

## **SHELLFISH MANAGEMENT DIVISION EVALUATION, 2/24/2026**

### **DISCUSSION:**

Request for approval of the 2026 Oyster Replenishment and Restoration Plan (ORP) and the Associated Procurements Procedures.

### **ISSUES:**

The Virginia Marine Resource Commission (VMRC) has been at the forefront of oyster restoration and replenishment efforts since the establishment of its Replenishment program in 1929.

The expenditures from the Replenishment Program are ~\$4-\$10 million annually. Funding is procured from a variety of sources, and includes \$4 million in annual General Funds, the remaining funding is a combination of grants, special legislative funds, and user fees collected from the oyster industry.

Each year the Commission is asked to review proposed projects, funding and procurement procedures that will be used for the maintenance and expansion of this ecologically, economically, and culturally important resource.

### **BACKGROUND:**

The public oyster resources are currently relatively stable in most areas. Harvest reached a recent record high in the 2022-2023 season but the 23-24 and 24-25 harvests saw modest declines back towards longer term average harvest of approximately ~250,000 bushels from public oyster grounds.

Since about the mid-2000's, Virginia has been experiencing a period of relatively high and consistent spat sets or recruitment, in most areas most years. The record number of market oyster observed during the 2021 and 2022 surveys is the likely result of the increased replenishment effort combined with these recent high recruitment events (spat sets), and adjustments in the management measures.

Current harvest levels are dependent on continued public investment in replenishment efforts (shell planting, seed planting, and other substrates such as stone). Recent studies and VIMS-VMRC survey data continues to show that areas open to harvest by dredge or scrape require significantly more replenishment efforts than areas open to less impactful harvest gears.

Current proposed State budget language indicates that General Funds for restoration and replenishment remain unchanged from the previous Fiscal Year (FY2025). The budget, starting in FY2019, included a change in language in the budget bill. Previously, all the General Funds were for the "replenishment" of public oyster grounds. The new language makes a distinction between funding for "restoration" and funding for "replenishment". Although in the past, replenishment was conducted on both harvest and non-harvest areas, it has been determined

that, with the new budget language, restoration-specific funds can be focused on non-harvest areas. This brings the potential available General Funds for this year’s plan to \$4.0 million.

**Non-Federal Funding Sources and total dollar amounts anticipated for replenishment and restoration in 2026.**

<b>NON-FEDERAL FUNDING SOURCES</b>	<b>AMOUNT</b>
General Funds Replenishment (GF)	\$2,500,000
General Funds Restoration (GF)	\$1,500,000
Non-General Funds (NGF) Oyster Resource User Fees	\$300,000
Other Non-General Funds	Up to \$500,000
Total	\$4,800,000

**Federal Funding Sources and total dollar amounts available restoration in 2026.**

<b>FEDERAL FUNDING SOURCES</b>	<b>AMOUNT</b>
NOAA	Up to \$500,000
Total	\$500,000

## 2026 OYSTER REPLENISHMENT AND RESTORATION PLAN

### SEED TRANSFER:

#### **James River**

For many years the majority of the transported seed from the James River was harvested from the Hand Tong Seed Areas and its survival in higher salinity areas tends to be low. This makes it only suitable for planting in locations such as the Potomac Tributaries with similar low salinity waters. Additionally, the cost of harvesting and then transporting this seed has continued to increase. As a result, the Shellfish Management Division (SMD) has replaced or supplemented the hand tong seed with seed that has been harvested from areas outside of the hand tong areas in the lower James River using larger oyster dredges. This seed can be moved for a significantly lower price and is suitable for planting in broader geographic and higher salinity areas. The areas where seed is removed are then re-shelled and have been expanded several times recently. Most have continued to receive good spat sets. As a result of the lower cost, and as a way of increasing productivity in low recruitment areas beyond the Potomac tributaries, staff has transported some of this seed to multiple areas for the last 6 years.

After receiving input from the Shellfish Management Advisory Committee (SMAC), the SMD has established an additional area suitable to remove seed by dredge through shell planting in a new location in the Jail Island area of the James River. This area received a very good spat set and is now available as a “new” seed source.

The SMD may contract to harvest and transport seed taken from the hand tong areas, the existing seed removal site in the lower James River, and the newly established seed area to up to four areas that do not consistently receive high spat sets from shell planting alone. The areas suitable for planting are the Potomac River Tributaries, Area 7 and 8 in the Rappahannock River, a portion of the Pocomoke Sound, and the York River Hand Tong Areas. The areas planted with seed may not be opened for immediate harvest. Staff would evaluate the seed plant areas prior to opening them to harvest. The cost for each bushel of seed to be harvested by dredge, transported, and planted will be at least \$7.00/bushel.

Funds from Oyster Resource User Fees and replenishment GFs will be used for this project.

A notice to transport seed oysters from hand tong areas may again be put out to solicit persons who may be willing to conduct this work at the price offered. If no positive responses are received this funding may be used to plant additional high recruitment areas with shell that can then be moved later as seed. The cost to harvest, transport and plant hand tong seed shall be no more than \$15.00/bushel.

Proposed Project	Up to 20,000 bushels of seed oysters @ \$7.00-\$15.00/bu.
Estimated Cost	\$300,000
Funding Sources	NGF and GF (Replenishment)

## **SHELL PLANTING:**

### **Bay and Tributaries:**

Shells on public beds naturally degrade over time and lose their effectiveness as a substrate for oyster larval attachment. In most of the mid-salinity areas in Virginia, the half-life of shells appears to be 3 to 4 years. Additional shell is lost and degradation intensified by the harvest and removal of market oysters. The density of living oysters and shell volume are determined from the results of the VIMS-VMRC annual hydraulic patent tong survey and this information is used to determine what areas are in the most in need of shell. If the mean volume of shell observed in the fall survey does not fall below 5 liters per square meter, a reasonable degree of productivity can be maintained. Maintaining areas at a mean shell volume closer to 10 liters per square meter or above is ideal.

Most of the harvest areas in the Chesapeake Bay and tributaries are experiencing a period of relatively consistent and high to moderate recruitment. However, there is strong evidence to suggest that extreme weather events, such as those seen in 2018, could become more frequent, resulting in the possibility of localized high oyster mortality and low recruitment. Replenishment should continue in areas that are determined to need additional substrate. This will prevent further substrate degradation of the public ground that is opened to harvest and provide an additional buffer for localized high mortality events and low spat sets should they occur. In addition, should a good spat set occur, more substrate will be available for spat to settle on and the areas will be able to more quickly recover from harvest or unpredictable natural causes.

The majority of the replenishment specific General Funds appropriation for FY2026 will be used for adding new shell to those areas in most need of shell and/or those that have been recently opened to public oyster harvest. Some restoration General Funds will be used to maintain or expand sanctuary areas. Funds for oyster replenishment are not likely to be enough to maintain the public beds at maximum productivity but will be used to maintain a minimum volume of shell, as observed in the fall survey, above 5 liters per square meter where possible and practical, with a goal of maintaining 10 liters per square meter or more. In Table 1 there is a list of all of the areas and acreages of oyster beds that VIMS-VMRC survey indicate to be in need of shell in 2026. In total, more than 6,000 acres of bottom need replenishment, based on shell volume. However, a considerable portion of the locations most in need of replenishment are in the upper James River and are not practical or feasible to replenish on a large scale. These areas should continue to be monitored to assess their decline.

The SMD will seek to plant the largest quantity of comparable shells for the lowest area dependent per-unit price. This will likely be a combination of house, reef and dredged shells. There are currently two locations permitted for hydraulic shell dredging (reef shells), one in the lower James River and a second location in the vicinity of the Craney Island Eastward Expansion. The estimated per bushel cost range is \$2.50 - \$5.50/bushel planted. Cost may vary depending on individual locations and contract size.

Proposed Project	600 – 800 acres of oyster shell restoration @ 750-1,000 bushels/acre @ \$2.50 - \$5.50/bushel
Estimated Cost	\$2,500,000-\$4,000,000
Funding Sources	GF

**Eastern Shore:**

The SMD and The Nature Conservancy (TNC) have consistently collaborated on Seaside replenishment and restoration efforts. Last year, for the sixth year in a row, TNC funds were used on areas both closed and open to harvest. The SMD will contract for shell planting for a Nature Conservancy project, assist with the site selection, and shell planting monitoring. If funding allows, additional locations will be planted using General Funds for restoration.

Up to 30 acres will be planted with shells harvested from local shell deposits or purchased from local sources. The estimated per bushel cost range is \$2.50 - \$5.50/bushel planted. Cost may vary depending on individual locations and contract size.

Proposed Project	Up to 30 acres @ 2,000 to 10,000 bushels of shells/acre @ \$2.50-\$5.50/bushel
Estimated Cost	Up to \$425,000
Funding Sources	NGF and GF (restoration)

**ALTERNATIVE CULTCH PROJECTS:**

The supply of shell for restoration, replenishment, and aquaculture will always be limited. The demand for shells in most years tends to be higher than the supply leading to increasing prices. For over a decade now, SMD and other restoration partners have begun using alternative substrate in certain areas. Non-harvest locations have been planted with larger sized substrate and harvest areas have been planted with a smaller sized material. Not all areas are suitable for planting with stone or concrete. The bottom needs to be firmer than areas that can be planted with shell.

The SMD has identified a number of locations that could have suitable bottom for alternative

cultch plantings. These areas tend to have sandier bottoms and low oyster densities. VMRC has existing permits (JPAs) for several locations. The locations would be near the Deep Rock Area, several locations in the Rappahannock, the Lower James River near Nansemond Ridge, and the lower Pocomoke Sound adjacent to Onancock Rock. Only a small portion of the permitted areas would be planted at any given time. If issues with acquiring shell arise, these areas could be expanded as needed and as suitable for planting.

In addition to these harvest areas, VMRC, in partnership with NOAA, USACE and other NGOs, will continue alternative cultch projects that will primarily focus on the restoration of non-harvest areas. Current efforts are focused in the Mobjack Bay but may expand to include additional locations in the Rappahannock River and the Pocomoke and Tangier Sound. The SMD will continue to carefully select locations in these areas for alternative substrate planting that will minimize potential user conflict. The intent is to create “new oyster reefs” that will have multiple benefits to adjacent areas, through improved water quality, increased fish habitat, and oyster larval transport to both public and private ground. The estimated per ton cost range is \$50.00-\$90.00/ton planted. Cost may vary depending on individual locations and contract size.

Proposed Project	0-100 acres @250 tons/acre @ \$50.00-\$90.00/ton Up to 100 acres @ 250-1000 tons/acre
Estimated Cost	\$750,000-\$4,500,000
Funding Sources	GF Restoration and Replenishment, Federal, Non- General Fund

**Summary of proposed projects and costs for oyster replenishment and restoration for 2026.**

Proposed Project	Estimated Cost	Funding Sources
Seed Oysters - Up to 20,000 bushels @ \$7.00-\$15.00/bu.	\$300,000	NGF and GF (Replenishment)
Shell Planting - 600 – 800 acres of oyster shell restoration @ 1,000-750 bushels/acre @ \$2.50 - \$5.50/bushel	\$2,500,000	GF Replenishment
	\$0-\$1,500,000	GF Restoration
Eastern Shore Shell Planting	\$425,000	GF Restoration and TNC
Alternative Cultch Projects: 0-50 acres @250 tons/acre @ \$50.00-\$90.00/ton Up to 100 acres @ 250-1000 tons/acre	\$500,000-	GF Restoration and Replenishment and Federal
	\$4,500,000	

**Attachments:**

1. Procurement Procedures
2. Table 1 Summary of existing potential areas in need of oyster replenishment and restoration activity.
3. Table 2 List of all areas surveyed in 2025 and summary information.
4. Table 3 Summary of “new” areas for proposed restoration and replenishment projects.

## **APPROVAL OF PROCUREMENT ACTIVITY FOR THE 2026 OYSTER REPLENISHMENT PROGRAM:**

### General:

Certain aspects of the procurement of seed, shell, and replenishment services differ from the Commonwealth's standard procurement procedures and therefore must be documented and approved by the Commission. The Commission will be exercising this option under Section 28.2-550 of the Code of Virginia.

This section of the Code states that:

*“C. The Commission, when it makes a determination in writing that competitive bidding or competitive negotiation is not feasible or fiscally advantageous to the Commonwealth, may authorize other methods of purchasing and contracting for seed oysters, house shells, reef shells, shell bed turning, and other goods and services for oyster ground replenishment, which are in the best interest of the Commonwealth and which are fair and impartial to suppliers. It may establish pricing for its award and purchases; use selection methods by lot; and open, close, and revise its purchases according to changing conditions of the natural resources, markets, and sources of supply.”*

For the harvest and movement of wild seed oysters the Commission will set the per bushel price to be paid. For the production of oyster eyed larvae, the Commission will set a price per million larvae. Public notices will be posted, and all interested parties may apply. Selection of contractors will be according to the lottery method.

The Commission will also set the price for the purchase of house shells. The prices are currently estimated to be \$2.00 per bushel for conch shells, \$2.50 per bushel for clam shells, and \$3.00 per bushel of oyster shells at the shucking house. Loading, transporting, and planting costs will be set by the Commission based on handling costs, the type of activity, and the distance for transporting to the activity sites. Letters were sent to all licensed shucking houses inquiring as to the availability of shell. All houses that responded positively will provide shells to the 2026 program until the total dollar limit for this activity is met. If funds are sufficient, all available house shells in the state will be purchased for the Oyster Replenishment Program. If funding sources do not allow the purchase of the entire shell market, house shell contracts and/or contract amounts will be based on geographical location, mobilization cost, and shell planting locations, which provide the greatest benefit to the oyster industry and to the Commonwealth.

The Commission may also set the price per ton for ground concrete or granite stone that will be used as alternative cultch material. Loading, transporting, and planting costs for this material will be set by the Commission based on handling costs, the type of activity, and the distance for transporting to the activity sites. Public Notices will be posted, and all interested parties may apply. Contractors will be selected by lottery or allowed to provide the material until the project is completed.

The agency anticipates that all other 2026 oyster replenishment activities will be

completed using the Invitation for Bid or Request for Proposal process in accordance with the Virginia Public Procurement Act.

If the condition of the oyster resource changes, or if the Conservation and Replenishment Department Head encounter unanticipated/unscheduled situations with the Oyster Replenishment Program, planned procurement activities may be changed, and one or more of the alternative methods of procurement listed above may be utilized to facilitate the completion of the 2026 Replenishment Program.

**APPROVAL, BY THE COMMISSION, OF THE REPLENISHMENT PLAN WILL ALSO INCLUDE APPROVAL OF THE PROCUREMENT METHODS MENTIONED ABOVE.**

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<b>Table 1. Summary of potential areas of oyster replenishment and</b>			
	<b>Acreage</b>	<b>Bushels Needed (1,000)</b>	<b>Cost Estimate (\$4/bu)</b>
Total Most in Need of Replenishment (Shell Volume less than 5L)	3,969	3,969,000	\$ 15,876,000
Total in Need of Replenishment (Shell volume less than 10L)	6,639	6,639,000	\$ 26,556,000
<b>Total Targeted*</b>	<b>417</b>	<b>417,000</b>	<b>\$ 1,668,000</b>
*Cost based on Shell Only			
*Does not include total acreage for Wreck or Offshore Jail			

<b>COLOR LEGEND</b>	
Most in need	Shell volume less than 5L
In need	Shell volume less than 10L
unless open to harvest	Shell volume greater than 10L
New Area	

**Table 2. Areas available for oyster replenishment and restoration activity for the 2026 Oyster Replenishment Plan.**

**Notes:**

- The cost estimate is based on average estimated price of \$4 per bushel for shell
- These are average prices based on a range of work that has been conducted in the past, the price paid will vary depending on location and the size of the project.
- The average markets and Brown Shell Volume are derived from the annual VIMS/VMRC Joint oyster assessment survey.
- Areas are targeted based on criteria outlined in the ORP that include brown shell volume and open harvest status, this incorporates the input of SMAC and the Commission.

Area Name	Average Number of Markets	Average Brown Shell Volume (L)	Acreage	Minium Bushels Needed (750 bu/acre)	Maximum Bushels Needed (1,000 bu/ac)	Cost Estimate	Notes (S=Sanctuary, H=Harvest Area, O=Open Area 25/26, T=Target for 2026 planting,
<b>James River</b>							
UPPER JAIL ISLAND	1.2	0.9	612	459,000	612,000	\$2,448,000	H,O
LOWER JAIL ISLAND	4.4	1.4	150	112,500	150,000	\$600,000	H,O
OFFSHORE SWASH	1.3	1.6	641	480,750	641,000	\$2,564,000	H,O
SWASH MUD SLOUGH	2.6	1.8	1,230	922,500	1,230,000	\$4,920,000	H,O
OFFSHORE JAIL ISLAND	5.3	3.5	1,017	762,750	1,017,000	\$4,068,000	H,O,T
MULBERRY POINT	2.3	4.4	48	36,000	48,000	\$192,000	H,O
WRECK INSHORE	11.8	5.7	585	438,750	585,000	\$2,340,000	S,O,T
SWASH	4.8	5.8	201	150,750	201,000	\$804,000	H,O
DAYS POINT	3.1	6.3	275	206,250	275,000	\$1,100,000	H,O
NANSEMOND RIDGE	9.6	8.4	100	75,000	100,000	\$400,000	H,O
DOG SHOAL UPPER	14.0	8.7	35	26,250	35,000	\$140,000	H,O
LONG ROCK also Cross Rock	8.0	9.4	41	30,750	41,000	\$164,000	H,O
THOMAS ROCK UPPER	22.0	9.5	93	69,750	93,000	\$372,000	H,O
HOTEL ROCK	6.3	9.8	14	10,500	14,000	\$56,000	H,O
BALLARD'S MARSH	18.0	10.0	78	58,500	78,000	\$312,000	H,O
DOG SHOAL LOWER	21.0	10.6	35	26,250	35,000	\$140,000	H,O
Upper Brown Shoal	23.0	11.6	23	17,250	23,000	\$92,000	H,O
SHANTY ROCK	16.0	12.0	3	2,250	3,000	\$12,000	H,O
THOMAS ROCK LOWER	19.4	12.0	93	69,750	93,000	\$372,000	H,O
HIGH SHOAL	16.6	14.0	44	33,000	44,000	\$176,000	H,O
V-ROCK	19.1	14.0	76	57,000	76,000	\$304,000	H,O
Lower Brown Shoal	24.1	14.1	82	61,500	82,000	\$328,000	H,O
MIDDLE HORSEHEAD	43.5	15.1	44	33,000	44,000	\$176,000	H,O
DRY LUMPS	34.0	15.3	6	4,500	6,000	\$24,000	H,O
CRUISER'S SHOAL	16.0	15.7	55	41,250	55,000	\$220,000	H,O

POINT OF SHOALS	40.0	15.8	155	116,250	155,000	\$620,000	H,O
LOWER HORSEHEAD	12.4	15.8	21	15,750	21,000	\$84,000	H,O
LOWER DEEP WATER SHOAL	37.5	16.3	20	15,000	20,000	\$80,000	H,O
SNYDER'S ROCK	16.0	16.7	9	6,750	9,000	\$36,000	H,O
UPPER DEEP WATER SHOAL	71.9	16.7	313	234,750	313,000	\$1,252,000	H,O
White Shoal	32.6	17.4	26	19,500	26,000	\$104,000	H,O
TRIANGLE ROCK	39.3	18.0	7	5,250	7,000	\$28,000	H,O
MOON ROCK	23.3	20.0	3	2,250	3,000	\$12,000	H,O
UPPER HORSEHEAD	36.3	26.3	5	3,750	5,000	\$20,000	H,O

Area Name	Average Number of Markets	Average Brown Shell Volume (L)	Acreage	Minium Bushels Needed (750 bu/acre)	Maximum Bushels Needed (1,000 bu/ac)	Cost Estimate	Notes (S=Sanctuary, H=Harvest Area, O=Open Area 25/26, T=Target for 2026 planting,
<b>York and Mobjack</b>							
Sarah's Creek 2	4.2	2.0	14	10,500	14,000	\$56,000	H,O
Tow Stake West	2.0	2.0	3	2,250	3,000	\$12,000	H,O,T
Tow Stake East	3.0	2.8	6	4,500	6,000	\$24,000	H,O,T
Timberneck	3.8	5.6	47	35,250	47,000	\$188,000	H,O
PULTZ BAR	11.3	5.8	14	10,500	14,000	\$56,000	H,O,T
Brown's Bay #1	12.6	5.9	83	62,250	83,000	\$332,000	S
Sarah's Creek 1	9.2	6.8	9	6,750	9,000	\$36,000	S
Aberdeen Rock	10.0	7.8	45	33,750	45,000	\$180,000	H,O,T
Pages Rock	7.4	9.6	116	87,000	116,000	\$464,000	H,O
Brown's Bay #2	8.5	10.3	22	16,500	22,000	\$88,000	S
Indian Field PG 2	11.8	10.5	1	750	1,000	\$4,000	S
Cheatham PG 1	7.5	12.3	2	1,500	2,000	\$8,000	S

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<b>Piankatank/Deep Rock</b>							
DOCS VIEW	0.0	0.2	1	750	1,000	\$4,000	S
THOMPSONS	1.0	0.3	1	750	1,000	\$4,000	S
PALACE BAR B also PALACE BA	1.7	1.4	7	5,250	7,000	\$28,000	S
SHIPLEYS EDGE	1.0	2.2	1	750	1,000	\$4,000	S
Iron Point Reef - TNC	1.8	2.4	4	3,000	4,000	\$16,000	S
Fishing Point	4.7	3.1	2	1,500	2,000	\$8,000	S
STOVE POINT	5.8	3.8	5	3,750	5,000	\$20,000	S
Heron Rock NOAA Stone Plant	7.5	4.1	13	9,750	13,000	\$52,000	S
COBBS CREEK	3.7	5.0	4	3,000	4,000	\$16,000	S
HERON ROCK	7.4	6.4	13	9,750	13,000	\$52,000	S
BLAND POINT	5.4	6.6	11	8,250	11,000	\$44,000	H,O
Bland Point NOAA Stone Plant	6.5	7.8	11	8,250	11,000	\$44,000	S
GINNEY POINT	8.8	7.9	4	3,000	4,000	\$16,000	H,O
Palace Bar NOAA Stone Plant	5.7	8.1	9	6,750	9,000	\$36,000	S
HILLS BAY	1.5	9.1	5	3,750	5,000	\$20,000	S
DEEP ROCK 4	16.2	9.1	8	6,000	8,000	\$32,000	S
PALACE BAR also PALACE BAR	6.6	9.7	38	28,500	38,000	\$152,000	H
BURTON POINT B	24.3	10.0	8	6,000	8,000	\$32,000	S
Stove Point NOAA Stone Plant	12.0	10.1	9	6,750	9,000	\$36,000	S
Ginney Point NOAA Stone Plant	16.6	10.7	6	4,500	6,000	\$24,000	S
BEVERLYS 4	18.0	11.0	15	11,250	15,000	\$60,000	S
BEVERLYS 1	18.0	11.0	14	10,500	14,000	\$56,000	S
Cape Toon NOAA Stone Plant	13.7	11.2	5	3,750	5,000	\$20,000	S
CAPE TUNE	3.8	11.8	41	30,750	41,000	\$164,000	H,O
ISLAND BAR	8.7	13.3	5	3,750	5,000	\$20,000	S
Island Bar NOAA Stone Plant	14.3	13.7	2	1,500	2,000	\$8,000	S

BURTON POINT	10.9	14.7	39	29,250	39,000	\$156,000	H,O
THREE BRANCHES	25.0	16.0	1	750	1,000	\$4,000	H
Burton Point NOAA Stone Plant	22.3	17.8	16	12,000	16,000	\$64,000	H
DEEP ROCK	34.0	18.0	38	28,500	38,000	\$152,000	S
MILFORD HAVEN	50.0	18.7	1	750	1,000	\$4,000	H
BEVERLYS 2	35.0	19.8	7	5,250	7,000	\$28,000	H
BEVERLYS 3	52.0	21.3	7	5,250	7,000	\$28,000	H

Area Name	Average Number of Markets	Average Brown Shell Volume (L)	Acreage	Minium Bushels Needed (750 bu/acre)	Maximum Bushels Needed (1,000 bu/ac)	Cost Estimate	Notes (S=Sanctuary, H=Harvest Area, O=Open Area 25/26, T=Target for 2026 planting,
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**Rappahannock River**

Drumming Ground sanctuary 2	2.5	2.5	3	2,250	3,000	\$12,000	S,T
Larson's Upper sanctuary	7.5	3.8	4	3,000	4,000	\$32,000	S,T
Corrotoman sanctuary	13.3	5.3	9	6,750	9,000	\$72,000	S,T
Temple Bay 2 (S.P. 136)	8.5	5.5	6	4,500	6,000	\$24,000	H
Mill Creek sanctuary	18.5	5.9	4	3,000	4,000	\$16,000	S,T
Mosquito Island	19.3	6.2	2	1,500	2,000	\$16,000	H
Bush Park	10.0	6.3	4	3,000	4,000	\$16,000	H,O,T
Parrot Rock sanctuary	12.0	6.7	10	7,500	10,000	\$40,000	H
Larsons Bay	10.7	7.0	2	1,500	2,000	\$8,000	S
Corrotoman Point C-2	11.6	7.2	9	6,750	9,000	\$36,000	H,O,T
Temple Bay sanctuary	13.7	7.7	9	6,750	9,000	\$36,000	S
Middle Ground	11.4	7.8	5	3,750	5,000	\$20,000	H,O,T
Little Wicks A	6.7	8.3	6	4,500	6,000	\$24,000	H,O
Butler's Hole West	11.0	8.6	7	5,250	7,000	\$28,000	H
Sturgeon Bar East (S.P. 551)	19.8	8.8	11	8,250	11,000	\$44,000	H,O,T
Punch Bowl	13.0	8.9	45	33,750	45,000	\$180,000	H,O
Parrot's Rock West	14.0	9.0	9	6,750	9,000	\$36,000	H
Parrot's Rock East	17.0	9.2	11	8,250	11,000	\$44,000	H,O

Broad Creek	10.0	9.3	16	12,000	16,000	\$64,000	H
Larson's Lower sanctuary	22.7	9.3	3	2,250	3,000	\$12,000	HS
North End S.P. 553	16.8	9.3	10	7,500	10,000	\$40,000	H
MORATTICO BAR	19.0	9.5	121	90,750	121,000	\$484,000	H,O
Sturgeon Bar West (S.P. 552)	17.7	9.7	8	6,000	8,000	\$32,000	H,O,T
Little Wicks B	15.8	9.8	7	5,250	7,000	\$28,000	H,O
Bush Park 2018 (Stone)	8.9	10.0	6	4,500	6,000	\$24,000	H
Temple Bay 4	13.3	10.0	12	9,000	12,000	\$48,000	H
Corrotoman Point C-1	14.0	10.2	8	6,000	8,000	\$32,000	H,O,T
Drumming Ground Inshore	18.5	11.0	29	21,750	29,000	\$116,000	H,O,T
Broad Creek Inshore	16.3	11.1	8	6,000	8,000	\$32,000	H
Corrotoman Point C-3	16.2	11.4	10	7,500	10,000	\$40,000	H,O,T
STOVE POINT	25.5	11.5	30	22,500	30,000	\$120,000	H,O
Lower Edge Broad Creek Middle	9.8	11.8	14	10,500	14,000	\$56,000	H
Butler's Hole gravel plant	13.2	12.0	5	3,750	5,000	\$20,000	H
Temple Bay 3	14.5	12.0	5	3,750	5,000	\$20,000	H
Spike	18.0	12.2	7	5,250	7,000	\$28,000	H
Whiting Creek	21.3	12.8	13	9,750	13,000	\$52,000	H
Butler's Hole East	17.4	13.0	6	4,500	6,000	\$24,000	H
Smokey Point	28.4	13.0	26	19,500	26,000	\$104,000	H,O
Monaskin Bluff	19.8	13.3	162	121,500	162,000	\$648,000	H,O
Drumming Ground sanctuary 1	24.8	13.5	7	5,250	7,000	\$28,000	S
Big Wicks B	32.3	13.8	24	18,000	24,000	\$96,000	H,O
Temple Bay 1 (S.P. 138)	23.0	13.8	6	4,500	6,000	\$24,000	H
Big Wicks C	24.8	14.0	24	18,000	24,000	\$96,000	H,O
Ferry Rock	30.3	14.3	4	3,000	4,000	\$16,000	H,O,T
Lower Edge Broad Creek East	19.9	14.3	18	13,500	18,000	\$72,000	H
Drumming Ground Offshore Ad	41.4	14.6	7	5,250	7,000	\$28,000	H,O
Hog House Offshore	30.5	15.0	6	4,500	6,000	\$24,000	H
Spike A	31.0	15.0	2	1,500	2,000	\$8,000	H
Spike B offshore	17.0	15.0	6	4,500	6,000	\$24,000	H
Waterview B	33.5	15.0	20	15,000	20,000	\$80,000	H,O
Waterview C	36.8	15.0	20	15,000	20,000	\$80,000	H,O

Drumming Ground Offshore	36.8	15.1	28	21,000	28,000	\$112,000	H,O
Temple Bay 5	23.3	15.5	18	13,500	18,000	\$72,000	H
Lower Sturgeon sanctuary	39.0	15.7	1	750	1,000	\$4,000	S
Lower Edge Broad Creek West	26.1	15.8	22	16,500	22,000	\$264,000	H
Upper Sturgeon sanctuary	30.0	16.0	5	3,750	5,000	\$60,000	S
Broad Creek sanctuary	33.3	16.8	8	6,000	8,000	\$32,000	S
Whitehouse West	31.6	17.6	14	10,500	14,000	\$56,000	S
Whitehouse East	48.8	18.4	13	9,750	13,000	\$52,000	S
Butler's Hole sanctuary	62.0	23.0	2	1,500	2,000	\$8,000	S
Hog House Inshore	70.5	26.8	4	3,000	4,000	\$16,000	H
<b>Area Name</b>	<b>Average Number of Markets</b>	<b>Average Brown Shell Volume (L)</b>	<b>Acreage</b>	<b>Minium Bushels Needed (750 bu/acre)</b>	<b>Maximum Bushels Needed (1,000 bu/ac)</b>	<b>Cost Estimate</b>	<b>Notes (S=Sanctuary, H=Harvest Area, O=Open Area 25/26, T=Target for 2026 planting,</b>
<b>Great Wicomico/Black Berry</b>							
VMRC 12/GW Corps 17	0.0	0.1	2	1,500	2,000	\$8,000	S
Mill Creek East	1.0	0.5	2	1,500	2,000	\$8,000	H,O
VMRC 10/GW Corps 12, 13	1.7	0.7	5	3,750	5,000	\$20,000	S
VMRC 15/GW Corps 21	4.8	2.1	3	2,250	3,000	\$12,000	S
VMRC 9/GW Corps 10	4.0	2.3	7	5,250	7,000	\$28,000	S
VMRC 8/GW Corps 9	4.4	2.3	14	10,500	14,000	\$56,000	S
ROGUE POINT	4.0	4.5	3	2,250	3,000	\$12,000	S
VMRC 11/GW Corps 14,15 & 16	5.0	4.6	14	10,500	14,000	\$56,000	S
Cockrell Creek Expansion Stone	11.5	4.8	10	7,500	10,000	\$40,000	S
SHELL BAR	9.3	6.5	18	13,500	18,000	\$72,000	H
VMRC 4/GW Corps 5	6.0	7.1	3	2,250	3,000	\$12,000	S
Rogue Point Expansion Stone 2	17.5	7.2	5	3,750	5,000	\$20,000	S
HARCUM FLATS	12.0	7.3	6	4,500	6,000	\$24,000	S
Dameron Marsh East	17.0	8.0	15	11,250	15,000	\$60,000	H,O
HAYNIE POINT	9.6	8.2	5	3,750	5,000	\$20,000	S
HILLY WASH	18.0	8.5	3	2,250	3,000	\$12,000	S

SANDY POINT	12.4	8.7	12	9,000	12,000	\$48,000	H
FLEET POINT	22.2	9.0	15	11,250	15,000	\$60,000	H,O
VMRC 1/GW Corps 1&2	13.0	9.8	6	4,500	6,000	\$24,000	S
Cockrell Creek	30.0	11.7	4	3,000	4,000	\$16,000	H,O
INGRAM'S Bay North	16.6	11.8	22	16,500	22,000	\$88,000	H,O
VMRC 16/GW Corps 22, 23 & 24	14.8	11.8	7	5,250	7,000	\$28,000	S
VMRC 13/GW Corps 18 & 19	9.5	12.0	6	4,500	6,000	\$24,000	S
VMRC 3/GW Corps 4	21.7	13.0	3	2,250	3,000	\$12,000	S
CRANES CREEK also WHALEYS	22.0	14.0	13	9,750	13,000	\$52,000	H,O
INGRAM'S Bay South	18.0	14.0	15	11,250	15,000	\$60,000	H,O
BLACKBERRY HANG	36.3	14.8	11	8,250	11,000	\$44,000	H,O
Back Yard Stone 2021	8.3	14.8	5	3,750	5,000	\$20,000	S
Shell Creek Expansion Stone 2021	13.3	15.1	5	3,750	5,000	\$20,000	S

Area Name	Average Number of Markets	Average Brown Shell Volume (L)	Acreage	Minium Bushels Needed (750 bu/acre)	Maximum Bushels Needed (1,000 bu/ac)	Cost Estimate	Notes (S=Sanctuary, H=Harvest Area, O=Open Area 25/26, T=Target for 2026 planting,
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**Tangier/Pocomoke**

Public Ground #10 H-2	1.8	0.6	21	15,750	21,000	\$84,000	H,O,T
Public Ground #10 H-1	6.3	4.0	70	52,500	70,000	\$280,000	H,O,T
PG13 H-5	4.4	4.2	19	14,250	19,000	\$76,000	H
Public Ground 11-1	4.8	4.3	37	27,750	37,000	\$24,000	H
PG17 Parker's Rock A	4.2	5.0	34	25,500	34,000	\$136,000	H,O
PG13 H-3	6.8	5.2	24	18,000	24,000	\$96,000	H
PG08-H3 California Rock	6.5	6.5	24	18,000	24,000	\$96,000	H
PG13 H-2	5.9	6.5	40	30,000	40,000	\$160,000	H
Public Ground #9 H-1	12.8	6.8	21	15,750	21,000	\$24,000	H,O
Upper Dogfish	6.5	6.8	24	18,000	24,000	\$96,000	H
PG07 H-3 Thoroughfare	13.0	7.0	26	19,500	26,000	\$104,000	H,O
PG07 H-5 Thoroughfare	13.5	7.0	9	6,750	9,000	\$36,000	H,O

PG04 Johnson's Rock	13.3	7.7	41	30,750	41,000	\$164,000	H,O
Cod Harbour	26.8	8.0	5	3,750	5,000	\$20,000	S
PG08-H1 California Rock	24.8	8.0	9	6,750	9,000	\$36,000	H
PG08-H2 California Rock	9.5	8.0	9	6,750	9,000	\$36,000	H
PG07 H-2 Thoroughfare	22.0	8.4	15	11,250	15,000	\$104,000	H,O
Public Ground #9 H-2	19.0	8.5	32	24,000	32,000	\$128,000	H,O
Island Rock	22.4	8.9	48	36,000	48,000	\$192,000	H,O
Lower Dogfish	1.7	9.0	51	38,250	51,000	\$204,000	H
PG01 Hurley's	21.3	9.0	7	5,250	7,000	\$28,000	H,O
PG05 H-1 Fox Island Rock	27.3	9.0	6	4,500	6,000	\$24,000	H,O
PG08-H4 California Rock	27.2	9.6	4	3,000	4,000	\$16,000	H
PG07 H-1 Thoroughfare	27.4	10.0	14	10,500	14,000	\$56,000	H,O
PG13 H-1	13.1	10.0	31	23,250	31,000	\$124,000	H
Byrd Rock	6.8	10.5	13	9,750	13,000	\$52,000	H,O
PG18 Onancock Rock A	15.0	10.8	10	7,500	10,000	\$40,000	H,O
PG07 H-4 Thoroughfare	30.3	12.7	4	3,000	4,000	\$16,000	H,O

**Table 3. Additional areas with planned replenishment and restoration activity for the 2026 Oyster Replenishment Plan.**

Note:  
 These are new areas that are not currently surveyed as part of the VIMS/VMRC survey.  
 The size is estimated based on past work. Adjustments may be made in the field by Division staff

Area Name	Acreage	Cost Estimate	Funding Source (GF = General Funds, NGF =Non General Funds, F =Federal)	Substrate Type (SH=Shell, A= Alternative Substrate/ Rocks, SD =Seed)
Eastern Shore Seaside	~15	\$ 200,000.00	NGF/GF	SH
Eastern Shore Bayside	~15	\$ 225,000.00	NGF/GF	SH
Mobjack Bay	~20	\$ 750,000.00	F/GF	A
Pocomoke	~40	\$ 160,000.00	GF	SH
Black Berry Hangs	~10	\$ 24,000.00	GF/NGF	SH