

Environmental Assessment Wilroy Pressure Reducing Station and Offline Storage Facility

HRSD
Virginia Beach, VA
March 2024

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HRSD
March 1, 2024

Prepared by Brown and Caldwell



301 Bendix Road, Suite 400
Virginia Beach, VA 23452
T: 757.518.2400

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List of Abbreviations

BMP	Best Management Practices	RWWMP	Regional Wet Weather Management Plan
CBPA	Chesapeake Bay Preservation Area	SFM	Sewer Force Main
CEQ	Council of Environmental Quality	SHPO	State Historic Preservation Office
CF	cubic feet	Sqft	Square feet
CFR	Code of Federal Regulations	SSOs	Sanitary Sewer Overflows
CIP	Capital Improvements Program	SWPPP	Stormwater Pollution Prevention Plan
CREC	Controlled Recognized Environmental Concern	THPO	Tribal Historic Preservation Officer
CWFAP	Clean Water Financing and Assistance Program	USACE	U.S. Army Corps of Engineers
EA	Environmental Assessment	USC	United States Code
EDR	Environmental Data Resources, Inc.	USFWS	U.S. Fish and Wildlife Service
EJ	Environmental Justice	VADHR	Virginia Department of Historic Resources
EJSCREEN	Environmental Justice Screen	VAFWIS	Virginia Fish and Wildlife Information Service
EO	Executive Order	VCRIS	Virginia Cultural Resources Information System
EPA	U.S. Environmental Protection Agency	VCWRLF	Virginia Clean Water Revolving Loan Fund
ESA	Environmental Site Assessment	VDACS	Virginia Department of Agriculture and Consumer Services
FEMA	Federal Emergency Management Agency	VDEQ	Virginia Department of Environmental Quality
FONSI	Finding of No Significant Impact	VDWR	Virginia Department of Wildlife Resources
HART	Hydraulic Analysis Review Team	VRRM	Virginia Runoff Reduction Method
HREC	Historic Recognized Environmental Concern	VSMP	Virginia Stormwater Management Program
HRSD	Hampton Roads Sanitation District	WOTUS	Waters of the United States
IP	Integrated Plan		
IPaC	Information for Planning and Consultation		
ISI	Institute for Sustainable Infrastructure		
If	linear feet		
MG	million gallons		
MGD	million gallons per day		
NEPA	National Environmental Policy Act		
NPDES	National Pollution Discharge Elimination System		
NRHP	National Register of Historic Places		
NWI	National Wetland Inventory		
OLSF	Offline Storage Facility		
PER	Preliminary Engineering Report		
PRS	Pressure Reducing Station		
PS	Pump Station		
REC	Recognized Environmental Concern		
RHM	Regional Hydraulic Model		

Section 1

Summary

1.1 Project Identification

Applicant: Hampton Roads Sanitation District
Address: 1434 Air Rail Avenue
Virginia Beach, VA 23455
Project #: NP014000

1.2 Contact Person

Contact Name: Chris Wilson, Project Manager
Entity: Brown and Caldwell
Address: 301 Bendix Road, Suite 400
Virginia Beach, VA 23455

1.3 Abstract

The Hampton Roads Sanitation District (HRSD) has conducted an environmental review pursuant to the National Environmental Policy Act (NEPA) of 1969 (42 United States Code [USC] 4321–4347), Council on Environmental Quality (CEQ) regulations for implementing the procedural provisions of NEPA (40 Code of Federal Regulations [CFR] §§ 1500–1508) (CEQ 2005), and the Environmental Review Process of the Clean Water Financing and Assistance Program (CWFAP) of the Virginia Department of Environmental Quality (DEQ) for the Virginia Department of Environmental Quality (VDEQ) Virginia Clean Water Revolving Loan Fund (VCWRLF) to assess the environmental impacts of constructing the Wilroy Pressure Reducing Station (PRS) and Offline Storage Facility (OLSF) Capital Improvements Program (CIP) project (NP014000), herein referred to as the Project. The Project will include a 10 million gallon per day (MGD) pump station (PS), 3 MGD tank with a 15-ft wall above grade, odor control system, emergency generator, two driveways, stormwater Best Management Practices (BMPs), and reroute of flow through the existing Sewer Force Main (SFM) 1,000 linear feet (lf) to the PRS. The Project is intended to provide pressure relief and increase system capacity for areas of Suffolk and Isle of Wight County during wet weather events thereby reducing capacity-related sanitary sewer overflows (SSOs).

HRSD is applying to the VCWRLF for a loan to finance the Wilroy PRS Project. The Preliminary Engineering Report (PER) estimates a project cost of approximately \$48.4 million.¹ As part of the VCWRLF application process, HRSD performed a Project Needs Assessment and has prepared this Environmental Assessment (EA) to fulfill the requirements of the environmental review.

1.4 Comment Period

The VDEQ will prepare a Finding of No Significant Impact (FONSI), if the agency determines. As part of this EA process, the VDEQ will have a comment period as part of the draft FONSI. The FONSI will

be distributed to interested persons and agencies for their review and will be available for public review at VDEQ for a 30-day period. Any comments received will be given due consideration. Comments should be addressed to:

Deanna Austin, Project Manager
Clean Water Financing and Assistance
Virginia Department of Environmental Quality
5636 Southern Boulevard
Virginia Beach, Virginia 23462



Section 2

Purpose and Need for Action

A PRS in the vicinity of Wilroy Road has been planned by HRSD for many years in order to reduce sanitary sewer overflows (SSOs) during wet weather events. The Wilroy PRS and OLSF Project was formally identified in the Regional Wet Weather Management Plan (RWWMP) solution set submitted to the United States Environmental Protection Agency (EPA) and VDEQ as part of the HRSD's Consent Decree ¹. In 2017, HRSD submitted to the EPA/DEQ, after amendments of the Consent Decree, an Integrated Plan (IP) with a list of high priority projects which included the Wilroy project. This plan was revised again in 2020 and finally approved in 2022.

The purpose of the Wilroy PRS and OLSF is to reduce SSOs during wet weather events. As documented in the Hydraulic Analysis Review Team (HART) Report, since 2009 there have been approximately 196 wet weather capacity-related overflows events reported in the City of Suffolk representing approximately 33 distinct locations within the City's sanitary sewer system ². The reported estimated total volume of wastewater spilled during those events was approximately 3 million gallons (MG). Also, HRSD reported approximately 6 SSOs events since 2009 with an estimated total volume of 0.6 MG, all of which occurred around the Shingle Creek gravity interceptor or at the receiving station, HRSD Suffolk PS #135. The Wilroy PRS and OLSF as defined in the RWWMP was evaluated using the Regional Hydraulic Model (RHM) with a 5-year peak flow recurrence event as an input flow to the model. The RHM showed significant mitigation of the SSOs in Suffolk with the use of the Wilroy PRS and OLSF during wet weather events. The results of this modeling were reported to the EPA and VDEQ during selection of this project as a High Priority Project for the RWWMP. The modeling efforts are documented in the Hydraulic Analysis for Wilroy PRS and OLSF (CIP NP014000) ¹.

As a Phase 1 High Priority Project in the RWWMP, HRSD must complete the Wilroy PRS/OLSF by December 31, 2030; however, HRSD is constructing two new pumping stations to replace the existing Suffolk PS #135 which will greatly benefit from the completion of this Wilroy project ¹.

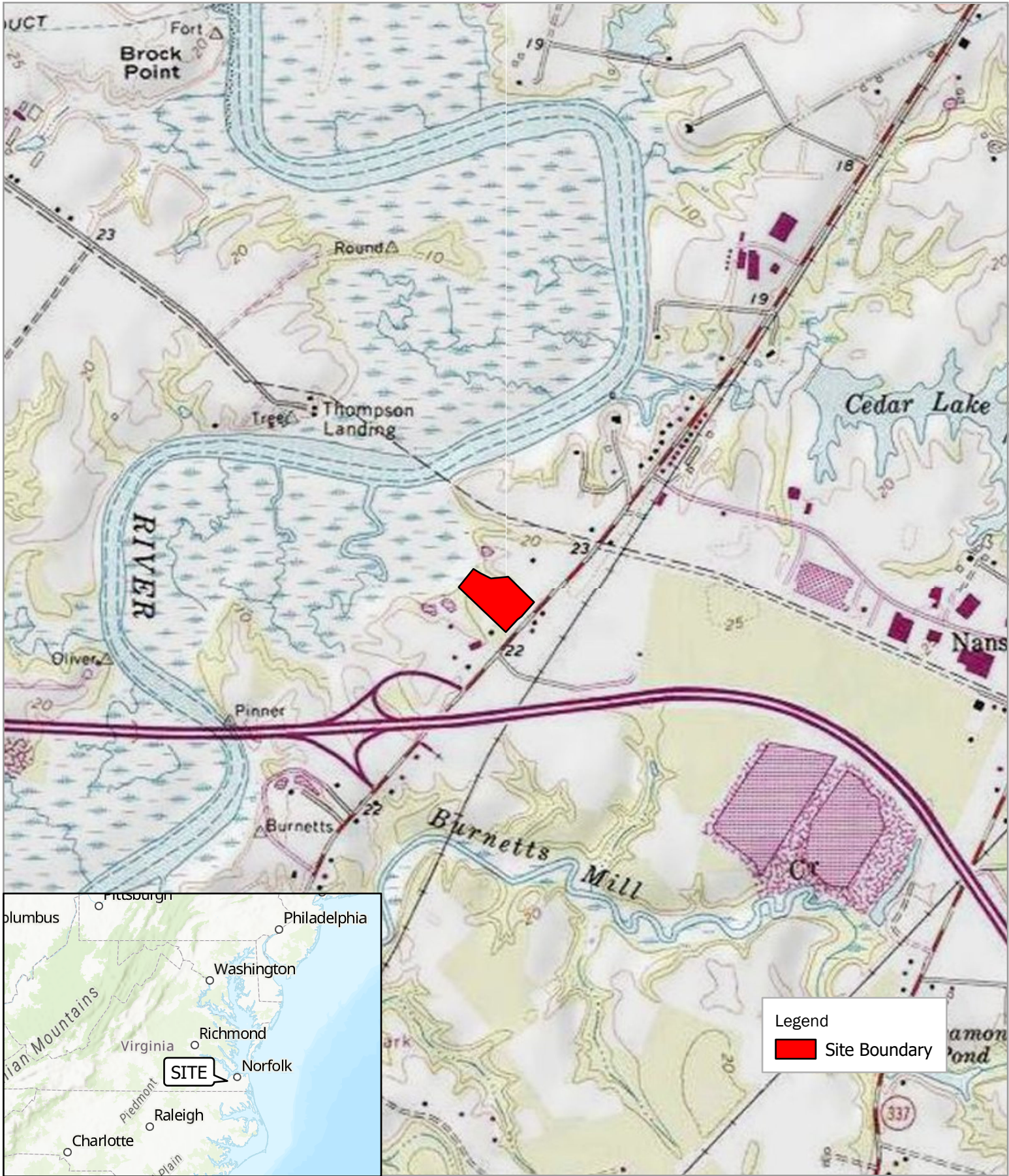
Section 3

Project Description

The Project Site, currently owned by HRSD, is approximately 5.37 acres total, with 3.5 acres of usable area, with useable area defined as being free of environmentally sensitive resources and land that is suitable for development for the purposes of this project. The proposed PRS and OLSF, to be located at 1941/1959 Wilroy Road within the City of Suffolk, VA, (see Figure 3-1) would provide pressure relief and increase system capacity for areas of Suffolk and Isle of Wight County during wet weather events. This would be accomplished through the use of a pumping facility capable of discharging 10 million gallons per day (MGD) through the downstream force main network that will reduce upstream pressures and allow Suffolk and Isle of Wight pumping stations to discharge into the force main system. In the event that the peak flow exceeds the 10 MGD capacity, a 3 million gallon (MG) offline storage tank is included in the project to temporarily store wet weather flows until pressures are reduced in the system. The facility will also include an odor control system and an emergency generator¹. Additionally, a driveway from Wilroy Road will also be constructed for HRSD personnel to access the facility. Approximately 1,000 linear feet (lf) of ductile iron pipe along Wilroy Road will be connected to the existing 30-inch SFM (SF-214) to reroute wastewater from Isle of Wight to the upstream side of the PRS facility, ultimately relieving pressure from the existing infrastructure.

The Project Site is a 5.37-acre section of land, located approximately 0.25 miles southwest of the intersection of QVC Drive and Wilroy Road in Suffolk, Virginia. The Project Site is in a region generally developed for commercial and residential use in Suffolk. The City of Suffolk Assessor's database shows that the Project Site is located at 1941 Wilroy Road [City of Suffolk Tax Parcel ID (APN) 301260000], 1949 Wilroy Road (APN 304324200), and an adjacent parcel without an address (APN 304324300) of Suffolk and owned by HRSD ⁴. HRSD completed a Phase I Environmental Site Assessment (ESA) of the entire Project Site in February 2023 as part of the process of purchasing the land. However, for the purposes of this EA, the potential impacts of the Project were evaluated using the Project Site, unless noted otherwise.

The Project Site is comprised of generally level terrain but has low lying areas along the northwest edge (toward the Nansemond River) and northern edge of the Site, which contain wetland habitats. Based on the Environmental Data Resources, Inc. (EDR) report, the Site generally slopes west-northwest. The surrounding area is mostly made up of light commercial use with some residential use located approximately 0.25 miles to the southeast. The 2019 Suffolk 7.5-minute United States Geological Survey's topographic quadrangle map indicates that the general direction of regional surface slope appears to be generally northwesterly toward the Nansemond River ³.



Prepared for: HRSD
Project #: 157943
Wilroy PRS and Tank

Date: 2/15/2023 11:33 AM

Notes: Drawn By: GRH
Checked By: KK

Spatial Reference:
Name: WGS 1984 Web Mercator Auxiliary Sphere
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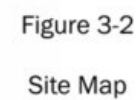
VGIN, Esri, HERE, Garmin, FAO, NOAA, USGS, EPA, Copyright:© 2013 National Geographic Society, I-cubed, Esri, USGS

Legend
 Site Boundary

Figure 1
Site Location

JTF Properties - Wilroy Road Suffolk, Virginia
Parcel ID 301260000, 304324200, and
304324300

Figure 3-1 Site Location



Brown AND Caldwell

3.1 Site Alternatives Evaluated

HRSD's HART report conducted analysis of two alternative site locations for the PRS and OLSF. Alternative 1 location is in the vicinity of the Nansemond Parkway and Upton Lane intersection. Alternative 2 location is located near the connection of the Windsor Line (SF-214) and Wilroy Road Line (SF-190). In the HART analysis, it was determined that the closer the PRS/OLSF is to the Windsor line (from Isle of Wight County) tie-in, the more benefit and relief that is provided to the system. This would mean that Alternative 2 location provides maximum relief in the upstream parts of the interceptor system. Note that if a connection point is on Wilroy Road upstream of the Windsor Line, an extension would be required to tie-in to the new PRS and OLSF ². This tie-in is important to ensure that the new PRS provides the relief to the Windsor system. In addition, 27 different properties were reviewed and ranked based on multiple criteria found within the Institute for Sustainable Infrastructure (ISI) Envision categories. These categories include the natural world, climate and resilience, quality of life, resource allocation and leadership.

Table 3-1. Site Alternatives

Site ID	Parcel ID/Owner	Site Selected (Yes/No)	Selection Criteria Not Met
1	304154000 JAMES RIVER LLC	No	Site too far downstream to be hydraulically useful
2	303737000 MINTONVILLE LLC ET ALS	No	Site too far downstream to be hydraulically useful
3	301897000 SCHULTZ JUSTIN R & CATHERINE C	No	Site too far downstream to be hydraulically useful
4	305035500 BRIDELWOOD ESTS HOA INC	No	Property being used for roadway realignment
5	300847000 CAROLYN CULPEPPER	No	Site too far downstream to be hydraulically useful
6	305035300 BRIDELWOOD ESTS HOA INC	No	Property being used for roadway realignment
7	301961000 THOMPSON REAGAN HOLLAND EXECT ET ALS	No	Property being used for roadway realignment
8	304886400 SESSOMS JOSEPH G ET AL CO EXEC	No	Property being used for roadway realignment
9	300853000 CULPEPPER JACQUELIN B TR	No	Property being used for roadway realignment
10	300849000 SOLENIS LLC	No	Property owner not willing to sell
11	300850000 SOLENIS LLC	No	Property owner not willing to sell
12	302112000 SOLENIS LLC	No	Property owner not willing to sell
13	300972300 SOLENIS LLC	No	Property owner not willing to sell
14	300981000 SOLENIS LLC	No	Property owner not willing to sell
15	300972200 SOLENIS LLC	No	Property owner not willing to sell
16	302531000 SOLENIS LLC	No	Property owner not willing to sell
17	301899100 SOLENIS LLC	No	Property owner not willing to sell
18	302842000 MICHAEL D TESTER & DAWN	No	Property heavily impacted by wetlands
19	300616500 CATERINO MILDRED GODWIN ET VIR	No	Property heavily impacted by wetlands
20	302591500 MAICO USA INC	No	Property heavily impacted by wetlands

Table 3-1. Site Alternatives				
Site ID	Parcel ID/Owner		Site Selected (Yes/No)	Selection Criteria Not Met
21	304339500	RRR ENTERPRISES LLC	No	Property not accessible from roadway
22	300520000	ECONOMIC DEVELOPMENT AUTHORITY	No	Site too small
23 (Alt 1)	304649300	CHESAPEAKE CITY OF	No	Property purchase from City would require open market sale
24 (Alt 2)	301260000 304324200 304324300	HRSD	Yes	



Legend

- Selected Site
- Site Selection Alternatives



Prepared for: HRSD
Project #: 157943
**Wilroy PRS and
OLSF Project**

Date: 12/14/2023 6:08 AM

Spatial Reference:
Name: WGS 1984 Web Mercator Auxiliary Sphere

Drawn By: K. Kowalski
Checked By: A. Horton

N
0 460 920 1,840 2,760
Feet

Figure 3-3
Site Alternatives Map

3.1.1 Selected Alternative

Following survey, geotechnical evaluation, and preliminary EA, the 1941/1949 Wilroy Road Site was the preferred option for locating the PRS and OLSF facility. The proposed facility would allow HRSD to efficiently reduce pressure and increase system capacity of the existing SFM without causing economic hardship to its customer base. In HRSDs HART analysis, it was determined that the closer the PRS/OLSF is to the Windsor line tie-in, the more benefit and relief that is provided to the system ². This would mean that the Wilroy Road Site provides maximum relief in the upstream parts of the interceptor system. The Project Site is located within the Coastal Plain Province of Virginia. A review of existing geologic data and information in the area, and the Geologic Map and Generalized Cross Sections of the Coastal Plain and Adjacent Parts of the Piedmont, Virginia (VA DMME, 1989) shows that the project site is underlain by Pleistocene Age alluvial soils of the Tabb Formation and the Miocene Age marine soils of the Yorktown Formation.

A Phase 1 ESA (Phase 1) was conducted in February 2023. The Phase 1 revealed no evidence of Recognized Environmental Concern (REC), controlled RECs (CRECs), or historical RECs (HRECs) ³. These findings would suggest the selected Project Location is preferred for the construction of the PRS and OLSF Project.

The Site has been purchased and is currently owned by HRSD. The Site is 5.37 acres in size, is located in an area generally developed for commercial use (Zone B-2) and is mostly rectangular in shape. HRSD has applied to the City of Suffolk to rezone the parcels to M-2 which allows for installation of the OLSF, and the application is under review. The geographic coordinates at the approximate center of the Site are longitude 36° 46' 04.80" North and latitude 76° 33' 04.4" West. The elevation at the estimated center of the Site is approximately 19 feet above mean sea level. The local terrain is generally level but has low lying areas along the northwest edge (toward the Nansemond River) and northern edge of the Site, which contain wetland habitats. The Site generally slopes west-northwest ³.

Primary access to the facility will be via Wilroy Road. Two driveways associated with a previous residential home are located on the property, with the rest of the Site being comprised of wooded, vegetated land. A conceptual site layout is shown on Figure 3-4.

The facility has four operational scenarios:

1. Dry weather flow scenario – During normal dry weather, flow will bypass the PRS through the station internal bypass piping.
2. PRS operating flow scenario – Once the force main system pressures increase above the initiation setpoint, the PRS will turn on and the bypass check valve will close. The PRS pumps will ramp up and down in their pumping to relieve the upstream system pressures as needed. The PRS will remain in operation until pressures reduce and the shutdown setpoint is reached.
3. PRS and OLSF operating flow scenario – Once the PRS reaches the maximum pumping capacity of 7,000 gpm, the valve to the OLSF will begin to open allowing flow to be directed to the OLSF at a rate required to maintain the desired suction hydraulic grade line (HGL), the setpoint will be adjustable and set above the PRS operating setpoint. The valve to the OLSF will close once the storage tank reaches maximum operating level.
4. Drain flow scenario – Once the OLSF is no longer filling and the discharge side HGL is below a set point the OLSF will be drained back to the force main system using pumps in the PRS building.

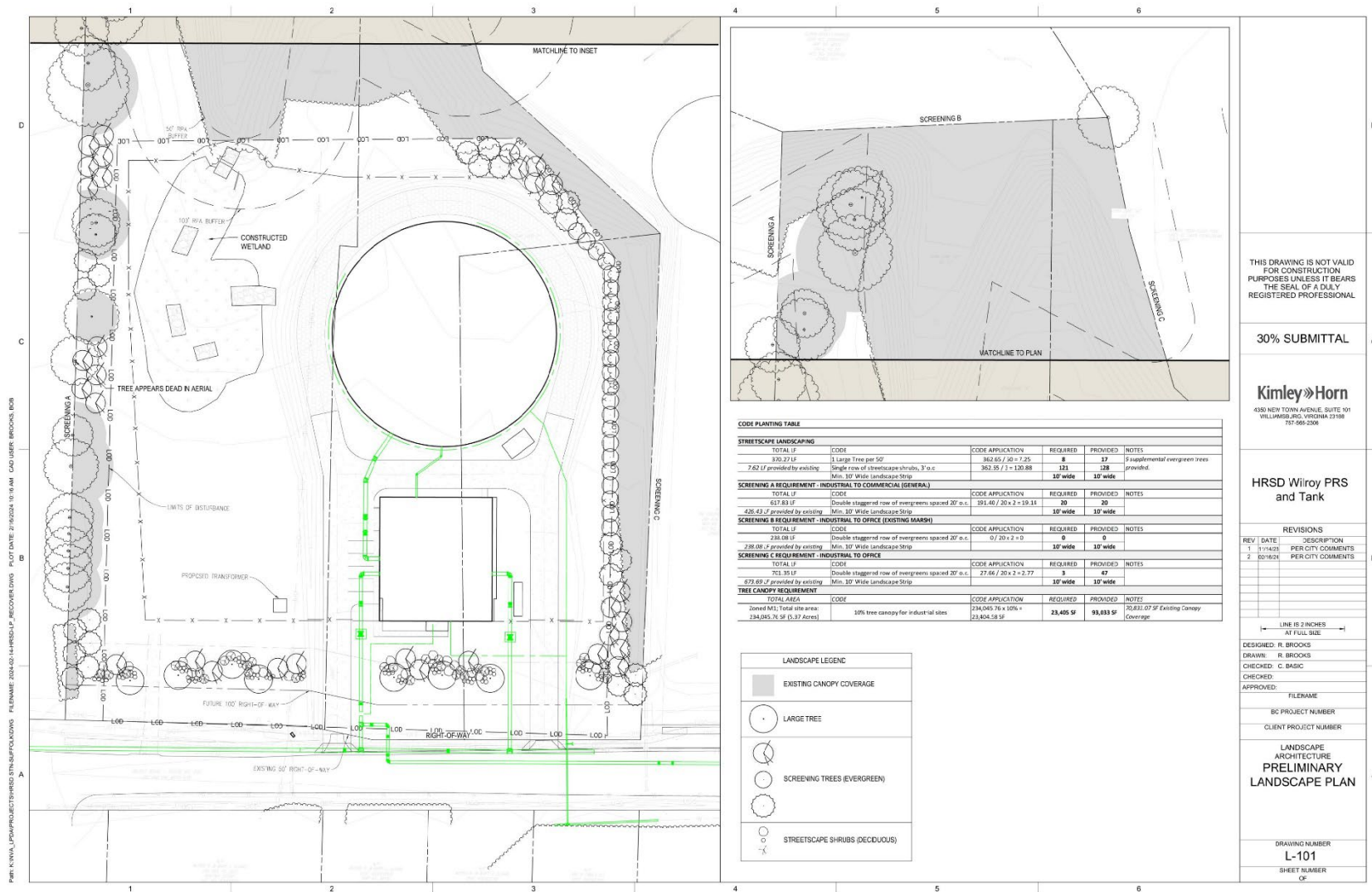


Figure 3-4. Conceptual Site Layout

Landscaping. Low-maintenance landscaping will be provided in disturbed areas of the site that are not paved. Plantings will include native species of grasses and wildflowers and/or limited areas of inorganic mulch. No on-site irrigation will be provided as native species will not require ongoing irrigation once they have been established. Trees and shrubs will be planted as part of the approved landscaping plan.

Utilities. Preliminary discussions have been conducted with City of Suffolk Public Utilities, City of Suffolk Public Works, City of Chesapeake Public Utilities, and the City of Portsmouth Public Utilities making them aware of the project. Suffolk has existing utilities that run along Wilroy Road and the project will also require a potable water connection. Electric utilities are also currently in place at the Site to supply the previously existing residential building. Coordination with Dominion Energy to provide power from the existing overhead lines along Wilroy Road is underway.

Grading. The site will be graded to facilitate stormwater runoff. Grading completed on site will be done to minimize ponding and promote drainage away from structures. Positive surface drainage shall be provided. The maximum and minimum grades for drainage are 0.3% to 2.0%, respectively.¹

Storm drainage. Storm drainage was considered for the entire parcel area (5.37 acres). The limits of disturbance for the Site will be limited to 2.79 acres. Within the limits of disturbance, the impervious cover of the area will increase from 0.07 acre to 1.14 acres. The impervious cover will consist of gravel access roads and entrances, and asphalt pavement for the parking area.

The proposed stormwater drainage is captured by proposed ditches on the perimeter of the facility and outfalls to a proposed Best Management Practice (BMP) to the northwest of the site. The proposed BMP will detain the stormwater to reduce the peak flow to be less than the existing peak flow. The BMP outfalls to the existing wetlands to the northwest of the site.⁴

Utilizing the Virginia Runoff Reduction Method (VRRM) Compliance Spreadsheet, the Pre-development treatment volume is 1,020 cubic feet (CF), while the post-development treatment volume is 5,247 CF.

3.1.2 No Action Alternative

The implications of forgoing or stalling the construction of the PRS and OLSF facility would cause further SSOs during wet weather events, causing more wastewater to overflow the existing sewer infrastructure within the City of Suffolk and Isle of Wight County. As a Phase 1 High Priority Project in the RWWMP, HRSD must complete the Wilroy PRS/OLSF by December 31, 2030; however, HRSD is constructing two new pumping stations to replace the existing Suffolk PS which will greatly benefit from the completion of the Wilroy project.

Currently, the PRS operated by HRSD to provide relief for the metro area of the City of Suffolk is the Pughsville PRS (PRS #134). This facility is located just south of the Bon White Lane and Shoulders Hill Road intersection. In light of the development trends in recent years and potential for growth, in the western parts of the City of Suffolk, the PRS no longer provides sufficient pressure relief for the City ¹.

The general terrain of the local area is low lying-in nature, with the existing drainage pattern flowing into the wetlands located north of the Site. In addition to safety concerns for the local residents, the overflow of the sanitary sewer infrastructure causes environmental concerns due to wastewater draining into these jurisdictionally protected areas.

The proposed site is located within the Chesapeake Bay Preservation Area (CBPA), an area protected by the Chesapeake Bay Preservation Act that was enacted by the Virginia General Assembly in 1988 as a critical element of Virginia's nonpoint source management program.²

Section 4

Affected Environment

4.1 Introduction

The following section describes the affected environment for the proposed Project. The VDEQ EA checklist was used for the resource areas assessed and the following sources of information were used to assess the affected environment.

4.1.1 Wildlife, Marine Life, and Endangered Species

A desktop review of threatened and endangered-listed species was conducted by first reviewing the Information for Planning and Consultation (IPaC) System of the U.S. Fish and Wildlife Service (USFWS) to determine the potential presence of species listed under the Endangered Species Act as endangered, threatened, or candidate. In addition to the USFWS's federal authority, the Virginia Department of Wildlife Resources (VDWR) has the authority to conserve, protect, and manage endangered and threatened vertebrate and invertebrate species while the Virginia Department of Agriculture and Consumer Services (VDACS), under the Virginia Endangered Plant and Insect Species Act the code of Virginia, manage endangered and threatened plant and insect species. The IPaC Report identified four federally listed species that have the potential to exist within the proposed Project Site. Appendix B provides more information on the species with federal status and their habitats. Table 4-1 shows all federal and state-listed species of concerns with the potential to exist within the Project Area.

Table 4-1. Threatened and Endangered Species with the Potential to Exist within the Project Area

Scientific Name	Common Name	Habitat	Conservation Status Federal(F) or State(S)	Potential Habitat Present
<i>Myotis septentrionalis</i>	Northern Long-eared Bat	Forested habitats underneath bark, in cavities or crevices of both live and dead trees and snags during spring, summer, and fall. Winter hibernacula includes caves and mines.	Endangered (F)(S)	Possibly
<i>Perimyotis subflavus</i>	Tricolored Bat	Forested habitats in deciduous hardwood trees during spring, summer, and fall. Winter hibernacula includes caves, mines, and road-associated culverts.	Proposed Endangered (F) Endangered (S)	Possibly
<i>Laterallus jamaicensis ssp. jamaicensis</i>	Eastern Black Rail	Salt, brackish, and freshwater marsh habitats with dense vegetative cover	Threatened (F) Endangered (S)	Possibly
<i>Picoides borealis</i>	Red-cockaded Woodpecker	Longleaf pines commonly preferred, but other species of southern pine are acceptable	Endangered (F)(S)	Unlikely
<i>Danaus plexippus</i>	Monarch butterfly	Open fields and meadows with milkweed	Candidate (F)	Unlikely
<i>Corynorhinus rafinesquii</i>	Rafinesque's Big-eared Bat	Hollow trees and old buildings (SE US), caves and mines (N and W US)	Endangered (S)	Possibly
<i>Crotalus horridus</i>	Canebrake Rattlesnake	Mature hardwood forests, mixed hardwood-pine forests, cane thickets, ridges and glades of swampy areas.	Endangered (S)	Possibly

Table 4-1. Threatened and Endangered Species with the Potential to Exist within the Project Area

Scientific Name	Common Name	Habitat	Conservation Status Federal(F) or State(S)	Potential Habitat Present
<i>Falco peregrinus</i>	Peregrine Falcon	12,000ft elevations, rivers, coastlines, cities, barrier islands, mudflats, lake edges, mountain chains	Threatened (S)	Unlikely
<i>Lanius ludovicianus</i>	Loggerhead Shrike	Agricultural fields, pastures, old orchards, riparian areas, desert scrublands, savannas, prairies, golf courses, cemeteries	Threatened (S)	Unlikely
<i>Centronyx henslowii</i>	Henslow's Sparrow	Wet meadows, weedy pastures, lowland prairie, hayfields	Threatened (S)	Unlikely
<i>Ambystoma mabeei</i>	Mabee's Salamander	Mixed hardwood forests, ephemeral wetlands	Threatened (S)	Unlikely

Source: IpaC System for Initial Project Scoping Mapping and Analysis (<http://ecos.fws.gov/ipac/>). Current as of December 2023.

Based on preferred habitat and an understanding of where populations are currently, the northern long-eared bat (*Myotis septentrionalis*), the tricolored bat (*Myotis septentrionalis*), the eastern black rail (*Laterallus jamaicensis ssp. jamaicensis*), the Rafinesque's big-eared bat (*Corynorhinus rafinesquii*), and the canebrake rattlesnake (*Crotalus horridus*) could have habitat in the Project Site. An environmental site visit was performed on August 1, 2022, to confirm the presence or absence of federally listed sensitive species. Preferred habitat was not observed for bats, monarch butterflies, or the red-cockaded woodpecker. In an email dated December 5, 2023, USFWS wildlife biologist Kim Maison stated the species listed on the IpaC list are the ones that should be considered when making determinations under Section 7 of the ESA. She did not state whether there is known occurrences of these species in the Project Site. Species-specific findings are discussed below.

Northern Long-eared Bat. The northern long-eared bat is a wide-ranging found in 37 states and eight provinces in North America. The species typically overwinters in caves or mines and spends the remainder of the year in forested habitats. They have a diverse diet including moths, flies, leafhoppers, caddisflies, beetles and arachnids. Like most bats, northern long-eared bats emerge at dusk to feed during their active time period. They primarily fly through the understory of forested areas feeding on prey, which they catch while in flight using echolocation or by gleaning motionless insects from vegetation. Since the Project Site is in Virginia's coastal plain, the northern long-eared bat is active year-round in forested habitats.⁹

Based on desktop analysis using VDWR northern long-eared bat regulatory buffer interactive tool (<https://dwr.virginia.gov/wildlife/bats/northern-long-eared-bat-application/>), the Project Site is within the boundary of the northern long-eared bat year-round presence and within 5 miles of the northern long-eared bat capture 3 mile buffer.

Tricolored Bat. During the spring, summer and fall, tricolored bats primarily roost among live and dead leaf clusters of live or recently dead deciduous hardwood trees. In the southern and northern portions of the range, tricolored bats will also roost in Spanish moss (*Tillandsia usneoides*) and *Usnea trichodea* lichen. In addition, tricolored bats have been observed roosting during summer among pine needles, eastern red cedar (*Juniperus virginiana*), within artificial roosts like barns, beneath porch roofs, bridges, concrete bunkers, and rarely within caves. During the winter, tricolored bats hibernate in caves and mines; although, in the southern United States, where caves are sparse, tricolored bats often hibernate in road-associated culverts, as well as sometimes in tree cavities and abandoned water wells.¹⁰

Tricolored bats are opportunistic feeders and consume small insects including caddisflies, moths, beetles, wasps, flying ants and flies. Tricolored bats emerge early in the evening and forage at treetop level or above but may forage closer to ground later in the evening. This species of bat exhibits slow, erratic, fluttery flight, while foraging and are known to forage most commonly over waterways and forest edges.

Based on desktop analysis using VDWR little brown bat and tri-colored bat winter habitat and roost application (<https://dwr.virginia.gov/wildlife/bats/little-brown-bat-tri-colored-bat-winter-habitat-roosts-application/>), the closest roost is 185 miles away.

Rafinesque's Big-eared Bat. Rafinesque's big-eared bat live in caves or trees depending on geographic location. Along the coast and in the southeastern U.S., they roost in hollow trees and old buildings year-round. However, farther north and west up the Appalachian Mountains, they can be found in caves and mines. In Virginia, Rafinesque's big-eared bats are found in bottomland hardwoods and swamps in the Coastal Plain. Moths make up to 90% of their diet, with beetles and other flying insects comprising the rest of their diet.¹¹

During the August site visit, there were no direct observations made of bat species or their presence on the site. Mature trees along the edges of the property were observed, however, the canopy was not completely closed. Since bats are nocturnal animals which rely on places to sleep during the day that are dark, cool, and away from direct sunlight, the observed breaks in the canopy suggest the area would not likely be a target for roosting bats.

Monarch Butterfly. The monarch butterfly exclusively uses milkweed (primarily *Asclepias* spp) for forage during the caterpillar stage. Monarchs breed year-round in many regions where they are found. Individuals in temperate climates in North America exhibit long-distance migration and overwinter as adults at forested locations in Mexico and California.¹²

During the August site visit no milkweed plants (*Asclepias*), nor adult monarch butterflies were observed. While milkweed, the host plant for monarch butterflies, was not observed on the property, it is still possible that adult monarch butterflies visit or pass through the Project Site their migration.

Eastern Black Rail. Black rails require dense vegetative cover that allows movement underneath the canopy. Because birds are found in a variety of salt, brackish, and freshwater marsh habitats that can be tidally or non-tidally influenced, plant structure is considered more important than plant species composition in predicting habitat suitability. Vegetation height is generally less than or equal to 1 meter in coastal habitats, but taller in occupied cattail and bulrush marshes, however, shrub densities become too high, the habitat becomes less suitable.¹³

Eastern black rails are known to eat aquatic beetles, spiders, snails, and small crustaceans. To forage, they walk among plants in the shallows, and sometimes in the deeper parts of marshes, and glean insects and other invertebrates from the ground, water, or vegetation. Eastern black rails are secretive birds and difficult to detect and during the breeding and wintering seasons, and also fly very little.

During the August site visit no eastern black rails were observed, however, the combination of elusive behavior and suitable habitat suggests they could be present on or near the Project Site.

Red-cockaded Woodpecker. Red-cockaded woodpeckers commonly prefer longleaf pines for habitat; however, species of southern pine are also acceptable where they excavate cavities in mature pine, generally more than 80 years old. More than 75% of the diet of red-cockaded woodpecker consists of arthropods, especially ants and cockroaches, but also includes beetles, spiders, centipedes, true bugs, crickets, and moths.¹⁴

During the August site visit, several pine trees were observed, however, they did not form a dense canopy associated with old growth pine forests. For this reason, it is unlikely that construction related activities in the Project Site will adversely impact red-cockaded woodpeckers.

Canebrake Rattlesnake. Canebrake Rattlesnake primarily occurs on the lower York-James Peninsula and east of the Suffolk Escarpment. They prefer mature hardwood forests, mixed hardwood-pine forests, cane thickets, and in the ridges and glades of swampy areas. Areas with numerous logs, significant leaf litter and humus also provide suitable habitat. This species overwinters in the bases of hollow trees and stumps, and in the underground tunnels resulting from stump and root decomposition. This species has also been known to occupy disturbed areas, such as farm fields and cut-overs. This species feeds primarily on gray squirrels and typically only feeds once or twice per year. This snake also may capture and eat other rodents, rabbits, and birds.¹⁵

Based on desktop analysis using VDWR's Fish and Wildlife Information Service and conducting an Initial Project Assessment Report, the canebrake rattlesnake has had confirmed observations within 2 miles of the Project Site. Their predicted habitat also overlaps with the Project Site.

Mabee's Salamander. Mabee's Salamander occurs only in the Coastal Plain from South Carolina to southeastern Virginia. Their breeding sites are comprised of fish-free vernal ponds or ephemeral coastal plain sinkholes up to 1.5 meters deep, with surrounding forests generally composed of hardwoods mixed with pine. They are also found in low areas adjacent to coastal rivers and pine savannas, and in bogs, ponds, low wet woods, and swamps. During non-breeding seasons, this salamander is known to live and wander in the uplands adjacent to breeding ponds. This species is known to eat zooplankton, arthropods, crustaceans and worms, and forages in the water and on the ground.¹⁶

Based on desktop analysis using VDWR's Fish and Wildlife Information Service and conducting an Initial Project Assessment Report, the Mabee's Salamander has had confirmed observations within 2 miles of the Project Site. Their predicted habitat also overlaps with the Project Site.

4.1.1.1 Migratory Birds

Table 4-2 summarizes the migratory birds that may be impacted by construction in the Project Site that were identified in the IPaC Report discussed in the previous section.

Table 4-2. Migratory Birds with Potential to Exist within Project Site				
Scientific Name	Common Name	Habitat	Listing Status	Potential Habitat Present
<i>Haliaeetus leucocephalus</i>	Bald eagle	Lakes and reservoirs containing fish and surrounding forests	Bald and Golden Eagle Protection Act	Possibly
<i>Dolichonyx oryzivorus</i>	Bobolink	Grasslands, hayfields and meadows, freshwater marshes and coastal areas	Bird of Conservation Concern	Possibly
<i>Chaetura pelagica</i>	Chimney Swift	Hollow trees, chimneys, and cave or cave-like structures	Bird of Conservation Concern	Unlikely
<i>Melanerpes erythrocephalus</i>	Red-headed Woodpecker	Open woodlands with oak, beech or pine, disturbed areas, groves of dead/dying trees	Bird of Conservation Concern	Possibly
<i>Euphagus carolinus</i>	Rusty Blackbird	Wet forests, fens, bogs, muskeg, beaver ponds, swamps, wet woodlands, and pond edges	Bird of Conservation Concern	Possibly

Source: The Cornell Lab (<https://www.birds.cornell.edu/home>), and the IPaC (Information, Planning, and Conservation) System for Initial Project Scoping Mapping and Analysis (<http://ecos.fws.gov/ipac/>). Current as of December 2023.

Based on preferred habitat and an understanding of where populations are situated currently, the bald eagle (*Haliaeetus leucocephalus*), the bobolink (*Dolichonyx oryzivorus*), the red-headed woodpecker (*Melanerpes erythrocephalus*), and the rusty blackbird (*Euphagus carolinus*) could have habitat in the Project Site. During the August 2022 site visit, there were no direct observations of any of the listed migratory birds. Additionally, none of the bird songs picked up by the recognition software were endangered, threatened, or included in the migratory bird list. The Merlin Bird ID application, created by the Cornell Lab of Ornithology in partnership with Birds in the Hand LLC, was used to aid in the identification of birds that may be present on site but could not be directly observed. This app was used to capture sound data during the site visit and then the app interprets the frequency and patterns and compares them to a collection of bird songs in their database. Although effective, this should not be considered proof of the absence of any bird species without a more in-depth survey. In an email dated December 5, 2023, USFWS wildlife biologist Kim Maison stated the species listen on the IPaC list are the ones that should be considered when making determinations under Section 7 of the ESA. She did not state whether there is known occurrences of these species in the Project Site. Species descriptions are discussed below.

Bald Eagle. Bald eagles require a good food base, perching areas and nesting sites. They can be found nesting near rivers, lakes, marshes, and estuaries. They're also increasingly found in drier areas that are farther from water sources such as farmland and urban and suburban habitat. In winter, the birds congregate in large numbers near open water in tall trees that they use for spotting prey. These trees also provide night roosts for sheltering. Bald eagles are opportunistic feeders, with fish being s staple food. They will also feed on waterfowl, shorebirds, waterbirds, turtles, rabbits, snakes, small animals, and carrion. Bald eagles can be seen soaring high above, flying around water bodies, perched in trees or on towers and standing on rocks or the ground. They are visual predators and hunt both while flying and from perches.¹⁷

Based on desktop analysis using the Center of Conservation Biology bald eagle nest locator (<https://ccbbirds.org/what-we-do/research/species-of-concern/virginia-eagles/nest-locator/>), the Project Site is within 0.75 mile of a bald eagle nest.

Bobolink. Bobolinks breed in open areas across the northern United States and southern Canada, preferring large fields with a mixture of grasses and broad-leaved plants like legumes and dandelions. They now also nest in eastern hayfields and meadows, and after breeding they move to freshwater marshes and coastal areas to molt before migrating. Their main wintering area is in the southern interior of South America. Bobolinks eat weed seeds, insect larvae, adult insects, spiders, and other arachnids. Normally daytime foragers, they may feed after dark on bright nights during migration.¹⁸

Chimney Swift. Chimney Swifts breed in urban and suburban habitats across the eastern half of the United States and southern Canada. They are most common in areas with a large concentration of chimneys for nest sites and roosts. In rural areas they may still nest in hollow trees, tree cavities, or caves. Chimney Swifts forage for airborne insects mostly over open terrain but also over forests, ponds, and residential areas. During migration they forage in flocks over forests and open areas and roost in chimneys at night. Chimney Swifts spend their lives airborne, except when they are roosting or on the nest.¹⁹

Red-headed Woodpecker. Red-headed Woodpeckers breed in deciduous woodlands with oak or beech, groves of dead or dying trees, river bottoms, burned areas, recent clearings, beaver swamps, orchards, parks, farmland, grasslands with scattered trees, forest edges, and roadsides. In the northern part of their winter range, they live in mature stands of forest, especially oak, oak-hickory, maple, ash, and beech. In the southern part, they live in pine and pine-oak. Red-headed

Woodpeckers eat insects, fruits, and seeds. They forage on the ground and up to 30 feet above the forest floor in summer, whereas in the colder months they forage higher in the trees.²⁰

Rusty Blackbird. Rusty Blackbirds breed in wet forests, including areas with fens, bogs, muskeg, and beaver ponds. Winters in swamps, wet woodlands, and pond edges. In summer, their diet consists of mostly insects while in winter they forage for acorns, pine seeds, and fruit.²¹

4.1.2 Wetlands

The Project Site includes wetland habitat along the northwestern boundary. Wetland boundaries were mapped during initial site reconnaissance by qualified personnel. The Project footprint does not include construction activities within these areas, therefore impacts to wetland habitats are not anticipated.

A desktop review of the National Wetland Inventory (NWI), which includes the presence of streams, wetlands, and water conveyance systems, was conducted to identify jurisdictional wetlands and/or waters (Waters of the US [i.e., WOTUS]) within and immediately adjacent to the proposed Project Site. The results of the NWI search are shown on Figure 4-1. Within the Project Site there is one freshwater forested/shrub wetland (PFO1R) and one stream (R4SBC). Adjacent to the Project Site on the northwestern boundary there is an estuarine and marine wetland (E2EM1P).

Surface waters were observed and delineated on the Site during site reconnaissance in June 2022. The Nansemond River borders the northwestern area of the Site and exhibits small, fringe wetlands along the north-northwest boundary of the Project Site. No other ponds, pits, lagoons, or retention basins were observed on the Project Site.

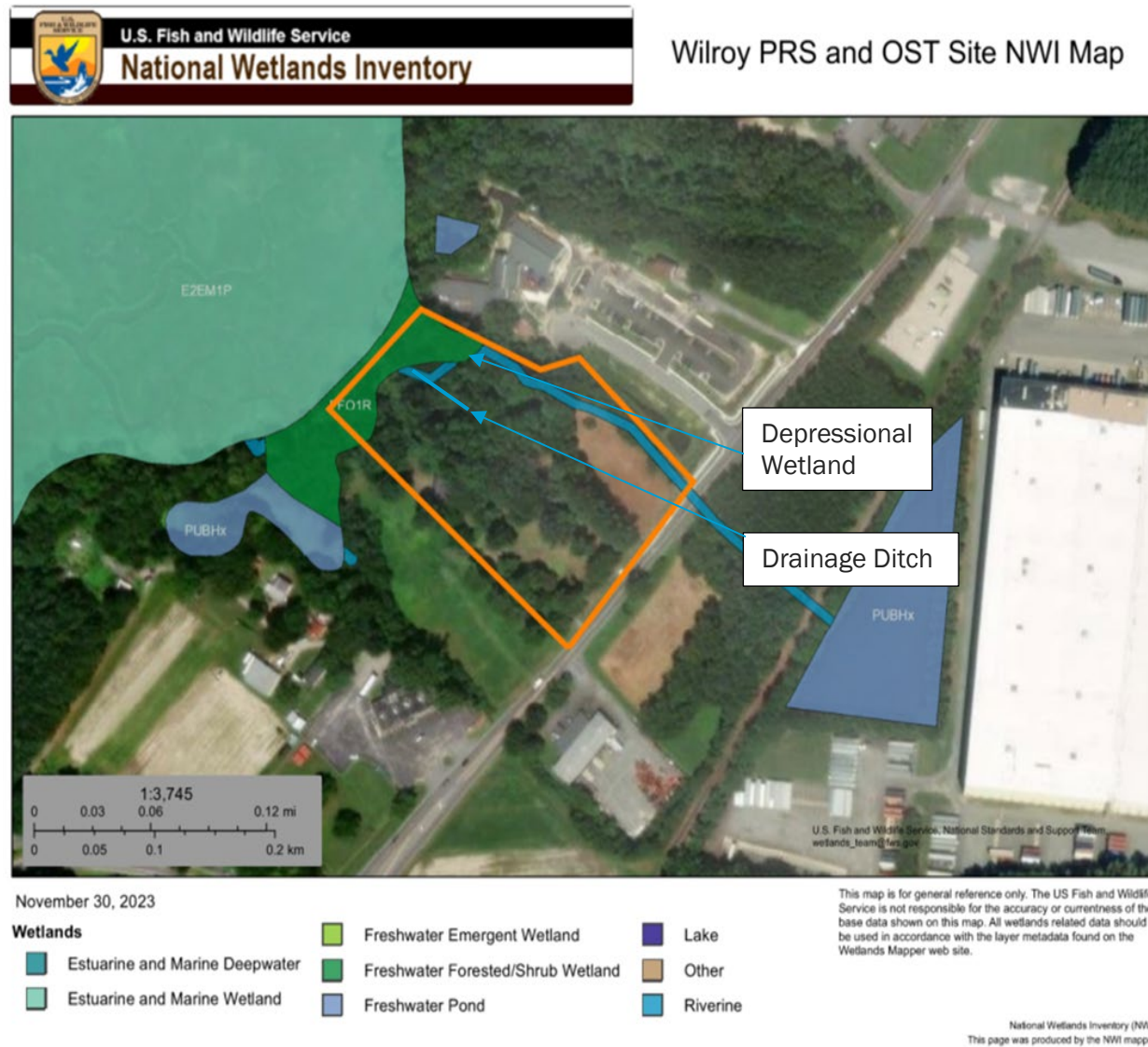


Figure 4-1. Wetlands Map

4.1.3 Displacement of Households, Businesses, or Services

A total of 3 parcels, currently owned by HRSD, are anticipated to be impacted based on the selected alternative. This is based on the area needed to construct the PRS and OLSF facility and associated access. The Site is currently zoned within the B-2 category, primarily used for shopping, recreation, and service activities, with rezoning application submitted to M-2 which allows construction of the OLSF. Displacement of households, business, or services are not anticipated for the proposed Project.

4.1.4 Possible Destruction of Surrounding Farmland or the Loss of Open Space Land

The proposed Project Location is comprised of mostly open space, with wetland habitats located along the northern edge of the Site. The open space within the Project Site is comprised of lightly wooded and vegetated areas. According to the Phase 1 ESA, historical use of the Site and surrounding properties may have been utilized for agricultural purposes. However, the property has remained generally unchanged since 1950 ³.

4.1.5 Historic and Cultural Resources

A desktop review of historic and cultural places was conducted by reviewing the National Park Service's National Register of Historic Places (NRHP). There are no documented sites listed on the NRHP within a 1-mile radius of the proposed Project Site, as shown on Figure 4-2. An additional review of historic and cultural sites is being conducted by the Virginia Department of Historic Resources (VADHR) (Virginia's version of a State Historic Preservation Office (SHPO)). ⁷ The email correspondence from VADHR has been included in Appendix A.

The Virginia Cultural Resources Information System (VCRIS) provided a database research report as part of the Virginia Department of Historical Resources (VADHR) Project Review process. VCRIS identified 25 records of cultural or historic significance within one mile of the Project Site. One historic structure, a house, was identified on the north adjacent project property at 2017 Wilroy Road (DHR ID 133-0227). This house is listed in the VCRIS, which is an online database that contains the inventory of buildings, districts, archaeological sites, and other types of properties. The house is not within a historic district and was described as a "typical late-19th century Nansemond County farmhouse" in a Phase1/Reconnaissance Survey in 1988 (Virginia Department of Historic Resources., Architectural Survey Form). However, no structures or records of cultural or historic significance were identified within the boundaries of the Project Site.

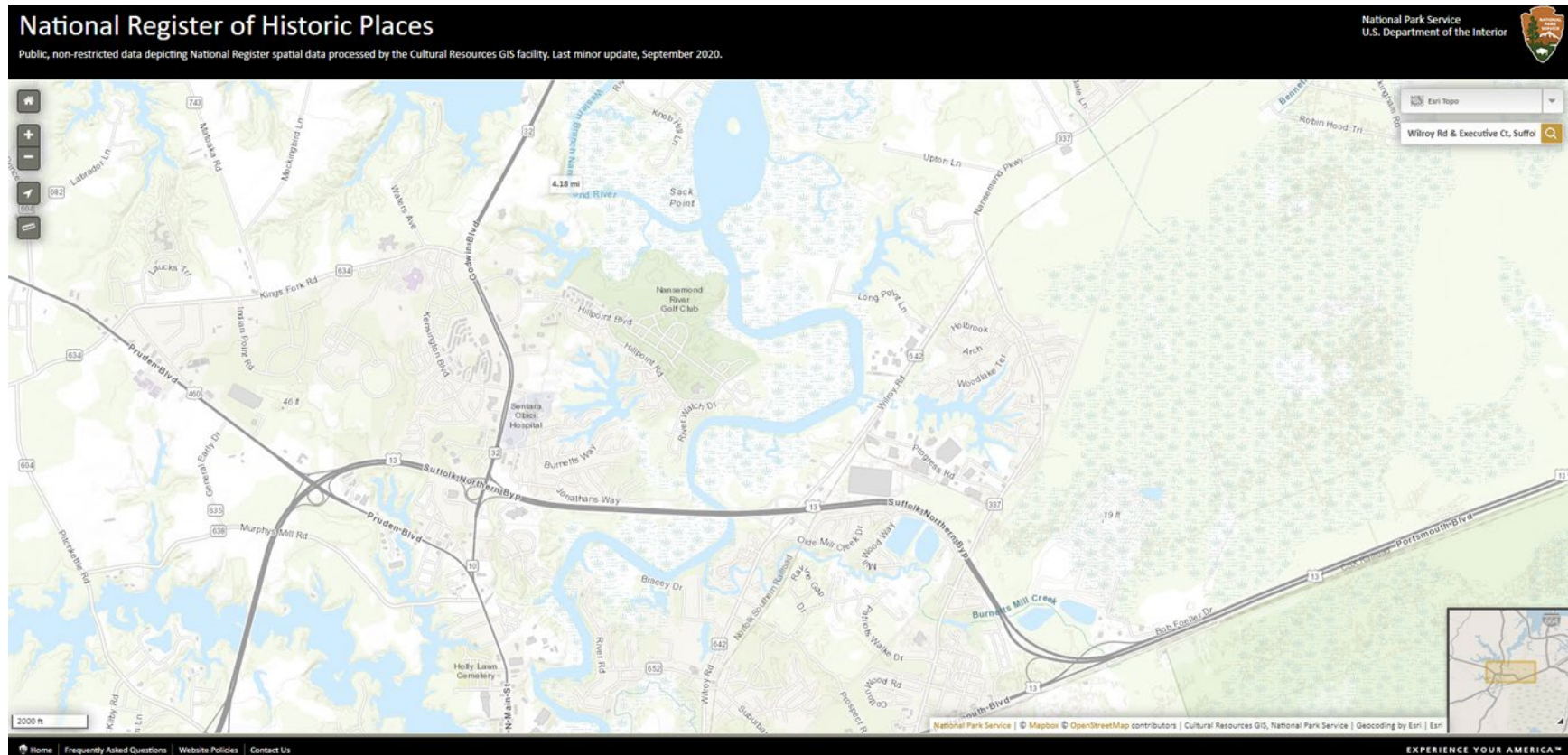


Figure 4-2. NRHP mapping tool showing no documented sites with 1-mile radius of Project Site

4.1.6 Noise

The Project Site is currently vacant, and void of any facilities contributing to noise levels within the surrounding area. Adjacent and surrounding properties are currently occupied by operational commercial and light industrial buildings. A residential area is also located southeast of the Project Site. These existing facilities and residential homes do contribute to the current noise levels surrounding the Project Site. Noise levels are influenced by the existing facility processes, traffic, and local residents of the area. Noise studies were not conducted as part of this analysis; however, this project will follow City of Suffolk noise ordinance regulations.

4.1.7 Traffic and Transportation

The surrounding area of the Site is occupied by commercial and light industrial facilities, as well as a residential area to the southeast. Local traffic patterns are influenced by workers commuting to and from the existing facilities, as well as the residents travelling to their places of work, or other destinations. The existing roadways, managed by the City of Suffolk, located within the surrounding area are believed to be sufficient to support current traffic patterns.

4.1.8 Floodplain

The Site is contained within Federal Emergency Management Agency (FEMA) Flood Plain Panel 5101560118E. According to the FEMA National Flood Hazard Layer geospatial database, the Project Site in the northwestern portion of the site is located in the 1% Special Flood Hazard area or 100-year floodplain⁸. The remainder of the Project Site is not located in a 100- or 500-year floodplain, as shown in Figure 4-3.

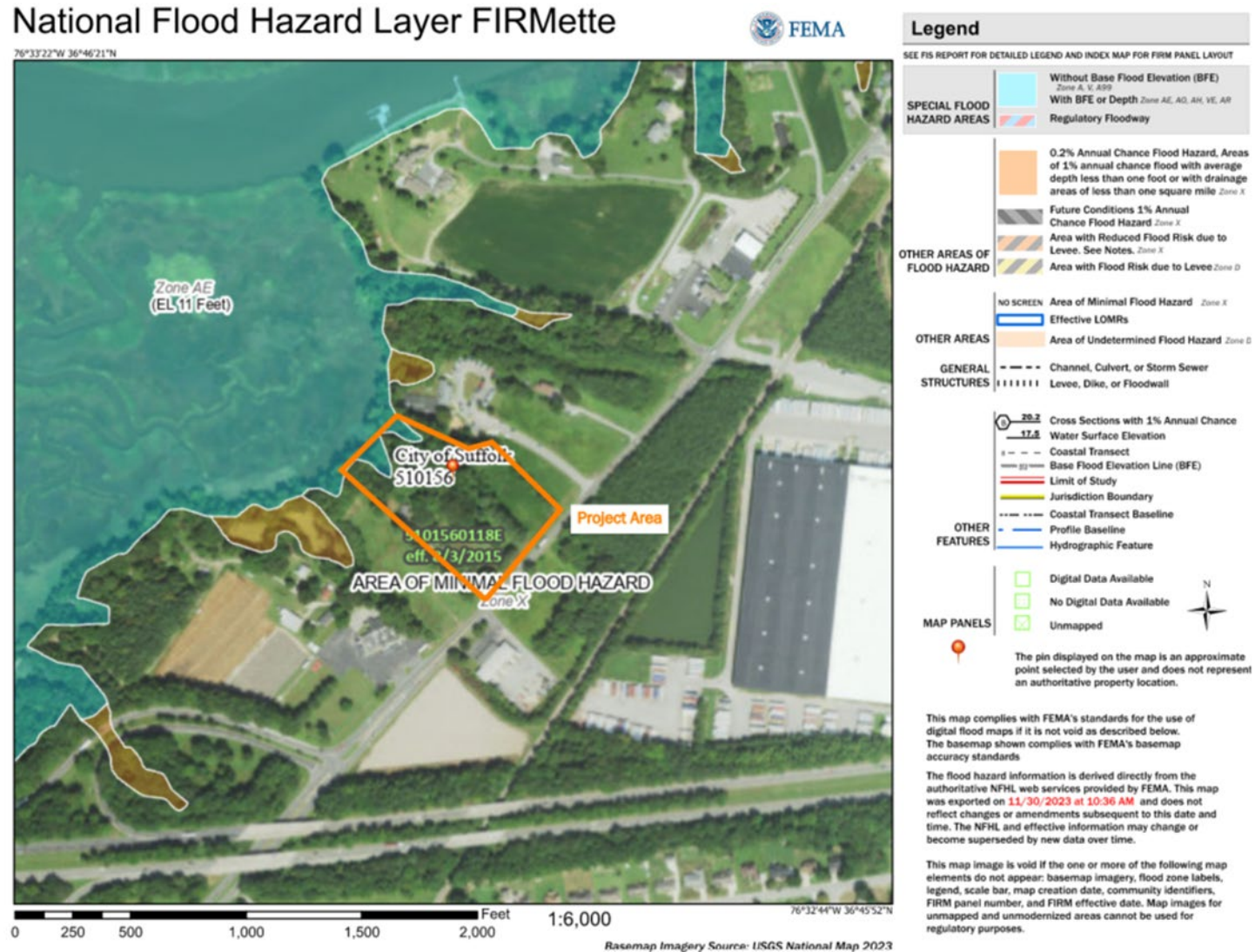


Figure 4-3. FEMA National Flood Hazard Layer Geospatial Database

4.1.9 Air Quality

The proposed Project Site is within an attainment area for all criteria pollutants.²² Activities associated with the Project have the potential for a temporary increase in dust and combustion emissions from construction equipment and other sources.

4.1.10 Aesthetic and Visual Impacts

The existing condition of the Project Site is described by open, vegetated area with some areas within being lightly wooded. Areas of wetland habitat are also located along the northwestern boundary of the Site. Surrounding properties include commercial and light industrial buildings visible along Wilroy Road as well as residential housing located southeast of the Project Site. The Project Site is currently unmanaged, and natural in appearance. Aesthetic and visual impacts to the surrounding area will be minimal, with architectural designs planned to blend in with surrounding structures as well as screening trees and shrubs.

4.1.11 Socio-Economic Changes

On Feb. 11, 1994, President Clinton issued Executive Order (EO) 12898, “Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations.” As part of the environmental compliance process associated with this EO, agencies are required to identify and address disproportionately high and adverse human health or environmental effects on minority or low-income communities (EO 12898 populations). Federal agencies are directed to ensure that federal programs or activities do not result, either directly or indirectly, in discrimination based on race, color, or national origin.

A report was generated for the approximate Project Site using the EPA’s online environmental justice mapping software, EJScreen.²³ This report is included in Appendix C. Table 4-3 shows the percentage of minority and low-income population in Suffolk compared to the State of Virginia developed using EJ Screen. Suffolk contains a larger percentage of minority populations than the state and low-income populations are almost equal to the state.

Table 4-3. Census Data for Suffolk, VA		
Parameter	Suffolk	State
Minority Population	52%	38%
Low Income	24%	25%
Unemployment Rate	7%	5%
Limited English-Speaking Households	1%	2%
Less Than High School Education	9%	10%
Under Age 5	6%	6%
Over Age 64	14%	17%
Low Life Expectancy	21%	20%

4.1.12 River Use

The Project Site’s northwestern boundary is located adjacent to the Nansemond River. Riverine boundaries were observed and delineated during initial site reconnaissance. All construction activities for the Project will take place within designated, upland areas. No impacts to any wetlands,

rivers, or waterbodies are anticipated. No wild and scenic rivers are located adjacent to the Project Site.

4.1.13 Irretrievable Resources

During site reconnaissance, no minerals, oil, or paleontological resources were observed. The EDR Report contained information about historic land use of the Project Site and indicated no mining operations have taken place within the property or the surrounding area. Impacts to irretrievable resources are not anticipated for the proposed Project.

4.1.14 Archeological Resources

No resources of archeological significance were observed during initial site reconnaissance. VADHR was contacted to perform a review of their records in order to indicate if any archeological resources have been discovered within one mile of the Project Site. Upon receipt of VADHR's review, it was indicated that no records exist of significant archeological findings within one mile of the Project Site, therefore no impacts to archeological resources are anticipated.

Section 5

Environmental Impacts of the Proposed Project

For each affected environmental resource in the following section, correspondence was initiated with the applicable agency bulleted below. A summary of correspondence is included in Section 6.1, and letters and emails from each agency has been included in Appendix A. The agencies included:

- Virginia Department of Historic Resources (VADHR)
- Tribal Historic Preservation Officer (THPO)
- U.S. Fish & Wildlife Service (USFWS)
- Virginia Department of Wildlife Resources (VDWR)

5.1 Direct and Secondary Impacts

Construction of the PRS and OLSF Project may have direct and secondary impacts on future use and development within the service area. Secondary impacts are those induced or stimulated by/resulting from the proposed action. These can include cumulative, social, and land use impacts, among others. Cumulative impacts are the collective incremental impacts of the proposed action regardless of the entity undertaking the action. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time. From the characteristics of the proposed project and descriptive elements of the environmental setting, probable impacts are direct and/or secondary. Direct and secondary impacts that are specific to the proposed action are discussed in the following subsections.

5.1.1 Wildlife, Marine Life, and Endangered Species

The below section details direct and indirect impacts to federal and state listed threatened and endangered species with the potential to be in the Project Area and how to mitigate these impacts. Table 4-1 in the previous section references all listed species from the IPaC report and Virginia Fish and Wildlife Information Service (VAFWIS) report.

Northern Long-eared Bat. The northern long-eared bat has the potential to be present year-round within the Project Area based on preferred habitat in Virginia's coastal plain region and could be directly impacted through tree clearing. To avoid impacting this species, tree clearing will be limited and if tree clearing is needed certified personnel would need to confirm the absence of this species.

Tricolored Bat. The tricolored bat has the potential to be present within the Project Area during non-winter months when they are not hibernating in caves and mines. To avoid impacting this species, tree clearing will be limited during spring, summer, and fall, and if tree clearing is needed certified personnel would need to confirm the absence of this species.

Rafinesque's Big-eared Bat. The Rafinesque's big-eared bat has the potential to be present year-round within the Project Area based on preferred habitat in Virginia's coastal plain region and could be directly impacted through tree clearing. To avoid impacting this species, tree clearing will be

limited and if tree clearing is needed certified personnel would need to confirm the absence of this species.

Eastern Black Rail. The eastern black rail has the potential to be present within the Project Area based on preferred habitat. To avoid impacting this species, cutting shrub vegetation heights of approximately 1 meter in marsh habitats should be limited. The construction contractor will need to be educated on the appearance and behavior of this species.

Canebrake Rattlesnake. The canebrake rattlesnake has the potential to be present within the Project Area based on preferred habitat. To avoid impacting this species the construction contractor will need to be educated on the appearance and behavior of this species. If this species is encountered, no person should kill the snake and VDWR should be notified of snake observation and potential relocation.

5.1.1.1 Migratory Birds

The below section details direct and indirect impacts to migratory birds protected under the Bald and Golden Eagle Protection or Bird of Conservation Concern with the potential to be in the Project Area and how to mitigate these impacts. Table 4-2 in the previous section lists the migratory bird species that were identified in the IPaC Report discussed in the previous section.

Bald Eagle. The bald eagle has the potential to be present within the Project Area based on preferred habitat and their closest nest being 0.75 mile away. In reference to the IPaC probability of presence summary for migratory birds, bald eagles can be present year-round excluding July and the beginning of November. Prior to construction of the proposed Project, a survey for bald eagles and their nests will be conducted. To avoid impacts if this species is present, trees with nests will not be cleared and the construction contractor will be educated on appearance and behavior.

Bobolink. The bobolink has the potential to be present within the Project Area based on preferred habitat. In reference to the IPaC probability of presence summary for migratory birds, survey efforts have observed this species in the third week of August. Prior to construction of the proposed Project, a survey for bobolinks will be conducted. To avoid impacts if this species is present, the construction contractor will be educated on appearance and behavior.

Red-headed Woodpecker. The red-headed woodpecker has the potential to be present within the Project Area based on preferred habitat. In reference to the IPaC probability of presence summary for migratory birds, survey efforts have observed this species in the third week of February, at the end of March going well into April, and during the third week of November. This species was not observed during breeding season which occurs May through September. Prior to construction of the proposed Project, a survey for red-headed woodpeckers will be conducted. To avoid impacts if this species is present, trees with nests will not be cleared, and the construction contractor will be educated on appearance and behavior.

Rusty Blackbird. The rusty blackbird has the potential to be present within the Project Area based on preferred habitat. In reference to the IPaC probability of presence summary for migratory birds, survey efforts have observed this species during the second week of March. Prior to construction of the proposed Project, a survey for rusty blackbirds will be conducted. To avoid impacts if this species is present, the construction contractor will be educated on appearance and behavior.

5.1.2 Wetlands

No direct wetland impacts are anticipated for the Project. No direct impacts to surface waters from erosion are anticipated for the proposed Project. The facility will be constructed in designated, upland areas away from environmentally sensitive resources. Implementation of proper sediment

and erosion control BMPs will be utilized during the construction phase of the project, mitigating indirect impacts to surface waters.

All construction will take place within designated, upland areas. Indirect impacts will be mitigated for by the utilization of BMPs throughout construction of the Project, preventing any sediment-laden water from impacting environmentally sensitive areas. Therefore, no formal mitigation will be required.

5.1.3 Displacement of Households, Businesses, Or Services

The Project Site is currently in the process of being rezoned to the M-2 category, heavy industrial use, to allow construction of the PRS and OLSF. HRSD has followed legal requirements to obtain necessary land acquisitions. Displacement of households, business, or services are not anticipated for the proposed Project. One structure, a vacant house, was previously located on the Project Site. After HRSD acquired the property, this house was demolished per local, state, and federal regulations. No other structures will be removed as part of the project, nor would any direct or indirect impacts occur that would otherwise displace members of the community within nearby properties. Therefore, no mitigation is required.

5.1.4 Possible Destruction of Surrounding Farmland or Loss of Open Space Land

The Project Site is comprised of 3.5 acres of usable, open space. This area is currently undeveloped with the exception of a driveway associated with a previously existing residential structure. As shown in the Conceptual Site Layout, Figure 3-4, the proposed facility will not encompass the entire 3.5 acres of usable land. Areas not within the facilities' footprint will be maintained per the landscaping plan and will remain vegetated. No mitigation is required for the use of this area.

5.1.5 Historic and Cultural Resources

The Project Site is previously disturbed and therefore no historic or cultural resources are anticipated. No historic or cultural resources have been identified by the state, as provided in Appendix A. However, should resources be discovered that reflect evidence of human remains, ceremonial or cultural objects, historic sites such as stone rings, burial mounds, or village or battlefield artifacts, each THPO and the VADHR will be contacted immediately, and work will be interrupted until the resources have been fully evaluated. Should cultural or historic resources be discovered during construction, all efforts will stop immediately to be assessed by qualified personnel.

5.1.6 Noise

Noise impacts associated with construction activities may incur short-term affects to the surrounding area. The use of heavy equipment will be necessary to construct the facility, however approved working hour constraints will be implemented as to not have significant, adverse effects on local residents or businesses.

5.1.7 Traffic and Transportation

Traffic volumes will see little impact from construction activities. Traffic levels in the Project Site are light and would not increase substantially or degrade existing traffic patterns on any nearby roadway or intersection. Construction activities would require the use of heavy equipment and worker commutes that would generate short-term increases in traffic. The local roadway infrastructure within the county would be sufficient to support these activities. Due to the work taking place away from the existing roadway, road closures or detours are not expected. A section of pipeline required

along Wilroy Road will impact travel for 3-4 weeks and will follow a City approved Maintenance of Traffic plan.

5.1.8 Floodplains

The northwestern portion of the Project Site is located in the 100-year floodplain; however, this area does not fall within the proposed Project's footprint, and therefore will not be impacted. Indirect impacts are also not anticipated to the 100-year floodplain area and will be mitigated by the proper implementation of sedimentation and erosion control BMPs. The remainder of the Project Site is not located in a 100- or 500-year floodplain, as shown in Figure 4-3. Therefore, no mitigation is required.

5.1.9 Impacts to Surface Water from Erosion

The VDEQ requires construction activities resulting in land disturbance equal to or greater than one acre to acquire a General Construction Permit. Included in this requirement is a Stormwater Pollution Prevention Plan (SWPPP) that shows erosion and sediment control BMP placement. The City of Suffolk requires all land-disturbing activities to acquire a Land Disturbance Permit and if land disturbing activity is to be in excess of 10,000 square feet (sqft) outside of the Chesapeake Bay Preservation Area to submit an Erosion and Sediment Control Plan Application.

As outlined in the Construction General Permit, there shall be no discharge of floating solids or visible foam that contravenes established standards or interferes directly or indirectly with designated uses of surface waters. During construction, the contractor will actively manage all surface water onsite (stormwater, groundwater, and dewatering) through BMPs. Typical BMPs include safety fence, silt fencing, blanket matting, temporary sediment traps, and vegetative management. The SWPPP must be kept updated and onsite throughout construction. During construction activities for the proposed Project, it is possible a release of sediment-laden water could impact the adjacent surface waters.

Any impacts are anticipated to be minor with the implementation of BMPs, including physical and administrative measures designed to avoid, eliminate, and/or minimize impacts to stormwater runoff. Specific BMPs would be detailed in the project SWPPP to be prepared in compliance with National Pollution Discharge Elimination System (NPDES) permitting requirements and Virginia Stormwater Management Program (VSMP) stormwater regulations. It is anticipated that the SWPPP would be prepared by the selected construction contractor. Stormwater impacts would be primarily short term, ending after successful revegetation and stabilization of the Project Site. Low-maintenance landscaping will be provided in disturbed areas of the site that are not paved. Plantings will include native species of grasses and wildflowers. No onsite irrigation will be provided as native species will not require ongoing irrigation once they have been established. Trees and shrubs will be planted only if existing vegetation must be removed for construction and are required to be replaced.

The local terrain is generally level but has low lying areas along the northwest edge (toward the Nansemond River) and northern edge of the Site, which contain wetland habitats. The site generally slopes west-northwest, from an elevation of ~22' to an elevation of ~8'. The existing site drains towards the wetlands to the north of the site. Runoff from offsite generally does not drain onto the site, as there is an existing drainage ditch to the east and south of the site, and the western portion of the site is on a drainage divide.

Long-term onsite stormwater controls include diverting stormwater runoff to the proposed detention pond on site. The detention pond will slowly release the runoff to a pre-development rate, ensuring no erosion is caused downstream and meeting all state and local stormwater requirements. No wetlands are impacted by the proposed development.

Schnabel Engineering, LLC completed a preliminary geotechnical study in July 2022 which included one test boring. Groundwater was encountered at a depth of 6 feet, about elevation 14. With the assumption that groundwater will be encountered onsite, dewatering will be needed and will be discharged through a temporary BMP in the vicinity of the permanent stormwater retention pond.

5.1.10 Air Quality

During land-disturbing and construction activities for the proposed Project, emissions into the air from machinery, such as excavators, are expected. To mitigate air pollution issues during construction, methods such as watering and/or avoiding ground disturbing activities during high winds should be implemented. In addition, materials and equipment will be transported in the most efficient way possible to reduce trip frequencies and avoid travel on poor air quality days. Air quality permitting associated with the construction and operation of the Project is not anticipated.

5.1.11 Aesthetic and Visual Impacts

The visual and aesthetic characteristics of areas undergoing land-disturbing activities would be temporarily altered by the use of construction equipment, associated land clearing, and stockpiling of construction materials. Following the completion of construction, the PRS and OLSF facility would remain as a permanent visual feature within the roadway viewshed. The maximum height of the proposed facility will be approximately 25 feet tall and will not be visually contradictory with surrounding developments. A City approved landscaping plan will be implemented, including along Wilroy Road within the Project Site boundaries.

5.1.12 Socio-Economic Changes

Adverse effects to the surrounding community are not expected with the proposed Project. The surrounding area is currently developed for commercial and light industrial facilities. The PRS and OLSF are designed to provide more consistent and reliable service to the surrounding communities. The Project Site is not ideal for multiple residential structures and the proposed facility will not hinder economic growth for the area. No effects on environmental justice would be expected, and the Project would not result in disproportionate adverse environmental or health effects on low-income or minority populations. Therefore, no mitigation is required.

5.1.13 River Use

The Project Site is located in close proximity to the Nansemond River. The Project is not anticipated to have adverse effects of river use nor does the Project footprint cross into the river itself. There are currently no public or private boat launches or otherwise formal access points to the Nansemond River located on the Project Site. In this locale of the Nansemond River, commercial or recreational use is unlikely in this area due to the shallow nature of the adjacent waterway. Indirect impacts associated with erosion and sediment discharge from construction efforts have the potential to impact the Nansemond River. During construction, proper BMPs will be utilized per the Construction General Permit in order to minimize sedimentation impacts. Proper BMP installation, maintenance, and inspections will be coordinated by certified personnel during construction of the Project.

5.1.14 Irretrievable Resources

The project would not affect known minerals, gas, oil, or paleontological resources; therefore, no mitigation is required.

5.1.15 Archeological Resources

According to the VADHR report, no archeological resources have been identified within or adjacent to the Project Site. The Project Site consists of previously disturbed land and the discovery of archeological resources is not anticipated. Should unidentified archaeological resources be discovered during the project, VADHR will be contacted, and work will be interrupted until the resources have been fully evaluated by certified personnel.

Correspondence was initiated with three Native American tribes to facilitate early involvement. The U.S. Department of Housing and Urban Development's Tribal Directory Assessment Tool was used to determine which tribes have interests in Suffolk.²⁴ THPOs were notified of the project and given our contact information should any tribe elect to participate in Section 106 review of the referenced project. The letter and email correspondence from each THPO has been included in Appendix A. No response was received from any of the three tribes as of January 25, 2024.

Section 6

Agency Correspondence and Public Participation

6.1 Agency Participation

A summary of agencies that were contacted is provided in Table 6-1. Copies of written correspondence and agency responses (if received) are provided in Appendix A.

Table 6-1. Agencies Contacted			
Agency	Contact	Date of Initial Notification Letter	Date of Response Letter
Virginia Department of Wildlife Resources	Susan Watson	11/30/2023	12/5/2023
Virginia Department of Historic Resources	Quatro Hubbard Jason Kramer	12/4/2023	12/4/2023
Tribal Historic Preservation Officers	Katelyn Lucas, THPO - Delaware Nation, OK Chief Keith Anderson – Nansemond Indian Tribe Chief Robert Gray – Pamunkey Indian Tribe	12/12/2023	No Response as of 3/1/24
US Fish and Wildlife Service (Virginia Field Office)	Kim Maison	12/4/2023	12/5/2023

6.2 Public Participation

Public outreach will be conducted as part of project design and EA process; however, no meetings have occurred to date.

Section 7

References

- ¹ Brown and Caldwell. 2022. Preliminary Engineering Report for Wilroy Pressure Reducing Station and Off-Line Storage Facility. Developed for Hampton Roads Sanitation District.
- ² HCS. 2022. Hydraulic Analysis for Wilroy PRS and Offline Storage Tank Facilities. Developed for Hampton Roads Sanitation District.
- ³ Brown and Caldwell. 2023. Phase 1 Environmental Site Assessment. JFT Properties. Developed for Hampton Roads Sanitation District.
- ⁴ Brown and Caldwell. 2023. Conditional Use Permit for Wilroy Pressure Reducing Station and Off-line Storage Facility. Developed for Hampton Roads Sanitation District.
- ⁵ VDEQ. 2023. <https://www.deq.virginia.gov/our-programs/water/chesapeake-bay/chesapeake-bay-preservation-act>
- ⁶ USFWS. 2023. <https://ipac.ecosphere.fws.gov/>
- ⁷ Virginia Department of Historic Resources. <https://www.dhr.virginia.gov/programs/dhr-archives/>
- ⁸ FEMA National Flood Hazard Layer: <https://www.fema.gov/flood-maps/national-flood-hazard-layer>
- ⁹ Northern Long-Eared Bat Regulatory Buffer Interactive Tool: <https://dwr.virginia.gov/wildlife/bats/northern-long-eared-bat-application/>
- ¹⁰ USFWS. Tricolored Bat Profile. <https://www.fws.gov/species/tricolored-bat-perimyotis-subflavus>
- ¹¹ VDWR. Rafinesque's Big-eared Bat Profile. <https://dwr.virginia.gov/wildlife/information/rafinesques-big-eared-bat/>
- ¹² USFWS. Monarch Butterfly Profile. <https://www.fws.gov/species/monarch-danaus-plexippus>
- ¹³ USFWS. Eastern Black Rail Profile. <https://fws.gov/species/eastern-black-rail-laterallus-jamaicensis-jamaicensis>
- ¹⁴ USFWS. Red-cockaded Woodpecker. <https://www.fws.gov/species/red-cockaded-woodpecker-dryobates-borealis>
- ¹⁵ VDWR. Canebrake Rattlesnake Profile. <https://dwr.virginia.gov/wp-content/uploads/media/Canebrake-Rattlesnake-Information-Sheet.pdf>
- ¹⁶ VDWR. Mabee's Salamander Profile. <https://dwr.virginia.gov/wp-content/uploads/Mabees-Salamander.pdf>
- ¹⁷ USFWS. Bald Eagle Profile. <https://www.fws.gov/species/bald-eagle-haliaeetus-leucocephalus>
- ¹⁸ The Cornell Lab. Bobolink Profile. <https://www.allaboutbirds.org/guide/bobolink>
- ¹⁹ The Cornell Lab. Chimney Swift Profile. https://www.allaboutbirds.org/guide/chimney_swift
- ²⁰ The Cornell Lab. Red-headed Woodpecker Profile. https://www.allaboutbirds.org/guide/Red-headed_Woodpecker
- ²¹ The Cornell Lab. Rusty Blackbird Profile. https://www.allaboutbirds.org/guide/Rusty_Blackbird
- ²² EPA. Greenbook. https://www3.epa.gov/airquality/greenbook/anayo_va.html
- ²³ EPA. EJScreen Tool: <https://www.epa.gov/ejscreen>
- ²⁴ Tribal Directory Assessment Tool: <https://egis.hud.gov/tdat/>

Other References:

Little Brown Bat and Tri-colored Bat Winter Habitat and Roosts Application:

<https://dwr.virginia.gov/wildlife/bats/little-brown-bat-tri-colored-bat-winter-habitat-roosts-application/>

National Register of Historic Places. Accessed 2023. <https://www.nps.gov/subjects/nationalregister/data-downloads.htm>

National Wetlands Inventory Mapper: <https://www.fws.gov/program/national-wetlands-inventory/wetlands-mapper>

The Center for Conservation Biology. Accessed 2023. <https://ccbbirds.org/what-we-do/research/species-of-concern/virginia-eagles/nest-locator/>

USFWS. Northern Long-eared Bat Profile. <https://www.fws.gov/species/northern-long-eared-bat-myotis-septentrionalis>

VDWR. Accessed 2023. <https://services.dwr.virginia.gov/fwis/index.asp?Menu=Home>

Appendix A: Agency Correspondence Letters





301 Bendix Road, Suite 400
Virginia Beach, VA 23452

T: 757.518.2400

December 12, 2023

Letter Report

Delaware Nation of Oklahoma
Katelyn Lucas, THPO
PO Box 825
Anadarko, OK 73005

Subject: Agency Letter – Environmental Assessment Agency Review Letter for the
Hampton Roads Sanitation District

Dear Katelyn Lucas,

The Hampton Roads Sanitation District (HRSD) is performing an environmental review pursuant to the National Environmental Policy Act (NEPA). The review will assess the potential environmental impacts of construction and operation of the proposed Wilroy Pressure Reducing Station and Offline Storage Tank Capital Improvements Program Project. This project will include a 10M gallon per day (MGD) pump station building, 3 MGD tank with a 15-ft wall above grade, odor control system, emergency generator, two driveways, stormwater BMP, and reroute of flow through the existing Sewer Force Main (SFM) 1,000 linear feet (lf) to the PRS. The Project is intended to provide pressure relief and increase system capacity for areas of Suffolk and Isle of Wight County during wet weather events. The environmental review fulfills an application requirement for the Virginia Department of Environmental Quality (VDEQ) Virginia Clean Water Revolving Loan Fund (VCWRLF). As part of this review, we are requesting a Section 106 consultation from your agency.

The proposed Project Area is in an area generally developed for commercial and residential use and is currently owned by HRSD. The site is approximately 5.37 acres total, with 3.5 acres of usable area (Figure 1 – Site Vicinity Map). The parcel is located southwest adjacent to the HRSD Nansemond Treatment Plant at 1941 and 1949 Wilroy Road, Suffolk, VA 23434 near the intersection of Wilroy Road and US-13 (Figure 2 – Site Location Map). The Project Area for this review encompasses the parcel and an approximate 1.0-mile radius around the parcel. A search of the National Register of Historic Places reveals the closest historic landmark, Joel E. Harrell and Son, to be approximately 1.65 miles away from the site.

This letter represents a formal request for input from your agency regarding an VCWRLF Environmental Review for the Hampton Roads Sanitation District's proposed Wilroy Pressure Reducing Station and Offline Storage Tank Project.

We look forward to receiving input from your agency regarding this project. Please reply at your earliest convenience or within 30 days as required by VDEQ. If you have any questions, or require any further information, please feel free to contact me by phone or email at 770-673-3654 or bhowell@brwnncald.com. Thank you in advance for your time and attention to this matter.



Katelyn Lucas
Delaware Nation of Oklahoma
12/12/2023
Page 2

Sincerely,
Brown and Caldwell

By: B. Howell
Brittany Howell
Staff Ecologist

Enclosure:
Site Vicinity Map
Site Location Map



301 Bendix Road, Suite 400
Virginia Beach, VA 23452

T: 757.518.2400

December 12, 2023

Letter Report

Nansemond Indian Nation
Chief Keith Anderson
1001 Pembroke Lane
Suffolk, VA 23434

Subject: Agency Letter – Environmental Assessment Agency Review Letter for the
Hampton Roads Sanitation District

Dear Keith Anderson,

The Hampton Roads Sanitation District (HRSD) is performing an environmental review pursuant to the National Environmental Policy Act (NEPA). The review will assess the potential environmental impacts of construction and operation of the proposed Wilroy Pressure Reducing Station and Offline Storage Tank Capital Improvements Program Project. This project will include a 10M gallon per day (MGD) pump station building, 3 MGD tank with a 15-ft wall above grade, odor control system, emergency generator, two driveways, stormwater BMP, and reroute of flow through the existing Sewer Force Main (SFM) 1,000 linear feet (lf) to the PRS. The Project is intended to provide pressure relief and increase system capacity for areas of Suffolk and Isle of Wight County during wet weather events. The environmental review fulfills an application requirement for the Virginia Department of Environmental Quality (VDEQ) Virginia Clean Water Revolving Loan Fund (VCWRLF). As part of this review, we are requesting a Section 106 consultation from your agency.

The proposed Project Area is in an area generally developed for commercial and residential use and is currently owned by HRSD. The site is approximately 5.37 acres total, with 3.5 acres of usable area (Figure 1 – Site Vicinity Map). The parcel is located southwest adjacent to the HRSD Nansemond Treatment Plant at 1941 and 1949 Wilroy Road, Suffolk, VA 23434 near the intersection of Wilroy Road and US-13 (Figure 2 – Site Location Map). The Project Area for this review encompasses the parcel and an approximate 1.0-mile radius around the parcel. A search of the National Register of Historic Places reveals the closest historic landmark, Joel E. Harrell and Son, to be approximately 1.65 miles away from the site.

This letter represents a formal request for input from your agency regarding an VCWRLF Environmental Review for the Hampton Roads Sanitation District's proposed Wilroy Pressure Reducing Station and Offline Storage Tank Project.

We look forward to receiving input from your agency regarding this project. Please reply at your earliest convenience or within 30 days as required by VDEQ. If you have any questions, or require any further information, please feel free to contact me by phone or email at 770-673-3654 or bhowell@brwnncald.com. Thank you in advance for your time and attention to this matter.



Katelyn Lucas
Delaware Nation of Oklahoma
12/12/2023
Page 2

Sincerely,
Brown and Caldwell

By: B. Howell
Brittany Howell
Staff Ecologist

Enclosure:
Site Vicinity Map
Site Location Map



301 Bendix Road, Suite 400
Virginia Beach, VA 23452

T: 757.518.2400

December 12, 2023

Letter Report

Pamunkey Indian Tribe
Chief Robert Gray
1054 Pocahontas Trail
King William, VA 23086

Subject: Agency Letter – Environmental Assessment Agency Review Letter for the
Hampton Roads Sanitation District

Dear Robert Gray,

The Hampton Roads Sanitation District (HRSD) is performing an environmental review pursuant to the National Environmental Policy Act (NEPA). The review will assess the potential environmental impacts of construction and operation of the proposed Wilroy Pressure Reducing Station and Offline Storage Tank Capital Improvements Program Project. This project will include a 10M gallon per day (MGD) pump station building, 3 MGD tank with a 15-ft wall above grade, odor control system, emergency generator, two driveways, stormwater BMP, and reroute of flow through the existing Sewer Force Main (SFM) 1,000 linear feet (lf) to the PRS. The Project is intended to provide pressure relief and increase system capacity for areas of Suffolk and Isle of Wight County during wet weather events. The environmental review fulfills an application requirement for the Virginia Department of Environmental Quality (VDEQ) Virginia Clean Water Revolving Loan Fund (VCWRLF). As part of this review, we are requesting a Section 106 consultation from your agency.

The proposed Project Area is in an area generally developed for commercial and residential use and is currently owned by HRSD. The site is approximately 5.37 acres total, with 3.5 acres of usable area (Figure 1 – Site Vicinity Map). The parcel is located southwest adjacent to the HRSD Nansemond Treatment Plant at 1941 and 1949 Wilroy Road, Suffolk, VA 23434 near the intersection of Wilroy Road and US-13 (Figure 2 – Site Location Map). The Project Area for this review encompasses the parcel and an approximate 1.0-mile radius around the parcel. A search of the National Register of Historic Places reveals the closest historic landmark, Joel E. Harrell and Son, to be approximately 1.65 miles away from the site.

This letter represents a formal request for input from your agency regarding an VCWRLF Environmental Review for the Hampton Roads Sanitation District's proposed Wilroy Pressure Reducing Station and Offline Storage Tank Project.

We look forward to receiving input from your agency regarding this project. Please reply at your earliest convenience or within 30 days as required by VDEQ. If you have any questions, or require any further information, please feel free to contact me by phone or email at 770-673-3654 or bhowell@brwnncald.com. Thank you in advance for your time and attention to this matter.



Katelyn Lucas
Delaware Nation of Oklahoma
12/12/2023
Page 2

Sincerely,
Brown and Caldwell

By: B. Howell
Brittany Howell
Staff Ecologist

Enclosure:
Site Vicinity Map
Site Location Map

Appendix B: IPaC Species Report





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: 2024-0014666
Project Name: Wilroy Road Pressure Reducing Station

November 09, 2023

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*). Any activity proposed on National Wildlife Refuge lands must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf>

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts, see <https://www.fws.gov/program/migratory-bird-permit/what-we-do>.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see <https://www.fws.gov/library/collections/threats-birds>.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit <https://www.fws.gov/partner/council-conservation-migratory-birds>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Project Code in the header of this

letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Bald & Golden Eagles
- Migratory Birds

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Virginia Ecological Services Field Office

6669 Short Lane

Gloucester, VA 23061-4410

(804) 693-6694

PROJECT SUMMARY

Project Code: 2024-0014666
Project Name: Wilroy Road Pressure Reducing Station
Project Type: Wastewater Facility - Maintenance / Modification
Project Description: Potential option of pump station improvements
Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@36.7680551,-76.5513741692661,14z>



Counties: Suffolk County, Virginia

ENDANGERED SPECIES ACT SPECIES

There is a total of 5 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

-
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

MAMMALS

NAME	STATUS
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Endangered
Tricolored Bat <i>Perimyotis subflavus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/10515	Proposed Endangered

BIRDS

NAME	STATUS
Eastern Black Rail <i>Laterallus jamaicensis ssp. jamaicensis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/10477	Threatened
Red-cockaded Woodpecker <i>Picoides borealis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/7614	Endangered

INSECTS

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

USFWS NATIONAL WILDLIFE REFUGE LANDS AND FISH HATCHERIES

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

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

BALD & GOLDEN EAGLES

Bald and golden eagles are protected under the Bald and Golden Eagle Protection Act¹ and the Migratory Bird Treaty Act².

Any person or organization who plans or conducts activities that may result in impacts to bald or golden eagles, or their habitats³, should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

-
1. The [Bald and Golden Eagle Protection Act](#) of 1940.
 2. The [Migratory Birds Treaty Act](#) of 1918.
 3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

There are bald and/or golden eagles in your project area.

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

NAME	BREEDING SEASON
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Oct 15 to Aug 31

PROBABILITY OF PRESENCE SUMMARY

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

Probability of Presence (■)

Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (■)

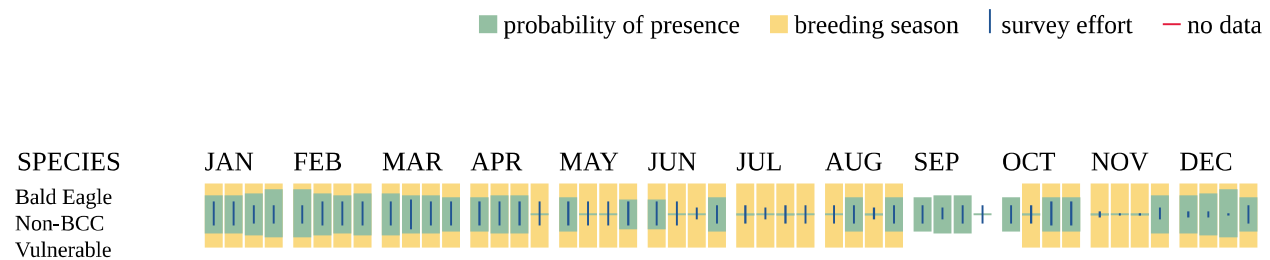
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

Survey Effort (|)

Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (—)

A week is marked as having no data if there were no survey events for that week.



Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
 - Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incident-take-migratory-birds>
 - Nationwide conservation measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>
 - Supplemental Information for Migratory Birds and Eagles in IPaC <https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>
-

MIGRATORY BIRDS

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats³ should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

-
1. The [Migratory Birds Treaty Act](#) of 1918.
 2. The [Bald and Golden Eagle Protection Act](#) of 1940.
 3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

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

NAME	BREEDING SEASON
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Oct 15 to Aug 31
Bobolink <i>Dolichonyx oryzivorus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9454	Breeds May 20 to Jul 31
Chimney Swift <i>Chaetura pelagica</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9406	Breeds Mar 15 to Aug 25
Red-headed Woodpecker <i>Melanerpes erythrocephalus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9398	Breeds May 10 to Sep 10
Rusty Blackbird <i>Euphagus carolinus</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9478	Breeds elsewhere

PROBABILITY OF PRESENCE SUMMARY

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

Probability of Presence (■)

Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (■)

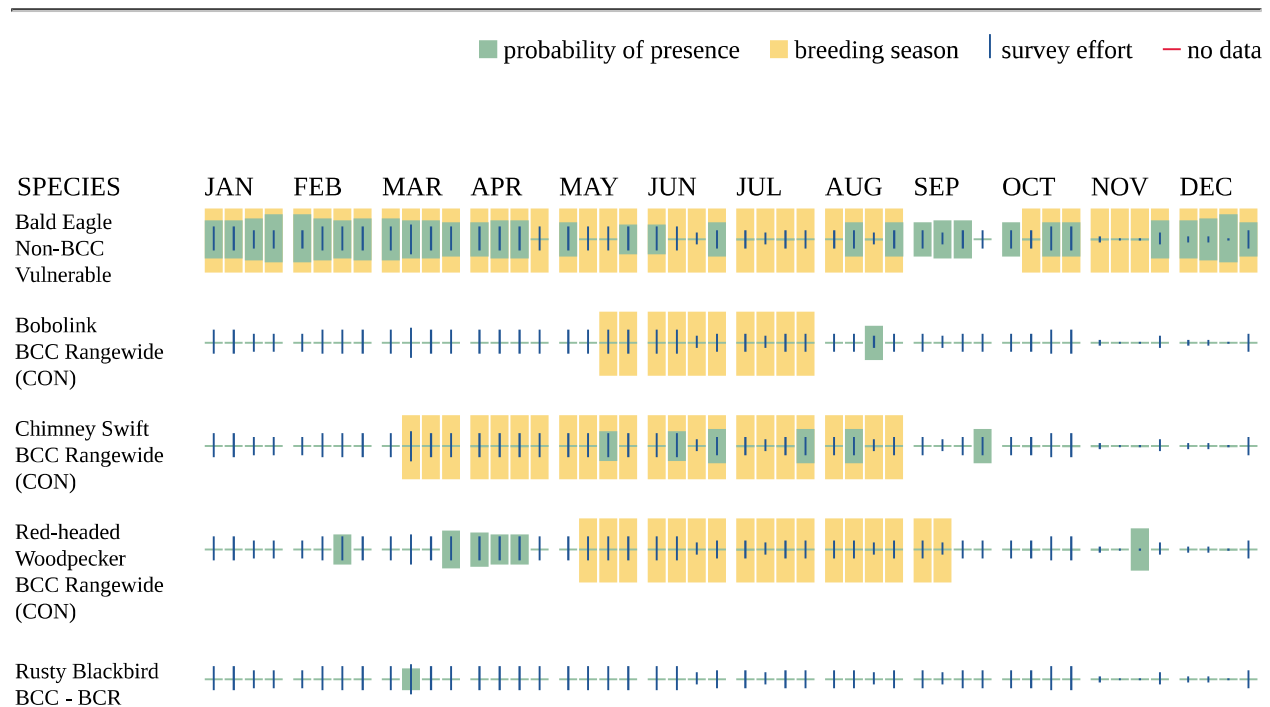
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

Survey Effort (|)

Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (—)

A week is marked as having no data if there were no survey events for that week.



Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>

- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds>
 - Nationwide conservation measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>
 - Supplemental Information for Migratory Birds and Eagles in IPaC <https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>
-

IPAC USER CONTACT INFORMATION

Agency: Private Entity
Name: Alex Horton
Address: 990 Hammond Drive
City: Atlanta
State: GA
Zip: 30328
Email: ahorton@brwncald.com
Phone: 3346529510

Appendix C: Environmental Justice Screen (EJSCREEN) Report for Commerce City



This report provides environmental and socioeconomic information for user-defined areas, and combines that data into environmental justice and supplemental indexes.

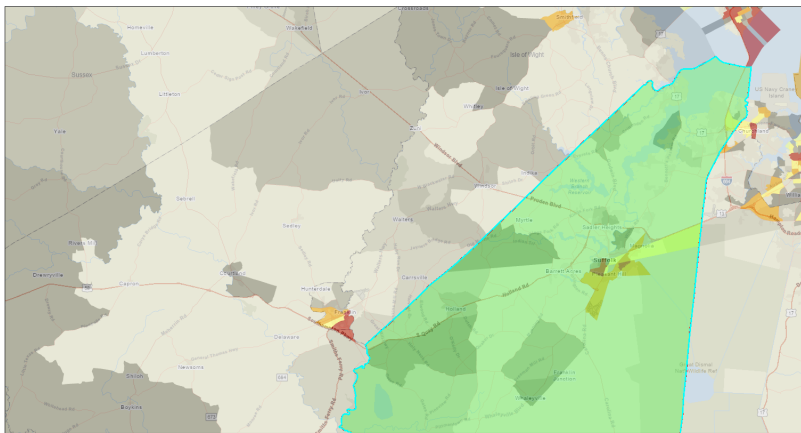
Suffolk, VA

City: Suffolk


Population: 93,268

Area in square miles: 428.91


A3 Landscape





December 4, 2023


 Wilroy PRS and OST


Low Income
(State Percentiles)


 Less than 50 percentile


 50 - 60 percentile

 60 - 70 percentile

 70 - 80 percentile

 80 - 90 percentile

 90 - 95 percentile

 95 - 100 percentile

1:288,895

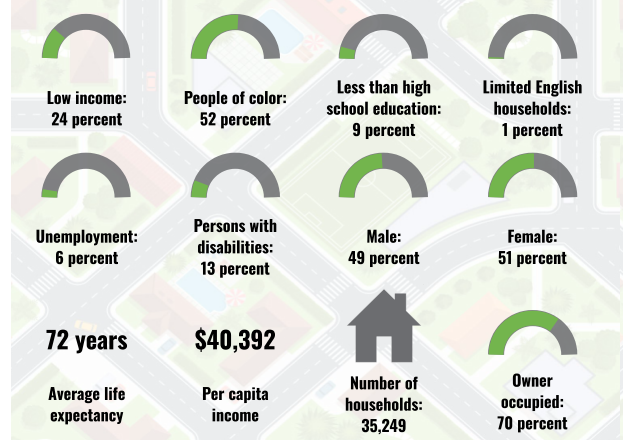
0 2.75 5.5 11 mi
0 4.5 9 18 km

VGN, Esri, HERE, Garmin, SafeGraph, METNAS
USGS, EPA, NPS, USDA

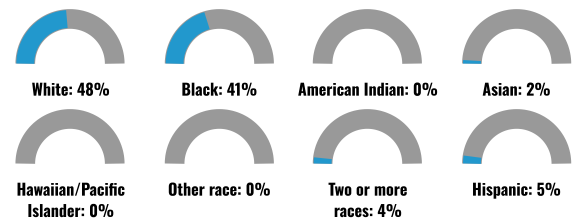
LANGUAGES SPOKEN AT HOME

LANGUAGE	PERCENT
English	95%
Spanish	3%
Other Indo-European	1%
Total Non-English	5%

COMMUNITY INFORMATION



BREAKDOWN BY RACE



BREAKDOWN BY AGE



LIMITED ENGLISH SPEAKING BREAKDOWN



Notes: Numbers may not sum to totals due to rounding. Hispanic population can be of any race. Source: U.S. Census Bureau, American Community Survey (ACS) 2017-2021. Life expectancy data comes from the Centers for Disease Control.

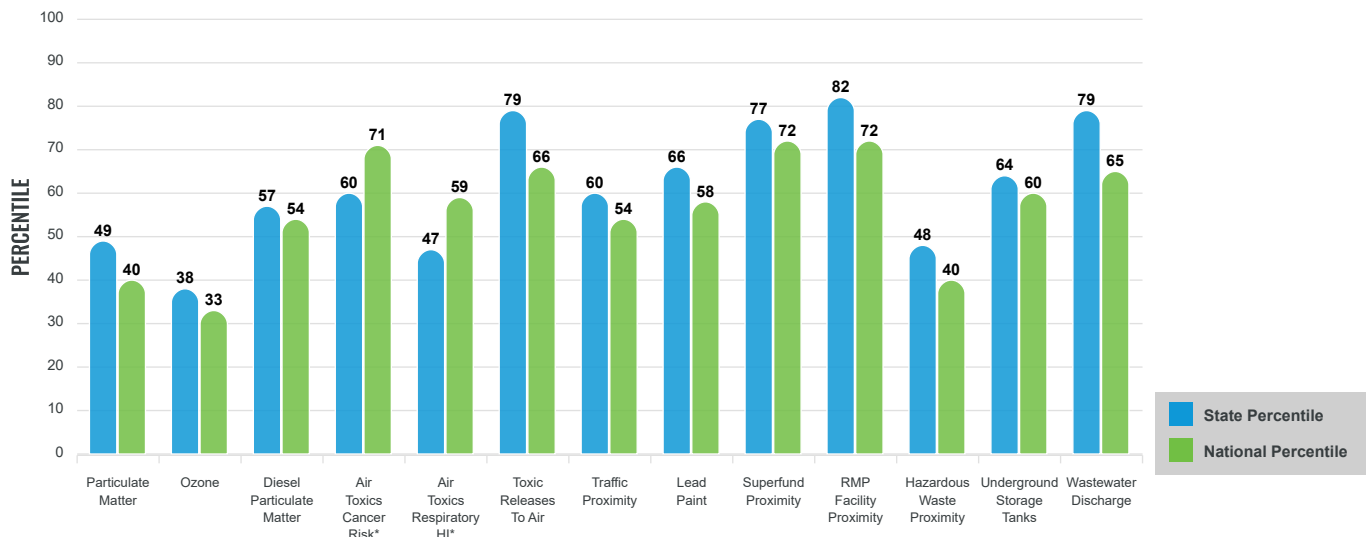
Environmental Justice & Supplemental Indexes

The environmental justice and supplemental indexes are a combination of environmental and socioeconomic information. There are thirteen EJ indexes and supplemental indexes in EJScreen reflecting the 13 environmental indicators. The indexes for a selected area are compared to those for all other locations in the state or nation. For more information and calculation details on the EJ and supplemental indexes, please visit the [EJScreen website](#).

EJ INDEXES

The EJ indexes help users screen for potential EJ concerns. To do this, the EJ index combines data on low income and people of color populations with a single environmental indicator.

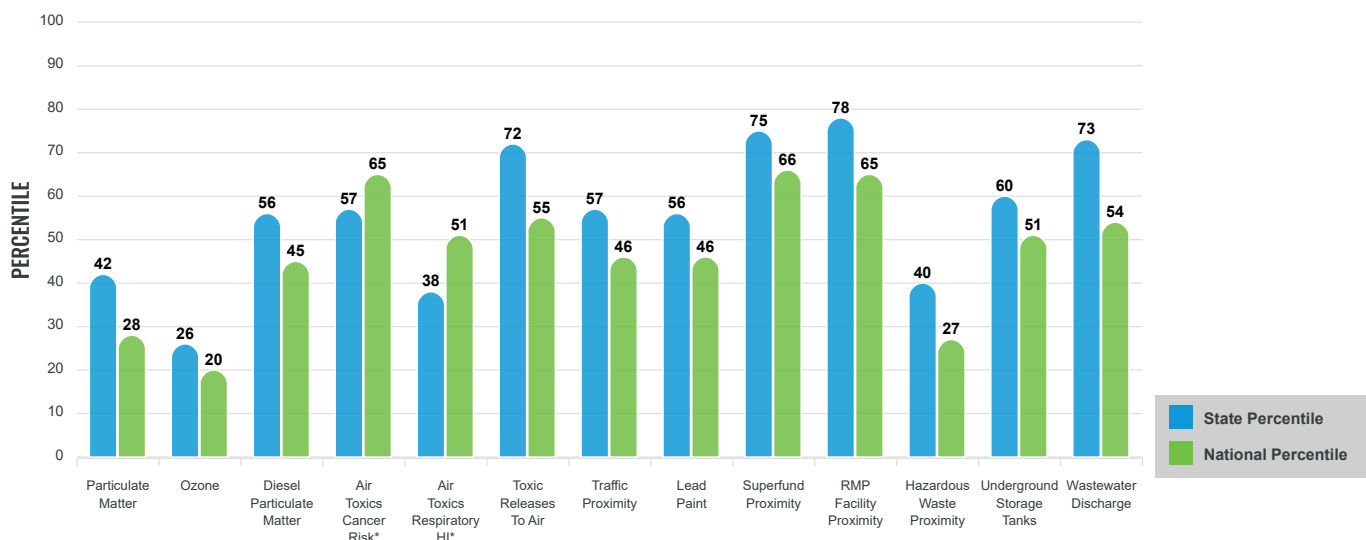
EJ INDEXES FOR THE SELECTED LOCATION



SUPPLEMENTAL INDEXES

The supplemental indexes offer a different perspective on community-level vulnerability. They combine data on percent low-income, percent linguistically isolated, percent less than high school education, percent unemployed, and low life expectancy with a single environmental indicator.

SUPPLEMENTAL INDEXES FOR THE SELECTED LOCATION



These percentiles provide perspective on how the selected block group or buffer area compares to the entire state or nation.

Report for City: Suffolk

EJScreen Environmental and Socioeconomic Indicators Data

SELECTED VARIABLES	VALUE	STATE AVERAGE	PERCENTILE IN STATE	USA AVERAGE	PERCENTILE IN USA
POLLUTION AND SOURCES					
Particulate Matter ($\mu\text{g}/\text{m}^3$)	7.16	7.53	34	8.08	24
Ozone (ppb)	57	59.1	19	61.6	18
Diesel Particulate Matter ($\mu\text{g}/\text{m}^3$)	0.168	0.209	39	0.261	36
Air Toxics Cancer Risk* (lifetime risk per million)	28	29	0	25	5
Air Toxics Respiratory HI*	0.3	0.33	9	0.31	31
Toxic Releases to Air	800	4,300	74	4,600	55
Traffic Proximity (daily traffic count/distance to road)	60	150	50	210	44
Lead Paint (% Pre-1960 Housing)	0.17	0.22	55	0.3	45
Superfund Proximity (site count/km distance)	0.16	0.11	85	0.13	79
RMP Facility Proximity (facility count/km distance)	0.39	0.21	86	0.43	72
Hazardous Waste Proximity (facility count/km distance)	0.13	0.61	31	1.9	25
Underground Storage Tanks (count/km ²)	1.4	1.9	58	3.9	53
Wastewater Discharge (toxicity-weighted concentration/m distance)	22	7.2	99	22	98
SOCIOECONOMIC INDICATORS					
Demographic Index	38%	31%	69	35%	61
Supplemental Demographic Index	12%	12%	57	14%	47
People of Color	52%	38%	70	39%	67
Low Income	24%	25%	55	31%	44
Unemployment Rate	7%	5%	74	6%	67
Limited English Speaking Households	1%	2%	64	5%	57
Less Than High School Education	9%	10%	58	12%	55
Under Age 5	6%	6%	65	6%	64
Over Age 64	14%	17%	46	17%	45
Low Life Expectancy	21%	20%	62	20%	63

*Diesel particulate matter, air toxics cancer risk, and air toxics respiratory hazard index are from the EPA's Air Toxics Data Update, which is the Agency's ongoing, comprehensive evaluation of air toxics in the United States. This effort aims to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that the air toxics data presented here provide broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. Cancer risks and hazard indices from the Air Toxics Data Update are reported to one significant figure and any additional significant figures here are due to rounding. More information on the Air Toxics Data Update can be found at: <https://www.epa.gov/haps/air-toxics-data-update>.

Sites reporting to EPA within defined area:

Superfund	2
Hazardous Waste, Treatment, Storage, and Disposal Facilities	1
Water Dischargers	46
Air Pollution	96
Brownfields	0
Toxic Release Inventory	15

Other community features within defined area:

Schools	22
Hospitals	3
Places of Worship	114

Other environmental data:

Air Non-attainment	Yes
Impaired Waters	Yes

Selected location contains American Indian Reservation Lands*	No
Selected location contains a "Justice40 (CEJST)" disadvantaged community	Yes
Selected location contains an EPA IRA disadvantaged community	Yes

Report for City: Suffolk

EJScreen Environmental and Socioeconomic Indicators Data

HEALTH INDICATORS

INDICATOR	HEALTH VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Low Life Expectancy	21%	20%	62	20%	63
Heart Disease	5.3	5.5	47	6.1	33
Asthma	10.3	9.6	72	10	61
Cancer	5.8	6.1	40	6.1	39
Persons with Disabilities	12.2%	12.6%	52	13.4%	48

CLIMATE INDICATORS

INDICATOR	HEALTH VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Flood Risk	5%	9%	46	12%	41
Wildfire Risk	2%	2%	93	14%	79

CRITICAL SERVICE GAPS

INDICATOR	HEALTH VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Broadband Internet	15%	13%	63	14%	61
Lack of Health Insurance	6%	8%	46	9%	47
Housing Burden	Yes	N/A	N/A	N/A	N/A
Transportation Access	Yes	N/A	N/A	N/A	N/A
Food Desert	Yes	N/A	N/A	N/A	N/A

Footnotes

Report for City: Suffolk