2616 - Onancock Treatment Plant Administration Building Design

Application Details

Funding Opportunity:	2336-Virginia Community Flood Preparedness Fund - Project Grants - CY24 Round 5
Funding Opportunity Due Date:	Jan 24, 2025 11:59 PM
Program Area:	Virginia Community Flood Preparedness Fund
Status:	Under Review
Stage:	Final Application
Initial Submit Date:	Oct 30, 2024 2:38 PM
Initially Submitted By:	Christina Condon
Last Submit Date:	Nov 1, 2024 9:59 AM
Last Submitted By:	Christina Condon

Contact Information

Primary Contact Information

Active User*:	Yes
Type:	External User
Name*:	Ms. (Salutation) Christina (First Name) Marie (Middle Name) Condon (Last Name)
Title:	Grants Analyst
Email*:	ccondon@hrsd.com
Address*:	1434 Air Rail Avenue
	Virginia Beach (City) Virginia (State/Province) 23455 (Postal Code/Zip)
Phone*:	(757) 460-7015 (Phone) Ext. ###-###-####
Fax:	###-###-####
Comments:	

Organization Information

Status*:	Approved
Name*:	Hampton Roads Sanitation District - HRSD
Organization Type*:	Local Government
Tax ID*:	54-6001749
Unique Entity Identifier (UEI)*:	NLNKLTGGRKZ6
Organization Website:	https://www.hrsd.com

Address*: 1434 Air Rail Avenue

Virginia Beach (City) Virginia (State/Province) 23455- (Postal Code/Zip)

Phone*: (757) 460-2261 Ext.
###-###-####

Fax: ###-###-####

Benefactor:

Vendor ID:

Comments:

VCFPF Applicant Information

Project Description

Name of Local Government*: Hampton Roads Sanitation District

Your locality's CID number can be found at the following link: Community Status Book Report

NFIP/DCR Community Identification Number (CID)*: 519999

If a state or federally recognized Indian tribe,

Name of Tribe:

Authorized Individual*: Steve (First Name) deMik (Last Name)

Mailing Address*: 1434 Air Rail Avenue
Address Line 1
Address Line 2
Virginia Beach (City) Virginia (State) 23455 (Zip Code)

Telephone Number*: 757-460-7240

Cell Phone Number*: 757-274-5340

Email*: sdemik@hrsd.com

Is the contact person different than the authorized individual?

Contact Person*: Yes

Contact: Christina (First Name) Condon (Last Name)
1434 Air Rail Avenue
Address Line 1
Address Line 2
Virginia Beach (City) Virginia (State) 23455 (Zip Code)

Telephone Number: 757-460-7015

Cell Phone Number: 757-510-6489

Email Address: ccondon@hrsd.com

Enter a description of the project for which you are applying to this funding opportunity

Project Description*:

Design project to replace the outmoded administrative building at the Onancock Wastewater Treatment Plant, which provides ongoing services to approximately 3,000 customers on Virginia's Eastern Shore. A resilient building is essential for daily operations, as a ride-out shelter for staff during

flood events to avoid sanitary sewer overflows, and to safely house the laboratory and control systems for all HRSD Eastern Shore facilities.
Low-income geographic area means any locality, or community within a locality, that has a median household income that is not greater than 80 percent of the local median household income, or any area in the Commonwealth designated as a qualified opportunity zone by the U.S. Secretary of the Treasury via his delegation of authority to the Internal Revenue Service. A project of any size within a low-income geographic area will be considered.

Is the proposal in this application intended to benefit a low-income geographic area as defined above?

Benefit a low-income geographic area*: Yes

Information regarding your census block(s) can be found at census.gov

Census Block(s) Where Project will Occur*: 510001096002

Is Project Located in an NFIP Participating Community?*: Yes

Is Project Located in a Special Flood Hazard Area?*: Yes

Flood Zone(s) (if applicable): AE

Flood Insurance Rate Map Number(s) (if applicable):

Eligibility CFPF - Round 4 - Projects

Eligibility

Is the applicant a local government (including counties, cities, towns, municipal corporations, authorities, districts, commissions, or political subdivisions created by the General Assembly or pursuant to the Constitution or laws of the Commonwealth, or any combination of these)?

Local Government*: Yes
Yes - Eligible for consideration
No - Not eligible for consideration

Does the local government have an approved resilience plan and has provided a copy or link to the plan with this application?

Resilience Plan*: Yes
Yes - Eligible for consideration under all categories
No - Eligible for consideration for studies, capacity building, and planning only

If the applicant is not a town, city, or county, are letters of support from all affected local governments included in this application?

Letters of Support*: Yes
Yes - Eligible for consideration
No - Not eligible for consideration
N/A - Not applicable

Has this or any portion of this project been included in any application or program previously funded by the Department?

Previously Funded*: No
Yes - Not eligible for consideration
No - Eligible for consideration

Has the applicant provided evidence of an ability to provide the required matching funds?

Evidence of Match Funds*: Yes
Yes - Eligible for consideration
No - Not eligible for consideration
N/A - Match not required

Scoring Criteria for Flood Prevention and Protection Projects - Round 4

Scoring

Category Scoring:
Hold CTRL to select multiple options

Project Category*: All other projects

Is the project area socially vulnerable? (based on ADAPT Virginia?s Social Vulnerability Index Score)
Social Vulnerability Scoring:
Very High Social Vulnerability (More than 1.5)

High Social Vulnerability (1.0 to 1.5)
Moderate Social Vulnerability (0.0 to 1.0)
Low Social Vulnerability (-1.0 to 0.0)
Very Low Social Vulnerability (Less than -1.0)

Socially Vulnerable*: Very High Social Vulnerability (More than 1.5)

Is the proposed project part of an effort to join or remedy the community?s probation or suspension from the NFIP?

NFIP*: No

Is the proposed project in a low-income geographic area as defined below?

"Low-income geographic area" means any locality, or community within a locality, that has a median household income that is not greater than 80 percent of the local median household income, or any area in the Commonwealth designated as a qualified opportunity zone by the U.S. Secretary of the Treasury via his delegation of authority to the Internal Revenue Service. A project of any size within a low-income geographic area will be considered.

Low-Income Geographic Area*: Yes

Projects eligible for funding may also reduce nutrient and sediment pollution to local waters and the Chesapeake Bay and assist the Commonwealth in achieving local and/or Chesapeake Bay TMDLs. Does the proposed project include implementation of one or more best management practices with a nitrogen, phosphorus, or sediment reduction efficiency established by the Virginia Department of Environmental Quality or the Chesapeake Bay Program Partnership in support of the Chesapeake Bay TMDL Phase III Watershed Implementation Plan?

Reduction of Nutrient and Sediment Pollution*: Yes

Does this project provide ?community scale? benefits?

Community Scale Benefits*: More than one census block

Expected Lifespan of Project

Expected Lifespan of Project*: Over 20 Years

Comments:

The building being designed is anticipated to have a minimum 30-year lifespan.

Scope of Work - Projects - Round 4

Scope of Work

Upload your Scope of Work

Please refer to Part IV, Section B. of the grant manual for guidance on how to create your scope of work

Scope of Work*: CID519999_HRSD_CFPF-1_SOW.pdf

Comments:

The Scope of Work for the Onancock Treatment Plant Administration Building Design is attached, filename CID51999_HRSD_CFPF-1_SOW.pdf. The document includes a narrative and 10 attachments.

Budget Narrative

Budget Narrative Attachment*: CID519999_HRSD_CFPF-1_Budget.pdf

Comments:

The Budget Narrative for the Onancock Treatment Plant Administration Building Design is attached, filename CID51999_HRSD_CFPF-1_Budget. The document includes the letter from the HRSD CFO authorizing funds. HRSD requests a match waiver.

Scope of Work Supporting Information - Projects

Supporting Information - Projects

Provide population data for the local government in which the project is taking place

Population*: 1169.00

Provide information on the flood risk of the project area, including whether the project is in a mapped floodplain, what flood zone it is in, and when it was last mapped. If the property or area around it has been flooded before, share information on the dates of past flood events and the amount of damage sustained

Historic Flooding data and Hydrologic Studies*: CID519999_HRSD_CFPF-1_Support_Flood.pdf

Include studies, data, reports that demonstrate the proposed project minimizes flood vulnerabilities and does not create flooding or increased flooding (adverse impact) to other properties

No Adverse Impact*: CID519999_HRSD_CFPF-1_CFM.pdf

Include supporting documents demonstrating the local government's ability to provide its share of the project costs. This must include an estimate of the total project cost, a description of the source of the funds being used, evidence of the local government's ability to pay for the project in full or quarterly prior to reimbursement, and a signed pledge agreement from each contributing organization

Ability to Provide Share of Cost*: CID519999_HRSD_CFPF-1_CFO.pdf

A benefit-cost analysis must be submitted with the project application

Benefit-Cost Analysis*: CID519999_HRSD_CFPF-1_Support_BCA.pdf

Provide a list of repetitive loss and/or severe repetitive loss properties. Do not provide the addresses for the properties, but include an exact number of repetitive loss and/or severe repetitive loss structures within the project area

Repetitive Loss and/or Severe Repetitive Loss Properties*: CID519999_HRSD_CFPF-1_Support_RepetitiveLoss.pdf

Describe the residential and commercial structures impacted by this project, including how they contribute to the community such as historic, economic, or social value. Provide an exact number of residential structures and commercial structures in the project area

Residential and/or Commercial Structures*:

There are no residential or commercial structures in this project request. The Onancock Treatment Plant Administration Building Design is a public service structure.

If there are critical facilities/infrastructure within the project area, describe each facility

Critical Facilities/Infrastructure*:

The Hampton Roads Sanitation District (HRSD) Onancock Wastewater Treatment Plant is a critical facility within the project area. It provides public wastewater collection and treatment services on Virginia's Eastern Shore. Wastewater treatment service is a critical community lifeline as defined by FEMA.

The proposed Onancock Treatment Plant Administration Building Design project will be used to replace the current Administration building which is in a deteriorated condition and is not rated to serve as a ride-out shelter. The project design is for a resilient facility to be used for daily administration and operations, including a space for a secure water quality laboratory, and SCADA control systems and network services. This critical facility will also be used as a ride-out shelter for essential staff during flooding and storm events. The Administration Building will serve as the central hub for the entire HRSD Eastern Shore Operations.

When constructed based on the project design, the resilient building will enable HRSD to mitigate operational interruptions in the event of a storm or flood that would negatively impact the Eastern Shore region. This is crucial because the absence of effective wastewater treatment operations poses public health risks from exposure to untreated sewage.

Explain the local government's financial and staff resources. How many relevant staff members does the local government have? To what relevant software does the local government have access? What are the local government's capabilities?

Financial and Staff Resources*:

HRSD was established in 1940 and has more than 80 years building and maintaining sustainable wastewater treatment infrastructure within the region. We have workforce expertise with approximately 900 highly skilled and trained employees to provide wastewater treatment, scientific, and ancillary services to 20 cities and counties in southeast and eastern Virginia.

HRSD has AA+ S&P and Fitch ratings and is highly capable of managing this project's budget. HRSD has received and successfully manages federal and state loans and grants. A copy of our annual comprehensive financial report is available at https://www.hrsd.com/finance#annfinrpt.

HRSD uses numerous software systems to achieve its mission. These include but are not limited to the following. Oracle E-Business including Enterprise Resource Planning for Finance, CIP budgeting, timekeeping, and more; and Oracle Utilities for the Customer Care and billing system; Hexagon CMMS for asset management; Enterprise PM systems, including Unifier for project management and contractor invoicing; robust network communications, information security, and information technology systems; as well as non-financial laboratory, pretreatment, operational, document management, and mapping systems.

Identify and describe the goals and objectives of the project. Include a description of the expected results of the completed project and explain the expected benefits of the project. This may include financial benefits, increased awareness, decreased risk, etc.

Goals and Objectives*:

The goals of the Onancock Treatment Plant Administration Building Design project are to obtain a preliminary engineering report that will develop a resilient building design alternative that meets the needs of the HRSD Eastern Shore operations. The expected results are a design that will be used for the construction of the upgraded building. The benefits are providing the design for a safe and resilient building for the operations of the Onancock Treatment Plant, including laboratory space for required onsite compliance analysis and treatment process control, and housing SCADA, as well as being a ride-out shelter during storm and flood events.

HRSD's integrated network of wastewater treatment assets and capabilities provide critical lifeline services that are used day-to-day to support the recurring needs of the community and enable other aspects of society to function. When built based on this proposed Design project, the

Onancock Treatment Plant Administration Building will decrease risks to staff during flood and storm events and improve the resiliency of the wastewater system, mitigating disruptions to effective wastewater treatment.

Outline a plan of action laying out the scope and detail of how the proposed work will be accomplished with a timeline identifying expected completion dates. Determine milestones for the project that will be used to track progress. Explain what deliverables can be expected at each milestone, and what the final project deliverables will be. Identify other project partners

Approach, Milestones, and Deliverables*: CID519999_HRSD_CFPF-1_Support_Deliverables.pdf

Where applicable, briefly describe the relationship between this project and other past, current, or future resilience projects. If the applicant has received or applied for any other grants or loans, please identify those projects, and, if applicable, describe any problems that arose with meeting the obligations of the grant and how the obligations of this project will be met

Relationship to Other Projects*:

This proposed project is a building Design project. Professional design is a standard practice for all HRSD infrastructure projects. HRSD utilizes expert consultants, evaluation reports and analysis, and flood maps to determine its resilient building designs. An example of previous related project includes the York River Treatment Plant Administration Building Renovation. The design was completed in 18 months at a cost of $355,022 for a building addition of 4,507 square feet and renovation of the existing building of 22,775 square feet, with an estimated minimum life of 30 years.

HRSD has received State and Federal grants and loans. To date, no material problems have occurred on any of the grant or loan projects.
1. Congressionally Directed Spending (Earmarks): (a) FY2025 application submitted March 21, 2024, pending Congressional review and approval. Proposed project is the Onancock Treatment Plant Solids Handling. (b) FY2024 appropriation $1.25 million pending EPA Community Grants Program application approval and will be applied toward a Chincoteague Treatment Plant.
2. VDCR - FHWA Recreational Trails Program award 339N210, $300,000 with $75,000 match for Flax Mill Creek Trail. Period of performance 12/6/21 - 12/31/24.
3. Virginia Department of Health / Fish & Wildlife, award VDH-24-619-0017, $57,700 for Boater Education and Pump-Out Program, POP 7/1/24 - 6/30/25. The VDH/VFW grants have been awarded to HRSD annually since 1996.
4. EPA Water Infrastructure Finance Innovation Act Loans, total $702,447,235 for the Sustainable Water Initiative for Tomorrow (SWIFT) projects.
5. Virginia Department of Environmental Quality, Clean Water Revolving Loan Fund, three active loans total $106,163,013.

HRSD Finance, including Accounting and Procurement, have systems in place and are prepared to accurately manage the financial requirements of grant awards. HRSD has encountered no problems meeting the obligations of grant awards. This project will be managed by an HRSD Design and Construction project manager, who will work closely with contract specialists to ensure the contract compliance is met. The project manager and post-award financial analyst will ensure project milestones are met and reported, invoices thoroughly reviewed, and reimbursement requests submitted timely and as determined in the award agreement. The final products are reviewed to ensure expectations of the Design and Construction team are met.

For ongoing projects or projects that will require future maintenance, such as infrastructure, flood warning and response systems, signs, websites, or flood risk applications, a maintenance, management, and monitoring plan for the projects must be provided

Maintenance Plan*: CID519999_HRSD_CFPF-1_Support_MaintenancePlan.pdf

Describe how the project meets each of the applicable scoring criteria contained in Appendix B. Documentation can be incorporated into the Scope of Work Narrative

Criteria*:

Eligible Projects (10 of 30 points): The Onancock Treatment Plant Administrative Building Design project meets the eligible projects criteria as a plan for a resilient critical community lifeline facility that will serve as a ride-out shelter for employees during storm and flood events to maintain operations and protect from potential catastrophic failure. The building will also be used to safely house the laboratory and SCADA systems that serve the entire HRSD Eastern Shore operations.

Social Vulnerability Index Score (10 of 10 points): The proposed building design is located in a Very High Social Vulnerability census block, shown in the VFRIS map, Attachment 5 of the Scope of Work. The building is critical to services in several other Very High and High Social Vulnerability areas, as depicted on the Social Vulnerability Map, Attachment 3 of the Scope of Work document).

Community scale of benefits (30 of 30 points): The building design will have a positive community benefit to at least ten census block groups by protecting HRSD assets on the Virginia Eastern Shore and protection from operations failure during flood or storm events that could lead to sewage overflow and create public health issues. The protection of these assets through resilient building design will also protect the natural environment in the surrounding areas and benefit residents and businesses throughout the Eastern Shore.

Expected lifespan of the project (10 of 10 points): The building design when constructed is expected to be operational and in use for at least 30 years.

Remedy for NFIP probation or suspension (0 of 5 points): Not applicable.

Proposed project part of a low-income geographic area (10 of 10 points): Yes, this project is in a low-income geographic area.

Proposed project implements a Chesapeake Bay TMDL BMP (5 of 5 points): Yes, the design for the construction will include erosion and sediment control measures. Additionally, the design includes laboratory space which helps to ensure HRSD meets water quality standards and implements a Chesapeake Bay TMDL BMP.

Budget

Budget Summary

Grant Matching Requirement*: Is a match waiver being requested?	LOW INCOME - All other Projects Fund 85%/Match 15%
Match Waiver Request Note: only low-income communities are eligible for a match waiver. *:	Yes
I certify that my project is in a low-income geographic area:	Yes
Total Project Amount (Request + Match)*:	$374,400.00 **This amount should equal the sum of your request and match figures
REQUIRED Match Percentage Amount:	$56,160.00

BUDGET TOTALS

Before submitting your application be sure that you meet the match requirements for your project type.

Match Percentage:	15.00% Verify that your match percentage matches your required match percentage amount above.
Total Requested Fund Amount:	$318,240.00
Total Match Amount:	$56,160.00
TOTAL:	$374,400.00

Personnel

Description	Requested Fund Amount	Match Amount	Match Source
N/A	$0.00	$0.00	Cash
	$0.00	**$0.00**	

Fringe Benefits

Description	Requested Fund Amount	Match Amount	Match Source
N/A	$0.00	$0.00	Cash
	$0.00	**$0.00**	

Travel

Description	Requested Fund Amount	Match Amount	Match Source
N/A	$0.00	$0.00	Cash
	$0.00	**$0.00**	

Equipment

Description	Requested Fund Amount	Match Amount	Match Source

N/A	$0.00	$0.00	Cash
	$0.00	**$0.00**	

Supplies

Description	Requested Fund Amount	Match Amount	Match Source
N/A	$0.00	$0.00	Cash
	$0.00	**$0.00**	

Construction

Description	Requested Fund Amount	Match Amount	Match Source
N/A	$0.00	$0.00	Cash
	$0.00	**$0.00**	

Contracts

Description	Requested Fund Amount	Match Amount	Match Source
Development of PER	$97,240.00	$17,160.00	Cash
Design of PER recommended alternative	$221,000.00	$39,000.00	Cash
	$318,240.00	**$56,160.00**	

Maintenance Costs

Description	Requested Fund Amount	Match Amount	Match Source
N/A	$0.00	$0.00	Cash
	$0.00	**$0.00**	

PreAward and Startup Costs

Description	Requested Fund Amount	Match Amount	Match Source
N/A	$0.00	$0.00	Cash
		$0.00	

Other Direct Costs

Description	Requested Fund Amount	Match Amount	Match Source
N/A	$0.00	$0.00	Cash
	$0.00	**$0.00**	

Long and Short Term Loan Budget - Projects - VCFPF

Budget Summary

Are you applying for a short term, long term, or no loan as part of your application?

If you are not applying for a loan, select "not applying for loan" and leave all other fields on this screen blank

Long or Short Term*: Not Applying for Loan

Total Project Amount:	$0.00
Total Requested Fund Amount:	$0.00
TOTAL:	$0.00

Salaries

Description	Requested Fund Amount
No Data for Table	

Fringe Benefits

Description	Requested Fund Amount
No Data for Table	

Travel

Description	Requested Fund Amount
No Data for Table	

Equipment

Description	Requested Fund Amount
No Data for Table	

Supplies

Description	Requested Fund Amount
No Data for Table	

Construction

Description	Requested Fund Amount
No Data for Table	

Contracts

Description	Requested Fund Amount
No Data for Table	

Other Direct Costs

Description	Requested Fund Amount
No Data for Table	

Supporting Documentation

Supporting Documentation

Named Attachment	Required	Description	File Name	Type	Size	Upload Date

Detailed map of the project area(s) (Projects/Studies)	Detailed map of Onancock Treatment Plant Administration building location with inset of the building to be replaced, and a broader view map of the HRSD Treatment Plant and assets in relation to the Town of Onancock	CID519999_HRSD_CFPF-1_ProjectMap.pdf	pdf	8 MB	10/31/2024 02:24 PM
FIRMette of the project area(s) (Projects/Studies)	FEMA National Flood Hazard Layer FIRMette map of Onancock Treatment Plant in Zone AE	CID519999_HRSD_CFPF-1_Firmette.pdf	pdf	696 KB	10/31/2024 02:24 PM
Historic flood damage data and/or images (Projects/Studies)	Explanation of no known flood events at project location.	CID519999_HRSD_CFPF-1_Support_Flood.pdf	pdf	76 KB	10/31/2024 02:24 PM
A link to or a copy of the current floodplain ordinance	Document with link to Town of Onancock's Floodplain Ordinance	CID519999_HRSD_CFPF-1_FloodplainOrdinance.pdf	pdf	69 KB	10/31/2024 02:24 PM
Maintenance and management plan for project	Summary maintenance plan for building being designed.	CID519999_HRSD_CFPF-1_Support_MaintenancePlan.pdf	pdf	122 KB	10/31/2024 02:24 PM
A link to or a copy of the current hazard mitigation plan	Document with links to relevant Hazard Mitigation Plans and attached FEMA approval letter of HRSD's HMP.	CID519999_HRSD_CFPF-1_HMP.pdf	pdf	233 KB	10/31/2024 02:24 PM
A link to or a copy of the current comprehensive plan	Document with link to Town of Onancock's Comprehensive Plan	CID519999_HRSD_CFPF-1_ComprehensivePlan.pdf	pdf	70 KB	10/31/2024 02:24 PM
Social vulnerability index score(s) for the project area	Document containing two maps, first with VFRIS SVI of project location, the 2nd with SVI of project impact.	CID51999_HRSD_CFPF-1_SVI.pdf	pdf	458 KB	10/31/2024 02:24 PM
Authorization to request funding from the Fund from governing body or chief executive of the local government	Letter from HRSD CFO to VDCR authorizing request for funding	CID519999_HRSD_CFPF-1_Authorization.pdf	pdf	143 KB	10/31/2024 02:24 PM
Signed pledge agreement from each contributing organization	Document stating signed pledge is not applicable since there are no contributing organizations other than HRSD.	CID519999_HRSD_CFPF-1_Pledge.pdf	pdf	65 KB	10/31/2024 02:24 PM
Maintenance Plan					

Benefit-cost analysis must be submitted with project applications over $2,000,000. in lieu of using the FEMA benefit-cost analysis tool, applicants may submit a narrative to describe in detail the cost benefits and value. The narrative must explicitly indicate the risk reduction benefits of a flood mitigation project and compares those benefits to its cost-effectiveness.

Benefit Cost Analysis	Document stating BCA not required for grant less than $2M.	CID519999_HRSD_CFPF-1_BCA.pdf	pdf	108 KB	10/31/2024 03:35 PM
Other Relevant Attachments					

Letters of Support

Description	File Name	Type	Size	Upload Date
Letter of Support from Accomack-Northampton Planning District Commission Executive Director	CID519999_HRSD_CFPF-1_LOS-ANPDC.pdf	pdf	1 MB	10/31/2024 02:24 PM
Letter of Support from Chincoteague Town Manager	CID519999_HRSD_CFPF-1_LOS-Chincoteague.pdf	pdf	74 KB	10/31/2024 02:24 PM
Letter of Support from Onancock Town Manager	CID519999_HRSD_CFPF-1_LOS Onancock.pdf	pdf	80 KB	10/31/2024 02:24 PM

Resilience Plan

Resilience Plan

Description	File Name	Type	Size	Upload Date
Cover sheet and letter dated August 30, 2024, from DCR approving the HRSD Resilience Plan.	CID519999_HRSD_CFPF-1_ResiliencePlan.pdf	pdf	246 KB	10/31/2024 02:24 PM

CID519999_HRSD_CFPF-1_SOW

Scope of Work Narrative

Applicant: Hampton Roads Sanitation District

Project Name: Onancock Treatment Plant Administration Building Design

1. Need

a. The specific problem being solved is the design of an essential building for wastewater treatment operations, a critical community lifeline.

i. Hampton Roads Sanitation District (HRSD) Onancock Wastewater Treatment Plant provides public wastewater collection and treatment services on Virginia's Eastern Shore. This service is a critical community lifeline as defined by FEMA[1]. HRSD's Onancock Wastewater Treatment Plant Administration building is in a deteriorated condition and is not rated to serve as a ride-out shelter. The administration building serves as the central hub for the entire HRSD Eastern Shore operations. The building will be designed with upgrades to serve as a ride-out shelter, provide laboratory space for required onsite compliance analysis and treatment process control, and house critical servers and supervisory control and data acquisition (SCADA) systems. Attachment 1 is the project area map with photo of the existing building, Attachment 2 is a map of Onancock service area, and Attachment 3 is a map of the Eastern Shore service area.

ii. Hurricane Helene's recent catastrophic impact on water and wastewater systems highlights the importance of proactive resilience investments in Virginia's critical community lifelines, especially in socially vulnerable areas that are already at high risk from hurricanes such as Virginia's Eastern Shore. Attachment 4 is a hurricane risk map of the Eastern Shore and Attachment 5 is the VFRIS Flood Risk and SVI for the project location.

iii. The project will include development of a preliminary engineering report (PER) and design documents for an upgraded administration and laboratory facility that will serve as a ride-out shelter for essential wastewater operations staff that support all HRSD Eastern Shore operations.

iv. The total project cost is $374,400. HRSD requests a waiver of the match, as detailed in the budget narrative. HRSD is prepared to cover a cash match if the waiver is not approved.

b. The key factors that contribute to the need for the Onancock Treatment Plant Administration Building Design are its current condition and location.

[1] https://www.fema.gov/emergency-managers/practitioners/lifelines

i. HRSD's ownership and operation of sanitary sewer systems on Virginia's Eastern Shore is a relatively recent development[2]. Prior to this, sewer infrastructure was the responsibility of individual localities. The Onancock Treatment Plant was originally built in the 1970s and that infrastructure was transferred 'as-is' to HRSD after the localities successfully petitioned the Courts to join HRSD. The current administration building is in deteriorating condition.

ii. HRSD operates entirely within coastal Virginia and takes resilience, climate change, and risk planning seriously as evidenced in the DCR approved Resilience Plan. This includes designation of appropriate ride-out shelters in the various geographic areas we serve. The Eastern Shore is geographically isolated from other parts of HRSD's territory and therefore needs the ability to operate independently.

c. The Onancock Treatment Plant Administration Building Design is needed locally and regionally to provide a building plan that will be used to construct the Administration Building and effectively enable wastewater treatment to Virginia's Eastern Shore in the event of hurricane, flooding, or other potential disruption.

i. Wastewater treatment is a critical community lifeline that enables all other aspects of society to function. Virginia's Eastern Shore is at high risk of hurricanes and the population is socially vulnerable. The upgraded administration facility will serve as a ride-out shelter for essential staff in addition to housing lab space, critical servers, and SCADA systems. The building design will allow HRSD to mitigate operational interruptions in the event of a storm or flood that would negatively impact the Eastern Shore region.

d. The Onancock Treatment Plant Administration Building Design decreases the flood risk to public safety by providing the plans to build a resilient facility that will be a ride-out shelter and maintain critical operations.

i. Wastewater treatment service is a critical community lifeline. Investment in the resiliency of these services mitigates disruptions from storm events that produce flooding or damaging winds. In the absence of effective wastewater treatment, public health is at risk from exposure to untreated sewage.

e. The Onancock Treatment Plant Administration Building Design project protects or conserves natural resources indirectly by providing the plans to build a resilient facility. This facility will provide protection to HRSD workers and assets that enable wastewater treatment services to continue. Without the building, the treatment services may be disrupted during weather events, which could cause sanitary sewage to overflow in the land and surrounding waterways and negatively impact local health and natural resources.

f. Who or what is protected?

[2] https://easternshorepost.com/2019/12/24/accomack-will-petition-to-join-hrsd/

i. The waterways of Virginia are prime beneficiaries of effective wastewater treatment. The Eastern Shore depends on its natural resources and the waters that surround it. The environmental health of the waterways is vital to the livelihood of the Eastern Shore counties for their economy, tourism, aquaculture, agriculture, recreation, and healthy living[3]. One of the key factors to healthier water is reduction of sewage outflows and excess nutrients, which is the purpose of the Onancock Treatment Plant. This is important because excess nutrients, such as nitrogen, cause algae blooms which consume oxygen needed for marine life[4]. This benefit is not isolated to a moment in time but is continuous as is wastewater treatment. The proposed purpose-built design of the facility on the Eastern Shore for HRSD operations, laboratory, SCADA, and as a ride-out shelter, is a key step toward protecting and conserving the Eastern Shore natural resources.

ii. The proposed design will be used to construct an upgraded facility that will protect essential staff, lab equipment, servers, and SCADA systems which, in turn, protect public health and ecosystems which contribute to the local economy.

g. The safety threats, or environmental concerns related to flood risk.

i. The safety of HRSD employees is paramount. HRSD provides around the clock services. This means, when a flood occurs, operations employees are expected to be at work and on location. At the Onancock Treatment Plant, the current administration building is not a safe harbor for employees during storms or flood events. The proposed project to design a new building to serve as a ride-out shelter will remedy this issue.

ii. Environmental concerns related to flood risk are the potential loss of treatment plant operations, and a place for operators to safely ride-out a storm. Failure to provide a safe administration building could result in extended sewer overflows or substandard treatment detrimental to public health and nearby waterways.

h. Groups who might directly benefit from this flood risk reduction effort.

i. HRSD's Eastern Shore approximately 3,000 wastewater customers, and the travelling public, waterfront property owners, water-based commercial and industrial businesses will benefit from the Onancock Treatment Plant Administration Building Design project.

i. What would happen (or not happen) if the applicant does not receive funding?

i. HRSD will proceed with the project; however, it is likely that the construction phase would be delayed as this project is not regulatorily required. HRSD's capacity for capital investment is largely bound by regulatory requirements.

---

[3] https://www.esvaplan.org/edplan/ The A-NPDC, Eastern Shore of Virginia's Planning District Commission, Eastern-Shore-Final-Report 2019 and Eastern Shore of Virginia regional Economic Development Plan 2017

[4] https://oceanservice.noaa.gov/facts/nutpollution.html

Approximately 75% of HRSD's capital program spend over the next 5 years is regulatorily driven; a staggering $2 billion.

j. Alternatives analysis of the viability of the project, how selected project reduces risk to populations at risk of flooding.

   i. The proposed Onancock Treatment Plant Administration Building Design project is a preliminary engineering report (PER) and design development. During the PER, alternatives will be evaluated for viability and make a recommendation for design.

   ii. Examples of previous related projects include the York River Treatment Plant Administration Building Renovation. The design was completed in 18 months at cost of $355,022 for a building addition of 4,507 square feet and renovation of the existing building of 22,775 square feet, with an estimated minimum life of 30 years. Professional design is a standard practice for all HRSD infrastructure projects.

2. Goals and Objectives

a. The goal of the proposed Onancock Treatment Plant Administration Building Design project is a constructable building design that meets the requirements of serving multiple purposes at existing location and functions as administration, laboratory, central SCADA, and a ride-out shelter for essential personnel.

b. The specific, measurable, and timebound objectives of the proposed project are:

   i. Completion of the final preliminary engineering report (PER) has an estimated duration of 8 months following notice to proceed to the design firm.

   ii. Development of bid-ready design documents and specifications are expected to be completed 12 months following the Final PER.

   iii. Total duration for the PER and Design phase for this project is expected to be completed in less than two years from commencement.

c. The estimated duration of the project can be comfortably completed within the agreement period.

3. Work Plan

a. Major activities and tasks of the Onancock Treatment Plant Administration Building Design project are:

   i. Procurement of professional services firm and scope negotiation for the development of a preliminary engineering report (PER) and design documents.

   ii. Preliminary Engineering Report (PER) (8 months)

      1) PER kickoff meeting with HRSD and firm.

      2) Draft PER review

      3) Final PER

   iii. Design (12 months)

1) Design phase kickoff
2) 60% Design review
3) 90% Design review
4) Bid-ready documents

b. Responsibility of activities and tasks:
    i. HRSD will assign a project manager from its Engineering Department to oversee the selected firm and coordinate with HRSD Eastern Shore Operations staff and obtain all necessary site plan approvals and permits.
    ii. Contract procurement will be processed by the assigned contract specialist who will work with the designated project manager and Chief Engineer.
    iii. Reimbursement requests will be submitted by the financial analyst after the project manager and contract specialist review the reports and invoices (prepared by the contractor) for completeness and accuracy.
c. The total timeframe is less than two years to complete the proposed Onancock Treatment Plant Administration Building Design.
d. Identify the required partners and where they are represented in the workplan.
    i. An HRSD project manager will work with the contract specialist for bids and will oversee the procured professional services firm through the PER and design development.
    ii. HRSD Operations staff will provide input and review of the PER and design documents to ensure that their needs will be adequately addressed.
    iii. Professional services firm will produce the PER and design deliverables according to HRSD standards and in compliance with local ordinances, resulting in an approved and bid-ready design.
    iv. Town of Onancock staff will be engaged in the PER and design development to identify relevant ordinances and permits that may be required. Locality staff will provide review and ultimate approval of the bid-ready documents.
    v. HRSD Communications will develop external media relevant to the project and coordination with the Town of Onancock. Communication products developed are primarily utilized during the construction phase, after this project is completed.
e. Deliverables
    i. Draft PER
    ii. Final PER
    iii. 60% Design Documents
    iv. 90% Design Documents
    v. Bid-Ready Documents

f. A Maintenance Plan for the Design project is not applicable. For sustaining the project after the agreement period, HRSD has extensive experience in maintenance of similar facilities and has in-house Facility Management staff. The periodic maintenance includes but is not limited to:

   i. Fire alarm, sprinkling or alarm panel testing and maintenance.
   ii. Backflow preventer testing
   iii. HVAC maintenance
   iv. Thermal imaging (contracted service)
   v. Roof inspection (contracted service)
   vi. Pest control
   vii. Specific maintenance details are maintained by the Facilities Manager.

4. Evaluation

a. The indicator of success for the Onancock Treatment Plant Administration Building Design is a final Preliminary Engineering Report (PER) that evaluates alternatives considering economic, social, and environmental impacts, and a buildable design document.

b. Data that will be collected and how the data will be used to measure success?

   i. Cost, scope, schedules, and bid-ready plans.
   ii. A range of alternatives will be evaluated to help HRSD determine how to cost-effectively design to meet the need. A comparison of scope, budgets, and schedules will inform the design development and success can be measured by comparing the variance in time and budget for achieving approved bid-ready plans to the initial estimates.

c. How was cost effectiveness evaluated and measured against the expected outcomes?

   i. Cost effectiveness is reviewed during professional services procurement and scope negotiation. Qualifications based procurement is used for the PER and design phase selection. The negotiated scope will be reviewed to verify reasonable time and cost.

d. What products, services, meetings, outreach efforts etc. will be conducted and how will success be measured?

   i. HRSD Onancock Treatment Plant Administration Building Design project will include engagement with local jurisdictions and state regulators as necessary.
   ii. Success is measured by approval of the bid-ready site plan.
   iii. HRSD has secured three letters of support from jurisdictions benefiting from the project. Attachments 6, 7, and 8 are letters from the Town Manager of Onancock, the Executive Director of the Accomack-Northampton Planning District Commission, and the Town Manager of Chincoteague.

e. HRSD will monitor project progress to ensure projects meet the requirements of the agreement and is delivered on time.

   i. Enterprise project management systems are used to track and approve schedule changes, invoices, and deliverables. HRSD and the professional services firm will agree to a schedule during scope negotiation.

   ii. The potential for project delays is acknowledged and communicated through development of a risk register which serves to anticipate risks and mitigate their effect.

   iii. Reports will be delivered on time and as established in the award agreement. Reports are scheduled in Outlook, tracked in Excel, and saved to a network folder.

Eligibility requirements:

HRSD Resilience Plan (Attachment 10)
Letter of Support (Attachments 7, 8, 9)
Link to Local Floodplain Ordinance
Link to Local Comprehensive Plan

List of Attachments:

#	Description
1	Aerial photo of HRSD Onancock Treatment Plant property with inset photo of existing administration building
2	Aerial photo and map of Onancock Treatment Plant pipelines and pump stations in Onancock and proximity to waterways
3	Map of Eastern Shore with social vulnerability, census blocks, and Onancock Treatment Plant location, pump stations, and connecting force main pipelines
4	Map of Eastern Shore with hurricane risk and Onancock Treatment Plant assets
5	DCR Virginia Flood Risk Information System (VFRIS) of Onancock Treatment Plant
6	Letter of Support from Town of Onancock
7	Letter of Support from Accomack-Northampton Planning District Commission
8	Letter of Support from Town of Chincoteague, Inc.
9	U.S. Census Bureau Income and Poverty (ACS 2022) for Town of Onancock
10	HRSD Resilience Plan Approval Letter from Virginia DCR

Onancock Treatment Plant Administration Building Design

CID519999_HRSD_CFPF-1_SOW-Attachment 1

WTP

HRSD Property Boundary

HRSD Pressurized Main

HRSD Gravity Main

WTP HRSD Treatment Plant

1% Annual Chance Flood Hazard (AE)

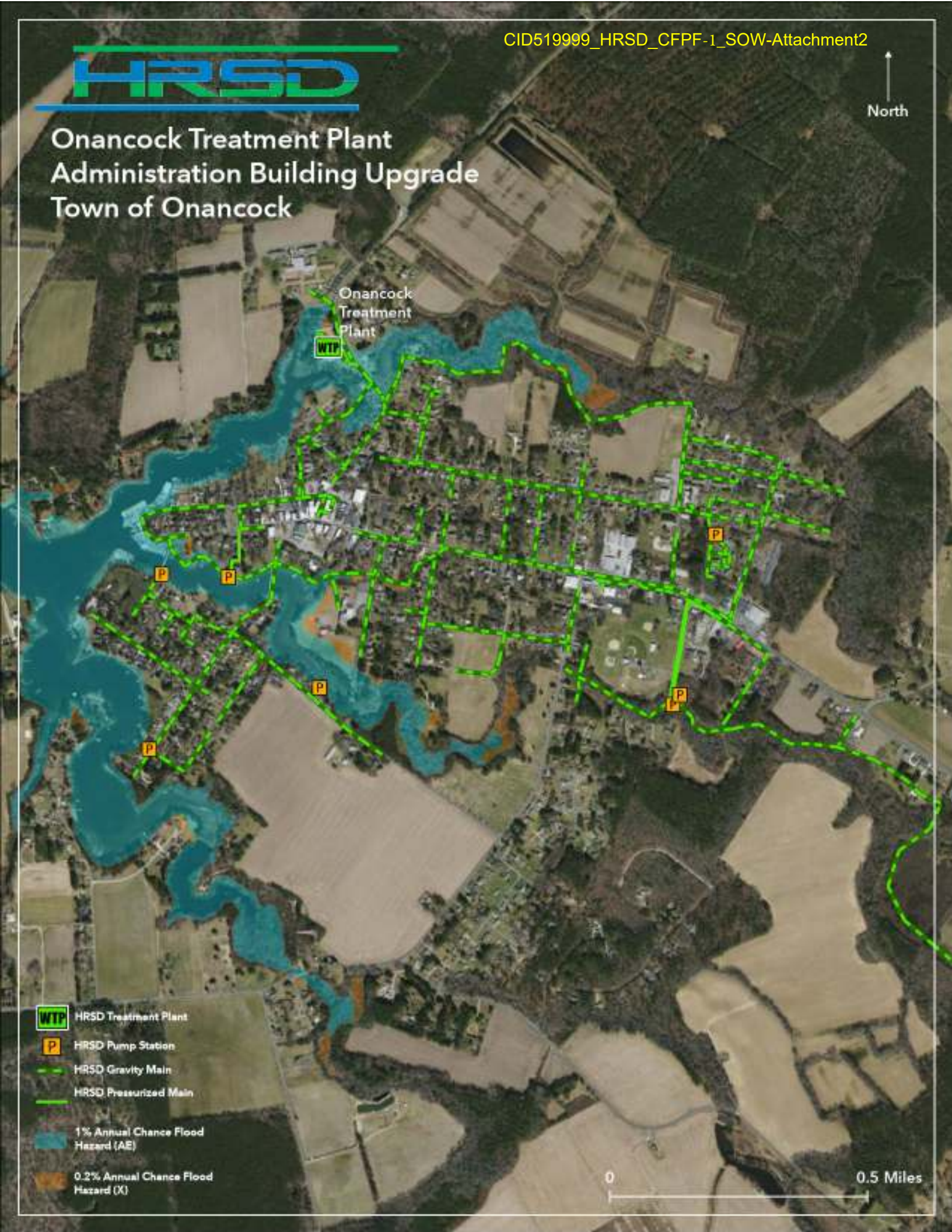
0.2% Annual Chance Flood Hazard (X)

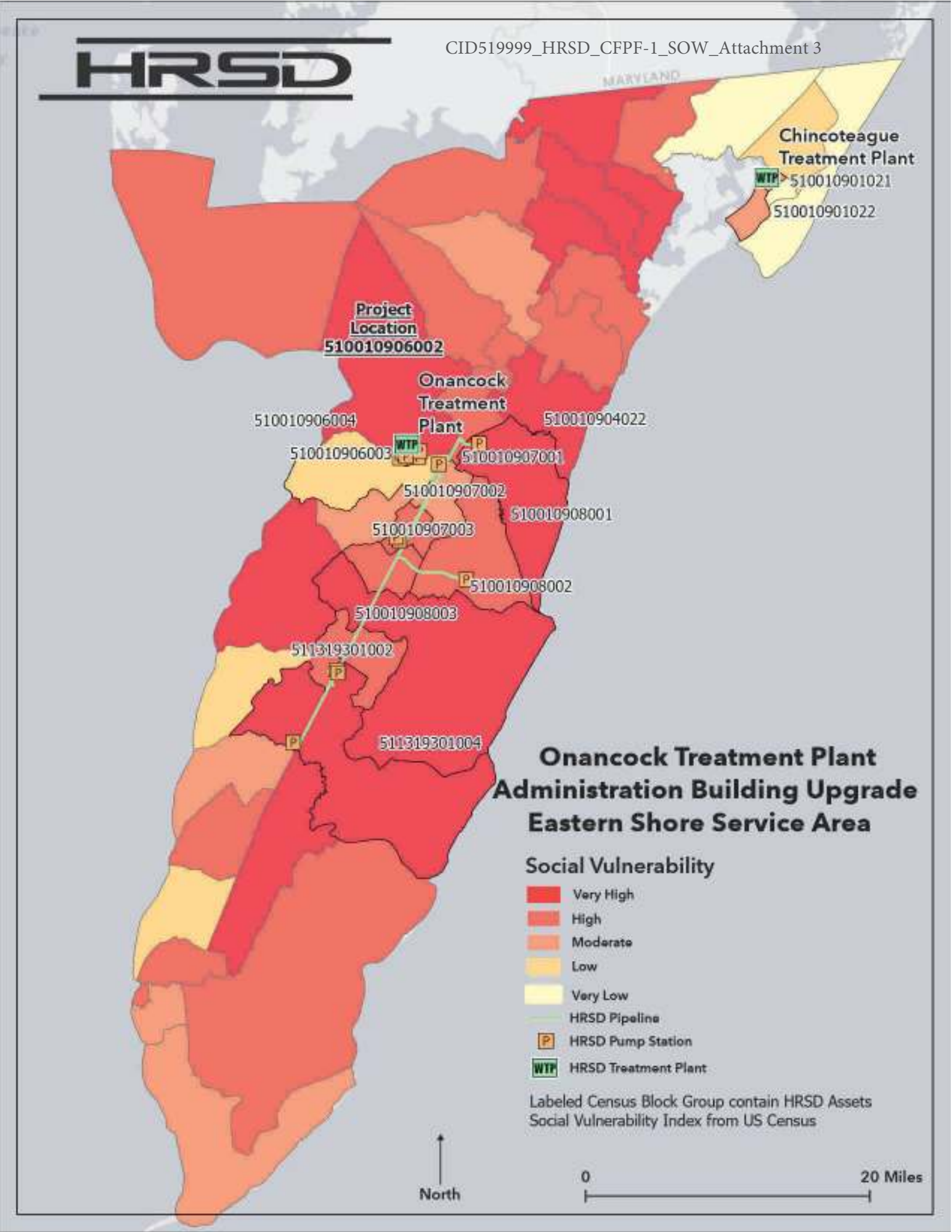
North

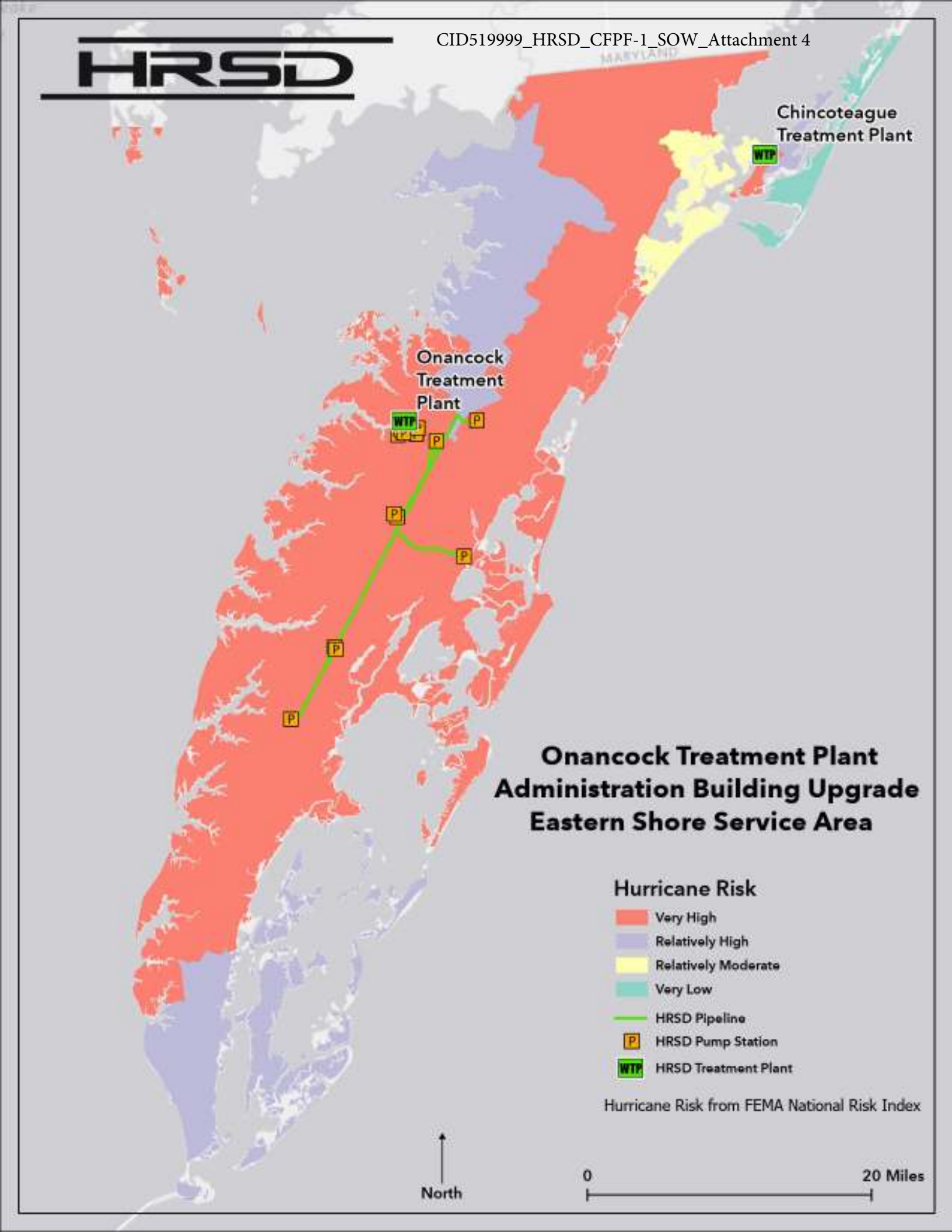
0 200 Feet

CID519999_HRSD_CFPF-1_SOW-Attachment2

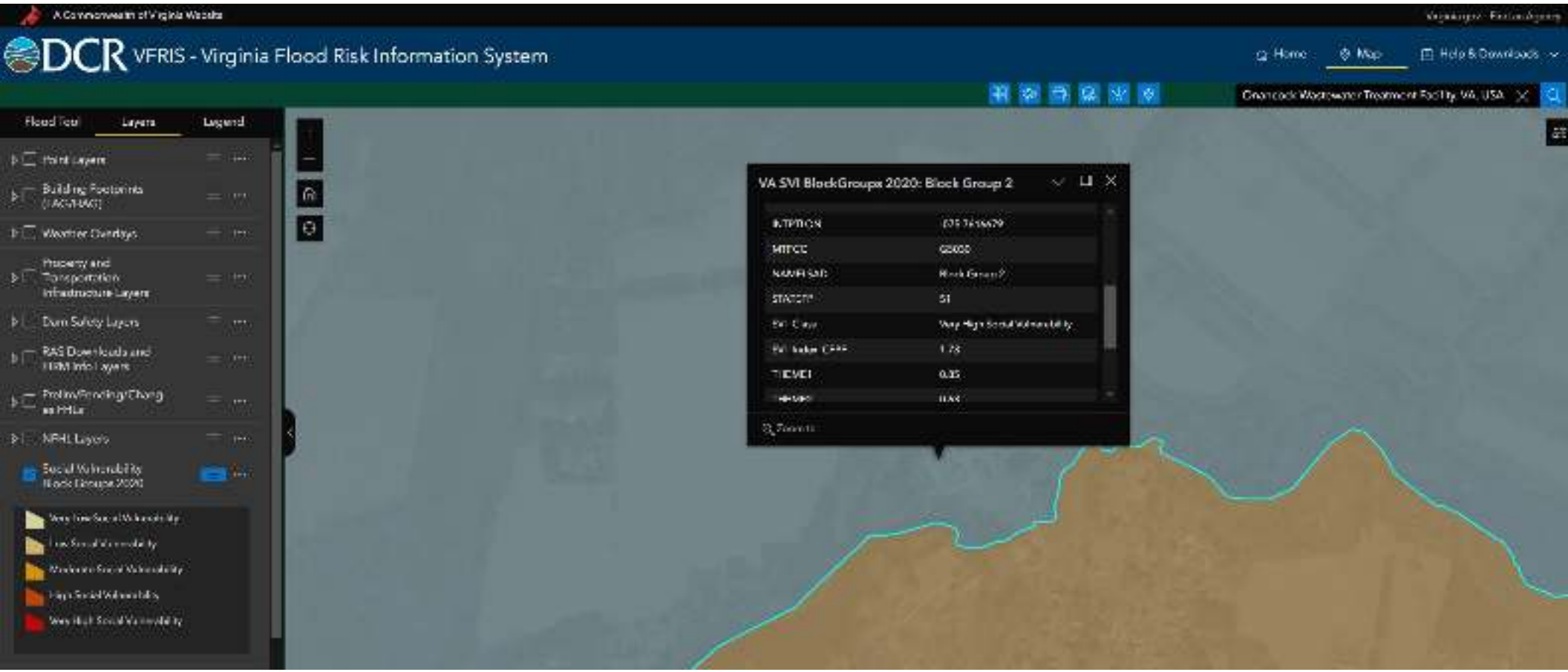
Onancock Treatment Plant Administration Building Upgrade Town of Onancock




HRSD
MARYLAND
Chincoteague Treatment Plant
WTP
510010901021
510010901022
Project Location
510010906002
Onancock Treatment Plant
510010906004
510010904022
510010906003
510010907001
510010907002
510010908001
510010907003
510010908002
510010908003
511319301002
511319301004
Onancock Treatment Plant Administration Building Upgrade
Eastern Shore Service Area
Social Vulnerability
Very High
High
Moderate
Low
Very Low
HRSD Pipeline
HRSD Pump Station
HRSD Treatment Plant
Labeled Census Block Group contain HRSD Assets
Social Vulnerability Index from US Census
North
0
20 Miles


HRSD
MARYLAND
Chincoteague Treatment Plant
WTP
Onancock Treatment Plant
WTP
P
P
P
P
P
P
Onancock Treatment Plant
Administration Building Upgrade
Eastern Shore Service Area
Hurricane Risk
Very High
Relatively High
Relatively Moderate
Very Low
HRSD Pipeline
P HRSD Pump Station
WTP HRSD Treatment Plant
Hurricane Risk from FEMA National Risk Index
North
0
20 Miles

CID519999_HRSD_CFPF-1_SOW_Attachment 5



ONANCOCK 1680
VIRGINIA'S EASTERN SHORE

October 9, 2024

Virginia Department of Conservation and Recreation
600 East Main Street, 24th Floor
Richmond, Virginia 23219-2094

Re: HRSD Onancock Treatment Plant Administration Building Upgrade – Letter of Support

Dear VA DCR,

The Town of Onancock fully supports HRSD's project to upgrade or replace the Onancock Treatment Plant Administrative and Laboratory Building. The existing facility was originally constructed in the 1970s and further expanded in 2012. It is in a deteriorated condition and not rated as an inclement weather ride-out shelter. A new facility would provide resilient and effective sanitary sewer service critical to protecting public health and the waterways that define the landscape of our coastal region and contribute heavily to the local economy and quality of life.

HRSD's Onancock Treatment Plant serves the entire Town of Onancock and several neighboring towns and counties. In addition, this location's administration and laboratory facilities support all of HRSD's Eastern Shore operations, including HRSD's Chincoteague Treatment Plant, miles of force main, gravity main, and pump stations. The facility will be upgraded to serve as a ride-out shelter, provide lab space for required onsite compliance analysis and treatment process control, and house critical servers and SCADA systems. These facilities must be operational daily to treat wastewater effectively and avoid sanitary sewer overflows. This project is a substantial investment as it will provide resilient working and lab analysis space for essential wastewater functions for the Town of Onancock and other communities on Virginia's eastern shore.

The Town of Onancock actively participates in HRSD projects and understands the need for and benefits of resilient wastewater services. The solutions developed for this project are anticipated to result in a thorough investigation of alternatives that consider financial, social, and environmental impacts.

Thanks,

Matt Spuck
Town Manager
Town of Onancock

C: Ryan Radspinner, P.E., Business Process Engineer, HRSD (via email)

A-NPDC
ACCOMACK-NORTHAMPTON PLANNING DISTRICT COMMISSION
P.O. BOX 417 • 23372 FRONT STREET • ACCOMAC, VIRGINIA 23301
(757) 787-2936 • TOLL FREE (866) 787-3001 • FAX (757) 787-4221
WEBSITE: www.a-npdc.org

October 16, 2024

Virginia Department of Conservation and Recreation
600 East Main Street, 24th Floor
Richmond, Virginia 23219-2094

Re: HRSD Onancock Treatment Plant Administration Building Upgrade – Letter of Support

Dear VA DCR,

The Accomack-Northampton Planning District Commission fully supports HRSD's project to replace the Onancock Treatment Plant Administrative and Laboratory Building located in the Town of Onancock. The existing facility was originally constructed in the 1970s and further expanded in 2012. The facility is in a deteriorated condition and not rated as an inclement weather *ride-out* shelter. A new facility would provide resilient and effective sanitary sewer service critical to protecting public health and the waterways that define the landscape of our coastal region and contribute heavily to the local economy and quality of life.

HRSD's Onancock Treatment Plant serves the entire Town of Onancock, the Town of Exmore, and portions of the Town of Nassawadox, the Town of Wachapreague, the Town of Accomac, as well as Accomack County. In addition, the laboratory facilities at this location support all of HRSD's Eastern Shore operations including HRSD's Chincoteague Treatment Plant and many miles of force main, gravity main, and pump stations.

The replacement facility will be upgraded to serve as a *ride out* shelter for essential staff and provide lab space for required onsite compliance analysis and treatment process control in addition to housing critical servers and SCADA systems. The facility must be operational all day, every day to treat wastewater effectively and to avoid sanitary sewer overflows. This project represents a substantial investment in the community by providing a resilient space for lab analysis and for staff who support the essential wastewater function for all of the communities on Virginia's eastern shore.

The Accomack-Northampton Planning District Commission supports HRSD projects and understands both the need for and the benefit of resilient wastewater services throughout the region where people live and work. This project will develop solutions for the Eastern Shore that will be the result of a thorough consideration of alternatives, taking into account environmental, social and financial impacts.

Sincerely,

Elaine Meil

Elaine K.N. Meil, Executive Director
Accomack-Northampton Planning District Commission

Town of Chincoteague, Inc.

October 04, 2024

Virginia Department of Conservation and Recreation
600 East Main Street, 24th Floor
Richmond, Virginia 23219-2094

Re: HRSD Onancock Treatment Plant Administration Building Upgrade _ Letter of Support

Dear VA DCR,

The Town of Chincoteague fully supports HRSD's project to upgrade or replace the Onancock Treatment Plant Administrative and Laboratory Building located in the Town of Onancock. The existing facility was originally constructed in the 1970s and further expanded in 2012. The facility is in a deteriorated condition and not rated as an inclement weather ride-out shelter. A new facility would provide resilient and effective sanitary sewer service critical to protecting public health and the waterways that define the landscape of our coastal region and contribute heavily to the local economy and quality of life.

HRSD's Onancock Treatment Plant serves the entire Town of Onancock, the Town of Exmore, and portions of the Town of Nassawadox, Town of Wachapreague, Town of Accomac, and Accomack County. In addition, the administration and laboratory facilities at this location support all of HRSD's Eastern Shore operations including HRSD's Chincoteague Treatment Plant and miles of force main, gravity main, and pump stations. The facility will be upgraded to serve as a ride-out shelter and provide lab space for required onsite compliance analysis and treatment process control in addition to housing critical servers and SCADA systems. These facilities must be operational all-day, every day to treat wastewater effectively and avoid sanitary sewer overflows. This project represents a substantial investment in the community by providing resilient working and lab analysis space for staff supporting essential wastewater function for the Town of Chincoteague and other communities on Virginia's eastern shore.

The Town of Chincoteague actively participates with HRSD projects and understands both the need for and benefit of resilient wastewater services within a community where people live,

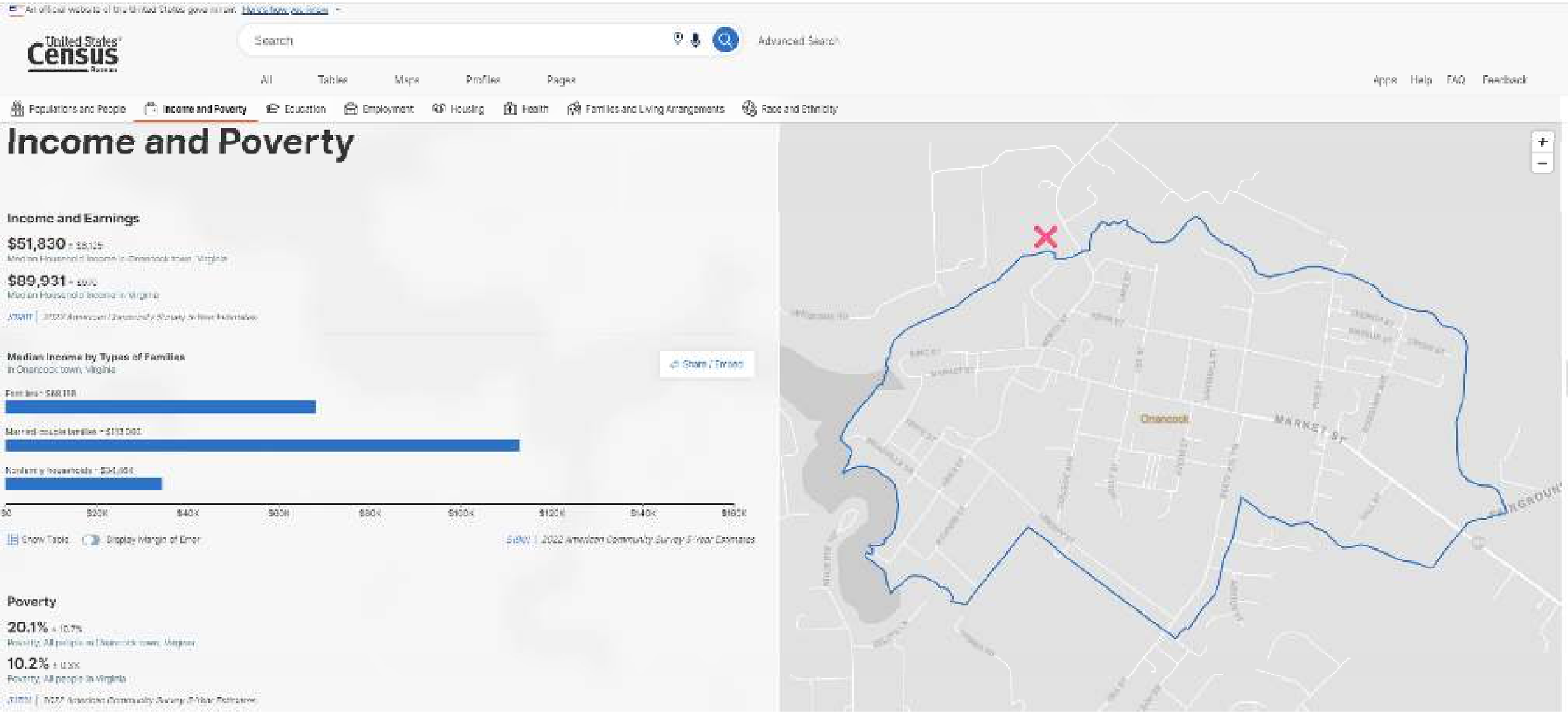
work and recreate. The solutions developed for this project are anticipated to result in a thorough investigation of alternatives considering financial, social, and environmental impacts.

Respectfully,

Michael T. Tolbert, P.E.
Town Manager
Town of Chincoteague

C: Ryan Radspinner, P.E., Business Process Engineer, HRSD (via email)

https://data.census.gov/profile/Onancock_town,_Virginia?g=160XX00US5159336



COMMONWEALTH of VIRGINIA

DEPARTMENT OF CONSERVATION AND RECREATION

August 30, 2024

Ryan Radspinner, PE
Business Process Engineer
Hampton Roads Sanitation District
PO Box 5915
Virginia Beach, VA 23471-0915

RE: HRSD Resiliency Plan Submission – CFPF

Dear Mr. Radspinner,

Thank you for submitting the *Hampton Roads Sanitation District* (*HRSD) Resiliency Plan.* After careful review and consideration, the Virginia Department of Conservation and Recreation has deemed the Plan complete, meeting all applicable criteria outlined in the Community Flood Preparedness Fund Round 4 Grant Manual. This approval will remain in effect for a period of five years, ending on August 30, 2029.

As a political subdivision of the Commonwealth created by an Act of Assembly (1940), HRSD is considered a local government for the purposes of the Community Flood Preparedness Fund (§ 10.1-603.24). Hampton Roads Sanitation District is the owner and operator of critical infrastructure that collects, conveys and treats wastewater generated by almost two million people in twenty localities across Eastern Virginia. As the sole provider of these services, HRSD is a "community lifeline," providing a most fundamental service that enables all other aspects of society to function.

The following elements were evaluated as part of this review:

Element 1: It is project-based with projects focused on flood control and resilience.

The *HRSD Resiliency Plan* draws flood control and resilience project possibilities primarily from the *Capital Improvement Plan*, informed by the document *Climate Change Planning Study: Utility-wide Flood Risk Results and Initial Mitigation Implementation Schedule.*

Element 2: It incorporates nature-based infrastructure to the maximum extent possible.

The *HRSD Resiliency Plan Executive Summary* aptly explains that while some proposed projects may be hybrid in nature, wastewater treatment on the community lifeline scale does not always lend itself to nature-based solutions. *Mitigation Concepts Summary Technical Memorandum* outlines that typical methods for this type of infrastructure would be dry-floodproofing, floodwalls with gates, and in some cases earthen levees, elevation or relocation.

HRSD's internal mitigation project ranking uses the "triple bottom line" scoring method described by the Envision framework of the Institute for Sustainable Infrastructure, which measures social and environmental benefits alongside economic prudence.

HRSD's commitment to nature-based stewardship is expressed through incorporation of sustainability measures where applicable, including managed meadows, solar roofs, rainwater cisterns. Particularly notable is the Sustainable Water Initiative for Tomorrow (SWIFT) program which puts treated water through additional rounds of advanced treatment to meet drinking water standards and injects it into the Potomac Aquifer to replenish groundwater resources and slow land subsidence. Eventually 90% of HRSD's discharge to local waters will be eliminated, reducing nutrient loads flowing to Chesapeake Bay.

Element 3: It considers of all parts of a locality regardless of socioeconomics or race.

The *HRSD Resiliency Plan* includes projects in a wide range of socioeconomic contexts and a spectrum of rural, suburban to urban conditions, as one would expect from their diverse, wide ranging service area. A map of EPA Environmental Justice index values across the service area also shows that treatment plants are not concentrated in low-income communities or communities of color.

Understanding the economic realities of their service base, HRSD strives to keep rates down through aggressive management of flood risk, as repair costs would be spread across all customers. As written in the Plan: "It is HRSD's responsibility to our customers to plan, design, construct, maintain, and operate our infrastructure to provide resilient service regardless of the socioeconomics of individual communities." This is critical as there is no other provider of this service in Eastern Virginia.

Element 4: Identifies all flooding occurring within locality, not only within SFHAs, and provides repetitive / severe repetitive loss data.

Firmettes are included for all proposed project locations as well as a contextual map of HRSD assets in relation to the greater SFHA.

Element 5: If property acquisition and / or relocation guidelines are included, equitable relocation strategies are addressed.

Not applicable.

Element 6: Includes a strategy for debris management.

The *HRSD Resiliency Plan* includes by reference the *2024 HRSD Hurricane Readiness and Recovery Plan*. This includes a specific list of debris clearance priorities and coordination points with other essential utilities to restore service and prevent environmental consequences to Tidewater and the Eastern Shore. An annual schedule for testing and maintenance of extensive fleet of debris removal equipment and training for all employees on protocols outlined in the *Damage Assessment Plan*.

Element 7: Includes administrative procedures for substantial damage / substantial improvement of structures within the SFHA.

HRSD is subject to the floodplain ordinance and substantial damage administrative procedures of the locality where each of its buildings are located.

Element 8: It includes coordination with other local and inter-jurisdictional projects, plans, and activities and has a clearly articulated timeline or phasing for plan implementation.

The *HRSD Resiliency Plan* describes how HRSD coordinates with the needs of the localities it serves and takes part in the hazard mitigation planning for the Hampton Roads area, specifically as an active participant in the *HRPDC Hazard Mitigation Plan*.

In the process of implementing its own flood risk mitigation projects as outlined in *Climate Change Planning Study: Utility-wide Flood Risk Results and Initial Mitigation Implementation Schedule*, HRSD expects that working with local governments on regional solutions will often amplify their mitigation efforts. This type of coordination would be considered on an annual basis as science progresses and re-assessments of vulnerability are made.

Element 9: Is based on the best available science, and incorporates climate change, sea level rise, storm surge (where appropriate), and current flood maps.

The *HRSD Resiliency Plan* includes by reference *Flood Risk in a Changing Climate* which examines the impacts of climate change on their facilities over the next 80 years using technical assessments produced by the *Climate Change Planning Study: Flood Water Level Evaluations for Treatment, Pumping and Administration Facilities.*

HRSD and their consultants performed extensive original H&H analyses, considering the degree to which flooding from all sources impacts their facilities. A range of storm scenarios and planning horizons inform resilience needs and strategy. Additional sources include FEMA maps and studies, USACE, NOAA, DCR and other state or federal research programs.

DCR looks forward to working with HRSD to build a more resilient Commonwealth. If you have questions or need additional assistance, please contact us at cfpf@dcr.virginia.gov. Again, thank you for your interest in the Community Flood Preparedness Fund and your participation in this program.

Sincerely,

Angela Davis, Director
Division of Floodplain Management

cc: Darryl M. Glover, DCR

CID519999_HRSD_CFPF-1_Budget

Budget Narrative

Applicant	Hampton Roads Sanitation District (HRSD)
Project Name	**Onancock Treatment Plant Administration Building Design**
Period of Performance	January 1, 2025, through December 30, 2028

	Match Waived	With Match
Grand Total State Funding Request	$374,400	$318,240
Grand Total Local Share of Project	$0	$56,160
Federal Funding (if applicable)	$0	$0
Project Grand Total	$374,400	$374,400
Locality In-Kind Match	0%	15%

Match Waived

Breakout by Cost Type	Personnel	Travel	Equipment	Supplies	**Contracts**	Indirect Costs	Other Cost	**Total**
Federal								0
Local								0
State CFPF Grant					374,400			$374,400
State RVRF Loan								0
Pre-Award								0
Maintenance								0
Total					**374,400**			**$374,400**

With Cash Match

Breakout by Cost Type	Personnel	Travel	Equipment	Supplies	**Contracts**	Indirect Costs	Other Cost	**Total**
Federal								0
Local					56,160			$56,160
State CFPF Grant					318,240			$318,240
State RVRF Loan								0
Pre-Award								0
Maintenance								0
Total					**$374,400**			**$374,400**

Estimated total project cost: $374,400

HRSD's Fiscal Year 2025 estimate for the Onancock Treatment Plant Administration Building Design is $374,400. This amount reflects the total cost of bringing the project to completion. Estimates for all work to be completed by third parties (engineers, contractors, etc.) are included.

Amount of funds requested from the Fund: $374,400 with match waiver or $318,240 without a match waiver.

1. HRSD requests $374,400 in grant funds with a match waiver. This represents 100% of the total Design project costs as explained in the Detailed Breakdown of Costs.
    a. HRSD requests Virginia Department of Conservation and Recreation to waive the match as described in CFPF Round 5 Grant Manual, Part IV, Section C, Grant Terms for grants of $1,000,000 or less.
    b. The Onancock Treatment Plant Administration Building Design project is in a low-income geographic area as detailed in Census.gov for Onancock and Accomack County[1].
2. If the match waiver is not approved, HRSD requests $318,240 in Community Flood Prevention Funding. HRSD will provide the $56,160 cast match, 15% the total Design project cost.
3. 100% of the grant funds will be used to reimburse HRSD for expenses incurred from professional services task orders to develop a PER and subsequent design documents.

Detailed Breakdown of Costs

Contracts: $374,400. The total budget represents HRSD's estimate for expenses incurred from contracted professional services task orders to complete the design phase of the facility. The contracted professional services will be with a competitively selected architecture/engineering firm, and in accordance with the Commonwealth of Virginia and HRSD procurement guidelines, whichever is more stringent.

The Onancock Treatment Plant Administration Building Design project consists of two distinct phases, PER and Design:

1. PER: $114,400. Development of the preliminary engineering report (PER) is estimated at $114,400. The purpose of the PER is to document the feasibility, planning, and alternatives analysis for the project. The PER clearly states the purpose, goals and assumptions used in preparation of the document. The PER includes a brief overview of the project, recommendations, all project costs (design, construction, etc.) and schedule to implement the work. The PER considers alternatives for the various elements to be included in the final design. A thoughtful method of comparing various alternatives is needed with specific recommendations. This preliminary document will be the basis to develop a more detailed design and ultimately, bid-ready document.
2. Design: $260,000. The design of the PER recommended alternative is estimated at $260,000. The purpose of the design phase is to further develop the PER recommended alternative and create locality approved, bid-ready comprehensive plans and specifications for the construction phase.

[1] Census.gov: https://data.census.gov/profile/Onancock_town,_Virginia?g=160XX00US5159336 and https://data.census.gov/all?q=Accomack%20County,%20Virginia&t=Income%20and%20Poverty

Both the PER and Design are milestones in the grant project scope of work and estimated to be completed within two years of the award agreement.

If the design phase expenditures exceed the proposed budget, HRSD will not seek grant fund reimbursement for the overage.

No other cost categories are requested for this project's grant application.

Amount of funds available

$374,400 is available to complete the Onancock Treatment Plant Administration Building Design. HRSD has all necessary funding secured to complete this Design project. A letter from Steve de Mik, HRSD Chief Financial Officer, authorizing funds is included with the application (Attachment 1).

HRSD has incorporated the Onancock Treatment Plant Administration Building Upgrade into the FY2025-2034 capital improvement plan (CIP) at a total budget of $4,670,640. The total budget in the CIP includes this application's Design project, as well as the construction. Upon initiation of the project following grant award, staff will seek appropriation from HRSD's Commission for the entire estimated project sum of $4,670,640.

HRSD has no taxing authority and meets its obligations by charging user fees. Grant funds are used to help offset costs that would otherwise be passed to our customers, the residents and businesses in eastern Virginia

October 21, 2024

Virginia Department of Conservation and Recreation
Attention: Virginia Community Flood Preparedness Fund
Division of Dam Safety and Floodplain Management
600 East Main Street, 24th Floor
Richmond, VA 23219

Re: Grant Application for the Virginia Community Flood Preparedness Fund Round 5

Dear Sir/Madam:

Hampton Roads Sanitation District (HRSD) is applying for the Community Flood Preparedness Fund for the Onancock Treatment Plant Administration Building Design project. HRSD fully supports the project, and it has been approved in the FY 2025 Capital Improvement Plan by the HRSD Board of Commissioners, our governing body.

The grant application proposal is for the full amount of the design phase estimated at $374,400 and requests a waiver on the match requirement. Any additional costs above $374,400 will be paid by HRSD. While HRSD has the liquidity to finance the project, it is awaiting the grant award notice before proceeding with the appropriation.

Thank you for this opportunity to apply for this critical project funding.

Sincerely,

Steve de Mik
Chief Financial Officer

CID519999_HRSD_CFPF-1_Support_Flood

Applicant: Hampton Roads Sanitation District

Project Name: Onancock Treatment Plant Administration Building Design

Supporting Information – Historic Flooding data and Hydrologic Studies

Provide information on the flood risk of the project area, including whether the project is in a mapped floodplain, what flood zone it is in, and when it was last mapped. If the property or area around it has been flooded before, share information on the dates of past flood events and the amount of damage sustained.

The project is in Flood Zone AE, source USGS National Map 2023. The FEMA National Flood Hazard Layer FIRMette map is attached.

Per HRSD Business Process Engineer, HRSD has no knowledge of historic flooding at the Onancock Treatment Plant. There has been none since HRSD acquired ownership in 2021. The Onancock Town Manager, Matt Spuck, also did not have any knowledge of prior plant flooding.

National Flood Hazard Layer FIRMette

FEMA

75°45'12"W 37°43'15"N

75°44'35"W 37°42'47"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Basemap Imagery Source: USGS National Map 2023

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

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This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

CID519999_HRSD_CFPF-1_Support_NoAdverseImpact

Applicant: Hampton Roads Sanitation District

Project Name: Onancock Treatment Plant Administration Building Design

Supporting Information – No Adverse Impact

Include studies, data, reports that demonstrate the proposed project minimizes flood vulnerabilities and does not create flooding or increased flooding (adverse impact) to other properties.

The proposed project is for Design only and is subject to local site plan approval by the Town of Onancock. There is no adverse impact with this project.

Attached is an endorsement from the Certified Flood Manager (CFM) with Hazen and Sawyer.

.

Hazen and Sawyer
1555 Roseneath Road
Richmond, VA 23230 • 804-266-1400

October 22, 2024

Ryan Radspinner, PE, MBA
Business Process Engineer
Hampton Roads Sanitation District (HRSD)
1434 Air Rail Avenue
Virginia Beach, VA 23455

Re: Onancock Treatment Plant Administration and Laboratory Building – Community Flood Preparedness Fund (CFPF), CFM Endorsement

Dear Mr. Radspinner:

My understanding is that HRSD is proposing a new Administration and Laboratory Building at the Onancock Treatment Plant located at 23656 North Street, Onancock, VA 23417. This site resides within FEMA Special Flood Hazard Areas Zone AE with a Base Flood Elevation 6 and Zone X (shaded) per FEMA FIRM Panel No. 51001C0630G, dated May 18, 2015. A portion of the site is also within Zone X, closest to North Street. Given that a very small area of the site is within Zone X, it is likely the new Administration and Laboratory Building will be located within the Zone AE special flood hazard area.

Since the new building would likely be located within one or both flood hazard areas, the project would be required to establish compliance with Accomack County's Code of Ordinances regarding construction within a special flood hazard area. Compliance would need to be established with Article XV, Flood Hazard Overlay District. Based on a review of this ordinance, the project would need to satisfy the requirements in this ordinance to be permitted by the County's floodplain administrator. These requirements are believed to be feasible to meet for this facility located in this area of tidally influenced floodplains.

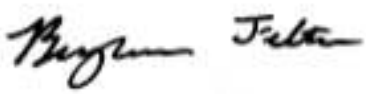
In addition to the establishing compliance with Accomack County's Code of Ordinances, the design will also be required to comply with HRSD's *Design and Construction Standards* which in Section 10, Flood Elevation Requirements, requires that the new facility be required to comply with Locality Code Requirements.

Given the project will be required to adhere to these requirements, it is my opinion that the project as conceived is capable of being compliant with floodplain regulations.

Job no

If you have any questions about this opinion, feel free to reach out to me at 804-521-0071 or bfelton@hazenandsawyer.com.

Very truly yours,



Benjamin Felton, PE, CFM
Senior Principal Engineer

October 21, 2024

Virginia Department of Conservation and Recreation
Attention: Virginia Community Flood Preparedness Fund
Division of Dam Safety and Floodplain Management
600 East Main Street, 24th Floor
Richmond, VA 23219

Re: Grant Application for the Virginia Community Flood Preparedness Fund Round 5

Dear Sir/Madam:

Hampton Roads Sanitation District (HRSD) is applying for the Community Flood Preparedness Fund for the Onancock Treatment Plant Administration Building Design project. HRSD fully supports the project, and it has been approved in the FY 2025 Capital Improvement Plan by the HRSD Board of Commissioners, our governing body.

The grant application proposal is for the full amount of the design phase estimated at $374,400 and requests a waiver on the match requirement. Any additional costs above $374,400 will be paid by HRSD. While HRSD has the liquidity to finance the project, it is awaiting the grant award notice before proceeding with the appropriation.

Thank you for this opportunity to apply for this critical project funding.

Sincerely,

Steve de Mik
Chief Financial Officer

CID519999_HRSD_CFPF-1

Applicant: Hampton Roads Sanitation District

Project Name: Onancock Treatment Plant Administration Building Design

Supporting Information – Projects – Benefit-Cost Analysis

A benefit-cost analysis must be submitted with the project application.

The benefit-cost analysis is not required for this Design project application. The total project cost is $374,400. Benefits of the project are summarized in the Scope of Work and Budget Narrative.

Note: The 2024 Funding Manual states, "Benefit-cost analysis or narrative of benefits must be submitted with project applications **over $2,000,000.**" This application is below that amount.

CID519999_HRSD_CFPF-1

Supporting Information – Projects – Repetitive Loss

Applicant: Hampton Roads Sanitation District

Project Name: Onancock Treatment Plant Administration Building Design

Supporting Information – Repetitive Loss

Provide a list of repetitive loss and/or severe repetitive loss properties. Do not provide the addresses for the properties, but include an exact number of repetitive loss and/or severe repetitive loss structures within the project area.

There is no repetitive loss and/or severe repetitive loss properties to report in the project area.

CID519999_HRSD_CFPF-1_Support_Deliverables

Applicant: Hampton Roads Sanitation District

Project Name: Onancock Treatment Plant Administration Building Design

Supporting Information – Approach, Milestones, and Deliverables

Outline a plan of action laying out the scope and detail of how the proposed work will be accomplished with a timeline identifying expected completion dates. Determine milestones for the project that will be used to track progress. Explain what deliverables can be expected at each milestone, and what the final project deliverables will be. Identify other project partners.

Full details of the plan of action are provided in the Scope of Work document "**CID519999_HRSD_CFPF-1_SOW**."

Scope: To obtain 1) final preliminary engineering report (PER) and 2) Design for the Onancock Treatment Plant Administration Building through contracted services. The PER and Design will meet certain specifications for ongoing operations and central hub for the HRSD Virginia Eastern Shore, and for essential personnel to use as a ride-out shelter during flood and storm events, and to protect the water quality laboratory and SCADA assets.

How it will be accomplished: The HRSD Design and Construction team will work with contract specialists to appropriately procure professional services firm and scope negotiation for the development of a PER and design document. All procurement will be conducted in compliance with Virginia Department of Conservation and Recreation and the Commonwealth of Virginia, and with sufficient details to meet the needs of the project scope.

The Design and Construction Project Manager will oversee the progress of the deliverables and review with the team prior to accepting a final version. Contract specialists and financial analyst will ensure accurate invoices and reimbursement requests are filed timely.

Timeline, Milestones, Deliverable:

Action	Milestones	Deliverables	Timeframe
Preliminary Engineering Report (PER)	• PER kickoff meeting with HRSD and firm • Draft PER review	Final PER	8 months from award execution
Design	• Design kickoff meeting • 60% Design review • 90% Design review	Bid-ready documents	12 months following PER
Reports	• Progress and Financial Reports	Completed reports	Per award document

Project partners: There are no project partners other than the contracted services procured.

CID519999_HRSD_CFPF-1_Support_MaintenancePlan

Applicant: Hampton Roads Sanitation District

Project Name: Onancock Treatment Plant Administration Building Design

Supporting Information – Maintenance Plan

For ongoing projects or projects that will require future maintenance, such as infrastructure, flood warning and response systems, signs, websites, or flood risk applications, a maintenance, management, and monitoring plan for the projects must be provided.

This proposed project is a building Design project. The design will not need future maintenance, although the new building will require it. Maintenance needs will be determined by the final building design.

Per the HRSD Facilities Maintenance Superintendent, periodic maintenance includes:

- Any type of fire alarm, sprinkling or alarm panel maintenance/testing.
    - Sprinkler system: Annual and 5-year inspections and testing. Repairs performed by contractor.
    - Fire Alarm: Annual inspection. Repairs performed by contractor
    - Backflow preventer testing: Annual inspection. Repairs performed by contractor.
    - Hydrant flow test: Minimum every 5 years
- HVAC maintenance:
    - Two scheduled inspections per year.
    - Maintenance and repairs performed by contractor.
- Database Initialization and Thermographic Inspection: Annual
- Roof inspection: Annual
- Pest Control: Annual

Onancock Treatment Plant Administration Building Design

CID519999_HRSD_CFPF-1_ProjectMap

WTP

HRSD Property Boundary

HRSD Pressurized Main

HRSD Gravity Main

WTP HRSD Treatment Plant

1% Annual Chance Flood Hazard (AE)

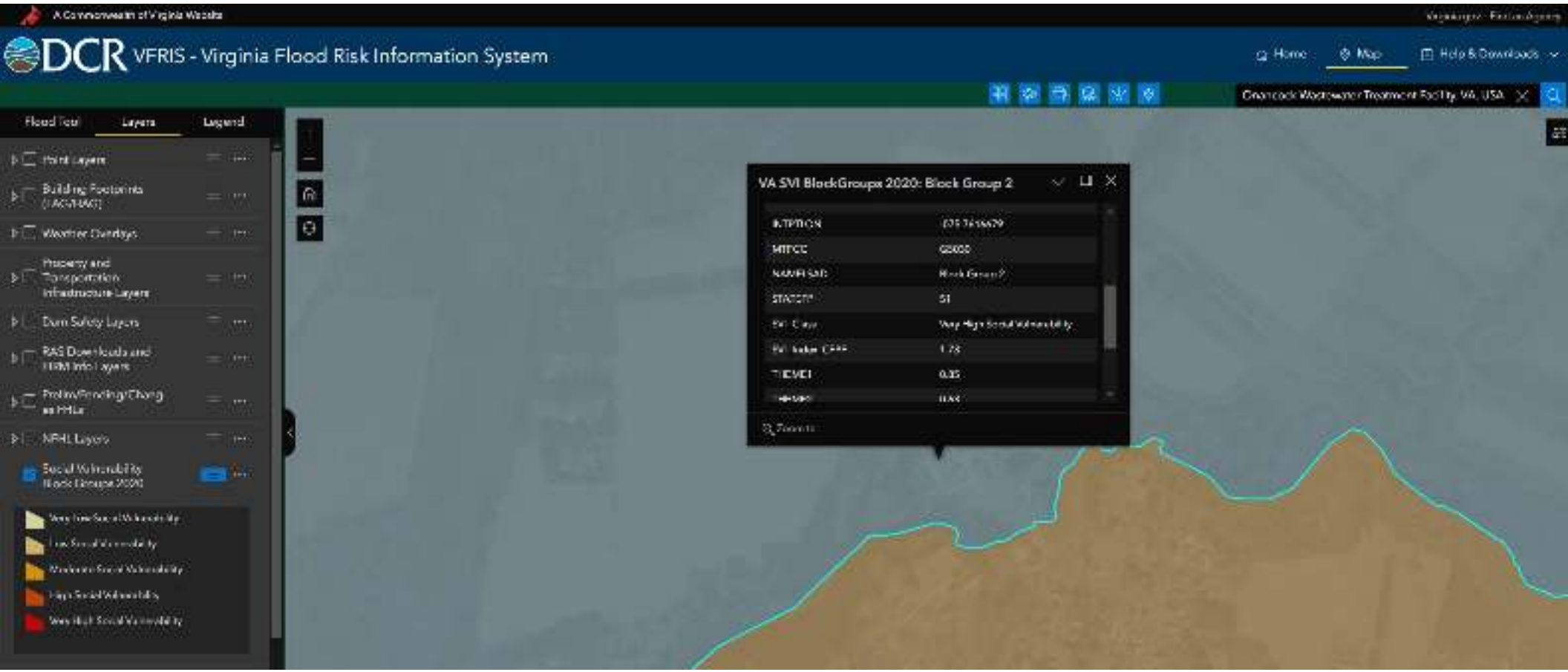
0.2% Annual Chance Flood Hazard (X)

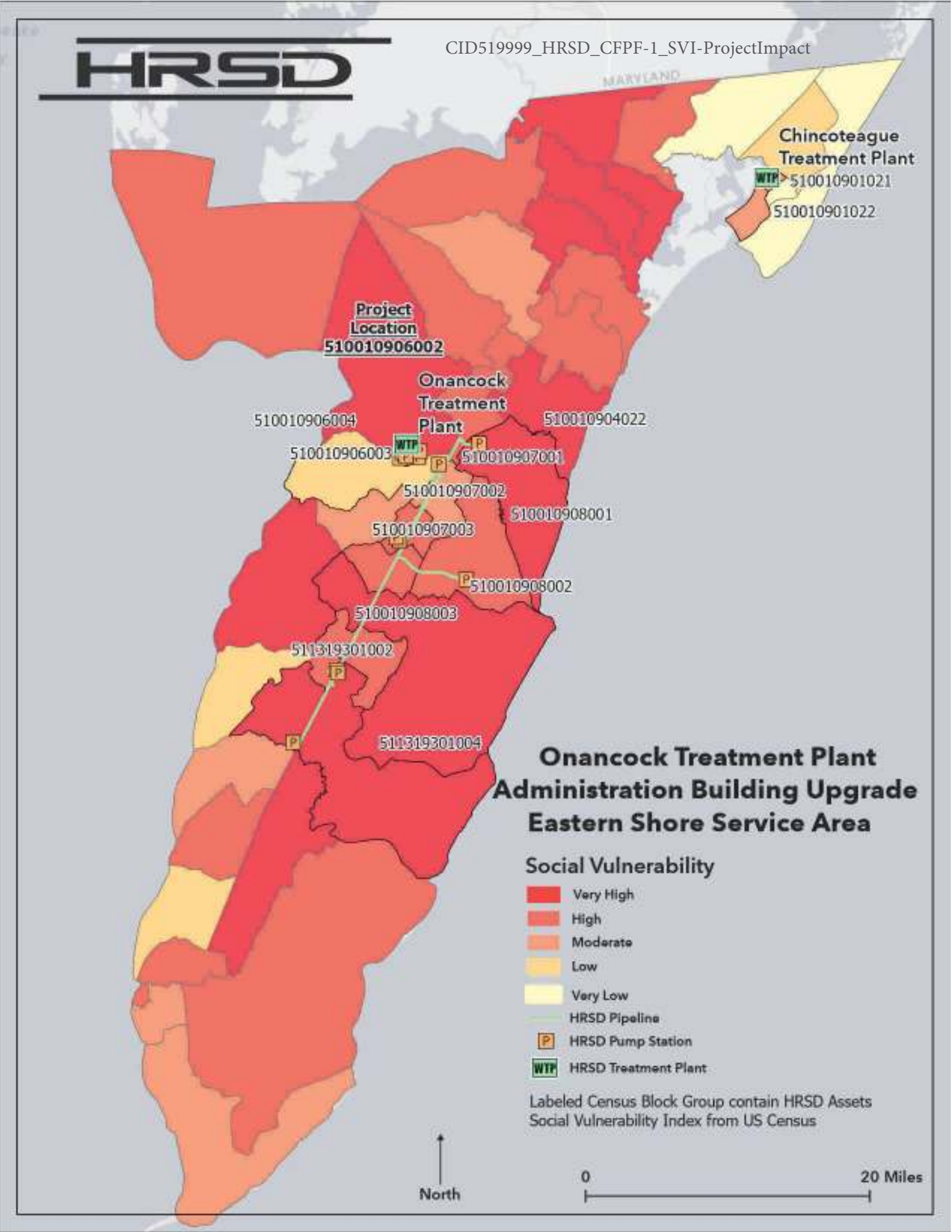
North

0 200 Feet


HRSD
Onancock Treatment Plant
Administration Building Upgrade
Town of Onancock
North
Onancock Treatment Plant
WTP
P
HRSD Treatment Plant
HRSD Pump Station
HRSD Gravity Main
HRSD Pressurized Main
1% Annual Chance Flood Hazard (AE)
0.2% Annual Chance Flood Hazard (X)
0
0.5 Miles

CID519999_HRSD_CFPF-1_SVI-ProjectLocation




HRSD
CID519999_HRSD_CFPF-1_SVI-ProjectImpact
MARYLAND
Chincoteague Treatment Plant
WTP
510010901021
510010901022
Project Location
510010906002
Onancock Treatment Plant
510010906004
510010904022
510010906003
510010907001
510010907002
510010908001
510010907003
510010908002
510010908003
511319301002
511319301004
Onancock Treatment Plant
Administration Building Upgrade
Eastern Shore Service Area
Social Vulnerability
Very High
High
Moderate
Low
Very Low
HRSD Pipeline
HRSD Pump Station
HRSD Treatment Plant
Labeled Census Block Group contain HRSD Assets
Social Vulnerability Index from US Census
North
0
20 Miles

CID519999_HRSD_CFPF-1

Applicant: Hampton Roads Sanitation District

Project Name: Onancock Treatment Plant Administration Building Design

Supporting Information – Projects – Benefit-Cost Analysis

A benefit-cost analysis must be submitted with the project application.

The benefit-cost analysis is not required for this Design project application. The total project cost is $374,400. Benefits of the project are summarized in the Scope of Work and Budget Narrative.

Note: The 2024 Funding Manual states, "Benefit-cost analysis or narrative of benefits must be submitted with project applications **over $2,000,000.**" This application is below that amount.

CID519999_HRSD_CFPF-1

Applicant: Hampton Roads Sanitation District

Project Name: Onancock Treatment Plant Administration Building Design

Supporting Documentation – Signed Pledge

Signed pledge agreement from each contributing organization.

This is not applicable to the HRSD Onancock application since there are no contributing organizations other than HRSD.

CID519999_HRSD_CFPF-1

Applicant: Hampton Roads Sanitation District

Project Name: Onancock Treatment Plant Administration Building Design

Supporting Documentation – Comprehensive Plan

A link to or a copy of the current comprehensive plan.

Below are links to the Town of Onancock Comprehensive Plan

Link to Local Comprehensive Plan

or

https://onancock.com/wp-content/uploads/2024/03/COMP-PLAN-FINAL-092721.pdf

CID519999_HRSD_CFPF-1

Applicant: Hampton Roads Sanitation District

Project Name: Onancock Treatment Plant Administration Building Design

Supporting Documentation - Floodplain Ordinance

A link to or a copy of the current floodplain ordinance.

Below are links to the Town of Onancock's Code of Ordinances, Chapter 20 – Floods, Article II. Flood Damage Prevention

Link to Local Floodplain Ordinance

or

https://library.municode.com/va/onancock/codes/code_of_ordinances?nodeId=PTIICOOR_CH20FL_ARTIIFLDAPR

CID519999_HRSD_CFPF-1

Applicant: Hampton Roads Sanitation District (HRSD)

Project Name: Onancock Treatment Plant Administration Building Design

Supporting Documentation – Hazard Mitigation Plan

A link to or a copy of the current hazard mitigation plan.

Below are links to two relevant Hazard Mitigation Plans.

1. 2022 Hampton Roads Hazard Mitigation Plan | Hampton Roads, VA or https://www.hrpdcva.gov/400/2022-Hampton-Roads-Hazard-Mitigation-Pla
   The above link is to the amended 2022 Hampton Roads Planning District Hazard Mitigation Plan. HRSD's HMP was approved by Virginia Department of Emergency Management and FEMA (letter attached) and is included in the DCR approved HRSD Resilience Plan.

2. Hazard Mitigation Planning – Accomack-Northampton Planning District Commission or https://www.esvaplan.org/planesva/coastal-resources/hazard-mitigation-planning/
   This link is to the 2021 Accomack-Northampton Planning District Hazard Mitigation Plan which includes the Town of Onancock's Plan (Chapter 17) with references to the wastewater treatment and its transfer to HRSD.

U.S. Department of Homeland Security
Federal Emergency Management Agency
Region 3

One Independence Mall
615 Chestnut Street, 6th floor
Philadelphia, PA 19106-4404

FEMA

February 29, 2024

John Sadler
Regional Emergency Management Administrator
Hampton Roads Sanitation District
723 Woodlake Drive
Chesapeake, Virginia 23320

Community:	Hampton Roads Sanitation District, Virginia
PDC:	Hampton Roads
Plan Adoption Date:	02/07/2024
Plan Approval Date:	06/08/2022
Plan Expiration Date:	06/07/2027

Dear Administrator Sadler:

I am pleased to tell you that FEMA has approved your Hazard Mitigation Plan (HMP). The plan meets the requirements of Title 44, Chapter 1, Section 201.6, of the Code of Federal Regulations (44 CFR 201.6). It addresses the required elements: planning process, risk assessment and hazard identification, mitigation strategy, maintenance and implementation, and adoption.

Your HMP also met the requirements to address all dam risks, based on the Fiscal Year 2024 Rehabilitation of High Hazard Potential Dams (HHPD) Notice of Funding Opportunity.

Participating communities are now eligible for FEMA non-emergency assistance and mitigation grants from the following programs:

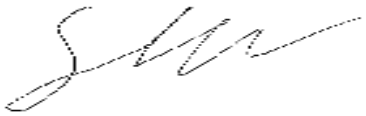
- Hazard Mitigation Grant Program (HMGP)
- Building Resilient Infrastructure and Communities (BRIC)
- Flood Mitigation Assistance (FMA)
- HHPD Grant Program

Funding from these programs can be used for qualified mitigation planning and projects that reduce disaster losses and protect life and property from future disasters. Approved HMPs can also earn points under the Community Rating System.

Within 5 years, your community must revise its plan and obtain approval to remain eligible for mitigation grant funding. You should review the plan annually to keep it relevant to the mitigation goals in your community. Please consider the enclosed recommendations to further strengthen your plan during its next update.

I commend you and the planning team for your hard work and continued commitment to building a safer, more resilient community. For questions about your plan or mitigation grant funding, please contact Katie Vugdalic, State Hazard Mitigation Officer, at (804) 461-0242.

Sincerely,



Sarah Wolfe, Branch Chief
Floodplain Management and Insurance Branch
FEMA Region 3

Enclosure

cc: Katie Vugdalic, State Hazard Mitigation Officer, VDEM
Stacy McKinley, Hazard Mitigation Planner, VDEM
Alexander Krupp, Deputy State Hazard Mitigation Officer, VDEM
Chris Bruce, All Hazards Planner, Region 5, VDEM
Ryan Radspinner, Engineer, HRSD
Anas Malkawi, Chief of Asset Management, HRSD
Tina Condon, Grand Analyst, HRSD

CID519999_HRSD_CFPF-1_Support_Flood

Applicant: Hampton Roads Sanitation District

Project Name: Onancock Treatment Plant Administration Building Design

Supporting Information – Historic Flooding data and Hydrologic Studies

Provide information on the flood risk of the project area, including whether the project is in a mapped floodplain, what flood zone it is in, and when it was last mapped. If the property or area around it has been flooded before, share information on the dates of past flood events and the amount of damage sustained.

Per HRSD Business Process Engineer, HRSD has no knowledge of historic flooding at the Onancock Treatment Plant. There has been none since HRSD acquired ownership in 2021. The Onancock Town Manager, Matt Spuck, also did not have any knowledge of prior plant flooding.

The Onancock Treatment Plant Administration Building Design project will be located in Flood Zone AE, source USGS National Map 2023. The FEMA National Flood Hazard Layer FIRMette map is attached to the application.

National Flood Hazard Layer FIRMette

FEMA

75°45'12"W 37°43'15"N

75°44'35"W 37°42'47"N

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- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

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October 21, 2024

Virginia Department of Conservation and Recreation
Attention: Virginia Community Flood Preparedness Fund
Division of Dam Safety and Floodplain Management
600 East Main Street, 24th Floor
Richmond, VA 23219

Re: Grant Application for the Virginia Community Flood Preparedness Fund Round 5

Dear Sir/Madam:

Hampton Roads Sanitation District (HRSD) is applying for the Community Flood Preparedness Fund for the Onancock Treatment Plant Administration Building Design project. HRSD fully supports the project, and it has been approved in the FY 2025 Capital Improvement Plan by the HRSD Board of Commissioners, our governing body.

The grant application proposal is for the full amount of the design phase estimated at $374,400 and requests a waiver on the match requirement. Any additional costs above $374,400 will be paid by HRSD. While HRSD has the liquidity to finance the project, it is awaiting the grant award notice before proceeding with the appropriation.

Thank you for this opportunity to apply for this critical project funding.

Sincerely,

Steve de Mik
Chief Financial Officer

CID519999_HRSD_CFPF-1_Support_MaintenancePlan

Applicant: Hampton Roads Sanitation District

Project Name: Onancock Treatment Plant Administration Building Design

Supporting Information – Maintenance Plan

For ongoing projects or projects that will require future maintenance, such as infrastructure, flood warning and response systems, signs, websites, or flood risk applications, a maintenance, management, and monitoring plan for the projects must be provided.

This proposed project is a building Design project. The design will not need future maintenance, although the new building will require it. Maintenance needs will be determined by the final building design.

Per the HRSD Facilities Maintenance Superintendent, periodic maintenance includes:

- Any type of fire alarm, sprinkling or alarm panel maintenance/testing.
    - Sprinkler system: Annual and 5-year inspections and testing. Repairs performed by contractor.
    - Fire Alarm: Annual inspection. Repairs performed by contractor
    - Backflow preventer testing: Annual inspection. Repairs performed by contractor.
    - Hydrant flow test: Minimum every 5 years
- HVAC maintenance:
    - Two scheduled inspections per year.
    - Maintenance and repairs performed by contractor.
- Database Initialization and Thermographic Inspection: Annual
- Roof inspection: Annual
- Pest Control: Annual

A-NPDC
ACCOMACK-NORTHAMPTON PLANNING DISTRICT COMMISSION
P.O. BOX 417 • 23372 FRONT STREET • ACCOMAC, VIRGINIA 23301
(757) 787-2936 • TOLL FREE (866) 787-3001 • FAX (757) 787-4221
WEBSITE: www.a-npdc.org

October 16, 2024

Virginia Department of Conservation and Recreation
600 East Main Street, 24th Floor
Richmond, Virginia 23219-2094

Re: HRSD Onancock Treatment Plant Administration Building Upgrade – Letter of Support

Dear VA DCR,

The Accomack-Northampton Planning District Commission fully supports HRSD's project to replace the Onancock Treatment Plant Administrative and Laboratory Building located in the Town of Onancock. The existing facility was originally constructed in the 1970s and further expanded in 2012. The facility is in a deteriorated condition and not rated as an inclement weather *ride-out* shelter. A new facility would provide resilient and effective sanitary sewer service critical to protecting public health and the waterways that define the landscape of our coastal region and contribute heavily to the local economy and quality of life.

HRSD's Onancock Treatment Plant serves the entire Town of Onancock, the Town of Exmore, and portions of the Town of Nassawadox, the Town of Wachapreague, the Town of Accomac, as well as Accomack County. In addition, the laboratory facilities at this location support all of HRSD's Eastern Shore operations including HRSD's Chincoteague Treatment Plant and many miles of force main, gravity main, and pump stations.

The replacement facility will be upgraded to serve as a *ride out* shelter for essential staff and provide lab space for required onsite compliance analysis and treatment process control in addition to housing critical servers and SCADA systems. The facility must be operational all day, every day to treat wastewater effectively and to avoid sanitary sewer overflows. This project represents a substantial investment in the community by providing a resilient space for lab analysis and for staff who support the essential wastewater function for all of the communities on Virginia's eastern shore.

The Accomack-Northampton Planning District Commission supports HRSD projects and understands both the need for and the benefit of resilient wastewater services throughout the region where people live and work. This project will develop solutions for the Eastern Shore that will be the result of a thorough consideration of alternatives, taking into account environmental, social and financial impacts.

Sincerely,

Elaine Meil

Elaine K.N. Meil, Executive Director
Accomack-Northampton Planning District Commission

Town of Chincoteague, Inc.

October 04, 2024

Virginia Department of Conservation and Recreation
600 East Main Street, 24th Floor
Richmond, Virginia 23219-2094

Re: HRSD Onancock Treatment Plant Administration Building Upgrade _ Letter of Support

Dear VA DCR,

The Town of Chincoteague fully supports HRSD's project to upgrade or replace the Onancock Treatment Plant Administrative and Laboratory Building located in the Town of Onancock. The existing facility was originally constructed in the 1970s and further expanded in 2012. The facility is in a deteriorated condition and not rated as an inclement weather ride-out shelter. A new facility would provide resilient and effective sanitary sewer service critical to protecting public health and the waterways that define the landscape of our coastal region and contribute heavily to the local economy and quality of life.

HRSD's Onancock Treatment Plant serves the entire Town of Onancock, the Town of Exmore, and portions of the Town of Nassawadox, Town of Wachapreague, Town of Accomac, and Accomack County. In addition, the administration and laboratory facilities at this location support all of HRSD's Eastern Shore operations including HRSD's Chincoteague Treatment Plant and miles of force main, gravity main, and pump stations. The facility will be upgraded to serve as a ride-out shelter and provide lab space for required onsite compliance analysis and treatment process control in addition to housing critical servers and SCADA systems. These facilities must be operational all-day, every day to treat wastewater effectively and avoid sanitary sewer overflows. This project represents a substantial investment in the community by providing resilient working and lab analysis space for staff supporting essential wastewater function for the Town of Chincoteague and other communities on Virginia's eastern shore.

The Town of Chincoteague actively participates with HRSD projects and understands both the need for and benefit of resilient wastewater services within a community where people live,

work and recreate. The solutions developed for this project are anticipated to result in a thorough investigation of alternatives considering financial, social, and environmental impacts.

Respectfully,

Michael T. Tolbert, P.E.
Town Manager
Town of Chincoteague

C: Ryan Radspinner, P.E., Business Process Engineer, HRSD (via email)

ONANCOCK 1680
VIRGINIA'S EASTERN SHORE

October 9, 2024

Virginia Department of Conservation and Recreation
600 East Main Street, 24th Floor
Richmond, Virginia 23219-2094

Re: HRSD Onancock Treatment Plant Administration Building Upgrade – Letter of Support

Dear VA DCR,

The Town of Onancock fully supports HRSD's project to upgrade or replace the Onancock Treatment Plant Administrative and Laboratory Building. The existing facility was originally constructed in the 1970s and further expanded in 2012. It is in a deteriorated condition and not rated as an inclement weather ride-out shelter. A new facility would provide resilient and effective sanitary sewer service critical to protecting public health and the waterways that define the landscape of our coastal region and contribute heavily to the local economy and quality of life.

HRSD's Onancock Treatment Plant serves the entire Town of Onancock and several neighboring towns and counties. In addition, this location's administration and laboratory facilities support all of HRSD's Eastern Shore operations, including HRSD's Chincoteague Treatment Plant, miles of force main, gravity main, and pump stations. The facility will be upgraded to serve as a ride-out shelter, provide lab space for required onsite compliance analysis and treatment process control, and house critical servers and SCADA systems. These facilities must be operational daily to treat wastewater effectively and avoid sanitary sewer overflows. This project is a substantial investment as it will provide resilient working and lab analysis space for essential wastewater functions for the Town of Onancock and other communities on Virginia's eastern shore.

The Town of Onancock actively participates in HRSD projects and understands the need for and benefits of resilient wastewater services. The solutions developed for this project are anticipated to result in a thorough investigation of alternatives that consider financial, social, and environmental impacts.

Thanks,

Matt Spuck
Town Manager
Town of Onancock

C: Ryan Radspinner, P.E., Business Process Engineer, HRSD (via email)

CID519999_HRSD_CFPF-1_ResiliencePlan

Applicant: Hampton Roads Sanitation District

Project Name: Onancock Treatment Plant Administration Building Design

Other Attachments – Resilience Plan

Elements of Resilience Plans

As previously stated in this manual, the contents of a resilience plan for the purpose of this grant round are meant to include the following elements.

- *It is project-based with projects focused on flood control and resilience.*
- *It incorporates nature-based infrastructure to the maximum extent possible.*
- *It includes considerations of all parts of a locality regardless of socioeconomics or race.*
- *It includes coordination with other local and inter-jurisdictional projects, plans, and activities and has a clearly articulated timeline or phasing for plan implementation.*
- *Is based on the best available science, and incorporates climate change, sea level rise, storm surge (where appropriate), and current flood maps.*

Hampton Roads Sanitation District's Resilience Plan was approved by Virginia Department of Conservation and Recreation. Attached is the approval letter dated August 30, 2024, from Angela Davis, Director, Division of Floodplain Management.

COMMONWEALTH of VIRGINIA
DEPARTMENT OF CONSERVATION AND RECREATION

August 30, 2024

Ryan Radspinner, PE
Business Process Engineer
Hampton Roads Sanitation District
PO Box 5915
Virginia Beach, VA 23471-0915

RE: HRSD Resiliency Plan Submission – CFPF

Dear Mr. Radspinner,

Thank you for submitting the *Hampton Roads Sanitation District* (*HRSD) Resiliency Plan.* After careful review and consideration, the Virginia Department of Conservation and Recreation has deemed the Plan complete, meeting all applicable criteria outlined in the Community Flood Preparedness Fund Round 4 Grant Manual. This approval will remain in effect for a period of five years, ending on August 30, 2029.

As a political subdivision of the Commonwealth created by an Act of Assembly (1940), HRSD is considered a local government for the purposes of the Community Flood Preparedness Fund (§ 10.1-603.24). Hampton Roads Sanitation District is the owner and operator of critical infrastructure that collects, conveys and treats wastewater generated by almost two million people in twenty localities across Eastern Virginia. As the sole provider of these services, HRSD is a "community lifeline," providing a most fundamental service that enables all other aspects of society to function.

The following elements were evaluated as part of this review:

Element 1: It is project-based with projects focused on flood control and resilience.

The *HRSD Resiliency Plan* draws flood control and resilience project possibilities primarily from the *Capital Improvement Plan*, informed by the document *Climate Change Planning Study: Utility-wide Flood Risk Results and Initial Mitigation Implementation Schedule.*

Element 2: It incorporates nature-based infrastructure to the maximum extent possible.

The *HRSD Resiliency Plan Executive Summary* aptly explains that while some proposed projects may be hybrid in nature, wastewater treatment on the community lifeline scale does not always lend itself to nature-based solutions. *Mitigation Concepts Summary Technical Memorandum* outlines that typical methods for this type of infrastructure would be dry-floodproofing, floodwalls with gates, and in some cases earthen levees, elevation or relocation.

HRSD's internal mitigation project ranking uses the "triple bottom line" scoring method described by the Envision framework of the Institute for Sustainable Infrastructure, which measures social and environmental benefits alongside economic prudence.

HRSD's commitment to nature-based stewardship is expressed through incorporation of sustainability measures where applicable, including managed meadows, solar roofs, rainwater cisterns. Particularly notable is the Sustainable Water Initiative for Tomorrow (SWIFT) program which puts treated water through additional rounds of advanced treatment to meet drinking water standards and injects it into the Potomac Aquifer to replenish groundwater resources and slow land subsidence. Eventually 90% of HRSD's discharge to local waters will be eliminated, reducing nutrient loads flowing to Chesapeake Bay.

Element 3: It considers of all parts of a locality regardless of socioeconomics or race.

The *HRSD Resiliency Plan* includes projects in a wide range of socioeconomic contexts and a spectrum of rural, suburban to urban conditions, as one would expect from their diverse, wide ranging service area. A map of EPA Environmental Justice index values across the service area also shows that treatment plants are not concentrated in low-income communities or communities of color.

Understanding the economic realities of their service base, HRSD strives to keep rates down through aggressive management of flood risk, as repair costs would be spread across all customers. As written in the Plan: "It is HRSD's responsibility to our customers to plan, design, construct, maintain, and operate our infrastructure to provide resilient service regardless of the socioeconomics of individual communities." This is critical as there is no other provider of this service in Eastern Virginia.

Element 4: Identifies all flooding occurring within locality, not only within SFHAs, and provides repetitive / severe repetitive loss data.

Firmettes are included for all proposed project locations as well as a contextual map of HRSD assets in relation to the greater SFHA.

Element 5: If property acquisition and / or relocation guidelines are included, equitable relocation strategies are addressed.

Not applicable.

Element 6: Includes a strategy for debris management.

The *HRSD Resiliency Plan* includes by reference the *2024 HRSD Hurricane Readiness and Recovery Plan*. This includes a specific list of debris clearance priorities and coordination points with other essential utilities to restore service and prevent environmental consequences to Tidewater and the Eastern Shore. An annual schedule for testing and maintenance of extensive fleet of debris removal equipment and training for all employees on protocols outlined in the *Damage Assessment Plan*.

Element 7: Includes administrative procedures for substantial damage / substantial improvement of structures within the SFHA.

HRSD is subject to the floodplain ordinance and substantial damage administrative procedures of the locality where each of its buildings are located.

Element 8: It includes coordination with other local and inter-jurisdictional projects, plans, and activities and has a clearly articulated timeline or phasing for plan implementation.

The *HRSD Resiliency Plan* describes how HRSD coordinates with the needs of the localities it serves and takes part in the hazard mitigation planning for the Hampton Roads area, specifically as an active participant in the *HRPDC Hazard Mitigation Plan*.

In the process of implementing its own flood risk mitigation projects as outlined in *Climate Change Planning Study: Utility-wide Flood Risk Results and Initial Mitigation Implementation Schedule*, HRSD expects that working with local governments on regional solutions will often amplify their mitigation efforts. This type of coordination would be considered on an annual basis as science progresses and re-assessments of vulnerability are made.

Element 9: Is based on the best available science, and incorporates climate change, sea level rise, storm surge (where appropriate), and current flood maps.

The *HRSD Resiliency Plan* includes by reference *Flood Risk in a Changing Climate* which examines the impacts of climate change on their facilities over the next 80 years using technical assessments produced by the *Climate Change Planning Study: Flood Water Level Evaluations for Treatment, Pumping and Administration Facilities.*

HRSD and their consultants performed extensive original H&H analyses, considering the degree to which flooding from all sources impacts their facilities. A range of storm scenarios and planning horizons inform resilience needs and strategy. Additional sources include FEMA maps and studies, USACE, NOAA, DCR and other state or federal research programs.

DCR looks forward to working with HRSD to build a more resilient Commonwealth. If you have questions or need additional assistance, please contact us at cfpf@dcr.virginia.gov. Again, thank you for your interest in the Community Flood Preparedness Fund and your participation in this program.

Sincerely,

Angela Davis, Director
Division of Floodplain Management

cc: Darryl M. Glover, DCR