



EasyGrantsID: 76171

National Fish and Wildlife Foundation – Chesapeake Bay Small Watershed Grants Implementation
2022, Full Proposal

Title: Phase I: Hog Island Restoration

Organization: Middle Peninsula Planning District Commission

Grant Information

Title of Project

Phase I: Hog Island Restoration

Total Amount Requested	\$ 499,999.15
Matching Contributions Proposed	\$
Proposed Grant Period	01/02/ 2023 - 12/31/ 2025

Project Description

The Middle Peninsula Planning District Commission (MPPDC) is proposing Phase I construction project to install a nature-based shoreline protection and habitat restoration solution along Hog Island in Gloucester County, Virginia which historically has experienced severe erosion. The project aims to protect and enhance maritime habitat for shorebirds and other species, restore oyster populations, and reduce erosion and sedimentation into the Chesapeake Bay. It also aims to protect the residential and commercial properties along Monday Creek and the York River which are currently protected by Hog Island. Hog Island is also located within the new NOAA Middle Peninsula Habitat Focus Area, a targeted area for habitat restoration which identifies the site as a top priority for Federal Chesapeake Bay habitat restoration activities.

Project Abstract

With funding through the Virginia Coastal Zone Management Program in 2020, MPPDC staff contracted with the Virginia Institute of Marine Science (VIMS) Shoreline Studies Program (SSP) to assess Hog Island site conditions and create a habitat restoration and shoreline protection design. In part, a Joint Permit Application was drafted. Therefore, with a design in hand, MPPDC staff is proposing to construct Phase I of this project which will focus on the south-facing shoreline of the Hog Island. This shoreline experiences the most wave energy and high shoreline erosion. Initial site assessments by VIMS SSP revealed that the nearshore around the island is extremely shallow and is likely not accessible by barge. Since getting materials and machinery to the site would be difficult and impractical, VIMS SSP will look to install oyster castles, or equivalent, to create a low reef. Such structures have been shown to be very successful in oyster recruitment which is necessary for long-term stability of the reef. This is particularly important in a high energy environment as stability is needed for the reef in order to withstand strong storms. The project was selected because of its unique impact to the estuary and adjacent parcels. As Hog Island sits at the mouth of Monday Creek and the York River, this project will provide protection for residences and two shellfish aquaculture businesses. This project location also provides important habitat, shore protection, and flood control.

Organization and Primary Contact Information

Organization	Middle Peninsula Planning District Commission
Organization Type	State or Local Government
City, State, Country	Saluda, Virginia, North America - United States

Region (if international)

Primary Contact Jackie Rickards



NFWF

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Position/Title
Phone and E-mail

804-758-2311 x ; jrickards@mppdc.com

Additional Contacts

Role	Name



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Project Location Information

Project Location Description	This project is located in Gloucester County, Virginia. Hog Island is part of the Guinea Marsh complex in the southeast part of the county.
Project Country(ies)	North America - United States
Project State(s)	Virginia
Project Congressional District(s)	District 1 (VA)

Permits and Approvals

Permits/Approvals Description:

Permits/Approvals Status:

Permits/Approvals Agency-Contact Person:

Permits/Approvals Submittal-Approval Date:



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Activities and Outcomes

Funding Strategy: Habitat Management

Metric: CBSF - BMP implementation for nutrient or sediment reduction - Acres with BMPs

Required: Optional

Description: Enter the total number of acres under agricultural or non-urban BMPs to reduce nutrient or sediment loading. Do not double-count individual acres which have multiple BMPs. DO NOT include cover crops, conservation tillage, enhanced cropland nutrient management, or managed grazing.

Starting Value 0.00 Acres with BMPs
Target value 9.00 Acres with BMPs

Note: The plan includes constructing oyster sills involving stone, oyster bags, and oyster castles that will protect island and restore oyster habitat. Therefore with the increase of oysters this will reduce nutrients and sediment in the adjacent waters.

Funding Strategy: Habitat Management

Metric: CBSF - BMP implementation for nutrient or sediment reduction - Lbs N avoided (annually)

Required: Optional

Description: Please use FieldDoc to develop estimates of the annual nitrogen pollutant load reductions from your proposed project. Enter FieldDoc-generated nitrogen reduction totals in this field then upload your FieldDoc Project Summary in the "Uploads" section.

Starting Value 0.00 Lbs N avoided (annually)
Target value 46.99 Lbs N avoided (annually)

Note: Living shorelines have the ability to remove 0.075 lbs/foot/year and with approximately 626.5 linear feet of shoreline constructed it will remove at least 46.99 lbs/year.

Funding Strategy: Habitat Management

Metric: CBSF - BMP implementation for nutrient or sediment reduction - Lbs P avoided (annually)

Required: Optional

Description: Please use FieldDoc to develop estimates of the annual phosphorus pollutant load reductions from your proposed project. Enter FieldDoc-generated phosphorus reduction totals in this field then upload your FieldDoc Project Summary in the "Uploads" section.



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Starting Value 0.00 Lbs P avoided (annually)
Target value 42.60 Lbs P avoided (annually)

Note: Living shorelines have the ability to remove 0.068 lbs/foot/year and with approximately 626.5 linear feet of shoreline constructed it will remove at least 42.60 lbs/year.

Funding Strategy: Habitat Restoration

Metric: CBSF - Erosion control - Miles restored

Required: Optional

Description: Enter the number of miles of tidal shoreline stabilized or restored through erosion control, including living shoreline restoration. Projects implementing qualifying stream restoration practices for TMDL crediting should instead report those outcomes instead through the "CBSF - stream restoration - miles restored" metric.

Starting Value 0.00 Miles restored
Target value 0.05 Miles restored

Note: MPPDC staff is proposing to construct Phase I of this project which will focus on the south-facing shoreline of the Hog Island. This shoreline experiences the most wave energy and high shoreline erosion of (-5 to -10 ft/yr). The constructed design will reduce this erosion rate.

Funding Strategy: Capacity, Outreach, Incentives

Metric: CBSF - Outreach/ Education/ Technical Assistance - # people reached

Required: Optional

Description: Enter the number of individuals reached by outreach, training, or technical assistance activities. In the "Notes" section, provide a summary of how individuals are reached (newsletter mailing list total, training attendance, etc.).

Starting Value 0.00 # people reached
Target value 100.00 # people reached

Note: MPPDC staff will document the progress of the project and share the progress on the Fight the Flood website and facebook page. This will reach at least 100 people and share how this project will enhance habitat and protect communities.



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I. PERSONNEL \$56,795.77

Staff Name	Position	Annual Salary	Project Hours	Hourly Rate	LOE (%)	Project Salary	% Fringe	\$ Fringe	Total Personnel
Lewie Lawrence	Executive Director	\$160,075.41	204.00	\$76.96	10	\$15,699.70	26.21	\$4,114.89	\$19,814.60
Curt Smith	Deputy Director	\$90,228.60	320.50	\$43.38	15	\$13,903.01	26.21	\$3,643.98	\$17,546.99
Jackie Rickards	Senior Planning Project Manager	\$73,780.00	327.10	\$35.47	16	\$11,602.61	26.21	\$3,041.05	\$14,643.66
Heather Modispaw	Chief Financial Director	\$78,950.03	100.00	\$37.96	5	\$3,795.67	26.21	\$994.85	\$4,790.52

Totals \$45,000.99 \$11,794.77 \$56,795.77

II. TRAVEL \$0.00

Domestic Airfare – Per Flight

Purpose/Destination	Unit Cost	Quantity	Total Cost

SubTotal \$0.00

International Airfare – Per Flight

Purpose/Destination	Unit Cost	Quantity	Total Cost

SubTotal \$0.00



Title: Phase I: Hog Island Restoration
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Train – Per Ticket

Purpose/Destination	Unit Cost	Quantity	Total Cost

SubTotal \$0.00

Rental Car – Per Day

Purpose/Destination	Days/Duration	Unit Cost	Quantity	Total Cost

SubTotal \$0.00

Taxis – Per Trip

Purpose/Destination	Unit Cost	Quantity	Total Cost

SubTotal \$0.00

Mileage – Per Mile

Purpose/Destination	Unit Cost	Quantity	Total Cost

SubTotal \$0.00

Gasoline – Per Gallon

Purpose/Destination	Unit Cost	Quantity	Total Cost



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SubTotal **\$0.00**

Per Diem (M&IE) – Per Day

Purpose/Destination	Days/Duration	Unit Cost	Quantity	Total Cost

SubTotal **\$0.00**

Lodging – Per Night

Purpose/Destination	Days/Duration	Unit Cost	Quantity	Total Cost

SubTotal **\$0.00**

Meals (no M&IE) – Per Meal

Purpose/Destination	Days/Duration	Unit Cost	Quantity	Total Cost

SubTotal **\$0.00**

III. EQUIPMENT **\$0.00**

Item Name	Description	Unit Cost	Quantity	Total Cost

IV. MATERIALS & SUPPLIES **\$0.00**

Type	Purpose	Unit of Measure	Unit Cost	Quantity	Total Cost



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V. CONTRACTUAL SERVICES	\$414,782.00
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Subcontract/Contract – Per Agreement

Contractor Name	Description	Total Cost
VIMS-SSP	JPA Application & Coordination w/ permit authoriti	\$15,000.00
Legal Services		\$5,000.00
Procured Contractor for Phase I Construction		\$394,782.00

SubTotal **\$414,782.00**

Subgrant – Per Agreement

Subrecipient	Description	Total Cost

SubTotal **\$0.00**

VI. OTHER DIRECT COSTS	\$0.00
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Type	Purpose	Unit of Measure	Unit Cost	Quantity	Total Cost

VII. TOTAL DIRECT COSTS	\$471,577.77
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VIII. INDIRECT COSTS	\$28,421.38
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Explanation of Modified Total Direct Cost Base(MTDC)	Rate Type	NICRA Expiration	\$MTDC	Rate(%)	Total Cost
Personnel, supplies, travel, and first \$25,000 of each subcontract, etc.; excludes equipment.	Fixed		\$101,795.77	27.92	\$28,421.38



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IX. TOTAL PROJECT COSTS

\$499,999.15



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Budget Narrative

Budget Narrative:

1. Personnel

Personnel -

Lewie Lawrence, the Executive Director of the MPPDC, will lead and coordinate project discussions with contractors and agencies to complete project deliverables. He will also provide updates to the MPPDC Board. Curt Smith, the Deputy Director, will coordinate project partners and the implementation of the project. Mr. Smith will also develop contracts to initiate project work. Jackie Rickards, Senior Planning Project Manager, will coordinate the project activities to make sure that the project is completed on time and within budget. Jackie will also lead project reporting needs. Heather Modispaw, Chief Financial Director, will manage and oversee all financial activities for the project including preparation of financial reports and invoices.

2. Travel

Domestic Airfare - Per Flight -

International Airfare - Per Flight -

Train - Per Ticket -

Rental Car - Per Day -

Taxis - Per Trip -

Mileage - Per Mile -

Gasoline - Per Gallon -

Per Diem (M&IE) - Per Day -



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Lodging - Per Night -

Meals (No M&IE) - Per Meal -

3. Equipment

Equipment -

4. Materials and Supplies

Materials and Supplies -

5. Contractual Services

Subcontract/Contract - Per Agreement -

VIMS-SSP Application & Coordination w/ permit authority: Hogg Island shoreline solution will incorporate new shoreline innovations associated with HB 1322 Living shorelines; modifies definition to include "other structural and organic materials, found in § 28.2-104.1. Living shorelines; development of general permit; guidance. Coordinating with VIMS Shoreline Studies program is needed to help coordinate with permitting agency after permit issuance on the final design, installation question and modifications associated with construction implementation. Assist with awareness of project functionality, cost savings, post construction permit communications as needed.

Legal Service for Procurement: Depending on the level of funding and the solution implemented, the project anticipates having to comply with the Virginia Procurement Act, legal assistance will be required to design, public notice, receive, review, and select winning contractor. A contract for award service will be issued to the selected contractor.



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Procure Contractor for Phase 1 Construction: Depending on the level of funding and the solution proposed, a private contractor will be awarded funds to construct the Hogg Island solutions as per the Joint Permit design. A contract for service prepared by legal will be utilized.

Subgrant - Per Agreement -

6. Other Direct Costs

Other Direct Costs -

7. Indirect Costs

Indirect Costs -



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Matching Contributions

Matching Contribution Amount:	\$
Type:	
Status:	
Source:	
Source Type:	
Description:	

Total Amount of Matching Contributions:	\$
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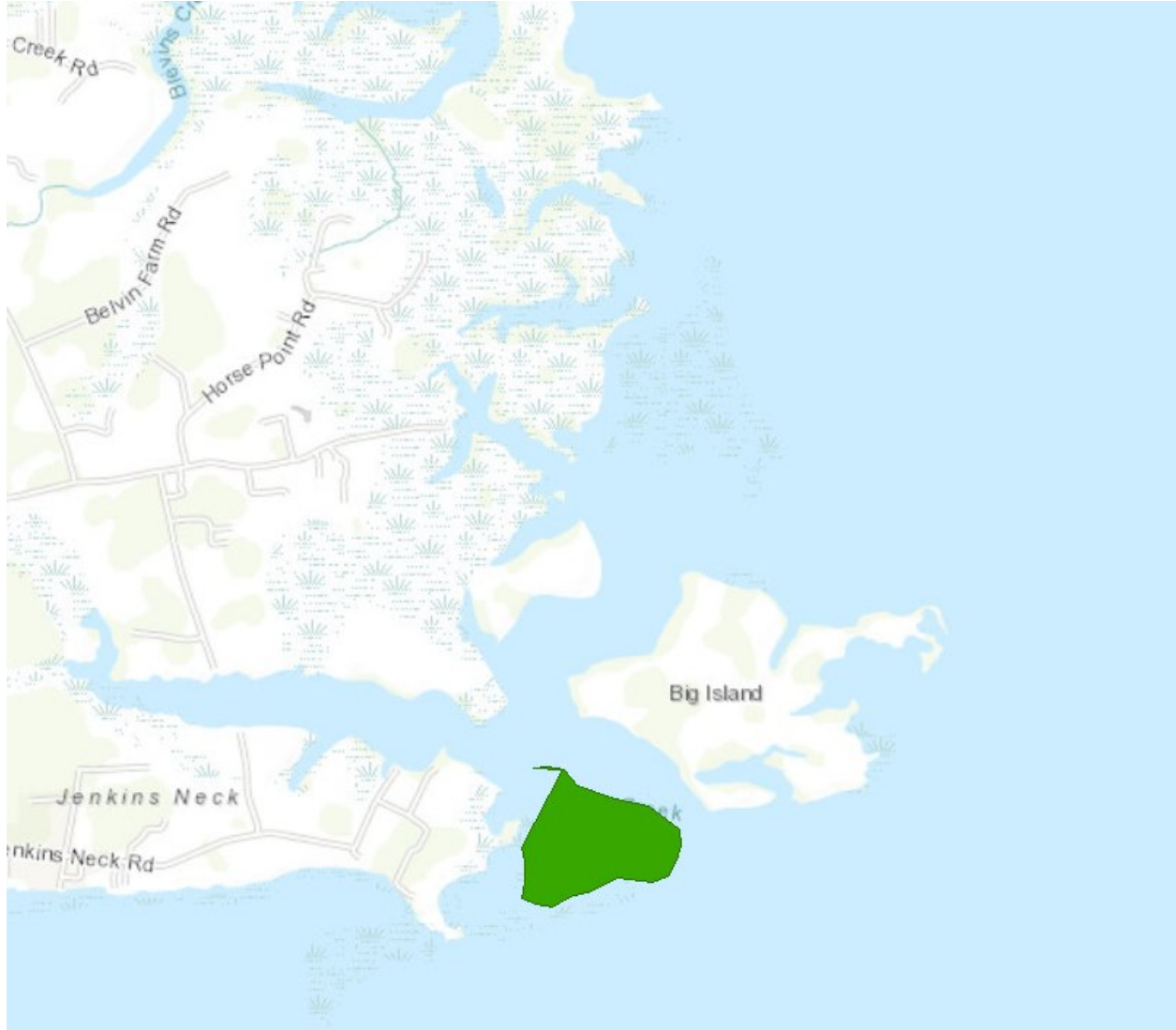
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The following pages contain the uploaded documents, in the order shown below, as provided by the applicant:

Upload Type	File Name	Uploaded By	Uploaded Date
CB SWG-I Full Proposal Narrative 2022	2022_SWG_Hog-Island_Application-Narrative.docx	Rickards, Jackie	04/21/2022
Letters of Support	NCBO - Larkin support letter for Hog Island.pdf	Rickards, Jackie	04/20/2022
Letters of Support	MPCBPAA Support Letter.pdf	Rickards, Jackie	04/21/2022
Letters of Support	MPPDC Letter.pdf	Rickards, Jackie	04/21/2022
CB SWG-I Field Doc Project Summary - Proposal 2022	FieldDoc _ Project Summary_Hog Island.pdf	Rickards, Jackie	04/21/2022
Statement of Litigation	Statement+of+Litigation.doc	Rickards, Jackie	04/19/2022
Board of Trustees, Directors, or equivalent	MPPDC Board of Commissioners 2022.pdf	Rickards, Jackie	04/19/2022
Applicant Controls Questionnaire	EZG+-+Applicant+Controls+Questionnaire.docx	Rickards, Jackie	04/19/2022
Other Documents	Audit FYE 21 MPPDC_Final.pdf	Rickards, Jackie	09/20/2022
Other Documents	Final Report - Hog Island - 20210624.pdf	Rickards, Jackie	04/21/2022

The following uploads do not have the same headers and footers as the previous sections of this document in order to preserve the integrity of the actual files uploaded.



NFWF

CHESAPEAKE BAY SMALL WATERSHED GRANTS IMPLEMENTATION

Full Proposal Project Narrative

A. Objectives: The Middle Peninsula Planning District Commission (MPPDC) is proposing a project to construct a resilient, nature-based shoreline protection and habitat restoration solution along Hog Island in Gloucester County, Virginia which historically has experienced severe erosion. The project aims to protect and enhance maritime habitat for shorebirds and other species, restore oyster populations, and reduce erosion and sedimentation into the Bay. It also aims to protect the residential and commercial properties along Monday Creek and the York River which are currently protected by Hog Island. Hog Island is also located within the new NOAA Middle Peninsula Habitat Focus Area, a targeted area for habitat restoration which identifies the site as a top priority for Federal Chesapeake Bay habitat restoration activities.

The Middle Peninsula Chesapeake Bay Public Access Authority (MPCBPAA), a political subdivision of the Commonwealth, has particular interest in this project as it has undivided ownership in Hog Island. The MPCBPAA has no staff and is fully staffed by the MPPDC. The two agencies serve as sister agencies for the Middle Peninsula and the MPPDC has assisted the MPCBPAA with advancing solutions for Hog Island for the past several years leading up to this proposal.

With funding through the Virginia Coastal Zone Management Program in 2020, MPPDC staff contracted with the Virginia Institute of Marine Science (VIMS) Shoreline Studies Program (SSP) to assess Hog Island site conditions and create a habitat restoration and shoreline protection design. In part, a Joint Permit Application was drafted. Therefore, with a design in hand, MPPDC staff is proposing to construct Phase I of this project which will focus on the south-facing shoreline of the Hog Island. This shoreline experiences the most wave energy and high shoreline erosion. Initial site assessments by VIMS SSP revealed that the nearshore around the island is extremely shallow and is likely not accessible by barge. Since getting materials and machinery to the site would be difficult and impractical, VIMS SSP will look to install oyster castles, or equivalent, to create a low reef. Such structures have been shown to be very successful in oyster recruitment which is necessary for long-term stability of the reef. This is particularly important in a high energy environment as stability is needed for the reef in order to withstand strong storms.

The MPPDC Hog Island project seeks to address several NFWF priority outcomes, including: **Priority 5 - Protecting and Enhancing Tidal and Estuarine Habitat**, including conserving tidal Marsh Habitat to enhance black duck carrying capacity. According to the Northeast Conservation Planning Atlas, Hog Island is located in an area of highest priority for protection of habitats for wintering black duck. Additionally, water quality will be seen as a result of the project due to the use of oyster reefs and the anticipation that oyster recruitment and reef growth. As oysters are filter feeders, they will add additional water quality benefits to the surrounding waters. According to DEQ estimates, a non-structural living shoreline or plant marsh with sill can prevent 42 lbs of sediment per linear foot, as well as 0.755 pounds of nitrogen per foot per year and .068 pounds of phosphorous per foot per year. Finally, under this priority, this project will manage shoreline erosion and march loss. This project will also address Priority 6 – Enhancing Nature-Based Resilience for Human Communities and Critical Habitats by protecting and enhancing habitats to improve community resilience and enhancing the long-term resilience of critical species and habitats. The project will aim enhance oyster populations through constructed oyster castles and installation of oyster bags. In fact, the Lower York River is one of the five tributaries in Virginia targeted for oyster restoration under the Chesapeake Bay Watershed Agreement.



B. Outcomes:

Focus	Outcome	Activity
Water Quality	Reduce nitrogen, phosphorus, and sediment pollution to the Chesapeake Bay and its tributary rivers and streams	<input type="checkbox"/> Improving water quality in agricultural areas by implementing best management practices to reduce polluted runoff
		<input type="checkbox"/> Improving water quality in urban and suburban areas by implementing green stormwater infrastructure practices to treat, capture, and/or store stormwater runoff
		<input type="checkbox"/> Restoring riparian forest buffer and associated riparian habitat in order to continually increase the capacity of forest buffers to provide water quality and habitat benefits throughout the watershed
		<input checked="" type="checkbox"/> Improving the health and function tributary rivers and streams
Eastern Brook Trout	Maintain and increase Eastern brook trout populations in stronghold patches	<input type="checkbox"/> Increasing habitat integrity in stronghold patches through protection and restoration of riparian areas, stream restoration, nonpoint source pollution controls and land use protections
American Black Duck	Increase wetland habitat and available food to support wintering black duck populations	<input checked="" type="checkbox"/> Creating, restoring, or enhancing the function of tidal and non-tidal wetlands to increase black duck carrying capacity through improved food resources
		<input type="checkbox"/> Increasing available food resources
River Herring	Restore access and use of high quality migratory river and stream habitat	<input type="checkbox"/> Implementing high priority, cost-effective connectivity enhancement projects through culvert replacement, fish passage improvements, and dam removal
Eastern Oyster	Restore oyster populations in priority Chesapeake Bay tributaries	<input checked="" type="checkbox"/> Restoring native oyster reefs in targeted tributaries through spat production and reef construction
Capacity and Planning	Motivate individuals in the watershed to adopt behaviors that benefit water quality, species, and habitats	<input checked="" type="checkbox"/> Enlisting individuals in local volunteer events to restore local natural resources and providing hands-on education and skill-building for individual action
		<input type="checkbox"/> Developing or improving conservation, watershed, or habitat management plans that provide guidance to landowners, organizations, or local governments on how to manage properties and communities for improved conservation outcomes

C. Project Location: Hog Island is located in Gloucester County, Virginia. Hog Island is an emergent estuarine marsh complex that is part of the overall Guinea marshes. Hog Island is a high wave energy eroding shoreline along its south-face on the York River, and lower wave energy along its west and east flanks that occur on Monday Creek. Based on tidal gauge data from VIMS, relative sea level rise rates ranging from 0.11-0.23 in/yr (2.9-5.8 mm/yr; period: 1976- 2007; 10 stations) within the Chesapeake Bay region, which are the highest rates reported along the U.S. Atlantic coast (Boon et. al. 2010). In addition to sea level rise, Gloucester County has a history of being impacted by hurricanes and tropical storms. As storms pass over or near the coast, the atmospheric pressure drops, causing a large volume of sea water to build up, eventually being pushed ashore by the storm’s winds causing a storm surge. In Gloucester County, strong East and Northeaster winds can push water from the Chesapeake Bay into the mouth of the York River and Mobjack Bay, flooding much of the county’s low-lying areas (Middle Peninsula Planning District Commission, 2005).

Figure 1: Shoreline of Hog Island during 1937 and present day..



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The tidal marshes at Hog Island experience medium (-2 to -5 ft/yr) to high (-5 to -10 ft/yr) rates of erosion on the shorelines of Mobjack Bay and the York River. Also **Figure 1** shows the change of the island's shoreline due to erosion from 1937 to the present. There have been changes and a reduction in the island size. These changes have resulted in a reduction of available habitat for wildlife and marine life and heightened exposure for inland properties sheltered from wave energy and flooding by the island. Therefore, without the restoration of Hog Island, these habitats and coastal buffers have a greater potential to erode and disappear, leaving residences and businesses more exposed to coastal hazards. The project will result in 54 residential and commercial properties with enhanced protection in Mayrus and on Jenkins Neck.



The project was selected because of its unique impact to the estuary and adjacent parcels. As Hog Island sits at the mouth of Monday Creek and the York River, this project will provide protection for residences and two shellfish aquaculture businesses. This project location also provides important fish and wildlife habitat, shore protection, and flood control for lower Gloucester County.

D. Current Conservation Context: As previously mentioned, in 2020 the MPPDC received funding through the Virginia Coastal Zone Management Program (NA18NOS4190152 Task 89.01) to conduct a site assessment and survey, design a habitat restoration and shore protection solution for Hog Island, and prepare a construction permit application. As part of this proposed project, MPPDC staff will continue working with VIMS SSP to finalize the joint permit application and submit the JPA to the appropriate regulatory agencies. If approved this Hog Island restoration project can be constructed.

Finally, the proposed Hog Island project coincides with many of the current resiliency efforts to protect and enhance shorelines in Gloucester County and Middle Peninsula region. In spring of 2020, the MPPDC staff launched the [Middle Peninsula Fight the Flood](#) program to connect property owners facing rising flood waters with funding mechanisms to contract with specialized businesses who can help evaluate, design, and build solutions to reducing the impacts of flooding. Fight the Flood has become the central hub for engaging coastal stakeholders and addressing shoreline issues (i.e., Flood waters, erosion, resilience, etc.). To date the program has invested \$11,815,876 in direct loans and grants to flood protection in the Middle Peninsula. Thus, the proposed Hog Island project will support the FTF Program in its work to improve coastal resiliency and preserve coastal habitats.

E. Current Partnership Context: The MPPDC will utilize many of its existing relationships to see this project to completion. Middle Peninsula Planning District Commission (MPPDC) staff will work together and with project partners to manage the proposed project. Below is the list of MPPDC staff that will contribute to the project:

- **Lewis Lawrence, MPPDC Executive Director**, will coordinate project partners, assist with project execution, and will provide updates to the MPPDC Board.
- **Curt Smith, Deputy Director**, will coordinate project partners and assist with project execution.
- **Heather Modispaw, Chief Financial Officer**, will direct and oversee all financial activities of this project including preparation of financial reports and budget management. She has also been in charge of administering the MPPDC Living Shoreline Incentives Revolving Loan and Grant Program



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- **Jackie Rickards, Senior Planning Project Planner**, will assist in managing partners, the activities and information gathered from the proposed project and project reports.

MPPDC staff will contract with VIMS SSP, who was responsible for developing the project design and draft Joint Permit Application, to coordinate with the permitting agencies regarding modifications and requests for information. This will include coordination with the Virginia Marine Resource Commission, U. S. Army Corps of Engineers, the Virginia Department of Environmental Quality (DEQ), and Gloucester County Wetlands Board. Though MPPDC will be the applicant, VIMS personnel will act as a technical support for the permit process. For instance, VIMS will work with Virginia Marine Resource Commission on permitting details.

Funds to support monitoring activities are not requested considering the amount of available funding and immediate restoration and protection needs at Hog Island. However, should NFWF request or require monitoring as part of the award contract, MPPDC would make modifications to the budget and scope to contract VIMS SSP to monitor the living shoreline to ensure vegetation is growing as intended and that the installed oyster breaks are mitigating wave energy and erosion. Funds would be reduced from the construction budget to accommodate the monitoring needs and should this scenario be required by NFWF, VIMS SSP will develop a QAPP before collecting data. Qualifications for VIMS SSP staff, Scott Hardaway and Donna Milligan, are as follows: *Since 1979, Mr. Hardaway has performed research on a variety of coastal problems, primarily shoreline erosion along the Chesapeake Bay and ocean shorelines of Virginia and Maryland. Donna Milligan, Assistant Research Scientist, focuses on the geological and physical factors influencing shorezone systems and applies that knowledge to effective shoreline management.*

F. Communities Engaged and Impacted: The percent of the Gloucester County population that will benefit from this project is 2.14%. This represents approximately 800 people living within the project area. out of 37,348 which is Gloucester County's total population. The project will address a specific and localized harm providing enhanced flood protection to all residents located within census block 501731005004 by enhancing nature-based flood protection by protecting Hog Island, a key wetland islands currently protecting, but fast eroding away (see **Figure 1**). An estimated 54 residential and commercial properties within Mayrus and on Jenkins Neck benefit from the restoration of Hog Island.

The community has been engaged through the larger efforts of the Fight the Flood program in educating the public on flood and coastal resiliency issues, as well as other outreach efforts of the MPPDC. The project was identified as critical due to this outreach. The community will be engaged throughout the process for input, volunteer and educational opportunities, and marketing materials to espouse the efforts of Fight the Flood and NFWF to solve rural coastal problems that affect real citizens.

According to the EPA's EJScreen Tool (<https://ejscreen.epa.gov/mapper/>), which uses data from the 2015-2019 American Community Survey (ACS), the area in Gloucester County abutting Hog Island (FIPS Code 510731005004) is in the 70th percentile for low-income residents, 74th percentile of those over age 64, 59th percentile for those who do not have a high school degree, and 53rd percentile for linguistic isolation compared to the rest of the state (**Figure 5**). According to the 2020 Census, project area, located in census block #1005, consists of a population made of 89% white, 2.7% Black, 0.3 American Indian, 0.8% Asian and 7.2% other.

Additionally, the MPCBPAA, who owns Hog Island, has a mandate from the Virginia General Assembly to provide public access to the water for the citizens of the Middle Peninsula and Commonwealth of Virginia. The MPCBPAA utilizes its properties to enhance the quality of life for citizens and wildlife and aquatic life alike. Once Hog Island has been restored, the MPCBPAA will have the ability to manage a



restored Hog Island for educational, research, and low-impact public access purposes which strive to preserve and enhance the unique coastal habitats and environments at the site.

G. Work Plan: MPPDC staff will contract with the VIMS SSP to complete and submit the joint permit application for the habitat restoration and shoreline protection project for Hog Island. MPPDC and VIMS SSP will work with the permitting authorities to address any needed modifications to the design should there be any. At the time of this proposal, MPPDC staff have requested a permit pre-application meeting with the US Army Corps of Engineers and while no meeting has occurred, it is anticipated that a meeting will occur prior to the NFWF award announcement date. Once permitted, construction will be prioritized along the south facing shoreline of the island and this will constitute Phase I of the full design implementation. According to the final designs Phase I will consist of the construction of 6 oyster castle sills/breakwaters (See Final Designs Attached) pending approval by the permitting authorities. Below are the major activities that will take place during this project:

Activity Description	Associated Deliverables	Responsible Parties	Completion Month and Year
Complete and Submit the Joint Permit Application	Permits to construct the restoration project	MPPDC & VIMS SSP	March 2023
Procure Construction Firm	Development of procurement documents with legal counsel review. This is part of getting the project constructed	MPPDC staff and MPPDC legal counsel	May 2023 (estimated and will occur upon issuance of permit)
Phase 1 Construction – restore and protect the South facing shoreline of Hog Island	Restoration and protection of the south facing shoreline	MPPDC will manage budget and construction to ensure compliance with final permit conditions	September 2023 (estimated and contingent upon issuance of permit)
Project Management & Closeout	Ensure activities are completed and within budget; provide NFWF needed progress reports.	MPPDC staff	December 2024

H. Data Collection Activities: Data collection is not being proposed but should NFWF or a permitting authority request or require it, the costs would reduce the amount of construction that could be achieved. Should data collection be required, the funds would be taken from the proposed construction budget resulting in the amount of construction that could be achieved.

I. Tracking and Sustaining Implementation Progress: The MPPDC’s Fight the Flood program was launched in 2020 as the nation’s first incentivized resilience implementation program. The proposed Phase 1 construction project at Hog Island will serve as a template for how implementation projects located on publicly owned property can advance through implementation via the Fight the Flood program with a desired outcome of enhanced efficiency and effectiveness for both future Phase 2 construction activities at Hog Island and the dozens of similar projects needed on publicly owned properties around the Middle Peninsula. MPPDC staff is prepared to assist NFWF and other Federal entities achieve the goals for habitat restoration and water quality enhancement for the Middle Peninsula and Chesapeake Bay which are set forth in the several plans and studies in existence for the region. It is anticipated that the successful and timely completion of the proposed project will serve as a critical initial step towards helping NFWF and other Federal entities achieving those goals.



U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NOAA Chesapeake Bay Office
200 Harry S. Truman Parkway, Suite 460
Annapolis, MD 21401
Tel: (410) 267-5660 Fax: (410) 267-5666 chesapeakebay.noaa.gov

4/20/2022

Mr. Jake Reilly
Program Director
National Fish and Wildlife Foundation
Chesapeake Bay Stewardship Fund
1133 Fifteenth St, N.W., Suite 1000
Washington, DC 20005

Dear Jake,

I am writing in support of the Hog Island Living Shoreline proposal by the Middle Peninsula Chesapeake Bay Public Access Authority. This project would support the habitat restoration and coastal resiliency goals of NOAA and other partners working in the region.

This proposed project would be constructed in the Middle Peninsula, near the mouth of the York River, a high priority area for habitat restoration. It would be located within NOAA's Middle Peninsula Habitat Focus Area, a collaborative framework to support targeted regional goals for resilient shorelines and increased fish and shellfish productivity. The Lower York River is also one of 10 tributaries targeted by NOAA and partners under the oyster restoration goals of the Chesapeake Bay Watershed Agreement. Furthermore, in the U.S. Army Corps of Engineers (USACE) Chesapeake Bay Comprehensive Plan (Comp. Plan), the Commonwealth of Virginia and USACE have identified the Middle Peninsula, as a "priority sub-watershed" for habitat restoration efforts. Finally, the waters of the York River and Mobjack Bay are considered by NOAA to be Essential Fish Habitat for 12 federally managed fish species, including summer flounder and black sea bass.

Specifically, the project would support the goals of NOAA, the Chesapeake Bay Watershed Agreement, and the USACE Comp. Plan by providing additional habitat for oysters (oyster castles and shell bags) which would also enhance fish and blue crab habitat. In addition, the proposed project would reduce erosion on Hog Island which would conserve existing fish and wildlife habitat (i.e. tidal marsh) and limit sediment transport that could negatively impact nearby oyster reef restoration sites.

I would be pleased to respond to any questions you have. Please do not hesitate to contact me at andrew.w.larkin@noaa.gov or at 757.201.8913.

Sincerely,

A handwritten signature in black ink, appearing to read "Andrew W. Larkin". The signature is written in a cursive style and is placed over a light gray rectangular background.

Andrew W. Larkin





MIDDLE PENINSULA CHESAPEAKE BAY PUBLIC ACCESS AUTHORITY

April 21, 2022

MEMBERS

Essex County

Hon. Ronnie Gill

Gloucester County

Hon. Christopher A. Hutson
(Vice-Chair)

King and Queen County

Hon. Doris Morris

King William County

Mr. Percy Ashcraft

Mathews County

Vacant

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Mr. Eric Pollitt

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Mr. Garth Wheeler

Town of West Point

Mr. John B. Edwards, Jr.
(Chair)

Mr. Jake Reilly
Program Director
National Fish and Wildlife Foundation
Chesapeake Bay Stewardship Fund
1133 Fifteenth St, N.W., Suite 1000
Washington, DC 20005

Dear Mr. Reilly,

The Middle Peninsula Chesapeake Bay Public Access Authority (MPCBPAA) community program supports the Middle Peninsula Planning District Commission (MPPDC) in its proposal to the NFWF Small Watershed Grant for the restoration of Hog Island.

MPCBPAA is the owner of Hog Island and will manage a restored Hog Island for educational, research, and low-impact public access purposes which strive to preserve and enhance the unique coastal habitats and environments at the site. This will ultimately support the MPCBPAA's mandate to improve and provide public access to the water for the citizens of the Middle Peninsula and Commonwealth of Virginia.

Please give this proposal your full consideration. If you have any questions I can answer, feel free to contact me at 804-758-2311.

Sincerely,

Lewie Lawrence
Secretary

Saluda Professional Center

125 Bowden Street

P. O. Box 286

Saluda, VA 23149-0286

Phone: (804) 758-2311

FAX: (804) 758-3221

email:

PublicAccess@mppdc.com



COMMISSIONERS

Essex County

Hon. Edwin E. Smith, Jr.
Hon. John C. Magruder
Ms. Sarah Pope

Town of Tappahannock

Hon. Fleet Dillard

Gloucester County

Hon. Ashley C. Chriscoe
(Vice-Chairman)
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Dr. William G. Reay
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Hon. R. F. Bailey
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Hon. Wayne H. Jessie, Sr.
Hon. Reggie Williams, Sr.
Mr. Gordon E. White

Town of Urbanna

Hon. Marjorie Austin

Secretary/Director

Mr. Lewis L. Lawrence

April 21, 2022

Mr. Jake Reilly
Program Director
National Fish and Wildlife Foundation
Chesapeake Bay Stewardship Fund
1133 Fifteenth St, N.W., Suite 1000
Washington, DC 20005

Dear Mr. Reilly,

The Middle Peninsula Planning District Commission (MPPDC) will provide staff for the project on behalf of Middle Peninsula Chesapeake Bay Public Access Authority (MPCBPAA). MPPDC staff will work closely with the MPCBPAA to have all project expectations met.

The MPPDC staff has assisted the MPCBPAA in this capacity for nearly 20 years and the Hog Island restoration project represents the culmination of a multi-year partnership between the two agencies. While it is a priority project for the MPPDC and MPCBPAA, we are excited to understand that the project is of similar high priority for NFWF habitat restoration efforts and other Federal agency priorities for the Chesapeake Bay.

For questions about about this partnership please reach out to me at 804-758-2311 or by email at llawrence@mppdc.com.

Sincerely,

Lewis Lawrence
Executive Director

Phase I: Hog Island Restoration

Last modified by Jackie Rickards on Thursday, April 21, 2022 at 3:47 PM

Draft

 [View change log](#)

The Middle Peninsula Planning District Commission (MPPDC) is proposing Phase I construction project to install a nature-based shoreline protection and habitat restoration solution along Hog Island in Gloucester County, Virginia which historically has experienced severe erosion. Virginia Institute of Marine Science Shoreline Studies Program will look to install oyster castles, or equivalent, to create a low reef. Such structures have been shown to be very successful in oyster recruitment which is necessary for long-term stability of the reef. The project aims to protect and enhance maritime habitat for shorebirds and other species, restore oyster populations, and reduce erosion and sedimentation into the Chesapeake Bay.



© Mapbox © OpenStreetMap

Metrics

Last updated on Apr 21, 2022 at 3:47 PM



No metric progress available.

This may mean that the project has not begun tracking practice implementation or that progress calculations are being updated.

Practices 1



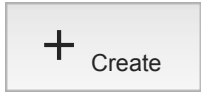
- [Living Shoreline NON-URBAN SHORELINE EROSION CONTROL VEGETATED \(CUSTOM MODEL\)](#)

Construction will entail the installation of a nature-based shoreline protection...



Last updated Apr 21, 2022

Sites 0



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NFWF

Statement of Litigation

Instructions: Save this document on your computer and complete. The final narrative should not exceed two (2) pages; do not delete the text provided below. Once complete, upload this document into the on-line application as instructed.

Litigation: In the space provided below, state any litigation (including bankruptcies) involving your organization and either a federal, state, or local government agency as parties. This includes anticipated litigation, pending litigation, or litigation completed within the past twelve months. Federal, state, and local government applicants are not required to complete this section. If your organization is not involved in any litigation, please state below.

The Middle Peninsula Planning District Commission is not now nor ever been involved in any litigation with a federal, state or local government agency.

MPPDC BOARD OF COMMISSIONERS
January 2022

ESSEX COUNTY

Hon. Edwin E. Smith, Jr. (elected)
Hon. John Magruder (elected)
Ms. Sarah Pope (citizen)

GLOUCESTER COUNTY

Hon. Ashley C. Chriscoe - Vice-Chairman (elected)
Hon. Kenneth W. Gibson (elected)
Dr. William Reay (citizen)
Ms. Carol Steele (term)

KING AND QUEEN COUNTY

Hon. Sherrin C. Alsop (elected)
Hon. R.F. Bailey, Jr. (elected)
Mr. Thomas Swartzwelder - Chairman (citizen & term)

KING WILLIAM COUNTY

Hon. Ed Moren, Jr. (elected)
Hon Travis J. Moskalski - Treasurer (elected)
Mr. Otto Williams (citizen)
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MATHEWS COUNTY

Hon. Melissa Mason (elected)
Hon. David Jones (elected)
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MIDDLESEX COUNTY

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TOWN OF WEST POINT

Hon. James Pruett (elected)
Mr. John Edwards (term)

APPLICANT CONTROLS AND CAPABILITIES QUESTIONNAIRE



INSTRUCTIONS: THIS QUESTIONNAIRE IS REQUIRED WITH THE SUBMISSION OF A NFWF FULL PROPOSAL, FOR THE FOLLOWING ORGANIZATION TYPES: NONPROFIT ORGANIZATIONS, STATE, LOCAL & MUNICIPAL GOVERNMENTS, INDIAN TRIBAL GOVERNMENTS, FOR-PROFIT ENTITIES, AND INCORPORATED INDIVIDUALS. PLEASE COMPLETE AND SIGN THE QUESTIONNAIRE IF YOUR ORGANIZATION DOES NOT HAVE A RECENT (WITHIN TWO YEARS) SINGLE AUDIT UPLOADED TO THE FEDERAL AUDIT CLEARINGHOUSE. DO NOT INCLUDE COPIES OF POLICIES OR PROCEDURES WITH THE SUBMISSION OF THIS FORM.

NFWF UTILIZES THIS QUESTIONNAIRE ALONG WITH A RISK ASSESSMENT TO DETERMINE ELIGIBILITY AND COMPLIANCE REQUIREMENTS, WHICH MAY INCLUDE THE FOLLOWING: ADDITIONAL REPORTING, RESTRICTION OF ADVANCE FUNDING, AND/OR SUBMISSION OF SUPPORTING DOCUMENTATION.

ORGANIZATION LEGAL NAME	Middle Peninsula Planning District Commission
ORGANIZATION EIN	54-0937411

1. Does your organization have a Single Audit (within the last 2 years) on file with the Federal Audit Clearinghouse?
 If yes, sign and upload form.
 If no, complete form in its entirety.
2. Has your organization been suspended or debarred from any government contracting process? If yes, please explain.
No
3. Has your organization managed a federal award before? If yes, provide a summary of your most recent award, including period of performance, awarding agency, federal program, and size of award.
Yes
4. Does your organization maintain written accounting policies and procedures applicable to headquarters and, if applicable, field offices? If no, please explain.
Yes
5. Does your accounting system (or other management system) allow organizational expenses to be tracked: (a) to a specific project on which your organization is working; (b) to specific tasks within that project; and, (c) to specific cost-type categories within each task (e.g., materials, supplies, travel, etc.)? If no, please explain.
Yes
6. Does your organization have a timekeeping system or documented process that allows staff time to be tracked: (a) to a particular project on which staff spends time; and, (b) to specific tasks within each project? If no, please explain.
Yes

APPLICANT CONTROLS AND CAPABILITIES QUESTIONNAIRE



7. Does your organization maintain employment agreements or other formal evidence of employment between it and its employees? If no, please explain.

Yes

8. Does your organization maintain basic property and casualty insurance? If no, please explain.

Yes

9. Is your organization able to perform the project on a cost-reimbursable basis? If no, please explain by providing the following information: (a) current cash on hand amount, (b) advance funding required, and (c) purpose of advance funding.

Yes

10. Does your organization maintain a written policy on conflict of interest? Would your organization's policy on conflict of interest operate to notify NFWF if your organization finds that it is unable to satisfactorily manage a conflict of interest pertinent to a NFWF-funded project? If no, please explain.

Yes

11. Does your organization maintain a written procurement policy? If no, please explain.

Yes

12. If your proposed project includes contracts and/or sub-recipients, has an appropriate legal/contracting officer at your organization reviewed such elements and confirmed that your organization indeed has the ability to implement the arrangements as envisioned?

Yes

13. Does your organization maintain written policies for property management and do you perform inventory audits/verifications on a regular basis? [APPLICABLE TO PROJECTS WITH EQUIPMENT OR SUPPLIES BUDGETED]

N/A

14. In the past three (3) years has your organization, or any unit or office thereof, been audited by an external donor/funder or agent thereof? (This would include, but not be limited to, audits of your organization by governmental entities.) If yes, please list all such audits.

Yes, we are periodically audited by funders on a regular basis. We have never had any findings to report. Last funder to audit programs – Virginia Department of Rail and Public Transportation.

I certify to the best of my knowledge and belief that the above information is true, complete, and accurate and that I am authorized to submit on behalf of the organization represented above.

SIGNATURE

A handwritten signature in cursive script, reading "Heather Modispaw", is written over a horizontal line.

NAME AND TITLE

Heather Modispaw, CFO

APPLICANT CONTROLS AND CAPABILITIES QUESTIONNAIRE



**MIDDLE PENINSULA PLANNING
DISTRICT COMMISSION**

**AUDITED FINANCIAL STATEMENTS
YEAR ENDED JUNE 30, 2021**

DUNHAM, AUKAMP & RHODES, PLC
Certified Public Accountants
Chantilly, Virginia

MIDDLE PENINSULA PLANNING DISTRICT COMMISSION

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MIDDLE PENINSULA PLANNING DISTRICT COMMISSION
BOARD OF COMMISSIONERS

Edwin E. Smith, Jr. - Essex County

John Magruder – Essex County

Sarah Pope - Essex County

Michael Lombardo – Essex County

Ashley C. Chriscoe - Gloucester County

Michael Winebarger - Gloucester County

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Otto Williams - King William County

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Michael Rowe – Mathews County

Tim Hill - Mathews County

Wayne Jessie – Middlesex County

Reggie Williams – Middlesex County

Gordon White – Middlesex County

Matt Walker – Middlesex County

Roy M. Gladding - Town of Tappahannock

Marjorie Austin - Town of Urbanna

James Pruett - Town of West Point

John Edwards - Town of West Point

Dunham, Aukamp & Rhodes, PLC
Certified Public Accountants

4437 Brookfield Corporate Dr., Suite 205-D
Chantilly, VA 20151

INDEPENDENT AUDITOR'S REPORT

To the Commissioners
Middle Peninsula Planning District Commission
Saluda, Virginia

Report on the Financial Statements

We have audited the accompanying financial statements of the business-type activities and the aggregate remaining fund information of the Middle Peninsula Planning District Commission, as of and for the year ended June 30, 2021, and the related notes to the financial statements, which collectively comprise the Middle Peninsula Planning District Commission's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

Managements is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express opinions on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States and the *Specifications for Audits of Authorities, Boards, and Commissions*, issued by the Auditor of Public Accounts of the Commonwealth of Virginia. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made be management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

Opinions

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the business-type activities and the aggregate remaining fund information of the Middle Peninsula Planning District Commission as of June 30, 2021, and the respective changes in financial position, and, where applicable, cash flows thereof for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis, budgetary comparison information, and pension disclosures on pages 4 - 7, page 33, and pages 36 - 37 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

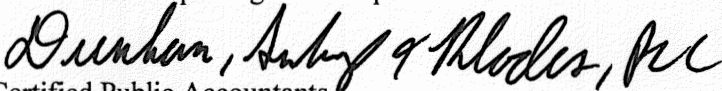
Other Information

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the Middle Peninsula Planning District Commission's basic financial statements. The schedule of revenues and expenses by program on pages 31 – 32 is presented for purposes of additional analysis and is not a required part of the basic financial statements.

The schedule of revenues and expenses by program is the responsibility of management and was derived from and relate directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the schedule of revenues and expenditures by program is fairly stated in all material respects in relation to the basic financial statements as a whole.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated February 28, 2022, on our consideration of Middle Peninsula Planning District Commission's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering Middle Peninsula Planning District Commission's internal control over financial reporting and compliance.


Certified Public Accountants
Chantilly, Virginia

February 28, 2022

MIDDLE PENINSULA PLANNING DISTRICT COMMISSION MANAGEMENT'S DISCUSSION AND ANALYSIS

In this section of the annual financial report of the Middle Peninsula Planning District Commission (the "Commission"), management provides a narrative discussion and an analysis of its financial activities for the fiscal year that ended June 30, 2021. Responsibility for the accuracy of the data as well as the completeness and fairness of this presentation (including all disclosures) rests with management. To the best of our knowledge and belief, the data contained herein is accurate in all material respects. This data is reported in a manner designed to fairly represent the Commission's financial position and the result of operations of its various funds. All disclosures necessary to enable the reader to gain an accurate understanding of the Commission's financial activities have been included. The Commission's financial performance is discussed and analyzed within the context of the accompanying financial statements and disclosures following this section.

Overview of the Financial Statements

The financial statements presented herein included all of the activities of the Commission using the integrated approach as prescribed by GASB Statement No. 34. Management's Discussion and Analysis (MD&A) is intended to introduce the Commission's financial statements. In addition to this Management's Discussion and Analysis (MD&A), the report consists of the enterprise fund financial statements, and the notes to the financial statements. These financial statements are designed to be more corporate-like in that all activities of the Commission are considered to be business-type activities.

Required Financial Statements

The Statement of Net Position focuses on resources available for future operations. In simple terms, this statement presents a snap shot view of the assets the Commission has, the liabilities it owes and the net difference. The net difference is further separated into amounts restricted for specific purposes and unrestricted amounts. Business-type activities are reported on the accrual basis of accounting. Over time, increases and decreases in net position may serve as a useful indicator of whether the financial position of the Commission is improving or deteriorating.

The Statement of Revenues, Expenses and Changes in Net Position details the Commission's revenues and expenses by functional type, and the net operating result of the current year. This statement summarizes and simplifies the user's analysis to determine the extent to which programs are self-supporting and/or subsidized by general revenues.

The Statement of Cash Flows shows the cash flows from the Commission's operating, capital and related financing, and investing activities.

The notes to the financial statements provide additional disclosure required by governmental accounting standards and provide information to assist the reader in understanding the Commission's financial condition.

The MD&A is intended to explain the significant changes in financial position and the differences in operation between the current year and prior years. Significant changes from the prior year are explained in the following paragraphs.

Financial Analysis

Summary Statements of Net Position June 30,

	<u>2021</u>	<u>2020</u>
Current Assets	\$1,189,717	\$ 914,425
Loans Receivable	319,637	201,689
Capital Assets (net)	<u>43</u>	<u>2,574</u>
Total Assets	<u>1,509,397</u>	<u>1,118,688</u>
Deferred Outflows of Resources	<u>51,732</u>	<u>28,176</u>
Current Liabilities	424,913	185,376
Long-Term Liabilities	<u>455,806</u>	<u>293,037</u>
Total Liabilities	<u>880,719</u>	<u>478,413</u>
Deferred Inflows of Resources	<u>4,039</u>	<u>67,268</u>
Invested in Capital Assets	43	2,574
Unrestricted	<u>676,328</u>	<u>598,609</u>
Total Net Position	<u>\$ 676,371</u>	<u>\$ 601,183</u>

Current assets increased during the year by approximately \$275,000 primarily due to an increase in accounts receivable of \$80,000 as the Commission was delayed in collections on billings, and a decrease in cash of \$82,300 as a result in that delay.

Loans receivable decreased approximately \$118,000 during the year as a result of repayments on various revolving loan programs.

Deferred outflows of resources associated with the differences in projected and actual experience of the pension plan was increased by approximately \$23,000 during the year.

Current liabilities increased approximately \$239,000 during the year primarily as a result of a timing difference in payments on accounts payable.

Deferred inflows of resources associated with the differences in projected and actual experience of the pension plan and differences between projected and actual earnings of the plan assets was reduced by \$63,000 during the year.

Long-term liabilities increased by approximately \$163,000 during the current year, as the Commission continued its septic repair and living shoreline loan programs financed through the Virginia Resources Authority. VRA loans have a delayed payback period of 2-3 years.

Total net position increased by approximately \$75,188 this year.

**Summary Statements of Activities
For the Years Ended June 30,**

	<u>2021</u>	<u>2020</u>
Revenues		
Operating revenues	\$1,768,814	\$865,737
Interest	<u>12,661</u>	<u>10,351</u>
Total Revenues	<u>1,781,475</u>	<u>876,088</u>
Expenses		
General and administration	84,647	109,085
Project costs	<u>1,644,532</u>	<u>811,739</u>
Total Expenses	<u>1,729,179</u>	<u>902,824</u>
GASB 68 pension benefit	<u>22,892</u>	<u>43,388</u>
Change in net position	75,188	(1,348)
Net position at beginning of year	<u>601,183</u>	<u>602,531</u>
Net position at end of year	<u>\$ 676,371</u>	<u>\$601,183</u>

Operating revenues increased by approximately \$903,000 and project expenses increased by approximately \$833,000 from the prior year. The Commissions work program and local businesses greatly benefited by Federal COVID pandemic funding. COVID funding financially helped local business owners across the Middle Peninsula. Commission staff working in concert with locality staff developed the *Back to Business Program* which encouraged any local business with federally qualified expenses to request reimbursement for those expenses. Each member locality requested customized programmatic assistance unique to their local needs. Commission staff delivered both programmatic and financial assistance. Additionally, new funding was provided to the Commission by the Virginia Port Authority or through the Public Access Authority directing Commission staff to study and propose a Middle Peninsula Local Government Dredging Implementation Business Plan as well as the contract with VIMS Shoreline Studies program to prepare dozens of Middle Peninsula creeks as “Shovel Ready” projects for future dredging. Results of this plan and studies is anticipated to help shape how dredging projects will be funded going forward.

It is not uncommon for these figures to change substantially from year to year due to differences in the Commission’s work program based on changes in the Commission’s priorities and the availability of funding to implement the work program. Being positioned to respond to unique Federal and State funding opportunities is a cornerstone of the Commission’s success.

In FY 2021 actual operating revenues were under the budgeted amount by approximately \$139,000 as several projects were delayed due to forces beyond the Commission’s control such as staffing changes, and unavoidable pandemic delays by project partners. Local grant revenues were under budget by \$156,000 for the same reasons.

Actual expenses exceeded budgeted expenses for personnel costs by approximately \$14,000 as a result of the Commission’s performance compensation program whereby management is authorized to obtain additional funding to enable and enhance the Commission’s work program and increase staff salaries proportionately as additional funding is obtained. The ability to allow for a fluctuation in personnel costs based on availability of funding allows for greater flexibility in applying for additional funding to advance the Commission’s priorities without increased staffing.

Actual promotion and advertising costs were lower than budget by \$21,000 as a result of a budget cut from the DRPT TDM Operating project.

Website and internet costs were \$15,000 lower than budgeted because we did not require as much anticipated IT support as in previous years. Also, we have an agreement with our IT person that if she does not invoice in time that we are not required to pay more than our monthly retainer.

Capital Assets

The capital assets in the governmental funds consist of computer equipment and vehicles used in the business-type activities of the Commission.

Long-Term Debt

Long-term debt consists of four loans from the Virginia Water Facilities Revolving Fund. In 2011 the Commission received a \$250,000 loan from the Virginia Water Facilities Revolving Fund to increase the revolving loan fund for wastewater loans. This loan consisted of a \$125,000 no interest loan and a \$125,000 “principal forgiveness” loan. As of June 30, 2021, \$125,000 had been drawn on this loan and an additional \$125,000 on the “principal forgiveness loan”. This loan has been reduced by regular annual payments to \$25,000. During FY2016 the Commission received another loan in the amount of \$250,000 loan from the Virginia Water Facilities Revolving Fund to increase the revolving loan fund for wastewater loans. As of June 30, 2021, \$236,774 had been drawn on this loan but through regular annual payments has been reduced to \$97,293. A third loan in the amount of a \$250,000 loan from the Virginia Water Facilities Revolving Fund to capitalize the new revolving loan fund for living shoreline projects was settled in FY2018. As of June 30, 2021, \$250,000 has been drawn down on this loan but through regular annual payments has been reduced to \$208,333. In FY2021, a new loan from Virginia Water Facilities Revolving Fund in the amount of \$175,000 was received to provide additional capital for the Living Shorelines Project. As of June 30, 2021, \$80,910 has been drawn down on this loan.

Economic Factors and Future Outlook

Presently, management of the Commission is aware of the changing federal, state, regional and local economic climate and is working to comprehensively understand, address and plan for the future security of the Commission consistent with the evolving new economic model and the cumulative effects of the Pandemic on the work program of the Commission. Management realizes the challenges posed to the organization by the high dependency on grants to fund operations especially during periods of economic stress and continues to explore other options to fund its essential programs including increased local funding. Management continues to work with the MPPDC leadership to explore strategies to fund the Commission, provide for a motivated and adequately compensated staff, and increase performance while maintaining compliance with the requirements of OMB Uniform Guidance and the needs and resources of the member localities. The Commission’s performance compensation program has added stability for the staff while many other PDC’s and local government are losing qualified employees. Currently management has increased the use of staffing under cooperative procurement to provide staffing needs as a means to providing more and varied expertise for increasingly complicated projects being undertaken by the Commission in regards to environmental and economic development projects.

Contacting the Commission’s Financial Management Staff

This financial report is designed to provide a general overview of the Commission’s finances and show the Commission’s accountability for the funds it receives. If you have questions about this report or need additional information, contact the Commission’s Executive Director at 125 Bowden Street in Saluda, Virginia.

MIDDLE PENINSULA PLANNING DISTRICT COMMISSION
STATEMENT OF NET POSITION
JUNE 30, 2021

ASSETS

Current Assets

Cash and cash equivalents	\$ 820,000
Restricted cash	29,167
Accounts receivable	340,550
Total Current Assets	1,189,717

Noncurrent Assets

Capital assets, net	43
Loans receivable	319,637
Total Noncurrent Assets	319,680
Total Assets	1,509,397

DEFERRED OUTFLOWS OF RESOURCES

Pension contributions after the measurement date	8,688
Changes of assumptions	5,683
Net difference between projected and actual earnings on plan investments	25,334
Differences between expected and actual experience	12,027
Total Deferred Outflows of Resources	51,732

LIABILITIES

Current Liabilities

Accounts payable	102,620
Deferred revenue	222,470
Accrued leave payable	50,656
Current portion of notes payable	49,167
Total Current Liabilities	424,913

Noncurrent Liabilities

Notes payable, net of current portion	362,369
Net pension liability	93,437
Total Liabilities	880,719

DEFERRED INFLOWS OF RESOURCES

Differences between expected and actual experience	3,631
Changes of assumptions	408
Total Deferred Inflows of Resources	4,039

NET POSITION

Invested in capital assets, net of related debt	43
Unrestricted	676,328
Total Net Position	\$ 676,371

See accompanying notes

MIDDLE PENINSULA PLANNING DISTRICT COMMISSION
STATEMENT OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION
FOR THE YEAR ENDED JUNE 30, 2021

Operating Revenues

Grants and appropriations	
Federal grants	\$ 555,677
State grants and appropriations	125,618
Local grants and appropriations	1,085,308
Miscellaneous	2,211
Total Operating Revenues	1,768,814

Operating Expenses

Consultant and contractual	845,705
Salaries	482,358
COVID business grants	200,000
Fringe benefits	108,495
Rent and utilities	30,219
Legal and accounting	21,066
Printing and duplicating	7,031
Office supplies	5,908
Dues and memberships	4,528
Subscriptions and publications	4,492
Telephone	3,742
Promotion and advertising	3,421
Depreciation	2,531
Miscellaneous	2,528
Insurance	2,024
Website and internet	1,579
Bad debt	975
Postage	729
Vehicle costs	727
Meeting supplies and expenses	540
Lodging and staff expense	524
Professional development	57
Total Operating Expenses	1,729,179
Operating Income	39,635

Non-Operating Revenues

Interest income	12,661
GASB 68 pension benefit	22,892
Change in Net Position	75,188
Net Position - Beginning of Year	601,183
Net Position - End of Year	\$ 676,371

See accompanying notes

MIDDLE PENINSULA PLANNING DISTRICT COMMISSION
STATEMENT OF CASH FLOWS
FOR THE YEAR ENDED JUNE 30, 2021

Cash Flows from Operating Activities

Received from customers	\$ 1,914,267
Paid to suppliers for goods and services	(1,169,728)
Paid to employees for services	(475,462)
Net Cash Flows Provided by Operating Activities	269,077

Cash Flows from Capital and Related Financing Activities

Proceeds from notes payable	148,043
Principal paid on notes payable	(49,167)
Net Cash Flows Provided by Capital and Related Financing Activities	98,876

Cash Flows from Investing Activities

Disbursement for new loans made	(180,018)
Loan payments received	62,070
Interest income	12,661
Net Cash Flows Used in Investing Activities	(105,287)

Net Change in Cash and Cash Equivalents	262,666
Cash and Cash Equivalents - Beginning of Year	586,501
Cash and Cash Equivalents - End of Year	\$ 849,167

**Reconciliation of Operating Income to Net Cash
Provided by Operating Activities**

Operating income	\$ 39,635
Depreciation	2,531
Changes in Assets and Liabilities	
Accounts receivable	(12,626)
Accounts payable	78,010
Deferred revenue	158,079
Accrued annual leave	3,448
Net Cash Flows from Operating Activities	\$ 269,077

See accompanying notes

MIDDLE PENINSULA PLANNING DISTRICT COMMISSION

NOTES TO FINANCIAL STATEMENTS

NOTE 1 – Organization and Summary of Accounting Policies

The Middle Peninsula Planning District Commission (the "Commission") was established April, 1972, pursuant to the provisions of Section 15.1-1403 of the Virginia code (the 1968 Virginia Area Development Act) as an authorized regional planning district commission. The Commission's primary duty is to promote orderly and efficient development of the physical, social and economic elements of the district by planning, encouraging and assisting governmental subdivisions to plan for the future. The Commission is a subsidiary organization of the counties of Essex, Gloucester, King and Queen, King William, Mathews, Middlesex and the towns of Tappahannock, Urbanna and West Point. Commission funding is obtained from member jurisdictions' contributions, funds provided by the Commonwealth of Virginia, and Federal, state and local grants and contracts for specified projects designed to further the Commission's goals and objectives.

The financial statements have been prepared in conformity with generally accepted accounting principles (GAAP) as applied to government units. The Government Accounting Standards Board (GASB) is the accepted standard-setting body for establishing governmental accounting and financial reporting principles. The following is a summary of significant accounting policies followed in the preparation of these financial statements:

- (a) Reporting Entity – The Commission's governing body is composed of members appointed by the nine member jurisdictions. The Commission is not a component unit of any of the member governments, and there are no component units to be included in the Commission's financial statements.
- (b) Basis of Accounting – The accounting and reporting policies of the Commission relating to the accompanying basic financial conform to accounting principles generally accepted in the United States of America applicable to state and local governments. Generally accepted accounting principles for local governments include those principles prescribed by the Governmental Accounting Standards Board (GASB) and by the Financial Accounting Standards Board (when applicable).

Management believes that the periodic determination of revenues earned, expenses incurred and net income is desirable for purposes of facilitating management control and accountability. Therefore, the activities of the Commission are accounted for as a proprietary fund which uses the accrual basis of accounting. Under the accrual basis of accounting, revenues are recognized when earned and expenses are recognized when incurred. The Commission considers grant revenue as earned when the grant expenditure is incurred.

Private-sector standards of accounting and financial reporting issued prior to December 31, 1989, generally are followed in the government-wide financial statements to the extent that those standards do not conflict with or contradict guidance of the Governmental Accounting Standards Board.

The Commission generally first uses restricted assets for expenses incurred for which both restricted and unrestricted assets are available. The Commission may defer the use of restricted assets based on a review of the specific transaction.

MIDDLE PENINSULA PLANNING DISTRICT COMMISSION

NOTES TO FINANCIAL STATEMENTS (Continued)

NOTE 1 – Organization and Summary of Accounting Policies (Continued)

- (c) Revenue Recognition – Intergovernmental revenues, consisting primarily of federal, state, local and other grants for the purpose of funding specific expenditures, are recognized when earned. Contributions of the member governments are based on population and are assessed annually. The Commission recognizes a liability for funds received in excess of project expenditures.
- (d) Project Expenditures – The costs of goods and services that are identifiable for indirect costs are allocated to projects as described in Note 11. Personnel costs for Commission employees, including overtime and compensatory time, are direct charges to the appropriate projects. Expenses for paid leave and fringe benefits are allocated to projects as described in Notes 10 and 12.
- (e) Concentrations of Credit and Market Risk – Financial instruments that potentially expose the Organization to concentrations of credit and market risk consist primarily of cash equivalents and investments. Cash equivalents are maintained at high-quality financial institutions which, at times, may exceed federally insured limits. Credit exposure is limited to any one institution. The Commission has not experienced any losses on its cash equivalents.
- (f) Cash and Cash Equivalents – Cash and cash equivalents include investments in highly liquid debt instruments with a maturity of three months or less, excluding amounts whose use is limited by the Commission’s Board designation or other arrangements under trust agreements with third-party payers.
- (g) Accounts Receivable – Accounts receivable are reported at their gross value when earned as the underlying exchange transaction occurs. Receivables related to non-exchange transactions are recognized when their eligibility requirements have been met. Receivables are reduced by the estimated portion that is expected to be uncollectible. This estimate is made based on collection history and current information regarding the credit worthiness of the debtors. When continued collection activity results in receipts of amounts previously written off, revenue is recognized for the amount collected. Management considers all of the receivables collectible at June 30, 2021, and no allowance for doubtful accounts has been provided. Concentration of credit risk with respect to accounts receivable is limited due to the number of grantors, many of which are federal government grants.
- (h) Employee Leave Benefits – Commission policy allows employees to accumulate unused vacation leave up to certain maximum hours. Commission employees earn from twelve to eighteen vacation days a year, depending on the length of their employment. Annual leave may be carried over from one fiscal year to the next, subject to certain limitations. The liability for accrued vacation is \$40,921 as of June 30, 2021.

All employees receive fifteen sick days a year. Sick leave may be carried over from one fiscal year to the next. Upon termination or retirement, employees with five or more years of continuous salaried service may receive up to 25% of their unused sick leave balances up to a maximum of \$5,000. The liability for accrued sick leave is \$9,735 as of June 30, 2021.

MIDDLE PENINSULA PLANNING DISTRICT COMMISSION

NOTES TO FINANCIAL STATEMENTS (Continued)

NOTE 1 – Organization and Summary of Accounting Policies (Continued)

- (i) Management Estimates – The presentation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amount of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amount of revenues and expenses during the reporting period. Actual results could differ from those estimates.
- (j) Capital Assets – Capital assets are recorded at historical or estimated historical cost if actual historical cost is not available for items exceeding \$1,000. Depreciation is taken on the straight-line method over the estimated useful life of the respective asset.

The estimated lives are as follows:

Equipment	3-5 years
Furniture	7 years

Assets that have been purchased with grantor funds may revert to the grantor in the event the program is discontinued.

- (k) Budgets and Budgetary Accounting – Annual budgets are adopted on a basis consistent with generally accepted accounting principles for all funds. All budgets are presented on the modified accrual basis of accounting. Accordingly, the Budgetary Comparison Schedule presents actual expenditures in accordance with the accounting principles generally accepted in the United States of America on a basis consistent with the adopted budgets as amended.
- (l) Advertising Costs – Advertising costs are expensed as incurred.
- (m) Deferred Outflows/Inflows of Resources – The Commission reports deferred outflows of resources on its statement of net position. Deferred outflows of resources represent a consumption of net position that applies to a future period(s) and so will not be recognized as an outflow of resources (expense/expenditure) until the applicable period.

The Commission reports deferred inflows of resources on its statement of net position. Deferred inflows of resources represent an acquisition of net position that applies to a future period(s) and so will not be recognized as an inflow of resources (revenue) until a future period.

- (n) Pension – For purposes of measuring the net pension liability, deferred outflows of resources and deferred inflows of resources related to pensions, and pension expense, information about the fiduciary net position of the Commission's Virginia Retirement System (VRS) plans (Plans) and additions to/deductions from the Plans' fiduciary net position have been determined on the same basis as they are reported by VRS. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

MIDDLE PENINSULA PLANNING DISTRICT COMMISSION

NOTES TO FINANCIAL STATEMENTS (Continued)

NOTE 2 – Cash and Investments

State statute authorizes the Commission to invest in obligations of the U.S. Treasury, agencies, and instrumentalities, repurchase agreements, certificates of deposit or time deposits insured by the FDIC, and the local government investment pool. Deposits are carried at cost, which approximates fair value.

At June 30, 2021 the carrying amount of the Commission’s deposits with banks was \$175,940 and the bank balances were \$214,544. All of the bank balances were covered by federal depository insurance or collateralized in accordance with the Virginia Security for Public Deposits Act.

Investments in 2a7-like pools are valued based on the value of pool shares. The Commission invests a 2a7-like pool, the Local Government Investment Pool, managed by the Virginia Department of Treasury. Permitted investments in the pool include U.S. government obligations, repurchase agreements, certificates of deposit, banker’s acceptances, commercial paper, short-term corporate notes, and short-term taxable municipal obligations. The investment pool has not been assigned a risk category since the Commission is not issued securities, but rather owns an undivided interest in the assets of the pool. The Commission’s balance in the investment pool was \$673,227 at June 30, 2021.

NOTE 3 – Restricted Cash

The Virginia Resources Authority has required the Commission to provide a loan loss reserve of one year’s worth of debt service on the 2015 Septic Repair Revolving Loan Fund note payable and for the 2015 Living Shoreline Revolving Loan Fund. Restricted cash accounts in the amount of \$12,500 and \$16,667, respectively, have been established.

NOTE 4 – Property and Equipment

A summary of property and equipment as of June 30, 2021 is as follows:

	Balance July 1, 2020	Additions	Disposals	Balance June 30, 2021
Equipment	\$ 50,184	\$ -	\$ -	\$ 50,184
Accumulated Depreciation	(47,610)	(2,531)	-	(50,141)
Net	<u>\$ 2,574</u>	<u>\$(2,531)</u>	<u>\$ -</u>	<u>\$ 43</u>

MIDDLE PENINSULA PLANNING DISTRICT COMMISSION

NOTES TO FINANCIAL STATEMENTS (Continued)

NOTE 5 – Pension Plan

The Virginia Retirement System (VRS) Commission Retirement Plan is a multi-employer, agent plan. For purposes of measuring the net pension liability, deferred outflows of resources and deferred inflows of resources related to pensions, and pension expense, information about the fiduciary net position of the Commission’s Retirement Plan and the additions to/deductions from the Commission’s Retirement Plan’s net fiduciary position have been determined on the same basis as they were reported by the Virginia Retirement System (VRS). For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

Plan Description

All full-time, salaried permanent employees of the Commission are automatically covered by VRS Retirement Plan upon employment. This plan is administered by the Virginia Retirement System (the System) along with plans for other employer groups in the Commonwealth of Virginia. Members earn one month of service credit for each month they are employed and for which they and their employer pay contributions to VRS. Members are eligible to purchase prior service, based on specific criteria defined in the *Code of Virginia*, as amended. Eligible prior service that may be purchased includes prior public service, active military service, certain periods of leave, and previously refunded service.

The System administers three different benefit structures for covered employees – Plan 1, Plan 2, and Hybrid. Each of these benefit structures has a different eligibility criteria. The specific information for each plan and the eligibility for covered groups within each plan are set out in the table below:

PLAN 1	PLAN 2	HYBRID RETIREMENT PLAN
<p>About Plan 1 Plan 1 is a defined benefit plan. The retirement benefit is based on a member’s age, service credit and average final compensation at retirement using a formula.</p>	<p>About Plan 2 Plan 2 is a defined benefit plan. The retirement benefit is based on a member’s age, service credit and average final compensation at retirement using a formula.</p>	<p>About the Hybrid Retirement Plan The Hybrid Retirement Plan combines the features of a defined benefit plan and a defined contribution plan.</p> <ul style="list-style-type: none"> • The defined benefit is based on a member’s age, service credit and average final compensation at retirement using a formula. • The benefit from the defined contribution component of the plan depends on the member and employer contributions made to the plan and the investment performance of those contributions. • In addition to the monthly benefit payment payable from the defined benefit plan at retirement, a member may start receiving distributions from the balance in the defined contribution account, reflecting the contributions, investment gains or losses, and any required fees.

MIDDLE PENINSULA PLANNING DISTRICT COMMISSION

**NOTES TO FINANCIAL STATEMENTS
(Continued)**

NOTE 5 – Pension Plan (Continued)

<p>Eligible Members Employees are in Plan 1 if their membership date is before July 1, 2010, and they were vested as of January 1, 2013, and they have not taken a refund.</p> <p>Hybrid Opt-In Election VRS non-hazardous duty covered Plan 1 members were allowed to make an irrevocable decision to opt into the Hybrid Retirement Plan during a special election window held January 1 through April 30, 2014.</p> <p>The Hybrid Retirement Plan’s effective date for eligible Plan 1 members who opted in was July 1, 2014.</p> <p>If eligible deferred members returned to work during the election window, they were also eligible to opt into the Hybrid Retirement Plan.</p> <p>Members who were eligible for an optional retirement plan (ORP) and had prior service under Plan 1 were not eligible to elect the Hybrid Retirement Plan and remain as Plan 1 or ORP.</p>	<p>Eligible Members Employees are in Plan 2 if their membership date is on or after July 1, 2010, or their membership date is before July 1, 2010, and they were not vested as of January 1, 2013.</p> <p>Hybrid Opt-In Election Eligible Plan 2 members were allowed to make an irrevocable decision to opt into the Hybrid Retirement Plan during a special election window held January 1 through April 30, 2014.</p> <p>The Hybrid Retirement Plan’s effective date for eligible Plan 2 members who opted in was July 1, 2014.</p> <p>If eligible deferred members returned to work during the election window, they were also eligible to opt into the Hybrid Retirement plan.</p> <p>Members who were eligible for an optional retirement plan (ORP) and have prior service under Plan 2 were not eligible to elect the Hybrid Retirement Plan and remain as Plan 2 or ORP.</p>	<p>Eligible Members Employees are in the Hybrid Retirement Plan if their membership date is on or after January 1, 2014. This includes:</p> <ul style="list-style-type: none"> • Political subdivision employees* • Members in Plan 1 or Plan 2 who elected to opt into the plan during the election window held January 1-April 30, 2014; the plan’s effective date for opt-in members was July 1, 2014. <p>* Non-Eligible Members Some employees are not eligible to participate in the Hybrid Retirement Plan. They include:</p> <ul style="list-style-type: none"> • Political subdivision employees who are covered by enhanced benefits for hazardous duty employees. <p>Those employees eligible for an optional retirement plan (ORP) must elect the ORP plan or the Hybrid Retirement Plan. If these members have prior service under Plan 1 or Plan 2, they are not eligible to elect the Hybrid Retirement Plan and must select Plan 1 or Plan 2 (as applicable) or ORP.</p>
<p>Retirement Contributions Members contribute up to 5% of their compensation each month to their member contribution account through a pretax salary reduction. Member contributions are tax-deferred until they are withdrawn as part of retirement benefit or as a refund. The employer makes a separate actuarially determined contribution to VRS for all covered employees. VRS invests both member and employer contributions to provide funding for the future benefit payment.</p>	<p>Retirement Contributions Same as Plan 1.</p>	<p>Retirement Contributions A member’s retirement benefit is funded through mandatory and voluntary contributions made by the member and the employer to both the defined benefit and the defined contribution components of the plan. Mandatory contributions are based on a percentage of the employee’s creditable compensation and are required from both the member and the employer. Additionally, members may choose to make voluntary contributions to the defined contribution component of the plan, and the employer is required to match those voluntary contributions according to specified percentages.</p>

MIDDLE PENINSULA PLANNING DISTRICT COMMISSION

**NOTES TO FINANCIAL STATEMENTS
(Continued)**

NOTE 5 – Pension Plan (Continued)

<p>Service credit Service credit includes active service. Members earn service credit for each month they are employed in a covered position. It also may include credit for prior service the member has purchased or additional service credit the member was granted. A member's total service credit is one of the factors used to determine their eligibility for retirement and to calculate their retirement benefit. It also may count toward eligibility for the health insurance credit in retirement, if the employer offers the health insurance credit.</p>	<p>Service credit Same as Plan 1.</p>	<p>Service credit <u>Defined Benefit Component:</u> Under the defined benefit component of the plan, service credit includes active service. Members earn service credit for each month they are employed in a covered position. It also may include credit for prior service the member has purchased or additional service credit the member was granted. A member's total service credit is one of the factors used to determine their eligibility for retirement and to calculate their retirement benefit. It also may count toward eligibility for the health insurance credit in retirement, if the employer offers the health insurance credit.</p> <p><u>Defined Contributions Component:</u> Under the defined contribution component, service credit is used to determine vesting for the employer contribution portion of the plan.</p>
<p>Vesting Vesting is the minimum length of service a member needs to qualify for a future retirement benefit. Members become vested when they have at least five years (60 months) of service credit. Vesting means members are eligible to qualify for retirement if they meet the age and service requirements for their plan. Members also must be vested to receive a full refund of their member contribution account balance if they leave employment and request a refund.</p> <p>Members are always 100% vested in the contributions that they make.</p>	<p>Vesting Same as Plan 1.</p>	<p>Vesting <u>Defined Benefit Component:</u> Defined benefit vesting is the minimum length of service a member needs to qualify for a future retirement benefit. Members are vested under the defined benefit component of the Hybrid Retirement Plan when they reach five years (60 months) of service credit. Plan 1 or Plan 2 members with at least five years (60 months) of service credit who opted into the Hybrid Plan remain vested in the defined benefit component.</p> <p><u>Defined Contributions Component:</u> Defined contribution vesting refers to the minimum length of service a member needs to be eligible to withdraw the employer contributions from the defined contribution component of the plan.</p> <p>Members are always 100% vested in the contributions that they make.</p> <p>Upon retirement or leaving covered employment, a member is eligible to withdraw a percentage of employer contributions to the defined contribution component of the plan, based on service.</p>

MIDDLE PENINSULA PLANNING DISTRICT COMMISSION

**NOTES TO FINANCIAL STATEMENTS
(Continued)**

NOTE 5 – Pension Plan (Continued)

		<p>Vesting (continued)</p> <ul style="list-style-type: none"> • After two years, a member is 50% vested and may withdraw 50% of employer contributions. • After three years, a member is 75% vested and may withdraw 75% of employer contributions. • After four or more years, a member is 100% vested and may withdraw 100% of employer contributions. <p>Distribution is not required, except as governed by law.</p>
<p>Calculating the Benefit The basic benefit is determined using the average final compensation, service credit and plan multiplier. An early retirement reduction is applied to this amount if the member is retiring with a reduced benefit. In cases where the member has elected an optional form of retirement payment, an option factor specific to the option chosen is then applied.</p>	<p>Calculating the Benefit See definition under Plan 1.</p>	<p>Calculating the Benefit <u>Defined Benefit Component:</u> See definition under Plan 1.</p> <p><u>Defined Contribution Component:</u> The benefit is based on contributions made by the member and any matching contributions made by the employer, plus net investment earnings on those contributions.</p>
<p>Average Final Compensation A member’s average final compensation is the average of the 36 consecutive months of highest compensation as a covered employee.</p>	<p>Average Final Compensation A member’s average final compensation is the average of the 60 consecutive months of highest compensation as a covered employee.</p>	<p>Average Final Compensation Same as Plan 2. It is used in the retirement formula for the defined benefit component of the plan.</p>
<p>Service Retirement Multiplier VRS: The retirement multiplier is a factor used in the formula to determine a final retirement benefit. The retirement multiplier for non-hazardous duty members is 1.70%.</p> <p>Sheriffs and regional jail superintendents: The retirement multiplier for sheriffs and regional jail superintendents is 1.85%.</p>	<p>Service Retirement Multiplier VRS: Same as Plan 1 for service earned, purchased or granted prior to January 1, 2013. For non-hazardous duty members the retirement multiplier is 1.65% for service credit earned, purchased or granted on or after January 1, 2013.</p> <p>Sheriffs and regional jail superintendents: Same as Plan 1.</p>	<p>Service Retirement Multiplier <u>Defined Benefit Component:</u> VRS: The retirement multiplier for the defined benefit component is 1.00%.</p> <p>For members who opted into the Hybrid Retirement Plan from Plan 1 or Plan 2, the applicable multipliers for those plans will be used to calculate the retirement benefit for service credited in those plans.</p> <p>Sheriffs and regional jail superintendents: Not applicable</p>

MIDDLE PENINSULA PLANNING DISTRICT COMMISSION

**NOTES TO FINANCIAL STATEMENTS
(Continued)**

NOTE 5 – Pension Plan (Continued)

<p>Service Retirement Multiplier VRS: (continued)</p> <p>Political subdivision hazardous duty employees: The retirement multiplier of eligible political subdivision hazardous duty employees other than sheriffs and regional jail superintendents is 1.70% or 1.85% as elected by the employer.</p>	<p>Service Retirement Multiplier VRS: (continued)</p> <p>Political subdivision hazardous duty employees: Same as Plan 1.</p>	<p>Service Retirement Multiplier VRS: (continued)</p> <p>Political subdivision hazardous duty employees: Not applicable.</p> <p><u>Defined Contribution Component:</u> Not applicable.</p>
<p>Normal Retirement Age VRS: Age 65.</p> <p>Political subdivision hazardous duty employees: Age 60.</p>	<p>Normal Retirement Age VRS: Normal Social Security retirement age.</p> <p>Political subdivision hazardous duty employees: Same as Plan 1.</p>	<p>Normal Retirement Age <u>Defined Benefit Component:</u> VRS: Same as Plan 2.</p> <p>Political subdivision hazardous duty employees: Not applicable.</p> <p><u>Defined Contribution Component:</u> Members are eligible to receive distributions upon leaving employment, subject to restrictions.</p>
<p>Earliest Unreduced Retirement Eligibility VRS: Age 65 with at least five years (60 months) of service credit or at age 50 with at least 30 years of service credit.</p> <p>Political subdivision hazardous duty employees: Age 60 with at least five years (60 months) of service credit or at age 50 with at least 25 years of service credit.</p>	<p>Earliest Unreduced Retirement Eligibility VRS: Normal Social Security retirement age with at least five years (60 months) of service credit or when their age plus service equal 90.</p> <p>Political subdivision hazardous duty employees: Same as Plan 1.</p>	<p>Earliest Unreduced Retirement Eligibility <u>Defined Benefit Component:</u> VRS: Normal Social Security retirement age and have at least five years (60 months) of service credit or when their age plus service equal 90.</p> <p>Political subdivision hazardous duty employees: Not applicable.</p> <p><u>Defined Contribution Component:</u> Members are eligible to receive distributions upon leaving employment, subject to restrictions.</p>
<p>Earliest Reduced Retirement Eligibility VRS: Age 55 with at least five years (60 months) of service credit or at age 50 with at least 10 years of service credit.</p> <p>Political subdivision hazardous duty employees: 50 with at least five years of service credit.</p>	<p>Earliest Reduced Retirement Eligibility VRS: Age 60 with at least five years (60 months) of service credit.</p> <p>Political subdivision hazardous duty employees: Same as Plan 1.</p>	<p>Earliest Reduced Retirement Eligibility <u>Defined Benefit Component:</u> VRS: Age 60 with at least five years (60 months) of service credit.</p> <p>Political subdivision hazardous duty employees: Not applicable.</p> <p><u>Defined Contribution Component:</u> Members are eligible to receive distributions upon leaving employment, subject to restrictions.</p>

MIDDLE PENINSULA PLANNING DISTRICT COMMISSION

**NOTES TO FINANCIAL STATEMENTS
(Continued)**

NOTE 5 – Pension Plan (Continued)

<p>Cost-of-Living Adjustment (COLA) in Retirement The Cost-of-Living Adjustment (COLA) matches the first 3% increase in the Consumer Price Index for all Urban Consumers (CPI-U) and half of any additional increase (up to 4%) up to a maximum COLA of 5%.</p> <p><u>Eligibility:</u> For members who retire with an unreduced benefit or with a reduced benefit with at least 20 years of service credit, the COLA will go into effect on July 1 after one full calendar year from the retirement date.</p> <p>For members who retire with a reduced benefit and who have less than 20 years of service credit, the COLA will go into effect on July 1 after one calendar year following the unreduced retirement eligibility date.</p> <p><u>Exceptions to COLA Effective Dates:</u> The COLA is effective July 1 following one full calendar year (January 1 to December 31) under any of the following circumstances:</p> <ul style="list-style-type: none"> • The member is within five years of qualifying for an unreduced retirement benefit as of January 1, 2013. • The member retires on disability. • The member retires directly from short-term to long-term disability. • The member is involuntarily separated from employment for causes other than job performance or misconduct and is eligible to retire under the Workforce Transition Act or the Transitional Benefits Program. • The member dies in service and the member’s survivor or beneficiary is eligible for a monthly death-in-service benefit. <p>The COLA will go into effect on July 1 following one full calendar year (January 1 to December 31) from the date the monthly benefit begins.</p>	<p>Cost-of-Living Adjustment (COLA) in Retirement The Cost-of-Living Adjustment (COLA) matches the first 2% increase in the CPI-U and half of any additional increase (up to 2%), for a maximum COLA of 3%.</p> <p><u>Eligibility:</u> Same as Plan 1.</p> <p><u>Exceptions to COLA Effective Dates:</u> Same as Plan 1.</p>	<p>Cost-of-Living Adjustment (COLA) in Retirement <u>Defined Benefit Component:</u> Same as Plan 2.</p> <p><u>Defined Contribution Component:</u> Not applicable.</p> <p><u>Eligibility:</u> Same as Plan 1 and Plan 2.</p> <p><u>Exceptions to COLA Effective Dates:</u> Same as Plan 1 and Plan 2.</p>
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MIDDLE PENINSULA PLANNING DISTRICT COMMISSION

**NOTES TO FINANCIAL STATEMENTS
(Continued)**

NOTE 5 – Pension Plan (Continued)

<p>Disability Coverage Members who are eligible to be considered for disability retirement and retire on disability, the retirement multiplier is 1.70% on all service, regardless of when it was earned, purchased or granted.</p>	<p>Disability Coverage Members who are eligible to be considered for disability retirement and retire on disability, the retirement multiplier is 1.65% on all service, regardless of when it was earned, purchased or granted.</p>	<p>Disability Coverage Employees of political subdivisions (including Plan 1 and Plan 2 opt-ins) participate in the Virginia Local Disability Program (VLDP) unless their local governing body provides and employer-paid comparable program for its members.</p> <p>Hybrid members (including Plan 1 and Plan 2 opt-ins) covered under VLDP are subject to a one-year waiting period before becoming eligible for non-work-related disability benefits.</p>
<p>Purchase of Prior Service Members may be eligible to purchase service from previous public employment, active duty military, an eligible period of leave or VRS refunded service as service credit in their plan. Prior service credit counts toward vesting, eligibility for retirement and the health insurance credit. Only active members are eligible to purchase prior service. When buying service, members must purchase their most recent period of service first. Members also may be eligible to purchase periods of leave without pay.</p>	<p>Purchase of Prior Service Same as Plan 1.</p>	<p>Purchase of Prior Service Defined Benefit Component: Same as Plan 1, with the following exceptions: <ul style="list-style-type: none"> • Hybrid Retirement Plan members are ineligible for ported service. Defined Contribution Component: Not applicable.</p>

Employees Covered by Benefit Terms

As of the June 30, 2019 actuarial valuation, the following employees were covered by the benefit terms of the pension plan:

	Number
Inactive Members or Their Beneficiaries Currently Receiving Benefits	3
Inactive Members	
Vested inactive members	1
Non-vested inactive members	2
Inactive members active elsewhere in VRS	<u>1</u>
Total Inactive Members	4
Active Members	<u>3</u>
Total covered employees	<u>10</u>

MIDDLE PENINSULA PLANNING DISTRICT COMMISSION

NOTES TO FINANCIAL STATEMENTS (Continued)

NOTE 5 – Pension Plans (Continued)

Contributions

The contribution requirement for active employees is governed by §51.1-145 of the *Code of Virginia*, as amended, but may be impacted as a result of funding options provided to political subdivisions by the Virginia General Assembly. Employees are required to contribute 5.00% of their compensation toward their retirement.

The Commission's contractually required contribution rate for the year ended June 30, 2021 was 3.93% of covered employee compensation. This rate was based on an actuarially determined rate from an actuarial valuation as of June 30, 2019.

This rate, when combined with employee contributions, was expected to finance the costs of benefits earned by employee during the year, with an additional amount to finance any unfunded accrued liability. Contributions to the pension plan from the Commission were \$8,688 and \$11,216 for the years ended June 30, 2021 and June 30, 2020, respectively.

Net Pension Liability

The net pension liability (NPL) is calculated separately for each employer and represents that particular employer's total pension liability determined in accordance with GASB Statement No. 68, less that employer's fiduciary net position. For the Commission, the net pension liability was measured as of June 30, 2020. The total pension liability used to calculate the net pension liability was determined by an actuarial valuation performed as of June 30, 2019 rolled forward to the measurement date of June 30, 2020.

Actuarial Assumptions – General Employees

The total pension liability for General Employees in the Commission's Retirement Plan was based on an actuarial valuation as of June 30, 2019, using the Entry Age Normal actuarial cost method and the following assumptions, applied to all periods included in the measurement and rolled forward to the measurement date of June 30, 2020.

Inflation	2.5%
Salary increases, including Inflation	3.5% – 5.35%
Investment rate of return	6.75%, net of pension plan investment expenses, including inflation*

- * Administrative expenses as a percent of the market value of assets for the last experience study were found to be approximately 0.06% of the market assets for all of the VRS plans. This would provide an assumed investment return rate for GASB purposes of slightly more than the assumed 6.75%. However, since the difference was minimal, and a more conservative 6.75% investment return assumption provided a projected plan net position that exceeded the projected benefit payments, the long-term expected rate of return on investments was assumed to be 6.75% to simplify preparation of pension liabilities.

MIDDLE PENINSULA PLANNING DISTRICT COMMISSION

**NOTES TO FINANCIAL STATEMENTS
(Continued)**

NOTE 5 – Pension Plans (Continued)

Mortality rates:

Largest 10 - Non-Hazardous Duty: 20% of deaths are assumed to be service related

Pre-Retirement:

RP-2014 Employee Rates to age 80, Healthy Annuitant Rates at ages 81 and older projected with scale BB to 2020; males 95% of rates; females 105% of rates.

Post-Retirement:

RP-2014 Employee Rates to age 49, Healthy Annuitant Rates at ages 50 and older projected with scale BB to 2020; males set forward 3 years; females 1.0% increase compounded from ages 70 to 90.

Post-Disablement:

RP-2014 Disability Mortality Rates projected with scale BB to 2020; males set forward 2 years, 110% of rates; females 125% of rates.

All Others (Non 10 Largest) - Non-Hazardous Duty: 15% of deaths are assumed to be service related

Pre-Retirement:

RP-2014 Employee Rates to age 80, Healthy Annuitant Rates at ages 81 and older projected with scale BB to 2020; males 95% of rates; females 105% of rates.

Post-Retirement:

RP-2014 Employee Rates to age 49, Healthy Annuitant Rates at ages 50 and older projected with scale BB to 2020; males set forward 3 years; females 1.0% increase compounded from ages 70 to 90.

Post-Disablement:

RP-2014 Disability Mortality Rates projected with scale BB to 2020; males set forward 2 years, 110% of rates; females 125% of rates.

The actuarial assumptions used in the June 30, 2019 valuation were based on the results of an actuarial experience study for the period from July 1, 2012 through June 30, 2016, except the change in the discount rate, which was based on VRS Board action effective as of July 1, 2019. Changes to the actuarial assumptions as a result of the experience study are as follows:

Largest 10 – Non-Hazardous Duty:

Mortality Rates (Pre-retirement, post-retirement healthy and disabled)	Update to a more current mortality table – RP-2014 projected to 2020
Retirement Rates	Lowered rates at older ages and changed final retirement from 70 to 75
Withdrawal Rates	Adjusted rates to better fit experience at each year age and service through 9 years of service
Disability Rates	Lowered rates
Salary Scale	No change
Line of Duty Disability	Increase rate from 14% to 20%
Discount Rate	Decrease rate from 7.00% to 6.75%

MIDDLE PENINSULA PLANNING DISTRICT COMMISSION

**NOTES TO FINANCIAL STATEMENTS
(Continued)**

NOTE 5 – Pension Plans (Continued)

All Other (Non 10 Largest) – Non-Hazardous Duty:

Mortality Rates (Pre-retirement, post-retirement healthy and disabled)	Update to a more current mortality table – RP-2014 projected to 2020
Retirement Rates	Lowered rates at older ages and changed final retirement from 70 to 75
Withdrawal Rates	Adjusted rates to better fit experience at each year age and service through 9 years of service
Disability Rates	Lowered rates
Salary Scale	No change
Line of Duty Disability	Increase rate from 14% to 15%
Discount Rate	Decrease rate from 7.00% to 6.75%

Long-Term Expected Rate of Return

The long-term expected rate of return on pension System investments was determined using a log-normal distribution analysis in which best-estimate ranges of expected future real rates of return (expected returns, net of pension System investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. The target asset allocation and best estimate of arithmetic real rates of return for each major asset class are summarized in the following table:

Asset Class (Strategy)	Target Allocation	Arithmetic Long-Term Expected Rate of Return	Weighted Average Long-Term Expected Rate of Return
Public Equity	34.00%	4.65%	1.58%
Fixed Income	15.00%	0.46%	0.07%
Credit Strategies	14.00%	5.38%	0.75%
Real Assets	14.00%	5.01%	0.70%
Private Equity	14.00%	8.34%	1.17%
MAPS-Multi-Asset Public Strategies	6.00%	3.04%	0.18%
PIP-Private Investment Partnership	3.00%	6.49%	0.19%
Total	100.00%		4.64%
	Inflation		2.50%
	* Expected arithmetic nominal return		7.14%

* The above allocation provides a one-year return 7.14%. However, one-year returns do not take into account the volatility present in each of the asset classes. In setting the long-term expected return for the system, stochastic projections are employed to model future returns under various economic conditions. The results provide a range of returns over various time periods that ultimately provide a median return of 7.11%, including expected inflation of 2.50%. On October 10, 2019 the VRS Board elected a long-term rate of 6.75% which is roughly at the 40th percentile of expected long-term results of the VRS fund asset allocation. More recent capital market assumptions compiled for the FY2020 actuarial valuations, provide a median return of 6.81%

MIDDLE PENINSULA PLANNING DISTRICT COMMISSION

**NOTES TO FINANCIAL STATEMENTS
(Continued)**

NOTE 5 – Pension Plans (Continued)

Discount Rate

The discount rate used to measure the total pension liability was 6.75%. The projection of cash flows used to determine the discount rate assumed that System member contributions will be made per the VRS Statutes and the employer contributions will be made in accordance with the VRS funding policy at rates equal to the difference between actuarially determined contribution rates adopted by the VRS Board of Trustees and the member rate. Consistent with the phased-in funding provided by the General Assembly for state and teacher employer contributions; political subdivisions were also provided with an opportunity to use an alternate employer contribution rate. For the year ended June 30, 2020, the alternate rate was the employer contribution rate used in FY2012 or 100% of the actuarially determined employer contribution rate from the June 30, 2017, actuarial valuations, whichever was greater. From July 1, 2020 on, participating employers are assumed to continue 100% of the actuarially determined contribution rates. Based on those assumptions, the pension plan’s fiduciary net position was projected to be available to make all projected future benefit payments of current active and inactive employees. Therefore, the Long-term expected rate of return was applied to all periods of projected benefit payments to determine the total pension liability.

Change in the Net Pension Liability:

	Total Pension Liability (a)	Plan Fiduciary Net Position (b)	Net Pension Liability (a)-(b)
Balances at June 30, 2019	\$863,824	\$834,280	\$ 29,544
Changes for the year:			
Service cost	20,752	-	20,752
Interest	57,514	-	57,514
Changes of assumptions	-	-	-
Differences between expected and actual experience	23,312	-	23,312
Contributions – employer	-	10,542	(10,542)
Contributions – employee	-	11,710	(11,710)
Net investment income	-	15,990	(15,990)
Benefit payments, including refunds of employee contributions	(23,519)	(23,519)	-
Administrative expense	-	(538)	538
Other changes	-	(19)	19
Net changes	78,059	14,166	63,893
Balances at June 30, 2020	\$941,883	\$848,446	\$ <u>93,437</u>

Sensitivity of the Net Pension Liability to Changes in the Discount Rate

The following presents the net pension liability of the Commission using the discount rate of 6.75%, as well as what the Commission’s net pension liability would be if it were calculated using a discount rate that is one percentage point lower (5.75%) or one percentage point higher (7.75%) than the current rate:

MIDDLE PENINSULA PLANNING DISTRICT COMMISSION

**NOTES TO FINANCIAL STATEMENTS
(Continued)**

NOTE 5 – Pension Plans (Continued)

Sensitivity of the Net Pension Liability to Changes in the Discount Rate (Continued)

	1% Decrease (5.75%)	Current Discount Rate (6.75%)	1% Increase (7.75%)
Commission’s Net Pension Liability	\$217,621	\$93,437	\$(10,395)

Pension Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions

For the year ended June 30, 2021, the Commission recognized pension benefit of \$22,893. At June 30, 2021, the Commission reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

Summary of Deferred Outflows of Resources and Inflows of Resources

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	\$ 12,027	\$3,631
Changes of assumptions	5,683	408
Net difference between projected and actual earnings on plan investments	25,334	-
Employer contributions subsequent to the Measurement Date	8,688	-
Total	<u>\$51,732</u>	<u>\$4,039</u>

\$8,688 reported as deferred outflows of resources related to pensions resulting from Commission’s contributions subsequent to the measurement date will be recognized as a reduction of the net pension liability in the fiscal year ended June 30, 2021. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows:

Reporting Date Ending June 30,	
2022	\$14,238
2023	8,272
2024	8,441
2025	8,054
2026	-
Thereafter	-

Pension Plan Data

Information about the VRS Political Subdivision Retirement Plan is also available in the separately issued VRS 2020 *Comprehensive Annual Financial Report (CAFR)*. A copy of the 2020 VRS CAFR may be downloaded from the VRS website at varetire.org/Pdf/Publications/2020-annual-report.pdf, or by writing to the System’s Chief Financial Officer at PO Box 2500, Richmond, VA 23218-2500.

MIDDLE PENINSULA PLANNING DISTRICT COMMISSION

NOTES TO FINANCIAL STATEMENTS (Continued)

NOTE 6 – Notes Payable

On February 10, 2011 the Commission entered into a financing agreement with the Virginia Water Facilities Revolving Fund to receive a \$125,000 loan to finance project costs of small water facility projects. The loan is non-interest bearing, and calls for semi-annual repayments of \$6,250 commencing on August 1, 2013. The balance of this loan was \$25,000 at June 30, 2021.

On December 16, 2014 the Commission entered into a financing agreement with the Virginia Water Facilities Revolving Fund to receive a \$200,000 loan to finance project costs of small water facility projects. The loan is non-interest bearing, and calls for semi-annual repayments of \$10,000 commencing on June 1, 2018. The balance of this loan was \$97,293 at June 30, 2021.

On June 14, 2017 the Commission entered into a financing agreement with the Virginia Water Facilities Revolving Fund to receive a \$250,000 loan to finance project costs of small water facility projects. The loan is non-interest bearing, and calls for semi-annual repayments of \$8,333 commencing on June 1, 2019. The balance of this loan was \$208,333 at June 30, 2021.

On August 1, 2020 the Commission entered into a financing agreement with the Virginia Water Facilities Revolving Fund to receive a \$175,000 loan to finance project costs of small water facility projects. The loan is non-interest bearing, and calls for semi-annual repayments of \$5,833 commencing on August 1, 2022. The balance of this loan was \$80,910 at June 30, 2021.

The following is a summary of changes in long-term debt for the year ended June 30, 2021:

	<u>Beginning</u>	<u>Additions</u>	<u>Deductions</u>	<u>Ending</u>
VRA 2011 Note	\$ 37,500	\$ -	\$12,500	\$ 25,000
VRA 2015 Note	117,293	-	20,000	97,293
VRA 2017 Note	157,867	67,133	16,667	208,333
VRA 2020 Note	<u>-</u>	<u>80,910</u>	<u>-</u>	<u>80,910</u>
Total	<u>\$312,660</u>	<u>\$148,043</u>	<u>\$49,167</u>	<u>\$411,536</u>

Mandatory debt service requirements consist of the following:

<u>Year ending</u> <u>June 30,</u>	<u>Total</u>
2022	\$ 49,167
2023	60,833
2024	48,333
2025	48,333
2026	45,626
Thereafter	<u>159,244</u>
Total	<u>\$411,536</u>

MIDDLE PENINSULA PLANNING DISTRICT COMMISSION

NOTES TO FINANCIAL STATEMENTS (Continued)

NOTE 7 – Lease Commitments

The Commission is obligated under an operating lease for office facilities. The 21-month facility lease commenced on October 1, 2018 and expired on June 30, 2020. The lease contains a provision whereby it automatically renews for a one-year period with a 3% increase in rent unless a three month notice to vacate is given. The lease calls for monthly payments in the amount of \$2,140. Rent expense was \$25,680 for the year ended June 30, 2021.

NOTE 8 – Loans Receivable

The Commission operates several loan programs to provide low or no interest loans for wastewater, small business and housing projects. The loans are carried at the net realizable value, and all amounts are believed collectible as of June 30, 2021. Loan loss reserves exist for several of the programs.

NOTE 9 – Commitments

The Commission participates in a number of programs that are fully or partially funded by grants received from other governmental units. Expenditures financed by grants are subject to audit by the appropriate grantor government. If expenditures are disallowed due to noncompliance with grant program regulations, the Commission may be required to reimburse. As of June 30, 2021, the Commission believes that disallowed expenditures, if any, based on subsequent audits will not have a material effect on the overall financial position of the Commission.

NOTE 10 – Leave Allocation

The leave allocation includes annual leave expense which is based on the amount of leave earned during the year. Other types of leave (i.e., holiday leave, administrative leave, etc.) are based on the amount of leave actually taken. Components for the leave allocation for the year ended June 30, 2021, are shown below:

Leave	
Holiday	\$21,793
Annual	16,452
Sick	<u>9,541</u>
Total	<u>\$47,786</u>

The leave allocation rate for the fiscal year ended June 30, 2021, is calculated as follows:

Leave allocation	\$ 47,786
Total regular time salaries, excluding leave	\$387,655 = 12.33%

MIDDLE PENINSULA PLANNING DISTRICT COMMISSION

NOTES TO FINANCIAL STATEMENTS (Continued)

NOTE 11 – Indirect Costs

Indirect costs, which support all projects, are allocated based on the ratio of the individual project's direct salaries, leave, and fringe benefits to total direct salaries, leave, and fringe benefits (excluding temporary help). The indirect cost rate for the fiscal year ended June 30, 2021 is calculated as follows:

Indirect costs	\$176,471
Total direct salaries, consultant costs, leave, and fringe benefits	\$782,321 = 22.56%

The following are included in indirect costs allocated to projects:

Salaries	\$ 76,067
Rent and storage	26,280
Fringe benefits	20,346
Information technology	16,984
Legal and accounting	11,725
Printing and duplicating	7,031
Telephone	3,742
Dues and subscriptions	3,707
Utilities	3,684
Office supplies	2,336
Consulting/contractual services	1,900
Miscellaneous	738
Postage	729
Facility maintenance	645
Travel	361
Vehicle operating costs	196
Total	<u>\$176,471</u>

MIDDLE PENINSULA PLANNING DISTRICT COMMISSION

NOTES TO FINANCIAL STATEMENTS (Concluded)

NOTE 12 – Fringe Benefit Allocation

Fringe benefit expense is allocated using the percentage of benefits to total salaries. The fringe benefit rate for the fiscal year ended June 30, 2021 is calculated as follows:

Fringe benefit expense	<u>\$108,495</u>
Total salaries	\$435,441 = 24.92%

Components of fringe benefit expense for the year ended June 30, 2021, are shown below:

Fringe benefits	
Group health insurance	\$ 49,851
Social security taxes	35,327
Retirement and special pension	18,153
Group life insurance	3,597
Long-term disability	949
Unemployment	<u>618</u>
Total	<u>\$108,495</u>

NOTE 13 – Uncertainties

On March 11, 2020, the World Health Organization declared the outbreak of a coronavirus (COVID-19) a pandemic. As a result, economic uncertainties have arisen which are likely to negatively impact the Alliance's grants, contributions and event income. Other financial impact could occur though such potential impact is unknown at this time.

NOTE 14 – Evaluation of Subsequent Events

The Commission has evaluated subsequent events through February 28, 2022, the date which the financial statements were available to be issued.

MIDDLE PENINSULA PLANNING DISTRICT COMMISSION

SCHEDULE OF REVENUES AND EXPENSES BY PROGRAM

For the Year Ended June 30, 2021

	Local Programs	Rural Trans- portation Planning	TDM	AHMP Update	Coastal Technical Assistance
Revenues					
Federal	\$ -	\$ 53,124	\$ -	\$ 51,414	\$ 53,829
State	75,971	-	36,793	12,854	-
Local	139,849	-	-	6,803	-
Other	339	-	-	-	-
Total Revenues	<u>216,159</u>	<u>53,124</u>	<u>36,793</u>	<u>71,071</u>	<u>53,829</u>
Expenses					
Salaries	38,360	33,894	32,551	38,931	36,013
Fringe benefits	9,300	9,096	8,735	9,017	9,610
Meeting supplies	503	-	-	-	-
Private mileage	96	-	-	-	-
Lodging and staff expense	67	-	-	-	-
Dues and memberships	-	-	1,175	-	-
Subscriptions and publications	35	-	-	-	-
Accounting and audit	497	-	-	-	-
Legal services	-	640	-	-	1,434
Consultant and contractual	5,470	14,493	-	6,890	43,303
Promotion and advertising	8,224	-	(4,927)	-	-
Insurance	2,555	-	-	-	-
Miscellaneous	1,959	-	(16)	-	-
Depreciation	1,951	-	-	-	-
Bad debt expense	965	-	-	-	-
Indirect expense	14,665	13,111	8,463	12,370	17,381
Total Expenses	<u>84,647</u>	<u>71,234</u>	<u>45,981</u>	<u>67,208</u>	<u>107,741</u>
Revenues Over (Under) Expenses	131,512	(18,110)	(9,188)	3,863	(53,912)
General Fund Support	<u>(79,216)</u>	<u>18,110</u>	<u>9,188</u>	<u>(3,863)</u>	<u>53,912</u>
Revenues and General Fund Support Over (Under) Expenses	<u>\$ 52,296</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>

MIDDLE PENINSULA PLANNING DISTRICT COMMISSION

SCHEDULE OF REVENUES AND EXPENSES BY PROGRAM

For the Year Ended June 30, 2021

<u>DEQ Planner</u>	<u>Septic Pump out</u>	<u>Ecotourism</u>	<u>NFWF Mathews</u>	<u>NFWF Landowners Living Shoreline Management</u>	<u>Living Shorelines Incentives</u>	<u>Covid CARES Act</u>
\$ 29,690	\$ 1,675	\$ 14,566	\$ 7,342	\$ 39,706	\$ -	\$ 304,331
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	9,812	-
<u>29,690</u>	<u>1,675</u>	<u>14,566</u>	<u>7,342</u>	<u>39,706</u>	<u>9,812</u>	<u>304,331</u>
7,852	-	5,756	3,241	2,307	2,865	53,815
1,931	-	1,335	870	530	769	1,055
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	172	-
-	-	-	-	-	4,200	-
20,500	990	21,945	2,183	33,269	-	43,000
-	-	-	-	-	-	-
-	-	-	-	-	-	200,000
-	-	-	-	-	-	-
-	-	-	-	-	-	-
6,831	1,320	5,963	1,048	3,600	1,806	6,461
<u>37,114</u>	<u>2,310</u>	<u>34,999</u>	<u>7,342</u>	<u>39,706</u>	<u>9,812</u>	<u>304,331</u>
(7,424)	(635)	(20,433)	-	-	-	-
<u>7,424</u>	<u>635</u>	<u>20,433</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>

The accompanying notes to financial statements
are an integral part of this statement

	VPA	GA Lobby	PAA Administration	Essex Planning Grant Broadband	EECBG Administration
Revenues					
Federal	\$ -	\$ -	\$ -	\$ -	\$ -
State	-	-	-	-	-
Local	779,141	30,000	119,534	3,000	-
Other	-	-	-	-	253
Total Revenues	<u>779,141</u>	<u>30,000</u>	<u>119,534</u>	<u>3,000</u>	<u>253</u>
Expenses					
Salaries	93,759	-	50,074	-	252
Fringe benefits	25,151	-	8,906	-	68
Meeting supplies	-	-	-	-	-
Private mileage	-	-	-	-	-
Lodging and staff expense	-	-	-	-	-
Dues and memberships	-	-	-	-	-
Subscriptions and publications	-	-	-	-	-
Accounting and audit	-	-	-	-	-
Legal services	-	-	1,464	-	-
Consultant and contractual	559,917	30,000	51,670	2,700	-
Promotion and advertising	-	-	-	-	-
Insurance	-	-	-	-	-
Miscellaneous	-	-	-	-	-
Depreciation	-	-	-	-	-
Bad debt expense	-	-	-	-	-
Indirect expense	66,298	-	14,365	609	72
Total Expenses	<u>745,125</u>	<u>30,000</u>	<u>126,479</u>	<u>3,309</u>	<u>392</u>
Revenues Over (Under) Expenses	34,016	-	(6,945)	(309)	(139)
General Fund Support	<u>(34,016)</u>	<u>-</u>	<u>6,945</u>	<u>309</u>	<u>139</u>
Revenues and General Fund Support Over (Under) Expenses	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>

MIDDLE PENINSULA PLANNING DISTRICT COMMISSION

SCHEDULE OF REVENUES AND EXPENSES BY PROGRAM

For the Year Ended June 30, 2021

Onsite Loan Management	MPBDP Support	MPA Staff Support	Total
\$ -	\$ -	\$ -	\$ 555,677
-	-	-	125,618
-	-	6,981	1,085,308
3,625	843	-	14,872
<u>3,625</u>	<u>843</u>	<u>6,981</u>	<u>1,781,475</u>
1,708	422	4,491	406,291
458	113	1,205	88,149
-	-	-	503
-	-	-	96
-	-	-	67
-	-	-	1,175
-	-	-	35
423	-	-	1,092
359	-	-	8,097
-	-	-	836,330
-	152	-	3,449
-	-	-	2,555
-	-	-	201,943
-	-	-	1,951
10	-	-	975
667	156	1,285	176,471
<u>3,625</u>	<u>843</u>	<u>6,981</u>	<u>1,729,179</u>
-	-	-	52,296
<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
\$ -	\$ -	\$ -	\$ 52,296

The accompanying notes to financial statements
are an integral part of this statement

MIDDLE PENINSULA PLANNING DISTRICT COMMISSION
BUDGETARY COMPARISON SCHEDULE
FOR THE YEAR ENDED JUNE 30, 2021

	Actual	Original Budget	Revised Budget	Favorable (Unfavorable)
Operating Revenues				
Grants and appropriations				
Federal grants	\$ 555,677	\$ 255,146	\$ 522,878	\$ 32,799
State grants and appropriations	125,618	480,247	114,775	10,843
Local grants and appropriations	1,085,308	2,203,927	1,242,027	(156,719)
Miscellaneous	2,211	17,500	3,980	(1,769)
Total Operating Revenues	1,768,814	2,956,820	1,883,660	(114,846)
Operating Expenses				
Consultant and contractual	845,705	1,837,859	1,167,115	321,410
Salaries	482,358	479,090	468,457	(13,901)
COVID business grants	200,000	-	-	(200,000)
Fringe benefits	108,495	113,945	113,127	4,632
Rent and utilities	30,219	34,850	33,350	3,131
Legal and accounting	21,066	13,500	13,500	(7,566)
Printing and duplicating	7,031	13,000	7,500	469
Office supplies	5,908	3,000	2,000	(3,908)
Dues and memberships	4,528	4,460	3,800	(728)
Subscriptions and publications	4,492	7,750	2,750	(1,742)
Telephone	3,742	2,800	2,800	(942)
Promotion and advertising	3,421	41,096	24,100	20,679
Miscellaneous	2,531	-	-	(2,531)
Depreciation	2,528	-	-	(2,528)
Insurance	2,024	2,152	2,152	128
Website and internet	1,579	18,331	16,400	14,821
Bad debt	975	-	-	(975)
Postage	729	1,200	1,200	471
Vehicle costs	727	2,925	3,025	2,298
Meeting supplies and expenses	540	1,400	700	160
Lodging and staff expense	524	4,500	4,500	3,976
Professional development	57	1,500	1,500	1,443
Total Operating Expenses	1,729,179	2,583,358	1,867,976	138,797
Operating Income	39,635	373,462	15,684	23,951
Non-Operating Revenues				
Interest income	12,661	10,000	1,000	11,661
GASB 68 pension benefit	22,892	-	-	22,892
Change in Net Position	75,188	383,462	16,684	58,504
Net Position - Beginning of Year	601,183	601,183	601,183	-
Net Position - End of Year	\$ 676,371	\$ 984,645	\$ 617,867	\$ 58,504

See accompanying notes

Dunham, Aukamp & Rhodes, PLC
Certified Public Accountants

4437 Brookfield Corporate Dr., Suite 205-D
Chantilly, VA 20151

**INDEPENDENT AUDITOR'S REPORT ON INTERNAL CONTROL OVER
FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS
BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED
IN ACCORDANCE WITH *GOVERNMENT AUDITING STANDARDS***

To the Commissioners
Middle Peninsula Planning District Commission:

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States, and the *Specifications for Audits of Authorities, Boards, and Commissions*, issued by the Auditor of Public Accounts of the Commonwealth of Virginia the financial statements of the business-type activities and the aggregate remaining fund information of Middle Peninsula Planning District Commission, as of and for the year ended June 30, 2021, and the related notes to the financial statements, which collectively comprise Middle Peninsula Planning District Commission's basic financial statements, and have issued our report thereon dated February 28, 2022.

Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered Middle Peninsula Planning District Commission's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in circumstances for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of Middle Peninsula Planning District Commission's internal control. Accordingly, we do not express an opinion on the effectiveness of Middle Peninsula Planning District Commission's internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A *material weakness* is a deficiency, or combination of deficiencies, in internal control such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

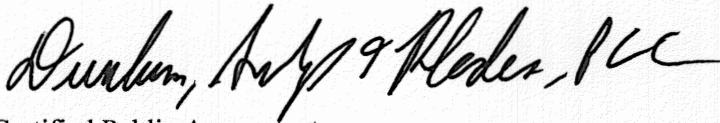
Our consideration of internal control over financial reporting was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or, significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether Middle Peninsula Planning District Commission's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the entity's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.



Certified Public Accountants
Chantilly, Virginia

February 28, 2022

MIDDLE PENINSULA PLANNING DISTRICT COMMISSION
SCHEDULE OF CHANGES IN THE COMMISSION'S NET PENSION
LIABILITY AND RELATED RATIOS
For the Plan Years Ended June 30,

	<u>2020</u>	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>
Total Pension Liability							
Service Cost	\$ 20,752	\$ 23,285	\$ 22,841	\$ 33,694	\$ 32,598	\$ 35,411	\$ 33,666
Interest	57,514	54,652	51,597	47,499	44,855	56,054	51,210
Differences between expected and actual experience	23,312	(13,208)	(14,068)	2,582	(27,899)	(247,777)	-
Changes of assumptions	-	26,733	-	(7,504)	-	-	-
Benefit payments, including refunds of employee contributions	<u>(23,519)</u>	<u>(16,756)</u>	<u>(16,701)</u>	<u>(18,748)</u>	<u>(4,821)</u>	<u>(2,534)</u>	<u>(28,811)</u>
Net change in total pension liability	78,059	74,706	43,669	57,523	44,733	(158,846)	56,065
Total pension liability - beginning	<u>863,824</u>	<u>789,118</u>	<u>745,449</u>	<u>687,926</u>	<u>643,193</u>	<u>802,039</u>	<u>745,974</u>
Total pension liability - ending (a)	<u>\$ 941,883</u>	<u>\$ 863,824</u>	<u>\$ 789,118</u>	<u>\$ 745,449</u>	<u>\$ 687,926</u>	<u>\$ 643,193</u>	<u>\$ 802,039</u>
Plan fiduciary net position							
Contributions - employer	\$ 10,542	\$ 8,734	\$ 11,043	\$ 13,393	\$ 30,454	\$ 29,567	\$ 41,066
Contributions - employee	11,710	9,332	10,076	12,257	14,502	14,079	15,942
Net investment income	15,990	52,729	53,890	78,809	11,707	25,306	69,634
Benefit payments, including refunds of employee contributions	(23,519)	(16,756)	(16,701)	(18,748)	(4,821)	(2,534)	(28,811)
Administrative expense	(538)	(507)	(452)	(440)	(340)	(299)	(348)
Other changes	<u>(19)</u>	<u>(33)</u>	<u>(48)</u>	<u>(71)</u>	<u>(5)</u>	<u>(5)</u>	<u>4</u>
Net change in plan fiduciary net position	14,166	53,499	57,808	85,200	51,497	66,114	97,487
Plan fiduciary net position - beginning	<u>834,280</u>	<u>780,781</u>	<u>722,973</u>	<u>637,773</u>	<u>586,276</u>	<u>520,162</u>	<u>422,675</u>
Plan fiduciary net position - ending (b)	<u>\$ 848,446</u>	<u>\$ 834,280</u>	<u>\$ 780,781</u>	<u>\$ 722,973</u>	<u>\$ 637,773</u>	<u>\$ 586,276</u>	<u>\$ 520,162</u>
Commission's Net Pension Liability - Ending (a) - (b)	<u>\$ 93,437</u>	<u>\$ 29,544</u>	<u>\$ 8,337</u>	<u>\$ 22,476</u>	<u>\$ 50,153</u>	<u>\$ 56,917</u>	<u>\$ 281,877</u>
Plan fiduciary net position as a percentage of the total pension liability	90.08%	96.58%	98.94%	96.98%	92.71%	91.15%	64.85%
Covered payroll	\$ 263,543	\$ 202,447	\$ 201,515	\$ 244,398	\$ 290,036	\$ 281,589	\$ 325,839
Commission's net pension liability as percentage of covered payroll	35.45%	14.59%	4.14%	9.20%	17.29%	20.21%	86.51%

See accompanying notes

**MIDDLE PENINSULA PLANNING DISTRICT COMMISSION
SCHEDULE OF EMPLOYER CONTRIBUTIONS
COMMISSION RETIREMENT PLAN
FOR THE YEARS ENDED JUNE 30, 2012 THROUGH 2021**

	Contractually Required Contributions	Contributions in Relation to Contractually Required Contributions	Contribution Deficiency (Excess)	Employer's Covered Payroll	Contributions as a % of Covered Payroll
2021	8,688	\$ 8,688	\$ -	\$205,390	4.23%
2020	11,148	9,332	1,816	263,543	3.54%
2019	9,475	8,734	741	202,447	4.31%
2018	9,431	11,043	(1,612)	201,515	5.48%
2017	13,393	13,393	-	244,398	5.48%
2016	30,454	30,454	-	290,036	10.50%
2015	29,567	27,344	2,223	281,589	9.71%
2014	41,968	41,070	898	325,839	12.60%
2013	42,064	39,438	2,626	326,582	12.08%
2012	29,612	42,818	(13,206)	263,220	16.27%

See accompanying notes

MIDDLE PENINSULA PLANNING DISTRICT COMMISSION

NOTES TO REQUIRED SUPPLEMENTARY INFORMATION For the Year Ended June 30, 2021

NOTE 1 – Change of Benefit Terms

There have been no actuarially material changes to the System benefit provisions since the prior actuarial valuation.

NOTE 2 – Changes of Assumptions

The actuarial assumptions used in the June 30, 2019 valuation were based on the results of an actuarial experience study for the period from July 1, 2012 through June 30, 2016, except the change in the discount rate, which was based on VRS Board action effective as of July 1, 2019. Changes to the actuarial assumptions as a result of the experience study are as follows:

Largest 10 – Non-Hazardous Duty:

Mortality Rates (Pre-retirement, post-retirement healthy, and disabled)	Update to a more current mortality table – RP-2014 projected to 2020
Retirement Rates	Lowered rates at older ages and changed final retirement from 70 to 75
Withdrawal Rates	Adjusted rates to better fit experience at each year age and service through 9 years of service
Disability Rates	Lowered rates
Salary Scale	No change
Line of Duty Disability	Increase rate from 14% to 20%
Discount Rate	Decrease rate from 7.00% to 6.75%

All Others (Non 10 Largest) – Non-Hazardous Duty:

Mortality Rates (Pre-retirement, post-retirement healthy, and disabled)	Update to a more current mortality table – RP-2014 projected to 2020
Retirement Rates	Lowered rates at older ages and changed final retirement from 70 to 75
Withdrawal Rates	Adjusted rates to better fit experience at each year age and service through 9 years of service
Disability Rates	Lowered rates
Salary Scale	No change
Line of Duty Disability	Increase rate from 14% to 15%
Discount Rate	Decrease rate from 7.00% to 6.75%



MIDDLE PENINSULA CHESAPEAKE BAY PUBLIC ACCESS AUTHORITY

Nearshore Habitat Restoration and Shore Protection Design at Hog Island, Gloucester

Final Report
1/8/2020

NA18NOS4190152
Task 89.01



Virginia Coastal Zone
MANAGEMENT PROGRAM

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Appendix

Appendix A: Hog Island Shore Protection and Habitat Restoration Living Shoreline Project

This project was funded, in part, by the Virginia Coastal Zone Management Program at the Virginia Department of Environmental Quality through Grant #NA18NOS4190152 of the U.S. Department of Commerce, National Oceanic and Atmospheric Administration, under the Coastal Zone Management Act of 1972, as amended.

Project Description

Hog Island, owned by the Middle Peninsula Chesapeake Bay Public Access Authority (MPCBPAA), is a barrier island in the Chesapeake Bay protecting properties in Maryus and Jenkins Neck in southern Gloucester County, Virginia. Hog Island and two adjacent islands (as part of the Guinea Marsh Islands) have historically experienced severe erosion. These islands are critical for the following reasons: (1) Guinea Marsh Islands serve as important maritime habitat for shorebirds and waterfowl as well as many important marine species; (2) Guinea Marsh Islands provide a storm surge break to the marsh complex inside Monday Creek and down the Mobjack Bay side towards the Severn River, which will soon be marshes owned by Virginia Department of Game and Inland Fisheries; (3) Monday Creek has two aquaculture operations inside the creek and the uplands provide a storm break for growing oysters; and (4) there are many FEMA repetitive loss residential structures within the Guinea area which rely on the Guinea Marsh complex for storm surge reduction.

For context of flood risk, the U.S. Army Corps of Engineers identified the Middle Peninsula as a priority subwatershed in the Draft Chesapeake Bay Comprehensive Water Resources and Restoration Plan. The Middle Peninsula includes the Piankatank River, Mobjack Bay, and York River watersheds. The coastal areas and more specifically the Guinea Marshes of the lower York River and Mobjack Bay rank highly for climate outcome related projects according to the Army Corps analysis.

Gloucester County, Virginia, is near the Chesapeake Bay and numerous tidal rivers that create an area of high risk of coastal flooding, sea level rise, and storm surge. Based on tidal gauge data from VIMS, relative sea level rise rates ranging from 0.11-0.23 in/yr (2.9-5.8 mm/yr; period: 1976-2007; 10 stations) within the Chesapeake Bay region, which are the highest rates reported along the U.S. Atlantic coast (Boon et. al. 2010). In addition to sea level rise, Gloucester County has a history of being impacted by hurricanes and tropical storms. As storms pass over or near the coast, the atmospheric pressure drops, causing a large volume of sea water to build up, eventually being pushed ashore by the storm's winds causing a storm surge. In Gloucester County, strong East and Northeaster winds can push water from the Chesapeake Bay into the mouth of the York and Rappahannock Rivers and Mobjack Bay, flooding much of the county's low-lying areas (Middle Peninsula Planning District Commission, 2005). Additionally, when a storm makes landfall at high tide, the storm surge and the added water from the tidal fluctuation combine to create a "storm tide". In Gloucester County, tidal waters normally fluctuate twice daily from 1.2 feet above mean sea level to 1.2 feet below (FEMA 1987, 6). If a severe hurricane were to make landfall during high tide, and additional 1.2 feet of water would be added to the highest storm surge possible, which could create a storm tide of 16.2 feet (Rygel, 2005). Nor'easters, like hurricanes and tropical storms, can dump heavy amounts of rain and produce hurricane-force winds that push large amounts of sea water inland.

According to a study conducted by the Center for Coastal Resources Management, a one-and-a-half-foot rise in sea level coupled with a three-foot storm surge, similar to what would be

experienced in a strong tropical storm, would lead to 13% of Gloucester County's land mass being flooded – including 118 miles of roads. Only 3% of the projected flood area is currently developed.

A strong indicator that Gloucester County is experiencing the impact of coastal hazards (i.e., flooding, hurricanes, sea level rise, and storm surge) is the number of repetitive loss and severe repetitive loss claims submitted by residents and businesses to FEMA. As of 2015, the county had 147 repetitive loss properties with claims topping \$3.3 million and 13 severe repetitive loss properties with claims totaling nearly \$1.9 million. The County has implemented several preventative measures, property protection policies, public information activities, and emergency service measures to decrease impacts on communities.

MPCBPAA partnered with the VIMS Shoreline Studies program on conducting a site assessment and survey, designing a habitat restoration and shore protection solution for Hog Island and the two adjacent islands, and preparing the construction permit application. The goal was to design a nature-based flood mitigation solution that addresses conservation and resiliency.

Product #1: Hog Island Site Assessment and Survey

A. Summary

VIMS personnel assessed the entire Hog Island shoreline to document type, stability, width, and the location of natural resources, such as submerged aquatic vegetation (SAV). GPS-referenced photos were taken. A detailed elevation survey in the area was completed using Real Time Kinematic GPS. VIMS personnel assessed the shore zone to determine the nature of the underlying strata and identify a location suitable for shoreline access during construction.

Hog Island and the two adjacent islands have medium (-2 to -5 ft/year) to high (-5 to -10 ft/year) rates of erosion on the shorelines of Mobjack Bay and the York River. Without restoration, these islands have a great potential to erode and disappear.

The York River and its watershed support many natural vegetative communities, from aquatic grass beds to tidal marches to a variety of woodlands. These communities support a wide variety of resident and migratory amphibians, reptiles, birds, and mammals. There are eight families and 26 species of amphibians, 36 species of reptiles, three species of sea turtles, 50 mammal species, and 230 bird species recorded within the Chesapeake Bay area (Brown, J. and S. Erdle, 2012). Some fish species that are present near and around the proposed project location include Atlantic croaker, spot, weakfish, spotted seatrout, silver perch, American Shad, river herring, Atlantic menhaden, striped bass, white perch, summer flounder, and Bay anchovy.

The York River is home to the Atlantic Sturgeon (*Acipenser ocyrinchus*) a federal and state identified endangered species. This project will only have minor temporary impacts the river during construction. The completed project will have no negative impacts to the river and will provide the positive impacts of increased habitat for local species.

B. Deliverables

1. Site Assessment and Survey (Appendix A)

Product #2: Hog Island Shore Protection Strategy

A. Summary

VIMS Shoreline Studies program designed a nature-based flood mitigation solution for the mouth of Monday Creek and Hog Island. The plan includes constructing eight oyster castle breakwaters that will protect the marsh that faces the York River. On the flanks of the island, nine oyster bag sills will be installed to enhance habitat and provide shore protection along the limited fetch shorelines. These techniques are proven approaches to address the coastal hazards. The project was designed to a 15 to 25-year FEMA design storm standard. The design attenuates wave energy and storm surge.

The project includes 18 acres of habitat restoration on Hog Island and just under one acre on each of the other two islands.

B. Deliverables

1. Design Documents (Appendix A)

Product #3: Hog Island Habitat Restoration and Shore Protection Permit Development

A. Summary

VIMS Shoreline Studies program prepared a Joint Permit Application for construction for the Virginia Marine Resource Commission, U. S. Army Corps of Engineers, the Virginia Department of Environmental Quality (DEQ), and Gloucester County Wetlands Board. The Middle Peninsula Chesapeake Bay Public Access Authority (MPCBPAA) is the applicant.

B. Deliverables

1. Joint Permit Application (Appendix A)

Related Efforts

The MPCBPAA applied to VDEM on November 10, 2020 for the new pre-disaster FEMA Building Resilient Infrastructure Communities (BRIC) funding to construct the project. VDEM is reviewing the application for submittal to FEMA in January 2021.

Pending approval of construction permits and funding, the project will be constructed in 2021.

Appendix A: Hog Island Shore Protection and Habitat Restoration Living Shoreline Project

Hog Island Shore Protection and Habitat Restoration Living Shoreline Project



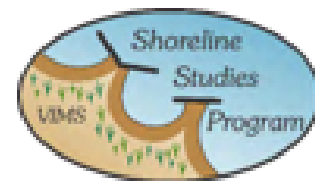
**Shoreline Studies Program
Virginia Institute of Marine Science
William & Mary**

December 2020

Hog Island Shore Protection and Habitat Restoration Living Shoreline Project Summary Report

C. Scott Hardaway, Jr.
Donna A. Milligan
Christine A. Wilcox
Nicholas J. DiNapoli

Shoreline Studies Program
Virginia Institute of Marine Science
William & Mary



This project was funded by the Virginia Coastal Zone Management Program at the Department of Environmental Quality through Grant # NA18NOS4190152 Task 89.01 of the U.S. Department of Commerce, National Oceanic and Atmospheric Administration, under the Coastal Zone Management Act of 1972, as amended. The views expressed herein are those of the authors and do not necessarily reflect the views of the U.S. Department of Commerce, NOAA, or any of its subagencies.

December 2020

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Site Assessment

Hog Island is an emergent estuarine marsh complex that is part of the overall Guinea marshes (Figure 1). These marshes are located at the confluence of Mobjack Bay and the York River in Gloucester County, Virginia. Hog Island is a high wave energy eroding shoreline along its south-face on the York River, and lower wave energy along its west and east flanks that occur on Monday Creek (Figure 2). The marsh consists mainly of grasses such as *Spartina alterniflora* and *Spartina patens*. A higher, sandy area along the higher energy shorelines has some scrub shrub. Two small ponds and a small creek occur on the interior of the marsh. The edge of the island is irregularly shaped with exposed peat and peat scarps along the shoreline (Figure 3).

Hog Island is critical for several reasons including: (1) Guinea Marsh Islands are important maritime habitats for shorebirds, waterfowl, as well as many important marine species; (2) Guinea Marsh Islands provide a storm surge break to the marsh complex inside Monday Creek and down the Mobjack Bay side towards the Severn, which will soon be marshes owned by the Virginia Department of Wildlife Resources; (3) Monday Creek has two aquaculture operations inside of the creek and the uplands provide a storm break for growing oysters; and (4) There are many FEMA repetitive loss structures in Guinea. Protecting these islands reduces the amount of storm surge energy entering the creek and thus reduces flood damage. As such, this project took conservation, resiliency, and protection aspects into consideration when assessing Hog Island for shore protection and habitat restoration. To determine management strategy suitability, the site assessment included hydrodynamic, physical, and biotic conditions existing at the site.

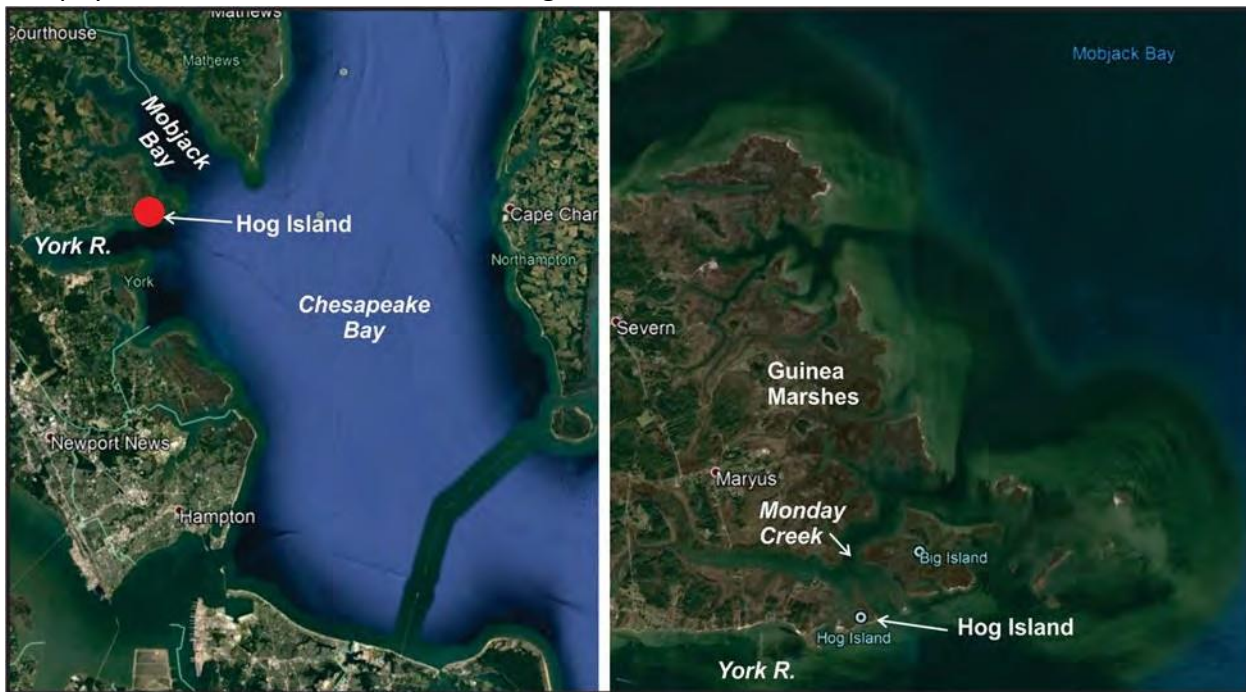


Figure 1. Location of Hog Island in Gloucester County, Virginia.

The physical assessment of the shore zone included shoreline type, stability, width, and the location of natural resources, such as SAV. In addition, native sediment type along the shoreline and the nature of the underlying strata was sampled to determine its suitability to sustain stone structures. This was done using hand augers, and the sampled sediment was classified using ASTM field classification methods. Using Real-Time Kinematic GPS and Robotic Total Station technology, the beach, marsh, and nearshore were surveyed for elevation and areal extent of habitat. The survey was tied into horizontal and vertical survey control systems (NAD 83 horizontal datum/NAVD 88 vertical datum) on 1 Oct 2020 and adjusted to mean low water (MLW). The conversion from NAVD88 to MLW at the site is 1.5 ft. Low-level, near vertical drone imagery of the site was taken on 27 Aug 2020 and rectified in GIS to provide a baseline of existing conditions for the plan.



Figure 2. Drone image of Hog Island taken 27 August 2020.



Figure 3. Physical features of Hog Island.

Shoreline Change

Hog Island's south-facing shoreline on the York River is exposed to large waves coming from the Atlantic Ocean through the mouth of Chesapeake Bay as well as Bay-generated waves coming from the east and east-southeast. It is eroding at a high rate of -4 to -5 ft per year (Figure 4). The east and west-facing Hog Island shorelines along Monday Creek have lower fetch exposures (0.2 to 0.5 miles) and erosion rates of about - 1 ft/yr. In 1937, the island was much larger with the highest erosion along the south-facing shoreline. Nearly 400 ft of shoreline has been lost in 83 years. The east-facing shoreline has lost about 60 ft and the west-facing shoreline about 40 ft in that same time period. The result is that about ½ of the area that existed in 1937 has eroded (Figure 5). The island has lost about 15 acres.

Assessment

An elevation survey in the area of the proposed structures included the marsh and nearshore (Figure 6). The nearshore zone was assessed to determine the nature of the underlying strata in the areas where structures are proposed. Also, a suitable location for access to the shoreline during construction was assessed. The island is low. The top of the peat scarp ranges from about +1.5 to +2.5 ft MLW where the mean tide range is 2.3 ft at this site. The highest point on the sandy berm area is +4.7 ft MLW. The nearshore is shallow with the deepest section occurring in the southeast corner. Depths around this point are about -2 ft MLW about 175 ft from the shoreline. The southwest corner of the island is slightly shallower.

The nearshore has sand bars along the York River side of the island. These bars vary from 50 to 100 feet apart and are about 0.5 ft in elevation.

Augers taken along the shoreline show the nearshore and subsurface sediment at the site. The auger taken on the southwest area of the site (B1) has stiff, sandy silt (ML) from the surface to about 1 ft down. From 1-2 feet below the bottom of the nearshore, the material is silty, fine sand (SM). At B2, the material between the bottom and 2 feet below is silty, very fine sand (SM).

The areas around Hog Island on Monday Creek have extensive submerged aquatic vegetation (SAV) beds (Figure 7) as mapped by the VIMS SAV mapping program. The nearshore on the western side of the island seems to have more extensive marsh than in 2019. In addition, several small stands of SAV exist in the sand bars that occur in the sandy nearshore.



Figure 4. Shore change and long-term rates of change along Hog Island from SSP online shore change viewer.



Figure 5. In the past 83 years, Hog Island has lost most of its area from the south-facing shoreline along the York River.

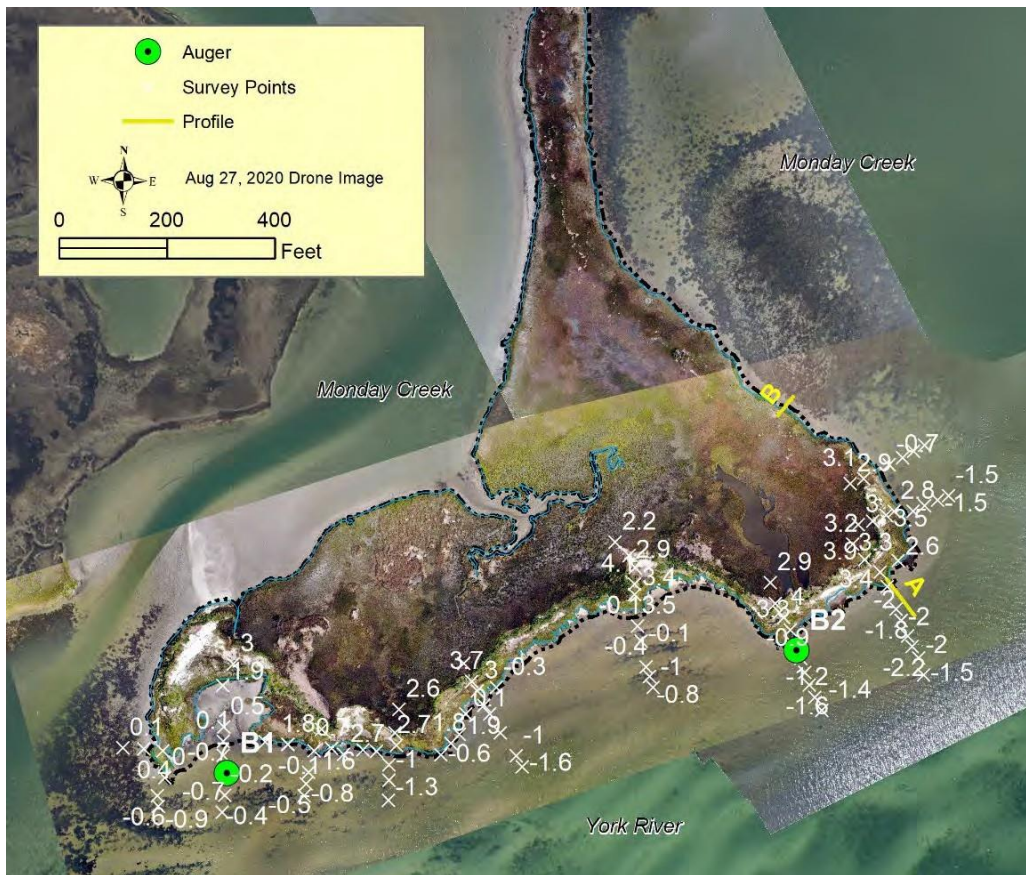


Figure 6. Marsh and nearshore survey taken on 1 Oct 2020. Also shown is the location of the augers taken.



Figure 7. Submerged aquatic vegetation (SAV) mapped in 2019 by the VIMS SAV mapping program.

Living Shoreline Project

This project focuses on designing a resilient, nature-based shoreline strategy along Hog Island in Gloucester County, Virginia which historically has experienced severe erosion. The Living Shoreline project includes a completed plan and permit so that the restoration and implementation of the shoreline management strategy for Hog Island can occur. The original conceptual design of the project included rock sills along the south-facing shoreline with potential access from Monday Creek. However, assessment of the site revealed that the nearshore around the entire island is extremely shallow and is likely not accessible by barge. Getting materials and machinery to the site would be difficult and impractical. As such, other types of structures were considered. When oyster castles or equivalent are constructed as a low reef, they have been shown to be very successful in oyster recruitment which is necessary for long-term stability of the reefs (Figure 8). This is particularly important in a high energy environment as the stability is needed for the reef to withstand strong storms.

Oyster castles are concrete blocks with oyster shells incorporated into it. They are placed in the water along shorelines and mimic oyster reefs by providing a habitat for oysters and potentially also reducing erosion (Figure 8). Smaller, lighter boats/barges can be used to bring in the oyster castles and oyster bags and they can be placed by hand, not requiring heavy machinery. No grading will occur, and no sand is being placed.

The proposed living shoreline project protects a total of about 3,000 ft of low marsh shoreline and consists of 8 oyster castle breakwaters and 9 oyster bag sills (Figure 9). The total structure length is 1,400 ft. The oyster castles can be stacked so that they are 10 ft wide and +2.5 ft MLW high. The crest elevation is just above mean high water to help reduce the effects of larger waves that impact the site during storms. They are placed strategically at existing marsh headlands along the south and east facing shoreline. Oyster castle breakwaters 1 (100 ft long), 2 (100 ft long), 4 (100 ft long), and 8 (100 ft long) consist of one row of oyster castles while reefs 3 (140 ft long), 5 (150 ft



Figure 8. Example of oyster castle placement in an estuarine environment (Photo from Allied Concrete). The top image shows what the reefs look like when first placed. The bottom shows the reefs after oyster recruitment. The proposed structures for Hog Island are higher and wider than this oyster castle sill.

long), 6 (80 ft long), and 7 (80 ft long) consist of two rows of stacked oyster castles about 5 ft apart. The double row breakwaters are proposed to better withstand the higher energy environment so that the structures will better secure the most exposed marsh headlands along the Hog Island coast. All oyster castle reef material will be placed below MLW to maximize oyster colonization covering about 0.34 acres of subaqueous bottom. The oyster bag sills will be constructed along the east-facing shoreline and will consist of 6 bags stacked in a pyramid shape. The oyster bag sills are 100 ft long with 15 ft gaps and placed at MLW to avoid impacts to SAV. Hog Island is only accessible by water. Oyster castles and bags will be brought in by boat and hand-placed along the shoreline.

The final plan set is shown in Appendix A, and the draft Joint Permit Application with associated drawings are shown in Appendix B. Approximate 2020 project completion costs are

located in Appendix C. In addition, an application has been submitted to FEMA BRIC for flood mitigation funding for a portion of the project funding.



Figure 9. Proposed living shoreline project at Hog Island using oyster castles and oyster bags to create living sills along the shoreline for habitat restoration and shoreline protection.

Appendix A

Final Plans

Hog Island Living Shoreline Project



- GENERAL NOTES**
1. Mercator map is 23 N (1963-2001)
 2. Horizontal control was established by the Triangulation Global Positioning System (RTK-GPS) and is shown in UTM, zone 18 NAD83, i.e. East of arcuate points shown in Latitude/Longitude.
 3. Vertical control is MEV: MEV1968-2000 was determined to be 1.5 ft below NAVD83 at Hog Island.
 4. Topographic data obtained on 1 October 2000 using RTK-GPS and Total Station. Drone imagery was captured on 27 Aug 2020.
 5. All dimensions and coordinates are given in feet.
 6. Plans were created in AutoCAD.



This project was funded by the Virginia Coastal Zone Management Program at the Department of Environmental Quality through Grant # 15A180056190423 Task 09/01 of the U.S. Department of Commerce, National Oceanic and Atmospheric Administration, under the Coastal Zone Management Act of 1972, as amended. The views expressed herein are those of the author and do not necessarily reflect the views of the U.S. Department of Commerce, NOAA, or any of its subsidiaries.

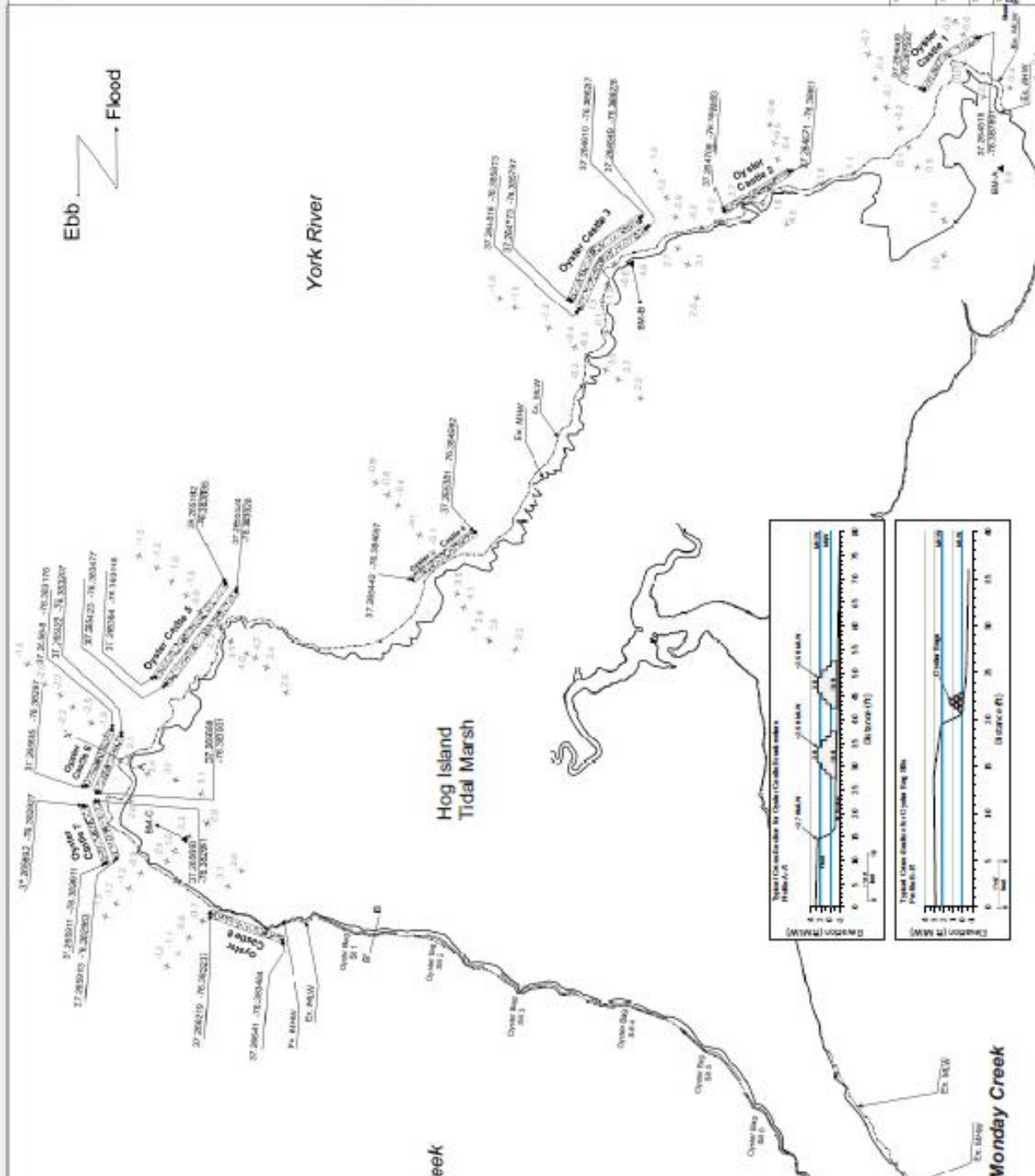
Hog Island
Living Shoreline Project



Project No.	Hog Island Living Shoreline Project
Location	
Project No.	
Drawing Title	
Sheet No.	Sheet 1
Date	01/18/2026
Sheet No.	Sheet 2
Proposed Plan	

Sheet No. 1
Drawing Title
Sheet 1
Cover Sheet
Sheet 2
Proposed Plan

Proposed Features			
Station	Structure	Length (ft)	Area (sq ft)
0+00 to 0+100	Channel	100	10,000
0+100 to 0+200	Channel	100	10,000
0+200 to 0+300	Channel	100	10,000
0+300 to 0+400	Channel	100	10,000
0+400 to 0+500	Channel	100	10,000
0+500 to 0+600	Channel	100	10,000
0+600 to 0+700	Channel	100	10,000
0+700 to 0+800	Channel	100	10,000
0+800 to 0+900	Channel	100	10,000
0+900 to 1+000	Channel	100	10,000
1+000 to 1+100	Channel	100	10,000
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9+600 to 9+700	Channel	100	10,000
9+700 to 9+800	Channel	100	10,000
9+800 to 9+900	Channel	100	10,000
9+900 to 10+000	Channel	100	10,000



Hog Island Living Shorelines Project

Existing Conditions

- Benchmarks
- Spot Elevation (MAY 08/08/2020)
- Profile
- Existing MHV*
- Existing MLW*

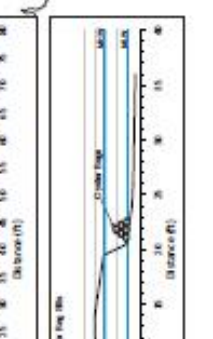
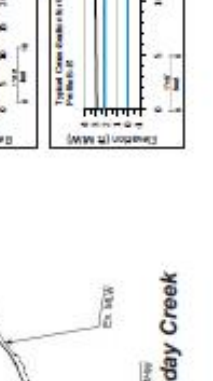
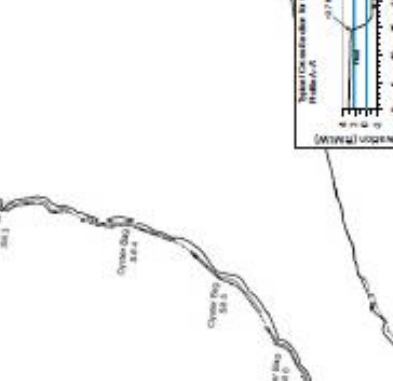
* Digitized from survey and drone imagery

Proposed Conditions

- Oyster Cable End Posts
- Oyster Bag Sill
- Oyster Cable Headland SW



Project Title: Hog Island Living Shorelines Project
 Revised For: Final Plan
 Drawing Title: Proposed Plan
 Date: December 11, 2020
 Scale: 1" = 60'



Appendix B

Joint Permit Application

- ❖ VMRC: An application fee of \$300 may be required for projects impacting tidal wetlands, beaches and/or dunes when VMRC acts as the LWB. VMRC will notify the applicant in writing if the fee is required. Permit fees involving subaqueous lands are \$25.00 for projects costing \$10,000 or less and \$100 for projects costing more than \$10,000. Royalties may also be required for some projects. The proper permit fee and any required royalty is paid at the time of permit issuance by VMRC. VMRC staff will send the permittee a letter notifying him/her of the proper permit fees and submittal requirements.
- ❖ LWB: Permit fees vary by locality. Contact the LWB for your project area or their website for fee information and submittal requirements. Contact information for LWBs may be found at http://ccrm.vims.edu/permits_web/guidance/local_wetlands_boards.html.

FOR AGENCY USE ONLY	
	Notes:
	JPA #

APPLICANTS

Part 1 – General Information

PLEASE PRINT OR TYPE ALL ANSWERS: If a question does not apply to your project, please print N/A (not applicable) in the space provided. If additional space is needed, attach 8-1/2 x 11 inch sheets of paper.

County or City in which the project is located: Gloucester				
Waterway at project site: York River				
PREVIOUS ACTIONS RELATED TO THE PROPOSED WORK (Include all federal, state, and local pre-application coordination, site visits, previous permits, or applications whether issued, withdrawn, or denied)				
Historical information for past permit submittals can be found online with VMRC - https://webapps.mrc.virginia.gov/public/habitat/ - or VIMS - http://ccrm.vims.edu/perms/newpermits.html				
Agency	Action / Activity	Permit/Project number, including any non-reporting Nationwide permits previously used (e.g., NWP 13)	Date of Action	If denied, give reason for denial

1. Applicant's legal name* and complete mailing address: Contact Information:

	Home	()	
	Work	()	
	Fax	()	
	Cell	()	
	e-mail		
State Corporation Commission Name and ID Number (if applicable) _____			

2. Property owner(s) legal name* and complete address, if different from applicant: Contact Information:

	Home	()	
	Work	()	
	Fax	()	
	Cell	()	
	e-mail		
State Corporation Commission Name and ID Number (if applicable) _____			

Part 1 - General Information (continued)

3. Authorized agent name* and complete mailing address (if applicable):
-
-
- Contact Information:
- Home () _____
- Work () _____
- Fax () _____
- Cell () _____
- e-mail _____
- State Corporation Commission Name and ID Number (if applicable) _____

*** If multiple applicants, property owners, and/or agents, each must be listed and each must sign the applicant signature page.**

4. Provide a detailed description of the project in the space below, including the type of project, its dimensions, materials, and method of construction. Be sure to include how the construction site will be accessed and whether tree clearing and/or grading will be required, including the total acreage. If the project requires pilings, please be sure to include the total number, type (e.g. wood, steel, etc), diameter, and method of installation (e.g. hammer, vibratory, jetted, etc). If additional space is needed, provide a separate sheet of paper with the project description.

Hog Island is located at the mouth of the York River. Its south-facing shoreline is exposed to large waves coming from the Atlantic Ocean through the mouth of Chesapeake Bay as well as Bay-generated waves coming from the east and east-southeast. It is eroding at a high rate of -4 to -5 ft per year. The east and west-facing Hog Island shorelines along Monday Creek have lower fetch exposures (0.2 to 0.5 miles) and erosion rates of about - 1 ft/yr. The proposed living shoreline project protects a total of about 3,000 ft of low marsh shoreline and consists of 8 oyster castle breakwaters and 9 oyster bag sills. The oyster castles will be stacked so that they are 10 ft wide and +2.5 ft MLW high. The crest elevation is just above mean high water to help reduce the effects of larger waves that impact the site during storms. They will be placed strategically at existing headlands along the south and east facing shoreline. Oyster castle breakwaters 3, 5, 6, and 7 will consist of two rows of stacked oyster castles about 5 ft apart. All oyster reef material will be placed on subaqueous bottom to maximize oyster colonization. The oyster bag sills will be constructed along the east-facing shoreline and will consist of 8 bags stacked in a pyramid shape. The sills will be 100 ft long with 15 ft gaps and placed at MLW. Hog Island is only accessible by water. Oyster castles bags will be brought in by boat and hand-placed along the shoreline.

5. Have you obtained a contractor for the project? Yes* No. *If your answer is "Yes" complete the remainder of this question and submit the Applicant's and Contractor's Acknowledgment Form (enclosed)

- Contractor's name* and complete mailing address:
-
-
- Contact Information:
- Home () _____
- Work () _____
- Fax () _____
- Cell () _____
- email _____
- State Corporation Commission Name and ID Number (if applicable) _____

*** If multiple contractors, each must be listed and each must sign the applicant signature page.**

6. List the name, address and telephone number of the newspaper having general circulation in the area of the project. Failure to complete this question may delay local and State processing.

- Name and complete mailing address:
- Gloucester Mathews Gazette Journal

8825 Main Street

Gloucester, VA 23061
- Telephone number
- (804) 693-3101

Part 1 - General Information (continued)

7. Give the following project location information:

Street Address (911 address if available) NA

Lot/Block/Parcel# NA

Subdivision NA

City / County Gloucester

ZIP Code

Latitude and Longitude at Center Point of Project Site (Decimal Degrees):

37.265612°

/ -76.385369°

(Example: 36.41600/-76.30733)

If the project is located in a rural area, please provide driving directions giving distances from the best and nearest visible landmarks or major intersections. *Note: if the project is in an undeveloped subdivision or property, clearly stake and identify property lines and location of the proposed project. A supplemental map showing how the property is to be subdivided should also be provided.*

Site is accessible only from the water. A public boat landing is available at Gloucester Point, Virginia under the Rt. 17 bridge.

8. What are the *primary and secondary purposes of and the need for* the project? For example, the primary purpose may be "to protect property from erosion due to boat wakes" and the secondary purpose may be "to provide safer access to a pier."

The primary purpose of the project is shore protection. The low marsh island is eroding at a high rate. The site protects aquaculture operations in Monday Creek. A secondary purpose is to protect marsh habitat and establish oyster habitat in the lower York River.

9. Proposed use (check one):

Single user (private, non-commercial, residential)

Multi-user (community, commercial, industrial, government)

10. Describe alternatives considered and the measures that will be taken to avoid and minimize impacts, to the maximum extent practicable, to wetlands, surface waters, submerged lands, and buffer areas associated with any disturbance (clearing, grading, excavating) during and after project construction. *Please be advised that unavoidable losses of tidal wetlands and/or aquatic resources may require compensatory mitigation.*

The use of rock sills was considered for this shore protection project. However, the nearshore immediately surrounding Hog Island is very shallow and is likely not accessible by barge. Getting materials and machinery to the site would be difficult. Smaller, lighter boats/barges can be used to bring in the oyster castles and oyster bags, and they will be placed by hand, not requiring heavy machinery. No grading will occur, and no sand is being placed. The oyster castles are below MLW to maximize oyster growth. The oyster bag sills were placed at MLW to avoid impacts to SAV.

Part 1 - General Information (continued)

11. Is this application being submitted for after-the-fact authorization for work which has already begun or been completed? Yes No. If yes, be sure to clearly depict the portions of the project which are already complete in the project drawings.
12. Approximate cost of the entire project (materials, labor, etc.): \$ 664,400
Approximate cost of that portion of the project that is channelward of mean low water: \$ 650,000
13. Completion date of the proposed work: _____ - _____
14. **Adjacent Property Owner Information:** List the name and complete **mailing address**, including zip code, of each adjacent property owner to the project. (NOTE: If you own the adjacent lot, provide the requested information for the first adjacent parcel beyond your property line.) Failure to provide this information may result in a delay in the processing of your application by VMRC.

2149 Big Island View Rd
The Bruce and Catherine Vogt Trust Agreement
PO Box 747
Hayes, VA 23072
RPC 13725
Tax Map # 53-255

10664 Heron Point Rd
Michael A. Koeppen
10664 Heron Point Rd
Hayes, VA 23072
RPC 11100
Tax Map # 53-252

Big Island Rd
Frances Elias Blackburn
203 Cove Rd
Hayes, VA 23072
RPC 18191
Tax Map # 53-259

Big Island View Rd
Great Island, LLC
753 Thimble Shoals Blvd., Suite C
Newport News, VA 23606
RPC 22455
Tax Map # 53-256

Part 2 - Signatures

1. Applicants and property owners (if different from applicant).

NOTE: REQUIRED FOR ALL PROJECTS

PRIVACY ACT STATEMENT: The Department of the Army permit program is authorized by Section 10 of the Rivers and Harbors Act of 1899, Section 404 of the Clean Water Act, and Section 103 of the Marine Protection Research and Sanctuaries Act of 1972. These laws require that individuals obtain permits that authorize structures and work in or affecting navigable waters of the United States, the discharge of dredged or fill material into waters of the United States, and the transportation of dredged material for the purpose of dumping it into ocean waters prior to undertaking the activity. Information provided in the Joint Permit Application will be used in the permit review process and is a matter of public record once the application is filed. Disclosure of the requested information is voluntary, but it may not be possible to evaluate the permit application or to issue a permit if the information requested is not provided.

CERTIFICATION: I am hereby applying for all permits typically issued by the DEQ, VMRC, USACE, and/or Local Wetlands Boards for the activities I have described herein. I agree to allow the duly authorized representatives of any regulatory or advisory agency to enter upon the premises of the project site at reasonable times to inspect and photograph site conditions, both in reviewing a proposal to issue a permit and after permit issuance to determine compliance with the permit.

In addition, I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Applicant's Legal Name (printed/typed)

(Use if more than one applicant)

Applicant's Signature

(Use if more than one applicant)

Date

Property Owner's Legal Name (printed/typed)
(If different from Applicant)

(Use if more than one owner)

Property Owner's Signature

(Use if more than one owner)

Date

Part 2 – Signatures (continued)

2. Applicants having agents (if applicable)

CERTIFICATION OF AUTHORIZATION

I (we), _____, hereby certify that I (we) have authorized _____
(Applicant's legal name(s)) (Agent's name(s))
to act on my behalf and take all actions necessary to the processing, issuance and acceptance of this permit and any and all standard and special conditions attached.

We hereby certify that the information submitted in this application is true and accurate to the best of our knowledge.

(Agent's Signature) (Use if more than one agent)

(Date)

(Applicant's Signature) (Use if more than one applicant)

(Date)

3. Applicant's having contractors (if applicable)

CONTRACTOR ACKNOWLEDGEMENT

I (we), _____, have contracted _____
(Applicant's legal name(s)) (Contractor's name(s))
to perform the work described in this Joint Permit Application, signed and dated _____.

We will read and abide by all conditions set forth in all Federal, State and Local permits as required for this project. We understand that failure to follow the conditions of the permits may constitute a violation of applicable Federal, state and local statutes and that we will be liable for any civil and/or criminal penalties imposed by these statutes. In addition, we agree to make available a copy of any permit to any regulatory representative visiting the project to ensure permit compliance. If we fail to provide the applicable permit upon request, we understand that the representative will have the option of stopping our operation until it has been determined that we have a properly signed and executed permit and are in full compliance with all terms and conditions.

Contractor's name or name of firm

Contractor's or firms address

Contractor's signature and title

Contractor's License Number

Applicant's signature (use if more than one applicant)

Date

Part 2 – Signatures (continued)

ADJACENT PROPERTY OWNER'S ACKNOWLEDGEMENT FORM

I (we), _____, own land next to (across the water
(Print adjacent/nearby property owner's name)

from/on the same cove as) the land of _____.
(Print applicant's name(s))

I have reviewed the applicant's project drawings dated _____
(Date)

to be submitted for all necessary federal, state and local permits.

I HAVE NO COMMENT ABOUT THE PROJECT.

I DO NOT OBJECT TO THE PROJECT.

I OBJECT TO THE PROJECT.

The applicant has agreed to contact me for additional comments if the proposal changes prior to construction of the project.

(Before signing this form be sure you have checked the appropriate option above).

Adjacent/nearby property owner's signature(s)

Date

Note: If you object to the proposal, the reason(s) you oppose the project must be submitted in writing to VMRC. An objection will not necessarily result in denial of the project; however, valid complaints will be given full consideration during the permit review process.

Part 2 – Signatures (continued)

ADJACENT PROPERTY OWNER'S ACKNOWLEDGEMENT FORM

I (we), _____, own land next to (across the water
(Print adjacent/nearby property owner's name)

from/on the same cove as) the land of _____
(Print applicant's name(s))

I have reviewed the applicant's project drawings dated _____
(Date)

to be submitted for all necessary federal, state and local permits.

I HAVE NO COMMENT ABOUT THE PROJECT.

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(Before signing this form, be sure you have checked the appropriate option above).

Adjacent/nearby property owner's signature(s)

Date

Note: If you object to the proposal, the reason(s) you oppose the project must be submitted in writing to VMRC. An objection will not necessarily result in denial of the project; however, valid complaints will be given full consideration during the permit review process.

Part 3 – Appendices (continued)

Appendix B: Projects for Shoreline Stabilization in tidal wetlands, tidal waters and dunes/beaches including riprap revetments and associated backfill, marsh toe stabilization, bulkheads and associated backfill, breakwaters, beach nourishment, groins, jetties, and living shoreline projects. Answer all questions that apply. Please provide any reports provided from the Shoreline Erosion Advisory Service or VIMS.

NOTE: It is the policy of the Commonwealth that living shorelines are the preferred alternative for stabilizing tidal shorelines (Va. Code § 28.2-104.1). **Information on non-structural, vegetative alternatives (i.e., Living Shoreline) for shoreline stabilization is available at http://ccrm.vims.edu/coastal_zone/living_shorelines/index.html.**

1. Describe each revetment, bulkhead, marsh toe, breakwater, groin, jetty, other structure, or living shoreline project separately in the space below. Include the overall length in linear feet, the amount of impacts in acres, and volume of associated backfill below mean high water and/or ordinary high water in cubic yards, as applicable:

The proposed living shoreline project protects a total of about 3,000 ft of low marsh shoreline and consists of 8 oyster castle breakwaters and 9 oyster bag sills. The total structure length is 1,400 ft. The oyster castles will be stacked so that they are 10 ft wide and +2.5 ft MLW high. The crest elevation is just above mean high water to help reduce the effects of larger waves that impact the site during storms. They will be placed strategically at existing headlands along the south and east facing shoreline. Oyster castle breakwaters 1 (100 ft long), 2 (100 ft long), 4 (100 ft long), and 8 (100 ft long) consist of one row of oyster castles while reefs 3 (140 ft long), 5 (150 ft long), 6 (80 ft long), and 7 (80 ft long) will consist of two rows of stacked oyster castles about 5 ft apart. The oyster bag sills will be constructed along the east-facing shoreline and will consist of 6 bags stacked in a pyramid shape. The sills will be 100 ft long with 15 ft gaps and placed at MLW. All oyster reef material will be placed on subaqueous bottom to maximize oyster colonization. The oyster castle structures will cover about 0.34 acres of subaqueous bottom. No sand fill is proposed.

2. What is the maximum encroachment channelward of mean high water? 71 feet.
Channelward of mean low water? 58 feet.
Channelward of the back edge of the dune or beach? feet.
3. Please calculate the square footage of encroachment over:
- | | | |
|--------------------------|---------------|-------------|
| • Vegetated wetlands | <u>0</u> | square feet |
| • Non-vegetated wetlands | <u>0</u> | square feet |
| • Subaqueous bottom | <u>14,600</u> | square feet |
| • Dune and/or beach | <u>0</u> | square feet |
4. For bulkheads, is any part of the project maintenance or replacement of a previously authorized, currently serviceable, existing structure? Yes No.

If yes, will the construction of the new bulkhead be no further than two (2) feet channelward of the existing bulkhead? Yes No.

If no, please provide an explanation for the purpose and need for the additional encroachment.

Part 3 – Appendices (continued)

5. Describe the type of construction and all materials to be used, including source of backfill material, if applicable (e.g., vinyl sheet-pile bulkhead, timber stringers and butt piles, 100% sand backfill from upland source; broken concrete core material with Class II quarry stone armor over filter cloth). **NOTE: Drawings must include construction details, including dimensions, design and all materials, including fittings if used.**

The project includes oyster castles and oyster bags. No sand fill is proposed.

6. If using stone, broken concrete, etc. for your structure(s), what is the average weight of the:
 Core (inner layer) material _____ pounds per stone Class size _____
 Armor (outer layer) material _____ pounds per stone Class size _____
7. For beach nourishment, including that associated with breakwaters, groins or other structures, provide the following:

- Volume of material

0	cubic yards channelward of mean low water
0	cubic yards landward of mean low water
0	cubic yards channelward of mean high water
0	cubic yards landward of mean high water
- Area to be covered

0	square feet channelward of mean low water
0	square feet landward of mean low water
0	cubic yards channelward of mean high water
0	cubic yards landward of mean high water

- Source of material, composition (e.g. 90% sand, 10% clay): NA
- Method of transportation and placement:
NA
- Describe any proposed vegetative stabilization measures to be used, including planting schedule, spacing, monitoring, etc. Additional guidance is available at <http://www.vims.edu/about/search/index.php?q=planting+guidelines>:

No planting will occur.



Adjacent Property Owners

Hog Island Living Shoreline

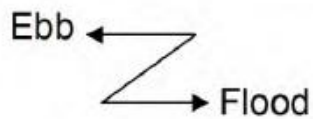
Application By:

Datum: MLW

At:
In:

Purpose: Shore Protection

Date: 12/16/2020
Sheet: 1 of 6

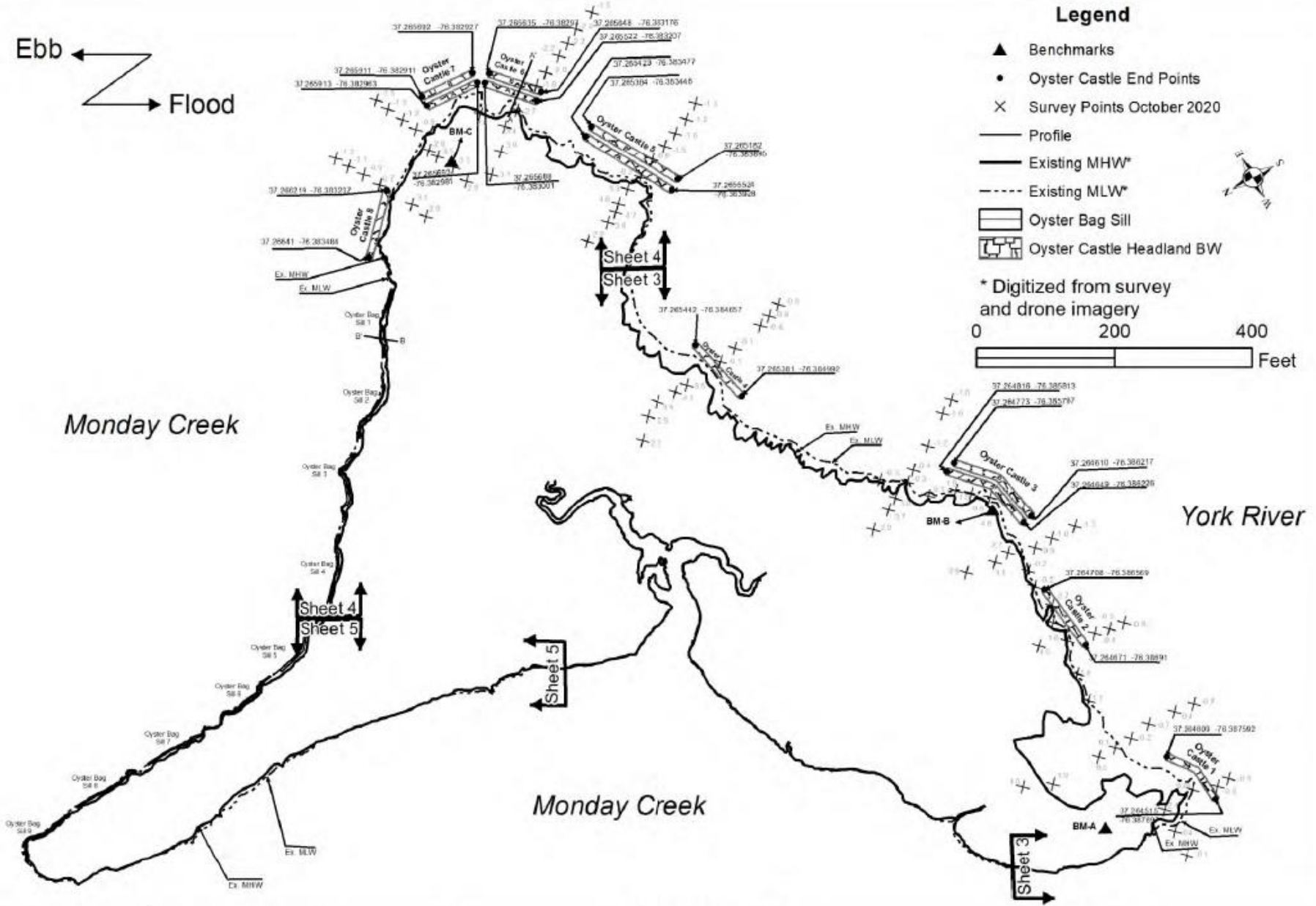
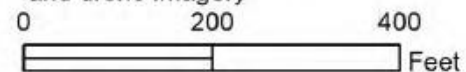


Legend

- ▲ Benchmarks
- Oyster Castle End Points
- × Survey Points October 2020
- Profile
- Existing MHW*
- - - Existing MLW*
- ▭ Oyster Bag Sill
- ▭ Oyster Castle Headland BW



* Digitized from survey and drone imagery



Adjacent Property Owners:

Datum: MLW

**Hog Island
Gloucester, Virginia**

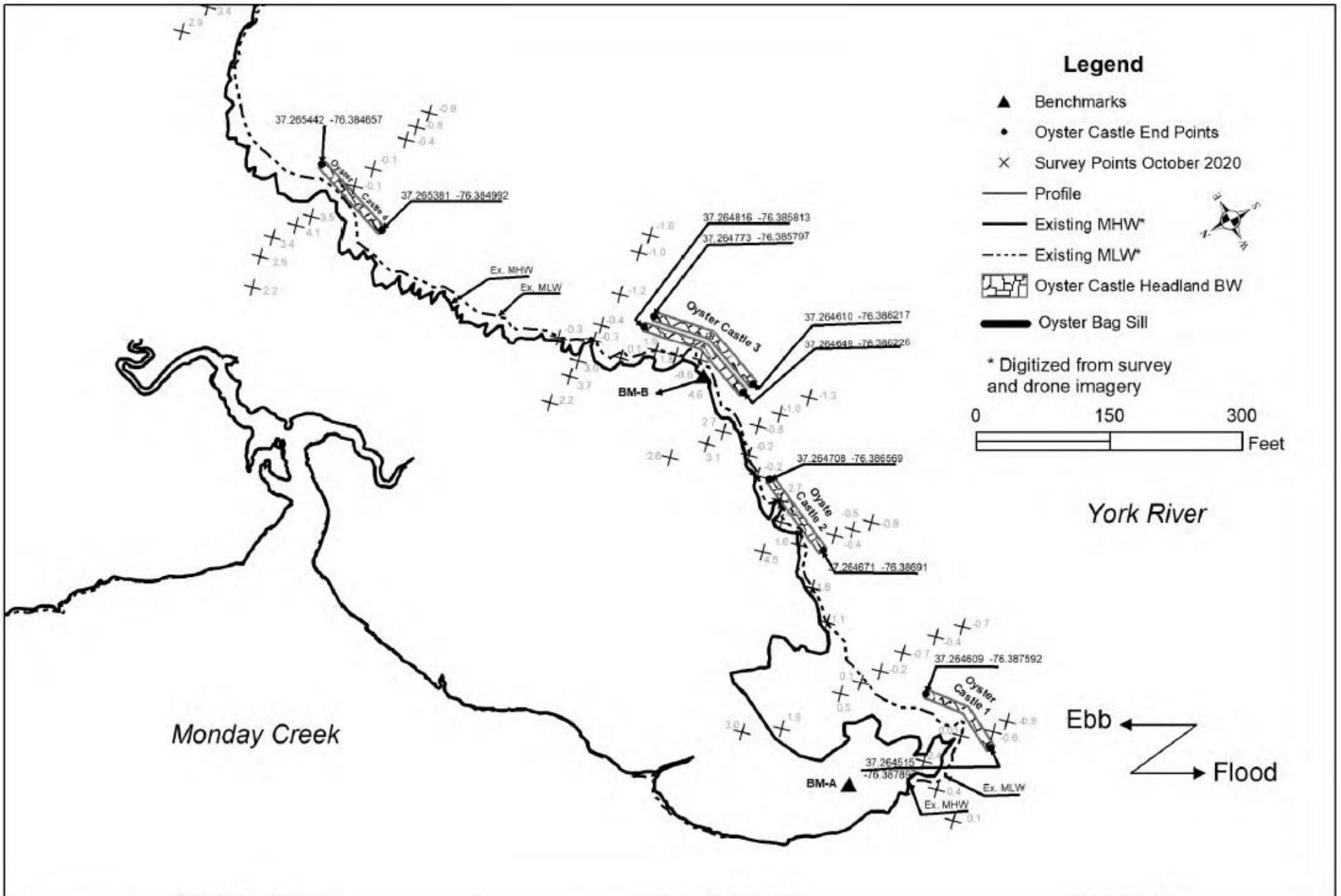
At In:


Purpose: Shore Protection

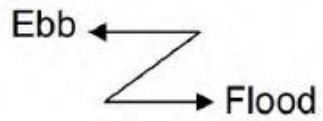
Application By:

Date: December 16, 2020

Sheet No. 2 of 5

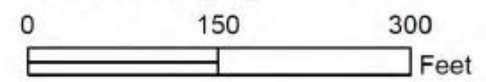


	Adjacent Property Owners:		Hog Island Gloucester, Virginia	Application By:
	Datum: MLW	At In:		Purpose: Shore Protection
				Sheet No. 3 of 6



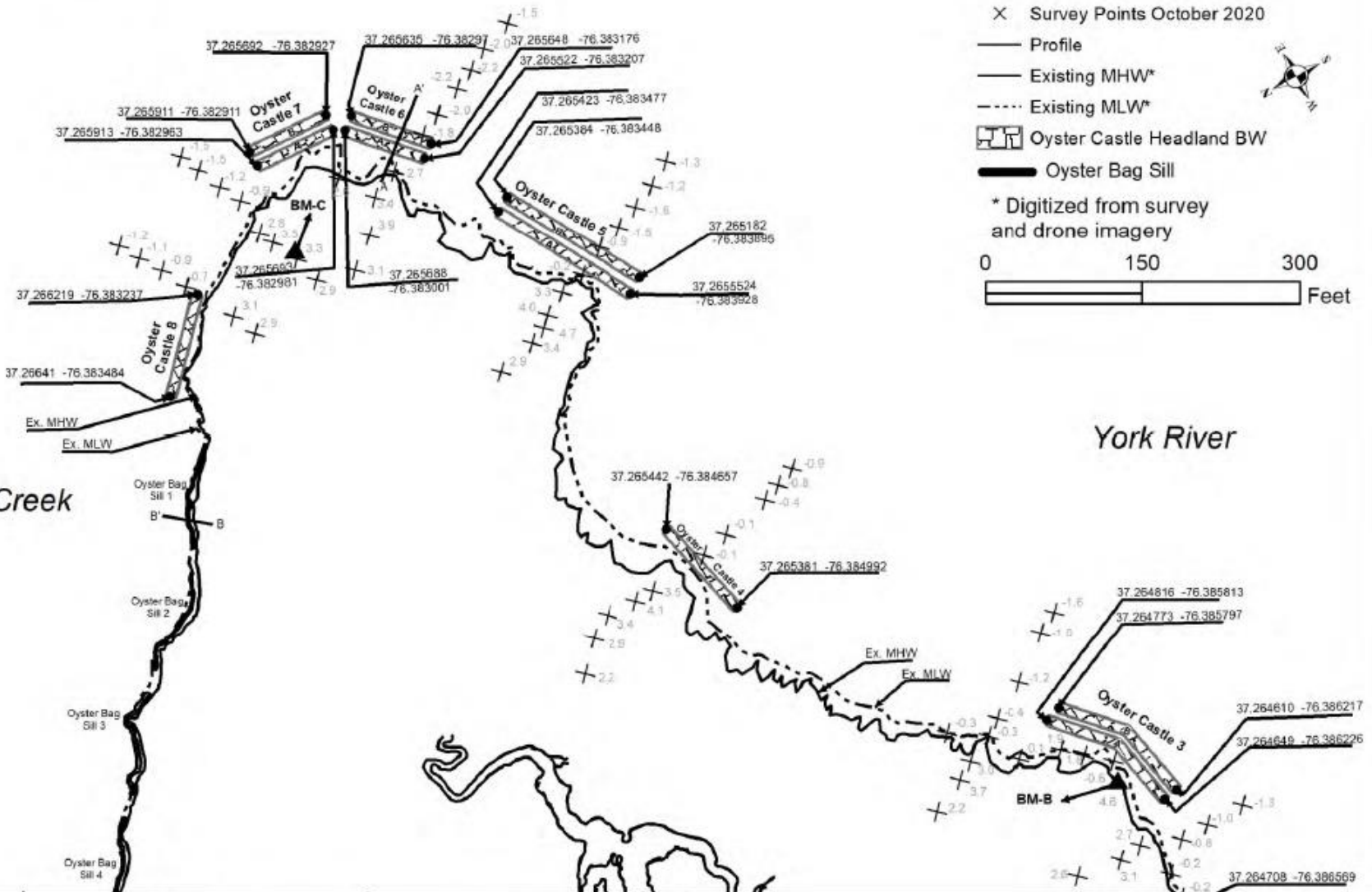
Legend

- ▲ Benchmarks
- Oyster Castle End Points
- × Survey Points October 2020
- Profile
- Existing MHW*
- - - Existing MLW*
- ▭ Oyster Castle Headland BW
- ▬ Oyster Bag Sill





Monday Creek

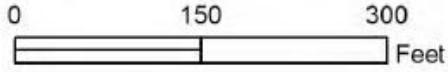
York River



Adjacent Property Owners:		Hog Island Gloucester, Virginia		Application By:	
Datum: MLW				Date: December 16, 2020	
At/In:		Purpose: Shore Protection		Sheet No. 4 of 5	

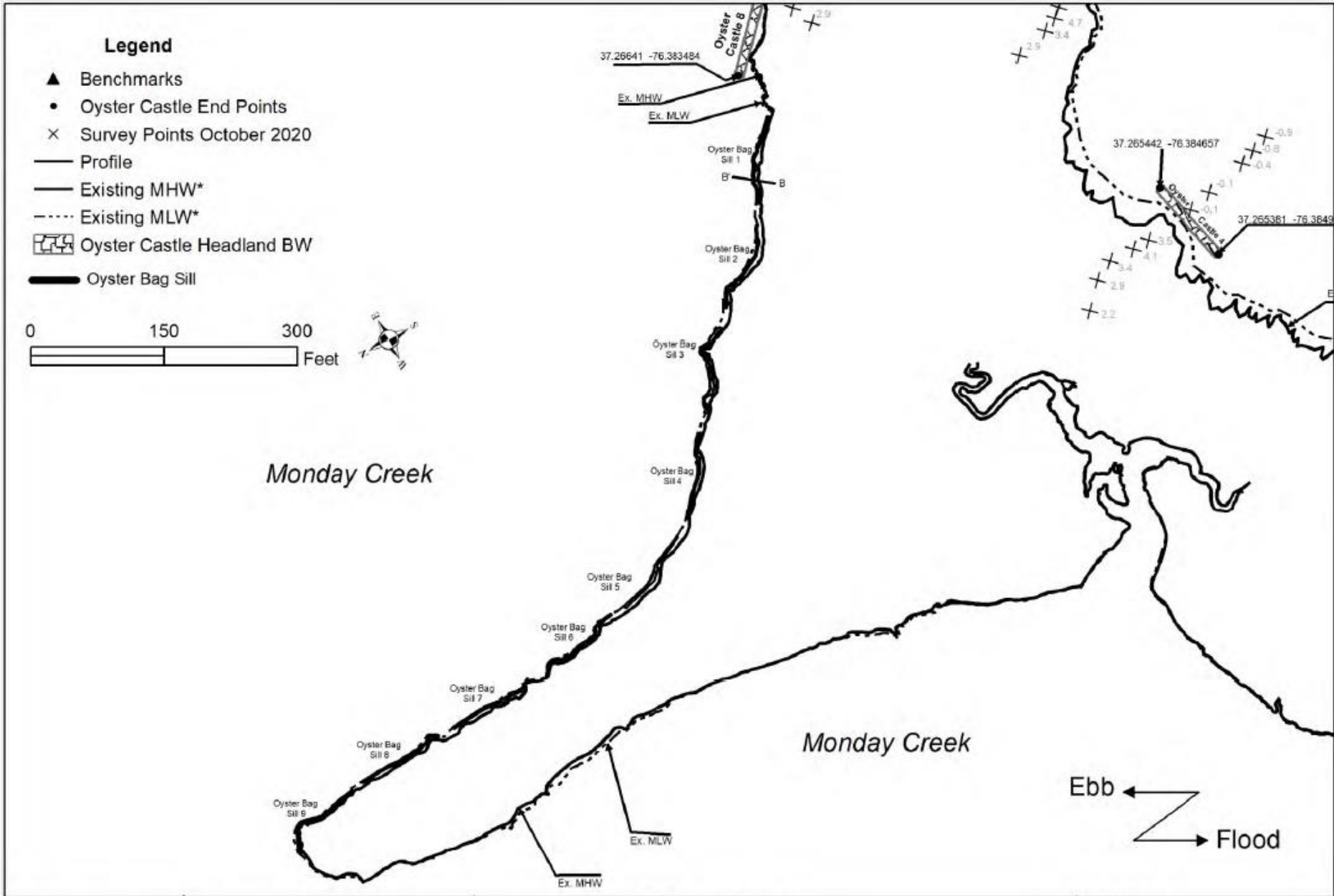
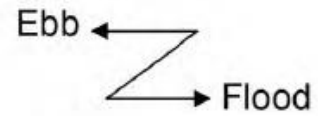
Legend

- ▲ Benchmarks
- Oyster Castle End Points
- × Survey Points October 2020
- Profile
- Existing MHW*
- - - Existing MLW*
-  Oyster Castle Headland BW
-  Oyster Bag Sill

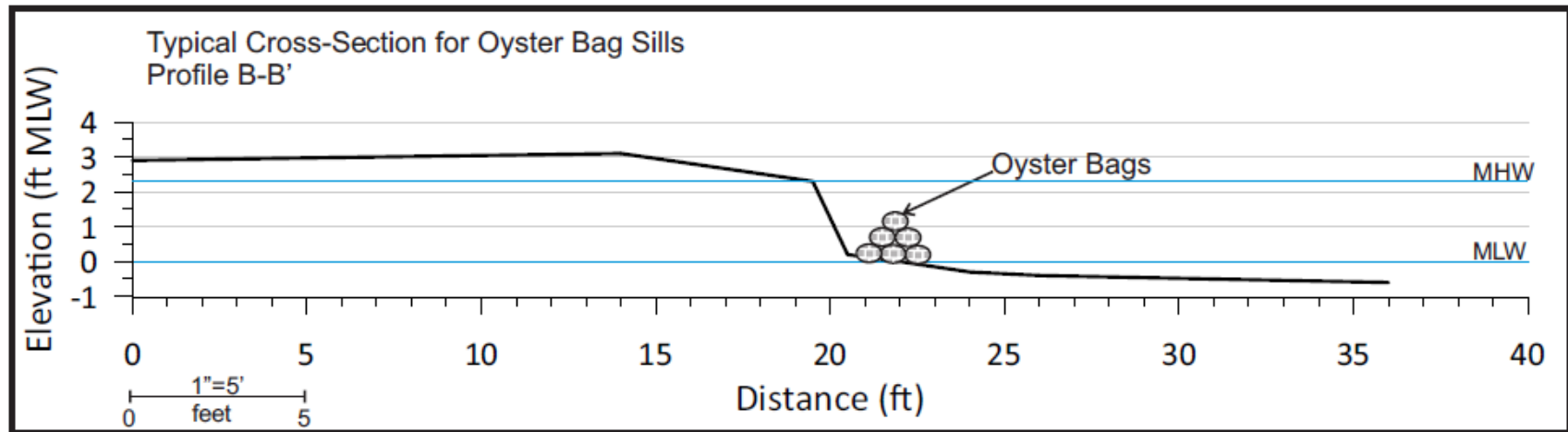
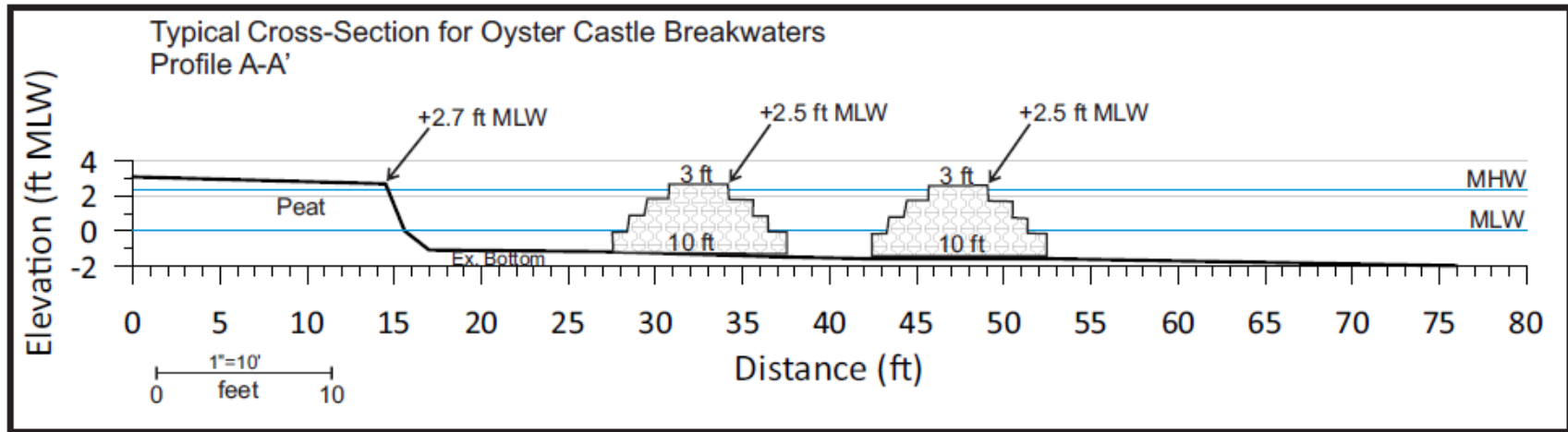


Monday Creek

Monday Creek



Adjacent Property Owners:	<h2 style="margin: 0;">Hog Island Gloucester, Virginia</h2>	Application By:
Datum: MLW	At: In:	Date: December 16, 2020
Purpose: Shore Protection		Sheet No. 5 of 5



Adjacent Property Owners

Hog Island Living Shoreline

Application By:

Datum: MLW

At:
In:

Purpose: Shore Protection

Date: 12/16/2020
Sheet: 6 of 6

Appendix C

Approximate 2020 Project Costs

Approximate 2020 Project Costs

Oyster Castles

10 ft wide, 3 ft crest

\$200 per foot x1.5 for delivery and installation

1,300 ft of structure	\$260,000	\$390,000	\$650,000
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Cost per foot and approximate installation costs supplied by Allied Concrete

6 Bag Oyster Sill

Construction requires 4 bags/ft

900 ft	\$4/bag	\$14,400
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Note, this amount is for the bags only. It assumes volunteer transport to site and volunteer labor to install.

Grand Total \$664,400