



A-NPDC

ACCOMACK-NORTHAMPTON PLANNING DISTRICT COMMISSION

PO Box 417 • 23372 FRONT STREET • ACCOMAC, VIRGINIA 23301

(757) 787-2936 • TOLL FREE (866) 787-3001 • FAX (757) 787-4221

WEBSITE: www.a-npdc.org

Eastern Shore Regional Navigable Waterways Committee

Meeting Agenda

April 18, 2024 3:00p.m.

*Enterprise Building (A-NPDC)
23372 Front Street, Accomac, VA 23301*

The Eastern Shore of Virginia Regional Navigable Waterways Committee (Navigable Waterways Committee) is a bi-county committee formed in 2015 to study and plan for navigable waterway needs. The Committee shall study and advise their respective Boards on the condition and status of all navigable waterways, list and prioritize the Shore's water navigation needs, and provide possible solutions to water transport needs. The Committee is staffed by the A-NPDC to ensure regional management approach. The Committee also works closely with the United States Army Corps of Engineers to facilitate clear communication of our dredging and waterway needs.

Virtual Attendance:

For Joining via Computer:

1. Click this link: <https://us06web.zoom.us/j/7577872936?pwd=QTNJdmhCc3pWdVNUZ0ZWYnVjdWpWUT09>
2. If prompted, enter the Meeting ID: 7577872936
3. If prompted, enter the Passcode: 7577872936



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Meeting Agenda

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2. Public Participation
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9. MPPDC/ANPDC Dual VPA WMF Proposal..... 18
10. Norfolk District Update for the ESRNWC - 1/18/24..... 19
10. Attachments
10. Schedule Next Meeting (June 20, 2024 @ 3pm; Enterprise Building 23372 Front Street, Accomac, VA 23301)
11. Adjourn



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MEMORANDUM

TO: Eastern Shore Regional Navigable Waterways Committee

FROM: Kellen J. Singleton
Interdisciplinary Planner
Accomack-Northampton Planning District Commission

DATE: April 18, 2024

SUBJECT: **Committee Attendance Record**

Committee Attendance Record

The FY2024 Committee Attendance Records are attached.



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ATTENDANCE RECORD FY2024

Members	Term Exp.	07/2023	10/2023	01/2024	04/2024
<u>Accomack County</u>					
Donald Hart	6/30/2025			X	
William J. "Billy" Tarr	6/30/2025		X	X	
John Tavolaro	6/30/2024	X	X	X	
George "Danny" Bowden	6/30/2024		X	X	
Brenden Kettner	6/30/2026	-	X	X	
<u>Northampton County</u>					
John Coker	6/8/2024		X	X	
Dixon Leatherbury	6/8/2024				
J.T. Holland	6/8/2024	X		X	
Andy Dunton, Chair	6/8/2024	X	X	X	
Robert Harris	6/8/2024	X	X	X	
<u>Non-Voting Ex-Officio Members</u>					
Kellen Singleton		X	X	X	
Vacant					
	- Not a Member			X	Member Present
	* No Meeting Held			NA	Not Applicable
	() Alternate Present				



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MEMORANDUM

TO: Eastern Shore Regional Navigable Waterways Committee

FROM: Kellen J. Singleton
Interdisciplinary Planner
Accomack-Northampton Planning District Commission

DATE: April 18, 2024

SUBJECT: **January 18, 2024 Meeting Minutes**

Please see the attached January 18, 2024 Meeting Minutes for approval.

Approval from the Eastern Shore Regional Navigable Waterways Committee is requested to accept the Meeting Minutes.



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Eastern Shore Regional Navigable Waterway Committee

ESRNWC January 18, 2024 Minutes

A meeting of the Eastern Shore Regional Navigable Waterways Committee was held on the 18th day of January 2024 at 3:00 p.m. at The Enterprise Building, A-NPDC, 23372 Front Street, Accomac, VA 23301.

Members Present:

Accomack

Donald Hart

William "Billy" J. Tarr

John Tavolaro

Danny Bowden

Brenden Kettner

Northampton

Andy Dunton, Chair

John Coker

Robert Harris

JT Holland

Members Absent:

Dixon Leatherbury

Others Present:

Elaine Meil, A-NPDC

Kellen Singleton, A-NPDC

Faith Lewis, A-NPDC

Ira Brotman, Moffatt and Nichol*

Mike Anderson, USACE*

Nolan Bursch, Rep. Kiggans

Curt Smith, MPPDC*

John Joeckel, SEAConsult*

*Participated via the Zoom platform or conference call for facilitation & presentation purposes.



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1. Call to Order:

Chairman Dunton called the meeting to order at 3:02 p.m.

The committee welcomed Office of Congresswoman Jen Kiggans (02-Virginia) Nolan Bursch. Chmn. Dunton confirmed calendar 2024 meeting dates, the 3rd Thursday of January, April, June, and October. Typos to the Attendance Record were noted and will be corrected by staff.

2. Public Comment

Mr. Joeckel updated the committee on USCG shallow draft program/report and aids to navigation changes in the region. Recommends USCG reengagement with ESRNWC and regular updates to USCG navigational aide removal workshops in concern to shallow draft waterways.

Mem. Hart moved for committee to draft and direct letter to Fifth Coast Guard District requesting USCG reengagement and regular updates to USCG navigational aide removal in region. Seconded by Mem. Tarr, the motion carried.

3. Minutes of January 18, 2024

The draft minutes of October 20, 2023 Meeting was presented.

Mem. Tarr moved to approve the minutes as presented. Seconded by Mem. Coker, the motion carried.

4. Projects Financial Status Report

Staff updated the committee on a November 1st ANPDC Planning and Administrative Staff meeting with Melissa Fularon Director, Grant Programs at The Port of Virginia to discuss project funding and administrative details. The Projects Financial Status Report was presented along with notes on funding details. The group discussed funding availability and eligible expenses. Committee members advised that a Project Budget Report be presented in proceeding updates.

5. Staff Report

Staff updated the committee on the progress of Kings Creek, Phase 2. Dredging and beneficial use placement began September 28. The Kings Creek Phase 2 project construction was completed on schedule November 2. The total material removed was 22,888 cubic yards (22,228 cubic yards payable) that was utilized to restore the Cape Charles Public Beach. Following AD surveys by Michel's Construction, Inc. and Waterway Surveys & Engineering, Ltd. A review and acceptance meeting between staff, project engineers, ESRNWC members, Northampton County and Cape



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Charles officials, was held November 8 at which Michel's Construction, Inc. was commended for their work. Michel's has completed their demobilization from the project site. \$1,389,016.00 was invoiced for the construction.

Staff and project engineer, Mr. Brotman, updated the group on Nassawadox Creek, Phase 1B, Nassawadox Creek, Phase 2, Red Bank Creek, Phase 1B, and Folly Creek, Phase 1B.

Moffat and Nichol have completed and submitted project JPA, signed off by Northampton County. DEQ has provided waiver letter. VMRC has assigned number, #23-2155. Claire Gorman in assignment. The USACE has acknowledged receipt, NAO-2007-02923-gdt (07-V0792, 23-V2155) (County of Northampton / Nassawadox Creek Channel Dredge / Northampton). POC is Taylor Hollingsworth

USACE has found that the current design does not meet the terms and conditions of any General Permit available for use within Virginia. Additional information has been provided for the first step of Individual Permit evaluation which is Corps issuance of a public notice. Based on berm characteristics and bottom sediment sampling VIMS and VMRC disagree with characterizing the proposed overboard disposal as beneficial use as there is no appreciable difference between what is proposed here and typical overboard disposal.

Mr. Brotman further explained the characteristics of the material planned and next steps. Six vibrocore samples were taken. Two samples indicated predominately silt material. An estimated 20,000 cy of material would be displaced. Dredged material placement is restricted by beneficial use policy in relation to its utilization on private property. Upland placement would require pre-construction approval of a permissible site. Supplemental samples would provide more information concerning material suitability.

Staff will explore beach nourishment private exemption options including procurement requirements. The group discussed dredged material management challenges. Mem. Tavolaro advised that group utilize parallel processes and approaches to challenges.

Mem. Tarr moved that remaining projects move forward prioritizing contractor sourced dredge material management. Seconded by Mem. Tavolaro, the motion carried.

6. Business:

Mr. Bursch updated the committee on the Water Resources Development Act (WRDA) a comprehensive water resources infrastructure development effort that authorizes studies and projects within the United States Army Corps of Engineers (Corps) Civil Works mission areas, including navigation, flood damage reduction, hurricane and storm damage reduction, shoreline protection, and ecosystem restoration. There is a March deadline for proposals. Mem. Tavolaro elucidated that WRDA is authorization, not funding, advising that the committee prioritize Community Project Grant funding.



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Mr. Smith, Dept Director-MPPC, presented the framework of a dual VPA Waterway Maintenance Fund proposal that would create a MPPDC master plan and separate ANPDC master plan with funds for each region to identify and develop placement sites and explore beneficial use options. The proposal would include a request for a total of \$4 million split between the two agencies.

Mem. Tavolaro moved for committee support and approval in moving forward with dual MPPDC/ANPDC VPA-WMF application. Seconded by Mem. Tavolaro, the motion carried.

Mr. Anderson updated the committee on ongoing USACE projects and initiatives.

Chincoteague Inlet received \$3,375,000 in FY2023 Congressional appropriations. Maintenance dredging utilizing the dredge Murden is scheduled for March 2024 to include up to 7 (24-hr.) days of dredging from the inner channel alignment with dredged material placement into the authorized nearshore zone off Wallops Island. Chincoteague Harbor of Refuge received \$250,000 in FY2023 Congressional appropriations. Maintenance dredging utilizing the dredge Murden is scheduled for March 2024 in concurrence with Chincoteague Inlet.

Quinby Channel received \$2,917,000 in FY2023 Congressional appropriations. The NAO project team and ERDC continue working together to determine if the Peeler Point overboard site is a dispersive or non-dispersive source of dredged sediments redepositing into the Quinby navigation channel. Study deliverables will include a dredge material management plan to help identify environmentally acceptable methods for containing unconfined placement of dredged material in advance of the next dredging cycle. The study scope is being expanded to include Bradford Bay, Chincoteague Inlet, and Lewis Creek overboard placement areas. Next meeting is scheduled for 20 February 2024.

WCV received \$4,975,000 in FY2023 Congressional appropriations. The scope of the planned contract award includes restoring the Bradford Bay and Finney Creek channel elements to a maintained depth of -6 feet MLLW. Approximately 60,000 cubic yards of material will be dredged using a cutterhead pipeline dredge. Material will be transported by pipeline with placement at a nearby designated overboard placement site. The bid opening occurred on 5 January 2024 with several competitive bids provided by the dredging industry. The District is currently going through the pre-award process with contract award tentatively scheduled in April 2024.

The Tangier Channels Federal Navigation Project received \$2,884,000 in FY2023 Congressional appropriations. These funds will be utilized for a fully scoped maintenance dredging contract. The Norfolk District is in the early stages of developing plans and specifications for the contract. \$500,000 in FY2022 Work Plan funds were utilized for maintenance dredging with Government Plant. The Special Purpose dredge Murden mobilized to the island and commenced dredging of the Eastern Channel on 06 April 2023 with placement at the nearshore placement site northwest of Uppards. Dredging concluded on 15 April 2023.

The Baltimore Harbor and Channels Civil Works O&M project received \$300,000 in FY2023 Congressional appropriations to evaluate beneficial use of dredged material at Tangier Island, VA. As part of the process, the ESRNWC and Town of Tangier Island, VA will be asked to participate and provide input.



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Little Machipongo River received \$2,200,000 in FY2023 Congressional appropriations. These funds will be used to evaluate the Government furnished placement site, initiate field evaluations, perform design, environmental coordination, and authorizations, plans and specifications, solicitation, and contract award. The project team has assessed the dredge material placement site conditions and has determined that the improvements will need to be made to the facility to operate effectively.

Deep Creek Accomack County, Virginia received \$4,275,000 in FY2023 Congressional appropriations. These funds will be used to evaluate the Government furnished placement site, initiate field evaluations, perform design, environmental coordination, and authorizations, plans and specifications, solicitation, and contract award.

Starlings Creek, Virginia received \$1,705,000 in FY2023 Congressional appropriations. These funds will be used to evaluate the Government furnished placement site, initiate field evaluations, perform design, environmental coordination, and authorizations, plans and specifications, solicitation, and contract award.

Chincoteague Island, Chincoteague, VA Flood Risk Management General Investigations (GI) Feasibility Study. The town of Chincoteague is the non-Federal sponsor, has provided a letter of support and has secured a cost share. The Norfolk District continues to submit the feasibility study for budget consideration. The district received an updated letter of intent in support of the study dated 27 March 2023, from Chincoteague Town Manager Michael T. Tolbert.

Tangier Island, VA Aquatic Ecosystem Restoration GI Feasibility. The Norfolk District continues to submit the feasibility study for budget consideration. The district is aware of a Community Project Funding request for FY 2024, submitted by the Eastern Shore Regional Navigable Waterways Committee to the House of Representatives. A non-Federal sponsor and Letter of Intent is required for the District to show capability to initiate a study.

Adjourn –

Mem. Tarr moved to adjourn. Seconded by Mem. Tavolaro, the motion carried.

The meeting was adjourned at 4:45 P.M.

Andy Dunton, Chair

Kellen Singleton, Secretary

Date



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MEMORANDUM

TO: Eastern Shore Regional Navigable Waterways Committee

FROM: Kellen Singleton
Interdisciplinary Planner
Accomack-Northampton Planning District Commission

DATE: April 18, 2024

SUBJECT: **ESRNWC Projects Budget Report**

Balances as of December 31, 2023			
	Revenues	Expenditures	Balance
Kings Creek	\$ 2,537,670.48		
		\$ (1,543,429.11)	\$ 994,241.37
Nassawadox	\$ 2,362,000.00		
		\$ (153,844.25)	\$ 2,208,155.75
Folly Creek	\$ 203,500.00		
		\$ (99,548.49)	\$ 103,951.51
Red Bank	\$ 222,060.00		
		\$ (121,483.96)	\$ 100,576.04

Notes:

- The same project does not need a resolution for funds transfer.
- Letter from county is needed for fund transfer request.
- VPA BOC meeting resolution in May.



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MEMORANDUM

TO: Eastern Shore Regional Navigable Waterways Committee

FROM: Kellen J. Singleton
Interdisciplinary Planner
Accomack-Northampton Planning District Commission

DATE: April 18, 2024

SUBJECT: **April 18, 2024 Staff Report**

Project Updates

Kings Creek, Phase 2 [VPA FY22]

- Dredging and beneficial use placement began September 28. The Kings Creek Phase 2 project construction was completed on schedule November 2.
- The total material removed was 22,888 cubic yards (22,228 cubic yards payable) that was utilized to restore the Cape Charles Public Beach. Following AD surveys by Michel's Construction, Inc. and Waterway Surveys & Engineering, Ltd.
- A review and acceptance meeting between staff, project engineers, ESRNWC members, Northampton County and Cape Charles officials, was held November 8 at which Michel's Construction, Inc. was commended for their work.
- Michel's has completed their demobilization from the project site. \$1,389,016.00 was invoiced for the construction.
- **\$ 994,241.37 remain in the Kings Creek project budget.**

Nassawadox Creek, Phase 1B [VPA FY22]

- Moffat and Nichol have completed and submitted project JPA, signed off by Northampton County.
- DEQ has provided waiver letter. VMRC has assigned number, #23-2155. Claire Gorman in assignment.
- The USACE has acknowledged receipt, NAO-2007-02923-gdt (07-V0792, 23-V2155) (County of Northampton / Nassawadox Creek Channel Dredge / Northampton). POC is Taylor Hollingsworth
- USACE has found that the current design does not meet the terms and conditions of any General Permit available for use within Virginia. Additional information has been provided for the first step of Individual Permit evaluation which is Corps issuance of a public notice.
- Based on berm characteristics and bottom sediment sampling VIMS and VMRC disagree with characterizing the proposed overboard disposal as beneficial use as there is no appreciable difference between what is proposed here and typical overboard disposal.

Next Steps:

- Verify direction to proceed is via Mech Dredge with upland placement area as determined by Contractor.
 - ANPDC to reach out to Michaels re potential contract mod to do this work.
 - Need to determine "transfer site" and need survey.
 - Michaels may have ideas for location of transfer site.
 - Requires updates to permit, including info on transfer site –impacts (wetlands, etc.).



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- Need “consent” from oyster lease holder (Patrick Cantwell)
- Option 2: Beach fill, on adjacent private property. Discussed, but has permit “risk” as VIMS likely will not support.
- Option 3: Explore Parker’s Marsh Natural Area Preserve to Scarsborough Neck as beneficial use alternative (6 miles from site).

Nassawadox Creek, Phase 2 [VPA FY24*]

- Awarded \$2.15M* from VPA WMF FY24*

Next Steps:

1. Complete Phase 1B
2. Begin developing scope and RFP for Phase 2

Folly Creek, Phase 1B [VPA FY22]

Next Steps:

- Verify direction to prepare permit for mechanical dredge, with contractor supplied upland placement site
- Need to determine details for the transfer area, likely county ramp.
- For county ramp, would need to get a topo survey (we would need to get a scope from surveyor).
- M&N has proposal from MSA to survey

Red Bank Creek, Phase 1B [VPA FY22]

- Discussions ongoing with Alexandra Wilke, Coastal Scientist, Virginia Coast Reserve TNC regarding collaboration to beneficially utilize materials in habitat build-up for migratory nesting birds

Next Steps:

1. GET will perform vibracores pending APO interest

Other

- **The Virginia Eastern Shore Conservation Alliance (VESCA)** Habitat and Restoration committee in their April 9th quarterly meeting has identified Dredging and Beneficial Use as a priority issue as part of their work to identify, promote, and implement effective habitat management and restoration strategies that maximize overall wildlife benefit at scale. Staff will work closely with fellow alliance partners to examine and identify beneficial use opportunities.
- **Cedar Island Marsh Creation Project**
 - Current Phase: Engineering Designs & Permit Application
 - Engineering designs and associated cost estimates for ~40 acres of new/elevated marsh along southern Cedar Island (in location of former tidal inlet known locally as The Breach) are nearing 60% completion.
 - Drafting of a joint permit application for construction is ongoing, led by teams at VIMS and Stantec. Likely submission timeline is Summer 2024.
 - Future Phase: Final Designs and Construction
 - 90% engineering design plans will be derived iteratively during permitting process (Fall 2024 – Winter 2025)
 - The project team is actively exploring and applying for funding for construction. Earliest possible construction would start in 2026 or 2027, pending funding.

Project Check-Ins



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1. Red Bank/Nassawadox/Folly Project Check ins: first Wednesdays of the month at 3PM
2. HOW TO JOIN (same for both project check ins & same each month)

- **Join Zoom Meeting**

<https://us06web.zoom.us/j/89457025520?pwd=Q1ErS0xVQ2R4L1BSL0JqQnBmVDBmUT09>

Meeting ID: 894 5702 5520

Passcode: 7577872936

Call In to Zoom Meeting

Call: 1-646-558-8656

Upon prompt, enter Meeting ID: 89457025520#

Upon prompt, enter Passcode: *75778



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MEMORANDUM

TO: Eastern Shore Regional Navigable Waterways Committee

FROM: Kellen J. Singleton
Interdisciplinary Planner
Accomack-Northampton Planning District Commission

DATE: April 18, 2024

SUBJECT: **Nassawadox Creek, Phase 1B**

Nassawadox Creek JPA Submittal

- VMRC is not in favor of the nearshore berm and has expressed hesitation despite material size.
- Beach fill option – if a site was available VMRC would expect more gradation data (GET has been reached for cost of additional samples).
- Beach fill –beneficial use on private property is a state concern.
- Upland is the most permissible option. The upland site does not need to be specified in the permit, but by the pre-dredge meeting (that would include VMRC) the site needs to be known.
- Upland site –if moving forward the transfer site would need to be discussed. This would need to be shown in permit and bid docs, and include any shoreline impacts or additional dredging if necessary.



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MEMORANDUM

TO: Eastern Shore Regional Navigable Waterways Committee

FROM: Kellen J. Singleton
Interdisciplinary Planner
Accomack-Northampton Planning District Commission

DATE: April 18, 2024

SUBJECT: **U.S. Aids to Navigation System**

USCG Shallow Draft Program

Staff contacted the USCG District 5 point of contact Albert L Grimes. At this time Sector Virginia is not working on any District 5 aids to navigation issue of/to note.

District 5 staff is available to answer any specific questions or request.



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MEMORANDUM

TO: Eastern Shore Regional Navigable Waterways Committee

FROM: Kellen J. Singleton
Interdisciplinary Planner
Accomack-Northampton Planning District Commission

DATE: April 18, 2024

SUBJECT: **MPPDC/ANPDC Dual VPA WMF Proposal**

MPPDC/ANPDC Dual VPA WMF Proposal

DMMP remains a significant barrier to regional dredging efforts. On March 1, 2024 Curtis Smith Dept Dir, MPPC submitted a dual drafted and supported proposal that would create separate MPPDC and ANPDC master plans with funds for each region to lease and develop placement sites and explore beneficial use options.

Please see the 3/1/2024 dual Middle Peninsula & Eastern Shore Dredge Material Management Initiative, attached.



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MEMORANDUM

TO: Eastern Shore Regional Navigable Waterways Committee

FROM: Mike Anderson, P.E.
Chief, Design Section
Operations Branch, Water Resources Division, Norfolk District

DATE: April 18, 2024

SUBJECT: **Norfolk District Update for the ESRNWC -1/18/24**

Norfolk District Update for the ESRNWC – 1/18/24

Please see below Norfolk District Update for the ESRNWC. A second quarter update will be provided separately.



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CORPS OF ENGINEERS NORFOLK DISTRICT

Eastern Shore Regional Navigable Waterways Committee

Status Update for 18 January 2024

Norfolk District Civil Works Program updates on Projects currently under development

Chincoteague Inlet Federal Navigation Project:

Chincoteague Inlet received \$3,375,000 in FY2023 Congressional appropriations.

Maintenance dredging utilizing the dredge Murden is scheduled for March 2024 to include up to 7 (24-hr.) days of dredging from the inner channel alignment with dredged material placement into the authorized nearshore zone off Wallops Island.

Multi-year project appropriations will be used for a full scope maintenance dredging contract including portions of the inner channel and outer bar to project authorized depths. The Corps will continue its collaboration with the U.S. Fish and Wildlife Service, National Park Service and Chincoteague National Wildlife Refuge to beneficially place suitable material at one their designated restoration sites surrounding Toms Cove. The Corps is currently waiting on further guidance from U.S. Fish and Wildlife Service as to whether cost-share funding will be made available through a NOAA transformational funding program. Grant funding approval should be known by March 2024.

Chincoteague Harbor of Refuge Federal Navigation Project:

Chincoteague Harbor of Refuge received \$250,000 in FY2023 Congressional appropriations.

Maintenance dredging utilizing the dredge Murden is scheduled for March 2024 in concurrence with Chincoteague Inlet. Maintenance dredging is scheduled for up to 2 (24-hr.) days, removing approximately 1,000 cubic yards from the harbor's entrance channel.

Quinby Channel Federal Navigation Project:

Quinby Channel received \$2,917,000 in FY2023 Congressional appropriations.

The NAO project team and ERDC continue working together to determine if the Peeler Point overboard site is a dispersive or non-dispersive source of dredged sediments redepositing into the Quinby navigation channel. Study deliverables will include a dredge material management plan to help identify environmentally acceptable methods for containing unconfined placement of dredged material in advance of the next dredging cycle. The study scope is being expanded to include Bradford Bay, Chincoteague Inlet, and Lewis Creek overboard placement areas. Next meeting is scheduled for 20 February 2024.

FY2023 appropriations will be used for a full scope maintenance dredging contract of the Quinby landing and entrance channel to restore the project to maintained depths.

Waterway on the Coast of Virginia (WCV) Federal Navigation Project:

WCV received \$4,975,000 in FY2023 Congressional appropriations.

The scope of the planned contract award includes restoring the Bradford Bay and Finney Creek channel elements to a maintained depth of -6 feet MLLW. Approximately 60,000 cubic yards of



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Eastern Shore Regional Navigable Waterways Committee

Status Update for 18 January 2024

material will be dredged using a cutterhead pipeline dredge. Material will be transported by pipeline with placement at a nearby designated overboard placement site. The bid opening occurred on 5 January 2024 with several competitive bids provided by the dredging industry. The District is currently going through the pre-award process with contract award tentatively scheduled in April 2024. If an adequate amount of congressional appropriations remain, another segment of the WCV will be scheduled for maintenance dredging.

Tangier Channels Federal Navigation Project:

The Project received \$2,884,000 in FY2023 Congressional appropriations. These funds will be utilized for a fully scoped maintenance dredging contract. The Norfolk District is in the early stages of developing plans and specifications for the contract.

\$500,000 in FY2022 Work Plan funds were utilized for maintenance dredging with Government Plant. The Special Purpose dredge Murden mobilized to the island and commenced dredging of the Eastern Channel on 06 April 2023 with placement at the nearshore placement site northwest of Upwards. Dredging concluded on 15 April 2023.

The Baltimore Harbor and Channels Civil Works O&M project received \$300,000 in FY2023 Congressional appropriations to evaluate beneficial use of dredged material at Tangier Island, VA. As part of the process, the ESRNWC and Town of Tangier Island, VA will be asked to participate and provide input. The \$300,000 will be used to initiate design, and environmental coordination. The Norfolk District is currently showing capability for an additional \$500,000 in FY 2024 to finalize designs, environmental authorizations, plans, and specifications leading to a contract to build a placement site infrastructure that would serve to receive dredged material but also provide stability to portions of the Northwestern shoreline of Tangier Island, VA.

Little Machipongo River Federal Navigation Project:

Little Machipongo River received \$2,200,000 in FY2023 Congressional appropriations.

These funds will be used to evaluate the Government furnished placement site, initiate field evaluations, perform design, environmental coordination, and authorizations, plans and specifications, solicitation, and contract award.

The project team has assessed the dredge material placement site conditions and has determined that the improvements will need to be made to the facility to operate effectively. The funding will be used for clearing and grubbing of vegetation within the containment area, earthwork to restore dike stability and capacity, and grading within the cell for adequate flow. The design team is currently in the process of collecting topographic survey data of the placement site and samples within the channel for soil characterization.

Deep Creek Accomack County, Virginia Federal Navigation Project:

Deep Creek Accomack County, Virginia received \$4,275,000 in FY2023 Congressional appropriations.



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These funds will be used to evaluate the Government furnished placement site, initiate field evaluations, perform design, environmental coordination, and authorizations, plans and specifications, solicitation, and contract award.

Project delivery team is evaluating the best option for placement site of dredge material. The land provided by the non-federal sponsor appears to consist of wetlands that will not support construction of an upland placement site of dredge material, and other avenues are being explored to include thin-layer placement, wetland creation, and beach placement options. The design team is in the process of collecting material samples within the channel for characterization which will provide needed information to narrow down the best placement option.

Starlings Creek, Virginia Federal Navigation Project:

Starlings Creek, Virginia received \$1,705,000 in FY2023 Congressional appropriations.

These funds will be used to evaluate the Government furnished placement site, initiate field evaluations, perform design, environmental coordination, and authorizations, plans and specifications, solicitation, and contract award.

Cedar Island, CAP, Section 204, Beneficial Uses of Dredged Material:

No significant updates to report. The purpose of the project is to beneficially use the dredged material from the Finney Creek Channel and the Bradford Bay Channel for enhancement, expansion, and protection of the Cedar Island back-barrier shoreline wetlands and marsh islands. The thin-layer spraying will be done via a hydraulic cutterhead dredge equipped with a pipeline that will spray the material from the Federal navigation sites. Total Project costs are estimated at \$11,258,000, which are to be cost shared on a 65 percent Federal and 35 percent non-Federal basis. The USACE NAD concurred with the Norfolk District's recommendation on 24 October 2019 concluding the feasibility phase of the project. Next phase is design and implementation phase, which requires a non-Federal Sponsor.

On 27 March 2023, the Norfolk District addressed the lack of project sponsorship during the recent Project Delivery Board for the Continuing Authority Program. Colonel Hallberg discussed the Cedar Island sponsorship with Commissioner Green on 28 March 2023. On 30 May 2023, USACE and VMRC met to discuss partnership opportunities highlighting Cedar Island and beneficial use. VMRC indicated they are interested in sponsoring the Project. USACE is currently waiting for a Letter of Intent to initiate the Design/Implementation phase.

General Investigation Studies:

Chincoteague Island, Chincoteague, VA Flood Risk Management General Investigations (GI) Feasibility Study. Study authority is provided by Section 1201(27) of the Water Infrastructure Improvements for the Nation Act of 2016 (Public Law 114-322) which states (27) CHINCOTEAGUE ISLAND, VIRGINIA. Project for hurricane and storm damage reduction, navigation, and ecosystem restoration, Chincoteague Island, Virginia. The town of Chincoteague is the non-Federal sponsor, has provided a letter of support and has secured a cost share. The



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Eastern Shore Regional Navigable Waterways Committee

Status Update for 18 January 2024

Norfolk District continues to submit the feasibility study for budget consideration. The district received an updated letter of intent in support of the study dated 27 March 2023, from Chincoteague Town Manager Michael T. Tolbert.

Tangier Island, VA Aquatic Ecosystem Restoration GI Feasibility. Study authority is provided by Section 1201 under America's Water Infrastructure Act of 2018 to evaluate... (9) COASTAL VIRGINIA, VIRGINIA.—Project for flood risk management, ecosystem restoration, and navigation, Coastal Virginia. Or (10) TANGIER ISLAND, VIRGINIA. Project for flood risk management and ecosystem restoration, Tangier Island, Virginia. The Norfolk District continues to submit the feasibility study for budget consideration. The district is aware of a Community Project Funding request for FY 2024, submitted by the Eastern Shore Regional Navigable Waterways Committee to the House of Representatives. A non-Federal sponsor and Letter of Intent is required for the District to show capability to initiate a study.

*** Please refer to the table and program mapping below for a summary of projects funded in FY 2023 with estimated times for contract award of work.**



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USACE NORFOLK DISTRICT CIVIL WORKS PROGRAM
(Eastern Shore)

18 January 2024

Project Name	Civil Works Appropriation	Business Line	Total Appropriated FY23	Estimated Construction Award Schedule	Notes
Chincoteague Island, VA, New Start Feasibility	Investigation	Coastal Storm Risk Management	\$0	Not Applicable	Non-Federal Sponsor is the Town of Chincoteague, VA. Letter of intent provided.
Tangier Island Aquatic Ecosystem Restoration, VA, New Start Feasibility	Investigation	Aquatic Ecosystem Restoration	\$0		Non-Federal Sponsor and Letter of Intent is required for USACE to show capability.
Cedar Island, CAP, Section 204, Beneficial Uses of Dredged Material	Construction (CAP)	Aquatic Ecosystem Restoration	\$0		Non-Federal Sponsor and Letter of Intent is required for USACE to show capability.
Chincoteague Harbor of Refuge, VA	Operations & Maintenance	Navigation	\$250,000	Mar-24	Maintenance dredging to be performed by the USACE dredge MURDEN
Chincoteague Inlet, VA	Operations & Maintenance	Navigation	\$3,375,000	Jul-25	Includes maintenance dredging by MURDEN in March 2024 and full scope contract for maintenance dredging with beneficial use of dredged material at nearby NWR. Estimated 18 months to award. Required agreement between USACE and U.S. Fish and Wildlife Service.
Deep Creek Accomack County, VA	Operations & Maintenance	Navigation	\$4,275,000	Oct-25	Placement site evaluation, field investigations, environmental coordination, design, development of plans and specifications is required.
Little Machipongo River, VA	Operations & Maintenance	Navigation	\$2,200,000	Jul-25	Government furnished placement site evaluation, field investigations, environmental coordination, design, development of plans and specifications is required.
Onancock River, VA	Operations & Maintenance	Navigation	\$700,000	Oct-24	Work to be performed by the USACE dredge MURDEN. Coarse grain material to be dredged with nearshore placement.
Parker Creek, VA	Operations & Maintenance	Navigation	\$3,544,000	Nov-25	Placement site evaluation, field investigations, environmental coordination, design, development of plans and specifications is required.
Quinby Creek, VA	Operations & Maintenance	Navigation	\$2,917,000	May-25	Placement site evaluation and modelling to be completed, field investigations, environmental coordination, design, development of plans and specifications is required.
Starlings Creek, VA	Operations & Maintenance	Navigation	\$1,705,000	Apr-25	Contract to prepare the placement site for dredged material. Environmental coordination, design, development of plans and specifications is required.
Tangier Channels, VA	Operations & Maintenance	Navigation	\$2,884,000	Apr-25	Includes Murden Dredging and Full Scope Contract for maintenance dredging and beneficial use of dredged material at nearby Beach (Northwest shoreline).
Tangier Channels Beneficial Use	Operations & Maintenance	Navigation	\$300,000	Not Applicable	Perform an evaluation using dredged material from nearby Federal channels for beneficial use on Tangier Island. Focus will consider using dredged material to repair, renourish, and stabilize the shoreline.
Waterway on the Coast of Virginia, VA	Operations & Maintenance	Navigation	\$4,975,000	Apr-24	Full scope contract for maintenance dredging Bradford Bay and Finney Creek with placement of dredged material at the nearby permitted overboard placement site. Lewis Creek and Magothy Bay project elements being considered for maintenance dredging if additional funding remains once the initial contract is awarded and executed.
TOTAL			\$27,125,000		

Proposal to
VIRGINIA PORT AUTHORITY
Virginia Waterway Maintenance Fund



Project:
***Middle Peninsula & Eastern Shore
Dredge Material Management Initiative***

Applicant:
Middle Peninsula Planning District Commission
in partnership with
Accomack-Northampton Planning District Commission

Total Project Cost
\$4,000,000

Note: Reduced scopes and budgets may be offered for consideration in an effort to provide VPA with a funding level which can be accommodated due to anticipated excessive demand. The applicant is willing to discuss these changes to the scope and awarded amount if deemed necessary by VPA.

Contact Information:
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Statement of Need and Urgency

The Middle Peninsula Planning District Commission (MPPDC) in partnership with the Accomack-Northampton Planning District Commission (ANPDC) is requesting funding to address and overcome the highest priority challenge regarding municipal dredging projects, including those currently permitted and those with designs but have yet to be permitted – the management and handling of dredged materials. The *Middle Peninsula and Eastern Shore Dredged Material Management Initiative* will involve the development of two customized Master Plans for the disposal or beneficial reuse of dredged material from local creeks at a network of strategically positioned in-water and/or upland sites. The project will involve implementation of the highest priority and most urgent strategies identified within the Master Plans for the Middle Peninsula and Eastern Shore regions.

Each region has experienced shared challenges in finding suitable locations for the disposal and reuse of dredged material projects. With previous support from the Virginia Port Authority's Waterway Maintenance Fund (VPA-WMF), the designed solutions for dredged material management have encountered a variety of challenges which have resulted in numerous occurrences where projects have stalled or failed. Examples of factors which have occurred for current projects have included regulatory authorities denying or requiring substantial modifications to permit applications, unknown or unanticipated barriers regarding the condition or availability of upland confined disposal areas, local zoning, expired easement agreements, emerging biological and ecological sensitivities. Furthermore, the multitude of challenges related to upland disposal stated previously and the use of WMF funding for the purchase, lease, or improvement of existing upland disposal facilities has necessitated additional focus and need for viable in-water disposal and reuse alternatives. Regarding in-water disposal and reuse, the proposed project will advance legal and regulatory analysis and discussions with regulatory authorities to identify viable in-water disposal and reuse options for each region's dredging projects as necessary.

Background

As devolution has occurred in rural coastal communities around the nation and within the Commonwealth of Virginia, it has created a series of new problems specifically related to the management and handling of dredged material.

Two alternatives for dredged material management exist: the material must be moved to an upland location or an in-water location. For rural coastal communities like those in the Middle Peninsula and Eastern Shore, historic disposal sites are mostly limited or unusable. Additionally, legacy sites are privately owned with expired easement agreements or already built upon. Existing upland holding areas are commonly undersized and need to be at least proportional to dredge material volume. Finally, VMRC historically has not allowed for in-water disposal except under "exceptional circumstances" which makes upland holding areas of much greater importance. Despite the historic limitations of in-water beneficial reuse in Virginia permitted by VMRC and the US Army Corps of Engineers, each permitting agency is undergoing a shift in regulatory policy which is more widely considering in-water beneficial reuse of dredged material. In-water beneficial reuse involving land restoration, land reclamation, thin layer placement, beach nourishment, confined aquatic disposal, etc. is regular and common practice in other states. VMRC staff have recently initiated a process to review its policies regarding beneficial reuse by researching how other states have managed and regulated its use and is interested in making amendments to its policies as deemed necessary. The timing of the proposed planning activities is optimal considering the current political and regulatory changes being considered in Virginia.

With Congress defunding shallow water dredging, local governments must now holistically approach all aspects of the dredging project, including dredge material management, beneficial reuse and Confined Disposal Facility (CDF) development and management. Such is the case regardless of dredging technique

as both hydraulic and mechanical dredging require material handling, storage and final use and disposal of material. Local governments need multiple material handling approaches and strategies for each individual waterway to ensure projects are efficiently completed and taxpayer funds expended in the most cost-effective way.

Additionally, opportunities related to manufacturing of dredged material have emerged and need to be considered in the planning process. The economic development prospects for products utilizing dredged material (concrete, mulch, fill for construction, etc.) have the potential to be transformational for the underserved and economically distressed rural coastal communities of the Middle Peninsula and Eastern Shore. The MPPDC in recent years has worked with several businesses to develop such operations in the Middle Peninsula and beyond. The process for handling of dredged materials for these purposes includes the removal and placement of material from one location to some other location, dewatering followed by separation, solidification, thermal desorption or incineration, and adding amendments to create various products for beneficial reuse. Supporting manufacturing operations requires a regional, comprehensive, and holistic plan which can provide continuous and consistent volumes of material.

This proposal consists of two primary activities: 1) Development of one actionable Dredged Material Management Master Plan for the Middle Peninsula and one plan for the Eastern Shore and 2) Implementation of Top Priority Master Plan Strategies by the MPPDC for the Middle Peninsula and by the ANPDC for the Eastern Shore. It is anticipated that the completion of these activities will result in the effective and efficient advancement of dredging projects within each region and serve as a model for other coastal communities to empower them to be able to do the same.

Geographic Area and Project Area Details

The proposed activities will focus on the jurisdictions within the Middle Peninsula and Eastern Shore regions.

Virginia's Middle Peninsula –

The Middle Peninsula region includes six counties (Gloucester, Mathews, Middlesex, Essex, King and Queen, and King William) and three incorporated towns (West Point, Urbanna, and Tappahannock). All 120 navigable waterways important for commercial and recreational boating activity will be considered in the project activities. A subset of navigable waterways will be targeted for additional analysis and design, or implementation activities related to dredged material disposal and reuse. Representatives from the jurisdictions will be engaged throughout the duration of the individual project elements. **Figure I** illustrates the geographic area of the proposed activities.

Figure I: Map of Middle Peninsula localities.



Figure 2: Navigation Projects in the Middle Peninsula Derived from the MPPDC’s 2020 VPA-WMF Project which will serve as basis for the proposed planning activities. Note that some additional information derived from the USACE since 2020 will be included in the proposed plan development process as well.

Summary of Project Dredging Depths, Disposal/Placement Types, Volumes, and Frequencies				
<u>Navigation Project</u>	<u>Dredging Depth (Ft.)</u>	<u>Assessment of Type of Disposal (Placement)</u>	<u>Total Volume</u>	<u>Dredging Frequency (Years)</u>
Mattaponi River ¹	No Dredging	No Dredging	No Dredging	No Dredging
Aberdeen Creek	-(6+1)	Upland	59,250	5-10
Cedarbush Creek	-(6+1)	Upland	89,506	10-20
Timberneck Creek	-(6+1)	Upland	46,300	5-10
Aberdeen, Cedarbush, & Timberneck Combination	-(6+1)	Upland	195,056	--
Sarah Creek	-(6+1)	Upland	9,549	5-10
Perrin River	-(6+1)	Upland	14,593	10-20
Sarah Creek & Perrin River Combination	-(6+1)	Upland	24,142	--
Free School Creek	-(4+1)	Upland	222	10-20
Whittaker Creek	-(4+1)	Upland	8,953	5-10
Free School & Whittaker Creek Combination	-(4+1)	Upland	9,175	--
Mill Creek 2	-(4+1)	Beneficial Use	1,127	10-20
Put In Creek	-(4+1)	Upland	5,370	5-10
Mill Creek 2 & Put In Creek Combination	-(4+1)	Upland	6,497	--
Davis Creek	-(7+1)	Upland	32,900	5-10
Horn Harbor	-(7+1)	Beneficial Use	82,233	10-20
Winter Harbor	-(6+1)	Beneficial Use & Upland	106,861	5-10
Horn & Winter Harbor Combination	-(7+1) -(6+1)	Beneficial Use & Upland	189,094	--
Hole In The Wall	-(6+1)	Beneficial Use	40,000	5-10
Queens Creek ²	-(6+1)	Beneficial Use	971/23,000	5-10
Milford Haven	-(10+1)	Beneficial Use	11,043	10-20
Queens Creek & Milford Haven Combination	-(6+1) -(10+1)	Beneficial Use	34,043	--
Broad Creek	-(7+1)	Beneficial Use & Upland	7,136	5-10
Bush Park Creek	-(4+1)	Beneficial Use	2,568	<5 years
Mill Creek	-(4+1)	Beneficial Use	483	10-20
Whiting Creek	-(6+1)	Beneficial Use	31,644	5-10
Robinson Creek	-(6+1)	Beneficial Use	4,372	5-10
Parrotts Creek	-(6+1)	Upland	20,265	10-20
Total:			597,375	

¹ VIMS channel condition survey indicated that dredging was not required.
² Dredging last occurred in 2019, with 2020 VIMS survey showing 971 cubic yards required to bring full project depth; long term dredging records indicate an average of 23,000 cubic yards required for removal each cycle.

Virginia's Eastern Shore –

The Eastern Shore of Virginia (ESVA) is a narrow, approximately 70-mile-long coastal peninsula separating the Chesapeake Bay from the Atlantic Ocean. The ESVA is home to two (2) counties and nineteen (19) incorporated towns. The peninsula is buffered from coastal impacts along its Atlantic coast by a barrier island chain and vast tidal marshes. Historic land-use activities and changes to the dynamic coastal environments have contributed to the sedimentation of many creeks of the Eastern Shore (ES). Furthermore, the region faces unique challenges associated with coastal flooding, coastal erosion, and inundation from sea-level rise. These challenges result from changes in storm intensity and frequency and changes in relative sea level, impacting sedimentation patterns, which can in turn have an effect on the shoaling and navigability of ES coastal waterways. Dredging these waterways will address these challenges and, additionally, result in the beneficial use of dredged materials to mitigate coastal erosion and flooding, and aid in habitat remediation. geographic area of the proposed activities.

The Eastern Shore has long acted as a port for safe harbor and intercoastal travel. In an effort to advocate for the region's navigable waters, Accomack and Northampton Counties formalized a bi- county Committee – the Eastern Shore Regional Navigable Waterways Committee (ESRNWC) – by Joint Resolution. The ESRNWC is part of the [Eastern Shore Navigation Partnership](#) – a group consisting of representatives from the U.S. Army Corps of Engineers, Norfolk District; other federal, state, and local agencies; and commercial watermen and aquaculture operations.

In 2016, the ESRNWC and A-NPDC staff developed the Regional Dredging Needs Assessment. Simultaneously, the Virginia Working Waterfront Master Plan was being developed; an initiative that the A-NPDC partnered on, along with the Northern Neck PDC, Middle Peninsula PDC, and Hampton Roads PDC with project funding from the Virginia Coastal Zone Management Program (CZM). As published the Virginia Working Waterfront Master Plan, the Eastern Shore identified over two hundred (200) working waterfronts on the coastal peninsula – the greatest number within any region in the Commonwealth. **Figure 3** illustrates the geographic area of the proposed activities.

Figure 3: Reference Map of Eastern Shore



Figure 4: Non-Federal Waterways in the Eastern Shore Derived from the ANPDC’s 2016 Eastern Shore of Virginia Regional Dredging Needs Assessment which will serve as basis for the proposed planning activities.

Waterway Name	USCG AtoN? Y/N*	Facilities	Use
Hunting Creek (Hopkins unincorp.)	Y	Landing (2)	Com & Rec Fishing & Boating, Aquaculture
Pungoteague Creek	Y	Landing, Country Club, Campground, Aquaculture, Seafood Co.	Com & Rec Fishing & Boating, Aquaculture
Hungars Creek	Y		Com & Rec Fishing & Boating, Aquaculture
Kings Creek	Y	Marina, Restaurant, Campground, Seafood Co.	Com & Rec Fishing & Boating, Aquaculture
Nassawadox Creek (& Church & Warehouse Creek)	N	Landing	Com & Rec Fishing & Boating, Aquaculture
Chincoteague USCG Station	NA	USGS Station	USGS Station
Day Marker 122 to Wachapreague Inlet	Y	USGS Station , Marina (3), Ramp, Fuel, Lodge, Campground, VIMS Lab, Seafood Co.	USGS Station , Com & Rec Fishing & Boating, Aquaculture, Research/Education
Folly Creek-Metompkin Inlet	N, but leads into VIP with AtoNs	Landing,	Com & Rec Fishing & Boating, Aquaculture
Gargathy Creek	N	2 Landings	Com & Rec Fishing & Boating, Aquaculture
Wachapreague Channel	N	USGS Station , Marina (3), Ramp, Fuel, Lodge, Campground, VIMS Lab, Seafood Co.	Com & Rec Fishing & Boating, Aquaculture, Research/Education
Eastern End of Federal Channel to Quinby Inlet	Y	Landing, Campground, Seafood Co.	Com & Rec Fishing & Boating, Aquaculture
Great Machipongo Inlet & Channel	Y	Landing, Restaurant, Aquaculture, Seafood Co., & Crab Shanties	Com & Rec Fishing & Boating, Aquaculture, Research
Red Bank Creek	N	Landing	Com & Rec Fishing & Boating, Aquaculture
Metompkin Inlet	N		Com & Rec Fishing, USCG Atlantic access
Bagwell Creek (Parkers Landing Rd)	N	Parkers Landing Rd, no ramp	Rec Fishing & Boating
End of Oyster Channel to Sand Shoal Inlet	Y	Public harbor, landing, UVA Center, Seafood Co.	Com & Rec Fishing & Boating, Aquaculture, Research/Education
Bullbeggar Creek	N		
Butcher Creek	N		Rec Fishing & Boating
Cattail Creek	N	Landing	Com & Rec Fishing & Boating, Aquaculture
Craddock Creek	N		Com & Rec Fishing & Boating
Doe Creek	N		Rec Fishing & Boating
France Creek	N		Rec Fishing & Boating
Holdens Creek	N		
Little Back Creek	N		Rec Fishing & Boating
Matchotank Creek	N		Rec Fishing & Boating
Messongo Creek	N	Landing (2), Seafood Co.	Com & Rec Fishing & Boating, Aquaculture
Muddy Creek	N	Landing, Pier, Beach	Com & Rec Fishing & Boating, Aquaculture

<u>Waterway Name</u>	<u>USCG AtoN? Y/N*</u>	<u>Facilities</u>	<u>Use</u>
Pitts Creek	N	Landing (actually on Pocomoke River)	Com & Rec Fishing & Boating
Youngs Creek	N		Rec Fishing & Boating
Barlow Creek	N		Com & Rec Fishing & Boating, Aquaculture
Cherrystone Inlet	N	Private companies docks, etc.	Com & Rec Fishing & Boating, Aquaculture
Longs Pond/ Old Plantation Creek/ Arlington Creek	N	Tomb of Custis	Com & Rec Fishing & Boating, Aquaculture
Mattawoman Creek	N		Com & Rec Fishing & Boating, Aquaculture
Parkers Creek	?	Landing	Com & Rec Fishing & Boating
the Gulf (Smith Beach)	N	Seafood Co.	Com & Rec Fishing & Boating, Aquaculture
Westerhouse Creek	N		Rec Fishing & Boating, Aquaculture
Assawoman Creek & Inlet	N	Old NASA ferry dock	Com & Rec Fishing & Boating
Little Mosquito Creek	N	Ramp, Slips, Trails End Resort	Rec Fishing & Boating
Swans Gut Creek (Captain's Cove/Horntown area)	N		
Indiantown Creek	N	Indiantown Rec Park (no water access)	
Taylor Creek	N		Rec Fishing & Boating
Upshur Creek	N	TNC dock	Rec Fishing & Boating, Research/Education

Total Project Cost, Total Amount of Funding Requested, and Budget

The MPPDC and ANPDC are requesting \$4,000,000 in FY2025 VPA-WMF funding to support the proposed activities. The applicant is willing to discuss changes to the scope and awarded amount if deemed necessary by VPA.

The project budget will consist of \$2,007,413 for the MPPDC and \$1,992,587 for ANPDC, which constitutes a roughly 50:50 split, with an additional amount of funds to the MPPDC for indirect costs anticipated resulting from the MPPDC's role as the applicant of record and contracting entity with the VPA. The MPPDC will issue a fee for service subcontract directly with the ANPDC. This contractual arrangement has been utilized successfully between the MPPDC and ANPDC in numerous occasions in recent years. Each agency will be responsible for independently managing its respective scope and finances. Consideration for consolidating procurement and contracting will be taken so that VPA-WMF funds are expended in an effort that maximizes cost efficiencies. Each agency will work independently but efforts to share lessons learned and other experiences will be accomplished through regular coordination meetings.

Task 1 planning, analysis, and design activities and Task 2 engineering designs may involve both public and privately-owned property as necessary; however, Task 2 implementation activities including construction will only involve current publicly owned properties and facilities. No requested VPA-WMF funding will be used to purchase or lease property.

The proposed budgets should be considered preliminary as changes may occur based on multiple factors and unknowns. This could include instances where initial discussions with regulatory authorities could result in a disposal or reuse option being ruled out, which would in turn not necessitate the use of planning and analysis funding for that particular option. For example, it is unknown whether VMRC will even entertain options which would be new within Virginia, such as Confined Aquatic Disposal (CAD – explained in greater detail in following sections), so if it is learned early on that no permitting lane exists for CAD, then it is proposed that the funding budgeted for CAD be reallocated for use in planning and designing in-use alternatives for a greater number of creeks or implementing additional upland activities. Additionally, should it be found that insufficient budget estimates for implementation activities have been included, then the scope and budget will be reworked to ensure that implementation of in-water or upland activities or site improvements may be completed with the funding award level. The desired outcome is to prepare a number of projects in each region which is commensurate with forthcoming funding VPA-WMF funding levels so that each region has a suite of shovel-ready dredging projects and disposal/reuse alternatives established so that future VPA-WMF-funded dredging projects can advance as efficiently and effectively as possible with regards to time and cost.

Additionally, each region will have autonomy to select which available alternatives for in-water or upland disposal or reuse it will want to involve in its planning process. The budget and scope for each respective region will reflect these priorities.

An overview of the proposed budget is included in the following table:

Middle Peninsula & Eastern Shore Dredge Material Management Initiative Budget Summary

Activity	MPPDC	ANPDC
Staff Salary for 1) grant administration, 2) development of Master Plan, and 3) contractor oversight for necessary planning, assessment, and implementation	\$150,000 (MPPDC Staff and/or consultant)	\$27,510 (A-NPDC Staff)
Legal for Procurement and Subcontract Development	\$10,000 (Sands Anderson)	\$10,000
Channel Condition Assessments and Characterization	NA	\$636,683 (Consultant)
In-water Disposal/Reuse Legal & Regulatory Analysis	\$50,000 (University or Other supported with \$25k from each PDC's budget)	
CAD Area Identification Study	\$150,000 (University or Other)	\$150,000 (University or Other)
In-water Disposal/Reuse Area Technical Site Assessments	\$50,000 (University or Other)	\$25,000 (University or Other)
Upland Disposal Legal Analysis & Document Development	\$50,000 (Sands Anderson or other)	\$50,000 (Other)
Upland Technical Site Assessments	\$300,000 (Procured Contractor)	\$300,000 (Procured Contractor)
Engineering design and cost for ~1-3 in-water and/or upland sites	\$300,000 (Procured Contractor)	\$300,000 (Procured Contractor)
Implementation/Construction Activities	\$831,607 (Procured Contractor)	\$405,000 (Procured Contractor)
Fringe Costs	\$39,706	\$7,153
Indirect Costs	\$111,100	\$56,241
Region Subtotal:	\$2,007,413	\$1,992,587
Total Project:	\$4,000,000	

Timeline and Phases of Project

MPPDC and ANPDC staff propose a project that aims to accomplish the following tasks:

TASK I – Development of Dredged Material Management Master Plan **(estimated July 2024 – June 2025)**

Task I will consist of up to three distinct subtasks which when completed, will comprise the Master Plan for dredged material and handling for permitted and to-be permitted dredging projects in the Middle Peninsula and the Eastern Shore.

Subtask I-A: In-Water Disposal/Reuse Study and Strategy Development

Each region will utilize known channel characterization information for the volume and type of dredged material for each targeted creek to conceptualize various in-water disposal and/or reuse alternatives within reasonable proximity. These specific strategies will be developed for each region as described in the following activities.

Activity I-A-i - Channel Condition Assessments and Characterization

With previously awarded Waterway Maintenance Funding, the MPPDC successfully assessed and characterized the volume and type of sediment for 22 creeks in the Middle Peninsula. This serves as the foundational understanding of the priority dredging needs within the region which the proposed Master Planning activities will be based upon. The Eastern Shore has conducted a regional assessment of where navigability issues and dredging needs exist; however, additional efforts to characterize the volumes and types of sediment to be dredged have not occurred to date.

The Eastern Shore has conducted a regional assessment of where navigability issues and dredging needs exist; however, additional efforts to characterize the volumes and types of sediment to be dredged have not occurred to date. A Shoreline Studies Program will conduct bathymetric and vibricore surveying of previously recognized non-federal channels identified in the “Eastern Shore of Virginia Regional Dredging Needs Assessment” 2016 study that have not been wholly characterized in addition to waterbodies of interest identified by the Eastern Shore Regional Navigable Waterway Committee and Virginia Eastern Shore Conservation Alliance. The data is intended to serve as the foundation for the overall management of Virginia’s Eastern Shore regional dredging program and to support the development of a customized Implementation Plan Development for Disposal/Reuse Strategy Alternatives and Beneficial Disposal/Reuse Study and Strategy Development of 22 waterbodies/creeks:

RDNA Identified Non-Federal Waterbodies (2016)	
Assessment Recommended	Waterbodies of Additional Interest
Red Bank to Federal Channel	Cattail Creek
Eastern End of Federal Channel to Quinby Inlet	Doe Creek
End of Oyster Channel to Sand Shoal Inlet	Fowling Gut
Folly Creek-Metompkin Inlet	Holdens Creek
Gargathy Creek	Matchotank Creek
Great Machipongo Inlet & Channel	Messongo Creek
Hunting Creek	
Hungars Creek	
Metompkin Inlet	
Muddy Creek	
Nassawadox Creek	
Pungoteague Creek	

Activity I-A-ii – In-Water Disposal and Reuse Legal and Regulatory Analysis

Legal and regulatory analysis for in-water disposal and reuse alternatives will be conducted to provide the MPPDC and ANPDC the understanding necessary as to 1) whether specific in-water alternatives utilized in other states by the dredging industry are currently permissible in Virginia, 2) what steps would need to be taken to allow for specific in-water disposal/reuse activities in the future, and 3) understand the regulatory pathway for conducting activities deemed currently permissible in Virginia. In-water disposal/reuse alternatives to be considered include but may not be limited to confined aquatic disposal, land creation/reclamation/restoration involving tidal marshes, islands and other coastal landforms, thin layer spraying, beach nourishment, overboard discharge, and in-water dewatering. This will involve consultation with VMRC regarding legality of various in-water options and research/analysis of the legal and permitting framework which other states have handled in-water disposal/reuse. The outcomes and findings of the analysis will be incorporated into each region’s Master Plan and will shape the methodology utilized to conceptualize and plan for viable in-water disposal/reuse options for each creek.

Activity I-A-iii – Development of In-Water Disposal and Reuse Strategies

For in-water disposal/reuse alternatives found to be permissible options in Virginia with verified legal and regulatory pathways identified, the MPPDC and ANPDC will consider the dredged material volumes and characteristics for each creek and conceptualize, study and develop strategies conducting for in-water disposal and reuse. Specific studies and analysis for each prospective site may include:

- Evaluation of substrate conditions to support the weight of the material;
- Hydrodynamic modeling to simulate sediment transport processes, wave energy regimes, and shoreline dynamics in target areas as well as to assess the impact of sediment placement on coastal morphology, tidal circulation patterns, and sedimentation rates to optimize project design and minimize adverse impacts;
- Determination of proximity to sensitive ecological environments and the potential for the site to enhance ecological and environmental conditions based on ecological value, hydrological conditions, and connectivity to existing habitats; and
- Evaluation of the flood and wave protection potential for adjacent properties and facilities.

Further explanation and activities related to specific in-water alternatives are provided in the following sections.

Land Creation, Reclamation, Restoration

Reuse activities involving the creation, reclamation, or restoration is common practice within the dredging industry outside of Virginia.

Restoration via Direct Placement –

When considering direct placement of dredged material for these purposes, the characteristics of the dredged material are critical to determining the type of reuse options available.

For predominantly coarse dredged material, the most common reuse practice is direct placement along shorelines or beach nourishment. This is an approach that has been historically permissible in Virginia when the dredged material is deemed to be free of contaminants and the grain sizes involved are at least as coarse as the native material at the location where the material is to be placed. The MPPDC and ANPDC have designed and conducted or are conducting dredging projects involving beach nourishment and new locations where this alternative is viable along shorelines in the vicinity of targeted creeks will be identified.

For dredged material not coarse enough for placement along shorelines, thin-layer spraying upon tidal marshes is a direct placement alternative to be considered. This approach is commonly utilized to provide elevation (typically ~1 to 12 inches) to tidal marshes so that they may be more resilient with regards to impacts from sea-level rise. Locations where thin-layer spraying may be a viable option adjacent to targeted creeks will be identified and further analyzed as needed under Activity I-A-iv described in later sections.

Creation or Reclamation of Tidal Marshes, Islands and Other Coastal Landforms -

Land creation or reclamation has become increasingly more commonplace outside of Virginia; however, several projects have begun to take place within Virginia. Conceptual locations where dredged material can be used in proximity to targeted creeks will be identified for the volume and characteristics of specific dredging projects.

Examples of successful projects include the USACE Poplar Island land reclamation project and miles of marsh and land reclamation projects in the Gulf of Mexico.

These types of projects can involve establish entire landforms within “contained” areas such as the successful USACE Poplar Island land reclamation project which utilized dredged materials from the Baltimore Harbor Approach Channels or restoration of parts of landforms such as restoring shorelines with use of geotextiles placed along the eroded shoreline or stream bank. An example of the latter was completed by the MPPDC during 2023. The MPPDC, in partnership with VA Sea Grant, worked with the VMRC and VIMS staff to permit and construct a living shoreline reclamation project at the Captain Sinclairs Public Recreation Area owned by he Middle Peninsula Chesapeake Bay Public Access Authority in Gloucester (**Figures 5 – 8**).



Figure 5 (above): Recently permitted and constructed project utilizing geotubes filled with dredged material in Gloucester. The tube has been covered with sediment and tidal marsh grasses have been planted atop the tube as part of a living shoreline.



Figure 6 (above): Recently permitted and constructed project utilizing geotubes filled with dredged material in Gloucester. The picture shows the tube as it is being covered with sediment. Grass has since been planted atop the tube as part of a living shoreline.



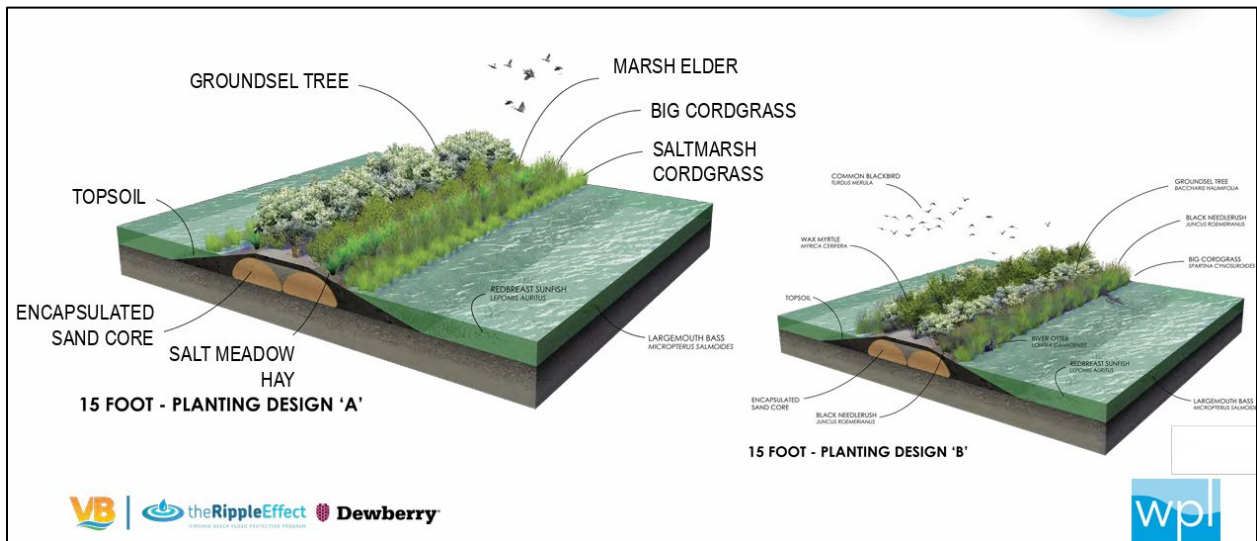
Figure 7 (above): Recently permitted and constructed project utilizing geotubes filled with dredged material in Gloucester. The tube has been covered with sand and grass and will function as a docking area at a public boat landing.



Figure 8: Recently permitted and constructed project utilizing geotubes filled with dredged material in Gloucester. The picture shows the tube as it is being covered with sediment. Grass has since been planted atop the tube and the site will function as a docking area at a public boat landing.

Other similar land restoration projects using dredged materials are advancing in Virginia including projects in Back Bay near Virginia Beach and a project being advanced by VIMS at Cedar Island in Accomack County. The City of Virginia Beach has applied for a permit to develop a series of 41 marsh terraces using geotextiles, dredged material, and plants which, when constructed will establish nearly 50 acres of upland habitat, 310 acres of suitable subaqueous habitat for submerged aquatic vegetation, and flood protection from tide and wind-driven flooding events (Figures 9 and 10).

These innovative approaches for utilizing dredged material which are relatively new for Virginia provide a multitude of benefits to the overall resiliency of watershed, flood prone property owners living along the waterfront, the sensitive ecological and biological habitats, and marine-based economies of the rural coastal communities of the Middle Peninsula and Eastern Shore.



Figures 9 (above) and 10 (left): Marsh Terraces designed for land and habitat restoration and flood protection purposes in Back Bay, Virginia (City of Virginia Beach).

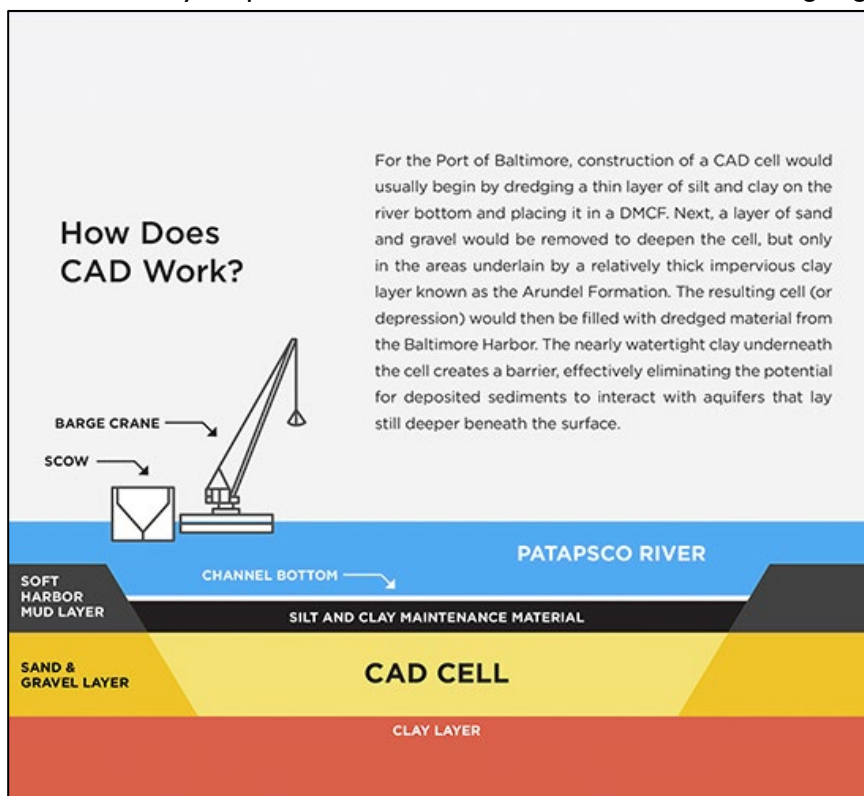
Overboard Discharge

In-water disposal via overboard discharge has been historic practice in Virginia waters within designated areas. If deemed as a permissible option, conceptual options for overboard discharge within existing or proposed designated areas may be considered for creeks proximal to such areas.

Confined Aquatic Disposal (CAD)

If a permissible avenue exists, MPPDC staff will initiate a CAD Strategy Development process. The strategy will involve a study to identify potential use of CAD cells as a disposal option. CAD has not been utilized in Virginia and the study will build upon the experiences and work of the Maryland Port Authority and others who have utilized CAD to advance dredging operations in a cost-efficient manner.

The vast majority of dredging projects in the Middle Peninsula consist of material which is too fine for the most readily available type of beneficial reuse, which is shoreline placement or beach renourishment. As such, the traditional method of disposal for dredged fines has been upland disposal, which in and of itself has proven to be very costly and often challenging with regards to the presence of wetlands or conflicts with neighboring land uses. CAD presents a potentially cheaper alternative for the disposal of dredged fines and offers the potential for the beneficial reuse of sand for coastal resilience purposes at the same time. CAD consists of dredging available sub-aqueous sand deposits and replacing the excavated cavity with dredged material from a nearby creek. In most instances, the dredged sand is beneficially reused by placing it along adjacent shorelines experiencing erosion or staging the sand in an upland area so that it may be used for construction purposes. Once the dredged fines have been used to fill the excavated cavity, steps are taken to ensure that the material is not going to be moved by



currents, wave action, or resuspension (Figure 11).

The proposed CAD study would consist of several elements: 1) an inventory and assessment of available sub-aqueous sand resources where no or minimal conflicts exist (i.e., outside of leased or public trust bottom areas, no submerged aquatic vegetation, etc.), 2) a strategic assessment of dredging needs of adjacent creeks and prospective locations for beneficial reuse of

Figure 11: Diagram Explaining Confined Aquatic Disposal (From Maryland Port Authority).

dredged sand, and 3) a technical site assessment for a prospective CAD area to determine necessary and feasible specifications for the area, should a strong prospective area for a CAD cell be identified.

It is anticipated that the VIMS Shoreline Studies Program will be contracted to conduct the inventory and assessment of available subaqueous sand resources. This work will consist of a literature and data review of all geological survey information for subaqueous sediments and analysis of datasets for potential use conflicts in the Middle Peninsula (i.e., leased and public trust bottom areas, SAV, sensitive habitat, utilities, etc.). GIS Mapping will be utilized to identify specific areas where CAD could be feasible with no or minimal use conflicts.

Should a strong prospective area for a CAD cell be identified in the Middle Peninsula during the inventory and assessment conducted during Activity I-A-iii, coring and geophysical surveys will be performed to define the approximate area and volume of the sand deposit. Subsequently, adjacent channels with proximity of the prospect CAD area will be assessed and characterized to determine whether the amount of sediment needing to be dredged would fit within the prospective CAD area. Additionally, prospective beneficial reuse locations will be identified for shoreline placement of the sand or temporary upland staging of the sand for construction uses. Since the ultimate number of prospective CAD areas is unknown at this time, VIMS-SSP will be contracted to conduct as many field surveys as the awarded amount will provide for and the prioritization of targeted sites will be determined through discussions with the local government administrators.

Should a strong prospective site for a CAD area be identified, MPPDC will contract with a firm experienced in CAD to design the specifications for the future development of the site.

In-Water Dewatering

In-water dewatering can be a viable alternative for creeks where upland and in-water disposal/reuse options are limited or non-existent. This approach involves the mechanical placement or pumping of dredge material into an anchored barge or hopper dredge where the water exits the vessel into the waterway and the dewatered material is transported to a separate location for mechanical or hydraulic offloading (**Figure 12**). Hopper dredges are commonly used for this purpose; however, dewatering containment areas on barges can be a viable option as well.



Figure 12: Example of In-Water Dewatering via mechanical dredging and placement within a hopper dredge (from IADC Dredging).

Subtask I-B: Upland Disposal/Reuse Strategy Development

Each region will utilize known channel characterization information for the volume and type of dredged material for each targeted creek to conceptualize various upland disposal and/or reuse alternatives within reasonable proximity. These specific strategies will be developed for each region as described in the following activities.

Activity I-B-I – Regulatory Research, Legal Work and Template Document Development

The Upland Disposal/Reuse Strategy Development process will consist of researching regulatory restrictions related to the dredged material disposal/reuse and working with legal counsel to conduct necessary legal research and development legal documents to facilitate future improvements to existing sites or establishment of new sites.

The first step with regards to regulatory research will be to analyze local zoning and permitting regulations pertaining to upland disposal of dredged material including construction and operations for confined disposal facilities. The findings of this research will inform the site identification process described under the subsequent activity and identify necessary actions local government can take to help facilitate and make upland disposal implementation easier in the future if necessary and desired.

Legal counsel may conduct necessary legal research related to the acquisition or lease of property associated with CDFs. This may include the development of legal documents or easement agreements; dredged material ownership, use and liability agreements; and the development of a public-private partnership structure for processing and manufacturing of products using dredged material as necessary.

Finally, legal counsel or PDC staff will research the need and costs associated with insurance liability coverage for local governments to determine if and whether a government entity may be held liable in the event that detrimental impacts were to occur as result of a CDF underperforming or failing.

Activity I-B-ii – Conceptualize, Assess, and Develop Strategies for Upland Alternatives for Targeted Creeks

The MPPDC and ANPDC will consider the dredged material volumes and characteristics for each creek and conceptualize upland disposal and reuse alternatives. This may involve utilizing existing upland disposal sites that have been used historically or identifying new locations for upland placement. New locations for upland disposal/reuse could involve the construction of confined disposal facilities; establishing dewatering and staging sites designed for off-site transportation or on-site manufacturing; or land placement activities for flood protection, filling of land or ditch systems, or other uses.

Further explanation and activities related to specific upland alternatives are provided in the following sections.

Confined Disposal Facility (CDF) Technical Site Assessments

A review of existing publicly and privately owned CDFs will be conducted and technical site assessments may be conducted as deemed necessary. The construction of new CDFs will be considered where no viable upland options currently exist.

Design of a new CDF involves determining the necessary site geometry such as the area and dike height (USACE, 2015). Additional considerations are site configuration and access, proximity to sensitive environments, topography to include potential changes in elevation and runoff patterns and adjacent drainage, groundwater levels, and soil properties. Many of these characteristics need to be determined by site visits to potential CDF locations. **Figure 13** shows schematics for dredged material process for both hydraulic and mechanical dredging operations with the disposal strategies for each highlighted in red representing where current and future dredging projects are anticipated to experience challenges.

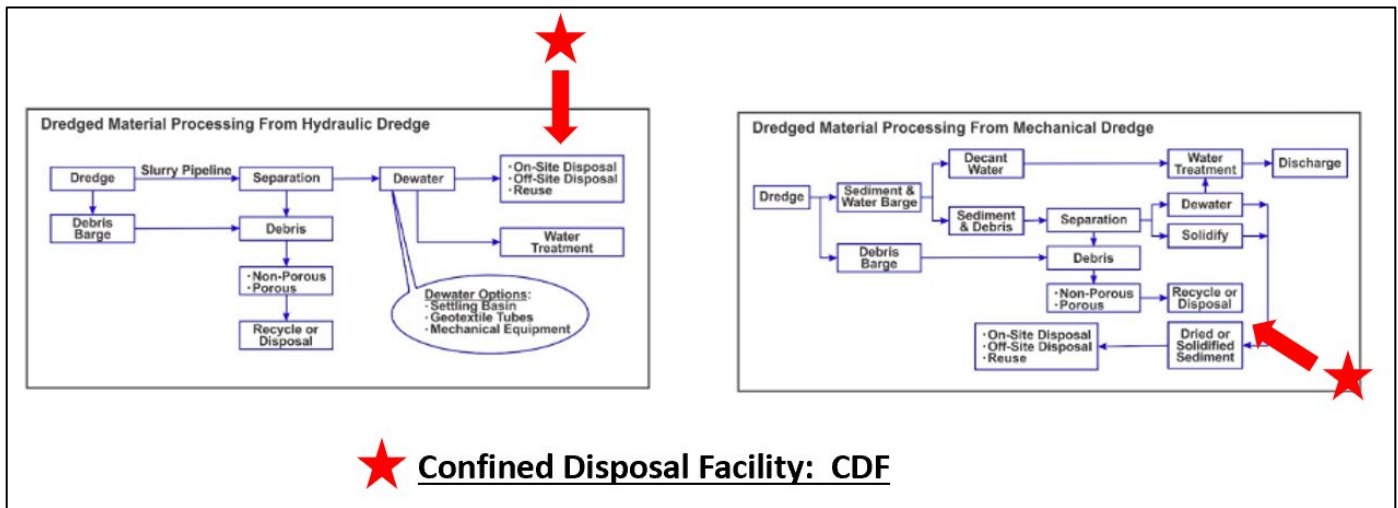


Figure 13: Schematics Illustrating the Steps Involved in Dredged Material Processing.

Once the legal documents needed for managing and handling the material are in place, a planning study in the form of a CDF Technical Site Assessment will be undertaken by PDC or contracted professionals to research and ascertain CDF site logistics. This will be done by following the technical framework established by the US Environmental Protection Agency for [Evaluating Environmental Effects of Dredged Material Management Alternatives](#) and will include but will not be limited to:

- determination of the needed available area and volumetric storage capacity to contain the material for the required life for the CDF sites;
- evaluation of real estate considerations;
- determination of needed site configuration and access for CDFs;
- determination of proximity to sensitive ecological environments;
- evaluation of topography to include potential changes in elevation and runoff patterns; and
- evaluation of proximity to dredging projects on other adjacent creeks and ability to develop CDFs which can accommodate more than one dredging project.

Many of the existing CDFs in rural coastal communities are constructed in a similar manner using earthen berm for the walls of the disposal area which are constructed with the intent for use during multiple dredging cycles over several decades. Many of the existing sites require regular and costly maintenance which can prove challenging for rural coastal governments to afford over time.

During the planning process, the challenges and costs associated with these traditional designs of CDF may necessitate a less permanent solution using more innovative technologies.

Additional considerations will be given for CDFs which operate as:

- Dewatering areas utilizing stacked Geotubes or Geotube-walled areas filled with dredged materials (**Figure 14**) or

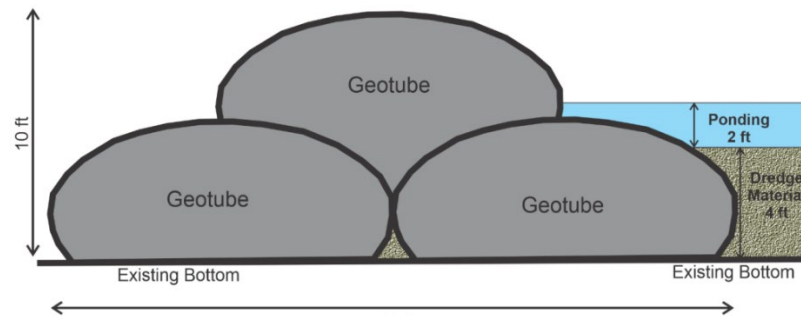


Figure 14: Schematic showing general stacked arrangement of Geotubes confined upland disposal site.

- Dewatering or holding areas using portable containment systems such as [Portadam](#) (**Figure 15**).



Figure 15: Photograph of a portable containment system (from Portadam).

Either of these alternatives may be an optimal approach considering the size of the dredging project, local zoning regulations, or other specific terms and conditions which prove not conducive to more traditional and permanent CDF construction via earthen berms.

Finally, consideration will be given to how a site could be configured for on-site manufacturing of dredged material or how a network of CDF sites could be configured to support transportation of dredged materials to a central facility for large scale manufacturing of dredged materials.

Technical Site Assessments for Other Upland Uses

For non-CDF type disposal and reuse alternatives such as linear berm creation for flood protection, land filling, etc., technical site assessments will be conducted to ensure the volume of dredged material is suitable for the site, the proposed activity is compliant with local, state and federal regulatory requirements, and will involve other geotechnical and geochemical analyses as necessary.

Fill activities could involve providing land elevation to flood prone areas along the waterfront in accordance with recent regulatory changes to the Chesapeake Bay Preservation Act which now allows for certain types of fill within CBPA areas, use as agricultural soil in fields, land reclamation for abandoned aggregate mines, or fill for other construction purposes.



The construction of berms to provide flood protection will also be considered. This practice is used in other states and can be designed to assist with protection from “sunny day” tidal flooding or more substantial storm surge events depending on the elevation of the berm.

For activities which may involve wetland impacts, impact and mitigation analyses would be conducted to determine firstly if an idea is permissible and secondly what the costs for purchase of necessary mitigation credits may involve.

Subtask I-C: Implementation Plan Development for Disposal/Reuse Strategy Alternatives

Two separate customized Master Plans will be developed for the Middle Peninsula and Eastern Shore. The plans will provide an actionable road map for implementation of specific and targeted in-water and/or upland disposal and reuse strategies. The plans will be developed by PDC staff or hired professional consultants. This will be done using the [2019 VIMS Shallow Water Dredging and Disposal Site Strategies](#) report to develop a methodology and strategy which ensures that a network of disposal and reuse sites exist in proximity to publicly financed dredging projects across the Middle Peninsula and Eastern Shore.

As part of the planning processes, each PDC will determine preferred disposal/reuse strategies and associated costs for each of its targeted creeks. Those strategies and cost estimates will then be reviewed to determine which strategies may be deemed as top priority strategies for selection for targeted funding for implementation or construction using FY2025 VPA-WMF funding under Task 2 described below. The prioritization and selection process will be driven by the regional priorities for dredging needs within the individual creeks and the available funds for implementation for each PDC. This will include the number of sites selected for implementation and the costs associated with individual disposal/reuse projects. It is desired that the number of creeks selected for implementation be commensurate with the levels of VPA-WMF funding

anticipated in subsequent years although achieving this may be challenging considering the FY2025 award level.

TASK 2 – Implementation of Top Priority Master Plan Strategies (estimated July 2025 – June 2026)

Subtask 2-A – Develop Conceptual and Final Engineering Designs for Preferred Alternatives

Once in-water and/or upland sites have been identified and evaluated, MPPDC and ANPDC will work with a procured contractor to develop conceptual engineering and designs for one, two or more top priority sites depending on costs and VPA award levels sites within ~2 miles of dredging project locations. Final engineering and designs for each disposal/reuse site and necessary permit applications will be developed as necessary. For CDF sites, this may involve site work plans, as-built drawings for CDF and material storage and access, stormwater and water discharge, and final costs. Design activities may occur on public or privately owned sites.

Subtask 2-B – Implementation for Preferred Alternatives

MPPDC and ANPDC staff will work with a procured contractor to implement and construct the designed and permitted activities. Implementation and construction activities will occur only on publicly owned property and no VPA-WMF funding will be used for lease or purchase of private property. Construction activities may involve improvements to existing upland disposal sites or construction of new in-water or upland sites.

Implementation activities will be documented with photos or video to for use in promoting VPA-WMF funded activities and for final reporting purposes.

Status of Any Necessary Permits

The proposed research, planning, and design activities (Task 1) will not require any permits. MPPDC and ANPDC staff will complete and apply for all necessary local, state and federal permits as required and as necessary for the preparation of the disposal/reuse site(s),

Adequacy of the Application’s Project Management

The MPPDC will serve as the applicant of record, will manage the project, and will subcontract to the ANPDC which will administer and manage its scope under the project.

MPPDC Project Management Experience

Since 1968, the Middle Peninsula Planning District Commission has collaborated with and coordinated with Middle Peninsula localities including Essex, Gloucester, King & Queen, King William, Mathews and Middlesex Counties and the Towns of Tappahannock, West Point, and Urbanna. MPPDC has a proven track record of successfully executing projects funded through a variety of entities (i.e., State Government, Federal Government, and 501(c)(3) nonprofit organizations) that focus on delivering Middle Peninsula localities effective solutions to their local or regional issues. MPPDC was awarded and has successfully managed eight VPA Waterway Maintenance Funding contracts to date with three additional ongoing awards for implementation of dredging projects in 2022-2024. For this project, MPPDC staff will work with the appropriate technical and legal staff to execute the tasks outlined in this proposal. MPPDC staff that will work to manage this project include:

Lewie Lawrence, MPPDC Executive Director: Coordinates and oversees all agency planning activities for the MPPDC;

Julie Kaylor, MPPDC Chief Financial Officer: Directs and oversees all financial activities of the MPPDC including preparation of financial reports and budgets.

Curtis Smith, MPPDC Deputy Director: Works as project manager for projects and assists with coordination and oversight of all agency MPPDC planning activities. Skills include conveyance of technical topics, land use tool and policy development, group facilitation, education and outreach, research and policy analysis, graphic art, and grant writing.

ANPDC Project Management Experience

Created by the Commonwealth of Virginia, the County of Accomack and the County of Northampton and joined by the Town of Chincoteague, the ANPDC has been the Eastern Shore of Virginia's regional planning organization since 1970. Tasked with supporting local planning and community development efforts and providing technical assistance on behalf of the Commonwealth, the ANPDC focuses on issues of regional importance. We also staff the Accomack-Northampton Regional Housing Authority and the Eastern Shore of Virginia Housing Alliance. The ANPDC has a proven track record of successfully executing projects funded through a variety of entities (i.e., State Government, Federal Government, and 501(c)(3) nonprofit organizations) that focus on delivering Eastern Shore localities effective solutions to their local or regional issues. The ANPDC was awarded and has successfully managed seven VPA Waterway Maintenance Funding contracts to date including the complete implementation of the Kings Creek Dredging and Beneficial Use Project completed as scheduled in 2023. For this project, ANPDC staff will work with the appropriate technical and legal staff to execute the tasks outlined in this proposal. ANPDC staff that will work to manage this project include:

Elaine Meil, ANPDC Executive Director: Coordinates and oversees all agency planning activities for the ANPDC;

Sandy Taylor, ANPDC Director of Administration: Directs and oversees all financial activities and administrative support of the ANPDC including preparation of financial oversight and reporting as well as the coordination of administrative staff.

Kellen Singleton, ANPDC Coastal Planner: Responsible for execution of Coastal Planning programs and projects portfolio, assisting Eastern Shore localities and regional commissions with comprehensive plans and implementation serving as a liaison between consultants, residents, local governments, and state and federal agencies. Background includes over 15 years of commercial aquaculture experience.

Feasibility of Proposed Planning and/or Dredging Project.

The feasibility of the proposed technical assistance, planning, research, and implementation activities will be the result of partnerships between the MPPDC, ANPDC and its hired and procured contractors.

The MPPDC will utilize and leverage existing and historically successful partnerships with the Middle Peninsula Chesapeake Bay Public Access Authority, the MPPDC member jurisdictions, and the VIMS Shoreline Studies Program. MPPDC, VIMS, and VA institutions with legal and policy research experience have collaborated on numerous studies similar to the proposed in-water disposal and reuse study task which combine coastal research with real-world considerations for policies, regulations and laws applicable for specific activities.

Through a comprehensive network of organizations and working groups that includes the Eastern Shore Regional Navigable Waterways Committee (ESRNBC) – part of the Eastern Shore Navigation Partnership – a group consisting of representatives from the U.S. Army Corps of Engineers, Norfolk District; other federal, state, and local agencies; and commercial watermen and aquaculture operations,

The Virginia Eastern Shore Conservation Alliance (VESCA) – a group that includes the Virginia Department of Environmental Quality (DEQ), the Virginia Eastern Shore Land Trust, Virginia Coastal Zone Management Program (CZM), Virginia Department of Conservation and Recreation (DCR), Virginia Department of Wildlife Resources (DWR), Virginia Department of Forestry (DOF), Eastern Shore Soil and Water Conservation District (ESSWCD), US Department of Agriculture - Natural Resources Conservation Service (NRCS), U.S. Fish and Wildlife Service (FWS), and The Nature Conservancy (TNC) , as well as the Eastern Shore of Virginia Climate Adaptation Working Group (CAWG) – a group consisting - VA Coastal Policy Center, William & Mary Law School, TNC, Virginia Coast Reserve, UVA Coastal Research Center (Virginia Coast Reserve LTER), DWR, Hampton Roads Sewer District, Accomack County, the NASA Wallops Flight Facility, Institute for Coastal Adaptation & Resilience - Old Dominion University, Hampton Roads Sewer District (HRSD), Northampton County, Cape Charles, ESSWCD, NASA Wallops Flight Facility, CZM, ESVA Resource Conservation & Development Council, DEQ, DOF, Onancock, Citizens for a Better Eastern Shore, NASA Goddard Space Flight Center, Wallops Flight Facility, Virginia Eastern Shore Land Trust, DWR, Eastern Shore Lab - Virginia Institute of Marine Science, NRCS, Wetlands Watch, and DCR the ANPDC will utilize and leverage existing and historically successful partnerships to combine coastal research with real-world considerations for policies, regulations, and laws applicable to identify beneficial use strategies and opportunities.

The MPPDC and ANPDC have historically partnered on multi-regional projects in the past due to the similarities amongst the Middle Peninsula and Eastern Shore communities.

Project Selection Process.

MPPDC Project Selection Process

The proposed activities build upon the outcomes of the *Middle Peninsula Dredging Implementation Plan* which has been identified by the local government administrators of the Middle Peninsula localities and the MPPDC as a critical step towards meeting the critical dredging needs within the region. The member jurisdictions of the MPPDC see the proposed project and associated tasks as the next steps towards advancing solutions for the region’s dredging needs. A proposal requesting support from the VPA-WMF was submitted during the FY2024 round but was not selected for award. The proposed activities have been discussed recently with the MPPDC Board during its November 2023 and January 2024 meeting and are in line with the MPPDC Board resolution passed on February 26, 2020 (**Appendix A**).

ANPDC Project Selection Process

The proposed activities build upon the outcomes of the ESRNWC and ANPDC staff developed the *Regional Dredging Needs Assessment* and the *Virginia Working Waterfront Master Plan* a critical preliminary step in identifying and prioritizing the scope, needs, and challenges in the region’s approach to shallow-draft maintenance dredging. The ESRNWC and affected stakeholders see the proposed project and associated tasks as the next steps towards advancing solutions for the region’s dredging needs. The proposed activities have been discussed recently with the ESRNWC during its January 2024 meeting in which the committee resolved its support for the effort. During the VESCA October 2023 quarterly meeting a strong demand for material to utilize in beach nourishment, land reclamation, thin layer placement, ditch filling and addressing land loss where also expressed and are in line with Accomack and Northampton Counties formalized bi- county Joint Resolution.

Potential Beneficial Use of Dredged Materials for the Purpose of Mitigation of Coastal Erosion, Flooding, or Other Purposes

The proposed planning activities will directly result in or lead to beneficial reuse. The intention of the proposed project is to set the stage for beneficial reuse of the dredged material in the future. Each beneficial reuse opportunity will be different for each site within the Middle Peninsula and Eastern Shore. Beneficial reuse may range from direct placement via beach nourishment, thin-layer spraying, or land restoration or habitat creation. Beneficial reuse may also involve the manufacturing of concrete or other products in the form of shoreline protection structures, artificial reef structures, non-structural concrete for landscaping, etc.; structural concrete in the form of concrete gravel for driveways and lanes; or other innovative uses. The MPPDC will work with its private sector partners who will provide expertise in these matters throughout the planning process to decide the best use and location for the dredged material.

Also, to assist in the disposal site selection and /or beneficial use of dredging material, the MPPDC was funded in 2018, through the Virginia Coastal Zone Management (CZM) Program to identify opportunities for beneficial use of dredged material throughout the Tidewater Virginia.

Finally, the disposal and/or placement of the dredged material will coincide with the Regional Sediment Management strategy developed in Mathews County. The full report is found here: <http://www.aldenst.com/wordpress/wp-content/uploads/2017/01/RSM-in-Matthews-County-VA.pdf>.

Potential Beneficial Impact to the Community

The development and implementation of the highest priority activities for dredged material management and handling will greatly enhance the ability for dredging projects to advance in a more efficient and effective manner as described in previous sections.

The dredging of shoaled channels will benefit the community in a variety of ways. First, by providing ease of access to and from the waters of the Commonwealth for commercial watermen as well as recreational boaters. Second, the US Coast Guard has the potential to use the open channels to reach calls more quickly. Finally, boaters traveling past the dredged channels will more easily and safely be able access the marinas, boat yards and other working waterfront businesses located in the region. This will bring more revenue to local businesses and increase visibility of the Middle Peninsula in the boating community. As explained above, the local government programs are anticipated to create and grow the dredging industry, resulting in new direct, indirect, and induced jobs, businesses and services in the region.

The Middle Peninsula and Eastern Shores' working waterfronts were inventoried in 2011 and may be found here: <https://www.deq.virginia.gov/Portals/0/DEQ/CoastalZoneManagement/FundsInitiativesProjects/task92-12c.pdf>.

Additionally, establishing operations via public-private partnerships or other means where manufacturing of dredged material may occur will directly contribute to local communities and economies via the creation of new jobs. Concrete products made of dredged material have the potential to help local, state, and national deficits in concrete as well as providing innovative solutions which can help reduce nutrient loading and even absorption of carbon from the atmosphere. The MPPDC has established professional relationships and a strong history working with private sector companies committed to partnering to advance innovative and beneficial solutions for the reuse of dredged material via the manufacturing of concrete products.

Economic Justification for Need

The rural coastal regions of the Middle Peninsula and Eastern Shore are commonly recognized as being fiscally stressed as compared to other communities in the Commonwealth. The VA General Assembly by creation and funding of the WMF has declared shallow draft dredging a state priority and have enabled projects to be funded. However, there is an enormous amount of planning and logistical work involved with administering and managing dredging projects where the requested WMF funds are needed to help with the advancement and administration of dredging projects with specific emphasis and focus on the disposal and reuse of dredged materials.

The channels to be included in the proposed effort are essential gateways to the Middle Peninsula and Eastern Shore’s working waterfronts. Economically, working waterfront industries contribute to rural coastal Virginia’s local and regional economies. Revenue is generated through tourism and recreation, boat building, harvesting of natural resources, maritime transport, and marine construction.

Within the Middle Peninsula recreation and commercial activity provide a large economic benefit to the counties as well as the Commonwealth. **Appendix B** presents the Maritime Jobs data from NOAA for all counties involved in the project. **Appendix C** offers a list of Virginia Marine Resources Commission Commercial Licenses and Permits purchased by member jurisdictions’ residents. A summary from the Virginia Working Waterfronts Master Plan (2015) of economic activity in the Middle Peninsula is included below.

ESSEX COUNTY –\$7,285 in VMRC Commercial Licenses & Permits representing 42 different types of licenses (2015).

GLOUCESTER COUNTY –\$181,098 in VMRC Commercial Licenses & Permits representing 104 different types of licenses (2015)

KING WILLIAM COUNTY –\$8,245 in VMRC Commercial Licenses & Permits representing 39 different types of licenses (2015)

KING & QUEEN COUNTY –\$6,993 in VMRC Commercial Licenses & Permits representing 35 different types of licenses (2015).

MIDDLESEX COUNTY –\$70,435 in VMRC Commercial Licenses & Permits representing 80 different types of licenses (2015).

MATHEWS COUNTY –\$57,481 in VMRC Commercial Licenses & Permits representing 86 different types of licenses (2015).

Table 4: Maritime jobs counting for employees, wages (2013), and good & services (NOAA Coastal County Snapshots, 2013).				
County	Maritime Employees	Percentage of Jobs in County	Maritime job Wages	Goods and Services
Mathews	111	1.7%	\$1 million	\$2 million
Gloucester	902	9.5%	\$12 million	\$23 million
Middlesex	247	7.7%	\$4 million	\$8 million
Essex	400	-	\$5.7 million	\$10.8 million
<i>Please note that NOAA does not track data for King William and King & Queen Counties, which is why they are not included in this table.</i>				

Additionally, previous MPPDC studies have shown a direct correlation between navigability and local property values. Local findings indicate that for every foot of change in channel depth in a navigable channel, there is a 16% change in real estate value to properties adjacent to the subject waterway. For instance, if a channel shoals by one-foot, real estate values decrease 16% in response to that change.

Conversely, if dredging results in a channel that is deeper by two feet, then real estate values increase by 32%. This finding demonstrates how critical navigability is to the tax base of rural coastal localities and it is anticipated that the proposed activities will have significant to real estate property values in the region.

Finally, and most importantly, very few of the VPA-funded dredging design projects will achieve implementation under the current level of funding and the development of local government operations are essential to implementation of any of the work that VPA has funded for design to date. The outcomes of the proposed activities will be transferrable to other rural localities around the Commonwealth and result in optimal and cost-efficient government operation.