

Project Summary				
Mitigation Title	Hazard	Benefits (B)	Costs (C)	BCR (B/C)
Acquisition @ 208 Highland Ave, Lumberton, North Carolina, 28358	Riverine Flood	\$22,037	\$0	0
Floodplain and Stream Restoration @ Lumberton, North Carolina	JFA - Riverine Floo	\$3,862,702	\$2,793,897	1.38
Acquisition @ 108 Best Dr, Lumberton, North Carolina, 28358	Riverine Flood	\$61,478	\$0	0
Acquisition @ 122 Best Dr, Lumberton, North Carolina, 28358	Riverine Flood	\$9,945	\$0	0
Acquisition @ 205 Highland Ave, Lumberton, North Carolina, 28358	Riverine Flood	\$49,123	\$0	0
	Total	\$4,005,285	\$2,793,897	1.43

Property Configuration	
Property Title:	Acquisition @ 208 Highland Ave, Lumberton, North Carolina, 28358
Property Location:	28358, Robeson, North Carolina
Property Coordinates:	34.642214, -79.005419
Hazard Type:	Riverine Flood
Mitigation Action Type:	Acquisition
Property Type:	Residential Building
Analysis Method Type:	Modeled Damages

Cost Estimation		Acquisition @ 208 Highland Ave, Lumberton, North Carolina, 28358
Project Useful Life (years):	100	
Project Cost:	\$0	
Number of Maintenance Years:	100 Use Default: Yes	
Annual Maintenance Cost:	\$0	

Comments	
Mitigation Project Cost:	Total project cost and budget reflected in the 'Floodplain and Stream Restoration' mitigation action.

Hazard Probabilities Parameters		Acquisition @ 208 Highland Ave, Lumberton, North Carolina, 28358
- Flood		
Lowest Floor Elevation of the Property (ft):	126.69	
Streambed Elevation at the Property Location (ft):	115.2 Use Default Recurrence Intervals:	
Use Default:	Yes	

Comments	
Lowest Floor Elevation:	LFE derived from the NC Building Footprint dataset developed for the NC Floodplain Mapping program (fris.nc.gov)
Streambed Elevation:	Streambed elevation from HEC-RAS derived cross section dataset (from National Flood Hazard Layer)

Discharge		Acquisition @ 208 Highland Ave, Lumberton, North Carolina, 28358	
Before Mitigation			
Recurrence Interval (years)	Surface Elevation (ft)	Discharge (cfs)	
10	124.6	1060	
50	125.5	1540	
100	126.1	1730	
500	126.5	2210	
After Mitigation			
Recurrence Interval (years)	Surface Elevation (ft)	Discharge (cfs)	
10	124.6	1060	
50	125.5	1540	
100	126.1	1730	
500	126.5	2210	

Building Information		Acquisition @ 208 Highland Ave, Lumberton, North Carolina, 28358	
Building Type:	One Story		
Foundation Type:			
Building Has Basement:	No		
NFIP:	No		

Comments	
Building Type:	All building information derived from the NC Building Footprint dataset developed for the NC Floodplain Mapping program (fris.nc.gov)

Standard Benefits - Building		Acquisition @ 208 Highland Ave, Lumberton, North Carolina, 28358	
Depth Damage Curve:	USACE Generic	Use Default:	Yes
Building Size (sq.ft):	2,524		
Building Replacement Value (\$/sq.ft):	\$100	Use Default:	Yes
Demolition Threshold (%):	50.00%	Use Default:	Yes
Expected Annual Losses due to Building Damages before Mitigation:	\$807.00		
Expected Annual Losses due to Building Damages after Mitigation :	\$0.00		
Expected Annual Benefits - Building :	\$807.00		

Comments	
Building Size:	All building information derived from the NC Building Footprint dataset developed for the NC Floodplain Mapping program (fris.nc.gov)

Depth Damage Curve - Building Acquisition @ 208 Highland Ave, Lumberton, North Carolina, 28358

Flood Depth (ft)	Percent (%)	Before Mitigation Damage			After Mitigation Damage		
		Value (\$)	NFIP (\$)	ICC Fees (\$)	Value (\$)	NFIP (\$)	ICC Fees (\$)
-2	0	0	0	0	0	0	0
-1	2.5	6,310	0	0	0	0	0
0	13.4	33,821.60	0	0	0	0	0
1	23.3	58,809.20	0	0	0	0	0
2	32.1	81,020.40	0	0	0	0	0
3	40.1	101,212.40	0	0	0	0	0
4	47.1	118,880.40	0	0	0	0	0
5	53.2	252,400	0	0	0	0	0
6	58.6	252,400	0	0	0	0	0
7	63.2	252,400	0	0	0	0	0
8	67.2	252,400	0	0	0	0	0
9	70.5	252,400	0	0	0	0	0
10	73.2	252,400	0	0	0	0	0
11	75.4	252,400	0	0	0	0	0
12	77.2	252,400	0	0	0	0	0
13	78.5	252,400	0	0	0	0	0
14	79.5	252,400	0	0	0	0	0
15	80.2	252,400	0	0	0	0	0
16	80.7	252,400	0	0	0	0	0

Standard Benefits - Contents Acquisition @ 208 Highland Ave, Lumberton, North Carolina, 28358

Contents Value in Dollars:	\$0	Use Default:	Yes
Utilities Elevated:	No		
Expected Annual Losses due to Content Damages before Mitigation:	\$737.00		
Expected Annual Losses due to Content Damages after Mitigation:	\$0.00		
Expected Annual Benefits - Content:	\$737.00		

Depth Damage Curve - Contents		Acquisition @ 208 Highland Ave, Lumberton, North Carolina, 28358		
Flood Depth (ft)	Before Mitigation Damage		After Mitigation Damage	
	Percent (%)	Value (\$)	Percent (%)	Value (\$)
-2	0	0	0	0
-1	2.4	6,057.60	0	0
0	8.1	20,444.40	0	0
1	13.3	33,569.20	0	0
2	17.9	45,179.60	0	0
3	22	55,528	0	0
4	25.7	64,866.80	0	0
5	28.8	72,691.20	0	0
6	31.5	79,506	0	0
7	33.8	85,311.20	0	0
8	35.7	90,106.80	0	0
9	37.2	93,892.80	0	0
10	38.4	96,921.60	0	0
11	39.2	98,940.80	0	0
12	39.7	100,202.80	0	0
13	40	100,960	0	0
14	40	100,960	0	0
15	40	100,960	0	0
16	40	100,960	0	0

Standard Benefits - Displacement		Acquisition @ 208 Highland Ave, Lumberton, North Carolina, 28358	
Lodging Per Diem:	\$96	Use Default:	Yes
Meals Per Diem:	\$55	Use Default:	Yes
Population Affected:	0		
Total Residential Displacement Cost:	\$0		
Expected Annual Losses due to Displacement Damages before mitigation:	\$0.00		
Expected Annual Losses due to Displacement Damages after Mitigation:	\$0.00		
Expected Annual Losses - Displacement:	\$0.00		

Depth Damage Curve - Displacement		Acquisition @ 208 Highland Ave, Lumberton, North Carolina, 28358			
Flood Depth (ft)	Before Mitigation Damage		After Mitigation Damage		
	Days	Value (\$)	Days	Value (\$)	
-2	0	0	0	0	
-1	0	0	0	0	
0	0	0	0	0	
1	45	0	0	0	
2	90	0	0	0	
3	135	0	0	0	
4	180	0	0	0	
5	225	0	0	0	
6	270	0	0	0	
7	315	0	0	0	
8	360	0	0	0	
9	405	0	0	0	
10	450	0	0	0	
11	495	0	0	0	
12	540	0	0	0	
13	585	0	0	0	
14	630	0	0	0	
15	675	0	0	0	
16	720	0	0	0	

Additional Benefits - Street Maintenance		Acquisition @ 208 Highland Ave, Lumberton, North Carolina, 28358	
Total Annual Street Maintenance Budget:	\$0		
Total Number of Street Miles Maintained:	0		
Street Miles that will not require future maintenance:	0		
Expected Annual Benefits - Street Maintenance:	\$0.00		

Standard Benefits - Volunteer Costs		Acquisition @ 208 Highland Ave, Lumberton, North Carolina, 28358	
Number of Volunteers (volunteers/event):	0		
Number of Days of Lodging:	0		
Expected Annual Volunteer Benefits:	\$0		

Standard Benefits - Ecosystem Services		Acquisition @ 208 Highland Ave, Lumberton, North Carolina, 28358
Total Project Area (acres):	0	
Percentage of Green Open Space:	0.00%	
Percentage of Riparian:	0.00%	
Percentage of Wetlands:	0.00%	
Percentage of Forests:	0.00%	
Percentage of Marine Estuary:	0.00%	
Expected Annual Ecosystem Services Benefits:	\$0	

Benefits-Costs Summary		Acquisition @ 208 Highland Ave, Lumberton, North Carolina, 28358
Total Standard Mitigation Benefits:	\$22,037	
Total Social Benefits:	\$0	
Total Mitigation Project Benefits:	\$22,037	
Total Mitigation Project Cost:	\$0	
Benefit Cost Ratio - Standard:	0	
Benefit Cost Ratio - Standard + Social:	0	

Property Configuration	
Property Title:	Floodplain and Stream Restoration @ Lumberton, North Carolina
Property Location:	28358, Robeson, North Carolina
Property Coordinates:	34.61898, -79.01398
Hazard Type:	Riverine Flood
Mitigation Action Type:	Floodplain and Stream Restoration
Property Type:	Other
Analysis Method Type:	Professional Expected Damages

Cost Estimation		Floodplain and Stream Restoration @ Lumberton, North Carolina
Project Useful Life (years):	30	
Project Cost:	\$2,623,670	
Number of Maintenance Years:	30 Use Default: Yes	
Annual Maintenance Cost:	\$13,718	

Comments	
Mitigation Project Cost:	This figure represents total project budget (including costs of acquisitions listed as separate mitigation actions). Annual maintenance cost estimated at 1% total cost of green infrastructure interventions (stream restoration, wetland construction, and floodplain restoration) including cost of acquisition, demolition, and site preparation. Annual maintenance costs for recreational infrastructure is based on cost estimates from the Green Values National Stormwater Management Calculator.
Annual Maintenance Cost:	Management Calculator.

Damage Analysis Parameters - Damage Frequency Assessment		Floodplain and Stream Restoration @ Lumberton, North Carolina
Year of Analysis Conducted:	2021	
Year Property was Built:	0	
Analysis Duration:	10 Use Default:	Yes

Professional Expected Damages Before Mitigation								Floodplain and Stream Restoration @ Lumberton, North Carolina
Recurrence Interval (years)	Other Damages (\$)	Optional Damages			Volunteer Costs		Total Damages (\$)	
		Category 1 (\$)	Category 2 (\$)	Category 3 (\$)	Number of Volunteers	Number of Days		
10	0	0	0	0	0	0	0	
25	66,531	0	0	0	0	0	66,531	
100	200,872	0	0	0	0	0	200,872	

Annualized Damages Before Mitigation			Floodplain and Stream Restoration @ Lumberton, North Carolina
Annualized Recurrence Interval (years)	Damages and Losses (\$)	Annualized Damages and Losses (\$)	
10	0	0	
25	66,531	3,468	
100	200,872	2,009	

Professional Expected Damages After Mitigation								Floodplain and Stream Restoration @ Lumberton, North Carolina
Recurrence Interval (years)	Other Damages (\$)	Optional Damages			Volunteer Costs		Total Damages (\$)	
		Category 1 (\$)	Category 2 (\$)	Category 3 (\$)	Number of Volunteers	Number of Days		
10	0	0	0	0	0	0	0	
25	0	0	0	0	0	0	0	
100	0	0	0	0	0	0	0	

Annualized Damages After Mitigation			Floodplain and Stream Restoration @ Lumberton, North Carolina
Annualized Recurrence Interval (years)	Damages and Losses (\$)	Annualized Damages and Losses (\$)	
10	0	0	
25	0	0	
100	0	0	

Standard Benefits - Ecosystem Services		Floodplain and Stream Restoration @ Lumberton, North Carolina
Total Project Area (acres):	13.8	
Percentage of Green Open Space:	4.30%	
Percentage of Riparian:	52.50%	
Percentage of Wetlands:	14.70%	
Percentage of Forests:	28.50%	
Percentage of Marine Estuary:	0.00%	
Expected Annual Ecosystem Services Benefits:	\$305,804.26	

Benefits-Costs Summary		Floodplain and Stream Restoration @ Lumberton, North Carolina
Total Standard Mitigation Benefits:	\$3,862,702	
Total Social Benefits:	\$0	
Total Mitigation Project Benefits:	\$3,862,702	
Total Mitigation Project Cost:	\$2,793,897	
Benefit Cost Ratio - Standard:	1.38	
Benefit Cost Ratio - Standard + Social:	1.38	

Property Configuration	
Property Title:	Acquisition @ 108 Best Dr, Lumberton, North Carolina, 28358
Property Location:	28358, Robeson, North Carolina
Property Coordinates:	34.643558, -79.006824
Hazard Type:	Riverine Flood
Mitigation Action Type:	Acquisition
Property Type:	Residential Building
Analysis Method Type:	Modeled Damages

Cost Estimation		Acquisition @ 108 Best Dr, Lumberton, North Carolina, 28358
Project Useful Life (years):	100	
Project Cost:	\$0	
Number of Maintenance Years:	100 Use Default: Yes	
Annual Maintenance Cost:	\$0	

Comments	
Mitigation Project Cost:	Total project cost and maintenance cost reflected in the 'Floodplain and Stream Restoration' mitigation action.

Hazard Probabilities Parameters - Flood		Acquisition @ 108 Best Dr, Lumberton, North Carolina, 28358
Lowest Floor Elevation of the Property (ft):	124.8	
Streambed Elevation at the Property Location (ft):	115.2	Use Default Recurrence Intervals:
Use Default:	Yes	

Comments	
Lowest Floor Elevation:	LFE derived from the NC Building Footprint dataset developed for the NC Floodplain Mapping program (fris.nc.gov)
Streambed Elevation:	Streambed elevation from HEC-RAS derived cross section dataset (from National Flood Hazard Layer)

Discharge				Acquisition @ 108 Best Dr, Lumberton, North Carolina, 28358
Before Mitigation				
		Surface	Discharge	
Recurrence Interval (years)		Elevation (ft)	(cfs)	
10		123.6	1060	
50		125	1540	
100		125.2	1730	
500		125.7	2210	
After Mitigation				
		Surface	Discharge	
Recurrence Interval (years)		Elevation (ft)	(cfs)	
10		123.6	1060	
50		125	1540	
100		125.2	1730	
500		125.7	2210	

Building Information		Acquisition @ 108 Best Dr, Lumberton, North Carolina, 28358
Building Type:	Two or More Stories	
Foundation Type:		
Building Has Basement:	No	
NFIP:	No	

Comments	
Building Type:	All building information derived from the NC Building Footprint dataset developed for the NC Floodplain Mapping program (fris.nc.gov)

Standard Benefits - Building		Acquisition @ 108 Best Dr, Lumberton, North Carolina, 28358	
Depth Damage Curve:	USACE Generic	Use Default:	Yes
Building Size (sq.ft):	2,699		
Building Replacement Value (\$/sq.ft):	\$100	Use Default:	Yes
Demolition Threshold (%):	50.00%	Use Default:	Yes
Expected Annual Losses due to Building Damages before Mitigation:	\$2,744.00		
Expected Annual Losses due to Building Damages after Mitigation :	\$0.00		
Expected Annual Benefits - Building :	\$2,744.00		

Depth Damage Curve - Building		Acquisition @ 108 Best Dr, Lumberton, North Carolina, 28358						
Flood Depth (ft)	Percent (%)	Before Mitigation Damage			After Mitigation Damage			
		Value (\$)	NFIP (\$)	ICC Fees (\$)	Percent (%)	Value (\$)	NFIP (\$)	ICC Fees (\$)
-2	0	0	0	0	0	0	0	0
-1	3	8,097	0	0	0	0	0	0
0	9.3	25,100.70	0	0	0	0	0	0
1	15.2	41,024.79	0	0	0	0	0	0
2	20.9	56,409.10	0	0	0	0	0	0
3	26.3	70,983.70	0	0	0	0	0	0
4	31.4	84,748.59	0	0	0	0	0	0
5	36.2	97,703.80	0	0	0	0	0	0
6	40.7	109,849.30	0	0	0	0	0	0
7	44.9	121,185.09	0	0	0	0	0	0
8	48.8	131,711.19	0	0	0	0	0	0
9	52.4	269,900	0	0	0	0	0	0
10	55.7	269,900	0	0	0	0	0	0
11	58.7	269,900	0	0	0	0	0	0
12	61.4	269,900	0	0	0	0	0	0
13	63.8	269,900	0	0	0	0	0	0
14	65.9	269,900	0	0	0	0	0	0
15	67.7	269,900	0	0	0	0	0	0
16	69.2	269,900	0	0	0	0	0	0

Standard Benefits - Contents		Acquisition @ 108 Best Dr, Lumberton, North Carolina, 28358	
Contents Value in Dollars:	\$0	Use Default:	Yes
Utilities Elevated:	No		
Expected Annual Losses due to Content Damages before Mitigation:	\$1,565.00		
Expected Annual Losses due to Content Damages after Mitigation:	\$0.00		
Expected Annual Benefits - Content:	\$1,565.00		

Depth Damage Curve - Contents		Acquisition @ 108 Best Dr, Lumberton, North Carolina, 28358		
Flood Depth (ft)	Before Mitigation Damage		After Mitigation Damage	
	Percent (%)	Value (\$)	Percent (%)	Value (\$)
-2	0	0	0	0
-1	1	2,699	0	0
0	5	13,495	0	0
1	8.7	23,481.30	0	0
2	12.2	32,927.80	0	0
3	15.5	41,834.50	0	0
4	18.5	49,931.50	0	0
5	21.3	57,488.70	0	0
6	23.9	64,506.10	0	0
7	26.3	70,983.70	0	0
8	28.4	76,651.60	0	0
9	30.3	81,779.70	0	0
10	32	86,368	0	0
11	33.4	90,146.60	0	0
12	34.7	93,655.30	0	0
13	35.6	96,084.40	0	0
14	36.4	98,243.60	0	0
15	36.9	99,593.10	0	0
16	37.2	100,402.80	0	0

Standard Benefits - Displacement		Acquisition @ 108 Best Dr, Lumberton, North Carolina, 28358	
Lodging Per Diem:	\$96	Use Default:	Yes
Meals Per Diem:	\$55	Use Default:	Yes
Population Affected:	0		
Total Residential Displacement Cost:	\$0		
Expected Annual Losses due to Displacement Damages before mitigation:	\$0.00		
Expected Annual Losses due to Displacement Damages after Mitigation:	\$0.00		
Expected Annual Losses - Displacement:	\$0.00		

Depth Damage Curve - Displacement		Acquisition @ 108 Best Dr, Lumberton, North Carolina, 28358			
Flood Depth (ft)	Before Mitigation Damage		After Mitigation Damage		
	Days	Value (\$)	Days	Value (\$)	
-2	0	0	0	0	
-1	0	0	0	0	
0	0	0	0	0	
1	45	0	0	0	
2	90	0	0	0	
3	135	0	0	0	
4	180	0	0	0	
5	225	0	0	0	
6	270	0	0	0	
7	315	0	0	0	
8	360	0	0	0	
9	405	0	0	0	
10	450	0	0	0	
11	495	0	0	0	
12	540	0	0	0	
13	585	0	0	0	
14	630	0	0	0	
15	675	0	0	0	
16	720	0	0	0	

Additional Benefits - Street Maintenance		Acquisition @ 108 Best Dr, Lumberton, North Carolina, 28358	
Total Annual Street Maintenance Budget:	\$0		
Total Number of Street Miles Maintained:	0		
Street Miles that will not require future maintenance:	0		
Expected Annual Benefits - Street Maintenance:	\$0.00		

Standard Benefits - Volunteer Costs		Acquisition @ 108 Best Dr, Lumberton, North Carolina, 28358
Number of Volunteers (volunteers/event):	0	
Number of Days of Lodging:	0	
Expected Annual Volunteer Benefits:	\$0	

Standard Benefits - Ecosystem Services		Acquisition @ 108 Best Dr, Lumberton, North Carolina, 28358
Total Project Area (acres):	0	
Percentage of Green Open Space:	0.00%	
Percentage of Riparian:	0.00%	
Percentage of Wetlands:	0.00%	
Percentage of Forests:	0.00%	
Percentage of Marine Estuary:	0.00%	
Expected Annual Ecosystem Services Benefits:	\$0	

Benefits-Costs Summary		Acquisition @ 108 Best Dr, Lumberton, North Carolina, 28358
Total Standard Mitigation Benefits:	\$61,478	
Total Social Benefits:	\$0	
Total Mitigation Project Benefits:	\$61,478	
Total Mitigation Project Cost:	\$0	
Benefit Cost Ratio - Standard:	0	
Benefit Cost Ratio - Standard + Social:	0	

Property Configuration	
Property Title:	Acquisition @ 122 Best Dr, Lumberton, North Carolina, 28358
Property Location:	28358, Robeson, North Carolina
Property Coordinates:	34.644291, -79.007976
Hazard Type:	Riverine Flood
Mitigation Action Type:	Acquisition
Property Type:	Residential Building
Analysis Method Type:	Modeled Damages

Cost Estimation		Acquisition @ 122 Best Dr, Lumberton, North Carolina, 28358
Project Useful Life (years):	100	
Project Cost:	\$0	
Number of Maintenance Years:	100 Use Default: Yes	
Annual Maintenance Cost:	\$0	

Comments

Mitigation Project Cost: Total project cost and maintenance cost reflected in the 'Floodplain and Stream Restoration' mitigation action.

Hazard Probabilities Parameters - Flood Acquisition @ 122 Best Dr, Lumberton, North Carolina, 28358

Lowest Floor Elevation of the Property (ft): 126.1
Streambed Elevation at the Property Location (ft): 115.2 Use Default Recurrence Intervals:
Use Default: Yes

Comments

Lowest Floor Elevation: LFE derived from the NC Building Footprint dataset developed for the NC Floodplain Mapping program (fris.nc.gov)

Streambed Elevation: Streambed elevation from HEC-RAS derived cross section dataset (from National Flood Hazard Layer)

Discharge Acquisition @ 122 Best Dr, Lumberton, North Carolina, 28358

Before Mitigation		
Recurrence Interval (years)	Surface Elevation (ft)	Discharge (cfs)
10	123	1060
50	124.7	1540
100	125	1730
500	125.4	2210
After Mitigation		
Recurrence Interval (years)	Surface Elevation (ft)	Discharge (cfs)
10	123	1060
50	124.7	1540
100	125	1730
500	125.4	2210

Building Information Acquisition @ 122 Best Dr, Lumberton, North Carolina, 28358

Building Type: One Story
Foundation Type:
Building Has Basement: No
NFIP: No

Comments

Building Type: All building information derived from the NC Building Footprint dataset developed for the NC Floodplain Mapping program (fris.nc.gov)

Standard Benefits - Building		Acquisition @ 122 Best Dr, Lumberton, North Carolina, 28358	
Depth Damage Curve:	USACE Generic	Use Default:	Yes
Building Size (sq.ft):	2,261		
Building Replacement Value (\$/sq.ft):	\$100	Use Default:	Yes
Demolition Threshold (%):	50.00%	Use Default:	Yes
Expected Annual Losses due to Building Damages before Mitigation:	\$384.00		
Expected Annual Losses due to Building Damages after Mitigation :	\$0.00		
Expected Annual Benefits - Building :	\$384.00		

Depth Damage Curve - Building		Acquisition @ 122 Best Dr, Lumberton, North Carolina, 28358						
Flood Depth (ft)	Percent (%)	Before Mitigation Damage			After Mitigation Damage			
		Value (\$)	NFIP (\$)	ICC Fees (\$)	Percent (%)	Value (\$)	NFIP (\$)	ICC Fees (\$)
-2	0	0	0	0	0	0	0	0
-1	3	6,783	0	0	0	0	0	0
0	9.3	21,027.30	0	0	0	0	0	0
1	15.2	34,367.20	0	0	0	0	0	0
2	20.9	47,254.89	0	0	0	0	0	0
3	26.3	59,464.30	0	0	0	0	0	0
4	31.4	70,995.40	0	0	0	0	0	0
5	36.2	81,848.20	0	0	0	0	0	0
6	40.7	92,022.70	0	0	0	0	0	0
7	44.9	101,518.90	0	0	0	0	0	0
8	48.8	110,336.79	0	0	0	0	0	0
9	52.4	226,100	0	0	0	0	0	0
10	55.7	226,100	0	0	0	0	0	0
11	58.7	226,100	0	0	0	0	0	0
12	61.4	226,100	0	0	0	0	0	0
13	63.8	226,100	0	0	0	0	0	0
14	65.9	226,100	0	0	0	0	0	0
15	67.7	226,100	0	0	0	0	0	0
16	69.2	226,100	0	0	0	0	0	0

Standard Benefits - Contents		Acquisition @ 122 Best Dr, Lumberton, North Carolina, 28358	
Contents Value in Dollars:	\$0	Use Default:	Yes
Utilities Elevated:	No		
Expected Annual Losses due to Content Damages before Mitigation:	\$313.00		
Expected Annual Losses due to Content Damages after Mitigation:	\$0.00		
Expected Annual Benefits - Content:	\$313.00		

Depth Damage Curve - Contents		Acquisition @ 122 Best Dr, Lumberton, North Carolina, 28358		
Flood Depth (ft)	Before Mitigation Damage		After Mitigation Damage	
	Percent (%)	Value (\$)	Percent (%)	Value (\$)
-2	0	0	0	0
-1	1	2,261	0	0
0	5	11,305	0	0
1	8.7	19,670.69	0	0
2	12.2	27,584.20	0	0
3	15.5	35,045.50	0	0
4	18.5	41,828.50	0	0
5	21.3	48,159.30	0	0
6	23.9	54,037.90	0	0
7	26.3	59,464.30	0	0
8	28.4	64,212.40	0	0
9	30.3	68,508.30	0	0
10	32	72,352	0	0
11	33.4	75,517.40	0	0
12	34.7	78,456.70	0	0
13	35.6	80,491.60	0	0
14	36.4	82,300.40	0	0
15	36.9	83,430.90	0	0
16	37.2	84,109.20	0	0

Standard Benefits - Displacement		Acquisition @ 122 Best Dr, Lumberton, North Carolina, 28358	
Lodging Per Diem:	\$96	Use Default:	Yes
Meals Per Diem:	\$55	Use Default:	Yes
Population Affected:	0		
Total Residential Displacement Cost:	\$0		
Expected Annual Losses due to Displacement Damages before mitigation:	\$0.00		
Expected Annual Losses due to Displacement Damages after Mitigation:	\$0.00		
Expected Annual Losses - Displacement:	\$0.00		

Depth Damage Curve - Displacement						Acquisition @ 122 Best Dr, Lumberton, North Carolina, 28358					
Flood Depth (ft)	Before Mitigation			After Mitigation							
	Days	Damage Value (\$)		Days	Damage Value (\$)						
-2	0	0		0	0						
-1	0	0		0	0						
0	0	0		0	0						
1	45	0		0	0						
2	90	0		0	0						
3	135	0		0	0						
4	180	0		0	0						
5	225	0		0	0						
6	270	0		0	0						
7	315	0		0	0						
8	360	0		0	0						
9	405	0		0	0						
10	450	0		0	0						
11	495	0		0	0						
12	540	0		0	0						
13	585	0		0	0						
14	630	0		0	0						
15	675	0		0	0						
16	720	0		0	0						

Additional Benefits - Street Maintenance		Acquisition @ 122 Best Dr, Lumberton, North Carolina, 28358	
Total Annual Street Maintenance Budget:	\$0		
Total Number of Street Miles Maintained:	0		
Street Miles that will not require future maintenance:	0		
Expected Annual Benefits - Street Maintenance:	\$0.00		

Standard Benefits - Volunteer Costs		Acquisition @ 122 Best Dr, Lumberton, North Carolina, 28358
Number of Volunteers (volunteers/event):	0	
Number of Days of Lodging:	0	
Expected Annual Volunteer Benefits:	\$0	

Standard Benefits - Ecosystem Services		Acquisition @ 122 Best Dr, Lumberton, North Carolina, 28358
Total Project Area (acres):	0	
Percentage of Green Open Space:	0.00%	
Percentage of Riparian:	0.00%	
Percentage of Wetlands:	0.00%	
Percentage of Forests:	0.00%	
Percentage of Marine Estuary:	0.00%	
Expected Annual Ecosystem Services Benefits:	\$0	

Benefits-Costs Summary		Acquisition @ 122 Best Dr, Lumberton, North Carolina, 28358
Total Standard Mitigation Benefits:	\$9,945	
Total Social Benefits:	\$0	
Total Mitigation Project Benefits:	\$9,945	
Total Mitigation Project Cost:	\$0	
Benefit Cost Ratio - Standard:	0	
Benefit Cost Ratio - Standard + Social:	0	

Property Configuration	
Property Title:	Acquisition @ 205 Highland Ave, Lumberton, North Carolina, 28358
Property Location:	28358, Robeson, North Carolina
Property Coordinates:	34.642715, -79.005923
Hazard Type:	Riverine Flood
Mitigation Action Type:	Acquisition
Property Type:	Residential Building
Analysis Method Type:	Modeled Damages

Cost Estimation		Acquisition @ 205 Highland Ave, Lumberton, North Carolina, 28358
Project Useful Life (years):	100	
Project Cost:	\$0	
Number of Maintenance Years:	100 Use Default: Yes	
Annual Maintenance Cost:	\$0	

Comments
 Mitigation Project Cost: Total project cost and maintenance cost reflected in the 'Floodplain and Stream Restoration' mitigation action.

Hazard Probabilities Parameters - Flood Acquisition @ 205 Highland Ave, Lumberton, North Carolina, 28358

Lowest Floor Elevation of the Property (ft): 125.5

Streambed Elevation at the Property Location (ft): 115.2 Use Default Recurrence Intervals:

Use Default: Yes

Comments

Lowest Floor Elevation: LFE derived from the NC Building Footprint dataset developed for the NC Floodplain Mapping program (fris.nc.gov)

Streambed Elevation: Streambed elevation from HEC-RAS derived cross section dataset (from National Flood Hazard Layer)

Discharge Acquisition @ 205 Highland Ave, Lumberton, North Carolina, 28358

Before Mitigation		
Recurrence Interval (years)	Surface Elevation (ft)	Discharge (cfs)
10	124.3	1060
50	125.4	1540
100	125.6	1730
500	126.1	2210
After Mitigation		
Recurrence Interval (years)	Surface Elevation (ft)	Discharge (cfs)
10	124.3	1060
50	125.4	1540
100	125.6	1730
500	126.1	2210

Building Information Acquisition @ 205 Highland Ave, Lumberton, North Carolina, 28358

Building Type: One Story

Foundation Type:

Building Has Basement: No

NFIP: No

Comments

Building Type: All building information derived from the NC Building Footprint dataset developed for the NC Floodplain Mapping program (fris.nc.gov)

Standard Benefits - Building		Acquisition @ 205 Highland Ave, Lumberton, North Carolina, 28358	
Depth Damage Curve:	USACE Generic	Use Default:	Yes
Building Size (sq.ft):	1,859		
Building Replacement Value (\$/sq.ft):	\$100	Use Default:	Yes
Demolition Threshold (%):	50.00%	Use Default:	Yes
Expected Annual Losses due to Building Damages before Mitigation:	\$1,918.00		
Expected Annual Losses due to Building Damages after Mitigation :	\$0.00		
Expected Annual Benefits - Building :	\$1,918.00		

Depth Damage Curve - Building		Acquisition @ 205 Highland Ave, Lumberton, North Carolina, 28358						
Flood Depth (ft)	Percent (%)	Before Mitigation Damage			After Mitigation Damage			
		Value (\$)	NFIP (\$)	ICC Fees (\$)	Percent (%)	Value (\$)	NFIP (\$)	ICC Fees (\$)
-2	0	0	0	0	0	0	0	0
-1	2.5	4,647.50	0	0	0	0	0	0
0	13.4	24,910.60	0	0	0	0	0	0
1	23.3	43,314.70	0	0	0	0	0	0
2	32.1	59,673.90	0	0	0	0	0	0
3	40.1	74,545.90	0	0	0	0	0	0
4	47.1	87,558.90	0	0	0	0	0	0
5	53.2	185,900	0	0	0	0	0	0
6	58.6	185,900	0	0	0	0	0	0
7	63.2	185,900	0	0	0	0	0	0
8	67.2	185,900	0	0	0	0	0	0
9	70.5	185,900	0	0	0	0	0	0
10	73.2	185,900	0	0	0	0	0	0
11	75.4	185,900	0	0	0	0	0	0
12	77.2	185,900	0	0	0	0	0	0
13	78.5	185,900	0	0	0	0	0	0
14	79.5	185,900	0	0	0	0	0	0
15	80.2	185,900	0	0	0	0	0	0
16	80.7	185,900	0	0	0	0	0	0

Standard Benefits - Contents		Acquisition @ 205 Highland Ave, Lumberton, North Carolina, 28358	
Contents Value in Dollars:	\$0	Use Default:	Yes
Utilities Elevated:	No		
Expected Annual Losses due to Content Damages before Mitigation:	\$1,524.00		
Expected Annual Losses due to Content Damages after Mitigation:	\$0.00		
Expected Annual Benefits - Content:	\$1,524.00		

Depth Damage Curve - Contents		Acquisition @ 205 Highland Ave, Lumberton, North Carolina, 28358		
Flood Depth (ft)	Before Mitigation Damage		After Mitigation Damage	
	Percent (%)	Value (\$)	Percent (%)	Value (\$)
-2	0	0	0	0
-1	2.4	4,461.60	0	0
0	8.1	15,057.90	0	0
1	13.3	24,724.70	0	0
2	17.9	33,276.10	0	0
3	22	40,898	0	0
4	25.7	47,776.30	0	0
5	28.8	53,539.20	0	0
6	31.5	58,558.50	0	0
7	33.8	62,834.19	0	0
8	35.7	66,366.30	0	0
9	37.2	69,154.80	0	0
10	38.4	71,385.60	0	0
11	39.2	72,872.80	0	0
12	39.7	73,802.30	0	0
13	40	74,360	0	0
14	40	74,360	0	0
15	40	74,360	0	0
16	40	74,360	0	0

Standard Benefits - Displacement		Acquisition @ 205 Highland Ave, Lumberton, North Carolina, 28358	
Lodging Per Diem:	\$96	Use Default:	Yes
Meals Per Diem:	\$55	Use Default:	Yes
Population Affected:	0		
Total Residential Displacement Cost:	\$0		
Expected Annual Losses due to Displacement Damages before mitigation:	\$0.00		
Expected Annual Losses due to Displacement Damages after Mitigation:	\$0.00		
Expected Annual Losses - Displacement:	\$0.00		

Depth Damage Curve - Displacement		Acquisition @ 205 Highland Ave, Lumberton, North Carolina, 28358			
Flood Depth (ft)	Before Mitigation Damage		After Mitigation Damage		
	Days	Value (\$)	Days	Value (\$)	
-2	0	0	0	0	
-1	0	0	0	0	
0	0	0	0	0	
1	45	0	0	0	
2	90	0	0	0	
3	135	0	0	0	
4	180	0	0	0	
5	225	0	0	0	
6	270	0	0	0	
7	315	0	0	0	
8	360	0	0	0	
9	405	0	0	0	
10	450	0	0	0	
11	495	0	0	0	
12	540	0	0	0	
13	585	0	0	0	
14	630	0	0	0	
15	675	0	0	0	
16	720	0	0	0	

Additional Benefits - Street Maintenance		Acquisition @ 205 Highland Ave, Lumberton, North Carolina, 28358	
Total Annual Street Maintenance Budget:	\$0		
Total Number of Street Miles Maintained:	0		
Street Miles that will not require future maintenance:	0		
Expected Annual Benefits - Street Maintenance:	\$0.00		

Standard Benefits - Volunteer Costs		Acquisition @ 205 Highland Ave, Lumberton, North Carolina, 28358
Number of Volunteers (volunteers/event):	0	
Number of Days of Lodging:	0	
Expected Annual Volunteer Benefits:	\$0	

Standard Benefits - Ecosystem Services		Acquisition @ 205 Highland Ave, Lumberton, North Carolina, 28358
Total Project Area (acres):	0	
Percentage of Green Open Space:	0.00%	
Percentage of Riparian:	0.00%	
Percentage of Wetlands:	0.00%	
Percentage of Forests:	0.00%	
Percentage of Marine Estuary:	0.00%	
Expected Annual Ecosystem Services Benefits:	\$0	

Benefits-Costs Summary		Acquisition @ 205 Highland Ave, Lumberton, North Carolina, 28358
Total Standard Mitigation Benefits:	\$49,123	
Total Social Benefits:	\$0	
Total Mitigation Project Benefits:	\$49,123	
Total Mitigation Project Cost:	\$0	
Benefit Cost Ratio - Standard:	0	
Benefit Cost Ratio - Standard + Social:	0	