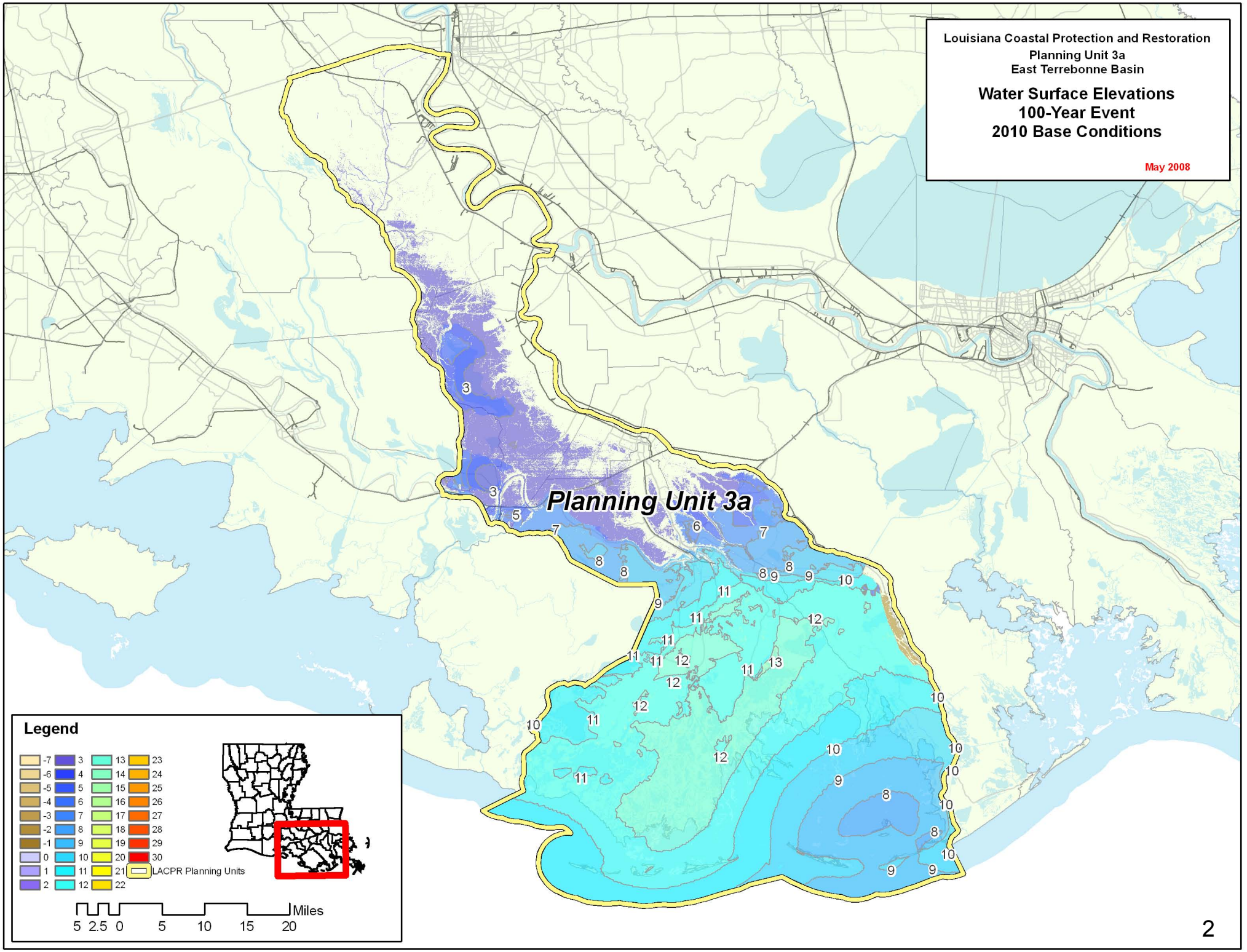
Planning Unit 3a


Louisiana Coastal Protection and Restoration
Planning Unit 3a
East Terrebonne Basin
Water Surface Elevations
100-Year Event
2010 Base Conditions
May 2008
Planning Unit 3a
Legend
-7 -6 -5 -4 -3 -2 -1 0 1 2
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23 24 25 26 27 28 29 30
LACPR Planning Units
Miles
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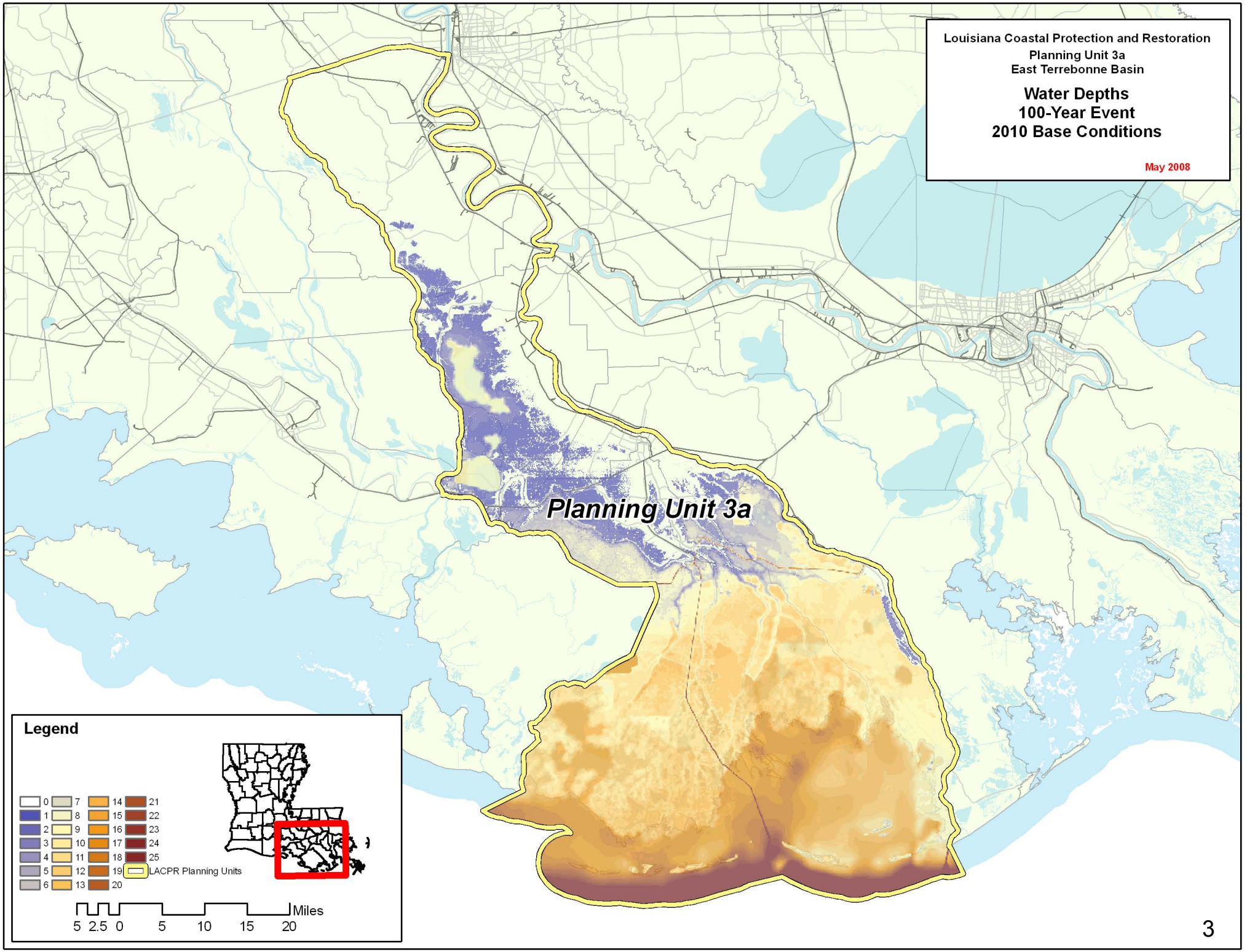
Louisiana Coastal Protection and Restoration
Planning Unit 3a
East Terrebonne Basin
Water Depths
100-Year Event
2010 Base Conditions
May 2008
Planning Unit 3a
Legend
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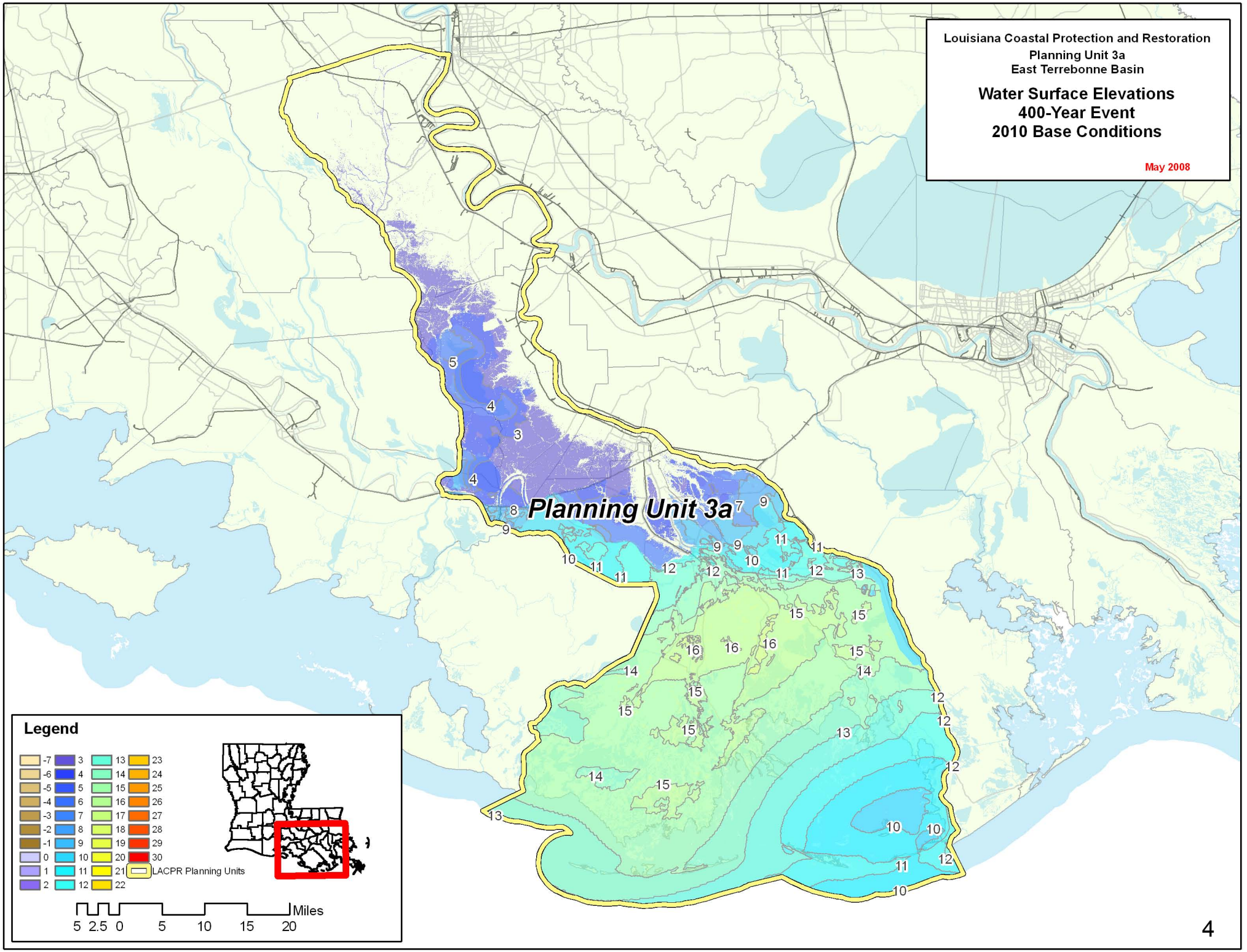
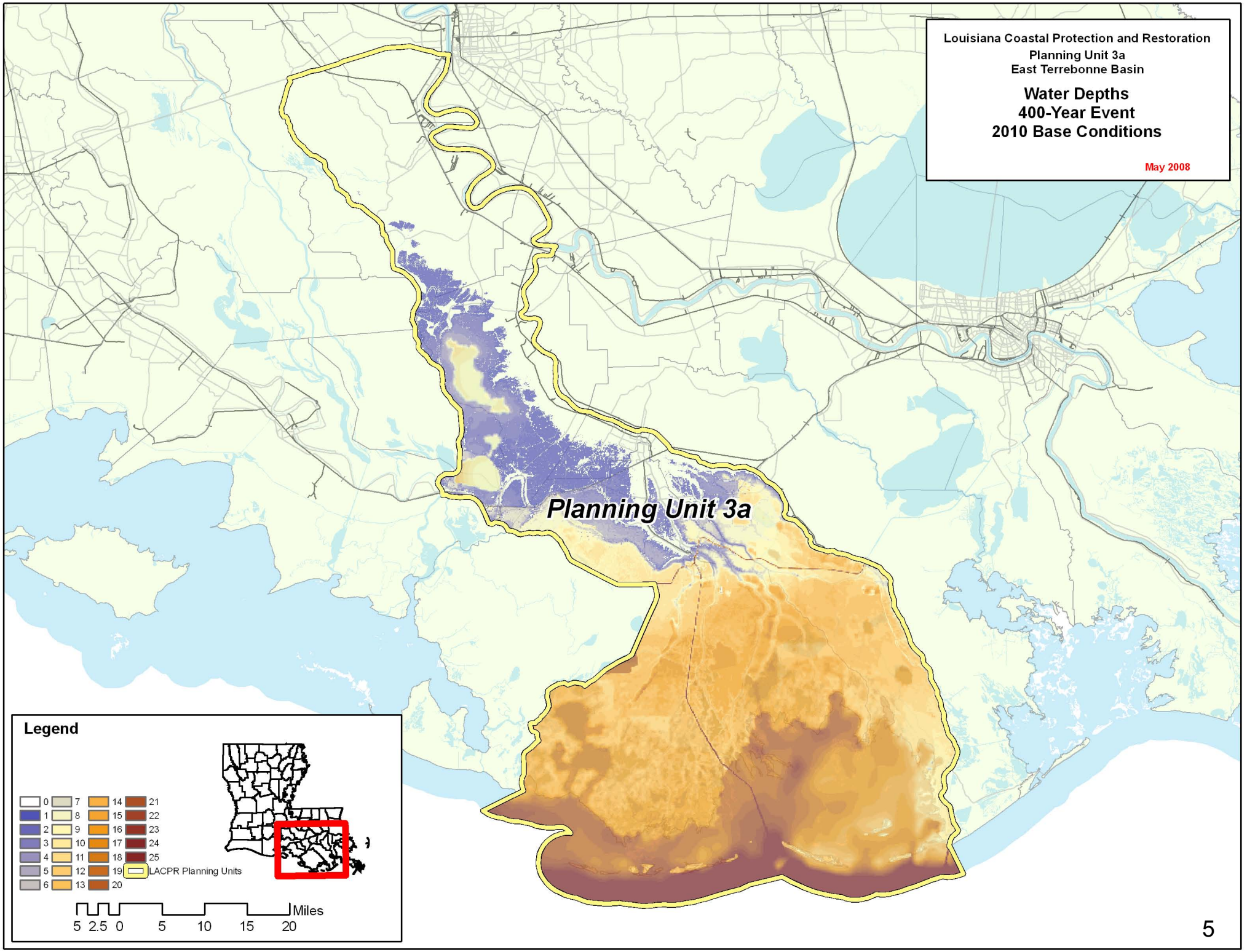
LACPR Planning Units
Miles
5 2.5 0 5 10 15 20


Louisiana Coastal Protection and Restoration
Planning Unit 3a
East Terrebonne Basin
Water Surface Elevations
400-Year Event
2010 Base Conditions
May 2008
Planning Unit 3a
Legend
-7 -6 -5 -4 -3 -2 -1 0 1 2
3 4 5 6 7 8 9 10 11 12
13 14 15 16 17 18 19 20 21 22
23 24 25 26 27 28 29 30
LACPR Planning Units
Miles
5 2.5 0 5 10 15 20


Louisiana Coastal Protection and Restoration
Planning Unit 3a
East Terrebonne Basin
Water Depths
400-Year Event
2010 Base Conditions
May 2008
Planning Unit 3a
Legend
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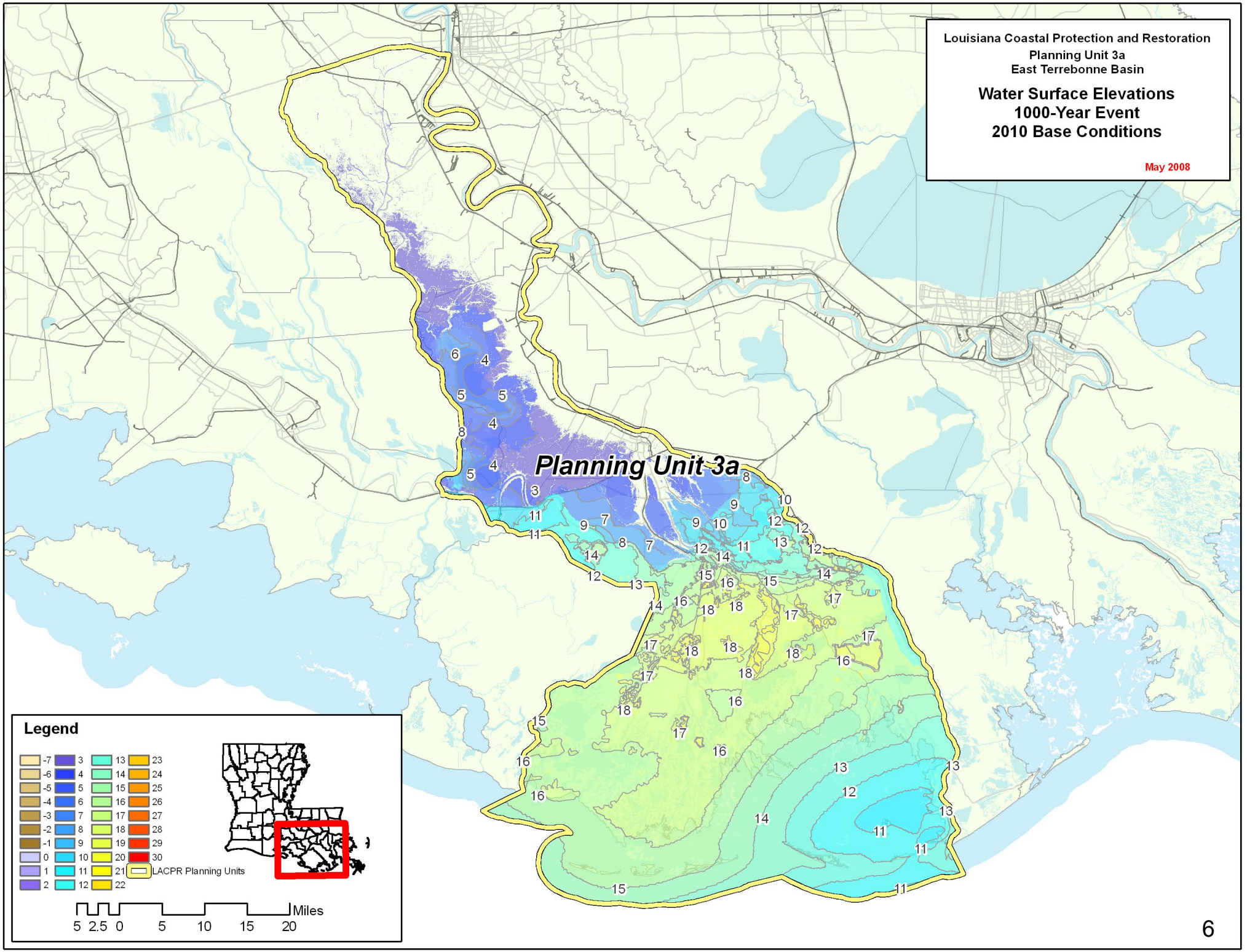
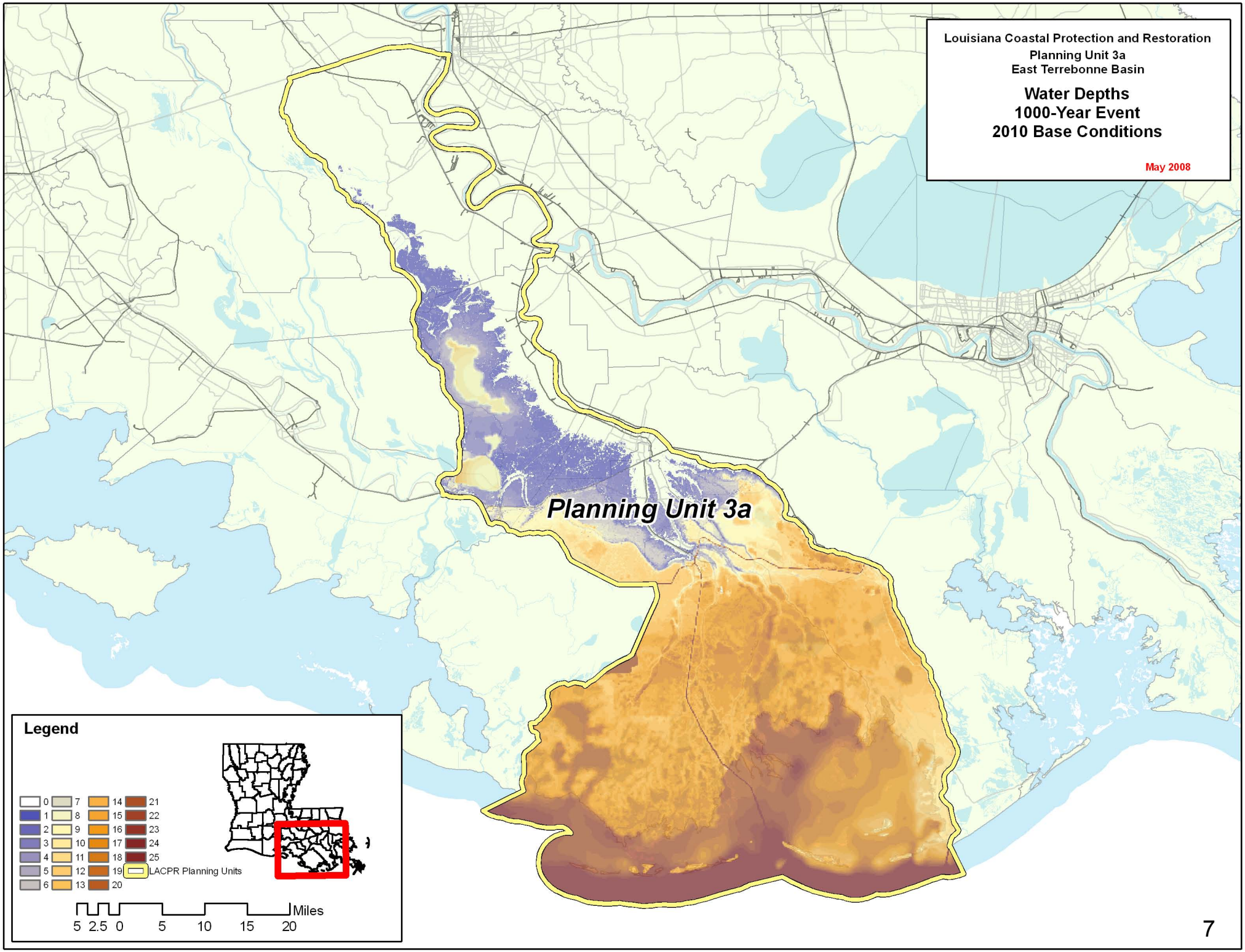
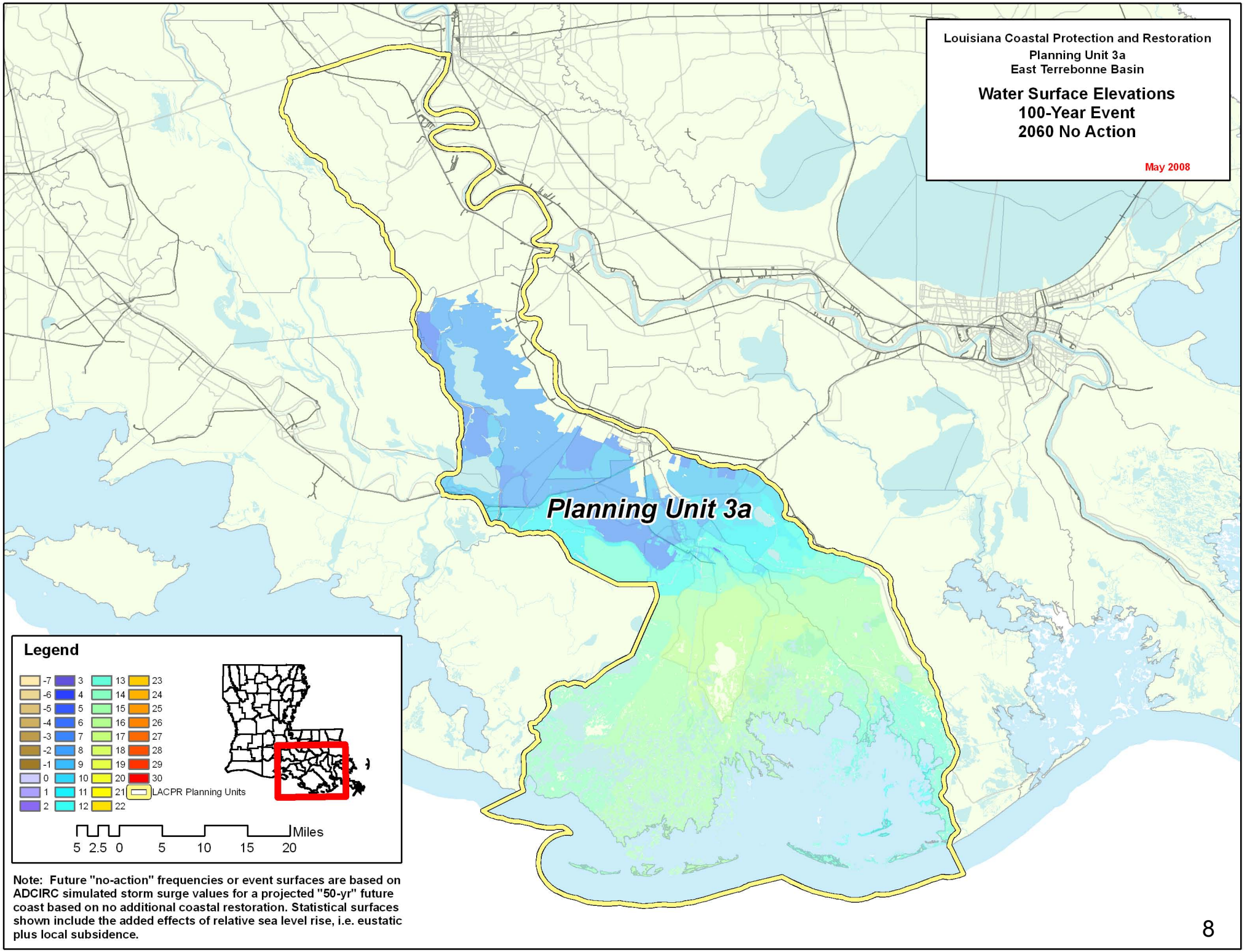
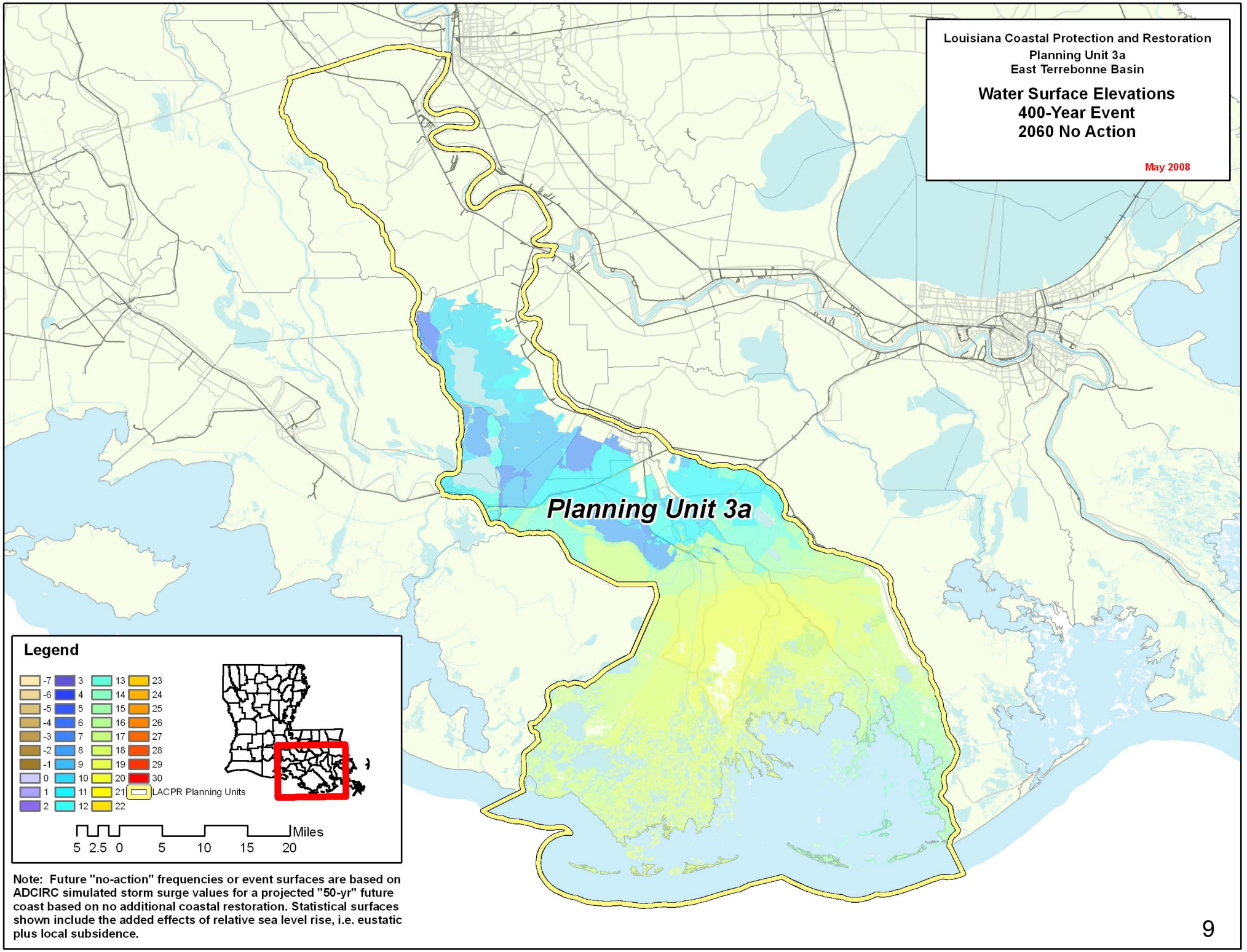
LACPR Planning Units
5 2.5 0 5 10 15 20
Miles


Louisiana Coastal Protection and Restoration
Planning Unit 3a
East Terrebonne Basin
Water Surface Elevations
1000-Year Event
2010 Base Conditions
May 2008
Planning Unit 3a
Legend
-7 -6 -5 -4 -3 -2 -1 0 1 2
3 4 5 6 7 8 9 10 11 12
13 14 15 16 17 18 19 20 21 22
23 24 25 26 27 28 29 30
LACPR Planning Units
Miles
5 2.5 0 5 10 15 20

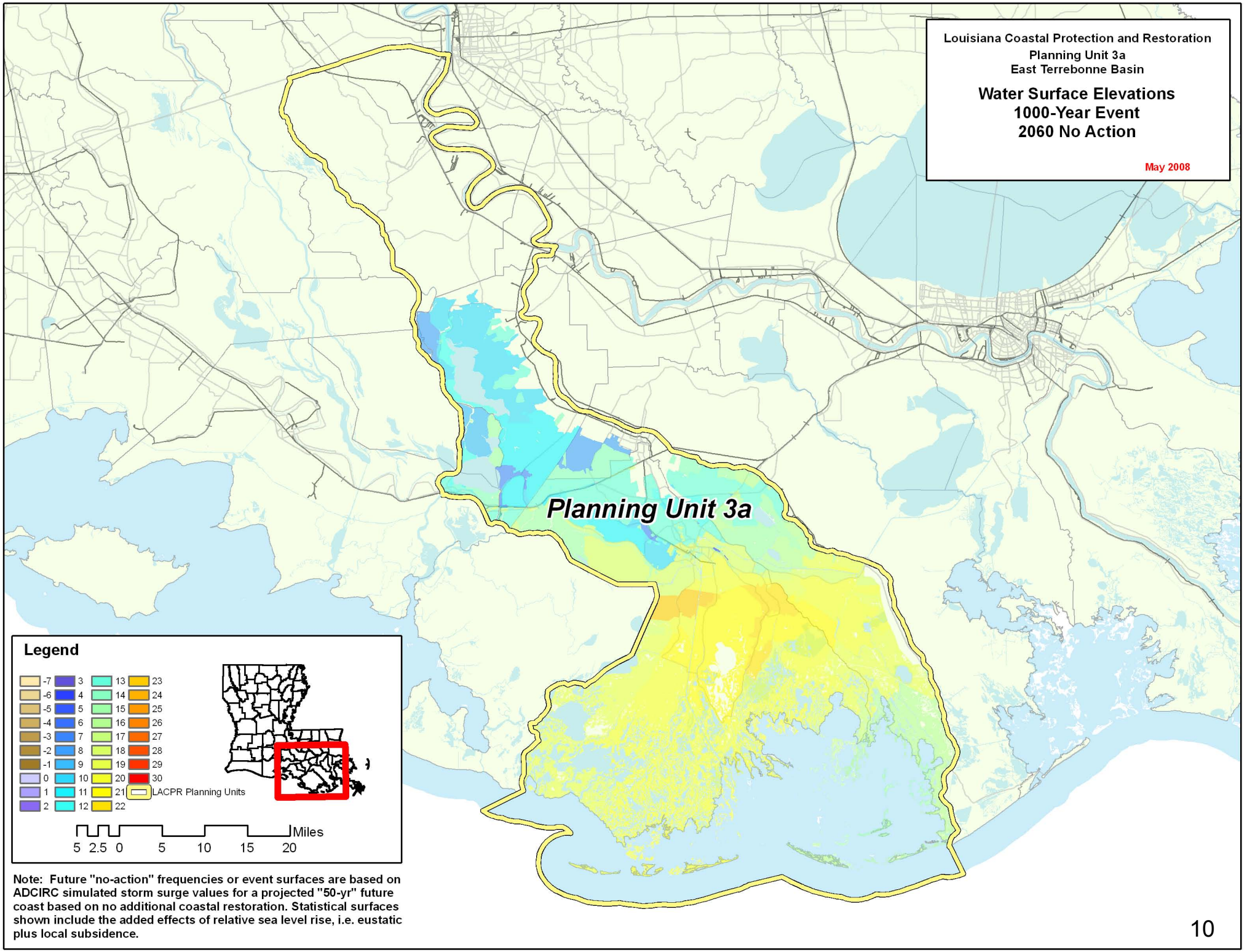

Louisiana Coastal Protection and Restoration
Planning Unit 3a
East Terrebonne Basin
Water Depths
1000-Year Event
2010 Base Conditions
May 2008
Planning Unit 3a
Legend
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25
LACPR Planning Units
Miles
5 2.5 0 5 10 15 20



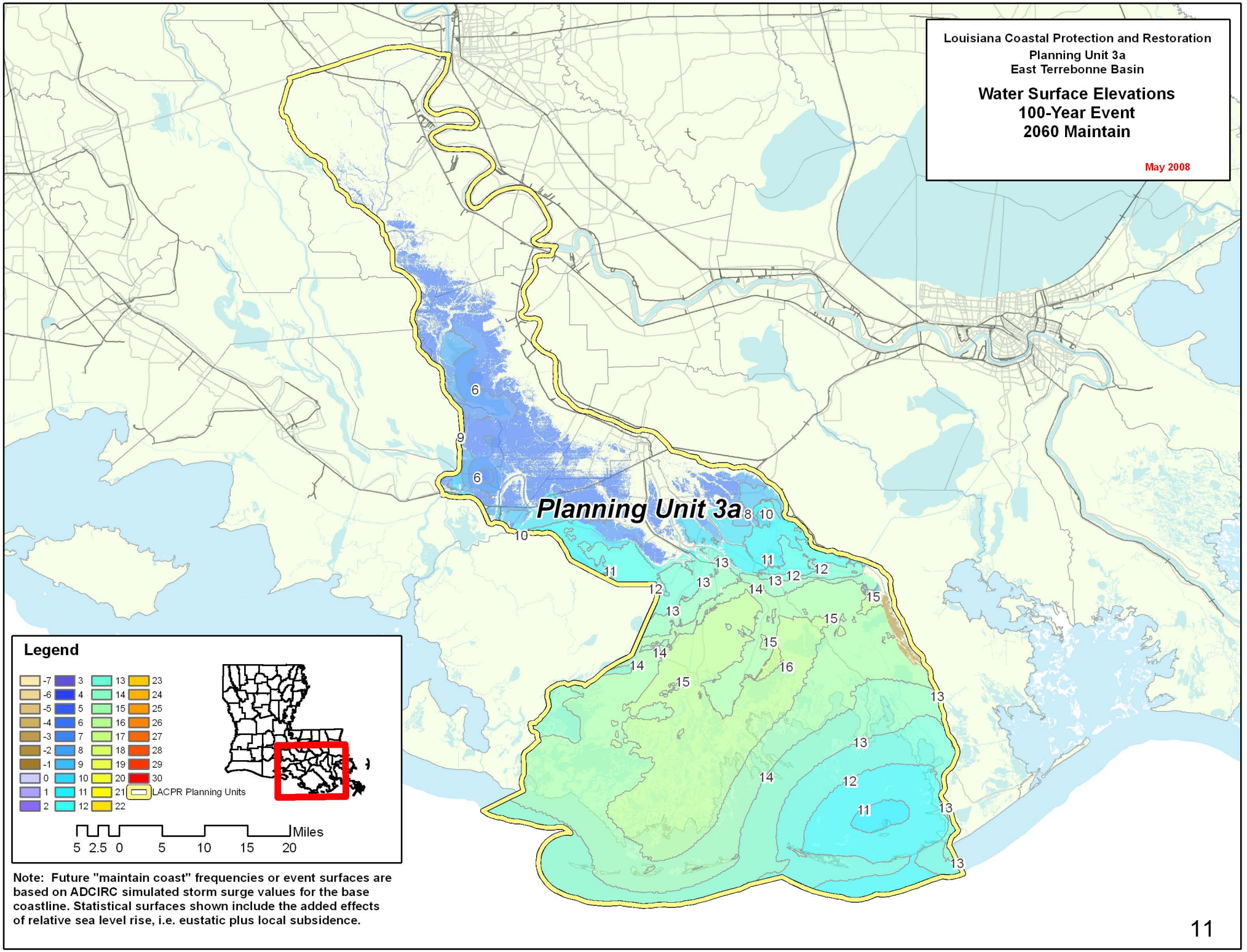
Note: Future "no-action" frequencies or event surfaces are based on ADCIRC simulated storm surge values for a projected "50-yr" future coast based on no additional coastal restoration. Statistical surfaces shown include the added effects of relative sea level rise, i.e. eustatic plus local subsidence.



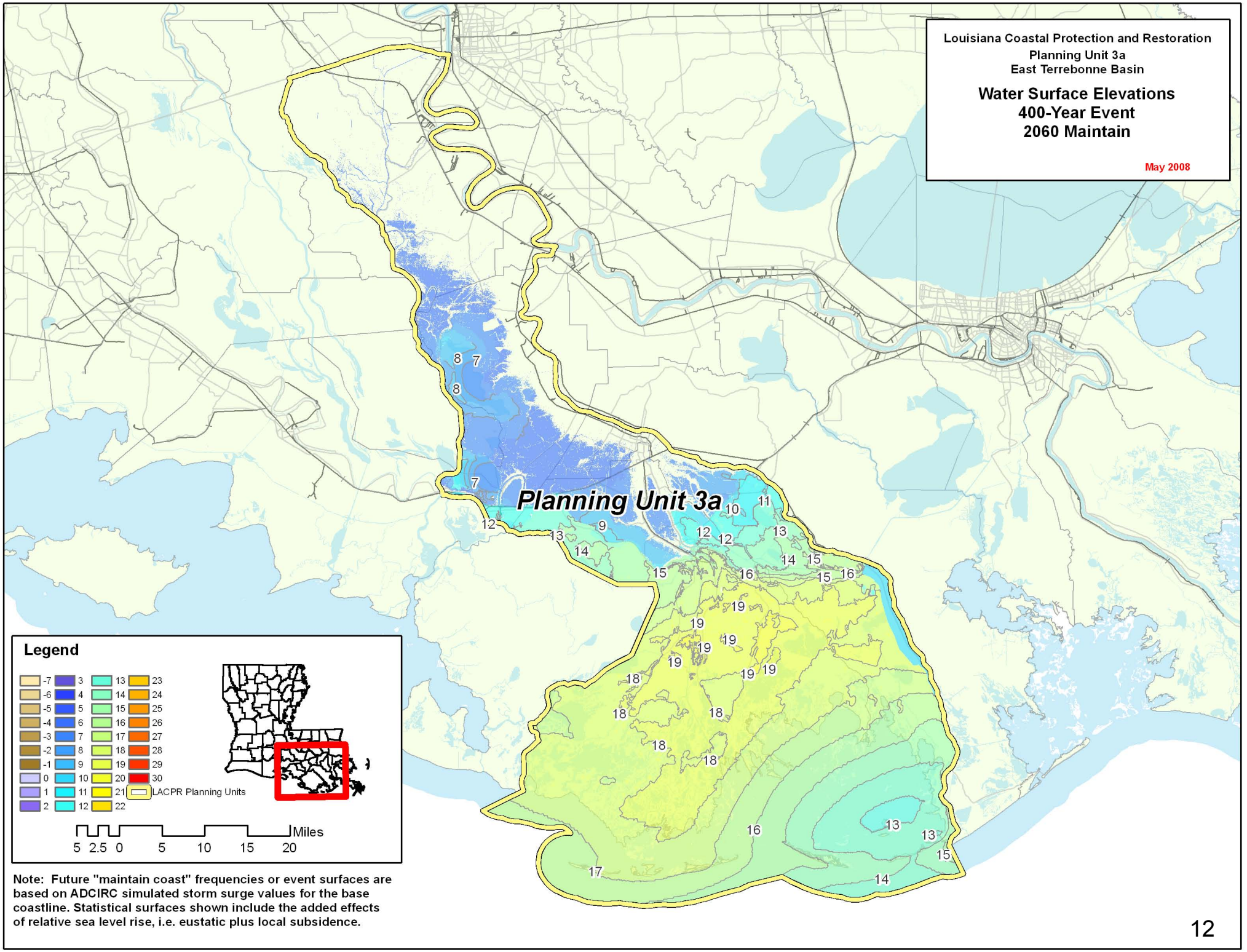
Note: Future "no-action" frequencies or event surfaces are based on ADCIRC simulated storm surge values for a projected "50-yr" future coast based on no additional coastal restoration. Statistical surfaces shown include the added effects of relative sea level rise, i.e. eustatic plus local subsidence.

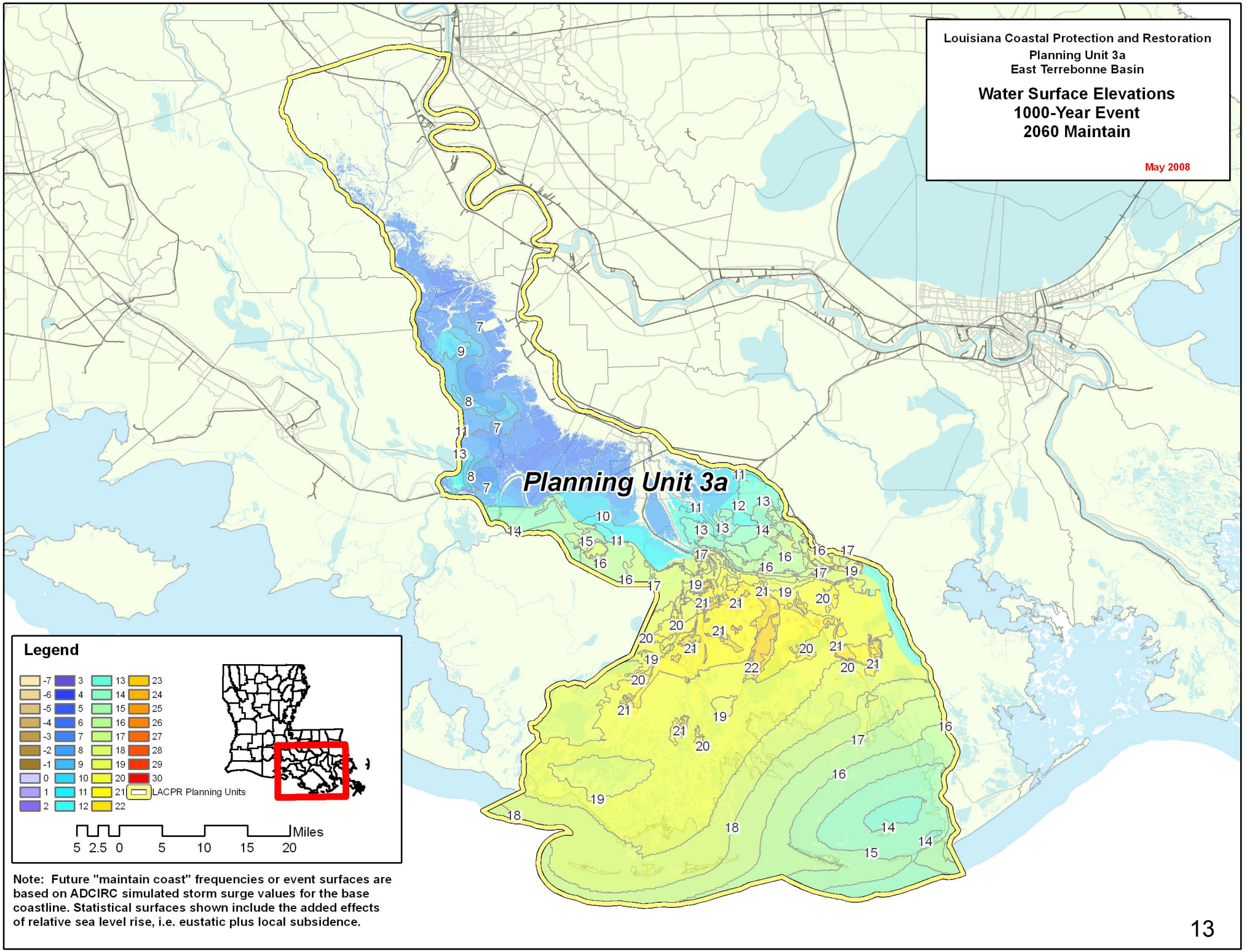


Note: Future "no-action" frequencies or event surfaces are based on ADCIRC simulated storm surge values for a projected "50-yr" future coast based on no additional coastal restoration. Statistical surfaces shown include the added effects of relative sea level rise, i.e. eustatic plus local subsidence.



Note: Future "maintain coast" frequencies or event surfaces are based on ADCIRC simulated storm surge values for the base coastline. Statistical surfaces shown include the added effects of relative sea level rise, i.e. eustatic plus local subsidence.


Louisiana Coastal Protection and Restoration
Planning Unit 3a
East Terrebonne Basin
Water Surface Elevations
400-Year Event
2060 Maintain
May 2008
Planning Unit 3a
Legend
LACPR Planning Units
Miles
5 2.5 0 5 10 15 20
Note: Future "maintain coast" frequencies or event surfaces are based on ADCIRC simulated storm surge values for the base coastline. Statistical surfaces shown include the added effects of relative sea level rise, i.e. eustatic plus local subsidence.



Note: Future "maintain coast" frequencies or event surfaces are based on ADCIRC simulated storm surge values for the base coastline. Statistical surfaces shown include the added effects of relative sea level rise, i.e. eustatic plus local subsidence.

Planning Unit:	3a	**Alt. No.:**	PU3a-0	**Category:**	No Action
Alternative Description:	No action (without project) alternative.				
Coastal Component:	Degraded coast--increasing risk.		**Nonstructural Component:**		None
Structural Component:	No new levees or increases in risk reduction level for existing levees.				

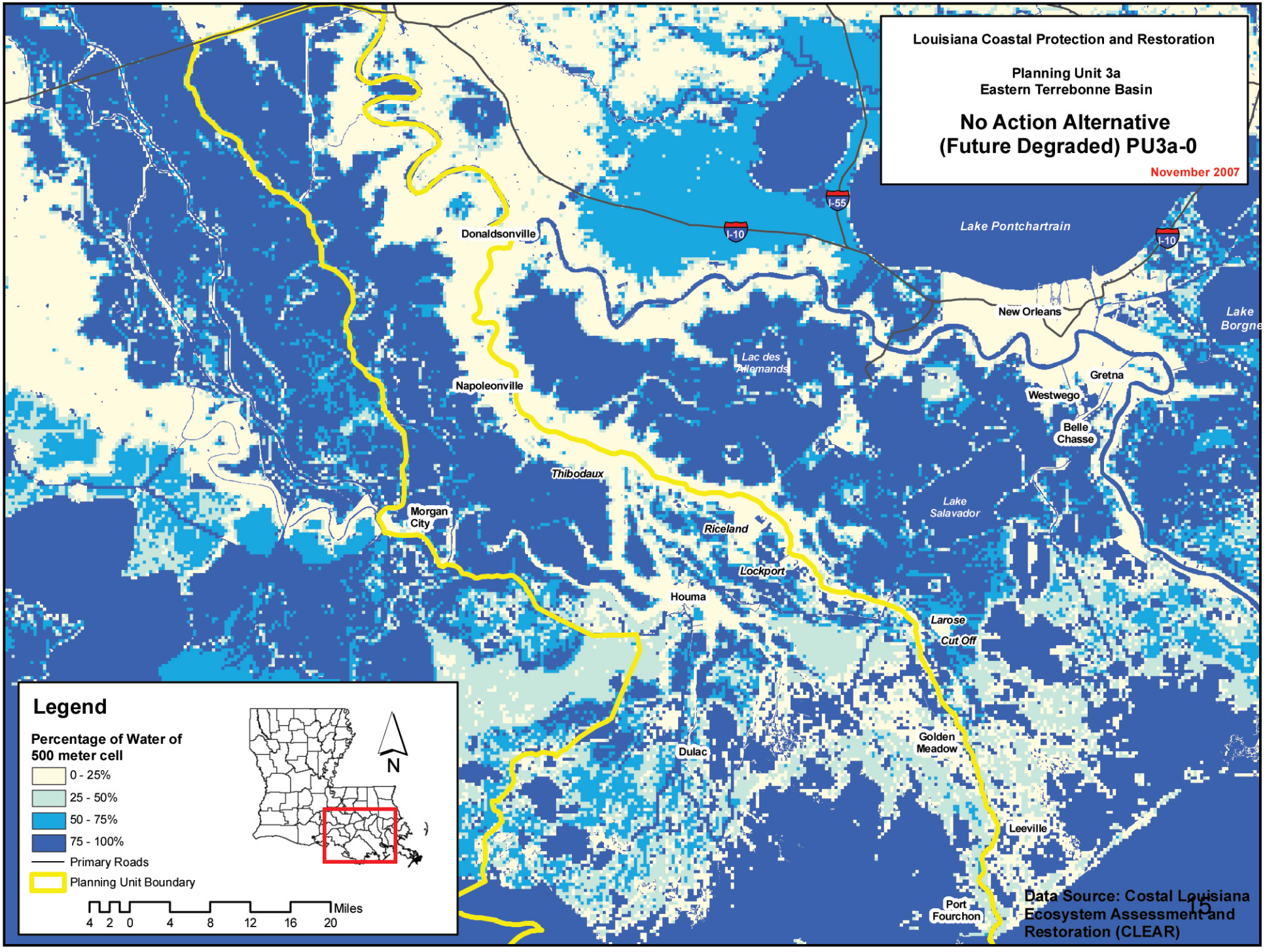
Scenario	Future Conditions (Relative Sea Level Rise (RSLR) and Redevelopment Assumptions)	Uncertainty	Results by Scenario with Uncertainty Bands								
			Life Cycle Cost	Population Impacted	Residual Damages	Gross Regional Output Impacted	Employment Impacted	People's Earned Income Impacted	Archeo. Sites Protected	Historic Properties Protected	Historic Districts Protected
			Ann. Equiv. $ Millions	Ann. Equiv. #	Ann. Equiv. $ Millions	Ann. Equiv. $ Millions	Ann. Equiv. #	Ann. Equiv. $ Millions	# Sites	# Properties	# Districts
1	Low RSLR High Employment Dispersed Population	High	0	12,448	491	869	2,329	168	92	7	1
		Mid		16,540	752	1,361	3,941	269	82	4	0
		Low		19,069	1,028	1,800	5,462	367	72	0	0
2	High RSLR High Employment Dispersed Population	High	0	14,323	596	1,131	2,872	223	92	5	1
		Mid		18,121	911	1,828	4,951	367	82	3	0
		Low		20,475	1,220	2,088	6,018	423	72	0	0
3	Low RSLR Business-as-Usual Compact Population	High	0	10,774	477	844	2,259	161	92	7	1
		Mid		14,918	723	1,271	3,809	257	82	4	0
		Low		17,236	967	1,634	5,167	341	72	0	0
4	High RSLR Business-as-Usual Compact Population	High	0	12,164	570	854	2,854	221	92	5	1
		Mid		16,092	855	1,197	4,715	345	82	3	0
		Low		18,171	1,115	1,343	5,787	405	72	0	0

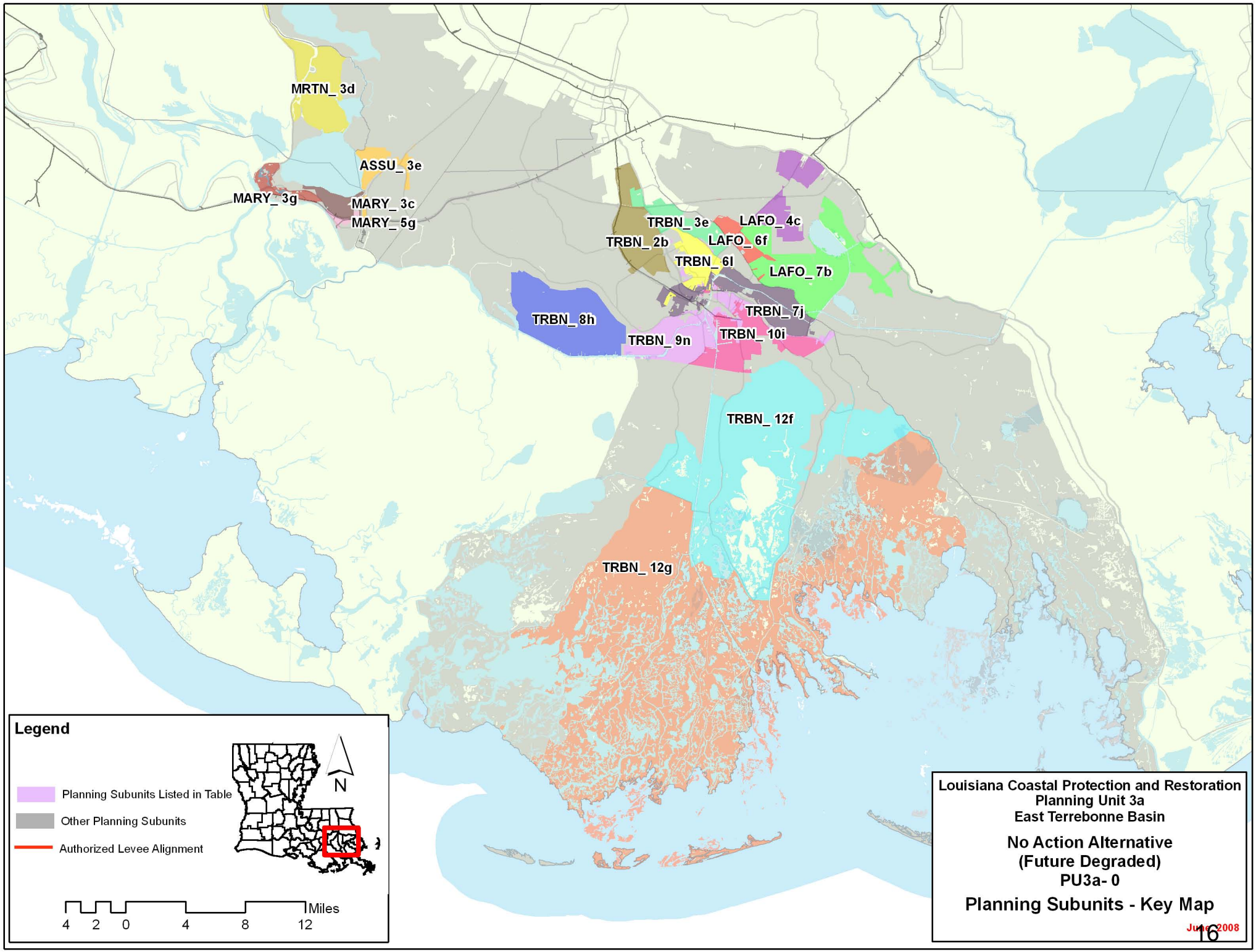
Other Results			
Construction Time (years)			0
Direct Wetland Impacts (acres)			0
Indirect Impacts (unitless)			0
Spatial Integrity (unitless)			0.24
Non-Federal Share of Present Value of Life Cycle Costs	Scenario	($ Millions)	
	1 / 2	0	0
	3 / 4	0	0

Wetlands Created/Protected	Scenario 1	Scenario 2	Scenario 3	Scenario 4
After 50 yrs (% of baseline)	68	66	68	66
After 100 yrs (% of baseline)	55	50	55	50
Present Value of Life Cycle Costs ($ Millions)				
Coastal Component	0	0	0	0
Nonstructural Component	0	0	0	0
Structural Component	0	0	0	0
Total Project	0	0	0	0

2075 Residual Risk / Damages - Low Uncertainty ($ Millions)									Planning Unit 3a
Frequency	Scenario 1		Scenario 2		Scenario 3		Scenario 4		
	No Action	With Proj	No Action	With Proj	No Action	With Proj	No Action	With Proj	
10-year	1,460	N/A	2,472	N/A	1,422	N/A	2,425	N/A	No Action Plan
100-year	10,629	N/A	15,966	N/A	9,695	N/A	13,659	N/A	
400-year	22,650	N/A	25,236	N/A	17,848	N/A	19,693	N/A	
1,000-year	26,922	N/A	28,128	N/A	20,766	N/A	21,591	N/A	
2,000-year	28,659	N/A	29,317	N/A	21,942	N/A	22,348	N/A	

Note: **Present Value** costs and **Annual Equivalent** numbers are calculated for the period from 2010 to 2075 at common base year 2025 using a 4 7/8% Federal discount rate. All dollar metrics are based on 2007 price levels.


Louisiana Coastal Protection and Restoration
Planning Unit 3a
Eastern Terrebonne Basin
No Action Alternative
(Future Degraded) PU3a-0
November 2007
Donaldsonville
I-55
I-10
Lake Pontchartrain
I-10
New Orleans
Lake Borgne
Lac des Allemands
Napoleonville
Gretna
Westwego
Belle Chasse
Thibodaux
Lake Salavador
Morgan City
Riceland
Lockport
Houma
Larose
Cut Off
Golden Meadow
Dulac
Leeville
Port Fourchon
Legend
Percentage of Water of 500 meter cell
0 - 25%
25 - 50%
50 - 75%
75 - 100%
Primary Roads
Planning Unit Boundary
N
Miles
4 2 0 4 8 12 16 20
Data Source: Costal Louisiana Ecosystem Assessment and Restoration (CLEAR)


MRTN_ 3d
ASSU_ 3e
MARY_ 3g
MARY_ 3c
MARY_ 5g
TRBN_ 3e
LAFO_ 4c
TRBN_ 2b
LAFO_ 6f
TRBN_ 6l
LAFO_ 7b
TRBN_ 8h
TRBN_ 7j
TRBN_ 9n
TRBN_ 10i
TRBN_ 12f
TRBN_ 12g
Legend
Planning Subunits Listed in Table
Other Planning Subunits
Authorized Levee Alignment
N
Miles
4 2 0 4 8 12
Louisiana Coastal Protection and Restoration
Planning Unit 3a
East Terrebonne Basin
No Action Alternative
(Future Degraded)
PU3a- 0
Planning Subunits - Key Map
June 2008

Alternative: PU3a-0

Water Surface Elevations (feet - NAVD88 2004.65)

Planning Sub Unit	2010 (Base) Conditions						2060 (Future) Conditions					
	100-yr Event		400-year Event		1,000-yr Event		100-yr Event		400-year Event		1,000-yr Event	
	Without Project	With Project	Without Project	With Project	Without Project	With Project	Without Project	With Project	Without Project	With Project	Without Project	With Project
ASSU_ 3e	3.7		3.9		4.3		6.9		7.1		7.5	
LAFO_ 4c	7.0		11.7		13.6		10.2		14.9		16.8	
LAFO_ 6f	8.4		13.4		16.7		11.6		16.6		19.9	
LAFO_ 7b	7.8		11.5		13.6		11.0		14.7		16.8	
MARY_ 2f	6.3		8.5		9.9		9.5		11.7		13.1	
MARY_ 3c	6.3		10.8		13.1		9.5		14.0		16.3	
MARY_ 3g	6.1		9.6		11.4		9.3		12.8		14.6	
MARY_ 5g	7.8		9.9		12.0		11.0		13.1		15.2	
MRTN_ 3d	3.8		5.9		7.1		7.0		9.1		10.3	
TRBN_ 10i	11.2		16.1		19.5		14.4		19.3		22.7	
TRBN_ 12f	13.5		18.0		20.8		16.7		21.2		24.0	
TRBN_ 12g	13.2		16.9		19.0		16.1		19.6		21.8	
TRBN_ 2b	6.6		9.5		12.8		9.8		12.7		16.0	
TRBN_ 3e	4.9		8.8		11.7		8.1		12.0		14.9	
TRBN_ 6l	7.8		8.8		10.5		11.0		12.0		13.7	
TRBN_ 7j	9.3		14.0		16.3		12.5		17.2		19.5	
TRBN_ 8h	9.7		14.5		17.4		14.3		18.7		20.7	
TRBN_ 9n	8.4		12.1		14.1		11.6		15.3		17.3	

Evaluation Parameters						
	Confidence Level:	90%		Levee Design:	No Friction Waves	
	Future Relative Sea Level Rise:	3.2 feet		Levee Overtopping:	No Friction Waves	

Planning Unit:	3a	Alt. No.:	PU3a-R1	Category:	Coastal Restoration Only
Alternative Description:					
Coastal Component:	R1	Nonstructural Component:	None		
Structural Component:	No new levees or increases in risk reduction level for existing levees.				

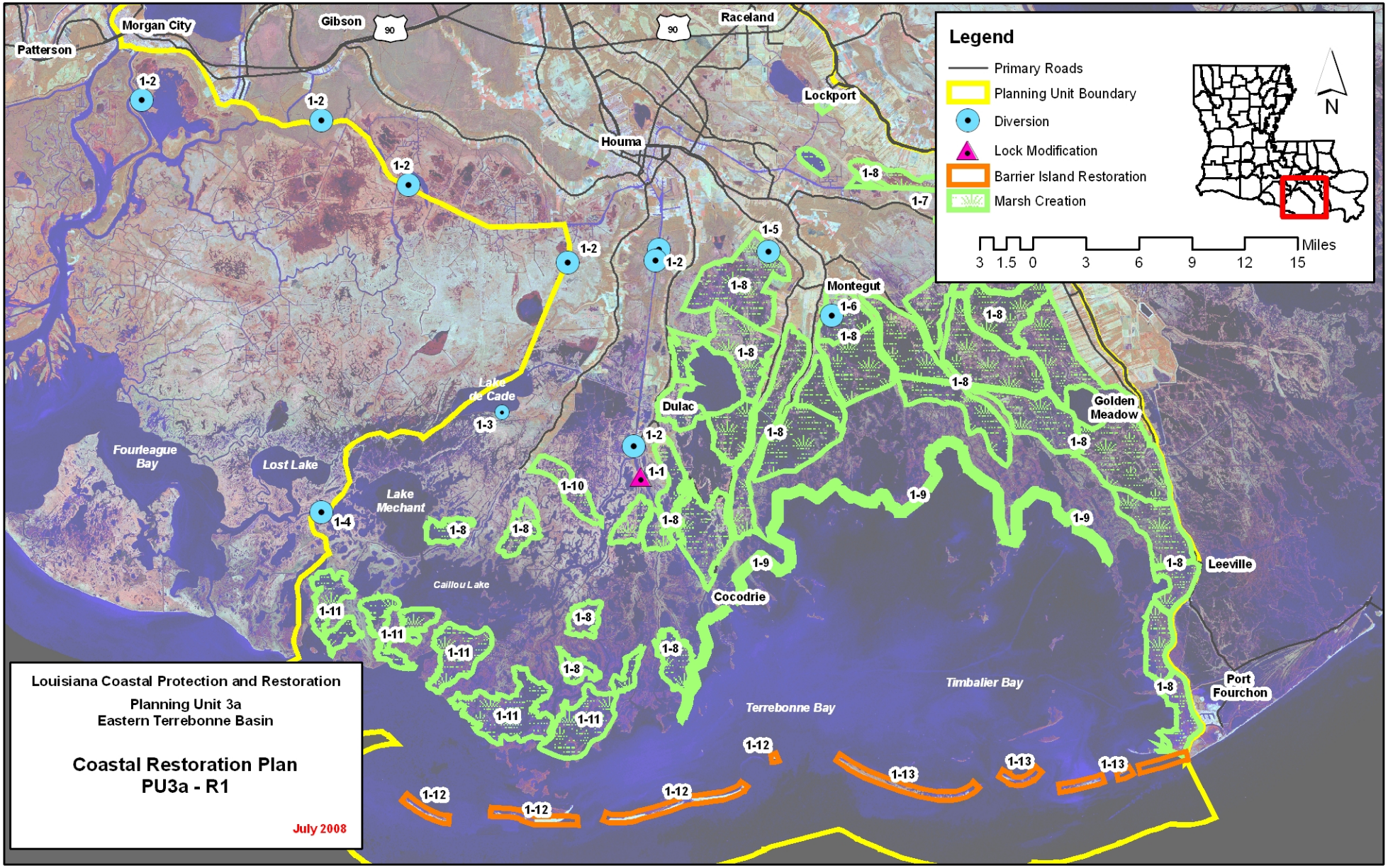
Scenario	Future Conditions (Relative Sea Level Rise (RSLR) and Redevelopment Assumptions)	Uncertainty	Results by Scenario with Uncertainty Bands								
			Life Cycle Cost	Population Impacted	Residual Damages	Gross Regional Output Impacted	Employment Impacted	People's Earned Income Impacted	Archeo. Sites Protected	Historic Properties Protected	Historic Districts Protected
			Ann. Equiv. $ Millions	Ann. Equiv. #	Ann. Equiv. $ Millions	Ann. Equiv. $ Millions	Ann. Equiv. #	Ann. Equiv. $ Millions	# Sites	# Properties	# Districts
1	Low RSLR High Employment Dispersed Population	High	1,189	12,456	490	864	2,317	167	157	10	1
		Mid		16,592	750	1,357	3,929	268	134	6	0
		Low		19,115	1,027	1,796	5,451	366	111	3	0
2	High RSLR High Employment Dispersed Population	High	1,210	14,325	595	1,131	2,873	223	157	10	1
		Mid		18,185	910	1,829	4,952	367	134	6	0
		Low		20,522	1,221	2,090	6,024	424	111	3	0
3	Low RSLR Business-as-Usual Compact Population	High	1,189	10,768	476	843	2,258	161	157	10	1
		Mid		14,958	722	1,272	3,809	257	134	6	0
		Low		17,274	967	1,633	5,163	341	111	3	0
4	High RSLR Business-as-Usual Compact Population	High	1,210	12,171	569	1,140	2,853	221	157	10	1
		Mid		16,142	855	1,684	4,716	345	134	6	0
		Low		18,207	1,117	1,944	5,789	405	111	3	0

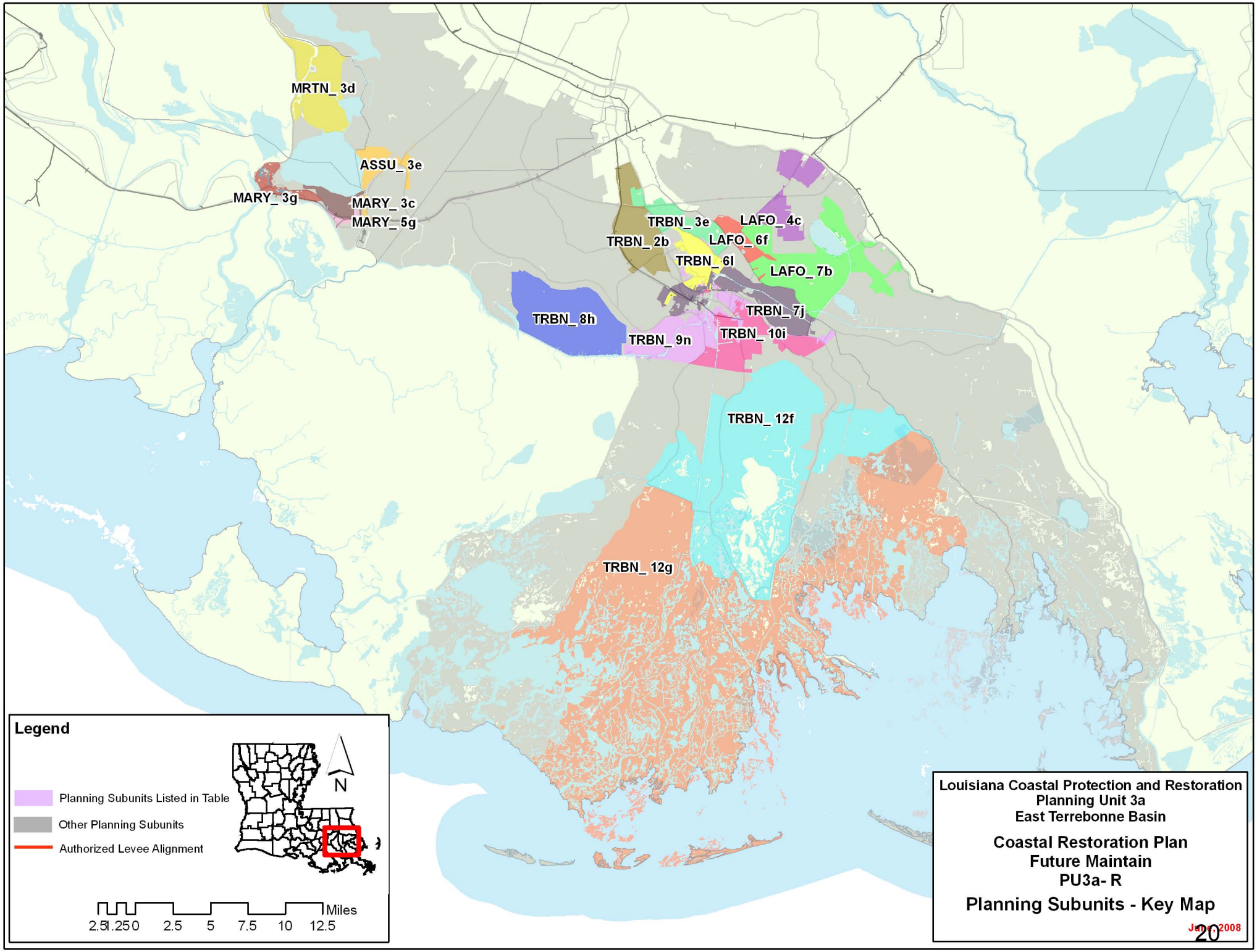
Other Results			
Construction Time (years)			15
Direct Wetland Impacts (acres)			0
Indirect Impacts (unitless)			0
Spatial Integrity (unitless)			0.37
Non-Federal Share of Present Value of Life Cycle Costs	Scenario	($ Millions)	
	1 / 2	8,146	8,296
	3 / 4	8,146	8,296

Wetlands Created/Protected	Scenario 1	Scenario 2	Scenario 3	Scenario 4
After 50 yrs (% of baseline)	98	97	98	97
After 100 yrs (% of baseline)	110	100	110	100
Present Value of Life Cycle Costs ($ Millions)				
Coastal Component	23,276	23,703	23,276	23,703
Nonstructural Component	0	0	0	0
Structural Component	0	0	0	0
Total Project	23,276	23,703	23,276	23,703

2075 Residual Risk / Damages - Low Uncertainty ($ Millions)									Planning Unit 3a Coastal Plan Coastal Restoration Alt
Frequency	Scenario 1		Scenario 2		Scenario 3		Scenario 4		
	No Action	With Proj	No Action	With Proj	No Action	With Proj	No Action	With Proj	
10-year	1,460	1,466	2,472	2,479	1,422	1,428	2,425	2,431	
100-year	10,629	10,574	15,966	15,993	9,695	9,683	13,659	13,697	
400-year	22,650	22,760	25,236	25,351	17,848	17,925	19,693	19,779	
1,000-year	26,922	27,034	28,128	28,244	20,766	20,855	21,591	21,683	
2,000-year	28,659	28,781	29,317	29,437	21,942	22,035	22,348	22,440	

Note: **Present Value** costs and **Annual Equivalent** numbers are calculated for the period from 2010 to 2075 at common base year 2025 using a 4 7/8% Federal discount rate. All dollar metrics are based on 2007 price levels.


Legend
Primary Roads
Planning Unit Boundary
Diversion
Lock Modification
Barrier Island Restoration
Marsh Creation
N
3 1.5 0 3 6 9 12 15 Miles
Louisiana Coastal Protection and Restoration
Planning Unit 3a
Eastern Terrebonne Basin
Coastal Restoration Plan
PU3a - R1
July 2008
Patterson
Morgan City
Gibson
Raceland
Lockport
Houma
Montegut
Dulac
Golden Meadow
Leeville
Cocodrie
Port Fourchon
Lake de Cade
Fourleague Bay
Lost Lake
Lake Mechant
Caillou Lake
Terrebonne Bay
Timbalier Bay


MRTN_ 3d
ASSU_ 3e
MARY_ 3g
MARY_ 3c
MARY_ 5g
TRBN_ 3e
LAFO_ 4c
TRBN_ 2b
LAFO_ 6f
TRBN_ 6l
LAFO_ 7b
TRBN_ 8h
TRBN_ 7j
TRBN_ 9n
TRBN_ 10i
TRBN_ 12f
TRBN_ 12g
Legend
Planning Subunits Listed in Table
Other Planning Subunits
Authorized Levee Alignment
N
Miles
2.5 1.25 0 2.5 5 7.5 10 12.5
Louisiana Coastal Protection and Restoration
Planning Unit 3a
East Terrebonne Basin
Coastal Restoration Plan
Future Maintain
PU3a- R
Planning Subunits - Key Map
June 2008

Alternative: PU3a-R1

Water Surface Elevations (feet - NAVD88 2004.65)

Planning Sub Unit	2010 (Base) Conditions*						2060 (Future) Conditions					
	100-yr Event		400-year Event		1,000-yr Event		100-yr Event		400-year Event		1,000-yr Event	
	Without Project	With Project	Without Project	With Project	Without Project	With Project	Without Project	With Project	Without Project	With Project	Without Project	With Project
ASSU_ 3e	3.7	3.7	3.9	3.9	4.3	4.3	6.9	6.9	7.1	7.1	7.5	7.5
LAFO_ 4c	7.0	7.0	11.7	11.7	13.6	13.6	10.2	10.2	14.9	14.9	16.8	16.8
LAFO_ 6f	8.4	8.4	13.4	13.4	16.7	16.7	11.6	11.6	16.6	16.6	19.9	19.9
LAFO_ 7b	7.8	7.8	11.5	11.5	13.6	13.6	11.0	11.0	14.7	14.7	16.8	16.8
MARY_ 2f	6.3	6.3	8.5	8.5	9.9	9.9	9.5	9.5	11.7	11.7	13.1	13.1
MARY_ 3c	6.3	6.3	10.8	10.8	13.1	13.1	9.5	9.5	14.0	14.0	16.3	16.3
MARY_ 3g	6.1	6.1	9.6	9.6	11.4	11.4	9.3	9.3	12.8	12.8	14.6	14.6
MARY_ 5g	7.8	7.8	9.9	9.9	12.0	12.0	11.0	11.0	13.1	13.1	15.2	15.2
MRTN_ 3d	3.8	3.8	5.9	5.9	7.1	7.1	7.0	7.0	9.1	9.1	10.3	10.3
TRBN_ 10i	11.2	11.2	16.1	16.1	19.5	19.5	14.4	14.4	19.3	19.3	22.7	22.7
TRBN_ 12f	13.5	13.5	18.0	18.0	20.8	20.8	16.7	16.7	21.2	21.2	24.0	24.0
TRBN_ 12g	13.2	13.2	16.9	16.9	19.0	19.0	16.1	16.4	19.6	20.1	21.8	22.2
TRBN_ 2b	6.6	6.6	9.5	9.5	12.8	12.8	9.8	9.8	12.7	12.7	16.0	16.0
TRBN_ 3e	4.9	4.9	8.8	8.8	11.7	11.7	8.1	8.1	12.0	12.0	14.9	14.9
TRBN_ 6l	7.8	7.8	8.8	8.8	10.5	10.5	11.0	11.0	12.0	12.0	13.7	13.7
TRBN_ 7j	9.3	9.3	14.0	14.0	16.3	16.3	12.5	12.5	17.2	17.2	19.5	19.5
TRBN_ 8h	9.7	9.7	14.5	14.5	17.4	17.4	14.3	12.9	18.7	17.7	20.7	20.6
TRBN_ 9n	8.4	8.4	12.1	12.1	14.1	14.1	11.6	11.6	15.3	15.3	17.3	17.3

Evaluation Parameters				
	Confidence Level:	90%	Levee Design:	No Friction Waves
	Future Relative Sea Level Rise:	3.2 feet	Levee Overtopping:	No Friction Waves

* With and without project base conditions (2010) are the same for coastal restoration only plans.

Planning Unit:	3a	Alt. No.:	PU3a-NS-100	Category:	Coastal Restoration + Nonstructural Measures
Alternative Description:	Sustain coastal landscape through restoration. Implement comprehensive 100-year nonstructural measures.				
Coastal Component:	R1	Nonstructural Component:	100-yr stand alone measures		
Structural Component:	No new levees or increases in risk reduction level for existing levees.				

Scenario	Future Conditions (Relative Sea Level Rise (RSLR) and Redevelopment Assumptions)	Uncertainty	Results by Scenario with Uncertainty Bands								
			Life Cycle Cost	Population Impacted	Residual Damages	Gross Regional Output Impacted	Employment Impacted	People's Earned Income Impacted	Archeo. Sites Protected	Historic Properties Protected	Historic Districts Protected
			Ann. Equiv. $ Millions	Ann. Equiv. #	Ann. Equiv. $ Millions	Ann. Equiv. $ Millions	Ann. Equiv. #	Ann. Equiv. $ Millions	# Sites	# Properties	# Districts
1	Low RSLR High Employment Dispersed Population	High	1,587	11,127	195	279	902	54	157	10	1
		Mid		15,021	327	640	2,047	127	134	6	0
		Low		17,559	512	932	3,078	193	111	3	0
2	High RSLR High Employment Dispersed Population	High	1,609	12,090	225	407	1,154	81	157	10	1
		Mid		15,841	406	861	2,550	175	134	6	0
		Low		18,284	625	1,032	3,313	214	111	3	0
3	Low RSLR Business-as-Usual Compact Population	High	1,587	9,856	189	257	852	49	157	10	1
		Mid		13,882	313	591	1,989	121	134	6	0
		Low		16,267	476	843	2,926	179	111	3	0
4	High RSLR Business-as-Usual Compact Population	High	1,608	10,579	212	267	1,120	77	157	10	1
		Mid		14,492	377	552	2,424	163	134	6	0
		Low		16,747	566	671	3,181	203	111	3	0

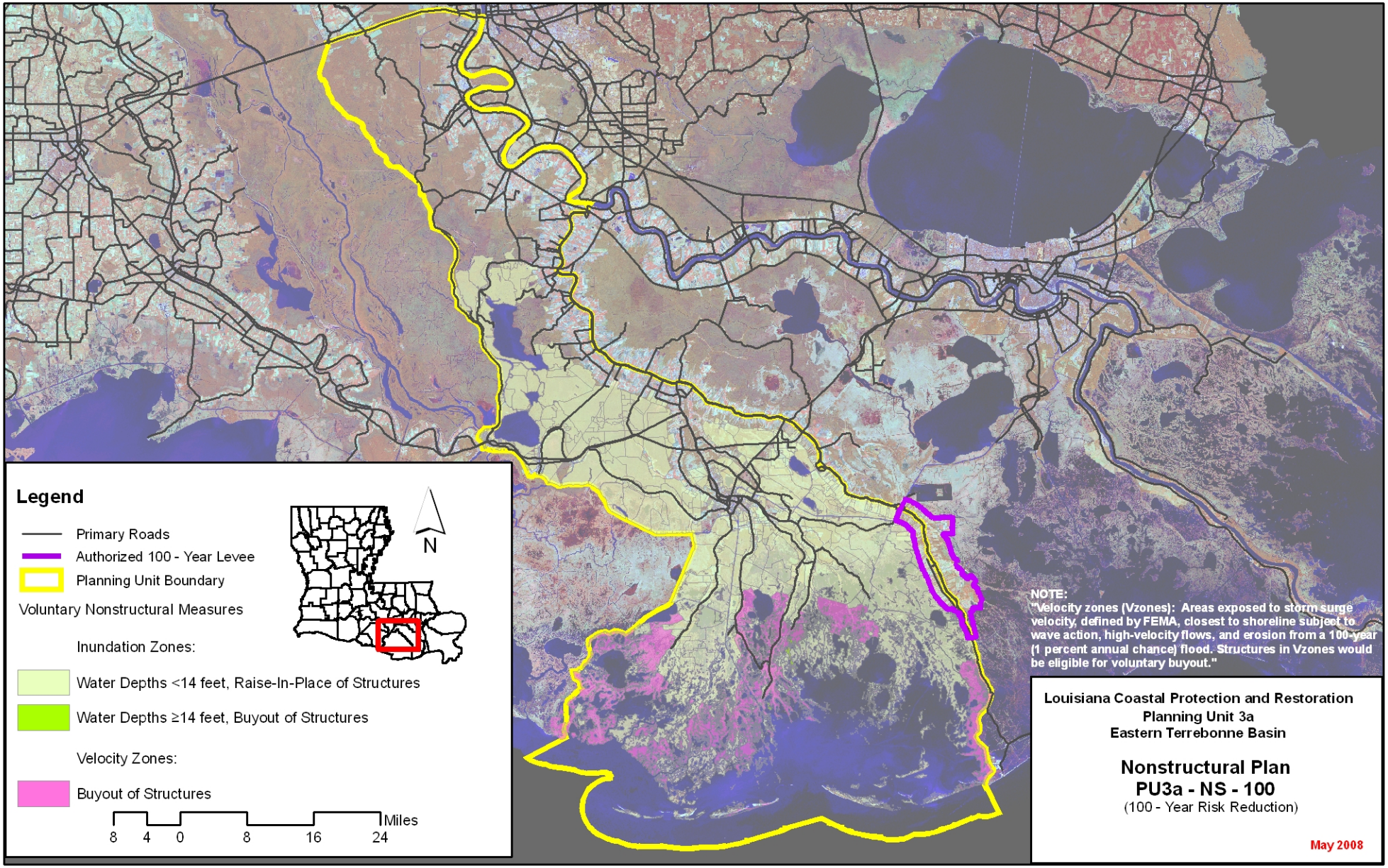
Other Results	
Construction Time (years)	15
Direct Wetland Impacts (acres)	0
Indirect Impacts (unitless)	0
Spatial Integrity (unitless)	0.37

Non-Federal Share of Present Value of Life Cycle Costs	Scenario	($ Millions)	
	1 / 2	10,886	11,035
	3 / 4	10,880	11,030

Wetlands Created/Protected	Scenario 1	Scenario 2	Scenario 3	Scenario 4
After 50 yrs (% of baseline)	98	97	98	97
After 100 yrs (% of baseline)	110	100	110	100
Present Value of Life Cycle Costs ($ Millions)				
Coastal Component	23,276	23,703	23,276	23,703
Nonstructural Component	7,827	7,827	7,811	7,811
Structural Component	0	0	0	0
Total Project	31,102	31,530	31,086	31,514

2075 Residual Risk / Damages - Low Uncertainty ($ Millions)									Planning Unit 3a
Frequency	Scenario 1		Scenario 2		Scenario 3		Scenario 4		
	No Action	With Proj	No Action	With Proj	No Action	With Proj	No Action	With Proj	
10-year	1,460	179	2,472	401	1,422	161	2,425	365	Nonstructural Plan
100-year	10,629	5,111	15,966	12,047	9,695	4,257	13,659	9,796	
400-year	22,650	20,976	25,236	24,215	17,848	16,213	19,693	18,694	
1,000-year	26,922	26,215	28,128	27,711	20,766	20,075	21,591	21,178	
2,000-year	28,659	28,308	29,317	29,086	21,942	21,587	22,348	22,107	100-year Design

Note: **Present Value** costs and **Annual Equivalent** numbers are calculated for the period from 2010 to 2075 at common base year 2025 using a 4 7/8% Federal discount rate. All dollar metrics are based on 2007 price levels.


Legend
Primary Roads
Authorized 100 - Year Levee
Planning Unit Boundary
Voluntary Nonstructural Measures
Inundation Zones:
Water Depths <14 feet, Raise-In-Place of Structures
Water Depths ≥14 feet, Buyout of Structures
Velocity Zones:
Buyout of Structures
8 4 0 8 16 24
Miles
N
NOTE:
"Velocity zones (Vzones): Areas exposed to storm surge velocity, defined by FEMA, closest to shoreline subject to wave action, high-velocity flows, and erosion from a 100-year (1 percent annual chance) flood. Structures in Vzones would be eligible for voluntary buyout."
Louisiana Coastal Protection and Restoration
Planning Unit 3a
Eastern Terrebonne Basin
Nonstructural Plan
PU3a - NS - 100
(100 - Year Risk Reduction)
May 2008

Planning Unit:	3a	**Alt. No.:**	PU3a-NS-400	**Category:**	Coastal Restoration + Nonstructural Measures
Alternative Description:	Sustain coastal landscape through restoration. Implement comprehensive 400-year nonstructural measures.				
Coastal Component:	R1	**Nonstructural Component:**	400-yr stand alone measures		
Structural Component:	No new levees or increases in risk reduction level for existing levees.				

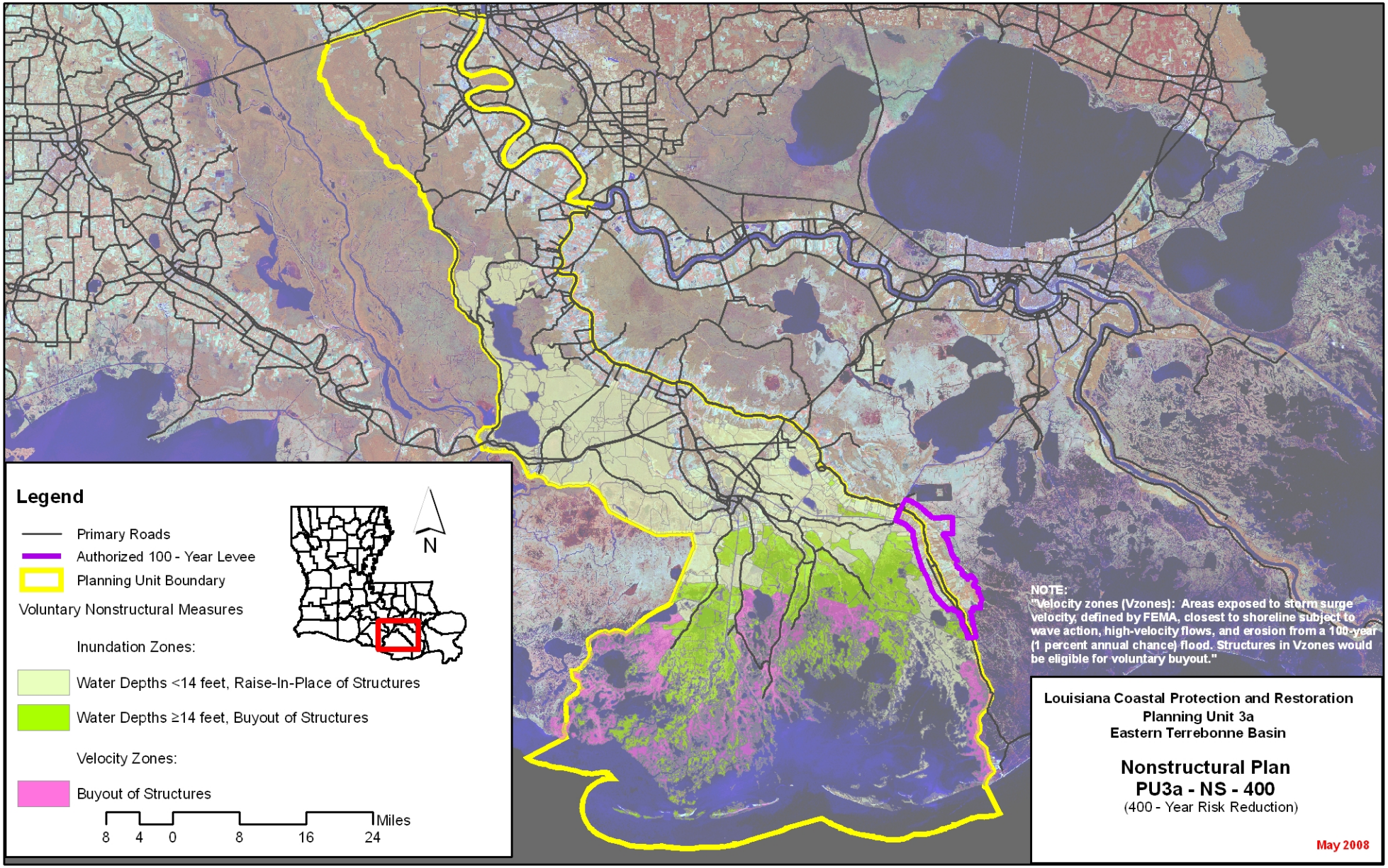
Scenario	Future Conditions (Relative Sea Level Rise (RSLR) and Redevelopment Assumptions)	Uncertainty	Results by Scenario with Uncertainty Bands								
			Life Cycle Cost	Population Impacted	Residual Damages	Gross Regional Output Impacted	Employment Impacted	People's Earned Income Impacted	Archeo. Sites Protected	Historic Properties Protected	Historic Districts Protected
			Ann. Equiv. $ Millions	Ann. Equiv. #	Ann. Equiv. $ Millions	Ann. Equiv. $ Millions	Ann. Equiv. #	Ann. Equiv. $ Millions	# Sites	# Properties	# Districts
1	Low RSLR High Employment Dispersed Population	High	1,733	9,442	159	153	603	28	157	10	1
		Mid		13,320	249	289	1,149	56	134	6	0
		Low		15,858	365	460	1,805	94	111	3	0
2	High RSLR High Employment Dispersed Population	High	1,755	10,389	165	165	628	31	157	10	1
		Mid		14,140	270	378	1,335	75	134	6	0
		Low		16,583	403	548	1,992	113	111	3	0
3	Low RSLR Business-as-Usual Compact Population	High	1,724	8,300	156	154	604	28	157	10	1
		Mid		12,317	242	287	1,157	56	134	6	0
		Low		14,702	348	463	1,770	93	111	3	0
4	High RSLR Business-as-Usual Compact Population	High	1,746	9,014	161	40	631	31	157	10	1
		Mid		12,927	260	165	1,343	76	134	6	0
		Low		15,183	380	280	1,995	115	111	3	0

Other Results			
Construction Time (years)			15
Direct Wetland Impacts (acres)			0
Indirect Impacts (unitless)			0
Spatial Integrity (unitless)			0.37
Non-Federal Share of Present Value of Life Cycle Costs	Scenario	($ Millions)	
	1 / 2	11,886	12,035
	3 / 4	11,827	11,977

Wetlands Created/Protected	Scenario 1	Scenario 2	Scenario 3	Scenario 4
After 50 yrs (% of baseline)	98	97	98	97
After 100 yrs (% of baseline)	110	100	110	100
Present Value of Life Cycle Costs ($ Millions)				
Coastal Component	23,276	23,703	23,276	23,703
Nonstructural Component	10,683	10,683	10,516	10,516
Structural Component	0	0	0	0
Total Project	33,959	34,386	33,792	34,219

2075 Residual Risk / Damages - Low Uncertainty ($ Millions)									Planning Unit 3a
Frequency	Scenario 1		Scenario 2		Scenario 3		Scenario 4		
	No Action	With Proj	No Action	With Proj	No Action	With Proj	No Action	With Proj	
10-year	1,460	123	2,472	221	1,422	112	2,425	226	Nonstructural Plan
100-year	10,629	1,271	15,966	3,002	9,695	1,148	13,659	2,601	
400-year	22,650	8,151	25,236	15,182	17,848	6,366	19,693	11,875	
1,000-year	26,922	19,436	28,128	22,703	20,766	14,870	21,591	17,415	
2,000-year	28,659	23,655	29,317	25,586	21,942	18,102	22,348	19,453	400-year Design

Note: **Present Value** costs and **Annual Equivalent** numbers are calculated for the period from 2010 to 2075 at common base year 2025 using a 4 7/8% Federal discount rate. All dollar metrics are based on 2007 price levels.


Legend
Primary Roads
Authorized 100 - Year Levee
Planning Unit Boundary
Voluntary Nonstructural Measures
Inundation Zones:
Water Depths <14 feet, Raise-In-Place of Structures
Water Depths ≥14 feet, Buyout of Structures
Velocity Zones:
Buyout of Structures
8 4 0 8 16 24 Miles
N
NOTE:
"Velocity zones (Vzones): Areas exposed to storm surge velocity, defined by FEMA, closest to shoreline subject to wave action, high-velocity flows, and erosion from a 100-year (1 percent annual chance) flood. Structures in Vzones would be eligible for voluntary buyout."
Louisiana Coastal Protection and Restoration
Planning Unit 3a
Eastern Terrebonne Basin
Nonstructural Plan
PU3a - NS - 400
(400 - Year Risk Reduction)
May 2008

Planning Unit:	3a	**Alt. No.:**	PU3a-NS-1000	**Category:**	Coastal Restoration + Nonstructural Measures
Alternative Description:	Sustain coastal landscape through restoration. Implement comprehensive 1000-year nonstructural measures.				
Coastal Component:	R1	**Nonstructural Component:**	1000-yr stand alone measures		
Structural Component:	No new levees or increases in risk reduction level for existing levees.				

Scenario	Future Conditions (Relative Sea Level Rise (RSLR) and Redevelopment Assumptions)	Uncertainty	Results by Scenario with Uncertainty Bands								
			Life Cycle Cost	Population Impacted	Residual Damages	Gross Regional Output Impacted	Employment Impacted	People's Earned Income Impacted	Archeo. Sites Protected	Historic Properties Protected	Historic Districts Protected
			Ann. Equiv. $ Millions	Ann. Equiv. #	Ann. Equiv. $ Millions	Ann. Equiv. $ Millions	Ann. Equiv. #	Ann. Equiv. $ Millions	# Sites	# Properties	# Districts
1	Low RSLR High Employment Dispersed Population	High	1,786	8,229	152	134	557	25	157	10	1
		Mid		12,045	235	237	1,007	45	134	6	0
		Low		14,544	330	319	1,457	65	111	3	0
2	High RSLR High Employment Dispersed Population	High	1,808	9,161	155	145	581	27	157	10	1
		Mid		12,852	243	267	1,071	52	134	6	0
		Low		15,262	344	444	1,727	91	111	3	0
3	Low RSLR Business-as-Usual Compact Population	High	1,798	7,368	149	135	560	25	157	10	1
		Mid		11,326	230	235	1,009	45	134	6	0
		Low		13,678	317	317	1,424	63	111	3	0
4	High RSLR Business-as-Usual Compact Population	High	1,819	8,076	151	13	579	27	157	10	1
		Mid		11,931	236	48	1,073	52	134	6	0
		Low		14,157	329	175	1,683	89	111	3	0

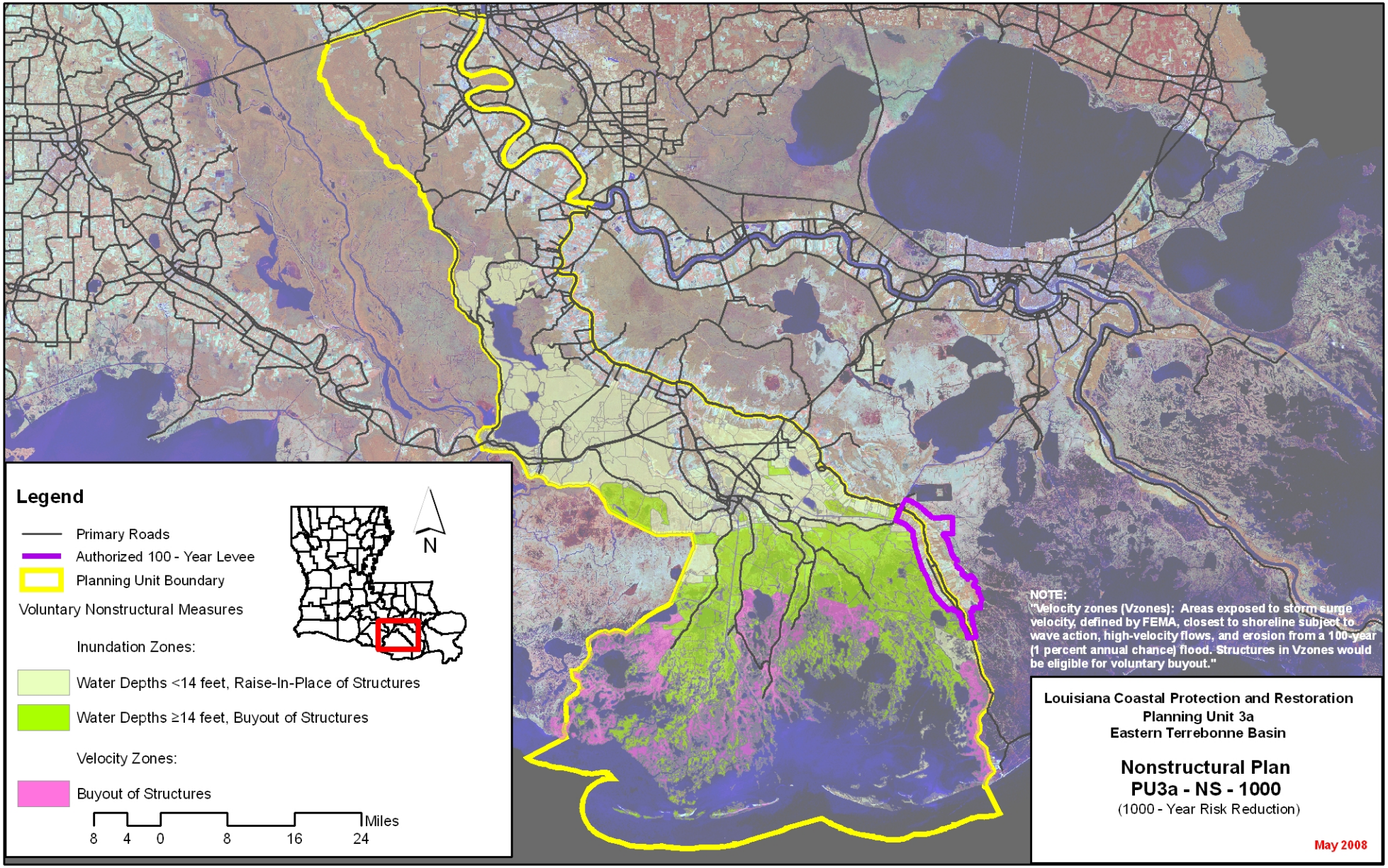
Other Results	
Construction Time (years)	15
Direct Wetland Impacts (acres)	0
Indirect Impacts (unitless)	0
Spatial Integrity (unitless)	0.37

Non-Federal Share of Present Value of Life Cycle Costs	Scenario	($ Millions)	
	1 / 2	12,250	12,399
	3 / 4	12,331	12,480

Wetlands Created/Protected	Scenario 1	Scenario 2	Scenario 3	Scenario 4
After 50 yrs (% of baseline)	98	97	98	97
After 100 yrs (% of baseline)	110	100	110	100
Present Value of Life Cycle Costs ($ Millions)				
Coastal Component	23,276	23,703	23,276	23,703
Nonstructural Component	11,724	11,724	11,954	11,954
Structural Component	0	0	0	0
Total Project	34,999	35,427	35,230	35,657

2075 Residual Risk / Damages - Low Uncertainty ($ Millions)									Planning Unit 3a
Frequency	Scenario 1		Scenario 2		Scenario 3		Scenario 4		
	No Action	With Proj	No Action	With Proj	No Action	With Proj	No Action	With Proj	
10-year	1,460	79	2,472	159	1,422	73	2,425	145	Nonstructural Plan
100-year	10,629	717	15,966	1,232	9,695	652	13,659	1,108	
400-year	22,650	3,068	25,236	4,819	17,848	2,199	19,693	3,555	
1,000-year	26,922	8,156	28,128	15,160	20,766	5,917	21,591	11,435	1000-year Design
2,000-year	28,659	16,545	29,317	20,336	21,942	12,660	22,348	15,570	

Note: **Present Value** costs and **Annual Equivalent** numbers are calculated for the period from 2010 to 2075 at common base year 2025 using a 4 7/8% Federal discount rate. All dollar metrics are based on 2007 price levels.


Legend
Primary Roads
Authorized 100 - Year Levee
Planning Unit Boundary
Voluntary Nonstructural Measures
Inundation Zones:
Water Depths <14 feet, Raise-In-Place of Structures
Water Depths ≥14 feet, Buyout of Structures
Velocity Zones:
Buyout of Structures
N
8 4 0 8 16 24
Miles
NOTE:
"Velocity zones (Vzones): Areas exposed to storm surge velocity, defined by FEMA, closest to shoreline subject to wave action, high-velocity flows, and erosion from a 100-year (1 percent annual chance) flood. Structures in Vzones would be eligible for voluntary buyout."
Louisiana Coastal Protection and Restoration
Planning Unit 3a
Eastern Terrebonne Basin
Nonstructural Plan
PU3a - NS - 1000
(1000 - Year Risk Reduction)
May 2008

Planning Unit:	3a	**Alt. No.:**	PU3a-M-100-1	**Category:**	Coastal Restoration + Structural Measures
Alternative Description:	Sustain coastal landscape through restoration. Construct Morganza to the Gulf levee with extension tying into high ground west of Morgan City at 100-year design level.				
Coastal Component:	R1	**Nonstructural Component:**	None		
Structural Component:	See alternative description above.				

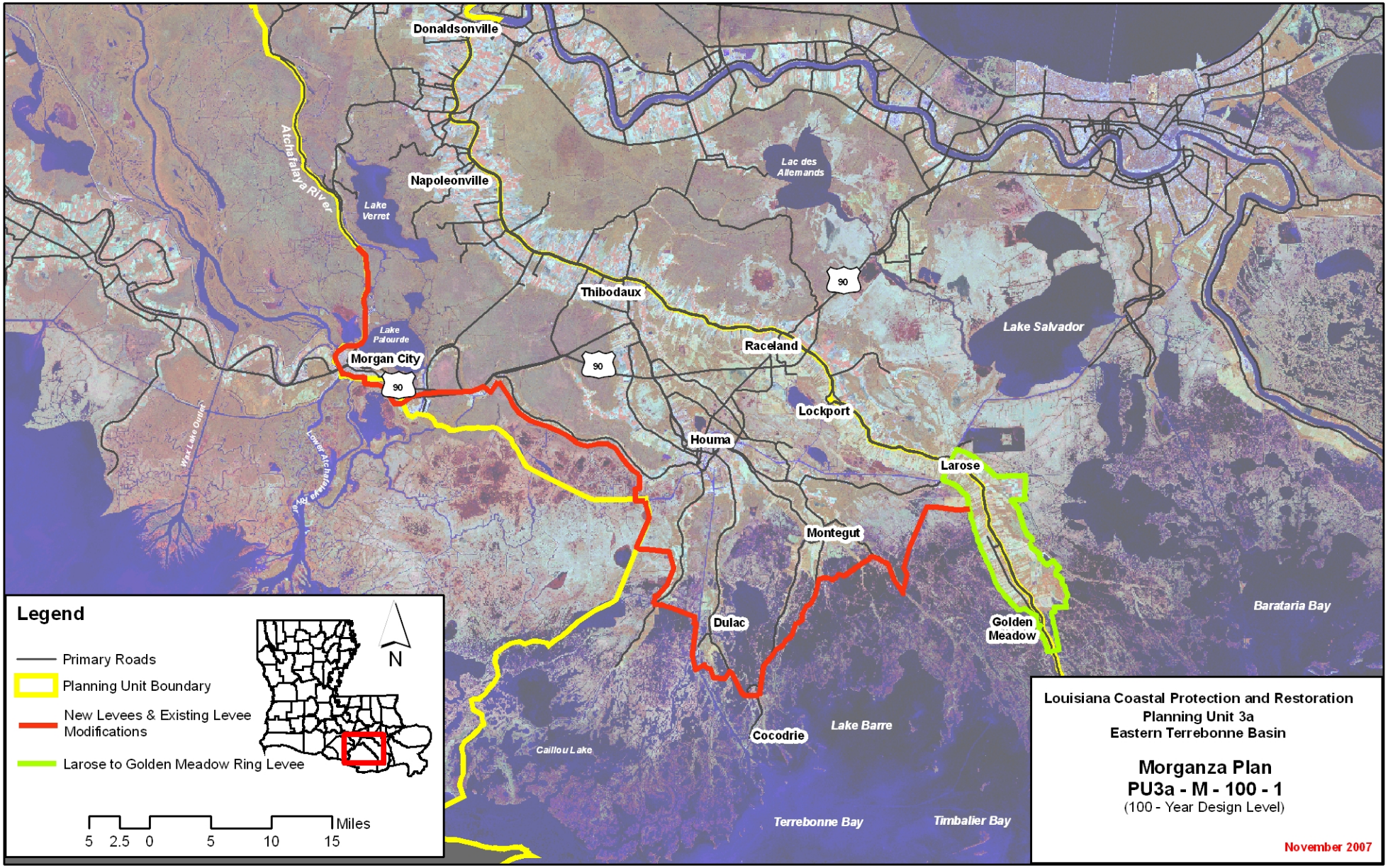
Scenario	Future Conditions (Relative Sea Level Rise (RSLR) and Redevelopment Assumptions)	Uncertainty	Results by Scenario with Uncertainty Bands								
			Life Cycle Cost	Population Impacted	Residual Damages	Gross Regional Output Impacted	Employment Impacted	People's Earned Income Impacted	Archeo. Sites Protected	Historic Properties Protected	Historic Districts Protected
			Ann. Equiv. $ Millions	Ann. Equiv. #	Ann. Equiv. $ Millions	Ann. Equiv. $ Millions	Ann. Equiv. #	Ann. Equiv. $ Millions	# Sites	# Properties	# Districts
1	Low RSLR High Employment Dispersed Population	High	2,282	5,918	236	333	1,022	62	203	18	1
		Mid		7,658	343	539	1,790	102	180	17	1
		Low		9,106	474	677	2,444	136	157	13	0
2	High RSLR High Employment Dispersed Population	High	2,330	6,165	253	407	1,149	76	203	18	1
		Mid		7,878	367	638	1,977	122	180	14	1
		Low		9,285	503	757	2,578	151	157	8	0
3	Low RSLR Business-as-Usual Compact Population	High	2,282	5,249	231	334	1,017	63	203	18	1
		Mid		7,041	334	528	1,776	102	180	17	1
		Low		8,388	455	653	2,392	132	157	13	0
4	High RSLR Business-as-Usual Compact Population	High	2,330	5,433	246	265	1,161	79	203	18	1
		Mid		7,198	354	363	1,958	121	180	14	1
		Low		8,507	478	417	2,544	150	157	8	0

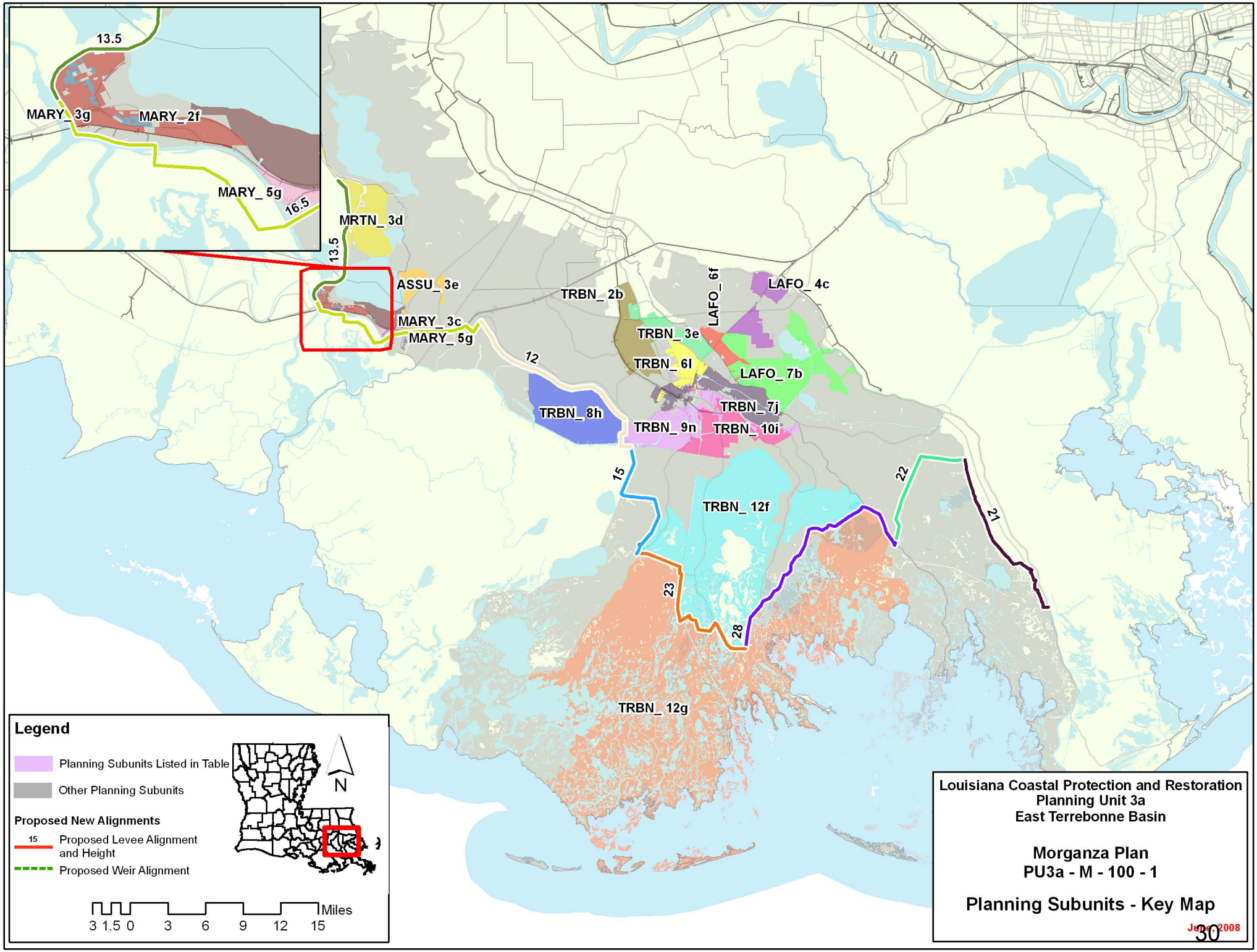
Other Results			
Construction Time (years)			10
Direct Wetland Impacts (acres)			4,900
Indirect Impacts (unitless)			-7
Spatial Integrity (unitless)			0.37
Non-Federal Share of Present Value of Life Cycle Costs	Scenario	($ Millions)	
	1 / 2	15,791	16,121
	3 / 4	15,791	16,121

Wetlands Created/Protected	Scenario 1	Scenario 2	Scenario 3	Scenario 4
After 50 yrs (% of baseline)	98	97	98	97
After 100 yrs (% of baseline)	110	100	110	100
Present Value of Life Cycle Costs ($ Millions)				
Coastal Component	23,276	23,703	23,276	23,703
Nonstructural Component	0	0	0	0
Structural Component	21,412	21,928	21,412	21,928
Total Project	44,688	45,631	44,688	45,631

2075 Residual Risk / Damages - Low Uncertainty ($ Millions)									Planning Unit 3a
Frequency	Scenario 1		Scenario 2		Scenario 3		Scenario 4		
	No Action	With Proj	No Action	With Proj	No Action	With Proj	No Action	With Proj	
10-year	1,460	347	2,472	445	1,422	329	2,425	431	Structural Plan
100-year	10,629	873	15,966	996	9,695	859	13,659	946	Morganza Alt
400-year	22,650	2,015	25,236	2,046	17,848	1,891	19,693	1,924	
1,000-year	26,922	15,270	28,128	15,273	20,766	12,948	21,591	12,951	100-year Design
2,000-year	28,659	20,250	29,317	20,251	21,942	16,667	22,348	16,669	

Note: **Present Value** costs and **Annual Equivalent** numbers are calculated for the period from 2010 to 2075 at common base year 2025 using a 4 7/8% Federal discount rate. All dollar metrics are based on 2007 price levels.


Donaldsonville
Napoleonville
Lake Verret
Atchafalaya River
Lac des Allemands
Thibodaux
90
Lake Palourde
Morgan City
90
90
Raceland
Lake Salvador
Lockport
Houma
Larose
Montegut
Dulac
Golden Meadow
Barataria Bay
Cocodrie
Lake Barre
Caillou Lake
Terrebonne Bay
Timbalier Bay
West Lake Outlet
Lower Atchafalaya River
Legend
Primary Roads
Planning Unit Boundary
New Levees & Existing Levee Modifications
Larose to Golden Meadow Ring Levee
N
5 2.5 0 5 10 15
Miles
Louisiana Coastal Protection and Restoration
Planning Unit 3a
Eastern Terrebonne Basin
Morganza Plan
PU3a - M - 100 - 1
(100 - Year Design Level)
November 2007


13.5
MARY_ 3g
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MRTN_ 3d
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ASSU_ 3e
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MARY_ 5g
12
TRBN_ 2b
LAFO_ 6f
LAFO_ 4c
TRBN_ 3e
TRBN_ 6l
LAFO_ 7b
TRBN_ 8h
TRBN_ 7j
TRBN_ 9n
TRBN_ 10i
15
22
21
TRBN_ 12f
23
28
TRBN_ 12g
Legend
Planning Subunits Listed in Table
Other Planning Subunits
Proposed New Alignments
15 Proposed Levee Alignment and Height
Proposed Weir Alignment
N
3 1.5 0 3 6 9 12 15 Miles
Louisiana Coastal Protection and Restoration
Planning Unit 3a
East Terrebonne Basin
Morganza Plan
PU3a - M - 100 - 1
Planning Subunits - Key Map
June 2008

Alternative: PU3a-M-100-1

Water Surface Elevations (feet - NAVD88 2004.65)

Planning Sub Unit	2010 (Base) Conditions						2060 (Future) Conditions					
	100-yr Event		400-year Event		1,000-yr Event		100-yr Event		400-year Event		1,000-yr Event	
	Without Project	With Project	Without Project	With Project	Without Project	With Project	Without Project	With Project	Without Project	With Project	Without Project	With Project
ASSU_ 3e	3.7	2.4	3.9	4.8	4.3	9.1	6.9	2.4	7.1	4.8	7.5	9.1
LAFO_ 4c	7.0	1.0	11.7	4.8	13.6	10.9	10.2	1.0	14.9	4.8	16.8	10.9
LAFO_ 6f	8.4	1.0	13.4	4.8	16.7	10.9	11.6	1.0	16.6	4.8	19.9	10.9
LAFO_ 7b	7.8	1.0	11.5	4.8	13.6	10.9	11.0	1.0	14.7	4.8	16.8	10.9
MARY_ 2f	6.3	2.4	8.5	4.8	9.9	9.1	9.5	2.4	11.7	4.8	13.1	9.1
MARY_ 3c	6.3	2.4	10.8	4.8	13.1	9.1	9.5	2.4	14.0	4.8	16.3	9.1
MARY_ 3g	6.1	2.4	9.6	4.8	11.4	9.1	9.3	2.4	12.8	4.8	14.6	9.1
MARY_ 5g	7.8	2.4	9.9	4.8	12.0	9.1	11.0	2.4	13.1	4.8	15.2	9.1
MRTN_ 3d	3.8	2.4	5.9	4.8	7.1	9.1	7.0	2.4	9.1	4.8	10.3	9.1
TRBN_ 10i	11.2	1.0	16.1	4.8	19.5	10.9	14.4	1.0	19.3	4.8	22.7	10.9
TRBN_ 12f	13.5	1.0	18.0	4.8	20.8	10.9	16.7	1.0	21.2	4.8	24.0	10.9
TRBN_ 12g	13.2	14.7	16.9	18.9	19.0	21.3	16.1	17.9	19.6	22.1	21.8	24.5
TRBN_ 2b	6.6	1.0	9.5	4.8	12.8	10.9	9.8	1.0	12.7	4.8	16.0	10.9
TRBN_ 3e	4.9	1.0	8.8	4.8	11.7	10.9	8.1	1.0	12.0	4.8	14.9	10.9
TRBN_ 6l	7.8	1.0	8.8	4.8	10.5	10.9	11.0	1.0	12.0	4.8	13.7	10.9
TRBN_ 7j	9.3	1.0	14.0	4.8	16.3	10.9	12.5	1.0	17.2	4.8	19.5	10.9
TRBN_ 8h	9.7	9.9	14.5	14.8	17.4	17.7	14.3	13.1	18.7	18.0	20.7	20.9
TRBN_ 9n	8.4	1.0	12.1	4.8	14.1	10.9	11.6	1.0	15.3	4.8	17.3	10.9

Evaluation Parameters				
	Confidence Level:	90%	Levee Design:	No Friction Waves
	Future Relative Sea Level Rise:	3.2 feet	Levee Overtopping:	No Friction Waves

Planning Unit:	3a	Alt. No.:	PU3a-M-100-2	Category:	Coastal Restoration + Structural Measures
Alternative Description:	Sustain coastal landscape through restoration. Construct Morganza to the Gulf levee with with tieback to high ground south of Thibodaux and ring levee around Morgan City at 100-year design level.				
Coastal Component:	R1	Nonstructural Component:	None		
Structural Component:	See alternative description above.				

Scenario	Future Conditions (Relative Sea Level Rise (RSLR) and Redevelopment Assumptions)	Uncertainty	Results by Scenario with Uncertainty Bands								
			Life Cycle Cost	Population Impacted	Residual Damages	Gross Regional Output Impacted	Employment Impacted	People's Earned Income Impacted	Archeo. Sites Protected	Historic Properties Protected	Historic Districts Protected
			Ann. Equiv. $ Millions	Ann. Equiv. #	Ann. Equiv. $ Millions	Ann. Equiv. $ Millions	Ann. Equiv. #	Ann. Equiv. $ Millions	# Sites	# Properties	# Districts
1	Low RSLR High Employment Dispersed Population	High	2,158	6,053	245	358	1,036	66	174	17	1
		Mid		8,182	374	579	1,854	110	151	14	1
		Low		9,937	537	747	2,606	149	128	10	0
2	High RSLR High Employment Dispersed Population	High	2,186	6,516	273	456	1,199	85	174	15	1
		Mid		8,554	413	697	2,065	133	151	11	0
		Low		10,221	579	843	2,763	168	128	8	0
3	Low RSLR Business-as-Usual Compact Population	High	2,158	5,341	240	365	1,034	67	174	17	1
		Mid		7,507	365	577	1,844	110	151	14	1
		Low		9,148	518	731	2,556	146	128	10	0
4	High RSLR Business-as-Usual Compact Population	High	2,186	5,698	267	323	1,218	88	174	15	1
		Mid		7,788	400	431	2,053	133	151	11	0
		Low		9,331	553	514	2,735	167	128	8	0

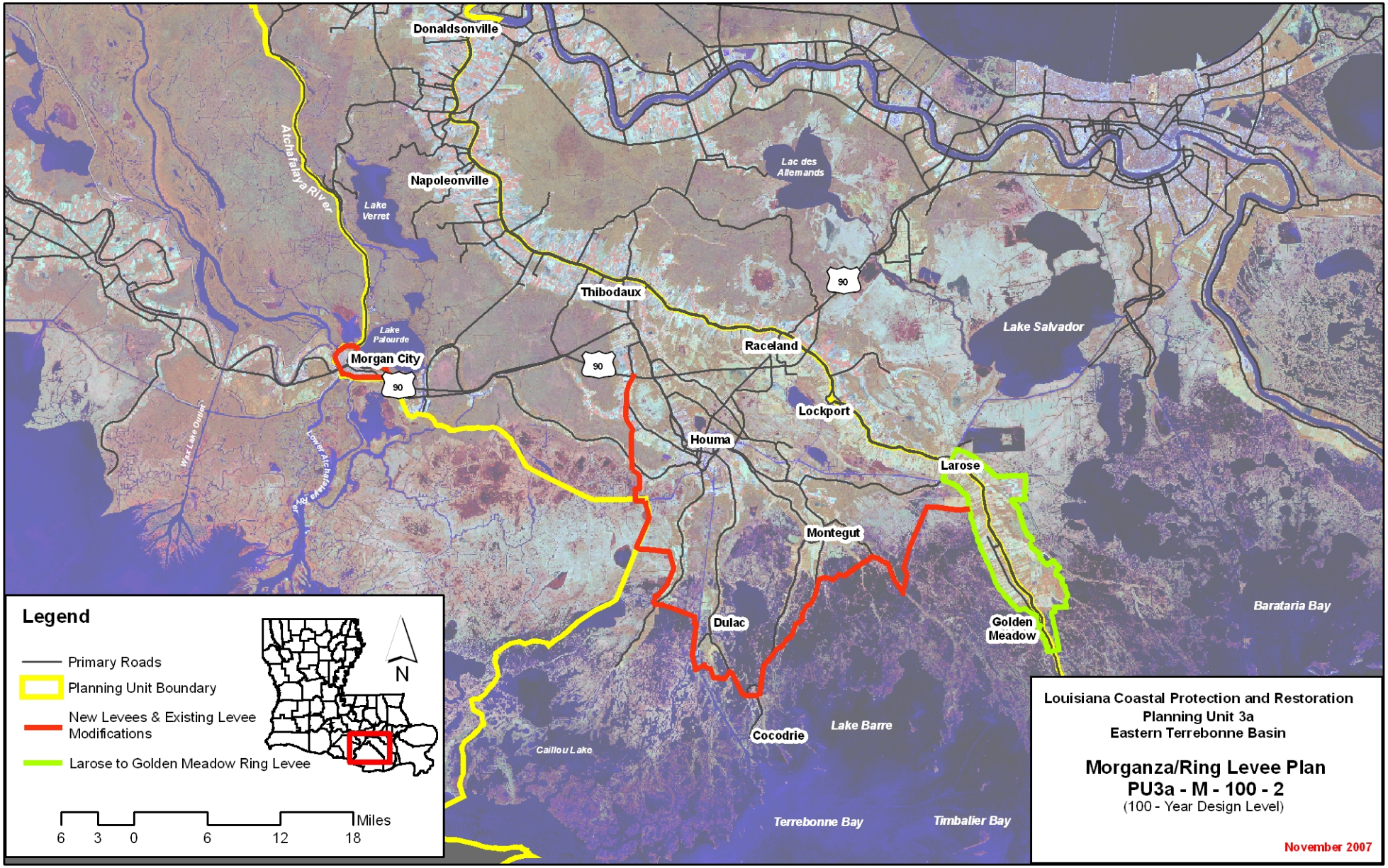
Other Results	
Construction Time (years)	10
Direct Wetland Impacts (acres)	4,200
Indirect Impacts (unitless)	-4
Spatial Integrity (unitless)	0.37

Non-Federal Share of Present Value of Life Cycle Costs	Scenario	($ Millions)	
	1 / 2	14,974	15,164
	3 / 4	14,974	15,164

Wetlands Created/Protected	Scenario 1	Scenario 2	Scenario 3	Scenario 4
After 50 yrs (% of baseline)	98	97	98	97
After 100 yrs (% of baseline)	110	100	110	100
Present Value of Life Cycle Costs ($ Millions)				
Coastal Component	23,276	23,703	23,276	23,703
Nonstructural Component	0	0	0	0
Structural Component	18,983	19,098	18,983	19,098
Total Project	42,258	42,801	42,258	42,801

2075 Residual Risk / Damages - Low Uncertainty ($ Millions)									Planning Unit 3a
Frequency	Scenario 1		Scenario 2		Scenario 3		Scenario 4		
	No Action	With Proj	No Action	With Proj	No Action	With Proj	No Action	With Proj	
10-year	1,460	399	2,472	725	1,422	390	2,425	762	Structural Plan
100-year	10,629	2,082	15,966	2,670	9,695	2,056	13,659	2,532	Morganza Alt
400-year	22,650	5,312	25,236	5,528	17,848	4,933	19,693	5,088	
1,000-year	26,922	20,567	28,128	20,702	20,766	16,857	21,591	16,937	100-year Design
2,000-year	28,659	20,763	29,317	20,780	21,942	17,002	22,348	17,028	

Note: **Present Value** costs and **Annual Equivalent** numbers are calculated for the period from 2010 to 2075 at common base year 2025 using a 4 7/8% Federal discount rate. All dollar metrics are based on 2007 price levels.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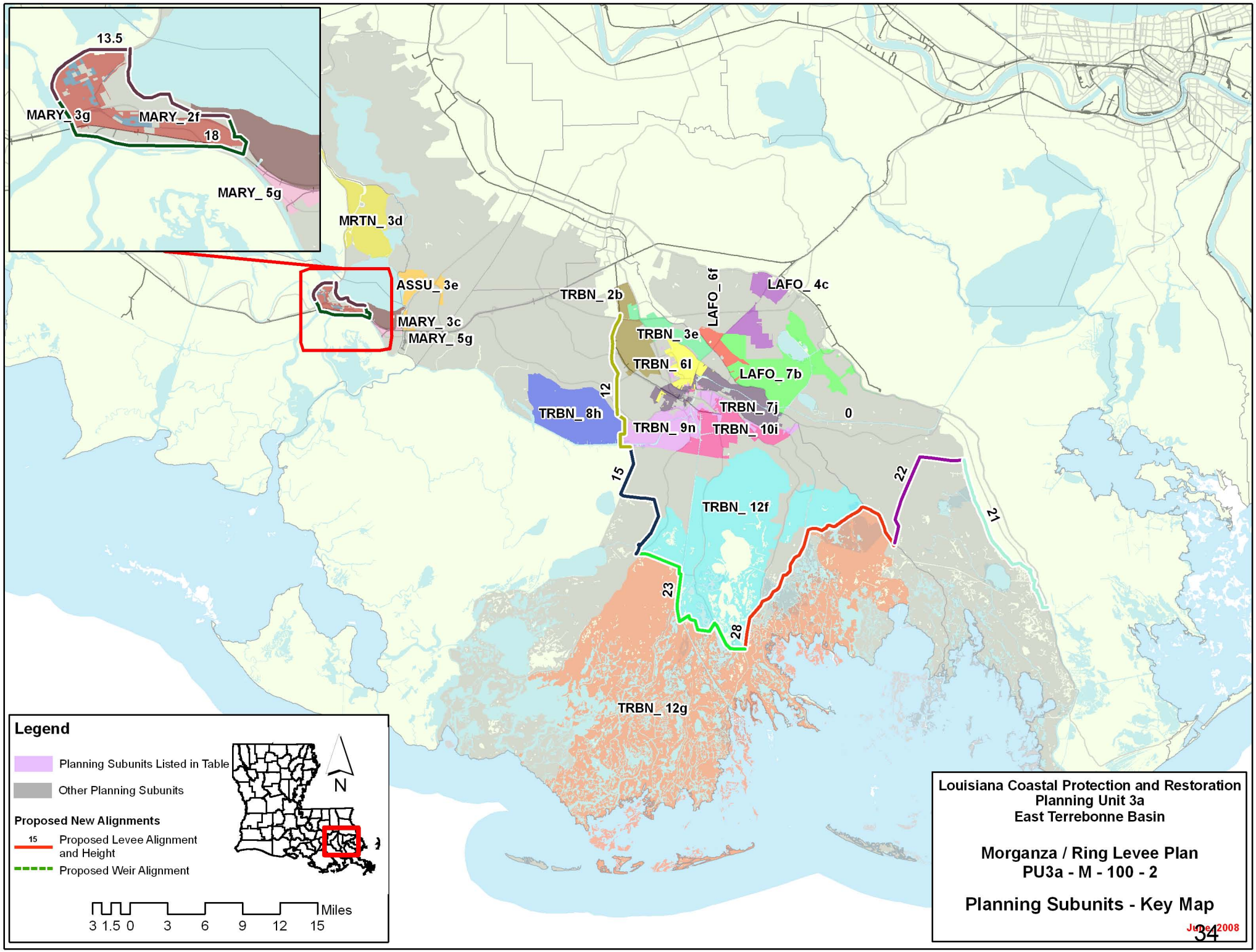
Atchafalaya River
Lac des Allemands
Thibodaux
90
Lake Palourde
Morgan City
90
Raceland
Lake Salvador
Lockport
Houma
Larose
West Lake Outlet
Lower Atchafalaya River
Montegut
Dulac
Golden Meadow
Barataria Bay
Caillou Lake
Lake Barre
Cocodrie
Terrebonne Bay
Timbalier Bay
Legend
Primary Roads
Planning Unit Boundary
New Levees & Existing Levee Modifications
Larose to Golden Meadow Ring Levee
N
Miles
6 3 0 6 12 18
Louisiana Coastal Protection and Restoration
Planning Unit 3a
Eastern Terrebonne Basin
Morganza/Ring Levee Plan
PU3a - M - 100 - 2
(100 - Year Design Level)
November 2007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MARY_ 2f
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ASSU_ 3e
MARY_ 3c
MARY_ 5g
TRBN_ 2b
LAFO_ 6f
LAFO_ 4c
TRBN_ 3e
TRBN_ 6l
LAFO_ 7b
12
TRBN_ 8h
TRBN_ 7j
0
TRBN_ 9n
TRBN_ 10i
15
22
21
TRBN_ 12f
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TRBN_ 12g
Legend
Planning Subunits Listed in Table
Other Planning Subunits
Proposed New Alignments
15 Proposed Levee Alignment and Height
Proposed Weir Alignment
N
3 1.5 0 3 6 9 12 15 Miles
Louisiana Coastal Protection and Restoration
Planning Unit 3a
East Terrebonne Basin
Morganza / Ring Levee Plan
PU3a - M - 100 - 2
Planning Subunits - Key Map
June 2008

Alternative: PU3a-M-100-2

Water Surface Elevations (feet - NAVD88 2004.65)

Planning Sub Unit	2010 (Base) Conditions						2060 (Future) Conditions					
	100-yr Event		400-year Event		1,000-yr Event		100-yr Event		400-year Event		1,000-yr Event	
	Without Project	With Project	Without Project	With Project	Without Project	With Project	Without Project	With Project	Without Project	With Project	Without Project	With Project
ASSU_ 3e	3.7	4.4	3.9	4.6	4.3	5.0	6.9	7.6	7.1	7.8	7.5	8.2
LAFO_ 4c	7.0	1.1	11.7	5.7	13.6	12.0	10.2	1.1	14.9	5.7	16.8	12.0
LAFO_ 6f	8.4	1.1	13.4	5.7	16.7	12.0	11.6	1.1	16.6	5.7	19.9	12.0
LAFO_ 7b	7.8	1.1	11.5	5.7	13.6	12.0	11.0	1.1	14.7	5.7	16.8	12.0
MARY_ 2f	6.3	1.3	8.5	10.1	9.9	18.0	9.5	1.3	11.7	10.1	13.1	18.0
MARY_ 3c	6.3	7.0	10.8	11.5	13.1	13.9	9.5	10.2	14.0	14.7	16.3	17.1
MARY_ 3g	6.1	1.3	9.6	10.1	11.4	18.0	9.3	1.3	12.8	10.1	14.6	18.0
MARY_ 5g	7.8	8.5	9.9	10.6	12.0	12.7	11.0	11.7	13.1	13.8	15.2	15.9
MRTN_ 3d	3.8	4.5	5.9	6.6	7.1	7.8	7.0	7.7	9.1	9.8	10.3	11.0
TRBN_ 10i	11.2	1.1	16.1	5.7	19.5	12.0	14.4	1.1	19.3	5.7	22.7	12.0
TRBN_ 12f	13.5	1.1	18.0	5.7	20.8	12.0	16.7	1.1	21.2	5.7	24.0	12.0
TRBN_ 12g	13.2	14.7	16.9	18.9	19.0	21.3	16.1	17.9	19.6	22.1	21.8	24.5
TRBN_ 2b	6.6	1.1	9.5	5.7	12.8	12.0	9.8	1.1	12.7	5.7	16.0	12.0
TRBN_ 3e	4.9	1.1	8.8	5.7	11.7	12.0	8.1	1.1	12.0	5.7	14.9	12.0
TRBN_ 6l	7.8	1.1	8.8	5.7	10.5	12.0	11.0	1.1	12.0	5.7	13.7	12.0
TRBN_ 7j	9.3	1.1	14.0	5.7	16.3	12.0	12.5	1.1	17.2	5.7	19.5	12.0
TRBN_ 8h	9.7	9.9	14.5	14.8	17.4	17.7	14.3	13.1	18.7	18.0	20.7	20.9
TRBN_ 9n	8.4	1.1	12.1	5.7	14.1	12.0	11.6	1.1	15.3	5.7	17.3	12.0

Evaluation Parameters					
	Confidence Level:	90%	Levee Design:	No Friction Waves	
	Future Relative Sea Level Rise:	3.2 feet	Levee Overtopping:	No Friction Waves	

Planning Unit:	3a	**Alt. No.:**	PU3a-G-400-2	**Category:**	Coastal Restoration + Structural Measures
Alternative Description:	Sustain coastal landscape through restoration. Construct Morganza to the Gulf levee at the 100-year design level with a second levee along the GIWW with tieback to high ground south of Thibodaux and ring levee around Morgan City providing a 400-year leve				
Coastal Component:	R1		**Nonstructural Component:**		None
Structural Component:	See alternative description above.				

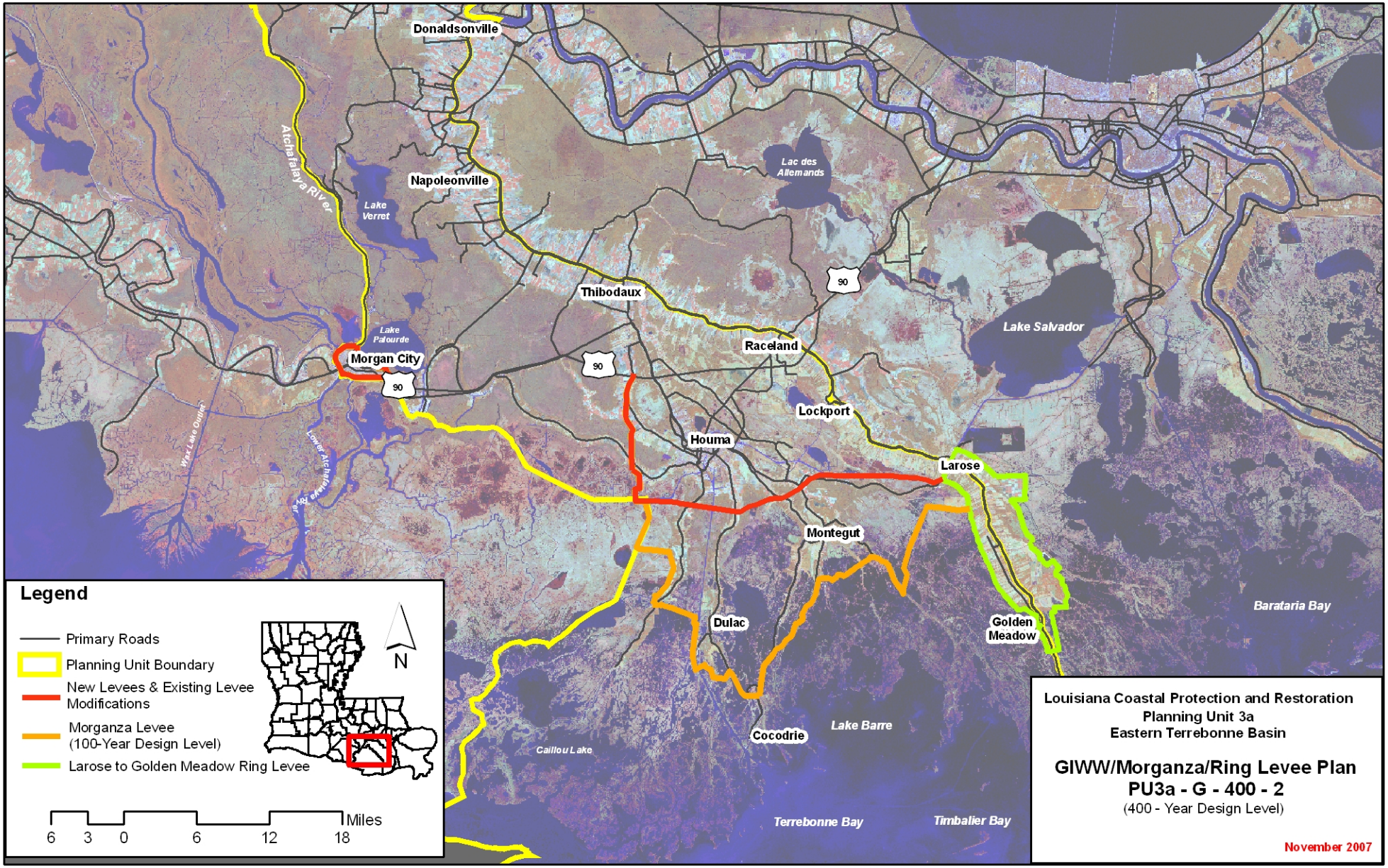
Scenario	Future Conditions (Relative Sea Level Rise (RSLR) and Redevelopment Assumptions)	Uncertainty	Results by Scenario with Uncertainty Bands								
			Life Cycle Cost	Population Impacted	Residual Damages	Gross Regional Output Impacted	Employment Impacted	People's Earned Income Impacted	Archeo. Sites Protected	Historic Properties Protected	Historic Districts Protected
			Ann. Equiv. $ Millions	Ann. Equiv. #	Ann. Equiv. $ Millions	Ann. Equiv. $ Millions	Ann. Equiv. #	Ann. Equiv. $ Millions	# Sites	# Properties	# Districts
1	Low RSLR High Employment Dispersed Population	High	2,476	6,212	254	371	1,081	69	174	13	1
		Mid		8,210	377	585	1,871	111	151	11	1
		Low		9,659	514	715	2,489	142	128	5	1
2	High RSLR High Employment Dispersed Population	High	2,502	6,675	281	469	1,243	88	174	11	1
		Mid		8,582	416	702	2,082	134	151	9	1
		Low		9,943	556	812	2,645	161	128	4	1
3	Low RSLR Business-as-Usual Compact Population	High	2,476	5,489	247	377	1,077	70	174	13	1
		Mid		7,549	368	583	1,860	111	151	11	1
		Low		8,923	497	701	2,441	140	128	5	1
4	High RSLR Business-as-Usual Compact Population	High	2,502	5,846	273	335	1,260	91	174	11	1
		Mid		7,830	402	436	2,069	134	151	9	1
		Low		9,106	532	484	2,619	161	128	4	1

Other Results		
Construction Time (years)		10
Direct Wetland Impacts (acres)		5,300
Indirect Impacts (unitless)		-7
Spatial Integrity (unitless)		0.37
Non-Federal Share of Present Value of Life Cycle Costs	Scenario	($ Millions)
	1 / 2	17,073 / 17,248
	3 / 4	17,073 / 17,248

Wetlands Created/Protected	Scenario 1	Scenario 2	Scenario 3	Scenario 4
After 50 yrs (% of baseline)	98	97	98	97
After 100 yrs (% of baseline)	110	100	110	100
Present Value of Life Cycle Costs ($ Millions)				
Coastal Component	23,276	23,703	23,276	23,703
Nonstructural Component	0	0	0	0
Structural Component	25,212	25,285	25,212	25,285
Total Project	48,488	48,988	48,488	48,988

2075 Residual Risk / Damages - Low Uncertainty ($ Millions)									Planning Unit 3a Structural Plan GIWW Alt 400-year Design
Frequency	Scenario 1		Scenario 2		Scenario 3		Scenario 4		
	No Action	With Proj	No Action	With Proj	No Action	With Proj	No Action	With Proj	
10-year	1,460	403	2,472	729	1,422	392	2,425	764	
100-year	10,629	2,080	15,966	2,668	9,695	2,053	13,659	2,529	
400-year	22,650	3,483	25,236	3,699	17,848	3,198	19,693	3,353	
1,000-year	26,922	10,993	28,128	11,127	20,766	9,148	21,591	9,227	
2,000-year	28,659	11,503	29,317	11,520	21,942	9,600	22,348	9,626	

Note: **Present Value** costs and **Annual Equivalent** numbers are calculated for the period from 2010 to 2075 at common base year 2025 using a 4 7/8% Federal discount rate. All dollar metrics are based on 2007 price levels.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Lake Palourde
Morgan City
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Raceland
Lake Salvador
Lockport
Houma
Larose
Montegut
Dulac
Golden Meadow
Barataria Bay
Cocodrie
Lake Barre
Caillou Lake
Terrebonne Bay
Timbalier Bay
West Lake Outlet
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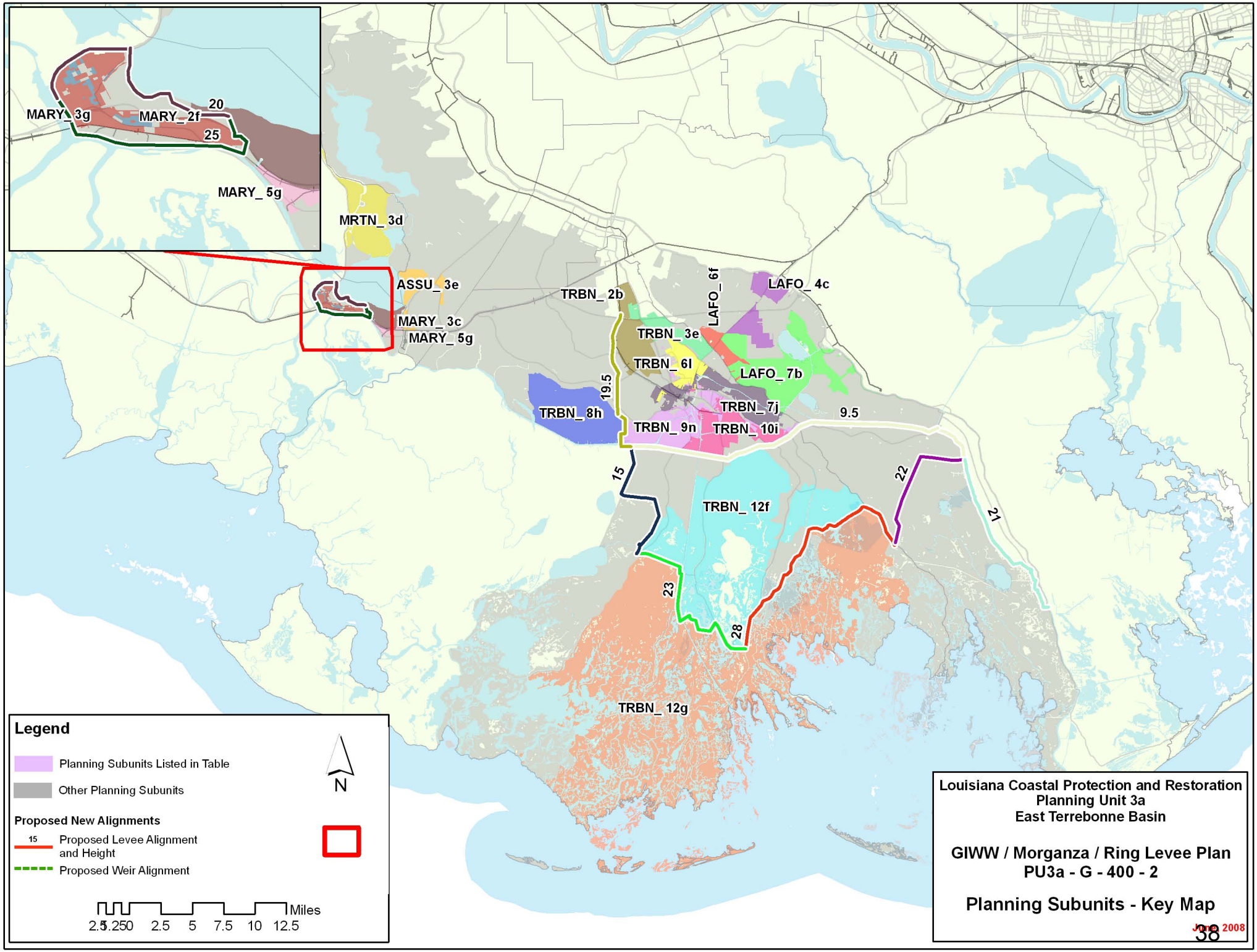
Legend
Primary Roads
Planning Unit Boundary
New Levees & Existing Levee Modifications
Morganza Levee (100-Year Design Level)
Larose to Golden Meadow Ring Levee
N
6 3 0 6 12 18 Miles
Louisiana Coastal Protection and Restoration
Planning Unit 3a
Eastern Terrebonne Basin
GIWW/Morganza/Ring Levee Plan
PU3a - G - 400 - 2
(400 - Year Design Level)
November 2007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ASSU_ 3e
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LAFO_ 6f
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TRBN_ 3e
TRBN_ 6l
LAFO_ 7b
19.5
TRBN_ 8h
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TRBN_ 9n
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22
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TRBN_ 12f
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TRBN_ 12g
Legend
Planning Subunits Listed in Table
Other Planning Subunits
Proposed New Alignments
15 Proposed Levee Alignment and Height
Proposed Weir Alignment
N
2.5 5.25 0 2.5 5 7.5 10 12.5 Miles
Louisiana Coastal Protection and Restoration
Planning Unit 3a
East Terrebonne Basin
GIWW / Morganza / Ring Levee Plan
PU3a - G - 400 - 2
Planning Subunits - Key Map
June 2008

Alternative: PU3a-G-400-2

Water Surface Elevations (feet - NAVD88 2004.65)

Planning Sub Unit	2010 (Base) Conditions						2060 (Future) Conditions					
	100-yr Event		400-year Event		1,000-yr Event		100-yr Event		400-year Event		1,000-yr Event	
	Without Project	With Project	Without Project	With Project	Without Project	With Project	Without Project	With Project	Without Project	With Project	Without Project	With Project
ASSU_ 3e	3.7	4.4	3.9	4.6	4.3	5.0	6.9	7.6	7.1	7.8	7.5	8.2
LAFO_ 4c	7.0	1.3	11.7	1.4	13.6	9.5	10.2	1.3	14.9	1.4	16.8	9.5
LAFO_ 6f	8.4	1.3	13.4	1.4	16.7	9.5	11.6	1.3	16.6	1.4	19.9	9.5
LAFO_ 7b	7.8	1.3	11.5	1.4	13.6	9.5	11.0	1.3	14.7	1.4	16.8	9.5
MARY_ 2f	6.3	0.8	8.5	1.3	9.9	2.8	9.5	0.8	11.7	1.3	13.1	2.8
MARY_ 3c	6.3	7.0	10.8	11.5	13.1	13.9	9.5	10.2	14.0	14.7	16.3	17.1
MARY_ 3g	6.1	0.8	9.6	1.3	11.4	2.8	9.3	0.8	12.8	1.3	14.6	2.8
MARY_ 5g	7.8	8.5	9.9	10.6	12.0	12.7	11.0	11.7	13.1	13.8	15.2	15.9
MRTN_ 3d	3.8	4.5	5.9	6.6	7.1	7.8	7.0	7.7	9.1	9.8	10.3	11.0
TRBN_ 10i	11.2	1.3	16.1	1.4	19.5	9.5	14.4	1.3	19.3	1.4	22.7	9.5
TRBN_ 12f	13.5	1.0	18.0	6.6	20.8	15.0	16.7	1.0	21.2	6.6	24.0	15.0
TRBN_ 12g	13.2	14.7	16.9	18.9	19.0	21.3	16.1	17.9	19.6	22.1	21.8	24.5
TRBN_ 2b	6.6	1.3	9.5	1.4	12.8	9.5	9.8	1.3	12.7	1.4	16.0	9.5
TRBN_ 3e	4.9	1.3	8.8	1.4	11.7	9.5	8.1	1.3	12.0	1.4	14.9	9.5
TRBN_ 6l	7.8	1.3	8.8	1.4	10.5	9.5	11.0	1.3	12.0	1.4	13.7	9.5
TRBN_ 7j	9.3	1.3	14.0	1.4	16.3	9.5	12.5	1.3	17.2	1.4	19.5	9.5
TRBN_ 8h	9.7	9.9	14.5	14.8	17.4	17.7	14.3	13.1	18.7	18.0	20.7	20.9
TRBN_ 9n	8.4	1.3	12.1	1.4	14.1	9.5	11.6	1.3	15.3	1.4	17.3	9.5

Evaluation Parameters				
	Confidence Level:	90%	Levee Design:	No Friction Waves
	Future Relative Sea Level Rise:	3.2 feet	Levee Overtopping:	No Friction Waves

Planning Unit:	3a	Alt. No.:	PU3a-G-1000-2	Category:	Coastal Restoration + Structural Measures
Alternative Description:	Sustain coastal landscape through restoration. Construct Morganza to the Gulf levee at the 100-year design level and a second levee along the GIWW with tieback to high ground south of Thibodaux and ring levee around Morgan City providing a 1000-year leve				
Coastal Component:	R1	Nonstructural Component:	None		
Structural Component:	See alternative description above.				

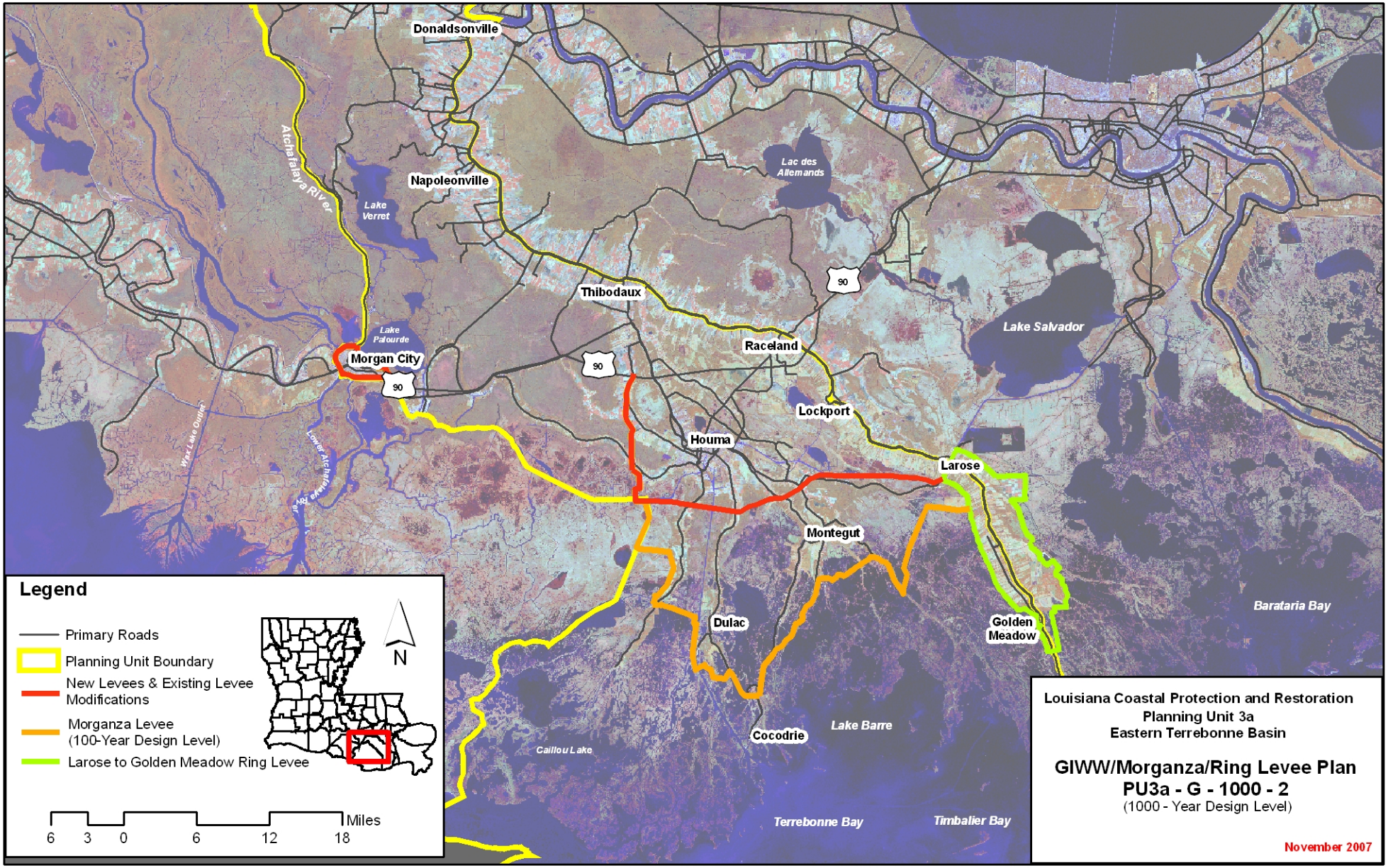
Scenario	Future Conditions (Relative Sea Level Rise (RSLR) and Redevelopment Assumptions)	Uncertainty	Results by Scenario with Uncertainty Bands								
			Life Cycle Cost	Population Impacted	Residual Damages	Gross Regional Output Impacted	Employment Impacted	People's Earned Income Impacted	Archeo. Sites Protected	Historic Properties Protected	Historic Districts Protected
			Ann. Equiv. $ Millions	Ann. Equiv. #	Ann. Equiv. $ Millions	Ann. Equiv. $ Millions	Ann. Equiv. #	Ann. Equiv. $ Millions	# Sites	# Properties	# Districts
1	Low RSLR High Employment Dispersed Population	High	2,599	6,050	246	358	1,036	66	174	17	1
		Mid		8,047	370	572	1,826	108	151	16	1
		Low		9,493	506	703	2,442	139	128	16	1
2	High RSLR High Employment Dispersed Population	High	2,625	6,512	274	456	1,199	85	174	16	1
		Mid		8,419	408	690	2,038	131	151	16	1
		Low		9,778	548	799	2,599	158	128	16	1
3	Low RSLR Business-as-Usual Compact Population	High	2,599	5,339	240	365	1,034	67	174	17	1
		Mid		7,399	361	570	1,817	108	151	16	1
		Low		8,768	490	688	2,397	137	128	16	1
4	High RSLR Business-as-Usual Compact Population	High	2,625	5,696	267	323	1,218	88	174	16	1
		Mid		7,680	396	424	2,026	132	151	16	1
		Low		8,951	525	472	2,575	158	128	16	1

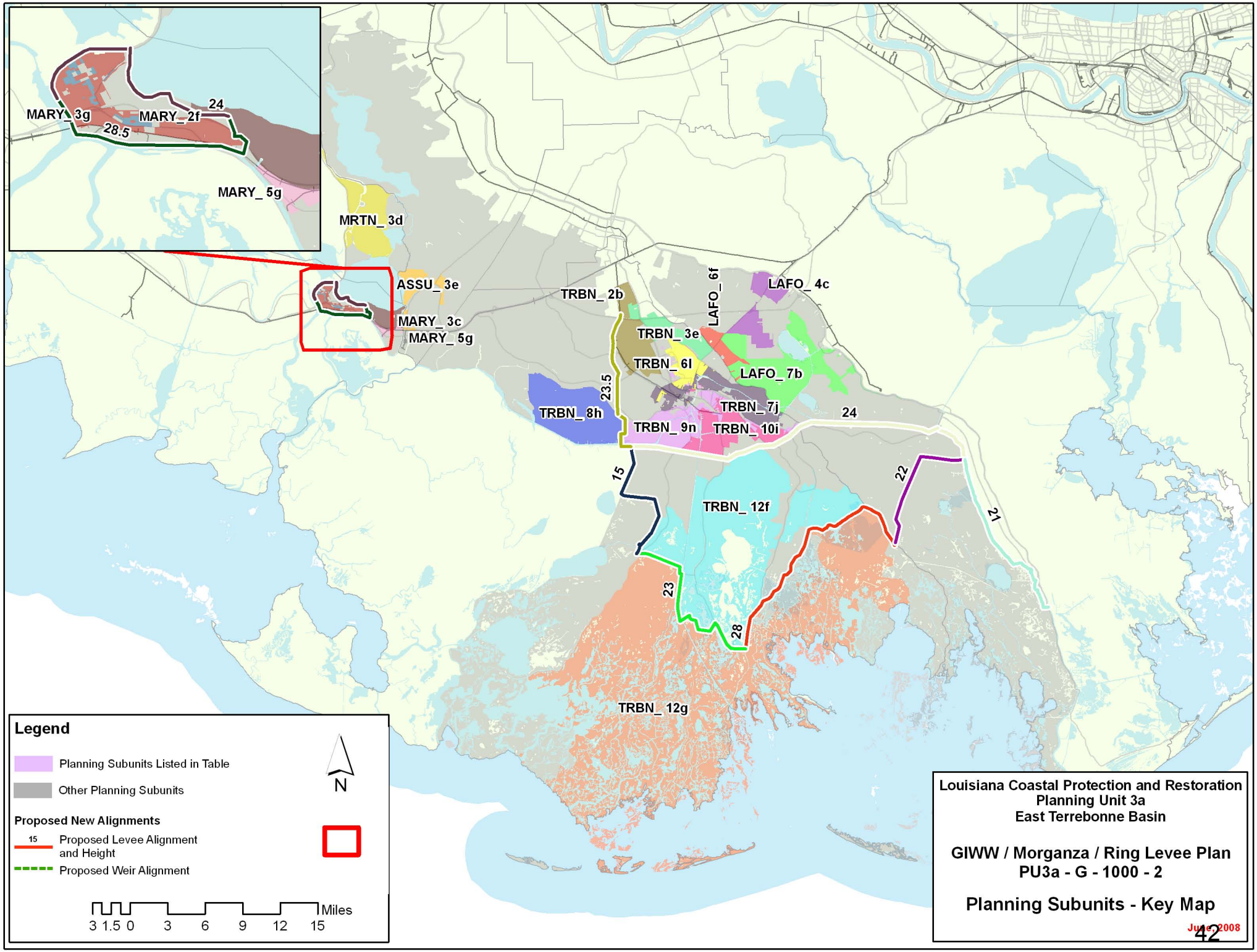
Other Results			
Construction Time (years)			10
Direct Wetland Impacts (acres)			6,600
Indirect Impacts (unitless)			-7
Spatial Integrity (unitless)			0.37
Non-Federal Share of Present Value of Life Cycle Costs	Scenario	($ Millions)	
	1 / 2	17,926	18,103
	3 / 4	17,926	18,103

Wetlands Created/Protected	Scenario 1	Scenario 2	Scenario 3	Scenario 4
After 50 yrs (% of baseline)	98	97	98	97
After 100 yrs (% of baseline)	110	100	110	100
Present Value of Life Cycle Costs ($ Millions)				
Coastal Component	23,276	23,703	23,276	23,703
Nonstructural Component	0	0	0	0
Structural Component	27,625	27,703	27,625	27,703
Total Project	50,901	51,406	50,901	51,406

2075 Residual Risk / Damages - Low Uncertainty ($ Millions)									Planning Unit 3a
Frequency	Scenario 1		Scenario 2		Scenario 3		Scenario 4		
	No Action	With Proj	No Action	With Proj	No Action	With Proj	No Action	With Proj	
10-year	1,460	403	2,472	729	1,422	392	2,425	764	Structural Plan
100-year	10,629	2,080	15,966	2,668	9,695	2,053	13,659	2,529	GIWW Alt
400-year	22,650	3,476	25,236	3,692	17,848	3,192	19,693	3,346	
1,000-year	26,922	5,200	28,128	5,335	20,766	4,661	21,591	4,741	1000-year Design
2,000-year	28,659	5,655	29,317	5,672	21,942	5,035	22,348	5,060	

Note: **Present Value** costs and **Annual Equivalent** numbers are calculated for the period from 2010 to 2075 at common base year 2025 using a 4 7/8% Federal discount rate. All dollar metrics are based on 2007 price levels.


Donaldsonville
Napoleonville
Lake Verret
Atchafalaya River
Lac des Allemands
Thibodaux
90
Lake Palourde
Morgan City
90
Raceland
Lake Salvador
Lockport
Houma
Larose
Montegut
Dulac
Golden Meadow
Barataria Bay
Cocodrie
Lake Barre
Caillou Lake
Terrebonne Bay
Timbalier Bay
West Lake Outlet
Lower Atchafalaya River
Legend
Primary Roads
Planning Unit Boundary
New Levees & Existing Levee Modifications
Morganza Levee (100-Year Design Level)
Larose to Golden Meadow Ring Levee
N
6 3 0 6 12 18 Miles
Louisiana Coastal Protection and Restoration
Planning Unit 3a
Eastern Terrebonne Basin
GIWW/Morganza/Ring Levee Plan
PU3a - G - 1000 - 2
(1000 - Year Design Level)
November 2007


MARY_ 3g
MARY_ 2f
24
28.5
MARY_ 5g
MRTN_ 3d
ASSU_ 3e
MARY_ 3c
MARY_ 5g
TRBN_ 2b
LAFO_ 6f
LAFO_ 4c
TRBN_ 3e
TRBN_ 6l
LAFO_ 7b
23.5
TRBN_ 8h
TRBN_ 7j
24
TRBN_ 9n
TRBN_ 10i
15
22
TRBN_ 12f
21
23
28
TRBN_ 12g
Legend
Planning Subunits Listed in Table
Other Planning Subunits
Proposed New Alignments
15 Proposed Levee Alignment and Height
Proposed Weir Alignment
N
3 1.5 0 3 6 9 12 15 Miles
Louisiana Coastal Protection and Restoration
Planning Unit 3a
East Terrebonne Basin
GIWW / Morganza / Ring Levee Plan
PU3a - G - 1000 - 2
Planning Subunits - Key Map
June 2008

Alternative: PU3a-G-1000-2

Water Surface Elevations (feet - NAVD88 2004.65)

Planning Sub Unit	2010 (Base) Conditions						2060 (Future) Conditions					
	100-yr Event		400-year Event		1,000-yr Event		100-yr Event		400-year Event		1,000-yr Event	
	Without Project	With Project	Without Project	With Project	Without Project	With Project	Without Project	With Project	Without Project	With Project	Without Project	With Project
ASSU_ 3e	3.7	4.4	3.9	4.6	4.3	5.0	6.9	7.6	7.1	7.8	7.5	8.2
LAFO_ 4c	7.0	1.3	11.7	1.3	13.6	1.4	10.2	1.3	14.9	1.3	16.8	1.4
LAFO_ 6f	8.4	1.3	13.4	1.3	16.7	1.4	11.6	1.3	16.6	1.3	19.9	1.4
LAFO_ 7b	7.8	1.3	11.5	1.3	13.6	1.4	11.0	1.3	14.7	1.3	16.8	1.4
MARY_ 2f	6.3	0.8	8.5	0.9	9.9	1.3	9.5	0.8	11.7	0.9	13.1	1.3
MARY_ 3c	6.3	7.0	10.8	11.5	13.1	13.9	9.5	10.2	14.0	14.7	16.3	17.1
MARY_ 3g	6.1	0.8	9.6	0.9	11.4	1.3	9.3	0.8	12.8	0.9	14.6	1.3
MARY_ 5g	7.8	8.5	9.9	10.6	12.0	12.7	11.0	11.7	13.1	13.8	15.2	15.9
MRTN_ 3d	3.8	4.5	5.9	6.6	7.1	7.8	7.0	7.7	9.1	9.8	10.3	11.0
TRBN_ 10i	11.2	1.3	16.1	1.3	19.5	1.4	14.4	1.3	19.3	1.3	22.7	1.4
TRBN_ 12f	13.5	1.0	18.0	6.6	20.8	15.0	16.7	1.0	21.2	6.6	24.0	15.0
TRBN_ 12g	13.2	14.7	16.9	18.9	19.0	21.3	16.1	17.9	19.6	22.1	21.8	24.5
TRBN_ 2b	6.6	1.3	9.5	1.3	12.8	1.4	9.8	1.3	12.7	1.3	16.0	1.4
TRBN_ 3e	4.9	1.3	8.8	1.3	11.7	1.4	8.1	1.3	12.0	1.3	14.9	1.4
TRBN_ 6l	7.8	1.3	8.8	1.3	10.5	1.4	11.0	1.3	12.0	1.3	13.7	1.4
TRBN_ 7j	9.3	1.3	14.0	1.3	16.3	1.4	12.5	1.3	17.2	1.3	19.5	1.4
TRBN_ 8h	9.7	9.9	14.5	14.8	17.4	17.7	14.3	13.1	18.7	18.0	20.7	20.9
TRBN_ 9n	8.4	1.3	12.1	1.3	14.1	1.4	11.6	1.3	15.3	1.3	17.3	1.4

Evaluation Parameters				
	Confidence Level:	90%	Levee Design:	No Friction Waves
	Future Relative Sea Level Rise:	3.2 feet	Levee Overtopping:	No Friction Waves

Planning Unit:	3a	**Alt. No.:**	PU3a-C-M-100-1	**Category:**	Comprehensive (Coastal+Structural+Nonstructural)
Alternative Description:	Comprehensive plan--Same coastal and structural measures as Alternative PU3a-M-100-1 but with complementary nonstructural measures to reduce residual risk.				
Coastal Component:	R1		**Nonstructural Component:**		100-yr complementary measures
Structural Component:	Same as Alternative PU3a-M-100-1				

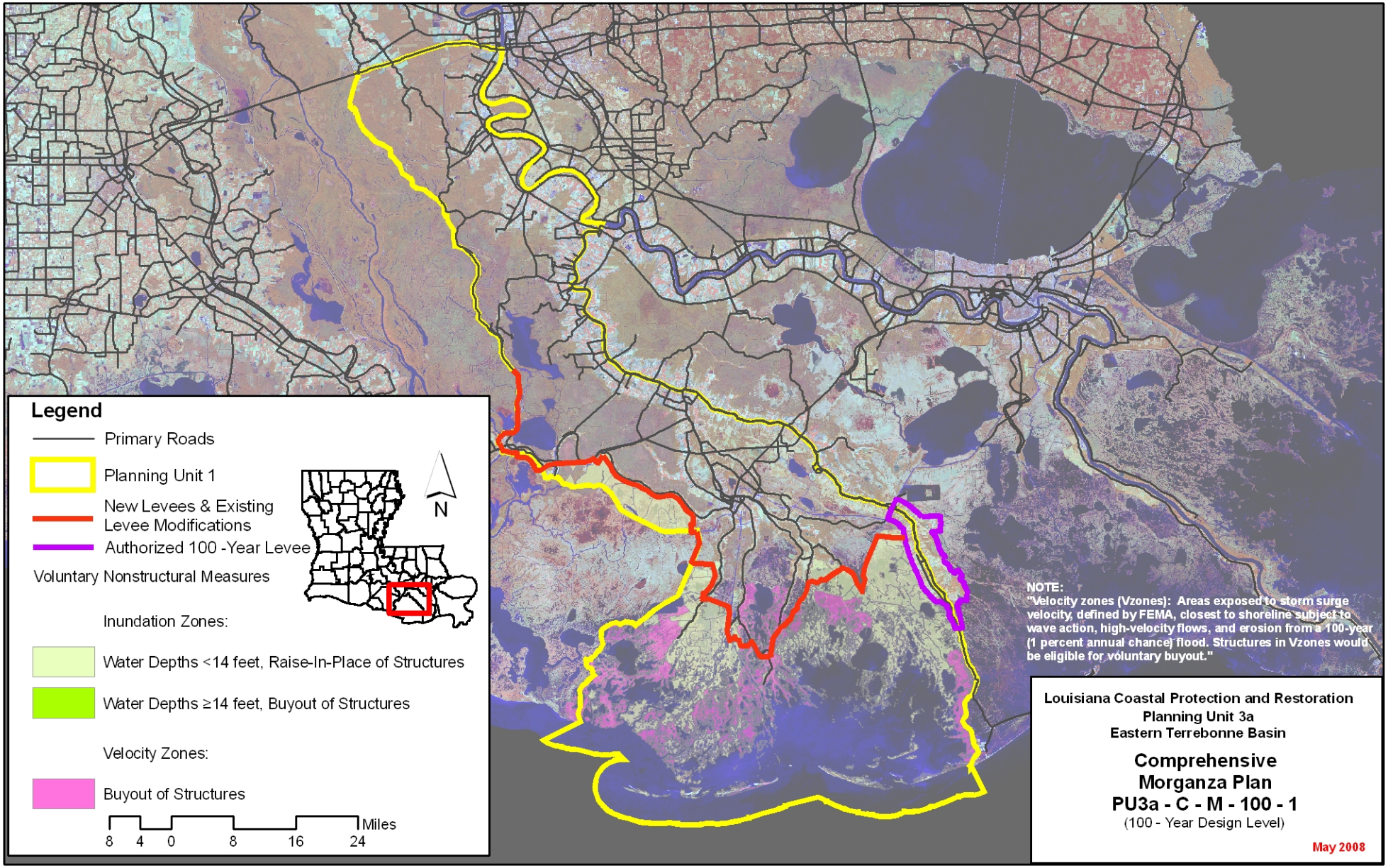
Scenario	Future Conditions (Relative Sea Level Rise (RSLR) and Redevelopment Assumptions)	Uncertainty	Results by Scenario with Uncertainty Bands: Life Cycle Cost	Population Impacted	Residual Damages	Gross Regional Output Impacted	Employment Impacted	People's Earned Income Impacted	Archeo. Sites Protected	Historic Properties Protected	Historic Districts Protected
			Ann. Equiv. $ Millions	Ann. Equiv. #	Ann. Equiv. $ Millions	Ann. Equiv. $ Millions	Ann. Equiv. #	Ann. Equiv. $ Millions	# Sites	# Properties	# Districts
1	Low RSLR High Employment Dispersed Population	High	2,314	5,906	191	304	933	57	203	18	1
		Mid		7,646	296	517	1,718	99	180	17	1
		Low		9,095	426	651	2,332	130	157	13	0
2	High RSLR High Employment Dispersed Population	High	2,362	6,153	207	384	1,075	73	203	18	1
		Mid		7,866	320	616	1,903	118	180	14	1
		Low		9,273	455	732	2,466	145	157	8	0
3	Low RSLR Business-as-Usual Compact Population	High	2,314	5,238	188	310	937	58	203	18	1
		Mid		7,030	289	511	1,711	99	180	17	1
		Low		8,377	409	632	2,290	127	157	13	0
4	High RSLR Business-as-Usual Compact Population	High	2,362	5,422	202	247	1,097	76	203	18	1
		Mid		7,187	309	345	1,892	118	180	14	1
		Low		8,496	432	396	2,442	144	157	8	0

Other Results			
Construction Time (years)			10
Direct Wetland Impacts (acres)			4,900
Indirect Impacts (unitless)			-7
Spatial Integrity (unitless)			0.37
Non-Federal Share of Present Value of Life Cycle Costs	Scenario	($ Millions)	
	1 / 2	16,012	16,342
	3 / 4	16,009	16,339

Wetlands Created/Protected	Scenario 1	Scenario 2	Scenario 3	Scenario 4
After 50 yrs (% of baseline)	98	97	98	97
After 100 yrs (% of baseline)	110	100	110	100
Present Value of Life Cycle Costs ($ Millions)				
Coastal Component	23,276	23,703	23,276	23,703
Nonstructural Component	631	631	623	623
Structural Component	21,412	21,928	21,412	21,928
Total Project	45,319	46,262	45,311	46,254

2075 Residual Risk / Damages - Low Uncertainty ($ Millions)									Planning Unit 3a Comprehensive Plan Morganza Alt 100-year Design
Frequency	Scenario 1		Scenario 2		Scenario 3		Scenario 4		
	No Action	With Proj	No Action	With Proj	No Action	With Proj	No Action	With Proj	
10-year	1,460	107	2,472	162	1,422	99	2,425	162	
100-year	10,629	422	15,966	614	9,695	434	13,659	593	
400-year	22,650	1,852	25,236	1,934	17,848	1,752	19,693	1,830	
1,000-year	26,922	15,182	28,128	15,207	20,766	12,875	21,591	12,896	
2,000-year	28,659	20,184	29,317	20,196	21,942	16,613	22,348	16,623	

Note: **Present Value** costs and **Annual Equivalent** numbers are calculated for the period from 2010 to 2075 at common base year 2025 using a 4 7/8% Federal discount rate. All dollar metrics are based on 2007 price levels.


Legend
Primary Roads
Planning Unit 1
New Levees & Existing Levee Modifications
Authorized 100 -Year Levee
Voluntary Nonstructural Measures
Inundation Zones:
Water Depths <14 feet, Raise-In-Place of Structures
Water Depths ≥14 feet, Buyout of Structures
Velocity Zones:
Buyout of Structures
8 4 0 8 16 24 Miles
N
NOTE:
"Velocity zones (Vzones): Areas exposed to storm surge velocity, defined by FEMA, closest to shoreline subject to wave action, high-velocity flows, and erosion from a 100-year (1 percent annual chance) flood. Structures in Vzones would be eligible for voluntary buyout."
Louisiana Coastal Protection and Restoration
Planning Unit 3a
Eastern Terrebonne Basin
Comprehensive
Morganza Plan
PU3a - C - M - 100 - 1
(100 - Year Design Level)
May 2008

Planning Unit:	3a	**Alt. No.:**	PU3a-C-M-100-2	**Category:**	Comprehensive (Coastal+Structural+Nonstructural)
Alternative Description:	Comprehensive plan--Same coastal and structural measures as Alternative PU3a-M-100-2 but with complementary nonstructural measures to reduce residual risk.				
Coastal Component:	R1		**Nonstructural Component:**		100-yr complementary measures
Structural Component:	Same as Alternative PU3a-M-100-2				

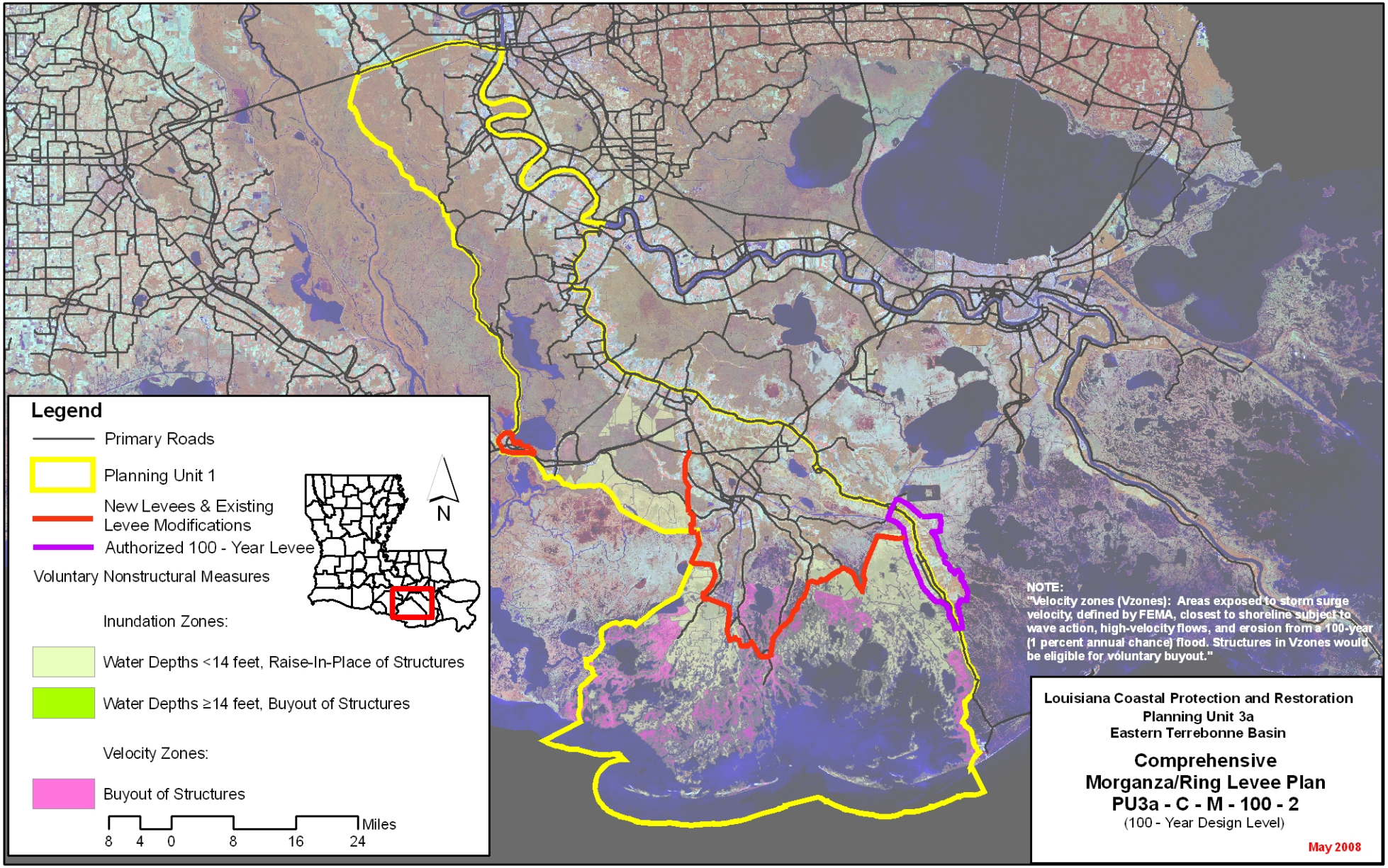
Scenario	Future Conditions (Relative Sea Level Rise (RSLR) and Redevelopment Assumptions)	Uncertainty	Results by Scenario with Uncertainty Bands								
			Life Cycle Cost	Population Impacted	Residual Damages	Gross Regional Output Impacted	Employment Impacted	People's Earned Income Impacted	Archeo. Sites Protected	Historic Properties Protected	Historic Districts Protected
			Ann. Equiv. $ Millions	Ann. Equiv. #	Ann. Equiv. $ Millions	Ann. Equiv. $ Millions	Ann. Equiv. #	Ann. Equiv. $ Millions	# Sites	# Properties	# Districts
1	Low RSLR High Employment Dispersed Population	High	2,193	6,042	196	321	942	61	174	17	1
		Mid		8,171	322	549	1,775	106	151	14	1
		Low		9,925	483	717	2,490	143	128	10	0
2	High RSLR High Employment Dispersed Population	High	2,221	6,504	224	420	1,118	81	174	15	1
		Mid		8,542	361	667	1,986	129	151	11	0
		Low		10,209	526	810	2,646	161	128	8	0
3	Low RSLR Business-as-Usual Compact Population	High	2,193	5,330	193	332	948	62	174	17	1
		Mid		7,496	315	551	1,773	106	151	14	1
		Low		9,137	466	704	2,449	141	128	10	0
4	High RSLR Business-as-Usual Compact Population	High	2,221	5,687	218	292	1,147	85	174	15	1
		Mid		7,777	350	405	1,981	130	151	11	0
		Low		9,320	502	484	2,626	162	128	8	0

Other Results			
Construction Time (years)			10
Direct Wetland Impacts (acres)			4,200
Indirect Impacts (unitless)			-4
Spatial Integrity (unitless)			0.37
Non-Federal Share of Present Value of Life Cycle Costs	Scenario	($ Millions)	
	1 / 2	15,217	15,407
	3 / 4	15,215	15,405

Wetlands Created/Protected	Scenario 1	Scenario 2	Scenario 3	Scenario 4
After 50 yrs (% of baseline)	98	97	98	97
After 100 yrs (% of baseline)	110	100	110	100
Present Value of Life Cycle Costs ($ Millions)				
Coastal Component	23,276	23,703	23,276	23,703
Nonstructural Component	695	695	689	689
Structural Component	18,983	19,098	18,983	19,098
Total Project	42,954	43,496	42,947	43,490

2075 Residual Risk / Damages - Low Uncertainty ($ Millions)									Planning Unit 3a Comprehensive Plan Morganza Alt 100-year Design
Frequency	Scenario 1		Scenario 2		Scenario 3		Scenario 4		
	No Action	With Proj	No Action	With Proj	No Action	With Proj	No Action	With Proj	
10-year	1,460	152	2,472	423	1,422	153	2,425	472	
100-year	10,629	1,548	15,966	2,236	9,695	1,550	13,659	2,129	
400-year	22,650	5,133	25,236	5,406	17,848	4,777	19,693	4,985	
1,000-year	26,922	20,469	28,128	20,631	20,766	16,774	21,591	16,877	
2,000-year	28,659	20,694	29,317	20,723	21,942	16,944	22,348	16,980	

Note: **Present Value** costs and **Annual Equivalent** numbers are calculated for the period from 2010 to 2075 at common base year 2025 using a 4 7/8% Federal discount rate. All dollar metrics are based on 2007 price levels.


Legend
Primary Roads
Planning Unit 1
New Levees & Existing Levee Modifications
Authorized 100 - Year Levee
Voluntary Nonstructural Measures
Inundation Zones:
Water Depths <14 feet, Raise-In-Place of Structures
Water Depths ≥14 feet, Buyout of Structures
Velocity Zones:
Buyout of Structures
8 4 0 8 16 24 Miles
N
NOTE:
"Velocity zones (Vzones): Areas exposed to storm surge velocity, defined by FEMA, closest to shoreline subject to wave action, high-velocity flows, and erosion from a 100-year (1 percent annual chance) flood. Structures in Vzones would be eligible for voluntary buyout."
Louisiana Coastal Protection and Restoration
Planning Unit 3a
Eastern Terrebonne Basin
Comprehensive
Morganza/Ring Levee Plan
PU3a - C - M - 100 - 2
(100 - Year Design Level)
May 2008

Planning Unit:	3a	**Alt. No.:**	PU3a-C-G-400-2	**Category:**	Comprehensive (Coastal+Structural+Nonstructural)
Alternative Description:	Comprehensive plan--Same coastal and structural measures as Alternative PU3a-G-400-2 but with complementary nonstructural measures to reduce residual risk.				
Coastal Component:	R1		**Nonstructural Component:**		400-yr complementary measures
Structural Component:	Same as Alternative PU3a-G-400-2				

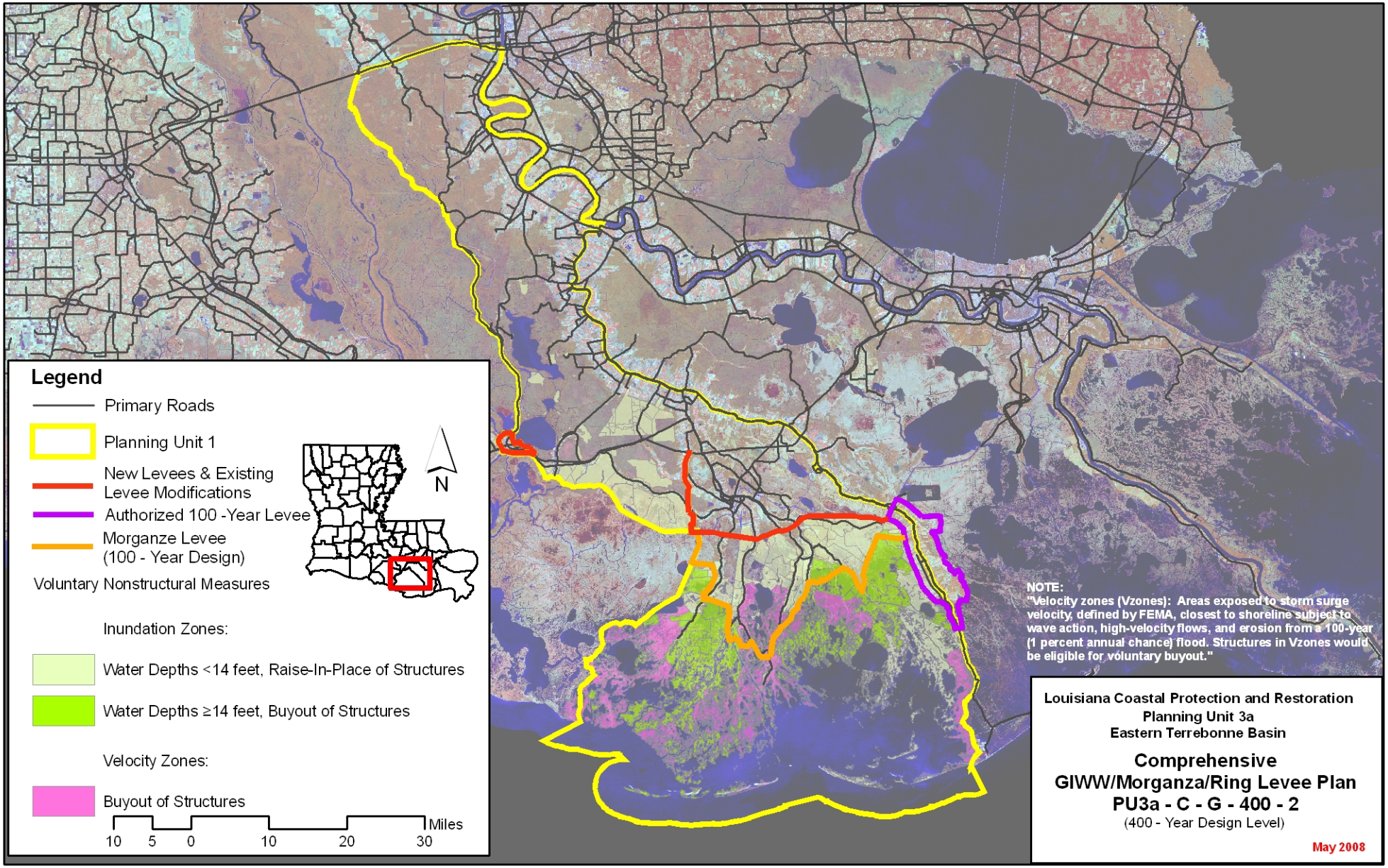
Scenario	Future Conditions (Relative Sea Level Rise (RSLR) and Redevelopment Assumptions)	Uncertainty	Results by Scenario with Uncertainty Bands								
			Life Cycle Cost	Population Impacted	Residual Damages	Gross Regional Output Impacted	Employment Impacted	People's Earned Income Impacted	Archeo. Sites Protected	Historic Properties Protected	Historic Districts Protected
			Ann. Equiv. $ Millions	Ann. Equiv. #	Ann. Equiv. $ Millions	Ann. Equiv. $ Millions	Ann. Equiv. #	Ann. Equiv. $ Millions	# Sites	# Properties	# Districts
1	Low RSLR High Employment Dispersed Population	High	2,553	5,990	198	274	873	51	174	13	1
		Mid		7,986	311	411	1,412	79	151	11	1
		Low		9,429	434	528	1,938	104	128	5	1
2	High RSLR High Employment Dispersed Population	High	2,579	6,452	223	330	977	62	174	11	1
		Mid		8,358	346	497	1,584	97	151	9	1
		Low		9,714	472	593	2,056	118	128	4	1
3	Low RSLR Business-as-Usual Compact Population	High	2,569	5,275	193	280	874	51	174	13	1
		Mid		7,334	303	412	1,418	79	151	11	1
		Low		8,700	418	520	1,917	103	128	5	1
4	High RSLR Business-as-Usual Compact Population	High	2,595	5,632	216	192	992	64	174	11	1
		Mid		7,615	334	232	1,583	97	151	9	1
		Low		8,884	450	267	2,049	118	128	4	1

Other Results			
Construction Time (years)			10
Direct Wetland Impacts (acres)			5,300
Indirect Impacts (unitless)			-7
Spatial Integrity (unitless)			0.37
Non-Federal Share of Present Value of Life Cycle Costs	Scenario	($ Millions)	
	1 / 2	17,605	17,780
	3 / 4	17,714	17,889

Wetlands Created/Protected	Scenario 1	Scenario 2	Scenario 3	Scenario 4
After 50 yrs (% of baseline)	98	97	98	97
After 100 yrs (% of baseline)	110	100	110	100
Present Value of Life Cycle Costs ($ Millions)				
Coastal Component	23,276	23,703	23,276	23,703
Nonstructural Component	1,520	1,520	1,831	1,831
Structural Component	25,212	25,285	25,212	25,285
Total Project	50,008	50,507	50,319	50,818

2075 Residual Risk / Damages - Low Uncertainty ($ Millions)									
Frequency	Scenario 1		Scenario 2		Scenario 3		Scenario 4		Planning Unit 3a Comprehensive Plan GIWW Alt 400-year Design
	No Action	With Proj	No Action	With Proj	No Action	With Proj	No Action	With Proj	
10-year	1,460	125	2,472	331	1,422	125	2,425	370	
100-year	10,629	1,188	15,966	1,628	9,695	1,168	13,659	1,540	
400-year	22,650	2,110	25,236	2,557	17,848	1,917	19,693	2,273	
1,000-year	26,922	9,204	28,128	9,505	20,766	7,400	21,591	7,638	
2,000-year	28,659	9,921	29,317	10,025	21,942	8,048	22,348	8,160	

Note: **Present Value** costs and **Annual Equivalent** numbers are calculated for the period from 2010 to 2075 at common base year 2025 using a 4 7/8% Federal discount rate. All dollar metrics are based on 2007 price levels.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Authorized 100 -Year Levee
Morganze Levee (100 - Year Design)
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Water Depths ≥14 feet, Buyout of Structures
Velocity Zones:
Buyout of Structures
10 5 0 10 20 30 Miles
N
NOTE:
"Velocity zones (Vzones): Areas exposed to storm surge velocity, defined by FEMA, closest to shoreline subject to wave action, high-velocity flows, and erosion from a 100-year (1 percent annual chance) flood. Structures in Vzones would be eligible for voluntary buyout."
Louisiana Coastal Protection and Restoration
Planning Unit 3a
Eastern Terrebonne Basin
Comprehensive
GIWW/Morganza/Ring Levee Plan
PU3a - C - G - 400 - 2
(400 - Year Design Level)
May 2008

Planning Unit:	3a	**Alt. No.:**	PU3a-C-G-1000-2	**Category:**	Comprehensive (Coastal+Structural+Nonstructural)
Alternative Description:	Comprehensive plan--Same coastal and structural measures as Alternative PU3a-G-1000-2 but with complementary nonstructural measures to reduce residual risk.				
Coastal Component:	R1		**Nonstructural Component:**		1000-yr complementary measures
Structural Component:	Same as Alternative PU3a-G-1000-2				

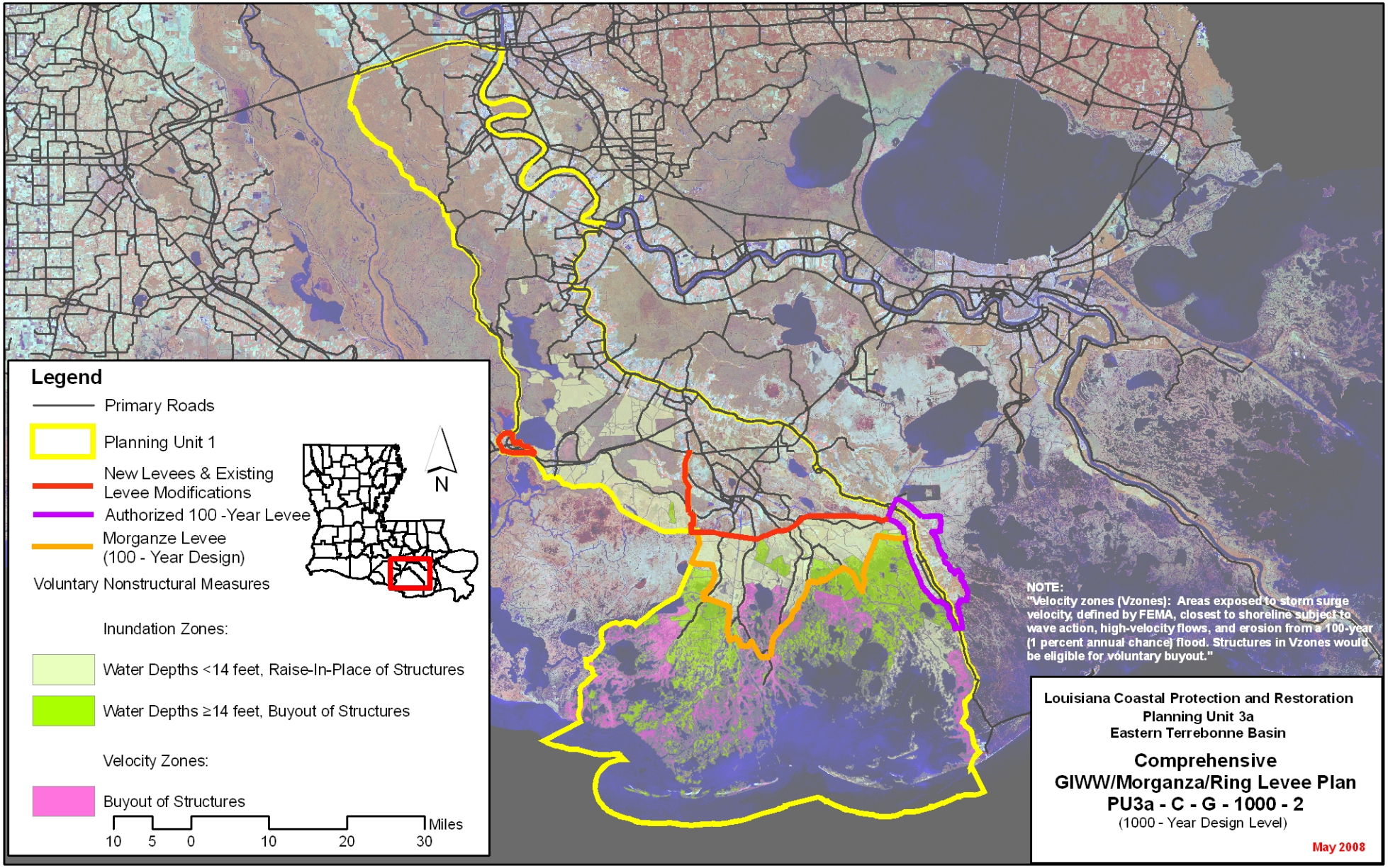
Scenario	Future Conditions (Relative Sea Level Rise (RSLR) and Redevelopment Assumptions)	Uncertainty	Results by Scenario with Uncertainty Bands								
			Life Cycle Cost	Population Impacted	Residual Damages	Gross Regional Output Impacted	Employment Impacted	People's Earned Income Impacted	Archeo. Sites Protected	Historic Properties Protected	Historic Districts Protected
			Ann. Equiv. $ Millions	Ann. Equiv. #	Ann. Equiv. $ Millions	Ann. Equiv. $ Millions	Ann. Equiv. #	Ann. Equiv. $ Millions	# Sites	# Properties	# Districts
1	Low RSLR High Employment Dispersed Population	High	2,727	5,747	189	261	828	48	174	17	1
		Mid		7,742	298	395	1,357	75	151	16	1
		Low		9,168	415	507	1,871	100	128	16	1
2	High RSLR High Employment Dispersed Population	High	2,753	6,210	212	315	927	59	174	16	1
		Mid		8,114	331	472	1,514	91	151	16	1
		Low		9,453	453	568	1,980	112	128	16	1
3	Low RSLR Business-as-Usual Compact Population	High	2,739	5,049	185	265	828	48	174	17	1
		Mid		7,106	291	391	1,361	75	151	16	1
		Low		8,455	400	493	1,843	98	128	16	1
4	High RSLR Business-as-Usual Compact Population	High	2,765	5,405	206	171	939	60	174	16	1
		Mid		7,387	319	204	1,511	91	151	16	1
		Low		8,638	431	239	1,968	112	128	16	1

Other Results			
Construction Time (years)			10
Direct Wetland Impacts (acres)			6,600
Indirect Impacts (unitless)			-7
Spatial Integrity (unitless)			0.37
Non-Federal Share of Present Value of Life Cycle Costs	Scenario	($ Millions)	
	1 / 2	18,802	18,979
	3 / 4	18,887	19,063

Wetlands Created/Protected	Scenario 1	Scenario 2	Scenario 3	Scenario 4
After 50 yrs (% of baseline)	98	97	98	97
After 100 yrs (% of baseline)	110	100	110	100
Present Value of Life Cycle Costs ($ Millions)				
Coastal Component	23,276	23,703	23,276	23,703
Nonstructural Component	2,504	2,504	2,745	2,745
Structural Component	27,625	27,703	27,625	27,703
Total Project	53,405	53,909	53,646	54,150

2075 Residual Risk / Damages - Low Uncertainty ($ Millions)									Planning Unit 3a Comprehensive Plan GIWW Alt 1000-year Design
Frequency	Scenario 1		Scenario 2		Scenario 3		Scenario 4		
	No Action	With Proj	No Action	With Proj	No Action	With Proj	No Action	With Proj	
10-year	1,460	102	2,472	276	1,422	98	2,425	289	
100-year	10,629	977	15,966	1,358	9,695	931	13,659	1,250	
400-year	22,650	1,651	25,236	1,951	17,848	1,438	19,693	1,681	
1,000-year	26,922	2,272	28,128	2,718	20,766	1,853	21,591	2,230	
2,000-year	28,659	3,156	29,317	3,313	21,942	2,627	22,348	2,796	

Note: **Present Value** costs and **Annual Equivalent** numbers are calculated for the period from 2010 to 2075 at common base year 2025 using a 4 7/8% Federal discount rate. All dollar metrics are based on 2007 price levels.


Legend
Primary Roads
Planning Unit 1
New Levees & Existing Levee Modifications
Authorized 100 -Year Levee
Morganze Levee (100 - Year Design)
Voluntary Nonstructural Measures
Inundation Zones:
Water Depths <14 feet, Raise-In-Place of Structures
Water Depths ≥14 feet, Buyout of Structures
Velocity Zones:
Buyout of Structures
10 5 0 10 20 30 Miles
N
NOTE:
"Velocity zones (Vzones): Areas exposed to storm surge velocity, defined by FEMA, closest to shoreline subject to wave action, high-velocity flows, and erosion from a 100-year (1 percent annual chance) flood. Structures in Vzones would be eligible for voluntary buyout."
Louisiana Coastal Protection and Restoration
Planning Unit 3a
Eastern Terrebonne Basin
Comprehensive
GIWW/Morganza/Ring Levee Plan
PU3a - C - G - 1000 - 2
(1000 - Year Design Level)
May 2008