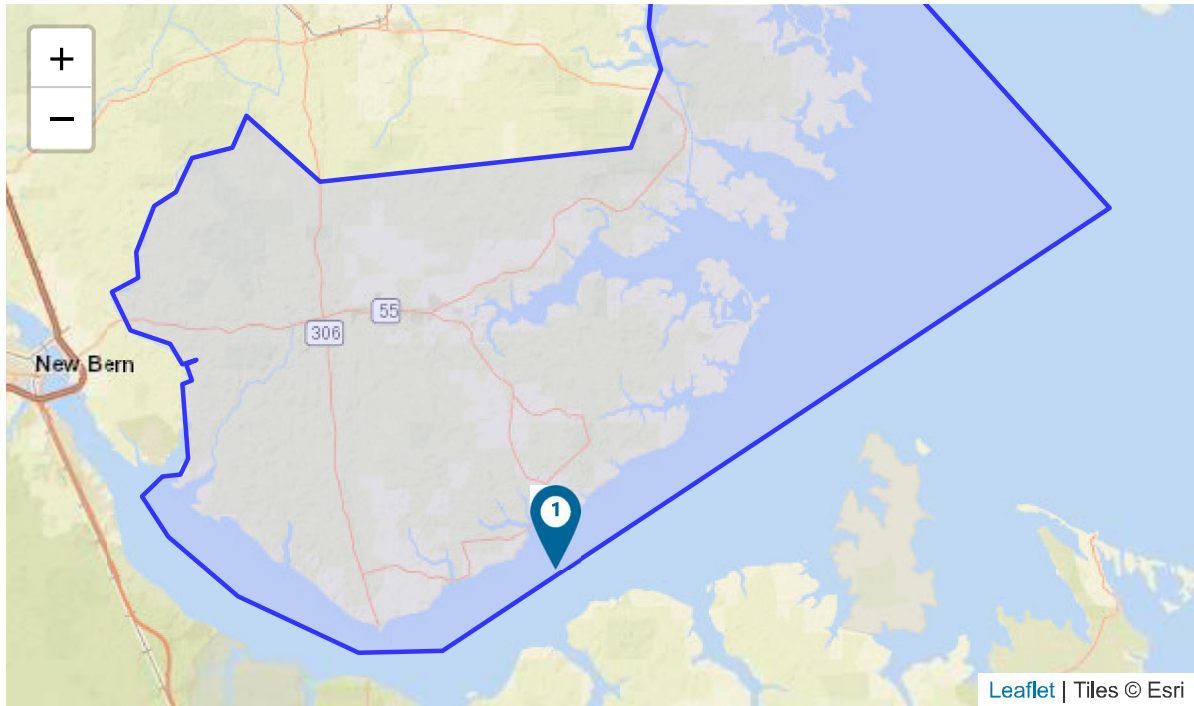




Benefit-Cost Analysis

Project Name: Bay River Metropolitan Sewer District Facultative Lagoon System Renovation and Capacity Upgrades



Map Marker	Mitigation Title	Property Type	Hazard	Using 7% Discount Rate			Using 3% Discount Rate (For FY22 BRIC and FMA only)		
				Benefits (B)	Costs (C)	BCR (B/C)	Benefits (B)	Costs (C)	BCR (B/C)
1	Other @ 35.0000000; -76.6833500		DFA - Infrastructure Failure	\$ 37,428	\$ 9,777,008	0.00	\$ 69,779	\$ 9,843,572	0.01
TOTAL (SELECTED)				\$ 37,428	\$ 9,777,008	0.00	\$ 69,779	\$ 9,843,572	0.01
TOTAL				\$ 37,428	\$ 9,777,008	0.00	\$ 69,779	\$ 9,843,572	0.01

Property Configuration

Property Title: Other @ 35.0000000; -76.6833500
Property Location: 28515, Pamlico, North Carolina
Property Coordinates: 35.000000, -076.683350
Hazard Type: Infrastructure Failure
Mitigation Action Type: Other
Property Type: Utilities
Analysis Method Type: Historical Damages

Cost Estimation

Other @ 35.0000000; -76.6833500

Project Useful Life (years): 50
Project Cost: \$9,700,000
Number of Maintenance Years: 50 Use Default:Yes
Annual Maintenance Cost: \$5,580

Damage Analysis Parameters - Damage Frequency Assessment

Other @ 35.0000000; -76.6833500

Year of Analysis was Conducted: 2022
Year Property was Built: 1984
Analysis Duration: 39 Use Default:Yes

Utilities Properties

Other @ 35.0000000; -76.6833500

Type of Service: Wastewater
Number of Customers Served: 6,780
Value of Unit of Service (\$/person/day): \$60 Use Default:Yes
Total Value of Service Per Day (\$/day): \$406,800

Historical Damages Before Mitigation

Other @ 35.0000000; -76.6833500

Damage Year	Recurrence Interval (years)	WASTEWATER Impact (days)	OPTIONAL DAMAGES			VOLUNTEER COSTS		TOTAL		
			Category 1 (\$)	Category 2 (\$)	Category 3 (\$)	Number of Volunteers	Number of Days	Damages (\$)	Current Dollars?	Inflated Damages (\$)
2018	50	0.5	0	0	0	0	0	203,400	No	203,400

Annualized Damages Before Mitigation

Other @ 35.0000000; -76.6833500

Annualized Recurrence Interval (years)	Damages and Losses (\$)	Annualized Damages and Losses (\$)
50	203,400	4,068
Sum Damages and Losses (\$)		Sum Annualized Damages and Losses (\$)
	203,400	4,068

Expected Damages After Mitigation

Other @ 35.0000000; -76.6833500

Recurrence Interval (years)	WASTEWATER	OPTIONAL DAMAGES			VOLUNTEER COSTS		TOTAL
	Impact (days)	Category 1 (\$)	Category 2 (\$)	Category 3 (\$)	Number of Volunteers	Number of Days	Damages (\$)
51	0.17	0	0	0	0	0	69,156

Annualized Damages After Mitigation

Other @ 35.0000000; -76.6833500

Annualized Recurrence Interval (years)	Damages and Losses (\$)	Annualized Damages and Losses (\$)
51	69,156	1,356
Sum Damages and Losses (\$)		Sum Annualized Damages and Losses (\$)
	69,156	1,356

Benefits-Costs Summary

Other @ 35.0000000; -76.6833500

Total Standard Mitigation Benefits: \$37,428

Total Social Benefits: \$0

Total Mitigation Project Benefits: \$37,428

Total Mitigation Project Cost: \$9,777,008

Benefit Cost Ratio - Standard: 0.00

Benefit Cost Ratio - Standard + Social: 0.00