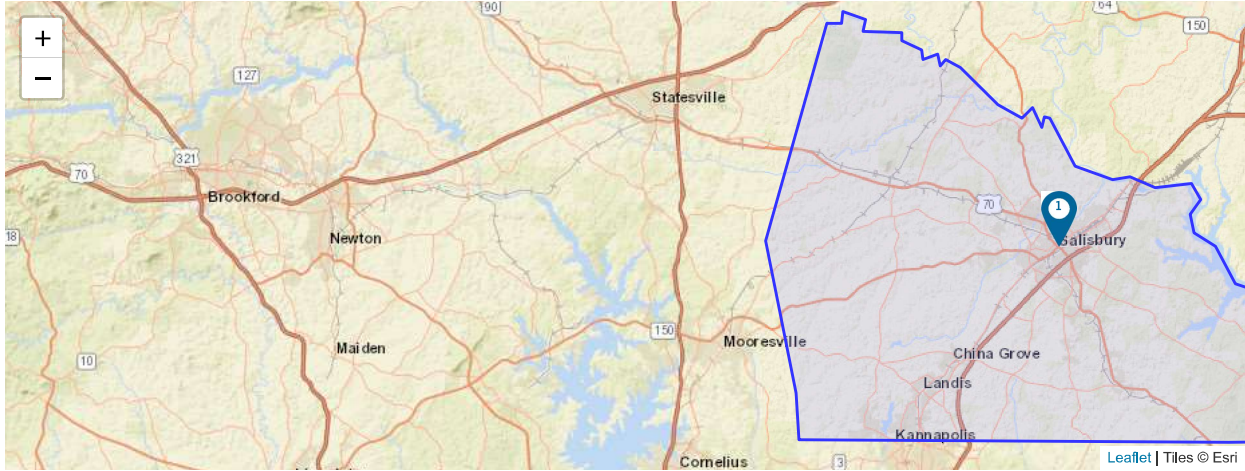




Benefit-Cost Analysis

Project Name: Salisbury Water Intake Resilience Project



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)	
▲	Other @ Salisbury, North Carolina		DFA - Riverine Flood	\$ 42,305,456	\$ 31,496,850	1.34	\$ 78,873,228	\$ 31,496,850	2.50	!
TOTAL (SELECTED)				\$ 0	\$ 0	0.00	\$ 0	\$ 0	0.00	
TOTAL				\$ 0	\$ 0	0.00	\$ 0	\$ 0	0.00	

Property Configuration

Property Title:	Other @ Salisbury, North Carolina
Property Location:	28144, Rowan, North Carolina
Property Coordinates:	35.66717, -80.46963
Hazard Type:	Riverine Flood
Mitigation Action Type:	Other
Property Type:	Utilities
Analysis Method Type:	Professional Expected Damages

Cost Estimation

Other @ Salisbury, North Carolina

Project Useful Life (years):	50
Project Cost:	\$31,496,850
Number of Maintenance Years:	50 Use Default:Yes
Annual Maintenance Cost:	\$0

Damage Analysis Parameters - Damage Frequency Assessment

Other @ Salisbury, North Carolina

Year of Analysis was Conducted:	2021
Year Property was Built:	1970
Analysis Duration:	52 Use Default:Yes

Utilities Properties

Other @ Salisbury, North Carolina

Type of Service:	Potable Water
Number of Customers Served:	38,600
Value of Unit of Service (\$/person/day):	\$116 Use Default:Yes
Total Value of Service Per Day (\$/day):	\$4,400,400

Professional Expected Damages Before Mitigation

Other @ Salisbury, North Carolina

Recurrence Interval (years)	POTABLE WATER		OPTIONAL DAMAGES			VOLUNTEER COSTS		TOTAL
	Impact (days)	Temporary Pumping	Purchased Raw Water	Facility Damages	Number of Volunteers	Number of Days	Damages (\$)	
10	0.5	5,000	26,400	0	0	0	2,231,600	
20	6	900,000	2,376,000	2,000,000	0	0	31,678,400	
50	10	1,350,000	3,564,000	4,000,000	0	0	52,918,000	
100	14	1,800,000	4,818,000	10,000,000	0	0	78,223,600	

Annualized Damages Before Mitigation

Other @ Salisbury, North Carolina

Annualized Recurrence Interval (years)	Damages and Losses (\$)	Annualized Damages and Losses (\$)
10	2,231,600	420,397
20	31,678,400	1,228,300
50	52,918,000	643,385
100	78,223,600	782,228
	Sum Damages and Losses (\$)	Sum Annualized Damages and Losses (\$)
	165,051,600	3,074,310

Professional Expected Damages After Mitigation

Other @ Salisbury, North Carolina

Recurrence Interval (years)	POTABLE WATER		OPTIONAL DAMAGES			VOLUNTEER COSTS		TOTAL
	Impact (days)	Temporary Pumping	Purchased Raw Water	Facility Damages	Number of Volunteers	Number of Days	Damages (\$)	
500	1	5,000	26,400	0	0	0	4,431,800	

Annualized Damages After Mitigation
Other @ Salisbury, North Carolina

Annualized Recurrence Interval (years)	Damages and Losses (\$)	Annualized Damages and Losses (\$)
500	4,431,800	8,863
	Sum Damages and Losses (\$)	Sum Annualized Damages and Losses (\$)
	4,431,800	8,863

Standard Benefits - Ecosystem Services
Other @ Salisbury, North Carolina

Total Project Area (acres):	0
Percentage of Urban Green Open Space:	
Percentage of Rural Green Open Space:	
Percentage of Riparian:	0.00%
Percentage of Coastal Wetlands:	
Percentage of Inland Wetlands:	
Percentage of Forests:	0.00%
Percentage of Coral Reefs:	
Percentage of Shellfish Reefs:	
Percentage of Beaches and Dunes:	
Expected Annual Ecosystem Services Benefits:	\$0

Benefits-Costs Summary
Other @ Salisbury, North Carolina

Total Standard Mitigation Benefits:	\$42,305,456
Total Social Benefits:	\$0
Total Mitigation Project Benefits:	\$42,305,456
Total Mitigation Project Cost:	\$31,496,850
Benefit Cost Ratio - Standard:	1.34
Benefit Cost Ratio - Standard + Social:	1.34