State Of Maryland 2022 Bond Initiative Fact Sheet

1. Name Of Project						
Hillsmere Shores Marsh Creation						
2. Senate Sponsor	3. House Sponsor					
Elfreth	D. Jones					
4. Jurisdiction (County or Baltimore City)	5. Requested Amount					
Anne Arundel County	\$109,000					
6. Purpose of Bond Initiative						
the acquisition, planning, design, construction, repair, renovation, reconstruction, site improvement, and capital equipping of a marsh and oyster habitat						
7. Matching Fund						
Requirements:	Type:					
Grant						
8. Special Provisions						
[] Historical Easement	[X] Non-Sectarian					
9. Contact Name and Title	Contact Ph#	Email Address				
Dana Jones		dana.jones@house.state.md.us				
Jennifer Carr		717-575-8214				

10. Description and Purpose of Organization (Limit length to visible area)

The mission of the Arundel Rivers Federation is to protect, preserve, and restore the South, West, and Rhode Rivers by working with local communities to achieve clean, fishable, and swimmable waterways for present and future generations. We use a science-driven, community-based approach to improve the water quality of our rivers and were not afraid to get our boots muddy. We pursue thoughtful restoration strategies to make our rivers and creeks safe for swimming and boating and to protect natural resources like fish, oysters and crabs. Our stream, wetland and shoreline projects create wildlife habitat, reduce flooding and help stop stormwater pollution. The Riverkeeper acts as the eyes, ears and voices for our local Rivers. Our organization is wholly focused on achieving our vision of clean, healthy, sustaining waterways for our local communities.

11. Description and Purpose of Project (Limit length to visible area)

This 15,000 square foot marsh will reduce pollutant loads entering the South River and Bay. The project will create new oyster habitat using oyster reef balls in the traditional living shoreline sills. The oyster balls provide habitat for a variety of aquatic fauna. The marsh itself will benefit terrapin, wading birds and other waterfowl. This innovative approach is driven by the communitys desire to make the site resilient against climate change and sea level rise while incorporating habitat and nutrient reduction. The lack of natural buffers against flooding and climate change is leaving this area increasingly vulnerable and washing out areas behind the riprap. If nothing is done, the peninsula will continually erode, requiring more costly and hardened infrastructure repairs to maintain the communitys access. This project will make the site more resilient by protecting it from storm surges and climate change. Hillsmere has committed \$13,000 to project costs.

Round all amounts to the nearest \$1,000. The totals in Items 12 (Estimated Capital Costs) and 13 (Proposed Funding Sources) must match. The proposed funding sources must not include the value of real property unless an equivalent value is shown under Estimated Capital Costs.

12. Estimated Capital Costs	
Acquisition	\$0
Design	\$35,000
Construction	\$300,000
Equipment	\$50,000
Total	\$385,000
13. Proposed Funding Sources - (List all funding source	es and amounts.)
Chesapeake Bay Trust Watershed Assistance Grant	\$32,000
Hillsmere Shores Improvement Association	\$13,000
State of Maryland Bond Initiative	\$109,000
Chesapeake Bay Trust - Anne Arundel Restoration Fund	\$231,000
Total	\$385,000

14. Project Schedule (Enter a date or one of the following in each box. N/A, TBD or Complete)									
Begin Design	n	Complete Design Bo		Begin	Begin Construction		Complete Construction		
Summer 202	1	Sumr	nmer 2022 2023				2023		
				ually at Project Serve		umber of People to be ad Annually After the ct is Complete			
13000.00	13000.00 1200 homes in Hi			in Hill	Ismere	mere 1200 homes in Hillsmere			
18. Other State Capital Grants to Recipients in the Past 15 Years									
Legislative	Sessi	ion	A	Amount		Purpose			
		-							
19. Legal Name and Address of Grantee								f Different)	
Arundel Rivers Federation, Inc P.O. Box 760 Edgewater, MD 21037			E Bay View Dr, Annapolis, MD 21403						
20. Legislative District in Which Project is Located 30A - Anne Arun					ındel County				
21. Legal Status of Grantee (Please Check One)									
Local Gov	t.]	For	Profit		Non Profit		Federal	
[]			[]	[X]			[]	
22. Grantee Legal Representative			23. If Match Includes Real Property:						
Name:			Has An Appraisal Been Done?		Yes/No				
Phone:							·	No	
Address:			If Yes, List Appraisal Dates and Value						

24. Impact of Project on Staffing and Operating Cost at Project Site								
Current # of Employees	Projected # of Employees	Curr	ent Operating Budget	Projected Operating Budget				
25. Ownership of Property (Info Requested by Treasurer's Office for bond purposes)								
A. Will the grantee own or lease (pick one) the property to be improved?								
B. If owned, does the grantee plan to sell within 15 years?								
C. Does the grantee intend to lease any portion of the property to others?								
D. If property is o	wned by grantee any sp	pace is to	be leased, provide	the followi	ing:			
	Lessee	Terms of Lease	Cost Square Covered Footage by Lease Leased					
E. If property is le	eased by grantee - Provi	ide the fo	llowing:					
Name of Leaser			Length of Lease	Options to Renew				
26. Building Square Footage:								
Current Space G	SSF							
Space to be Reno	ovated GSF							
New GSF								

27. Year of Construction of Any Structures Proposed for Renovation, Restoration or Conversion

28. Comments

This shoreline approach will have offshore segmented stone breakwaters placed in front of the existing riprap to create the new marsh. Reef balls or similar suitable substrate will line the outer rock shoreline sills to create shellfish habitat. The oyster reef that is 300 yards away should replenish the balls with spat over time. The reef balls have proven to be excellent aquatic habitats for a variety of species. Past monitoring data from the Federations tidal station 100 yards from the site has shown that Duvall Creek has adequate dissolved oxygen levels to support oysters. Along the road, conservation plantings will be installed behind the riprap in an area experiencing the most erosion from surface flow. The planting plan will be a mix of hardy species with strong root systems like switchgrass to prevent erosion and a mix of native flowering plants for pollinators. This innovative approach is driven by the community's desire to make the site more resilient against climate change and sea-level rise while incorporating habitat and nutrient reduction into the design.

This location is a high priority for the community because higher tides are washing into and over the bulkhead and riprap lining the only road leading onto the sand spit and community marina. The lack of natural buffers against flooding and climate change is leaving this area increasingly vulnerable and washing out areas behind the riprap. If nothing is done, the peninsula will continually erode, requiring more costly and hardened infrastructure and impervious surfaces to repair the peninsula and maintain the community's recreational access. A living shoreline will make the peninsula more resilient by protecting the infrastructure from storm surges and climate change in a way that is Bay-friendly. The new marsh and added oyster reef balls will serve as a habitat to support an abundance of aquatic invertebrates, fish, turtles, crabs, waterfowl, and wading birds. The tiny existing marsh area has supported Terrapin nests in the past. This project would increase the available nesting grounds. In addition, this marsh will sequester carbon from the atmosphere, absorb excess nutrients, and act as a buffer between wave action and the erodible land behind it.

The Maryland Coastal Atlas currently lists the community flood risk as very high and at a moderate risk to hazards from sea-level rise. The entire coastline of Hillsmere would be impacted by a 0 to 2-foot inundation. At 2 to 5-foot inundation, the entire sand spit peninsula and the Hillsmere Marina would be impacted. This stresses the urgency to use natural infrastructure, such as a marsh, to protect the community's marina. The marsh buffer would absorb and negate some of the harmful storm surges during these flood events and help brace the shoreline for more severe hurricane seasons.

This project is located within a subwatershed identified as the highest priority for restoration in the County's Watershed Implementation Plan. The Hillsmere community will execute a Memorandum of Understanding with Anne Arundel County that gives the County all pollution reduction credits generated by the project. In the same MOU, Hillsmere will agree to maintain the shoreline in perpetuity. In a community of over 1,200 homes, these areas provide invaluable access to enjoy and experience the Bay so Hillsmere is fully committed to this project.