

2023 COASTAL MASTER PLAN

COMMUNITY FACT SHEETS

ATTACHMENT F5

REPORT: VERSION 03 DATE: APRIL 2023





COASTAL PROTECTION AND RESTORATION AUTHORITY 150 TERRACE AVENUE BATON ROUGE, LA 70802 WWW.COASTAL.LA.GOV

COASTAL PROTECTION AND RESTORATION AUTHORITY

This document was developed in support of the 2023 Coastal Master Plan being prepared by the Coastal Protection and Restoration Authority (CPRA). CPRA was established by the Louisiana Legislature in response to Hurricanes Katrina and Rita through Act 8 of the First Extraordinary Session of 2005. Act 8 of the First Extraordinary Session of 2005 expanded the membership, duties, and responsibilities of CPRA and charged the new authority to develop and implement a comprehensive coastal protection plan, consisting of a master plan (revised every six years) and annual plans. CPRA's mandate is to develop, implement, and enforce a comprehensive coastal protection and restoration master plan.

CITATION

Coastal Protection and Restoration Authority. (2023). 2023 Coastal Master Plan: Attachment F5: Community Fact Sheets. Version 3. (pp. 1-61). Baton Rouge, Louisiana: Coastal Protection and Restoration Authority.

TABLE OF CONTENTS

ABBEVILLE AREA
BELLE CHASSE AREA
BOOTHVILLE-VENICE AREA
CAMERON/CREOLE AREA10
CHALMETTE AREA
CHAUVIN AREA
DESTRAHAN AREA16
DONALDSONVILLE AREA
FRANKLIN AREA
GALLIANO AREA
GONZALES AREA
GRAND CHENIER AREA
GRAND ISLE AREA
HOUMA AREA
JENNINGS AREA
LAFITTE AREA
LAKE CHARLES AREA
LAPLACE AREA
LULING/BOUTTE AREA
MANDEVILLE AREA
MORGAN CITY AREA
NEW IBERIA AREA
NEW ORLEANS AREA
PONTCHATOULA AREA
PORT SULPHUR AREA
RACELAND AREA
SLIDELL AREA
THIBODAUX AREA
VACHERIE AREA60

ABBEVILLE AREA





Community Location

Iberia Parish; Vermilion Parish -

Path to Risk Reduction

Storm surge-based flooding damage can be reduced through the implementation of structural and nonstructural risk reduction strategies. Structural strategies include large flood control structures such as levees, floodgates, and floodwalls.

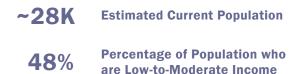
Nonstructural risk reduction strategies such as elevating homes, such as those outlined below can significantly reduce the cost of damages from events. Assuming a flood depth with a **1% annual exceedance probability (AEP) under initial conditions**, in Abbeville Area there are:

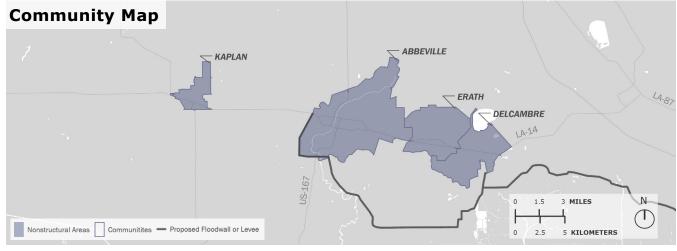
720	commercial properties identified as candidates for floodproofing
2.8K	residential properties identified as candidates for being elevated, and

2 residential properties identified as candidates for voluntary acquisition.

If 100% of identified properties implement nonstructural mitigation efforts, expected annual dollar damages (EADD) at **year 50** could be reduced by 38% under the lower scenario, and by 35% under the higher scenario in a **future without action** at a cost of \$600M.

If the master plan is fully implemented, a portion of the above risk would be reduced due to both restoration and structural risk reduction projects. Under this **future with master plan**, any remaining residual surge-based flood risk could be reduced by an additional 10% under the lower scenario, and 17% under the higher scenario.





2023 COASTAL MASTER PLAN

ABBEVILLE AREA - PAGE 1 OF 2

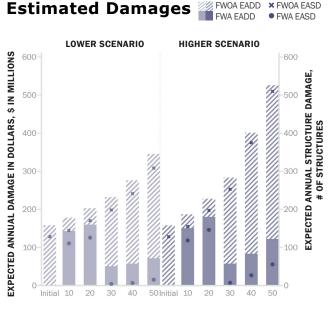


Economic Damage

Risk reduction projects are evaluated by how much they reduce Expected Annual Damage in terms of dollars (EADD) and structures (EASD). EADD takes into account both the potential economic damage from storms and the overall frequency of such storms occurring; it is a summary measure and is averaged over the entire

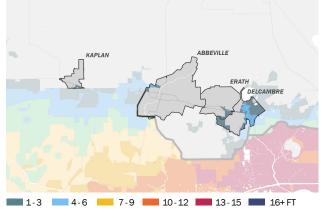
FWOA EADD

× FWOA EASD



With Structural Risk Reduction and Restoration projects only.

Damage Reduction



Structural Risk Reduction

Map: Flood Depths, Future With Action, 1% Annual Exceedance Probability, Lower Scenario, Year 50

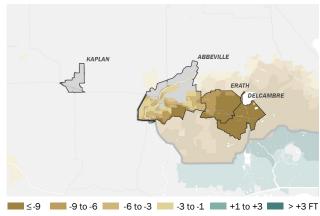
distribution of possible flood events included in the master plan analysis. EASD is calculated in the same way as EADD, however it removes some economic factors that are tied to property values so that the results are agnostic to assumptions around initial property value assessments.

Flood Risk In Project Area

Coastal Louisiana communities are at risk of storm surge-based flooding and environmental and climate changes are expected to increase risk over time. While implementing structural risk reduction and restoration projects can reduce risk and damages, communities will still face some residual risk from these events.

	Initial Conditions	FWOA (YR20/50)	FWA (YR20/50)	Losses Avoided (YR20/50)
Lower Scenario				
EADD (\$)	160M	200M/350M	160M/71M	43M/270M
EASD (#Structures)	130	170/310	130/15	45/290
Higher Scenario				
EADD (\$)	160M	230M/530M	180M/120M	48M/400M
EASD (#Structures)	130	200/510	150/56	51/450

All values are rounded to two significant figures. Losses Avoided may not equal the difference between FWOA and FWA. See Estimated Damages figure.



Structural Risk Reduction

2023 COASTAL MASTER PLAN

BELLE CHASSE AREA

RISK REDUCTION STRATEGIES

Community Location

Plaquemines Parish -

Path to Risk Reduction

Storm surge-based flooding damage can be reduced through the implementation of structural and nonstructural risk reduction strategies. Structural strategies include large flood control structures such as levees, floodgates, and floodwalls.

Nonstructural risk reduction strategies such as elevating homes, such as those outlined below can significantly reduce the cost of damages from events. Assuming a flood depth with a **1% annual exceedance probability (AEP) under initial conditions**, in Belle Chasse Area there are:

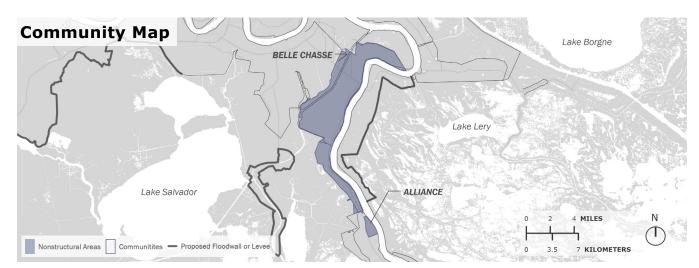
180	commercial properties identified as candidates for floodproofing
31	residential properties identified as candidates for being elevated, and
1	residential properties identified as candidates for voluntary acquisition.

If 100% of identified properties implement nonstructural mitigation efforts, expected annual dollar damages (EADD) at **year 50** could be reduced by 6% under the lower scenario, and by 3% under the higher scenario in a **future without action** at a cost of \$28M.

If the master plan is fully implemented, a portion of the above risk would be reduced due to both restoration and structural risk reduction projects. Under this **future with master plan**, any remaining residual surge-based flood risk could be reduced by an additional 6% under the lower scenario, and 3% under the higher scenario.

~17K Estimated Current Population

30% Percentage of Population who are Low-to-Moderate Income

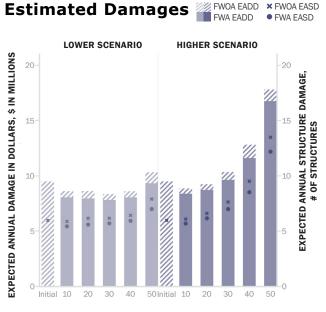






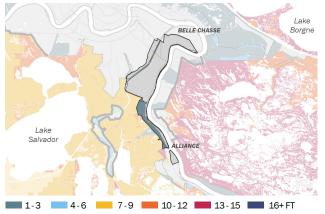
Economic Damage

Risk reduction projects are evaluated by how much they reduce Expected Annual Damage in terms of dollars (EADD) and structures (EASD). EADD takes into account both the potential economic damage from storms and the overall frequency of such storms occurring; it is a summary measure and is averaged over the entire



With Structural Risk Reduction and Restoration projects only.

Damage Reduction



Structural Risk Reduction

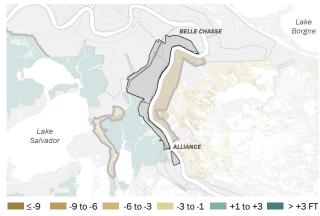
Map: Flood Depths, Future With Action, 1% Annual Exceedance Probability, Lower Scenario, Year 50 distribution of possible flood events included in the master plan analysis. EASD is calculated in the same way as EADD, however it removes some economic factors that are tied to property values so that the results are agnostic to assumptions around initial property value assessments.

Flood Risk In Project Area

Coastal Louisiana communities are at risk of storm surge-based flooding and environmental and climate changes are expected to increase risk over time. While implementing structural risk reduction and restoration projects can reduce risk and damages, communities will still face some residual risk from these events.

	Initial Conditions	FWOA (YR20/50)	FWA (YR20/50)	Losses Avoided (YR20/50)
Lower Scenario				
EADD (\$)	9.5M	8.6M/10M	8.0M/9.3M	670K/990K
EASD (#Structures) 6	6/8	6/7	1/1
Higher Scenario				
EADD (\$)	9.5M	9.2M/18M	8.7M/17M	520K/1.1M

All values are rounded to two significant figures. Losses Avoided may not equal the difference between FWOA and FWA. See Estimated Damages figure.



Structural Risk Reduction

BOOTHVILLE-VENICE AREA

RISK REDUCTION STRATEGIES



Community Location

Plaquemines Parish -

Path to Risk Reduction

Storm surge-based flooding damage can be reduced through the implementation of structural and nonstructural risk reduction strategies. Structural strategies include large flood control structures such as levees, floodgates, and floodwalls.

Nonstructural risk reduction strategies such as elevating homes, such as those outlined below can significantly reduce the cost of damages from events. Assuming a flood depth with a **1% annual exceedance probability (AEP) under initial conditions**, in Boothville-Venice Area there are:

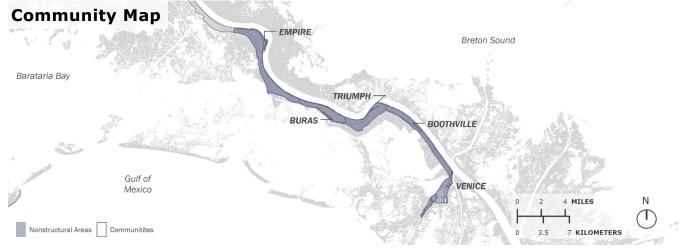
14	commercial properties identified as candidates for floodproofing
60	residential properties identified as candidates for being elevated, and
5	residential properties identified as candidates for voluntary acquisition.

If 100% of identified properties implement nonstructural mitigation efforts, expected annual dollar damages (EADD) at **year 50** could be reduced by 4% under the lower scenario, and by 4% under the higher scenario in a **future without action** at a cost of \$13M.

If the master plan is fully implemented, a portion of the above risk would be reduced due to both restoration and structural risk reduction projects. Under this **future with master plan**, any remaining residual surge-based flood risk could be reduced by an additional 4% under the lower scenario, and 4% under the higher scenario.



54%Percentage of Population who
are Low-to-Moderate Income

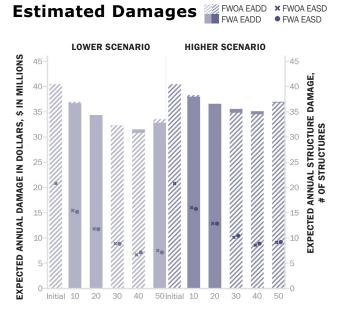


2023 COASTAL MASTER PLAN



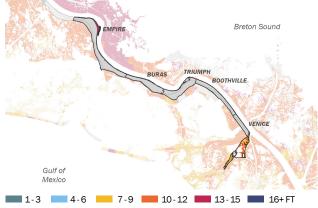
Economic Damage

Risk reduction projects are evaluated by how much they reduce Expected Annual Damage in terms of dollars (EADD) and structures (EASD). EADD takes into account both the potential economic damage from storms and the overall frequency of such storms occurring; it is a summary measure and is averaged over the entire



With Structural Risk Reduction and Restoration projects only. For some years, FWA damage is higher than FWOA damage.

Damage Reduction



Structural Risk Reduction

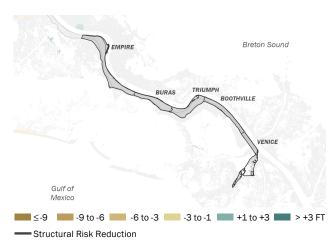
Map: Flood Depths, Future With Action, 1% Annual Exceedance Probability, Lower Scenario, Year 50 distribution of possible flood events included in the master plan analysis. EASD is calculated in the same way as EADD, however it removes some economic factors that are tied to property values so that the results are agnostic to assumptions around initial property value assessments.

Flood Risk In Project Area

Coastal Louisiana communities are at risk of storm surge-based flooding and environmental and climate changes are expected to increase risk over time. While implementing structural risk reduction and restoration projects can reduce risk and damages, communities will still face some residual risk from these events.

	Initial Conditions	FWOA (YR20/50)	FWA (YR20/50)	Losses Avoided (YR20/50)
Lower Scenario				
EADD (\$)	40M	34M/34M	34M/33M	13K/720K
EASD (#Structures)) 21	12/8	12/7	/
Higher Scenario				
EADD (\$)	40M	37M/37M	37M/37M	30K/-170K
EASD (#Structures)) 21	13/9	13/9	/

All values are rounded to two significant figures. Losses Avoided may not equal the difference between FWOA and FWA. See Estimated Damages figure.



CAMERON/CREOLE AREA

RISK REDUCTION STRATEGIES



Community Location

Cameron Parish -

Path to Risk Reduction

Storm surge-based flooding damage can be reduced through the implementation of structural and nonstructural risk reduction strategies. Structural strategies include large flood control structures such as levees, floodgates, and floodwalls.

Nonstructural risk reduction strategies such as elevating homes, such as those outlined below can significantly reduce the cost of damages from events. Assuming a flood depth with a **1% annual exceedance probability (AEP) under initial conditions**, in Cameron/Creole Area there are:

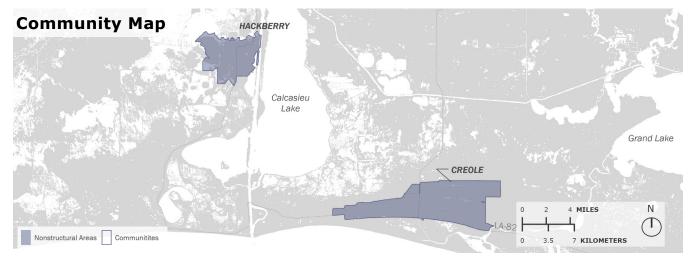
130	commercial properties identified as candidates for floodproofing
410	residential properties identified as candidates for being elevated, and
2	residential properties identified as candidates for voluntary acquisition.

If 100% of identified properties implement nonstructural mitigation efforts, expected annual dollar damages (EADD) at **year 50** could be reduced by 23% under the lower scenario, and by 20% under the higher scenario in a **future without action** at a cost of \$100M.

If the master plan is fully implemented, a portion of the above risk would be reduced due to both restoration and structural risk reduction projects. Under this **future with master plan**, any remaining residual surge-based flood risk could be reduced by an additional 24% under the lower scenario, and 21% under the higher scenario.

~1.2K Estimated Current Population Percentage of Population who

23% Percentage of Population who are Low-to-Moderate Income



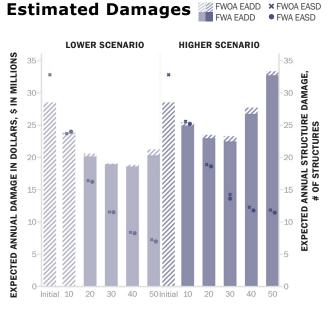
2023 COASTAL MASTER PLAN

CAMERON/CREOLE AREA - PAGE 1 OF 2



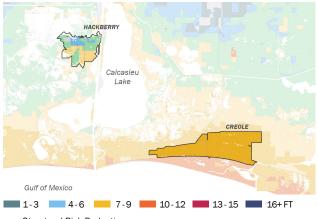
Economic Damage

Risk reduction projects are evaluated by how much they reduce Expected Annual Damage in terms of dollars (EADD) and structures (EASD). EADD takes into account both the potential economic damage from storms and the overall frequency of such storms occurring; it is a summary measure and is averaged over the entire



With Structural Risk Reduction and Restoration projects only.

Damage Reduction



Structural Risk Reduction

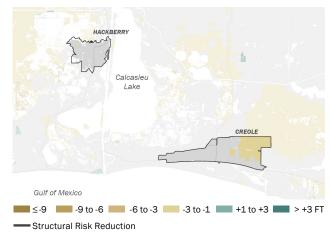
Map: Flood Depths, Future With Action, 1% Annual Exceedance Probability, Lower Scenario, Year 50 distribution of possible flood events included in the master plan analysis. EASD is calculated in the same way as EADD, however it removes some economic factors that are tied to property values so that the results are agnostic to assumptions around initial property value assessments.

Flood Risk In Project Area

Coastal Louisiana communities are at risk of storm surge-based flooding and environmental and climate changes are expected to increase risk over time. While implementing structural risk reduction and restoration projects can reduce risk and damages, communities will still face some residual risk from these events.

	Initial Conditions	FWOA (YR20/50)	FWA (YR20/50)	Losses Avoided (YR20/50)
Lower Scenario				
EADD (\$)	29M	21M/21M	20M/20M	430K/920K
EASD (#Structures	33	16/7	16/7	/
) 33	10/1	10/1	/
Higher Scenario) 33	10/7	10/1	/
	29M	24M/33M	23M/33M	540K/600K

All values are rounded to two significant figures. Losses Avoided may not equal the difference between FWOA and FWA. See Estimated Damages figure.



CHALMETTE AREA



RISK REDUCTION STRATEGIES

Community Location

St. Bernard Parish -

Path to Risk Reduction

Storm surge-based flooding damage can be reduced through the implementation of structural and nonstructural risk reduction strategies. Structural strategies include large flood control structures such as levees, floodgates, and floodwalls.

Nonstructural risk reduction strategies such as elevating homes, such as those outlined below can significantly reduce the cost of damages from events. Assuming a flood depth with a **1% annual exceedance probability (AEP) under initial conditions**, in Chalmette Area there are:

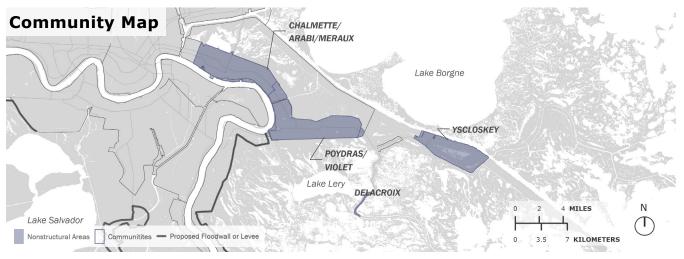
770	commercial properties identified as candidates for floodproofing
310	residential properties identified as candidates for being elevated, and
110	residential properties identified as candidates for voluntary acquisition.

If 100% of identified properties implement nonstructural mitigation efforts, expected annual dollar damages (EADD) at **year 50** could be reduced by 16% under the lower scenario, and by 13% under the higher scenario in a **future without action** at a cost of \$170M.

If the master plan is fully implemented, a portion of the above risk would be reduced due to both restoration and structural risk reduction projects. Under this **future with master plan**, any remaining residual surge-based flood risk could be reduced by an additional 16% under the lower scenario, and 13% under the higher scenario.

~44K Estimated Current Population

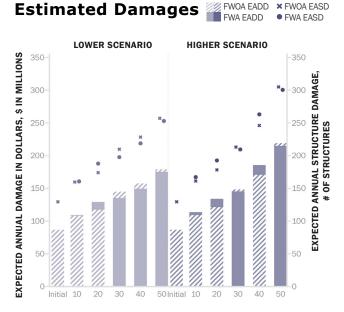
49% Percentage of Population who are Low-to-Moderate Income





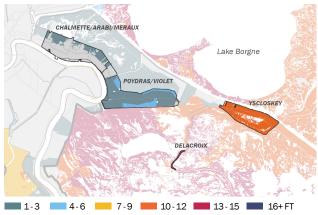
Economic Damage

Risk reduction projects are evaluated by how much they reduce Expected Annual Damage in terms of dollars (EADD) and structures (EASD). EADD takes into account both the potential economic damage from storms and the overall frequency of such storms occurring; it is a summary measure and is averaged over the entire



With Structural Risk Reduction and Restoration projects only. For some years, FWA damage is higher than FWOA damage.

Damage Reduction



Structural Risk Reduction

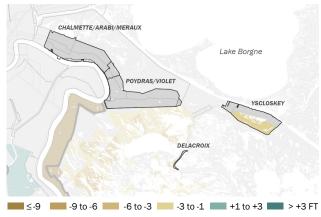
Map: Flood Depths, Future With Action, 1% Annual Exceedance Probability, Lower Scenario, Year 50 distribution of possible flood events included in the master plan analysis. EASD is calculated in the same way as EADD, however it removes some economic factors that are tied to property values so that the results are agnostic to assumptions around initial property value assessments.

Flood Risk In Project Area

Coastal Louisiana communities are at risk of storm surge-based flooding and environmental and climate changes are expected to increase risk over time. While implementing structural risk reduction and restoration projects can reduce risk and damages, communities will still face some residual risk from these events.

	Initial Conditions	FWOA (YR20/50)	FWA (YR20/50)	Losses Avoided (YR20/50)
Lower Scenario				
EADD (\$)	87M	120M/180M	130M/180M	-12M/3.6M
EASD (#Structures)	130	170/260	190/250	-14/4
Higher Scenario				
EADD (\$)	87M	120M/220M	130M/210M	-13M/4.3M
EASD (#Structures)	130	180/310	190/300	-14/4

All values are rounded to two significant figures. Losses Avoided may not equal the difference between FWOA and FWA. See Estimated Damages figure.



Structural Risk Reduction

CHAUVIN AREA



RISK REDUCTION STRATEGIES

Community Location

Lafourche Parish; Terrebonne Parish

Path to Risk Reduction

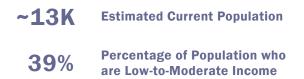
Storm surge-based flooding damage can be reduced through the implementation of structural and nonstructural risk reduction strategies. Structural strategies include large flood control structures such as levees, floodgates, and floodwalls.

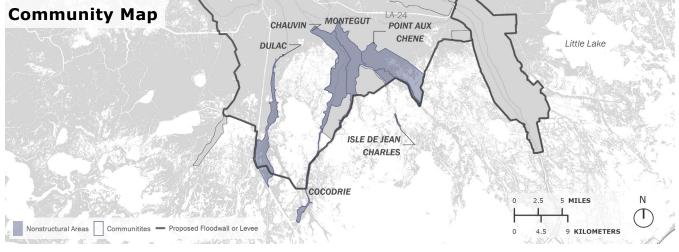
Nonstructural risk reduction strategies such as elevating homes, such as those outlined below can significantly reduce the cost of damages from events. Assuming a flood depth with a **1% annual exceedance probability (AEP) under initial conditions**, in Chauvin Area there are:

340	commercial properties identified as candidates for floodproofing
4.8K	residential properties identified as candidates for being elevated, and
57	residential properties identified as candidates for voluntary acquisition.

If 100% of identified properties implement nonstructural mitigation efforts, expected annual dollar damages (EADD) at **year 50** could be reduced by 59% under the lower scenario, and by 56% under the higher scenario in a **future without action** at a cost of \$1.1B.

If the master plan is fully implemented, a portion of the above risk would be reduced due to both restoration and structural risk reduction projects. Under this **future with master plan**, any remaining residual surge-based flood risk could be reduced by an additional 60% under the lower scenario, and 61% under the higher scenario.





CHAUVIN AREA - PAGE 1 OF 2

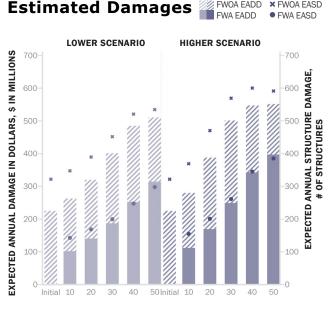


Economic Damage

Risk reduction projects are evaluated by how much they reduce Expected Annual Damage in terms of dollars (EADD) and structures (EASD). EADD takes into account both the potential economic damage from storms and the overall frequency of such storms occurring; it is a summary measure and is averaged over the entire

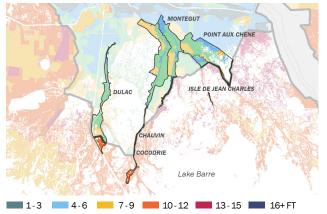
FWOA EADD

× FWOA EASD



With Structural Risk Reduction and Restoration projects only.

Damage Reduction



Structural Risk Reduction

Map: Flood Depths, Future With Action, 1% Annual Exceedance Probability, Lower Scenario, Year 50

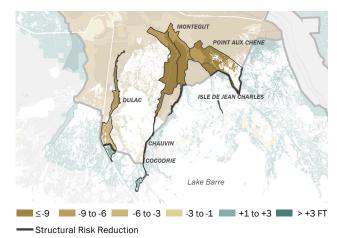
distribution of possible flood events included in the master plan analysis. EASD is calculated in the same way as EADD, however it removes some economic factors that are tied to property values so that the results are agnostic to assumptions around initial property value assessments.

Flood Risk In Project Area

Coastal Louisiana communities are at risk of storm surge-based flooding and environmental and climate changes are expected to increase risk over time. While implementing structural risk reduction and restoration projects can reduce risk and damages, communities will still face some residual risk from these events.

	Initial Conditions	FW0A (YR20/50)	FWA (YR20/50)	Losses Avoided (YR20/50)
Lower Scenario				
EADD (\$)	250M	350M/540M	150M/330M	210M/210M
EASD (#Structures)	360	430/560	180/310	260/250
Higher Scenario				
EADD (\$)	250M	420M/580M	180M/420M	250M/160M
EASD (#Structures)	360	520/620	210/400	310/220

All values are rounded to two significant figures. Losses Avoided may not equal the difference between FWOA and FWA. See Estimated Damages figure.



DESTRAHAN AREA

RISK REDUCTION STRATEGIES

Community Location

St. Charles Parish -

Path to Risk Reduction

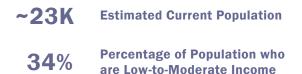
Storm surge-based flooding damage can be reduced through the implementation of structural and nonstructural risk reduction strategies. Structural strategies include large flood control structures such as levees, floodgates, and floodwalls.

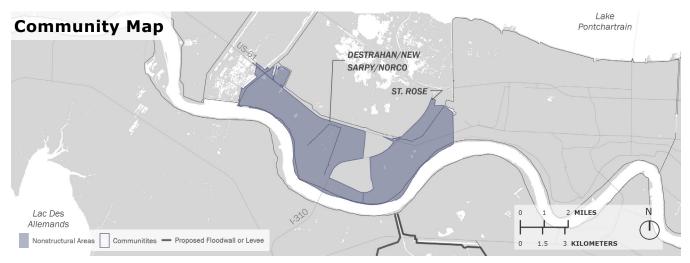
Nonstructural risk reduction strategies such as elevating homes, such as those outlined below can significantly reduce the cost of damages from events. Assuming a flood depth with a **1% annual exceedance probability (AEP) under initial conditions**, in Destrahan Area there are:

- **1.8K** commercial properties identified as candidates for floodproofing
 2.0K residential properties identified as candidates for being elevated, and residential properties identified as
 - candidates for voluntary acquisition.

If 100% of identified properties implement nonstructural mitigation efforts, expected annual dollar damages (EADD) at **year 50** could be reduced by 53% under the lower scenario, and by 53% under the higher scenario in a **future without action** at a cost of \$650M.

If the master plan is fully implemented, a portion of the above risk would be reduced due to both restoration and structural risk reduction projects. Under this **future with master plan**, any remaining residual surge-based flood risk could be reduced by an additional 53% under the lower scenario, and 53% under the higher scenario.

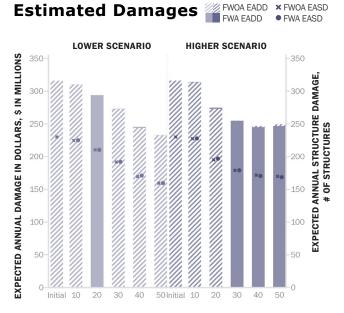






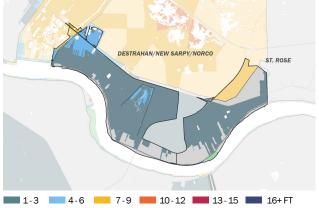
Economic Damage

Risk reduction projects are evaluated by how much they reduce Expected Annual Damage in terms of dollars (EADD) and structures (EASD). EADD takes into account both the potential economic damage from storms and the overall frequency of such storms occurring; it is a summary measure and is averaged over the entire



With Structural Risk Reduction and Restoration projects only. For some years, FWA damage is higher than FWOA damage.

Damage Reduction



Map: Flood Depths, Future With Action, 1% Annual Exceedance Probability, Lower Scenario, Year 50 $\,$

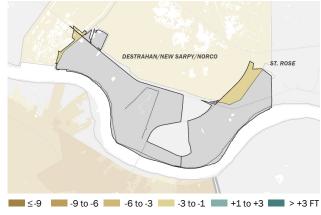
distribution of possible flood events included in the master plan analysis. EASD is calculated in the same way as EADD, however it removes some economic factors that are tied to property values so that the results are agnostic to assumptions around initial property value assessments.

Flood Risk In Project Area

Coastal Louisiana communities are at risk of storm surge-based flooding and environmental and climate changes are expected to increase risk over time. While implementing structural risk reduction and restoration projects can reduce risk and damages, communities will still face some residual risk from these events.

	Initial Conditions	FW0A (YR20/50)	FWA (YR20/50)	Losses Avoided (YR20/50)
Lower Scenario				
EADD (\$)	320M	290M/230M	290M/230M	18K/-370K
EASD (#Structures)	230	210/160	210/160	/
Higher Scenario				
EADD (\$)	320M	270M/250M	270M/250M	-2.2M/2.5M
EASD (#Structures)	230	200/170	200/170	-2/1

All values are rounded to two significant figures. Losses Avoided may not equal the difference between FWOA and FWA. See Estimated Damages figure.



Structural Risk Reduction

DONALDSONVILLE AREA

RISK REDUCTION STRATEGIES



Community Location

Ascension Parish; Assumption Parish; St. James Parish -

Path to Risk Reduction

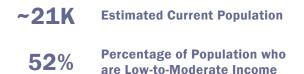
Storm surge-based flooding damage can be reduced through the implementation of structural and nonstructural risk reduction strategies. Structural strategies include large flood control structures such as levees, floodgates, and floodwalls.

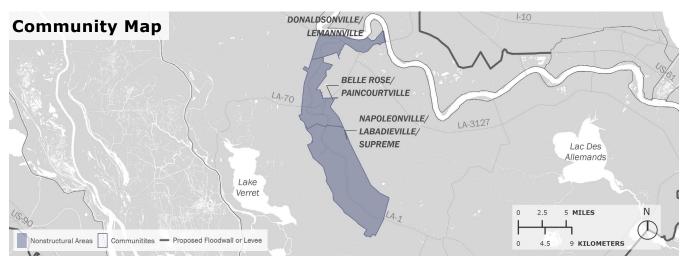
Nonstructural risk reduction strategies such as elevating homes, such as those outlined below can significantly reduce the cost of damages from events. Assuming a flood depth with a **1% annual exceedance probability (AEP) under initial conditions**, in Donaldsonville Area there are:

- **130** commercial properties identified as candidates for floodproofing
- **120** residential properties identified as candidates for being elevated, and
 - 2 residential properties identified as candidates for voluntary acquisition.

If 100% of identified properties implement nonstructural mitigation efforts, expected annual dollar damages (EADD) at **year 50** could be reduced by 3% under the lower scenario, and by 1% under the higher scenario in a **future without action** at a cost of \$38M.

If the master plan is fully implemented, a portion of the above risk would be reduced due to both restoration and structural risk reduction projects. Under this **future with master plan**, any remaining residual surge-based flood risk could be reduced by an additional 6% under the lower scenario, and 2% under the higher scenario.





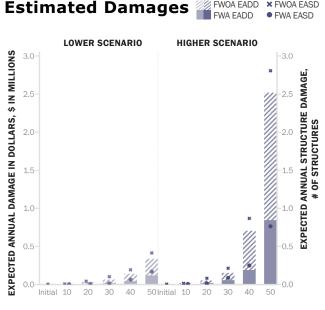


Economic Damage

Risk reduction projects are evaluated by how much they reduce Expected Annual Damage in terms of dollars (EADD) and structures (EASD). EADD takes into account both the potential economic damage from storms and the overall frequency of such storms occurring; it is a summary measure and is averaged over the entire

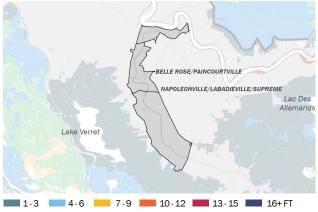
FWOA EADD

× FWOA EASD



With Structural Risk Reduction and Restoration projects only.

Damage Reduction



Structural Risk Reduction

Map: Flood Depths, Future With Action, 1% Annual Exceedance Probability, Lower Scenario, Year 50

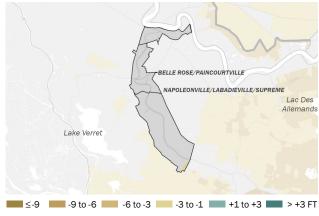
distribution of possible flood events included in the master plan analysis. EASD is calculated in the same way as EADD, however it removes some economic factors that are tied to property values so that the results are agnostic to assumptions around initial property value assessments.

Flood Risk In Project Area

Coastal Louisiana communities are at risk of storm surge-based flooding and environmental and climate changes are expected to increase risk over time. While implementing structural risk reduction and restoration projects can reduce risk and damages, communities will still face some residual risk from these events.

	Initial Conditions	FWOA (YR20/50)	FWA (YR20/50)	Losses Avoided (YR20/50)
Lower Scenario				
EADD (\$)	6.1K	31K/340K	9.0K/120K	22K/220K
EASD (#Structures)		/	/	/
Higher Scenario				
EADD (\$)	6.1K	52K/2.5M	16K/850K	35K/1.7M
EASD (#Structures)		/3	/1	/2

All values are rounded to two significant figures. Losses Avoided may not equal the difference between FWOA and FWA. See Estimated Damages figure.



Structural Risk Reduction

FRANKLIN AREA



RISK REDUCTION STRATEGIES

Community Location

Iberia Parish; St. Mary Parish ·

Path to Risk Reduction

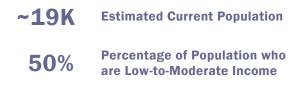
Storm surge-based flooding damage can be reduced through the implementation of structural and nonstructural risk reduction strategies. Structural strategies include large flood control structures such as levees, floodgates, and floodwalls.

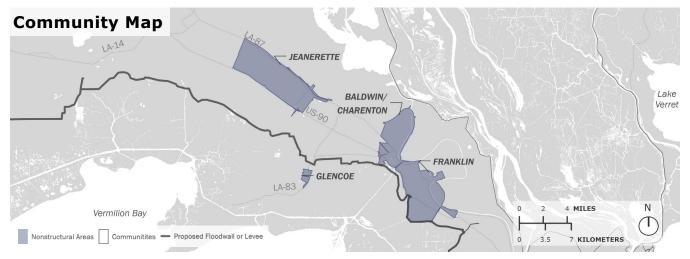
Nonstructural risk reduction strategies such as elevating homes, such as those outlined below can significantly reduce the cost of damages from events. Assuming a flood depth with a **1% annual exceedance probability (AEP) under initial conditions**, in Franklin Area there are:

670	commercial properties identified as candidates for floodproofing
2.3K	residential properties identified as candidates for being elevated, and
2	residential properties identified as candidates for voluntary acquisition.

If 100% of identified properties implement nonstructural mitigation efforts, expected annual dollar damages (EADD) at **year 50** could be reduced by 51% under the lower scenario, and by 48% under the higher scenario in a **future without action** at a cost of \$490M.

If the master plan is fully implemented, a portion of the above risk would be reduced due to both restoration and structural risk reduction projects. Under this **future with master plan**, any remaining residual surge-based flood risk could be reduced by an additional 19% under the lower scenario, and 29% under the higher scenario.





FRANKLIN AREA - PAGE 1 OF 2

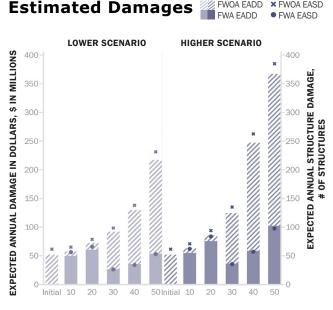


Economic Damage

Risk reduction projects are evaluated by how much they reduce Expected Annual Damage in terms of dollars (EADD) and structures (EASD). EADD takes into account both the potential economic damage from storms and the overall frequency of such storms occurring; it is a summary measure and is averaged over the entire

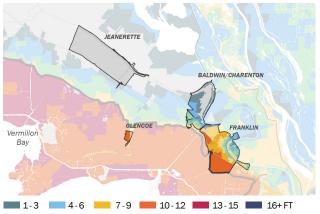
FWOA EADD

× FWOA EASD



With Structural Risk Reduction and Restoration projects only.

Damage Reduction



Structural Risk Reduction

Map: Flood Depths, Future With Action, 1% Annual Exceedance Probability, Lower Scenario, Year 50

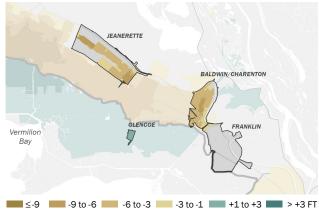
distribution of possible flood events included in the master plan analysis. EASD is calculated in the same way as EADD, however it removes some economic factors that are tied to property values so that the results are agnostic to assumptions around initial property value assessments.

Flood Risk In Project Area

Coastal Louisiana communities are at risk of storm surge-based flooding and environmental and climate changes are expected to increase risk over time. While implementing structural risk reduction and restoration projects can reduce risk and damages, communities will still face some residual risk from these events.

	Initial Conditions	FWOA (YR20/50)	FWA (YR20/50)	Losses Avoided (YR20/50)
Lower Scenario				
EADD (\$)	52M	73M/220M	61M/54M	12M/160M
EASD (#Structures) 62	79/230	66/53	13/180
Higher Scenario				
EADD (\$)	52M	85M/370M	76M/100M	9.9M/270M
EASD (#Structures) 62	94/390	84/98	10/290

All values are rounded to two significant figures. Losses Avoided may not equal the difference between FWOA and FWA. See Estimated Damages figure.



Structural Risk Reduction

GALLIANO AREA



Community Location

Lafourche Parish -

Path to Risk Reduction

Storm surge-based flooding damage can be reduced through the implementation of structural and nonstructural risk reduction strategies. Structural strategies include large flood control structures such as levees, floodgates, and floodwalls.

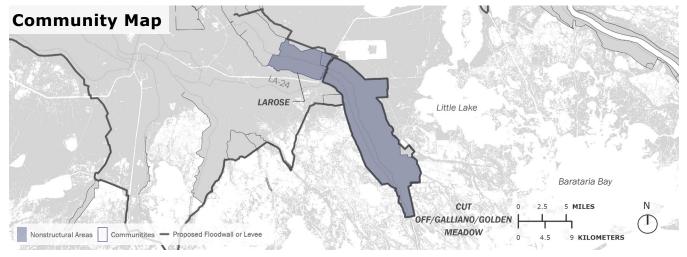
Nonstructural risk reduction strategies such as elevating homes, such as those outlined below can significantly reduce the cost of damages from events. Assuming a flood depth with a **1% annual exceedance probability (AEP) under initial conditions**, in Galliano Area there are:

180	commercial properties identified as candidates for floodproofing
1.7K	residential properties identified as candidates for being elevated, and
5	residential properties identified as candidates for voluntary acquisition.

If 100% of identified properties implement nonstructural mitigation efforts, expected annual dollar damages (EADD) at **year 50** could be reduced by 61% under the lower scenario, and by 51% under the higher scenario in a **future without action** at a cost of \$430M.

If the master plan is fully implemented, a portion of the above risk would be reduced due to both restoration and structural risk reduction projects. Under this **future with master plan**, any remaining residual surge-based flood risk could be reduced by an additional 70% under the lower scenario, and 76% under the higher scenario.

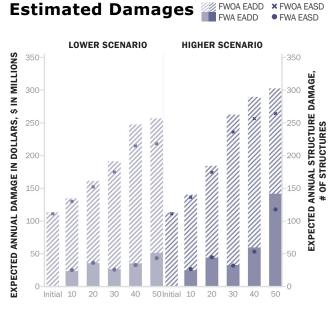
~23KEstimated Current Population37%Percentage of Population who
are Low-to-Moderate Income





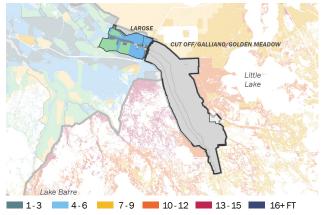
Economic Damage

Risk reduction projects are evaluated by how much they reduce Expected Annual Damage in terms of dollars (EADD) and structures (EASD). EADD takes into account both the potential economic damage from storms and the overall frequency of such storms occurring; it is a summary measure and is averaged over the entire



With Structural Risk Reduction and Restoration projects only.

Damage Reduction



Structural Risk Reduction

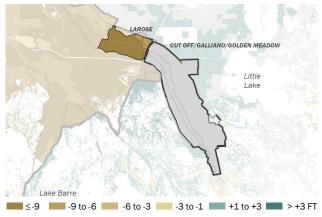
Map: Flood Depths, Future With Action, 1% Annual Exceedance Probability, Lower Scenario, Year 50 distribution of possible flood events included in the master plan analysis. EASD is calculated in the same way as EADD, however it removes some economic factors that are tied to property values so that the results are agnostic to assumptions around initial property value assessments.

Flood Risk In Project Area

Coastal Louisiana communities are at risk of storm surge-based flooding and environmental and climate changes are expected to increase risk over time. While implementing structural risk reduction and restoration projects can reduce risk and damages, communities will still face some residual risk from these events.

	Initial Conditions	FWOA (YR20/50)	FWA (YR20/50)	Losses Avoided (YR20/50)
Lower Scenario				
EADD (\$)	110M	160M/260M	36M/51M	130M/210M
EASD (#Structures)	110	150/220	36/44	120/170
Higher Scenario				
EADD (\$)	110M	180M/300M	44M/140M	140M/160M
EASD (#Structures)	110	170/260	45/120	130/150

All values are rounded to two significant figures. Losses Avoided may not equal the difference between FWOA and FWA. See Estimated Damages figure.



Structural Risk Reduction

GONZALES AREA



RISK REDUCTION STRATEGIES

Community Location

Ascension Parish; Livingston Parish

Path to Risk Reduction

Storm surge-based flooding damage can be reduced through the implementation of structural and nonstructural risk reduction strategies. Structural strategies include large flood control structures such as levees, floodgates, and floodwalls.

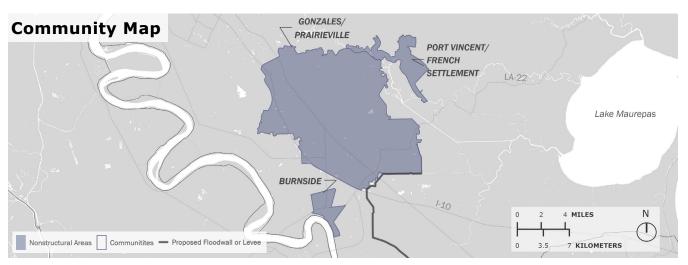
Nonstructural risk reduction strategies such as elevating homes, such as those outlined below can significantly reduce the cost of damages from events. Assuming a flood depth with a **1% annual exceedance probability (AEP) under initial conditions**, in Gonzales Area there are:

- **1.6K** commercial properties identified as candidates for floodproofing
- **1.2K** residential properties identified as candidates for being elevated, and
 - 8 residential properties identified as candidates for voluntary acquisition.

If 100% of identified properties implement nonstructural mitigation efforts, expected annual dollar damages (EADD) at **year 50** could be reduced by 20% under the lower scenario, and by 10% under the higher scenario in a **future without action** at a cost of \$410M.

If the master plan is fully implemented, a portion of the above risk would be reduced due to both restoration and structural risk reduction projects. Under this **future with master plan**, any remaining residual surge-based flood risk could be reduced by an additional 16% under the lower scenario, and 8% under the higher scenario.

~110K Estimated Current Population 30% Percentage of Population who are Low-to-Moderate Income



GONZALES AREA - PAGE 1 OF 2

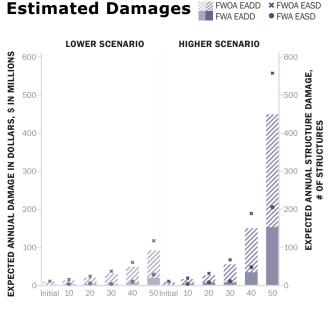


Economic Damage

Risk reduction projects are evaluated by how much they reduce Expected Annual Damage in terms of dollars (EADD) and structures (EASD). EADD takes into account both the potential economic damage from storms and the overall frequency of such storms occurring; it is a summary measure and is averaged over the entire

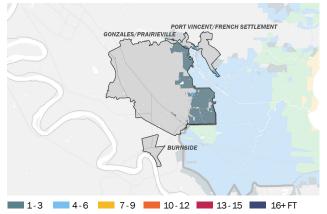
FWOA EADD

× FWOA EASD



With Structural Risk Reduction and Restoration projects only.

Damage Reduction



Structural Risk Reduction

Map: Flood Depths, Future With Action, 1% Annual Exceedance Probability, Lower Scenario, Year 50

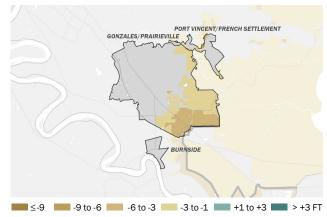
distribution of possible flood events included in the master plan analysis. EASD is calculated in the same way as EADD, however it removes some economic factors that are tied to property values so that the results are agnostic to assumptions around initial property value assessments.

Flood Risk In Project Area

Coastal Louisiana communities are at risk of storm surge-based flooding and environmental and climate changes are expected to increase risk over time. While implementing structural risk reduction and restoration projects can reduce risk and damages, communities will still face some residual risk from these events.

	Initial Conditions	FWOA (YR20/50)	FWA (YR20/50)	Losses Avoided (YR20/50)
Lower Scenario				
EADD (\$)	9.9M	21M/93M	4.9M/20M	16M/73M
EASD (#Structures) 12	25/120	6/29	19/88
Higher Scenario				
EADD (\$)	9.9M	27M/450M	7.4M/150M	20M/300M
EASD (#Structures) 12	32/560	9/210	23/350

All values are rounded to two significant figures. Losses Avoided may not equal the difference between FWOA and FWA. See Estimated Damages figure.



Structural Risk Reduction

GRAND CHENIER AREA

RISK REDUCTION STRATEGIES



Community Location

Cameron Parish -

Path to Risk Reduction

Storm surge-based flooding damage can be reduced through the implementation of structural and nonstructural risk reduction strategies. Structural strategies include large flood control structures such as levees, floodgates, and floodwalls.

Nonstructural risk reduction strategies such as elevating homes, such as those outlined below can significantly reduce the cost of damages from events. Assuming a flood depth with a **1% annual exceedance probability (AEP) under initial conditions**, in Grand Chenier Area there are:

9	commercial properties identified as candidates for floodproofing
20	residential properties identified as candidates for being elevated, and
1	residential properties identified as candidates for voluntary acquisition.

If 100% of identified properties implement nonstructural mitigation efforts, expected annual dollar damages (EADD) at **year 50** could be reduced by 25% under the lower scenario, and by 22% under the higher scenario in a **future without action** at a cost of \$6.9M.

If the master plan is fully implemented, a portion of the above risk would be reduced due to both restoration and structural risk reduction projects. Under this **future with master plan**, any remaining residual surge-based flood risk could be reduced by an additional 24% under the lower scenario, and 22% under the higher scenario.



24% Percentage of Population who are Low-to-Moderate Income



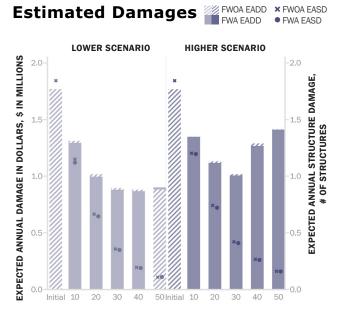
2023 COASTAL MASTER PLAN

GRAND CHENIER AREA - PAGE 1 OF 2



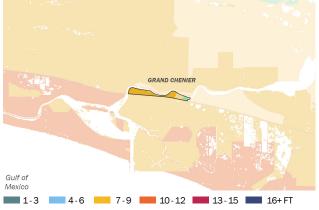
Economic Damage

Risk reduction projects are evaluated by how much they reduce Expected Annual Damage in terms of dollars (EADD) and structures (EASD). EADD takes into account both the potential economic damage from storms and the overall frequency of such storms occurring; it is a summary measure and is averaged over the entire



With Structural Risk Reduction and Restoration projects only. For some years, FWA damage is higher than FWOA damage.

Damage Reduction



Structural Risk Reduction

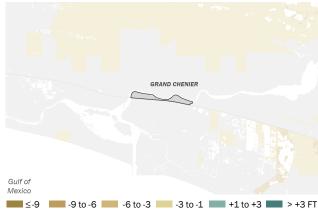
Map: Flood Depths, Future With Action, 1% Annual Exceedance Probability, Lower Scenario, Year 50 distribution of possible flood events included in the master plan analysis. EASD is calculated in the same way as EADD, however it removes some economic factors that are tied to property values so that the results are agnostic to assumptions around initial property value assessments.

Flood Risk In Project Area

Coastal Louisiana communities are at risk of storm surge-based flooding and environmental and climate changes are expected to increase risk over time. While implementing structural risk reduction and restoration projects can reduce risk and damages, communities will still face some residual risk from these events.

	Initial Conditions	FWOA (YR20/50)	FWA (YR20/50)	Losses Avoided (YR20/50)
Lower Scenario				
EADD (\$)	1.8M	1.0M/880K	1.0M/900K	21K/-17K
EASD (#Structures)	2	1/	1/	/
Higher Scenario				
EADD (\$)	1.8M	1.1M/1.4M	1.1M/1.4M	14K/1.9K
EASD (#Structures)	2	1/	1/	/

All values are rounded to two significant figures. Losses Avoided may not equal the difference between FWOA and FWA. See Estimated Damages figure.



Structural Risk Reduction

GRAND ISLE AREA

RISK REDUCTION STRATEGIES



Community Location

Jefferson Parish; Lafourche Parish

Path to Risk Reduction

Storm surge-based flooding damage can be reduced through the implementation of structural and nonstructural risk reduction strategies. Structural strategies include large flood control structures such as levees, floodgates, and floodwalls.

Nonstructural risk reduction strategies such as elevating homes, such as those outlined below can significantly reduce the cost of damages from events. Assuming a flood depth with a **1% annual exceedance probability (AEP) under initial conditions**, in Grand Isle Area there are:

170	commercial properties identified as candidates for floodproofing
770	residential properties identified as candidates for being elevated, and
14	residential properties identified as candidates for voluntary acquisition.

If 100% of identified properties implement nonstructural mitigation efforts, expected annual dollar damages (EADD) at **year 50** could be reduced by 21% under the lower scenario, and by 19% under the higher scenario in a **future without action** at a cost of \$150M.

If the master plan is fully implemented, a portion of the above risk would be reduced due to both restoration and structural risk reduction projects. Under this **future with master plan**, any remaining residual surge-based flood risk could be reduced by an additional 21% under the lower scenario, and 20% under the higher scenario.



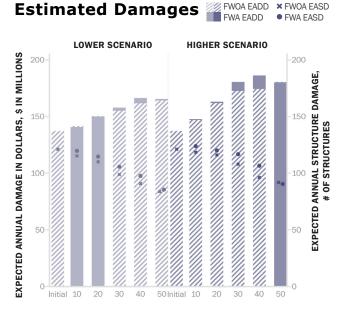
41% Percentage of Population who are Low-to-Moderate Income

Community Map Barataria Bay LEEVILLE GRAND ISLE Caminada Bay PORT FOURCHON Gulf of Mexico Timbalier Bay Ν 4 MILES Terrebonne Bav Nonstructural Areas Communitites - Proposed Floodwall or Levee 3.5 7 KILOMETERS 2023 COASTAL MASTER PLAN GRAND ISLE AREA - PAGE 1 OF 2



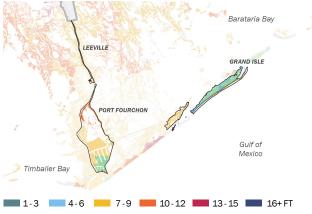
Economic Damage

Risk reduction projects are evaluated by how much they reduce Expected Annual Damage in terms of dollars (EADD) and structures (EASD). EADD takes into account both the potential economic damage from storms and the overall frequency of such storms occurring; it is a summary measure and is averaged over the entire



With Structural Risk Reduction and Restoration projects only. For some years, FWA damage is higher than FWOA damage.

Damage Reduction



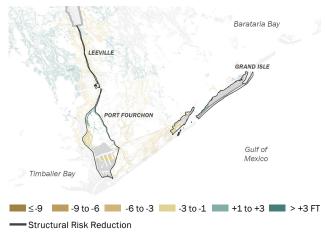
Map: Flood Depths, Future With Action, 1% Annual Exceedance Probability, Lower Scenario, Year 50 distribution of possible flood events included in the master plan analysis. EASD is calculated in the same way as EADD, however it removes some economic factors that are tied to property values so that the results are agnostic to assumptions around initial property value assessments.

Flood Risk In Project Area

Coastal Louisiana communities are at risk of storm surge-based flooding and environmental and climate changes are expected to increase risk over time. While implementing structural risk reduction and restoration projects can reduce risk and damages, communities will still face some residual risk from these events.

	Initial Conditions	FWOA (YR20/50)	FWA (YR20/50)	Losses Avoided (YR20/50)
Lower Scenario				
EADD (\$)	140M	150M/160M	150M/170M	590K/-1.2M
EASD (#Structures)) 120	110/84	110/86	-5/-2
Higher Scenario				
EADD (\$)	140M	160M/180M	160M/180M	-1.1M/380K
EASD (#Structures)) 120	120/92	120/91	-4/1

All values are rounded to two significant figures. Losses Avoided may not equal the difference between FWOA and FWA. See Estimated Damages figure.



HOUMA AREA





Community Location

Lafourche Parish; Terrebonne Parish

Path to Risk Reduction

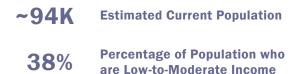
Storm surge-based flooding damage can be reduced through the implementation of structural and nonstructural risk reduction strategies. Structural strategies include large flood control structures such as levees, floodgates, and floodwalls.

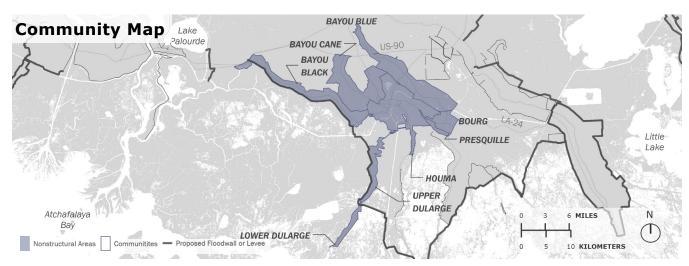
Nonstructural risk reduction strategies such as elevating homes, such as those outlined below can significantly reduce the cost of damages from events. Assuming a flood depth with a **1% annual exceedance probability (AEP) under initial conditions**, in Houma Area there are:

4.3K commercial properties identified as candidates for floodproofing
6.9K residential properties identified as candidates for being elevated, and residential properties identified as candidates for voluntary acquisition.

If 100% of identified properties implement nonstructural mitigation efforts, expected annual dollar damages (EADD) at **year 50** could be reduced by 48% under the lower scenario, and by 39% under the higher scenario in a **future without action** at a cost of \$1.8B.

If the master plan is fully implemented, a portion of the above risk would be reduced due to both restoration and structural risk reduction projects. Under this **future with master plan**, any remaining residual surge-based flood risk could be reduced by an additional 56% under the lower scenario, and 57% under the higher scenario.







Economic Damage

Risk reduction projects are evaluated by how much they reduce Expected Annual Damage in terms of dollars (EADD) and structures (EASD). EADD takes into account both the potential economic damage from storms and the overall frequency of such storms occurring; it is a summary measure and is averaged over the entire



EXPECTED ANNUAL DAMAGE IN DOLLARS, \$ IN MILLIONS EXPECTED ANNUAL STRUCTURE DAMAGE **OF STRUCTURES**

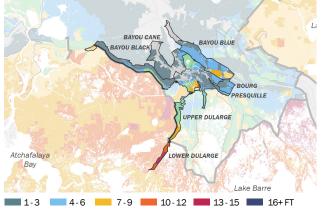
50 Initial 10

20 30 40 50

40 With Structural Risk Reduction and Restoration projects only.

Damage Reduction

20 30



Structural Risk Reduction

Map: Flood Depths, Future With Action, 1% Annual Exceedance Probability, Lower Scenario, Year 50

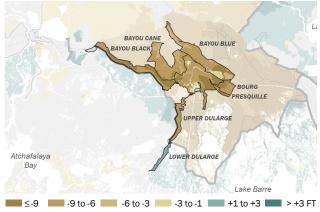
distribution of possible flood events included in the master plan analysis. EASD is calculated in the same way as EADD, however it removes some economic factors that are tied to property values so that the results are agnostic to assumptions around initial property value assessments.

Flood Risk In Project Area

Coastal Louisiana communities are at risk of storm surge-based flooding and environmental and climate changes are expected to increase risk over time. While implementing structural risk reduction and restoration projects can reduce risk and damages, communities will still face some residual risk from these events.

	Initial Conditions	FWOA (YR20/50)	FWA (YR20/50)	Losses Avoided (YR20/50)
Lower Scenario				
EADD (\$)	360M	860M/3.3B	260M/1.0B	600M/2.2B
EASD (#Structures)	360	840/3.2K	220/1.1K	620/2.1K
Higher Scenario				
EADD (\$)	360M	1.1B/5.9B	330M/2.4B	740M/3.5B
EASD (#Structures)	360	1.0K/5.5K	290/2.5K	750/3.1K

All values are rounded to two significant figures. Losses Avoided may not equal the difference between FWOA and FWA. See Estimated Damages figure.



Structural Risk Reduction

JENNINGS AREA





Community Location

Acadia Parish; Jefferson Davis Parish; Vermilion Parish -

Path to Risk Reduction

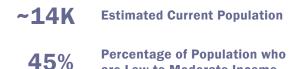
Storm surge-based flooding damage can be reduced through the implementation of structural and nonstructural risk reduction strategies. Structural strategies include large flood control structures such as levees, floodgates, and floodwalls.

Nonstructural risk reduction strategies such as elevating homes, such as those outlined below can significantly reduce the cost of damages from events. Assuming a flood depth with a 1% annual exceedance probability (AEP) under initial conditions, in Jennings Area there are:

160	commercial properties identified as candidates for floodproofing
76	residential properties identified as candidates for being elevated, and
	residential properties identified as candidates for voluntary acquisition.

If 100% of identified properties implement nonstructural mitigation efforts, expected annual dollar damages (EADD) at year 50 could be reduced by 10% under the lower scenario, and by 3% under the higher scenario in a future without action at a cost of \$32M.

If the master plan is fully implemented, a portion of the above risk would be reduced due to both restoration and structural risk reduction projects. Under this future with master plan, any remaining residual surge-based flood risk could be reduced by an additional 13% under the lower scenario, and 3% under the higher scenario.



are Low-to-Moderate Income

Community Map IFNNINGS MERMENTAU LAKE ARTHUR **GUEYDAN** Ν 4 MILES LA-14 Nonstructural Areas Communitites - Proposed Floodwall or Levee 3.5 7 KILOMETERS

2023 COASTAL MASTER PLAN

JENNINGS AREA - PAGE 1 OF 2



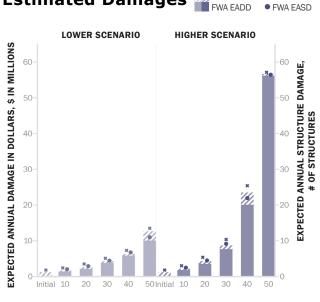
Economic Damage

Estimated Damages

Risk reduction projects are evaluated by how much they reduce Expected Annual Damage in terms of dollars (EADD) and structures (EASD). EADD takes into account both the potential economic damage from storms and the overall frequency of such storms occurring; it is a summary measure and is averaged over the entire

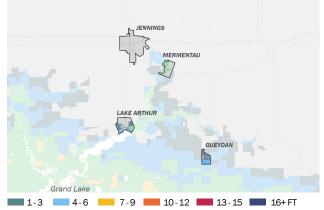
FWOA EADD

× FWOA EASD



With Structural Risk Reduction and Restoration projects only.

Damage Reduction



Structural Risk Reduction

Map: Flood Depths, Future With Action, 1% Annual Exceedance Probability, Lower Scenario, Year 50 $\,$

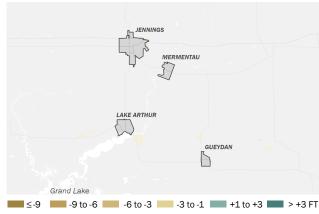
distribution of possible flood events included in the master plan analysis. EASD is calculated in the same way as EADD, however it removes some economic factors that are tied to property values so that the results are agnostic to assumptions around initial property value assessments.

Flood Risk In Project Area

Coastal Louisiana communities are at risk of storm surge-based flooding and environmental and climate changes are expected to increase risk over time. While implementing structural risk reduction and restoration projects can reduce risk and damages, communities will still face some residual risk from these events.

	Initial Conditions	FWOA (YR20/50)	FWA (YR20/50)	Losses Avoided (YR20/50)
Lower Scenario				
EADD (\$)	1.2M	2.6M/13M	2.1M/10M	500K/2.6M
EASD (#Structures)	2	4/14	3/11	1/3
Higher Scenario				
EADD (\$)	1.2M	4.3M/57M	3.5M/56M	800K/500K
EASD (#Structures)	2	5/57	5/56	1/1

All values are rounded to two significant figures. Losses Avoided may not equal the difference between FWOA and FWA. See Estimated Damages figure.



Structural Risk Reduction

LAFITTE AREA



RISK REDUCTION STRATEGIES

Community Location

Jefferson Parish -

Path to Risk Reduction

Storm surge-based flooding damage can be reduced through the implementation of structural and nonstructural risk reduction strategies. Structural strategies include large flood control structures such as levees, floodgates, and floodwalls.

Nonstructural risk reduction strategies such as elevating homes, such as those outlined below can significantly reduce the cost of damages from events. Assuming a flood depth with a 1% annual exceedance probability (AEP) under initial conditions, in Lafitte Area there are:

100	commercial properties identified as candidates for floodproofing
2.0K	residential properties identified as candidates for being elevated, and
50	residential properties identified as candidates for voluntary acquisition.

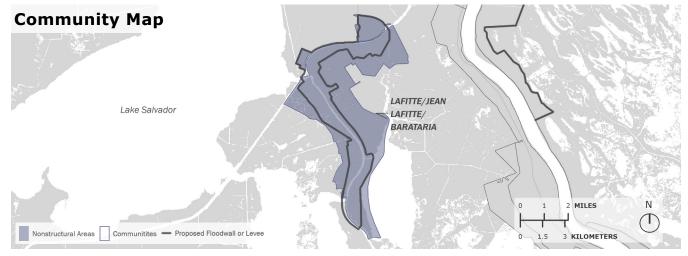
If 100% of identified properties implement nonstructural mitigation efforts, expected annual dollar damages (EADD) at year 50 could be reduced by 64% under the lower scenario, and by 58% under the higher scenario in a future without action at a cost of \$440M.

If the master plan is fully implemented, a portion of the above risk would be reduced due to both restoration and structural risk reduction projects. Under this future with master plan, any remaining residual surge-based flood risk could be reduced by an additional 71% under the lower scenario, and 68% under the higher scenario.

~6.7K **Estimated Current Population**

47%

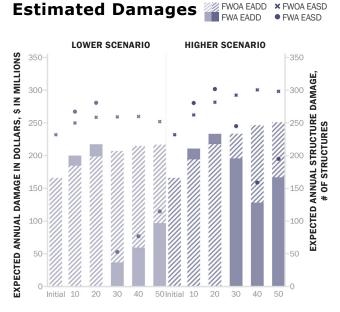
Percentage of Population who are Low-to-Moderate Income





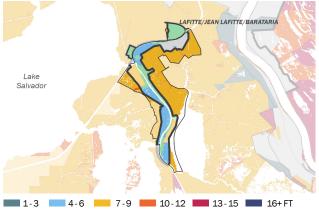
Economic Damage

Risk reduction projects are evaluated by how much they reduce Expected Annual Damage in terms of dollars (EADD) and structures (EASD). EADD takes into account both the potential economic damage from storms and the overall frequency of such storms occurring; it is a summary measure and is averaged over the entire



With Structural Risk Reduction and Restoration projects only. For some years, FWA damage is higher than FWOA damage.

Damage Reduction



Structural Risk Reduction

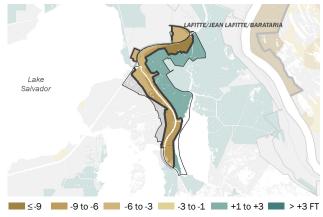
Map: Flood Depths, Future With Action, 1% Annual Exceedance Probability, Lower Scenario, Year 50 distribution of possible flood events included in the master plan analysis. EASD is calculated in the same way as EADD, however it removes some economic factors that are tied to property values so that the results are agnostic to assumptions around initial property value assessments.

Flood Risk In Project Area

Coastal Louisiana communities are at risk of storm surge-based flooding and environmental and climate changes are expected to increase risk over time. While implementing structural risk reduction and restoration projects can reduce risk and damages, communities will still face some residual risk from these events.

	Initial Conditions	FWOA (YR20/50)	FWA (YR20/50)	Losses Avoided (YR20/50)
Lower Scenario				
EADD (\$)	170M	200M/220M	220M/97M	-19M/120M
EASD (#Structures) 230	260/250	280/110	-22/140
Higher Scenario				
EADD (\$)	170M	220M/250M	230M/170M	-16M/85M
EASD (#Structures) 230	280/300	300/200	-20/100

All values are rounded to two significant figures. Losses Avoided may not equal the difference between FWOA and FWA. See Estimated Damages figure.



Structural Risk Reduction

LAKE CHARLES AREA

RISK REDUCTION STRATEGIES





Community Location

Calcasieu Parish -

Path to Risk Reduction

Storm surge-based flooding damage can be reduced through the implementation of structural and nonstructural risk reduction strategies. Structural strategies include large flood control structures such as levees, floodgates, and floodwalls.

Nonstructural risk reduction strategies such as elevating homes, such as those outlined below can significantly reduce the cost of damages from events. Assuming a flood depth with a **1% annual exceedance probability (AEP) under initial conditions**, in Lake Charles Area there are:

- 2.3K commercial properties identified as candidates for floodproofing
 1.6K residential properties identified as candidates for being elevated, and
- **72** residential properties identified as candidates for voluntary acquisition.

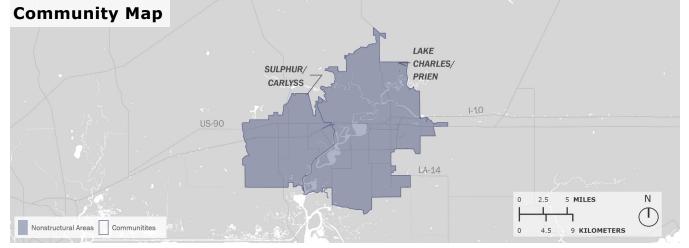
If 100% of identified properties implement nonstructural mitigation efforts, expected annual dollar damages (EADD) at **year 50** could be reduced by 19% under the lower scenario, and by 6% under the higher scenario in a **future without action** at a cost of \$620M.

If the master plan is fully implemented, a portion of the above risk would be reduced due to both restoration and structural risk reduction projects. Under this **future with master plan,** any remaining residual surge-based flood risk could be reduced by an additional 24% under the lower scenario, and 8% under the higher scenario.

~170K Estimated Current Population

42% Per are

Percentage of Population who are Low-to-Moderate Income



2023 COASTAL MASTER PLAN

LAKE CHARLES AREA - PAGE 1 OF 2

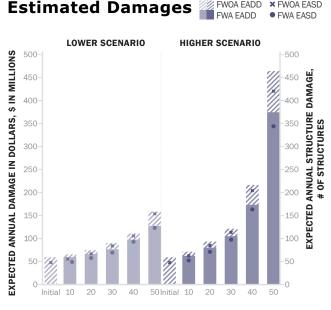


Economic Damage

Risk reduction projects are evaluated by how much they reduce Expected Annual Damage in terms of dollars (EADD) and structures (EASD). EADD takes into account both the potential economic damage from storms and the overall frequency of such storms occurring; it is a summary measure and is averaged over the entire

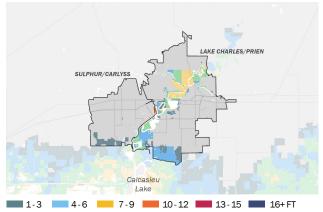
FWOA EADD

× FWOA EASD



With Structural Risk Reduction and Restoration projects only.

Damage Reduction



Structural Risk Reduction

Map: Flood Depths, Future With Action, 1% Annual Exceedance Probability, Lower Scenario, Year 50

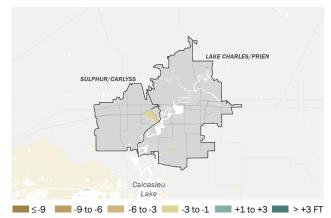
distribution of possible flood events included in the master plan analysis. EASD is calculated in the same way as EADD, however it removes some economic factors that are tied to property values so that the results are agnostic to assumptions around initial property value assessments.

Flood Risk In Project Area

Coastal Louisiana communities are at risk of storm surge-based flooding and environmental and climate changes are expected to increase risk over time. While implementing structural risk reduction and restoration projects can reduce risk and damages, communities will still face some residual risk from these events.

	Initial Conditions	FWOA (YR20/50)	FWA (YR20/50)	Losses Avoided (YR20/50)
Lower Scenario				
EADD (\$)	59M	74M/160M	66M/130M	8.5M/32M
EASD (#Structures)	48	67/150	57/120	9/31
Higher Scenario				
EADD (\$)	59M	93M/460M	80M/370M	13M/90M
EASD (#Structures)	48	85/420	71/340	14/76

All values are rounded to two significant figures. Losses Avoided may not equal the difference between FWOA and FWA. See Estimated Damages figure.



Structural Risk Reduction

LAPLACE AREA





Community Location

St. Charles Parish; St. John The Baptist Parish

Path to Risk Reduction

Storm surge-based flooding damage can be reduced through the implementation of structural and nonstructural risk reduction strategies. Structural strategies include large flood control structures such as levees, floodgates, and floodwalls.

Nonstructural risk reduction strategies such as elevating homes, such as those outlined below can significantly reduce the cost of damages from events. Assuming a flood depth with a **1% annual exceedance probability (AEP) under initial conditions**, in Laplace Area there are:

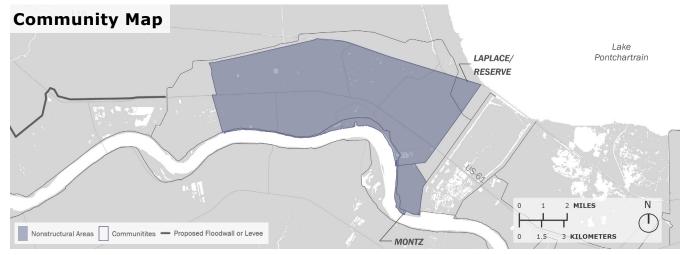
590	commercial properties identified as candidates for floodproofing
160	residential properties identified as candidates for being elevated, and
	residential properties identified as candidates for voluntary acquisition.

If 100% of identified properties implement nonstructural mitigation efforts, expected annual dollar damages (EADD) at **year 50** could be reduced by 26% under the lower scenario, and by 29% under the higher scenario in a **future without action** at a cost of \$91M.

If the master plan is fully implemented, a portion of the above risk would be reduced due to both restoration and structural risk reduction projects. Under this **future with master plan**, any remaining residual surge-based flood risk could be reduced by an additional 31% under the lower scenario, and 28% under the higher scenario.

~40K Estimated Current Population

44% Percentage of Population who are Low-to-Moderate Income

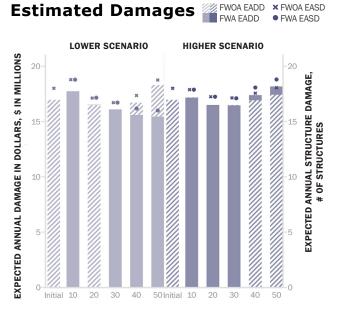


LAPLACE AREA - PAGE 1 OF 2



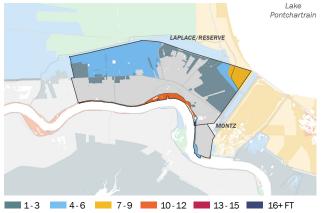
Economic Damage

Risk reduction projects are evaluated by how much they reduce Expected Annual Damage in terms of dollars (EADD) and structures (EASD). EADD takes into account both the potential economic damage from storms and the overall frequency of such storms occurring; it is a summary measure and is averaged over the entire



With Structural Risk Reduction and Restoration projects only. For some years, FWA damage is higher than FWOA damage.

Damage Reduction



Structural Risk Reduction

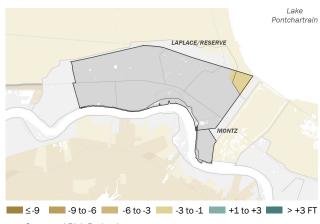
Map: Flood Depths, Future With Action, 1% Annual Exceedance Probability, Lower Scenario, Year 50 distribution of possible flood events included in the master plan analysis. EASD is calculated in the same way as EADD, however it removes some economic factors that are tied to property values so that the results are agnostic to assumptions around initial property value assessments.

Flood Risk In Project Area

Coastal Louisiana communities are at risk of storm surge-based flooding and environmental and climate changes are expected to increase risk over time. While implementing structural risk reduction and restoration projects can reduce risk and damages, communities will still face some residual risk from these events.

	Initial Conditions	FWOA (YR20/50)	FWA (YR20/50)	Losses Avoided (YR20/50)
Lower Scenario				
EADD (\$)	17M	16M/18M	17M/15M	-43K/2.8M
EASD (#Structures) 18	17/19	17/16	/3
Higher Scenario				
EADD (\$)	17M	17M/17M	17M/18M	5.1K/-740K
EASD (#Structures) 18	17/18	17/19	/-1

All values are rounded to two significant figures. Losses Avoided may not equal the difference between FWOA and FWA. See Estimated Damages figure.



Structural Risk Reduction

LULING/BOUTTE AREA

RISK REDUCTION STRATEGIES



Community Location

Lafourche Parish; St. Charles Parish

Path to Risk Reduction

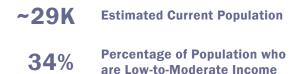
Storm surge-based flooding damage can be reduced through the implementation of structural and nonstructural risk reduction strategies. Structural strategies include large flood control structures such as levees, floodgates, and floodwalls.

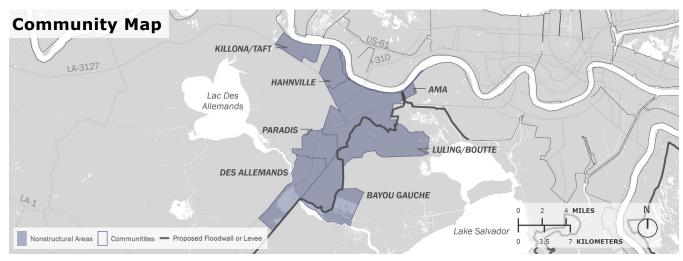
Nonstructural risk reduction strategies such as elevating homes, such as those outlined below can significantly reduce the cost of damages from events. Assuming a flood depth with a **1% annual exceedance probability (AEP) under initial conditions**, in Luling/ Boutte Area there are:

520	commercial properties identified as candidates for floodproofing
5.2K	residential properties identified as candidates for being elevated, and
	residential properties identified as candidates for voluntary acquisition.

If 100% of identified properties implement nonstructural mitigation efforts, expected annual dollar damages (EADD) at **year 50** could be reduced by 69% under the lower scenario, and by 54% under the higher scenario in a **future without action** at a cost of \$1.3B.

If the master plan is fully implemented, a portion of the above risk would be reduced due to both restoration and structural risk reduction projects. Under this **future with master plan**, any remaining residual surge-based flood risk could be reduced by an additional 82% under the lower scenario, and 67% under the higher scenario.





LULING/BOUTTE AREA - PAGE 1 OF 2

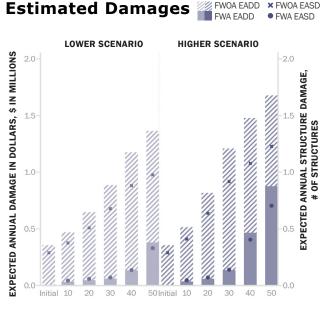


Economic Damage

Risk reduction projects are evaluated by how much they reduce Expected Annual Damage in terms of dollars (EADD) and structures (EASD). EADD takes into account both the potential economic damage from storms and the overall frequency of such storms occurring; it is a summary measure and is averaged over the entire

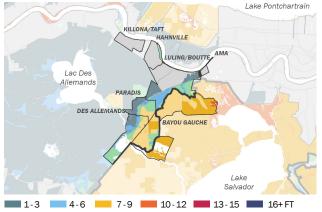
FWOA EADD

× FWOA EASD



With Structural Risk Reduction and Restoration projects only.

Damage Reduction



Structural Risk Reduction

Map: Flood Depths, Future With Action, 1% Annual Exceedance Probability, Lower Scenario, Year 50

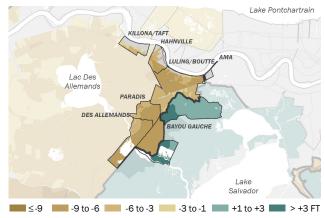
distribution of possible flood events included in the master plan analysis. EASD is calculated in the same way as EADD, however it removes some economic factors that are tied to property values so that the results are agnostic to assumptions around initial property value assessments.

Flood Risk In Project Area

Coastal Louisiana communities are at risk of storm surge-based flooding and environmental and climate changes are expected to increase risk over time. While implementing structural risk reduction and restoration projects can reduce risk and damages, communities will still face some residual risk from these events.

	Initial Conditions	FWOA (YR20/50)	FWA (YR20/50)	Losses Avoided (YR20/50)
Lower Scenario				
EADD (\$)	350M	650M/1.4B	47M/380M	600M/990M
EASD (#Structures)	290	510/980	59/330	450/650
Higher Scenario				
EADD (\$)	350M	820M/1.7B	60M/880M	760M/800M
EASD (#Structures)	290	640/1.2K	72/710	570/520

All values are rounded to two significant figures. Losses Avoided may not equal the difference between FWOA and FWA. See Estimated Damages figure.



Structural Risk Reduction

MANDEVILLE AREA

RISK REDUCTION STRATEGIES



Community Location

St. Tammany Parish; Tangipahoa Parish

Path to Risk Reduction

Storm surge-based flooding damage can be reduced through the implementation of structural and nonstructural risk reduction strategies. Structural strategies include large flood control structures such as levees, floodgates, and floodwalls.

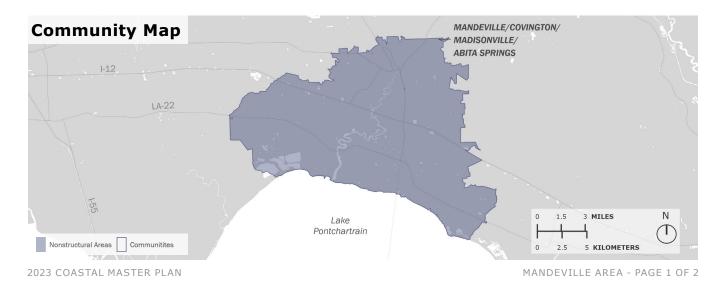
Nonstructural risk reduction strategies such as elevating homes, such as those outlined below can significantly reduce the cost of damages from events. Assuming a flood depth with a **1% annual exceedance probability (AEP) under initial conditions**, in Mandeville Area there are:

- **1.9K** commercial properties identified as candidates for floodproofing
- **3.2K** residential properties identified as candidates for being elevated, and
- **35** residential properties identified as candidates for voluntary acquisition.

If 100% of identified properties implement nonstructural mitigation efforts, expected annual dollar damages (EADD) at **year 50** could be reduced by 64% under the lower scenario, and by 49% under the higher scenario in a **future without action** at a cost of \$1.1B.

If the master plan is fully implemented, a portion of the above risk would be reduced due to both restoration and structural risk reduction projects. Under this **future with master plan**, any remaining residual surge-based flood risk could be reduced by an additional 69% under the lower scenario, and 58% under the higher scenario.

~110K Estimated Current Population 23% Percentage of Population who are Low-to-Moderate Income



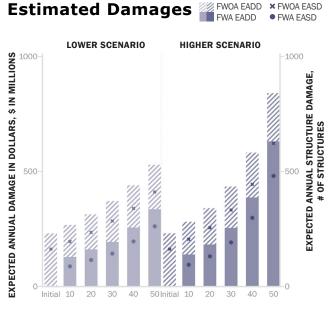


Economic Damage

Risk reduction projects are evaluated by how much they reduce Expected Annual Damage in terms of dollars (EADD) and structures (EASD). EADD takes into account both the potential economic damage from storms and the overall frequency of such storms occurring; it is a summary measure and is averaged over the entire

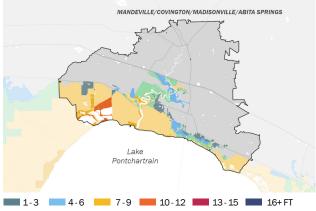
FWOA EADD

× FWOA EASD



With Structural Risk Reduction and Restoration projects only.

Damage Reduction



Structural Risk Reduction

Map: Flood Depths, Future With Action, 1% Annual Exceedance Probability, Lower Scenario, Year 50

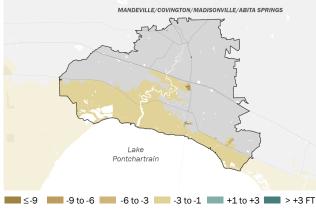
distribution of possible flood events included in the master plan analysis. EASD is calculated in the same way as EADD, however it removes some economic factors that are tied to property values so that the results are agnostic to assumptions around initial property value assessments.

Flood Risk In Project Area

Coastal Louisiana communities are at risk of storm surge-based flooding and environmental and climate changes are expected to increase risk over time. While implementing structural risk reduction and restoration projects can reduce risk and damages, communities will still face some residual risk from these events.

	Initial Conditions	FWOA (YR20/50)	FWA (YR20/50)	Losses Avoided (YR20/50)
Lower Scenario				
EADD (\$)	230M	310M/530M	160M/340M	150M/190M
EASD (#Structures)	160	240/410	120/260	120/150
Higher Scenario				
EADD (\$)	230M	340M/840M	180M/630M	160M/210M
EASD (#Structures)	160	260/620	130/480	120/140

All values are rounded to two significant figures. Losses Avoided may not equal the difference between FWOA and FWA. See Estimated Damages figure.



Structural Risk Reduction

MORGAN CITY AREA





Community Location

Assumption Parish; St. Martin Parish; St. Mary Parish -

Path to Risk Reduction

Storm surge-based flooding damage can be reduced through the implementation of structural and nonstructural risk reduction strategies. Structural strategies include large flood control structures such as levees, floodgates, and floodwalls.

Nonstructural risk reduction strategies such as elevating homes, such as those outlined below can significantly reduce the cost of damages from events. Assuming a flood depth with a **1% annual exceedance probability (AEP) under initial conditions**, in Morgan City Area there are:

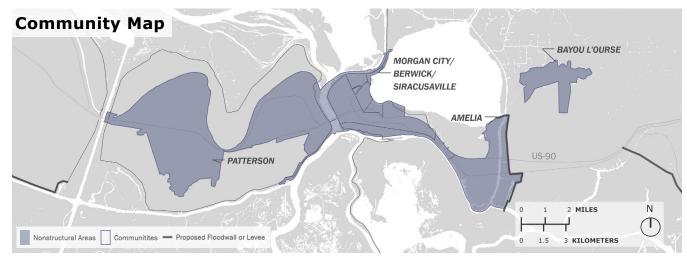
- 1.7K commercial properties identified as candidates for floodproofing
 1.1K residential properties identified as candidates for being elevated, and
 - residential properties identified as candidates for voluntary acquisition.

If 100% of identified properties implement nonstructural mitigation efforts, expected annual dollar damages (EADD) at **year 50** could be reduced by 24% under the lower scenario, and by 11% under the higher scenario in a **future without action** at a cost of \$410M.

If the master plan is fully implemented, a portion of the above risk would be reduced due to both restoration and structural risk reduction projects. Under this **future with master plan**, any remaining residual surge-based flood risk could be reduced by an additional 26% under the lower scenario, and 14% under the higher scenario.



37% Percentage of Population who are Low-to-Moderate Income



5

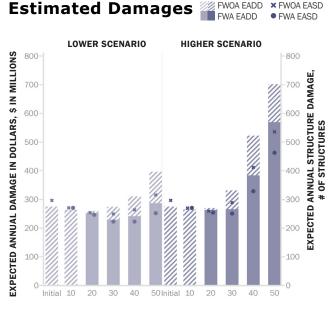


Economic Damage

Risk reduction projects are evaluated by how much they reduce Expected Annual Damage in terms of dollars (EADD) and structures (EASD). EADD takes into account both the potential economic damage from storms and the overall frequency of such storms occurring; it is a summary measure and is averaged over the entire

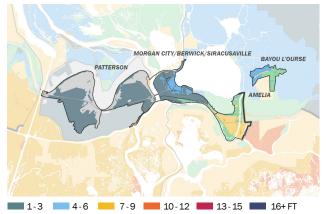
FWOA EADD

× FWOA EASD



With Structural Risk Reduction and Restoration projects only.

Damage Reduction



Structural Risk Reduction

Map: Flood Depths, Future With Action, 1% Annual Exceedance Probability, Lower Scenario, Year 50

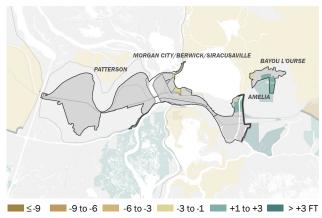
distribution of possible flood events included in the master plan analysis. EASD is calculated in the same way as EADD, however it removes some economic factors that are tied to property values so that the results are agnostic to assumptions around initial property value assessments.

Flood Risk In Project Area

Coastal Louisiana communities are at risk of storm surge-based flooding and environmental and climate changes are expected to increase risk over time. While implementing structural risk reduction and restoration projects can reduce risk and damages, communities will still face some residual risk from these events.

	Initial Conditions	FWOA (YR20/50)	FWA (YR20/50)	Losses Avoided (YR20/50)
Lower Scenario				
EADD (\$)	280M	260M/400M	250M/290M	8.3M/110M
EASD (#Structures)	300	250/320	250/250	7/64
Higher Scenario				
EADD (\$)	280M	270M/700M	260M/570M	6.0M/130M
EASD (#Structures)	300	260/540	250/460	5/73

All values are rounded to two significant figures. Losses Avoided may not equal the difference between FWOA and FWA. See Estimated Damages figure.



Structural Risk Reduction

NEW IBERIA AREA



RISK REDUCTION STRATEGIES

Community Location

Iberia Parish; St. Martin Parish -

Path to Risk Reduction

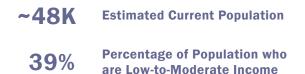
Storm surge-based flooding damage can be reduced through the implementation of structural and nonstructural risk reduction strategies. Structural strategies include large flood control structures such as levees, floodgates, and floodwalls.

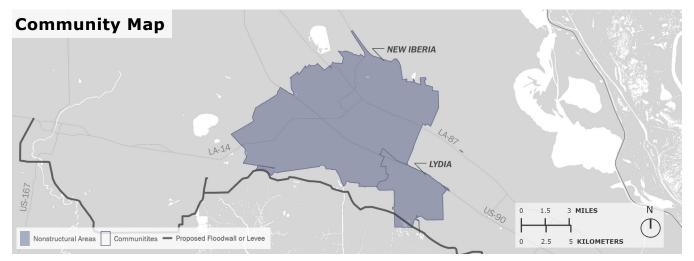
Nonstructural risk reduction strategies such as elevating homes, such as those outlined below can significantly reduce the cost of damages from events. Assuming a flood depth with a **1% annual exceedance probability (AEP) under initial conditions**, in New Iberia Area there are:

- 1.1K commercial properties identified as candidates for floodproofing
 3.8K residential properties identified as candidates for being elevated, and residential properties identified as
 - **3** candidates for voluntary acquisition.

If 100% of identified properties implement nonstructural mitigation efforts, expected annual dollar damages (EADD) at **year 50** could be reduced by 37% under the lower scenario, and by 34% under the higher scenario in a **future without action** at a cost of \$810M.

If the master plan is fully implemented, a portion of the above risk would be reduced due to both restoration and structural risk reduction projects. Under this **future with master plan**, any remaining residual surge-based flood risk could be reduced by an additional 34% under the lower scenario, and 20% under the higher scenario.





NEW IBERIA AREA - PAGE 1 OF 2

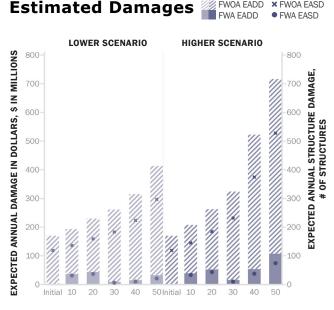


Economic Damage

Risk reduction projects are evaluated by how much they reduce Expected Annual Damage in terms of dollars (EADD) and structures (EASD). EADD takes into account both the potential economic damage from storms and the overall frequency of such storms occurring; it is a summary measure and is averaged over the entire

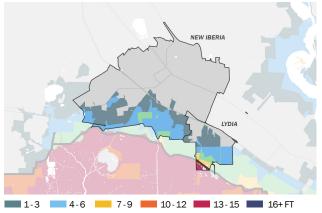
FWOA EADD

× FWOA EASD



With Structural Risk Reduction and Restoration projects only.

Damage Reduction



Structural Risk Reduction

Map: Flood Depths, Future With Action, 1% Annual Exceedance Probability, Lower Scenario, Year 50

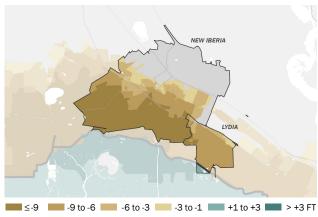
distribution of possible flood events included in the master plan analysis. EASD is calculated in the same way as EADD, however it removes some economic factors that are tied to property values so that the results are agnostic to assumptions around initial property value assessments.

Flood Risk In Project Area

Coastal Louisiana communities are at risk of storm surge-based flooding and environmental and climate changes are expected to increase risk over time. While implementing structural risk reduction and restoration projects can reduce risk and damages, communities will still face some residual risk from these events.

	Initial Conditions	FWOA (YR20/50)	FWA (YR20/50)	Losses Avoided (YR20/50)
Lower Scenario				
EADD (\$)	170M	230M/410M	43M/32M	190M/380M
EASD (#Structures)	120	160/300	37/21	120/280
Higher Scenario				
EADD (\$)	170M	260M/720M	52M/110M	210M/610M
EASD (#Structures)	120	190/530	44/74	140/450

All values are rounded to two significant figures. Losses Avoided may not equal the difference between FWOA and FWA. See Estimated Damages figure.



Structural Risk Reduction

NEW ORLEANS AREA

RISK REDUCTION STRATEGIES



Community Location

Orleans Parish -

5

Path to Risk Reduction

Storm surge-based flooding damage can be reduced through the implementation of structural and nonstructural risk reduction strategies. Structural strategies include large flood control structures such as levees, floodgates, and floodwalls.

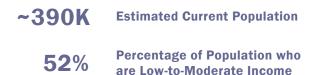
Nonstructural risk reduction strategies such as elevating homes, such as those outlined below can significantly reduce the cost of damages from events. Assuming a flood depth with a **1% annual exceedance probability (AEP) under initial conditions**, in New Orleans Area there are:

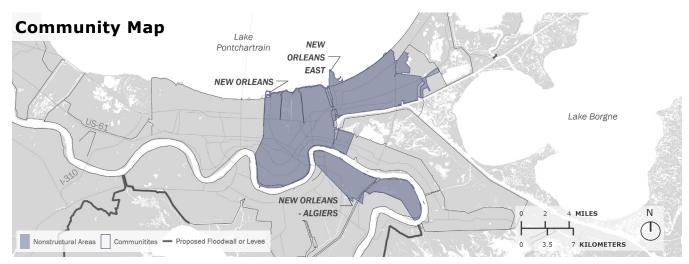
1.4K	commercial properties identified as candidates for floodproofing					
600	residential properties identified as candidates for being elevated, and					

residential properties identified as candidates for voluntary acquisition.

If 100% of identified properties implement nonstructural mitigation efforts, expected annual dollar damages (EADD) at **year 50** could be reduced by 2% under the lower scenario, and by 1% under the higher scenario in a **future without action** at a cost of \$310M.

If the master plan is fully implemented, a portion of the above risk would be reduced due to both restoration and structural risk reduction projects. Under this **future with master plan**, any remaining residual surge-based flood risk could be reduced by an additional 2% under the lower scenario, and 2% under the higher scenario.





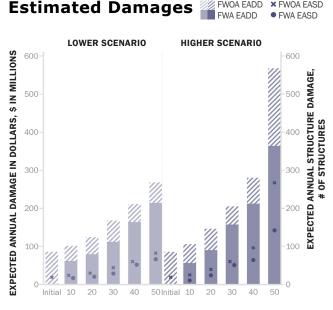


Economic Damage

Risk reduction projects are evaluated by how much they reduce Expected Annual Damage in terms of dollars (EADD) and structures (EASD). EADD takes into account both the potential economic damage from storms and the overall frequency of such storms occurring; it is a summary measure and is averaged over the entire

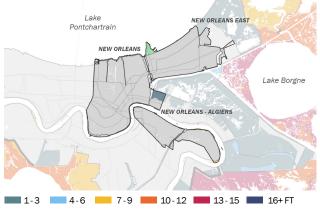
FWOA EADD

× FWOA EASD



With Structural Risk Reduction and Restoration projects only.

Damage Reduction



Structural Risk Reduction

Map: Flood Depths, Future With Action, 1% Annual Exceedance Probability, Lower Scenario, Year 50

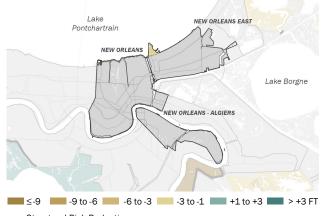
distribution of possible flood events included in the master plan analysis. EASD is calculated in the same way as EADD, however it removes some economic factors that are tied to property values so that the results are agnostic to assumptions around initial property value assessments.

Flood Risk In Project Area

Coastal Louisiana communities are at risk of storm surge-based flooding and environmental and climate changes are expected to increase risk over time. While implementing structural risk reduction and restoration projects can reduce risk and damages, communities will still face some residual risk from these events.

	Initial Conditions	FWOA (YR20/50)	FWA (YR20/50)	Losses Avoided (YR20/50)
Lower Scenario				
EADD (\$)	85M	120M/270M	79M/210M	45M/53M
EASD (#Structures)	19	30/83	21/67	9/16
Higher Scenario				
EADD (\$)	85M	150M/570M	90M/360M	56M/200M
EASD (#Structures)	19	40/270	24/140	15/120

All values are rounded to two significant figures. Losses Avoided may not equal the difference between FWOA and FWA. See Estimated Damages figure.



Structural Risk Reduction

PONTCHATOULA AREA

RISK REDUCTION STRATEGIES



Community Location

Livingston Parish; Tangipahoa Parish

Path to Risk Reduction

Storm surge-based flooding damage can be reduced through the implementation of structural and nonstructural risk reduction strategies. Structural strategies include large flood control structures such as levees, floodgates, and floodwalls.

Nonstructural risk reduction strategies such as elevating homes, such as those outlined below can significantly reduce the cost of damages from events. Assuming a flood depth with a **1% annual exceedance probability (AEP) under initial conditions**, in Pontchatoula Area there are:

220	commercial properties identified as candidates for floodproofing
590	residential properties identified as candidates for being elevated, and
	residential properties identified as

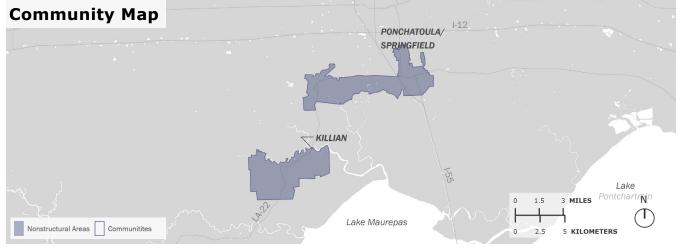
1 residential properties identified as candidates for voluntary acquisition.

If 100% of identified properties implement nonstructural mitigation efforts, expected annual dollar damages (EADD) at **year 50** could be reduced by 62% under the lower scenario, and by 43% under the higher scenario in a **future without action** at a cost of \$170M.

If the master plan is fully implemented, a portion of the above risk would be reduced due to both restoration and structural risk reduction projects. Under this **future with master plan,** any remaining residual surge-based flood risk could be reduced by an additional 71% under the lower scenario, and 55% under the higher scenario.

~12K Estimated Current Population

34% Percentage of Population who are Low-to-Moderate Income



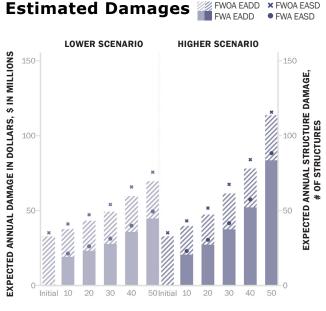


Economic Damage

Risk reduction projects are evaluated by how much they reduce Expected Annual Damage in terms of dollars (EADD) and structures (EASD). EADD takes into account both the potential economic damage from storms and the overall frequency of such storms occurring; it is a summary measure and is averaged over the entire

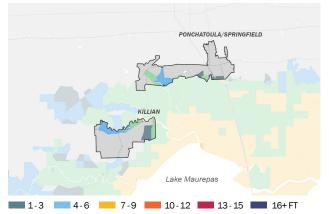
FWOA EADD

× FWOA EASD



With Structural Risk Reduction and Restoration projects only.

Damage Reduction



Structural Risk Reduction

Map: Flood Depths, Future With Action, 1% Annual Exceedance Probability, Lower Scenario, Year 50

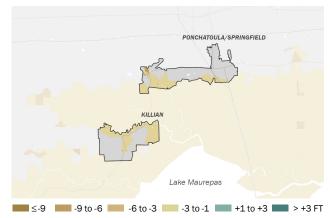
distribution of possible flood events included in the master plan analysis. EASD is calculated in the same way as EADD, however it removes some economic factors that are tied to property values so that the results are agnostic to assumptions around initial property value assessments.

Flood Risk In Project Area

Coastal Louisiana communities are at risk of storm surge-based flooding and environmental and climate changes are expected to increase risk over time. While implementing structural risk reduction and restoration projects can reduce risk and damages, communities will still face some residual risk from these events.

	Initial Conditions	FWOA (YR20/50)	FWA (YR20/50)	Losses Avoided (YR20/50)
Lower Scenario				
EADD (\$)	33M	43M/70M	23M/45M	20M/25M
EASD (#Structures) 35	47/76	26/49	21/26
Higher Scenario				
EADD (\$)	33M	47M/110M	27M/83M	20M/30M
EASD (#Structures) 35	52/120	30/88	21/27

All values are rounded to two significant figures. Losses Avoided may not equal the difference between FWOA and FWA. See Estimated Damages figure.



Structural Risk Reduction

PORT SULPHUR AREA

RISK REDUCTION STRATEGIES



Community Location

Plaquemines Parish -

Path to Risk Reduction

Storm surge-based flooding damage can be reduced through the implementation of structural and nonstructural risk reduction strategies. Structural strategies include large flood control structures such as levees, floodgates, and floodwalls.

Nonstructural risk reduction strategies such as elevating homes, such as those outlined below can significantly reduce the cost of damages from events. Assuming a flood depth with a **1% annual exceedance probability (AEP) under initial conditions**, in Port Sulphur Area there are:

29	commercial properties identified as candidates for floodproofing
6	residential properties identified as candidates for being elevated, and
	residential properties identified as candidates for voluntary acquisition

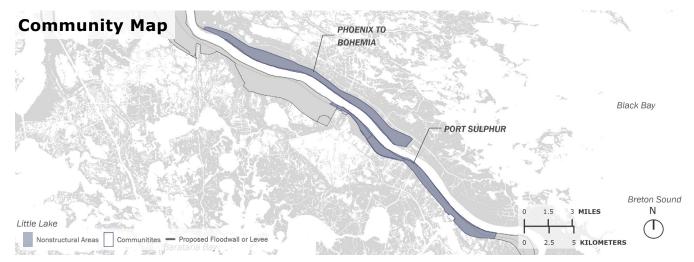
If 100% of identified properties implement nonstructural mitigation efforts, expected annual dollar damages (EADD) at **year 50** could be reduced by 3% under the lower scenario, and by 2% under the higher scenario in a **future without action** at a cost of \$4.6M.

If the master plan is fully implemented, a portion of the above risk would be reduced due to both restoration and structural risk reduction projects. Under this **future with master plan**, any remaining residual surge-based flood risk could be reduced by an additional 3% under the lower scenario, and 2% under the higher scenario.



62% ^{Pe}

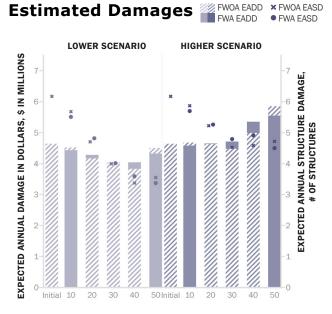
Percentage of Population who are Low-to-Moderate Income





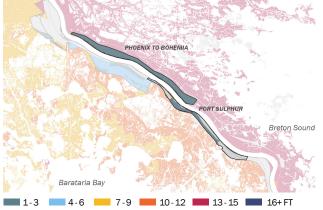
Economic Damage

Risk reduction projects are evaluated by how much they reduce Expected Annual Damage in terms of dollars (EADD) and structures (EASD). EADD takes into account both the potential economic damage from storms and the overall frequency of such storms occurring; it is a summary measure and is averaged over the entire



With Structural Risk Reduction and Restoration projects only. For some years, FWA damage is higher than FWOA damage.

Damage Reduction



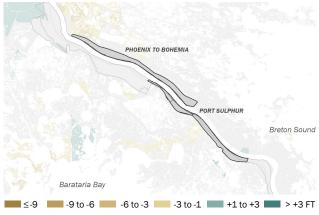
Map: Flood Depths, Future With Action, 1% Annual Exceedance Probability, Lower Scenario, Year 50 distribution of possible flood events included in the master plan analysis. EASD is calculated in the same way as EADD, however it removes some economic factors that are tied to property values so that the results are agnostic to assumptions around initial property value assessments.

Flood Risk In Project Area

Coastal Louisiana communities are at risk of storm surge-based flooding and environmental and climate changes are expected to increase risk over time. While implementing structural risk reduction and restoration projects can reduce risk and damages, communities will still face some residual risk from these events.

	Initial Conditions	FWOA (YR20/50)	FWA (YR20/50)	Losses Avoided (YR20/50)
Lower Scenario				
EADD (\$)	4.6M	4.2M/4.5M	4.3M/4.3M	-120K/180K
EASD (#Structures)) 6	5/4	5/3	/
Higher Scenario				
EADD (\$)	4.6M	4.6M/5.9M	4.6M/5.5M	-14K/310K
EASD (#Structures)) 6	5/5	5/5	/

All values are rounded to two significant figures. Losses Avoided may not equal the difference between FWOA and FWA. See Estimated Damages figure.



Structural Risk Reduction

RACELAND AREA



RISK REDUCTION STRATEGIES

Community Location

Lafourche Parish -

Path to Risk Reduction

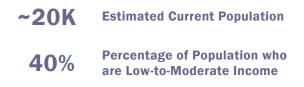
Storm surge-based flooding damage can be reduced through the implementation of structural and nonstructural risk reduction strategies. Structural strategies include large flood control structures such as levees, floodgates, and floodwalls.

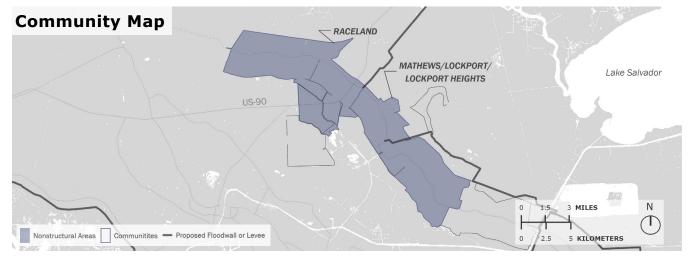
Nonstructural risk reduction strategies such as elevating homes, such as those outlined below can significantly reduce the cost of damages from events. Assuming a flood depth with a **1% annual exceedance probability (AEP) under initial conditions**, in Raceland Area there are:

780	commercial properties identified as candidates for floodproofing
2.9K	residential properties identified as candidates for being elevated, and
1	residential properties identified as candidates for voluntary acquisition.

If 100% of identified properties implement nonstructural mitigation efforts, expected annual dollar damages (EADD) at **year 50** could be reduced by 62% under the lower scenario, and by 43% under the higher scenario in a **future without action** at a cost of \$720M.

If the master plan is fully implemented, a portion of the above risk would be reduced due to both restoration and structural risk reduction projects. Under this **future with master plan**, any remaining residual surge-based flood risk could be reduced by an additional 77% under the lower scenario, and 75% under the higher scenario.





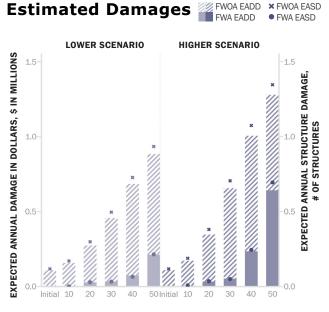


× FWOA EASD

FWOA EADD

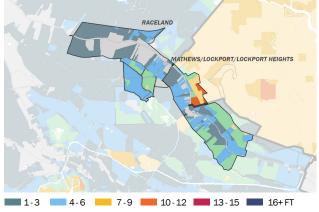
Economic Damage

Risk reduction projects are evaluated by how much they reduce Expected Annual Damage in terms of dollars (EADD) and structures (EASD). EADD takes into account both the potential economic damage from storms and the overall frequency of such storms occurring; it is a summary measure and is averaged over the entire



With Structural Risk Reduction and Restoration projects only.

Damage Reduction



Structural Risk Reduction

Map: Flood Depths, Future With Action, 1% Annual Exceedance Probability, Lower Scenario, Year 50

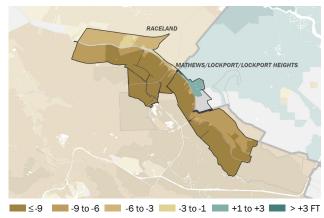
distribution of possible flood events included in the master plan analysis. EASD is calculated in the same way as EADD, however it removes some economic factors that are tied to property values so that the results are agnostic to assumptions around initial property value assessments.

Flood Risk In Project Area

Coastal Louisiana communities are at risk of storm surge-based flooding and environmental and climate changes are expected to increase risk over time. While implementing structural risk reduction and restoration projects can reduce risk and damages, communities will still face some residual risk from these events.

	Initial Conditions	FWOA (YR20/50)	FWA (YR20/50)	Losses Avoided (YR20/50)
Lower Scenario				
EADD (\$)	110M	270M/880M	28M/210M	250M/670M
EASD (#Structures)	120	300/930	29/210	270/720
Higher Scenario				
EADD (\$)	110M	350M/1.3B	33M/640M	310M/640M
EASD (#Structures)	120	380/1.3K	36/700	350/650

All values are rounded to two significant figures. Losses Avoided may not equal the difference between FWOA and FWA. See Estimated Damages figure.



Structural Risk Reduction

SLIDELL AREA





Community Location

St. Tammany Parish -

Path to Risk Reduction

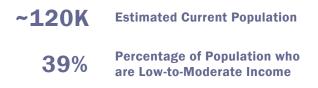
Storm surge-based flooding damage can be reduced through the implementation of structural and nonstructural risk reduction strategies. Structural strategies include large flood control structures such as levees, floodgates, and floodwalls.

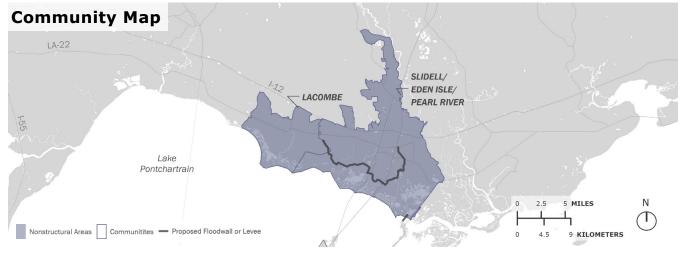
Nonstructural risk reduction strategies such as elevating homes, such as those outlined below can significantly reduce the cost of damages from events. Assuming a flood depth with a **1% annual exceedance probability (AEP) under initial conditions**, in Slidell Area there are:

2.9K	commercial properties identified as candidates for floodproofing
13K	residential properties identified as candidates for being elevated, and
130	residential properties identified as candidates for voluntary acquisition.

If 100% of identified properties implement nonstructural mitigation efforts, expected annual dollar damages (EADD) at **year 50** could be reduced by 78% under the lower scenario, and by 71% under the higher scenario in a **future without action** at a cost of \$3.5B.

If the master plan is fully implemented, a portion of the above risk would be reduced due to both restoration and structural risk reduction projects. Under this **future with master plan**, any remaining residual surge-based flood risk could be reduced by an additional 84% under the lower scenario, and 77% under the higher scenario.





SLIDELL AREA - PAGE 1 OF 2

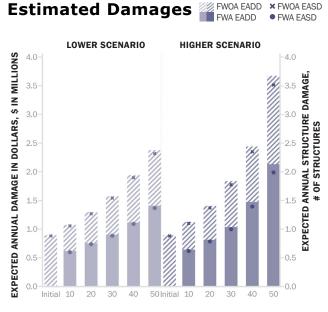


Economic Damage

Risk reduction projects are evaluated by how much they reduce Expected Annual Damage in terms of dollars (EADD) and structures (EASD). EADD takes into account both the potential economic damage from storms and the overall frequency of such storms occurring; it is a summary measure and is averaged over the entire

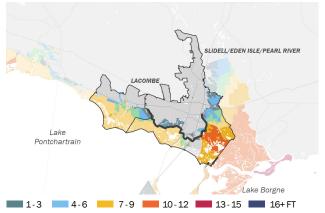
FWOA EADD

× FWOA EASD



With Structural Risk Reduction and Restoration projects only.

Damage Reduction



Structural Risk Reduction

Map: Flood Depths, Future With Action, 1% Annual Exceedance Probability, Lower Scenario, Year 50

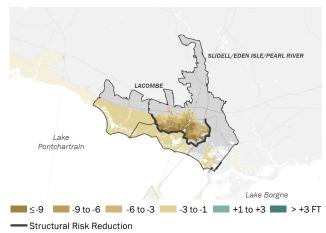
distribution of possible flood events included in the master plan analysis. EASD is calculated in the same way as EADD, however it removes some economic factors that are tied to property values so that the results are agnostic to assumptions around initial property value assessments.

Flood Risk In Project Area

Coastal Louisiana communities are at risk of storm surge-based flooding and environmental and climate changes are expected to increase risk over time. While implementing structural risk reduction and restoration projects can reduce risk and damages, communities will still face some residual risk from these events.

	Initial Conditions	FWOA (YR20/50)	FWA (YR20/50)	Losses Avoided (YR20/50)
Lower Scenario				
EADD (\$)	890M	1.3B/2.4B	760M/1.4B	540M/970M
EASD (#Structures)	880	1.3K/2.3K	740/1.4K	530/950
Higher Scenario				
EADD (\$)	890M	1.4B/3.7B	820M/2.1B	590M/1.5B
EASD (#Structures)) 880	1.4K/3.5K	790/2.0K	580/1.5K

All values are rounded to two significant figures. Losses Avoided may not equal the difference between FWOA and FWA. See Estimated Damages figure.



THIBODAUX AREA



RISK REDUCTION STRATEGIES

Community Location

Lafourche Parish; Terrebonne Parish

Path to Risk Reduction

Storm surge-based flooding damage can be reduced through the implementation of structural and nonstructural risk reduction strategies. Structural strategies include large flood control structures such as levees, floodgates, and floodwalls.

Nonstructural risk reduction strategies such as elevating homes, such as those outlined below can significantly reduce the cost of damages from events. Assuming a flood depth with a **1% annual exceedance probability (AEP) under initial conditions**, in Thibodaux Area there are:

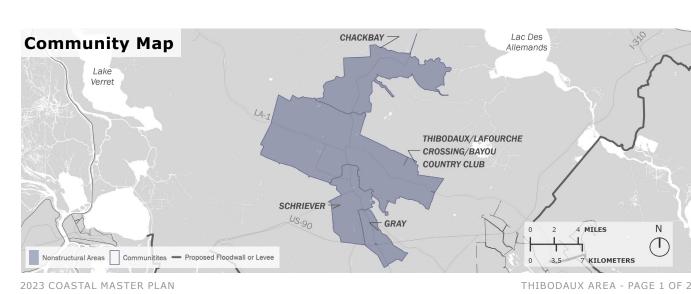
460	commercial properties identified as candidates for floodproofing
160	residential properties identified as candidates for being elevated, and
	residential properties identified as candidates for voluntary acquisition.

If 100% of identified properties implement nonstructural mitigation efforts, expected annual dollar damages (EADD) at **year 50** could be reduced by 19% under the lower scenario, and by 6% under the higher scenario in a **future without action** at a cost of \$80M.

If the master plan is fully implemented, a portion of the above risk would be reduced due to both restoration and structural risk reduction projects. Under this **future with master plan**, any remaining residual surge-based flood risk could be reduced by an additional 26% under the lower scenario, and 21% under the higher scenario.

~54K Estimated Current Population

38% Percentage of Population who are Low-to-Moderate Income



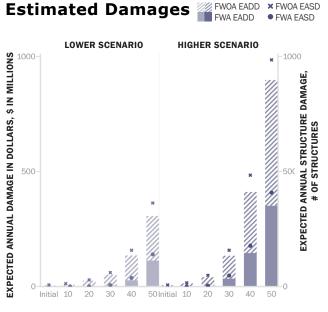


Economic Damage

Risk reduction projects are evaluated by how much they reduce Expected Annual Damage in terms of dollars (EADD) and structures (EASD). EADD takes into account both the potential economic damage from storms and the overall frequency of such storms occurring; it is a summary measure and is averaged over the entire

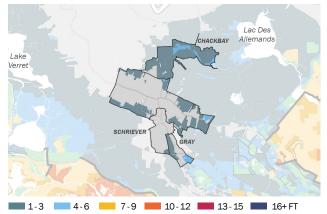
FWOA EADD

× FWOA EASD



With Structural Risk Reduction and Restoration projects only.

Damage Reduction



Structural Risk Reduction

Map: Flood Depths, Future With Action, 1% Annual Exceedance Probability, Lower Scenario, Year 50

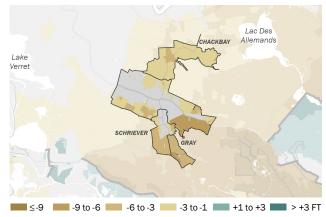
distribution of possible flood events included in the master plan analysis. EASD is calculated in the same way as EADD, however it removes some economic factors that are tied to property values so that the results are agnostic to assumptions around initial property value assessments.

Flood Risk In Project Area

Coastal Louisiana communities are at risk of storm surge-based flooding and environmental and climate changes are expected to increase risk over time. While implementing structural risk reduction and restoration projects can reduce risk and damages, communities will still face some residual risk from these events.

	Initial Conditions	FWOA (YR20/50)	FWA (YR20/50)	Losses Avoided (YR20/50)
Lower Scenario				
EADD (\$)	5.4M	25M/310M	940K/110M	24M/190M
EASD (#Structures)) 7	29/360	1/140	29/220
Higher Scenario				
EADD (\$)	5.4M	40M/900M	2.7M/350M	37M/550M
EASD (#Structures)) 7	48/990	3/410	45/580

All values are rounded to two significant figures. Losses Avoided may not equal the difference between FWOA and FWA. See Estimated Damages figure.



Structural Risk Reduction

VACHERIE AREA



RISK REDUCTION STRATEGIES

Community Location

St. James Parish; St. John The Baptist Parish

Path to Risk Reduction

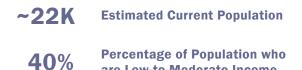
Storm surge-based flooding damage can be reduced through the implementation of structural and nonstructural risk reduction strategies. Structural strategies include large flood control structures such as levees, floodgates, and floodwalls.

Nonstructural risk reduction strategies such as elevating homes, such as those outlined below can significantly reduce the cost of damages from events. Assuming a flood depth with a 1% annual exceedance probability (AEP) under initial conditions, in Vacherie Area there are:

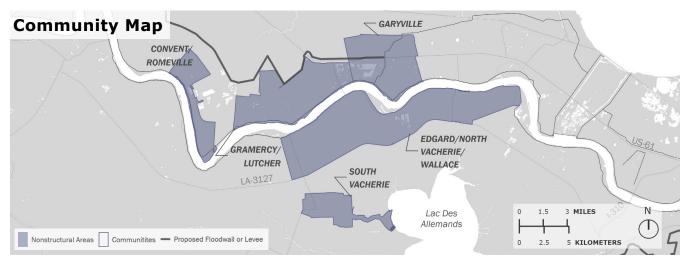
240	commercial properties identified as candidates for floodproofing
55	residential properties identified as candidates for being elevated, and
	residential properties identified as candidates for voluntary acquisition.

If 100% of identified properties implement nonstructural mitigation efforts, expected annual dollar damages (EADD) at year 50 could be reduced by 27% under the lower scenario, and by 7% under the higher scenario in a future without action at a cost of \$36M.

If the master plan is fully implemented, a portion of the above risk would be reduced due to both restoration and structural risk reduction projects. Under this future with master plan, any remaining residual surge-based flood risk could be reduced by an additional 62% under the lower scenario, and 32% under the higher scenario.



are Low-to-Moderate Income



VACHERIE AREA - PAGE 1 OF 2

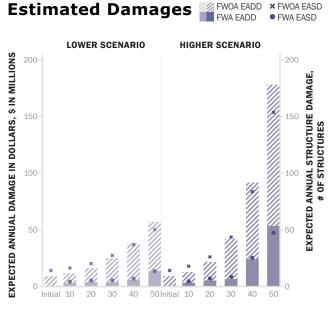


Economic Damage

Risk reduction projects are evaluated by how much they reduce Expected Annual Damage in terms of dollars (EADD) and structures (EASD). EADD takes into account both the potential economic damage from storms and the overall frequency of such storms occurring; it is a summary measure and is averaged over the entire

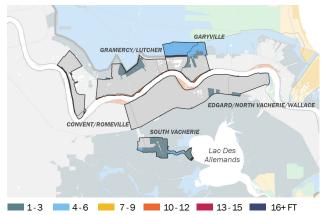
FWOA EADD

× FWOA EASD



With Structural Risk Reduction and Restoration projects only.

Damage Reduction



Structural Risk Reduction

Map: Flood Depths, Future With Action, 1% Annual Exceedance Probability, Lower Scenario, Year 50

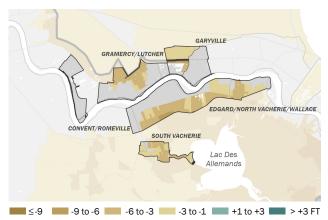
distribution of possible flood events included in the master plan analysis. EASD is calculated in the same way as EADD, however it removes some economic factors that are tied to property values so that the results are agnostic to assumptions around initial property value assessments.

Flood Risk In Project Area

Coastal Louisiana communities are at risk of storm surge-based flooding and environmental and climate changes are expected to increase risk over time. While implementing structural risk reduction and restoration projects can reduce risk and damages, communities will still face some residual risk from these events.

	Initial Conditions	FWOA (YR20/50)	FWA (YR20/50)	Losses Avoided (YR20/50)
Lower Scenario				
EADD (\$)	9.0M	16M/57M	3.8M/13M	12M/44M
EASD (#Structures)	14	20/50	5/14	15/37
Higher Scenario				
EADD (\$)	9.0M	22M/180M	5.3M/54M	16M/120M
EASD (#Structures)	14	26/150	7/47	19/110

All values are rounded to two significant figures. Losses Avoided may not equal the difference between FWOA and FWA. See Estimated Damages figure.



Structural Risk Reduction