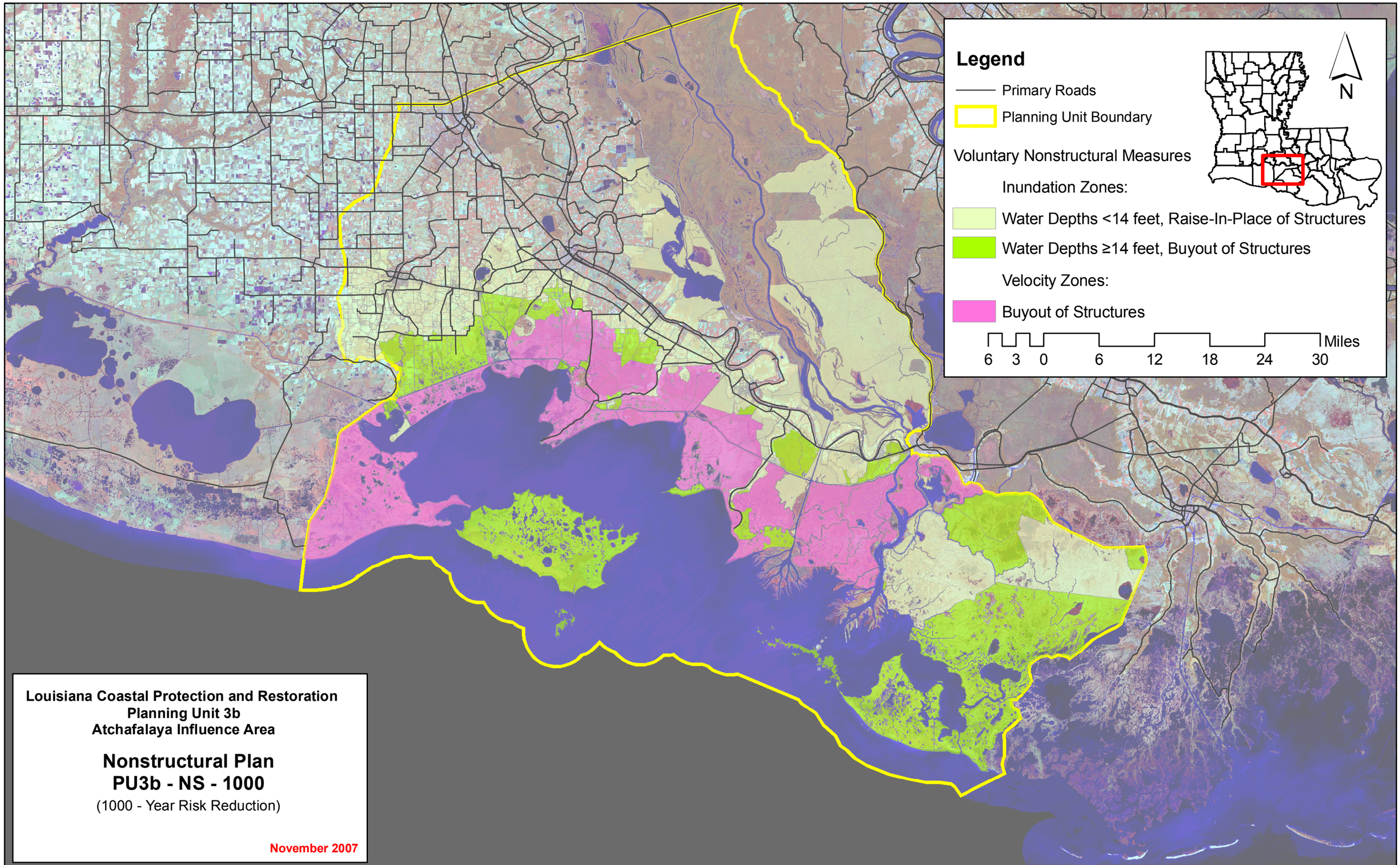
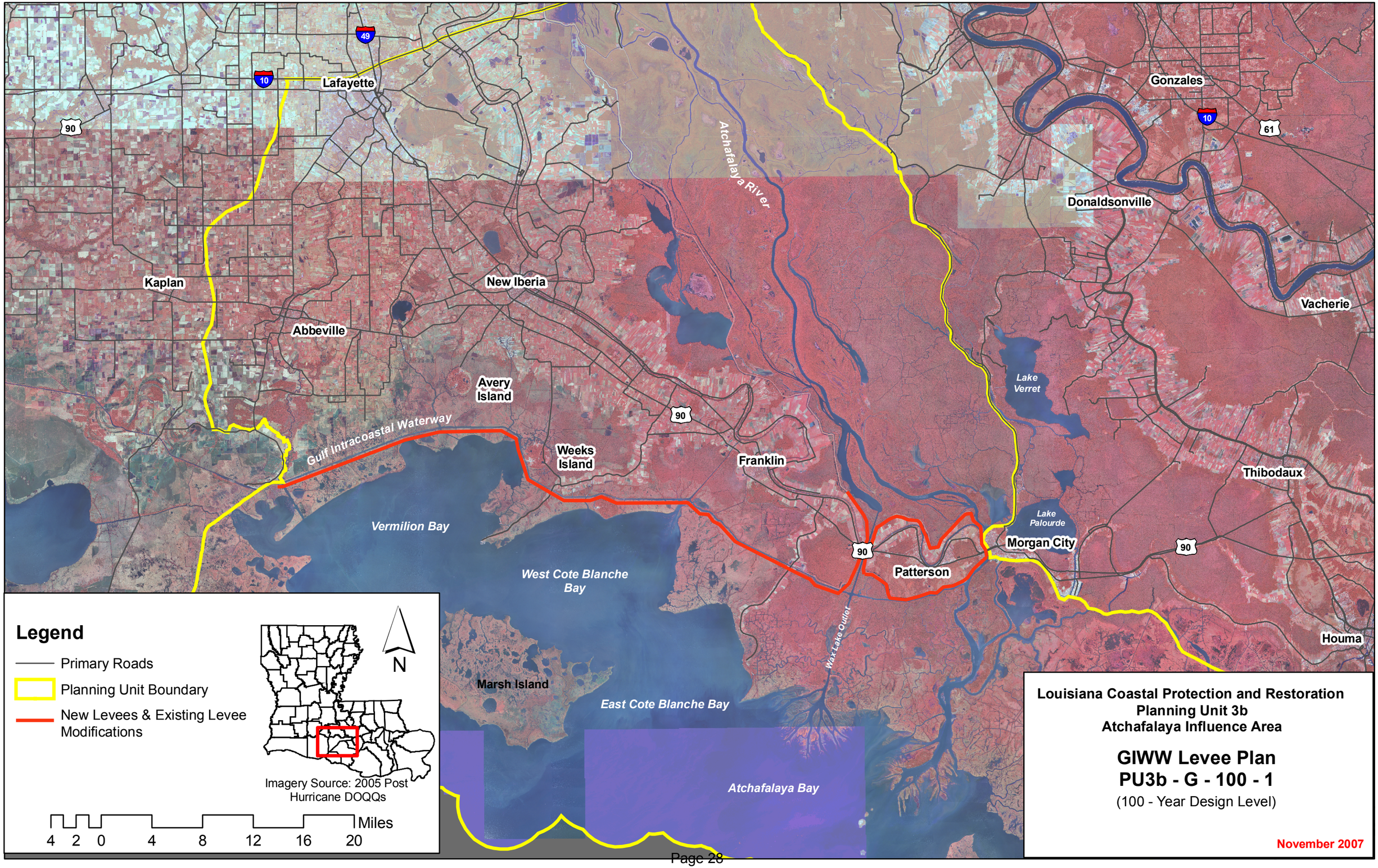
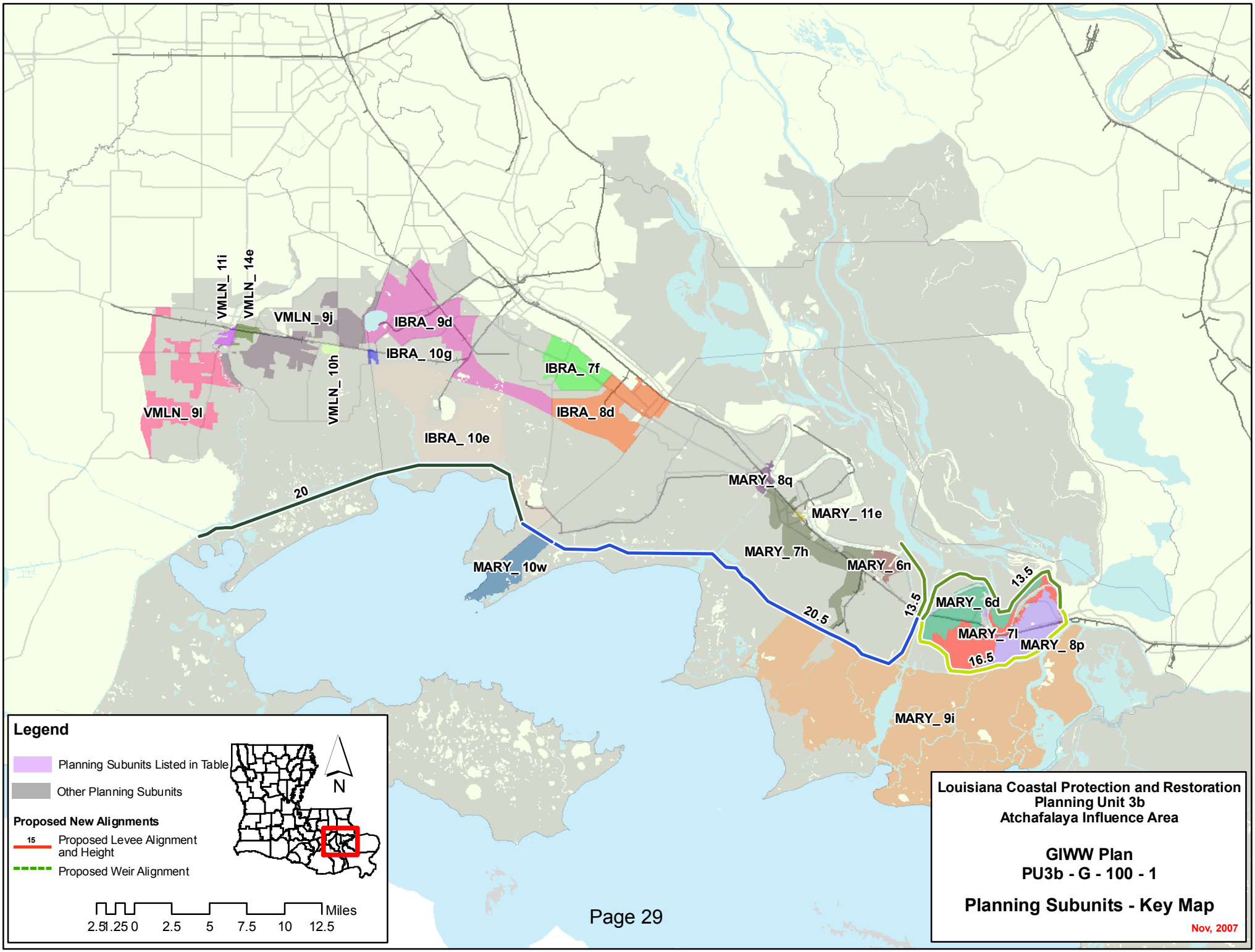

Legend
Primary Roads
Planning Unit Boundary
Voluntary Nonstructural Measures
Inundation Zones:
Water Depths <14 feet, Raise-In-Place of Structures
Water Depths ≥14 feet, Buyout of Structures
Velocity Zones:
Buyout of Structures
6 3 0 6 12 18 24 30
Miles
N
Louisiana Coastal Protection and Restoration
Planning Unit 3b
Atchafalaya Influence Area
Nonstructural Plan
PU3b - NS - 1000
(1000 - Year Risk Reduction)
November 2007

Planning Unit:	3b	**Alt. No.**	PU3b-G-100-1	**Category**	Coastal Restoration + Structural Measures
Alternative Description:	Sustain coastal landscape through restoration. Raise ring levee around Patterson/Berwick to 100-year design level and construct levee along the GIWW west to the boundary of Planning Unit 4 at the 100-year design level.				
Coastal Component:	R1			**Nonstructural Component:**	None
Structural Component:	See alternative description.				

		Metric Results by Scenario with Uncertainty Bands								
		Life-cycle Cost	Resident Population Impacted	Residual Damages	Gross Regional Output Impacted	Employment Impacted	People's Earned Income Impacted	Archeo. Sites Protected	Historic Properties Protected	Historic Districts Protected
		$ Billions	Ann. Equiv. #	Ann. Equiv ($ 1000's)	Ann. Equiv ($ 1000's)	Ann. Equiv #	Ann. Equiv ($ 1000's)	# Sites	# Properties	# Districts
Scenario 1	**Low**		2,206	144,422	187,015	615	35,628	264	18	5
	Mean	20.0	3,917	261,282	287,205	1,085	59,030	288	19	5
	High		5,064	366,397	349,533	1,352	70,171	312	20	5
Scenario 2	**Low**		2,307	152,662	204,563	644	38,704	264	18	4
	Mean	20.0	3,993	270,332	294,077	1,104	60,637	288	18	5
	High		5,160	374,786	358,872	1,370	71,972	312	20	5
Scenario 3	**Low**		2,050	136,903	195,689	616	36,708	264	18	5
	Mean	20.0	3,679	245,392	303,870	1,089	61,062	288	19	5
	High		4,771	343,769	364,606	1,320	70,255	312	20	5
Scenario 4	**Low**		2,146	144,261	219,196	654	40,764	264	18	4
	Mean	20.0	3,747	253,609	310,322	1,102	62,126	288	18	5
	High		4,874	351,274	374,114	1,336	71,864	312	20	5

Other Metric Results							
Construction Time (years)	10	**Wetlands Created/ Protected (acres)**	**Scen 1&3**	**Scen 2&4**	**PV Cost of NS Comp ($ Billions)**	**Scen 1&2**	**Scen 3&4**
Direct Wetland Impacts (acres)	-2,296		50,027	62,021		**N/A**	**N/A**
Indirect Impacts	-8	**PV Cost of Coastal Component ($ Billions)**	4.76	4.80			
Spatial Integrity	0.505						
		PV Cost of Structural Component ($ Billions)	15.21	15.24			


Lafayette
Gonzales
Donaldsonville
Kaplan
New Iberia
Abbeville
Vacherie
Avery Island
Lake Verret
Gulf Intracoastal Waterway
Weeks Island
Franklin
Thibodaux
Vermilion Bay
Lake Palourde
Morgan City
West Cote Blanche Bay
Patterson
Houma
Marsh Island
East Cote Blanche Bay
Atchafalaya Bay
Atchafalaya River
Wax Lake Outlet
Legend
Primary Roads
Planning Unit Boundary
New Levees & Existing Levee Modifications
N
Imagery Source: 2005 Post Hurricane DOQQs
Miles
4 2 0 4 8 12 16 20
Louisiana Coastal Protection and Restoration
Planning Unit 3b
Atchafalaya Influence Area
GIWW Levee Plan
PU3b - G - 100 - 1
(100 - Year Design Level)
November 2007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VMLN_ 14e
VMLN_ 9j
IBRA_ 9d
IBRA_ 10g
VMLN_ 10h
IBRA_ 7f
VMLN_ 9l
IBRA_ 8d
IBRA_ 10e
20
MARY_ 8q
MARY_ 11e
MARY_ 7h
MARY_ 6n
MARY_ 10w
13.5
MARY_ 6d
20.5
13.5
MARY_ 7l
MARY_ 8p
16.5
MARY_ 9i
Legend
Planning Subunits Listed in Table
Other Planning Subunits
Proposed New Alignments
15
Proposed Levee Alignment and Height
Proposed Weir Alignment
N
Miles
2.5 1.25 0 2.5 5 7.5 10 12.5
Louisiana Coastal Protection and Restoration
Planning Unit 3b
Atchafalaya Influence Area
GIWW Plan
PU3b - G - 100 - 1
Planning Subunits - Key Map
Nov, 2007

Alternative: PU3b-G-100-1
Water Surface Elevations (feet - NAVD88 2004.65)

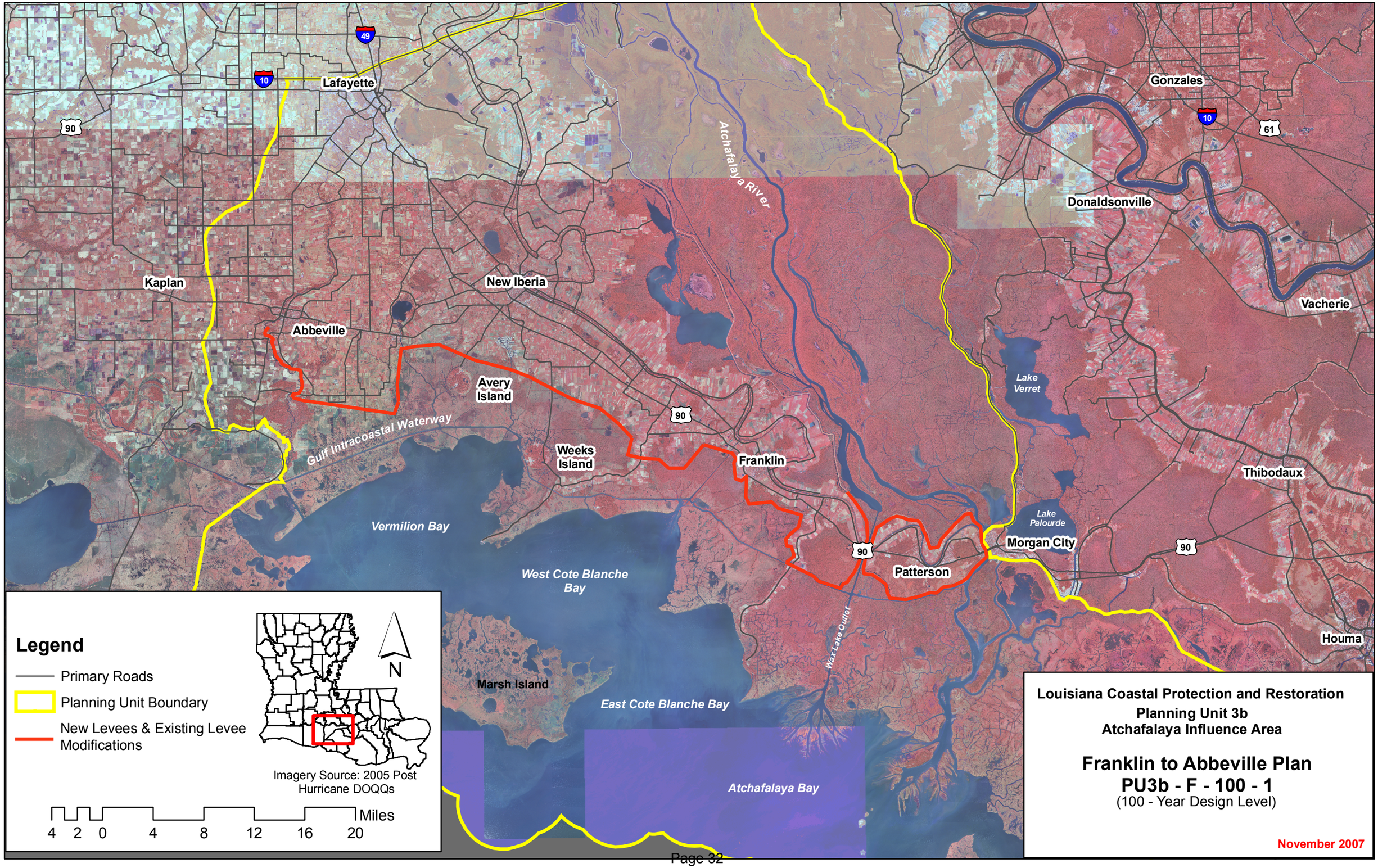
Planning Sub Unit	2010 (Base) Conditions						2060 (Future) Conditions					
	100-yr Event		400-year Event		1,000-yr Event		100-yr Event		400-year Event		1,000-yr Event	
	Without Project	With Project	Without Project	With Project	Without Project	With Project	Without Project	With Project	Without Project	With Project	Without Project	With Project
IBRA_ 10e	11.6	2.4	15.5	3.9	18.0	8.2	15.0	2.4	18.7	3.9	21.0	8.2
IBRA_ 10g	11.5	2.4	15.4	3.9	17.8	8.2	15.2	2.4	18.7	3.9	20.9	8.2
IBRA_ 7f	7.8	2.4	7.8	3.9	9.4	8.2	11.0	2.4	11.6	3.9	12.6	8.2
IBRA_ 8d	10.1	2.4	15.2	3.9	19.1	8.2	13.9	2.4	19.6	3.9	23.6	8.2
IBRA_ 9d	9.0	2.4	13.8	3.9	17.1	8.2	14.5	2.4	17.9	3.9	20.3	8.2
MARY_ 10w	11.7	13.1	16.0	17.8	18.9	20.9	14.8	16.3	18.5	21.0	21.2	24.1
MARY_ 11e	7.8	1.3	11.3	3.5	14.1	9.1	11.0	1.3	16.2	3.5	19.4	9.1
MARY_ 6d	7.8	-0.4	9.6	3.5	12.0	10.8	11.0	-0.4	12.9	3.5	15.3	10.8
MARY_ 6n	7.8	1.3	11.1	3.5	13.3	9.1	11.0	1.3	14.0	3.5	16.6	9.1
MARY_ 7h	7.8	1.3	10.9	3.5	13.2	9.1	12.9	1.3	16.1	3.5	17.8	9.1
MARY_ 7l	7.8	-0.4	10.6	3.5	13.1	10.8	11.0	-0.4	13.8	3.5	16.2	10.8
MARY_ 8p	8.6	-0.4	12.4	3.5	14.8	10.8	11.8	-0.4	15.2	3.5	17.5	10.8
MARY_ 8q	8.2	1.3	13.5	3.5	17.2	9.1	13.7	1.3	18.4	3.5	21.4	9.1
MARY_ 9i	9.9	11.1	13.4	14.7	15.4	16.7	13.0	14.3	16.6	17.9	18.5	19.9
VMLN_ 10h	11.4	2.4	15.6	3.9	18.3	8.2	14.8	2.4	18.9	3.9	21.7	8.2
VMLN_ 11i	7.8	2.4	11.3	3.9	14.8	8.2	11.0	2.4	15.5	3.9	18.9	8.2
VMLN_ 14e	7.8	2.4	9.4	3.9	14.3	8.2	11.0	2.4	13.6	3.9	18.4	8.2
VMLN_ 9j	7.8	2.4	13.1	3.9	16.3	8.2	13.1	2.4	17.3	3.9	20.4	8.2
VMLN_ 9l	10.6	2.4	13.7	3.9	15.5	8.2	14.4	2.4	17.7	3.9	19.6	8.2

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

Planning Unit:	3b	Alt. No.	PU3b-F-100-1	Category	Coastal Restoration + Structural Measures
Alternative Description:	Sustain coastal landscape through restoration. Raise ring levee around Patterson/Berwick to 100-year design level and construct levee along the edge of development north of the GIWW to high ground west of Abbeville at the 100-year design level.				
Coastal Component:	R1			Nonstructural Component:	None
Structural Component:	See alternative description.				

		Metric Results by Scenario with Uncertainty Bands								
		Life-cycle Cost	Resident Population Impacted	Residual Damages	Gross Regional Output Impacted	Employment Impacted	People's Earned Income Impacted	Archeo. Sites Protected	Historic Properties Protected	Historic Districts Protected
		$ Billions	Ann. Equiv. #	Ann. Equiv ($ 1000's)	Ann. Equiv ($ 1000's)	Ann. Equiv #	Ann. Equiv ($ 1000's)	# Sites	# Properties	# Districts
Scenario 1	Low		2,648	166,832	145,751	563	30,407	154	14	1
	Mean	18.7	4,504	296,228	254,200	1,090	56,542	178	15	3
	High		5,851	425,597	329,672	1,409	70,470	202	16	3
Scenario 2	Low		2,755	176,420	168,352	606	34,992	154	14	0
	Mean	18.8	4,599	306,672	273,716	1,127	60,379	178	15	2
	High		5,949	435,559	354,904	1,455	75,660	202	16	3
Scenario 3	Low		2,436	156,073	151,832	562	31,114	154	14	1
	Mean	18.7	4,198	275,527	266,365	1,089	58,002	178	15	3
	High		5,489	395,824	339,596	1,363	69,508	202	16	3
Scenario 4	Low		2,536	164,404	177,088	603	35,483	154	14	0
	Mean	18.8	4,271	284,777	285,291	1,112	60,437	178	15	2
	High		5,580	404,314	361,266	1,388	72,494	202	16	3

Other Metric Results							
Construction Time (years)	10	Wetlands Created/ Protected (acres)	Scen 1&3	Scen 2&4	PV Cost of NS Comp ($ Billions)	Scen 1&2	Scen 3&4
Direct Wetland Impacts (acres)	-2,466		50,027	62,021		N/A	N/A
Indirect Impacts	4	PV Cost of Coastal Component ($ Billions)	4.76	4.80			
Spatial Integrity	0.505						
		PV Cost of Structural Component ($ Billions)	13.92	13.95			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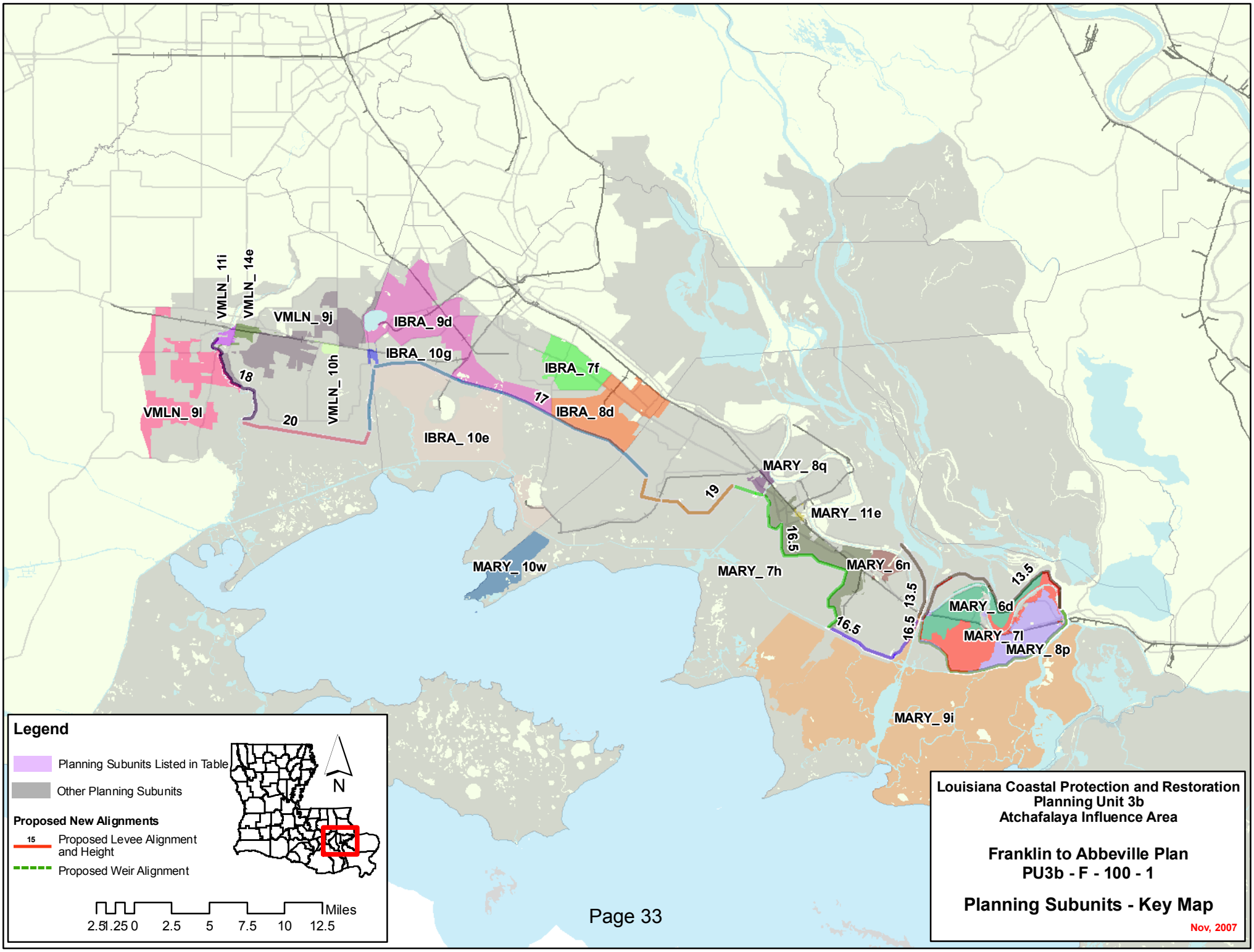
Gonzales
Donaldsonville
Kaplan
New Iberia
Abbeville
Vacherie
Avery Island
Weeks Island
Franklin
Thibodaux
Morgan City
Patterson
Houma
Marsh Island
Atchafalaya River
Lake Verret
Lake Palourde
Gulf Intracoastal Waterway
Vermilion Bay
West Cote Blanche Bay
East Cote Blanche Bay
Atchafalaya Bay
Wax Lake Outlet
49
10
90
61
Legend
Primary Roads
Planning Unit Boundary
New Levees & Existing Levee Modifications
N
Imagery Source: 2005 Post Hurricane DOQQs
4 2 0 4 8 12 16 20 Miles
Louisiana Coastal Protection and Restoration
Planning Unit 3b
Atchafalaya Influence Area
Franklin to Abbeville Plan
PU3b - F - 100 - 1
(100 - Year Design Level)
November 2007


VMLN_ 11i
VMLN_ 14e
VMLN_ 9j
IBRA_ 9d
IBRA_ 10g
IBRA_ 7f
IBRA_ 8d
VMLN_ 10h
VMLN_ 9l
IBRA_ 10e
18
20
17
19
MARY_ 8q
MARY_ 11e
16.5
MARY_ 6n
MARY_ 10w
MARY_ 7h
13.5
MARY_ 6d
MARY_ 7l
MARY_ 8p
MARY_ 9i
Legend
Planning Subunits Listed in Table
Other Planning Subunits
Proposed New Alignments
15
Proposed Levee Alignment and Height
Proposed Weir Alignment
N
Miles
2.5 1.25 0 2.5 5 7.5 10 12.5
Louisiana Coastal Protection and Restoration
Planning Unit 3b
Atchafalaya Influence Area
Franklin to Abbeville Plan
PU3b - F - 100 - 1
Planning Subunits - Key Map
Nov, 2007

Alternative: PU3b-F-100-1
Water Surface Elevations (feet - NAVD88 2004.65)

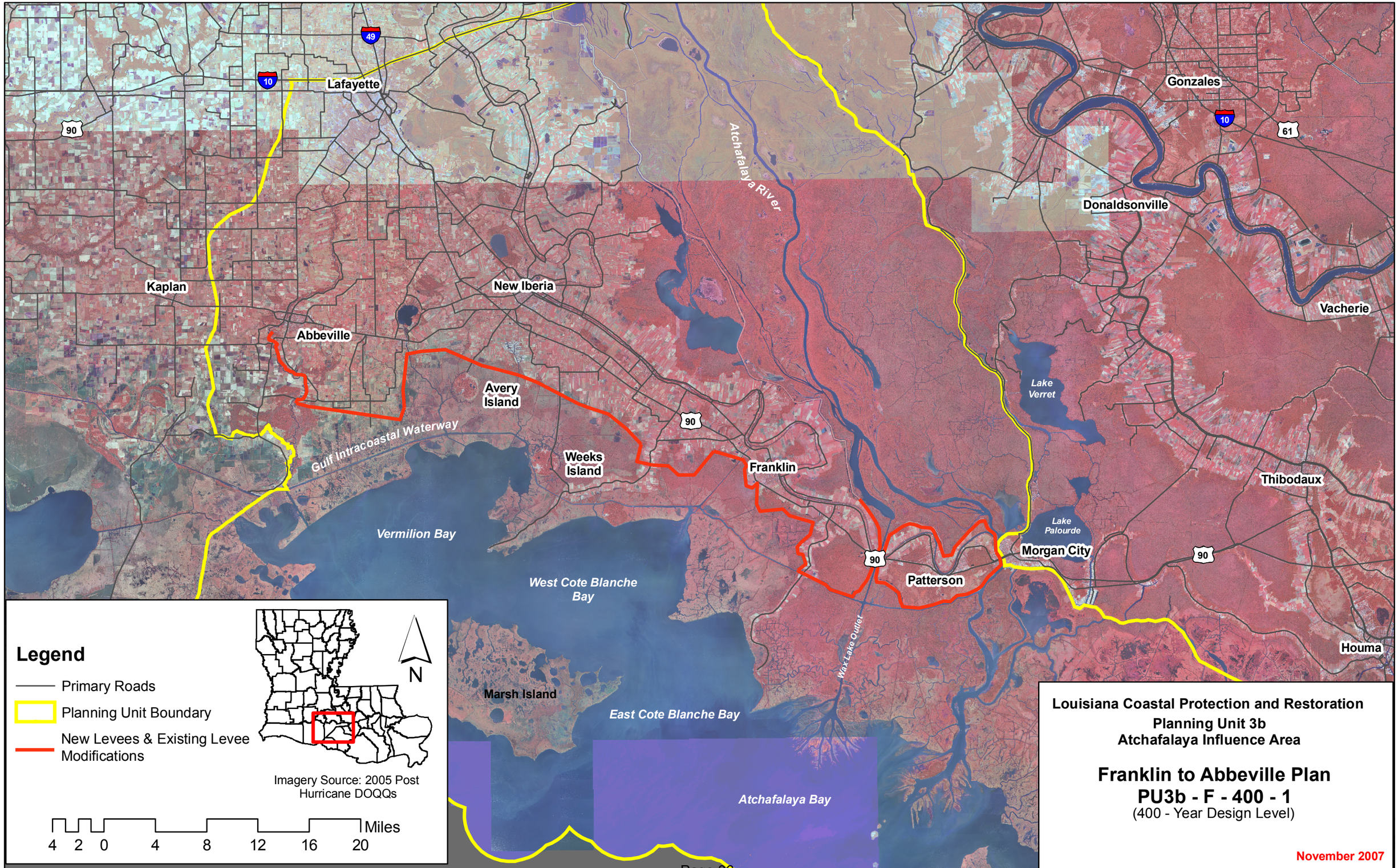
Planning Sub Unit	2010 (Base) Conditions						2060 (Future) Conditions					
	100-yr Event		400-year Event		1,000-yr Event		100-yr Event		400-year Event		1,000-yr Event	
	Without Project	With Project	Without Project	With Project	Without Project	With Project	Without Project	With Project	Without Project	With Project	Without Project	With Project
IBRA_ 10e	11.6	11.6	15.5	15.5	18.0	18.0	15.0	14.8	18.7	18.7	21.0	21.2
IBRA_ 10g	11.5	4.6	15.4	11.5	17.8	17.0	15.2	4.6	18.7	11.5	20.9	17.0
IBRA_ 7f	7.8	4.0	7.8	15.0	9.4	17.0	11.0	4.0	11.6	15.0	12.6	17.0
IBRA_ 8d	10.1	4.0	15.2	15.0	19.1	17.0	13.9	4.0	19.6	15.0	23.6	17.0
IBRA_ 9d	9.0	4.0	13.8	15.0	17.1	17.0	14.5	4.0	17.9	15.0	20.3	17.0
MARY_ 10w	11.7	11.7	16.0	16.0	18.9	18.9	14.8	14.9	18.5	19.2	21.2	22.1
MARY_ 11e	7.8	0.5	11.3	9.8	14.1	16.5	11.0	0.5	16.2	9.8	19.4	16.5
MARY_ 6d	7.8	-0.4	9.6	3.5	12.0	10.8	11.0	-0.4	12.9	3.5	15.3	10.8
MARY_ 6n	7.8	0.5	11.1	9.8	13.3	16.5	11.0	0.5	14.0	9.8	16.6	16.5
MARY_ 7h	7.8	0.5	10.9	9.8	13.2	16.5	12.9	0.5	16.1	9.8	17.8	16.5
MARY_ 7l	7.8	-0.4	10.6	3.5	13.1	10.8	11.0	-0.4	13.8	3.5	16.2	10.8
MARY_ 8p	8.6	-0.4	12.4	3.5	14.8	10.8	11.8	-0.4	15.2	3.5	17.5	10.8
MARY_ 8q	8.2	3.0	13.5	8.3	17.2	16.5	13.7	3.0	18.4	8.3	21.4	16.5
MARY_ 9i	9.9	9.9	13.4	13.4	15.4	15.4	13.0	13.1	16.6	16.6	18.5	18.6
VMLN_ 10h	11.4	4.6	15.6	11.5	18.3	17.0	14.8	4.6	18.9	11.5	21.7	17.0
VMLN_ 11i	7.8	4.6	11.3	11.5	14.8	17.0	11.0	4.6	15.5	11.5	18.9	17.0
VMLN_ 14e	7.8	4.6	9.4	11.5	14.3	17.0	11.0	4.6	13.6	11.5	18.4	17.0
VMLN_ 9j	7.8	4.6	13.1	11.5	16.3	17.0	13.1	4.6	17.3	11.5	20.4	17.0
VMLN_ 9l	10.6	8.7	13.7	11.5	15.5	13.1	14.4	11.9	17.7	14.7	19.6	16.3

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

Planning Unit:	3b	Alt. No.	PU3b-F-400-1	Category	Coastal Restoration + Structural Measures
Alternative Description:	Sustain coastal landscape through restoration. Raise ring levee around Patterson/Berwick to 400-year design level and construct levee along the edge of development north of the GIWW to high ground west of Abbeville at the 400-year design level.				
Coastal Component:	R1			Nonstructural Component:	None
Structural Component:	See alternative description.				

		Metric Results by Scenario with Uncertainty Bands								
		Life-cycle Cost	Resident Population Impacted	Residual Damages	Gross Regional Output Impacted	Employment Impacted	People's Earned Income Impacted	Archeo. Sites Protected	Historic Properties Protected	Historic Districts Protected
		$ Billions	Ann. Equiv. #	Ann. Equiv ($ 1000's)	Ann. Equiv ($ 1000's)	Ann. Equiv #	Ann. Equiv ($ 1000's)	# Sites	# Properties	# Districts
Scenario 1	Low		2,861	180,530	164,601	627	34,382	154	18	5
	Mean	28.2	4,798	316,469	273,487	1,173	61,014	178	19	5
	High		5,996	428,466	336,627	1,444	72,108	202	19	5
Scenario 2	Low		2,993	191,843	188,496	674	39,347	154	18	4
	Mean	28.4	4,909	328,913	294,007	1,214	65,147	178	19	5
	High		6,113	440,190	363,273	1,493	77,560	202	19	5
Scenario 3	Low		2,641	169,065	172,285	628	35,309	154	18	5
	Mean	28.2	4,484	294,862	286,548	1,173	62,580	178	19	5
	High		5,622	399,289	347,333	1,403	71,310	202	19	5
Scenario 4	Low		2,765	178,871	199,507	675	40,287	154	18	4
	Mean	28.4	4,571	305,882	306,348	1,199	65,215	178	19	5
	High		5,736	409,325	370,688	1,432	74,656	202	19	5

Other Metric Results							
Construction Time (years)	12	Wetlands Created/ Protected (acres)	Scen 1&3	Scen 2&4	PV Cost of NS Comp ($ Billions)	Scen 1&2	Scen 3&4
Direct Wetland Impacts (acres)	-3,878		50,027	62,021		N/A	N/A
Indirect Impacts	4	PV Cost of Coastal Component ($ Billions)	4.76	4.80			
Spatial Integrity	0.505						
		PV Cost of Structural Component ($ Billions)	23.44	23.64			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Gonzales
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Atchafalaya River
Lake Verret
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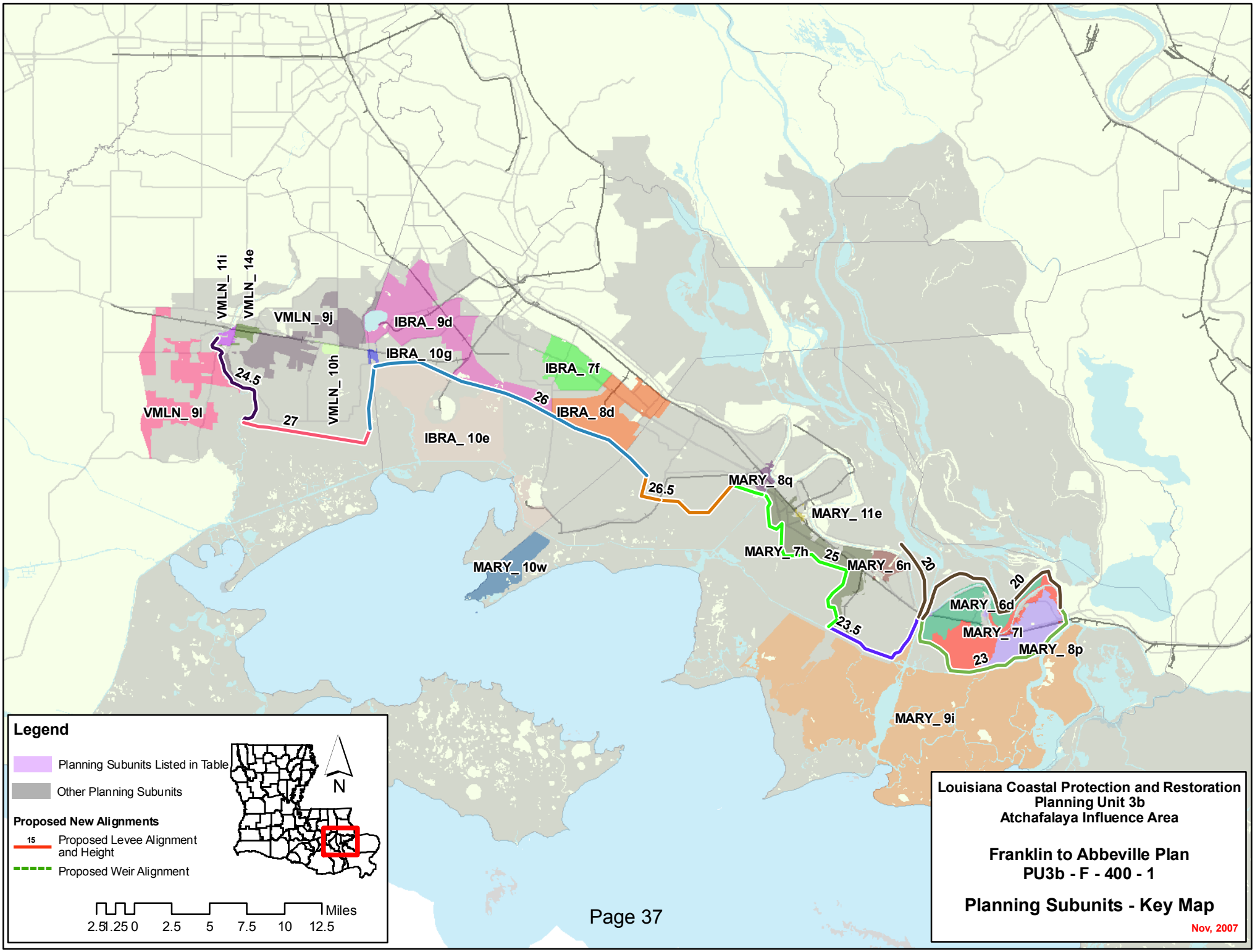
Gulf Intracoastal Waterway
Vermilion Bay
West Cote Blanche Bay
East Cote Blanche Bay
Marsh Island
Wax Lake Outlet
Atchafalaya Bay
Legend
Primary Roads
Planning Unit Boundary
New Levees & Existing Levee Modifications
N
Imagery Source: 2005 Post Hurricane DOQQs
Miles
4 2 0 4 8 12 16 20
Louisiana Coastal Protection and Restoration
Planning Unit 3b
Atchafalaya Influence Area
Franklin to Abbeville Plan
PU3b - F - 400 - 1
(400 - Year Design Level)
November 2007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IBRA_ 8d
IBRA_ 10e
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MARY_ 11e
MARY_ 7h
25
MARY_ 6n
20
MARY_ 10w
20
MARY_ 6d
23.5
MARY_ 7l
MARY_ 8p
23
MARY_ 9i
Legend
Planning Subunits Listed in Table
Other Planning Subunits
Proposed New Alignments
15
Proposed Levee Alignment and Height
Proposed Weir Alignment
N
Miles
2.5 1.25 0 2.5 5 7.5 10 12.5
Louisiana Coastal Protection and Restoration
Planning Unit 3b
Atchafalaya Influence Area
Franklin to Abbeville Plan
PU3b - F - 400 - 1
Planning Subunits - Key Map
Nov, 2007

Alternative: PU3b-F-400-1

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
IBRA_ 10e	11.6	11.6	15.5	15.5	18.0	18.0	15.0	14.8	18.7	18.7	21.0	21.2
IBRA_ 10g	11.5	4.3	15.4	4.5	17.8	5.6	15.2	4.3	18.7	4.5	20.9	5.6
IBRA_ 7f	7.8	3.9	7.8	4.0	9.4	5.3	11.0	3.9	11.6	4.0	12.6	5.3
IBRA_ 8d	10.1	3.9	15.2	4.0	19.1	5.3	13.9	3.9	19.6	4.0	23.6	5.3
IBRA_ 9d	9.0	3.9	13.8	4.0	17.1	5.3	14.5	3.9	17.9	4.0	20.3	5.3
MARY_ 10w	11.7	11.7	16.0	16.0	18.9	18.9	14.8	14.9	18.5	19.2	21.2	22.1
MARY_ 11e	7.8	0.2	11.3	0.4	14.1	1.5	11.0	0.2	16.2	0.4	19.4	1.5
MARY_ 6d	7.8	-0.6	9.6	-0.5	12.0	0.1	11.0	-0.6	12.9	-0.5	15.3	0.1
MARY_ 6n	7.8	0.2	11.1	0.4	13.3	1.5	11.0	0.2	14.0	0.4	16.6	1.5
MARY_ 7h	7.8	0.2	10.9	0.4	13.2	1.5	12.9	0.2	16.1	0.4	17.8	1.5
MARY_ 7l	7.8	-0.6	10.6	-0.5	13.1	0.1	11.0	-0.6	13.8	-0.5	16.2	0.1
MARY_ 8p	8.6	-0.6	12.4	-0.5	14.8	0.1	11.8	-0.6	15.2	-0.5	17.5	0.1
MARY_ 8q	8.2	2.8	13.5	3.0	17.2	3.6	13.7	2.8	18.4	3.0	21.4	3.6
MARY_ 9i	9.9	9.9	13.4	13.4	15.4	15.4	13.0	13.1	16.6	16.6	18.5	18.6
VMLN_ 10h	11.4	4.3	15.6	4.5	18.3	5.6	14.8	4.3	18.9	4.5	21.7	5.6
VMLN_ 11i	7.8	4.3	11.3	4.5	14.8	5.6	11.0	4.3	15.5	4.5	18.9	5.6
VMLN_ 14e	7.8	4.3	9.4	4.5	14.3	5.6	11.0	4.3	13.6	4.5	18.4	5.6
VMLN_ 9j	7.8	4.3	13.1	4.5	16.3	5.6	13.1	4.3	17.3	4.5	20.4	5.6
VMLN_ 9l	10.6	8.7	13.7	11.5	15.5	13.1	14.4	11.9	17.7	14.7	19.6	16.3

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