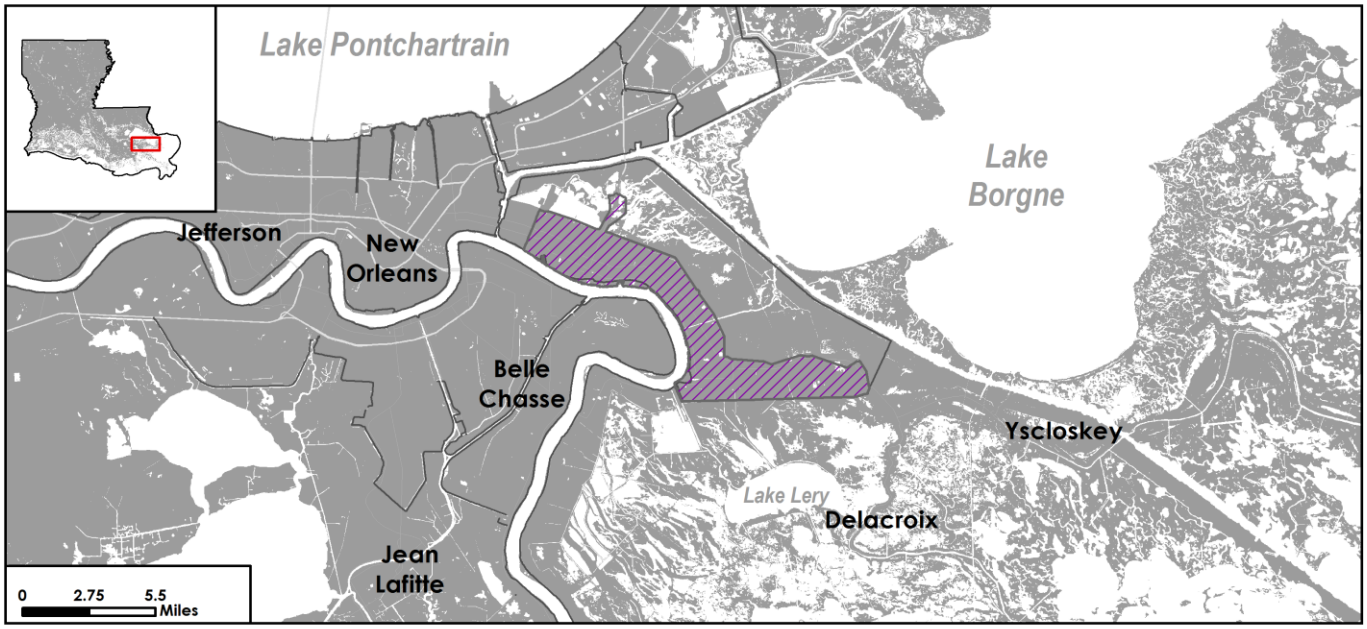
St. Bernard

Nonstructural Risk Reduction

Project ID: STB.02N



Description

Project includes floodproofing non-residential properties where 100-year flood depths are 1-3 feet, elevating residential properties where 100-year flood depths are 3-14 feet, and acquiring residential properties where 100-year flood depths are greater than 14 feet.

Scale of Influence

Local Sub-basin Basin Regional

Project Location

St. Bernard Parish

Project Duration

Construction is estimated to take 1 year.

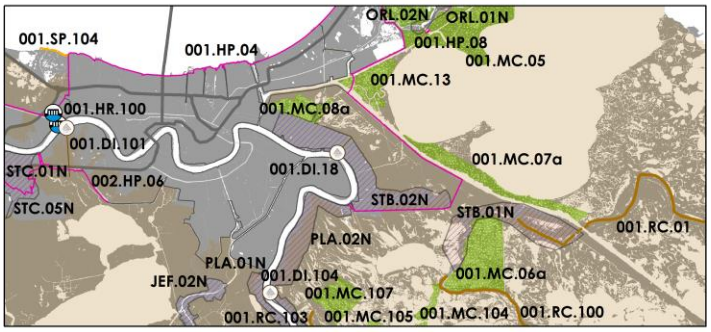
Project Cost Estimate

Voluntary Measure	*Structures Mitigated*	*Estimated Cost*
Non-residential Floodproofing	1	$2,200,000
Residential Elevation	1	$300,000
Residential Acquisition	0	$0
Total	**2**	**$2,500,000**

Note:

Cost Estimate does not represent specific residential or commercial structures to be mitigated.

Other Nearby Projects in the Master Plan



Other Project Area Statistics

Estimated Current Population *U.S. Census (2010), U.S. Dept. of Energy Oak Ridge National Laboratory, Land Scan (2011)*	35,603
Percent of Population who are Low-to-Moderate Income *American Community Survey (2006-2010)*	17%
Number of Severe Repetitive Loss Properties *Governor's Office of Homeland Security (2015)*	0

2017 Coastal Master Plan
Implementation Period I

St. Bernard

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Economic Damage

Nonstructural risk reduction projects are evaluated by how they reduce Expected Annual Damage (EAD) for a particular area. EAD represents the average direct economic damage projected to result from storm surge flooding events, from Category 1 or greater storms, in any given year, taking into account both the expected damage and the overall frequency of such storms occurring. EAD is a summary measure of the potential damage averaged over the entire distribution of possible flood events. Damage is also summarized at various return periods (DRP), e.g., 100-year damage being the damage with a 1% chance of occurring or being exceeded in a given year. The following are the economic damage summaries for the Future Without Action (FWOA) and Future With Project (FWP) conditions for EAD (Table 1) and by return period (Table 2). EAD and DRP values are reported in millions of dollars.

Table 1: Expected Annual Damage

Year	*FWOA*	*FWP*	*Difference*
0	$5 M	-	-
10	$14 M	$13 M	**$1 M**
25	$30 M	$28 M	**$1 M**
50	$75 M	$73 M	**$2 M**

Table 2: Economic Damage by Return Period

Year	*50 Year*		*100 Year*		*500 Year*	
	FWOA	*FWP*	*FWOA*	*FWP*	*FWOA*	*FWP*
0	< $1 M	-	< $1 M	-	$11 M	-
10	$97 M	$62 M	$100 M	$64 M	$1,255 M	$1,216 M
25	$101 M	$66 M	$279 M	$242 M	$4,122 M	$4,083 M
50	$274 M	$238 M	$756 M	$717 M	$13,394 M	$13,354 M