWS determines its proposed action will not affect a listed species or designated critical habitat.

The Migratory Bird Treaty Act (MBTA, 16 USC §703–712) implements four (4) international conservation treaties that the United States entered into with Canada, Mexico, Japan, and Russia. The MBTA prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization by the Department of Interior USFWS.

#### Migratory Bird Treaty Act Definitions (50 CFR 10.12)

- **Migratory Bird:** Any bird, whatever its origin and whether or not raised in captivity, which belongs to a species listed in 50 CFR 10.13, or which is a mutation or a hybrid of any such species, including any part, nest, or egg of any such bird, or any product, whether or not manufactured, which consists, or is composed in whole or part, of any such bird or any part, nest, or egg thereof.
- **Take:** To pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to pursue, hunt, shoot, wound, kill, trap, capture, or collect.

## Affected Environment

Three (3) threatened, endangered, or candidate species were identified as having the potential to occur within the Affected Environment area. See **Table 1** for an overview of these species. There is no critical habitat within the proposed action's Affected Environment. See **Appendix C** for a copy of the IPaC Report.

| Common /<br>Scientific Name                                | Taxa (e.g.,<br>Fish) | Federal<br>Status      | Habitat Requirements   |
|--|----------------------|------------------------|--|
| Northern Long-<br>eared Bat<br>(Myotis<br>septentrionalis) | Mammal               | Threatened             | During the summer and portions of the fall and spring, Northern Long-eared Bats may be found roosting singly or in colonies underneath bark, in cavities or in crevices of both live trees and snags, or dead trees. Males and non-reproductive females may also roost in cooler places, like caves and mines. |
| Monarch Butterfly<br>( <i>Danaus plexippus</i> )           | Insect               | Candidate              | Monarch butterflies require the presence of milkweed and other flowering herbaceous plants. Adults feed on the nectar of a variety of flowers, but milkweed is a critical plant species for laying eggs and caterpillar life stages.   |
| Tricolored Bat<br>(Perimyotis<br>subflavus)                | Mammal               | Proposed<br>Endangered | During the summer and portions of the fall and spring, Tricolored Bats may be found roosting singly or in colonies in live or recently dead leaf clusters in hardwood deciduous tree.  Occasionally, they are found roosting in pine needles, barns, beneath porches, bridges, and concrete bunkers.           |

Table 1 T&E species with the potential to occur within the Affected Environment. Source: IPAC Report (Appendix C)

#### **Environmental Impacts**

#### **Evaluation Criteria**

Impacts to federally protected species would be considered significant if the proposed action would result in a take of a federally protected species or lead to impacts on designated critical habitat. Impacts would also be considered significant if noise or other disturbances resulting from the proposed action led to impacts on federally protected species in the area. Impacts to migratory birds are more likely to be significant if they occur during a species' known breeding season.

#### **Alternative 1: Proposed Action**

#### **Construction Impacts**

Temporary impacts related to construction are anticipated for monarch butterfly only. Herbaceous vegetation, possibly including milkweed, a critical habitat feature for monarch butterflies, will be cleared or damaged by construction. Impacted areas will be restored using a native seed mix post-construction.

No tree clearing is proposed, so impacts to Northern long-eared and Tricolored bat are not anticipated.

#### Alternative 2: Open Trench Construction

Temporary impacts related to construction are anticipated for monarch butterfly only. Herbaceous vegetation, possibly including milkweed, a critical habitat feature for monarch butterflies, will be cleared or damaged by construction. Impacted areas will be restored using a native seed mix post-construction.

No tree clearing is proposed, so impacts to Northern long-eared and Tricolored bat are not anticipated.

#### **Alternative 3: No Action**

Under the No Action alternative, the proposed action would not be implemented. There would be no temporary impacts to habitat for federally threatened species.

#### 3.4 Cumulative Effects

#### **Definition**

**Cumulative effects** are "the effects on the environment that result from the incremental effects of the action when added to the effects of other past, present, and reasonably foreseeable actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative effects can result from individually minor but collectively significant actions taking place over a period of time" (40 CFR 1508.1 (g)(3)).

To determine whether there is the potential for cumulatively significant impacts resulting from the proposed action and no action alternatives, a review of past, present, and planned projects in the affected area was conducted. The spatial scope for the proposed action is the project area identified in **Figure 2.1.** The temporal scope is past, present, and future planned projects within a 5-year period, consisting of 5 years in the past and 5 years in the future.

# 3.4.1 Current / Ongoing Projects

Current and Ongoing Projects within the next 5 years include routine maintenance of the utility easement.

#### 3.4.2 Past Projects

Past projects within the previous 5 years include routine maintenance of the utility easement.

#### 3.4.3 Planned Projects

The Affected Environment includes the locations of research facilities and public utilities.; therefore, future renovations or construction on these properties are unknown, but it is anticipated that any potential work on these existing structures would be minimal and would not result in a change of land use. Therefore, any potential activities do not present the potential for significant cumulative impacts.

There are no additional projects planned for within the defined Affected Environment.

#### 3.4.4 Cumulative Impacts - Summary

The proposed action is the only research that is anticipated to take place in this area within the next five (5) years. There are no concerns about the proposed project resulting in further development in the area (including transportation, energy needs, and water usage).

Based on the analysis completed in this EA, there are no cumulative impacts that would result from the incremental impact of the proposed action when added to other past, present, and reasonably foreseeable future actions.

# 3.5 Impacts Summary and Conclusions

This EA supports a Finding of No Significant Impact for the proposed action. See **Table 2** for a summary of impacts, best practices, and mitigation measures identified in this EA.

| Impacts Summary   |   |   |  |  |
|---|---|---|--|--|
| Resource Area Alternatives  |   | Mitigation Measures / Best<br>Practices for Proposed Action |  |  |
| Land Use, Zoning,<br>and Aesthetics   | Proposed Action: No significant impacts identified.  Alternative 2: No significant impacts identified.  No Action Alternative: No impacts identified. | Mitigation Measures: None.  Best Practices: None.           |  |  |
| Proposed Action: No significant impacts identified.  Transportation and Parking  Alternative 2: No significant impacts identified.  No Action Alternative: No impacts identified. |   | Mitigation Measures: None.  Best Practices: None.           |  |  |
| Recreation  | Proposed Action: No significant impacts identified.  Alternative 2: No significant impacts identified.  No Action Alternative: No impacts identified. | Mitigation Measures: None.  Best Practices: None.           |  |  |
| Utilities: Energy   | Proposed Action: No significant impacts identified.  Alternative 2: No significant impacts identified.  No Action Alternative: No impacts identified. | Mitigation Measures: None.  Best Practices: None.           |  |  |
| Utilities: Water and<br>Sewer Capacity  | Proposed Action: No significant impacts identified.  Alternative 2: No significant impacts identified.  | Mitigation Measures: None. Best Practices: None.            |  |  |

| Impacts Summary                   |  |   |  |  |
|-----------------------------------|--|---|--|--|
| Resource Area                     | Alternatives   | Mitigation Measures / Best<br>Practices for Proposed Action   |  |  |
|                                   | <b>No Action Alternative:</b> No impacts identified.                                     |   |  |  |
|                                   | <b>Proposed Action:</b> No significant impacts identified.                               | Mitigation Measures: None.  Best Practices: None.   |  |  |
| Noise                             | <b>Alternative 2:</b> No significant impacts identified.                                 |   |  |  |
|                                   | <b>No Action Alternative:</b> No impacts identified.                                     |   |  |  |
|                                   | <b>Proposed Action:</b> No significant impacts identified.                               | Mitigation Measures: None. Best Practices: None.  |  |  |
| Solid and<br>Hazardous Waste      | <b>Alternative 2:</b> No significant impacts identified.                                 |   |  |  |
|                                   | <b>No Action Alternative:</b> No impacts identified.                                     |   |  |  |
|                                   | <b>Proposed Action:</b> No significant impacts identified.                               | Mitigation Measures: None.  Best Practices: None.   |  |  |
| Air Quality                       | <b>Alternative 2:</b> No significant impacts identified.                                 |   |  |  |
|                                   | <b>No Action Alternative:</b> No impacts identified.                                     |   |  |  |
|                                   | <b>Proposed Action:</b> No significant impacts identified.                               | Mitigation Measures: None. Best Practices: None.  |  |  |
| Geology,<br>Topography, Soils     | <b>Alternative 2:</b> No significant impacts identified.                                 |   |  |  |
|                                   | <b>No Action Alternative:</b> No impacts identified.                                     |   |  |  |
|                                   | <b>Proposed Action:</b> No significant impacts identified.                               | Mitigation Measures: None. Best Practices: None.  |  |  |
| Farmland                          | <b>Alternative 2:</b> No significant impacts identified.                                 |   |  |  |
|                                   | <b>No Action Alternative:</b> No impacts identified.                                     |   |  |  |
| Water Resources:<br>Surface Water | <b>Proposed Action:</b> Minor temporary impacts identified including ground disturbance. | Mitigation Measures: Restore area to pre-construction conditions.  Best Practices: Follow MDE's Best Management Practices for Working in Nontidal Wetlands, Wetland Buffers, Waterways, and 100-Year Floodplains. |  |  |
|                                   | Alternative 2: Significant impacts identified including ground disturbance               |   |  |  |

| Impacts Summary   |  |   |  |
|---|--|---|--|
| Resource Area   | Alternatives   | Mitigation Measures / Best<br>Practices for Proposed Action   |  |
|   | <b>No Action Alternative:</b> Continuous impacts identified due to ongoing sewage leak into Beaverdam Creek. |   |  |
| Water Resources:<br>Floodplains                               | <b>Proposed Action:</b> Minor temporary impacts identified including ground disturbance.                     | Mitigation Measures: Restore area to pre-construction conditions.  Best Practices: Follow MDE's Best Management Practices for Working in Nontidal Wetlands, Wetland Buffers, Waterways, and 100-Year Floodplains. |  |
|   | Alternative 2: Significant impacts identified including ground disturbance.                                  |   |  |
|   | <b>No Action Alternative:</b> No impacts identified.   |   |  |
| Water Resources:<br>Wetlands                                  | <b>Proposed Action:</b> Minor temporary impacts identified including ground disturbance.                     | Mitigation Measures: Restore area to pre-construction conditions.  Best Practices: Follow MDE's Best Management Practices for Working in Nontidal Wetlands, Wetland Buffers, Waterways, and 100-Year Floodplains. |  |
|   | Alternative 2: Significant impacts identified including ground disturbance.                                  | ·   |  |
|   | <b>No Action Alternative:</b> Continuous impacts identified due to ongoing sewage leak into Beaverdam Creek. |   |  |
| Water Resources:<br>Federally<br>Protected Water<br>Resources | <b>Proposed Action:</b> Minor temporary impacts identified including ground disturbance.                     | Mitigation Measures: Restore area to pre-construction conditions.  Best Practices: Follow MDE's Best Management Practices for Working in Nontidal Wetlands, Wetland Buffers, Waterways, and 100-Year Floodplains. |  |
|   | Alternative 2: Significant impacts identified including ground disturbance.                                  |   |  |
|   | No Action Alternative: Continuous impacts identified due to ongoing sewage leak into Beaverdam Creek.        |   |  |

| Impacts Summary  |  |  |  |  |
|--|--|--|--|--|
| Resource Area  | Alternatives   | Mitigation Measures / Best<br>Practices for Proposed Action  |  |  |
| Biological<br>Resources:<br>Vegetation,<br>Wildlife, Habitat   | <b>Proposed Action:</b> Minor temporary impacts identified including herbaceous vegetation clearing.         | Mitigation Measures: Restore impacted areas using native seed mixes.  Best Practices: Restore impacted areas using native seed mixes   |  |  |
|  | Alternative 2: Minor temporary impacts identified including herbaceous vegetation clearing.                  |  |  |  |
|  | <b>No Action Alternative:</b> Continuous impacts identified due to ongoing sewage leak into Beaverdam Creek. |  |  |  |
| Biological<br>Resources:<br>Vegetation,<br>Wildlife, Habitat   | <b>Proposed Action:</b> Minor temporary impacts identified including herbaceous vegetation clearing.         | Mitigation Measures: None Best Practices: Although not anticipated, if any federally protected species were identified during ground disturbing construction activities, all work would be halted and the Facilities, Safety, and Real Property Team would be notified immediately. Work in the sensitive area would not resume until all appropriate measures to ensure compliance with the ESA were implemented. |  |  |
|  | Alternative 2: Minor temporary impacts identified including herbaceous vegetation clearing.                  |  |  |  |
|  | No Action Alternative: Continuous impacts identified due to ongoing sewage leak into Beaverdam Creek.        |  |  |  |
| Cultural Resources: Historic Districts, Sites, Buildings, Structures  Cultural Resources: Archaeological | Proposed Action: No significant impacts identified.  Alternative 2: No significant impacts identified.       | Mitigation Measures: None. Best Practices: None.   |  |  |
|  | No Action Alternative: No impacts identified.  Proposed Action: No significant                               | Mitigation Measures: None.   |  |  |
|  | impacts identified. <b>Alternative 2:</b> No significant impacts identified.                                 | Best Practices: None.  |  |  |
| Resources  | <b>No Action Alternative:</b> No impacts identified.   |  |  |  |

| Impacts Summary            |  |   |  |
|----------------------------|--|---|--|
| Resource Area              | Alternatives   | Mitigation Measures / Best<br>Practices for Proposed Action |  |
|                            | <b>Proposed Action:</b> No significant impacts identified. | Mitigation Measures: None.  Best Practices: None.           |  |
| Environmental<br>Justice   | <b>Alternative 2:</b> No significant impacts identified.   |   |  |
|                            | <b>No Action Alternative:</b> No impacts identified.       |   |  |
|                            | <b>Proposed Action:</b> No significant impacts identified. | Mitigation Measures: None.  Best Practices: None.           |  |
| Socioeconomic<br>Resources | <b>Alternative 2:</b> No significant impacts identified.   |   |  |
|                            | <b>No Action Alternative:</b> No impacts identified.       |   |  |

**Table 2: Impact Summary** 

# **Appendix A. List of Preparers**

# **Haley Kelly**

M.S. Geography and Environmental Science

B.S. Environmental Science

B.A. Anthropology

Years of Experience: 11+ years

# **Appendix B. References**

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school/science/surface-runoff-and-water-cycle?qt-science\_center\_objects=0#qt-science\_center\_objects>

# **Appendix C. IPaC Official Species List and Resource List**



# United States Department of the Interior



#### FISH AND WILDLIFE SERVICE

Chesapeake Bay Ecological Services Field Office 177 Admiral Cochrane Drive Annapolis, MD 21401-7307 Phone: (410) 573-4599 Fax: (410) 266-9127

In Reply Refer To: 08/14/2024 15:19:55 UTC

Project code: 2024-0130272 Project Name: USDA Beltsville

Federal Nexus: yes

Federal Action Agency (if applicable): Army Corps of Engineers

**Subject:** Record of project representative's no effect determination for 'USDA Beltsville'

#### Dear Katelyn Hoisington:

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 August 14, 2024, for 'USDA Beltsville' (here forward, Project). This project has been assigned Project Code 2024-0130272 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, including the consequences of other activities that are caused by the proposed action. A

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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 Chesapeake Bay Ecological Services Field Office and reference Project Code 2024-0130272 associated with this Project.

### **Action Description**

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

#### 1. Name

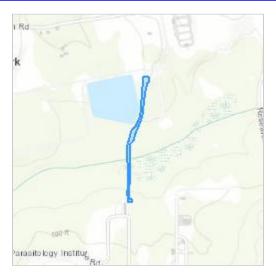
**USDA** Beltsville

#### 2. Description

The following description was provided for the project 'USDA Beltsville':

Emergency sewer pipe replacement

The approximate location of the project can be viewed in Google Maps: <a href="https://www.google.com/maps/@39.022467750000004">https://www.google.com/maps/@39.022467750000004</a>,-76.88556514905184,14z



## **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. The action area does not overlap with an area for which U.S. Fish and Wildlife Service currently has data to support the presumption that the northern long-eared bat is present. Are you aware of other data that indicates that northern long-eared bats (NLEB) are likely to be present in the action area?

Bat occurrence data may include identification of NLEBs in hibernacula, capture of NLEBs, tracking of NLEBs to roost trees, or confirmed NLEB acoustic detections. Data on captures, roost tree use, and acoustic detections should post-date the year when whitenose syndrome was detected in the relevant state. With this question, we are looking for data that, for some reason, may have not yet been made available to U.S. Fish and Wildlife Service.

No

3. 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

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

Yes

5. 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?

6. 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.

No

7. 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

- 8. Is the lead federal action agency the Federal Energy Regulatory Commission (FERC)? *No*
- 9. 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 <a href="Effects of the Action">Effects of the Action</a> can be found here: <a href="https://www.fws.gov/media/northern-long-eared-bat-assisted-determination-key-selected-definitions">https://www.fws.gov/media/northern-long-eared-bat-assisted-determination-key-selected-definitions</a>

No

10. [Semantic] Is the action area located within 0.5 miles of a known northern long-eared bat hibernaculum?

**Note:** The map queried for this question contains proprietary information and cannot be displayed. If you need additional information, please contact your State wildlife agency.

Automatically answered

11. Does the action area contain any caves (or associated sinkholes, fissures, or other karst features), mines, rocky outcroppings, or tunnels that could provide habitat for hibernating northern long-eared bats?

No

12. Is suitable summer habitat for the northern long-eared bat present within 1000 feet of project activities?

(If unsure, answer "Yes.")

**Note:** If there are trees within the action area that are of a sufficient size to be potential roosts for bats (i.e., live trees and/or snags ≥3 inches (12.7 centimeter) dbh), answer "Yes". If unsure, additional information defining suitable summer habitat for the northern long-eared bat can be found at: <a href="https://www.fws.gov/media/northern-long-eared-bat-assisted-determination-key-selected-definitions">https://www.fws.gov/media/northern-long-eared-bat-assisted-determination-key-selected-definitions</a>

Yes

13. Will the action cause effects to a bridge?

No

14. Will the action result in effects to a culvert or tunnel?

No

15. Does the action include the intentional exclusion of northern long-eared bats from a building or structure?

**Note:** Exclusion is conducted to deny bats' entry or reentry into a building. To be effective and to avoid harming bats, it should be done according to established standards. If your action includes bat exclusion and you are unsure whether northern long-eared bats are present, answer "Yes." Answer "No" if there are no signs of bat use in the building/structure. If unsure, contact your local U.S. Fish and Wildlife Services Ecological Services Field Office to help assess whether northern long-eared bats may be present. Contact a Nuisance Wildlife Control Operator (NWCO) for help in how to exclude bats from a structure safely without causing harm to the bats (to find a NWCO certified in bat standards, search the Internet using the search term "National Wildlife Control Operators Association bats"). Also see the White-Nose Syndrome Response Team's guide for bat control in structures

No

- 16. Does the action involve removal, modification, or maintenance of a human-made structure (barn, house, or other building) **known or suspected to contain roosting bats?**No
- 17. Will the action directly or indirectly cause construction of one or more new roads that are open to the public?

**Note:** The answer may be yes when a publicly accessible road either (1) is constructed as part of the proposed action or (2) would not occur but for the proposed action (i.e., the road construction is facilitated by the proposed action but is not an explicit component of the project).

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18. Will the action include or cause any construction or other activity that is reasonably certain to increase average daily traffic on one or more existing roads?

**Note:** For federal actions, answer 'yes' when the construction or operation of these facilities is either (1) part of the federal action or (2) would not occur but for an action taken by a federal agency (federal permit, funding, etc.).

No

19. Will the action include or cause any construction or other activity that is reasonably certain to increase the number of travel lanes on an existing thoroughfare?

For federal actions, answer 'yes' when the construction or operation of these facilities is either (1) part of the federal action or (2) would not occur but for an action taken by a federal agency (federal permit, funding, etc.).

No

- 20. Will the proposed action involve the creation of a new water-borne contaminant source (e.g., leachate pond pits containing chemicals that are not NSF/ANSI 60 compliant)? *No*
- 21. Will the proposed action involve the creation of a new point source discharge from a facility other than a water treatment plant or storm water system?

No

22. Will the action include drilling or blasting?

No

- 23. Will the action involve military training (e.g., smoke operations, obscurant operations, exploding munitions, artillery fire, range use, helicopter or fixed wing aircraft use)?

  No
- 24. Will the proposed action involve the use of herbicide or other pesticides (e.g., fungicides, insecticides, or rodenticides)?

No

25. Will the action include or cause activities that are reasonably certain to cause chronic nighttime noise in suitable summer habitat for the northern long-eared bat? Chronic noise is noise that is continuous or occurs repeatedly again and again for a long time.

**Note:** Additional information defining suitable summer habitat for the northern long-eared bat can be found at: <a href="https://www.fws.gov/media/northern-long-eared-bat-assisted-determination-key-selected-definitions">https://www.fws.gov/media/northern-long-eared-bat-assisted-determination-key-selected-definitions</a> *No* 

26. Does the action include, or is it reasonably certain to cause, the use of artificial lighting within 1000 feet of suitable northern long-eared bat roosting habitat?

**Note:** Additional information defining suitable roosting habitat for the northern long-eared bat can be found at: <a href="https://www.fws.gov/media/northern-long-eared-bat-assisted-determination-key-selected-definitions">https://www.fws.gov/media/northern-long-eared-bat-assisted-determination-key-selected-definitions</a> *No* 

27. Will the action include tree cutting or other means of knocking down or bringing down trees, tree topping, or tree trimming?

No

28. Will the action result in the use of prescribed fire?

No

29. Will the action cause noises that are louder than ambient baseline noises within the action area?

# **PROJECT QUESTIONNAIRE**

Will all project activities by completed by November 30, 2024? *No* 

# **IPAC USER CONTACT INFORMATION**

Agency: Wetland Studies and Solutions, Inc.

Name: Katelyn Hoisington Address: 1131 Benfield Blvd

City: Millersville

State: MD Zip: 21108

Email khoisington@wetlands.com

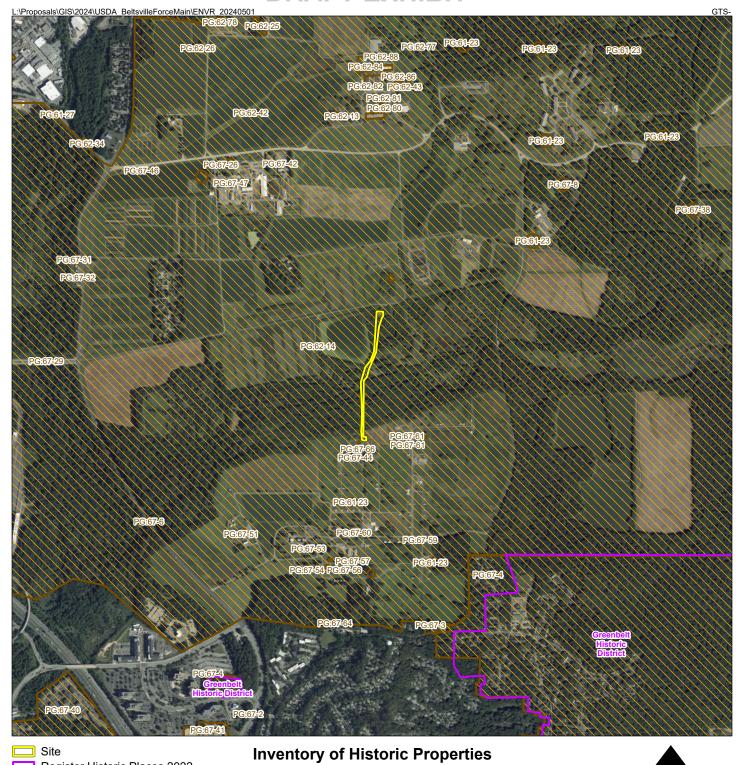
Phone: 7038957904

### LEAD AGENCY CONTACT INFORMATION

Lead Agency: Army Corps of Engineers

# **Appendix D. Section 106 Consultation**

# DRAFT EXHIBIT



**USDABeltsville Force Main** 

Source: MD Historical Trust, National Agriculture Imagery Program - 2018

Register Historic Places 2022

Maryland Inventory of Historic

Properties

**NORTH** 

Feet Original Scale: 1 " = 1,500 '

1,500