

**LOUISIANA COASTAL PROTECTION AND RESTORATION FINAL TECHNICAL REPORT
EVALUATION RESULTS APPENDIX**

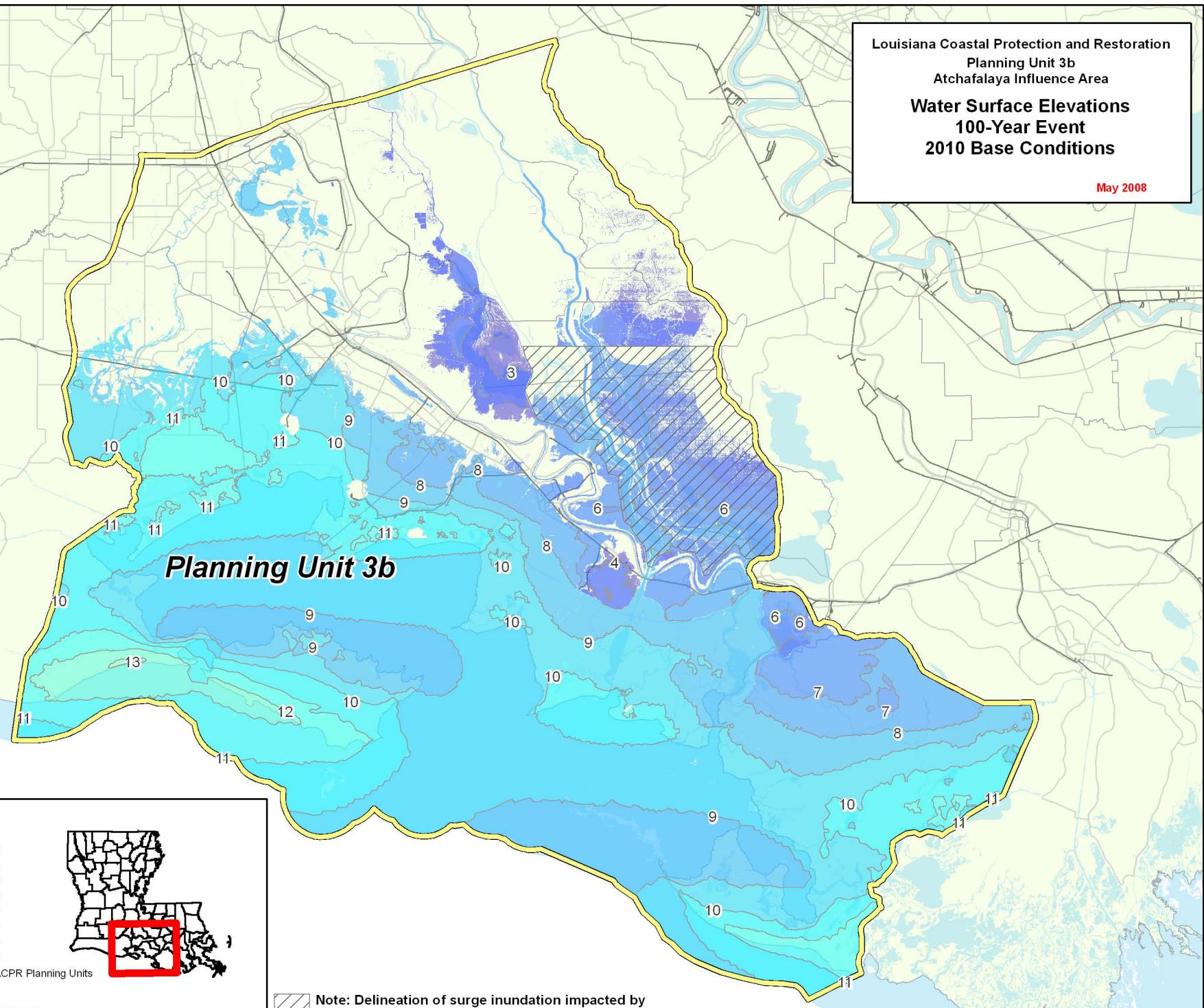
Planning Unit 3b

Louisiana Coastal Protection and Restoration

Planning Unit 3b
Atchafalaya Influence Area

Water Surface Elevations
100-Year Event
2010 Base Conditions

May 2008



Louisiana Coastal Protection and Restoration

Planning Unit 3b
Atchafalaya Influence Area

Water Depths
100-Year Event
2010 Base Conditions

May 2008

Planning Unit 3b

Legend

| | | | |
|---|----|----|----------------------|
| 0 | 7 | 14 | 21 |
| 1 | 8 | 15 | 22 |
| 2 | 9 | 16 | 23 |
| 3 | 10 | 17 | 24 |
| 4 | 11 | 18 | 25 |
| 5 | 12 | 19 | LACPR Planning Units |
| 6 | 13 | 20 | |



Miles
4 2 0 4 8 12 16

Note: Delineation of surge inundation impacted by inconsistent Lidar layers used in original mapping of this area and is confined well within Atchafalaya floodway, causing no impact on evaluation of alternatives.

Louisiana Coastal Protection and Restoration

Planning Unit 3b
Atchafalaya Influence Area

Water Surface Elevations
400-Year Event
2010 Base Conditions

May 2008

Planning Unit 3b

Legend

| | | | |
|----|----|----|---------------------|
| -7 | 3 | 13 | 23 |
| -6 | 4 | 14 | 24 |
| -5 | 5 | 15 | 25 |
| -4 | 6 | 16 | 26 |
| -3 | 7 | 17 | 27 |
| -2 | 8 | 18 | 28 |
| -1 | 9 | 19 | 29 |
| 0 | 10 | 20 | 30 |
| 1 | 11 | 21 | LACP Planning Units |
| 2 | 12 | 22 | |



4 2 0 4 8 12 16 Miles

Note: Delineation of surge inundation impacted by inconsistent Lidar layers used in original mapping of this area and is confined well within Atchafalaya floodway, causing no impact on evaluation of alternatives.

Louisiana Coastal Protection and Restoration

Planning Unit 3b
Atchafalaya Influence Area

Water Depths
400-Year Event
2010 Base Conditions

May 2008

Planning Unit 3b

Legend

| | | | |
|---|----|----|---------------------|
| 0 | 7 | 14 | 21 |
| 1 | 8 | 15 | 22 |
| 2 | 9 | 16 | 23 |
| 3 | 10 | 17 | 24 |
| 4 | 11 | 18 | 25 |
| 5 | 12 | 19 | LACP Planning Units |
| 6 | 13 | 20 | |



Miles
4 2 0 4 8 12 16

Note: Delineation of surge inundation impacted by inconsistent Lidar layers used in original mapping of this area and is confined well within Atchafalaya floodway, causing no impact on evaluation of alternatives.

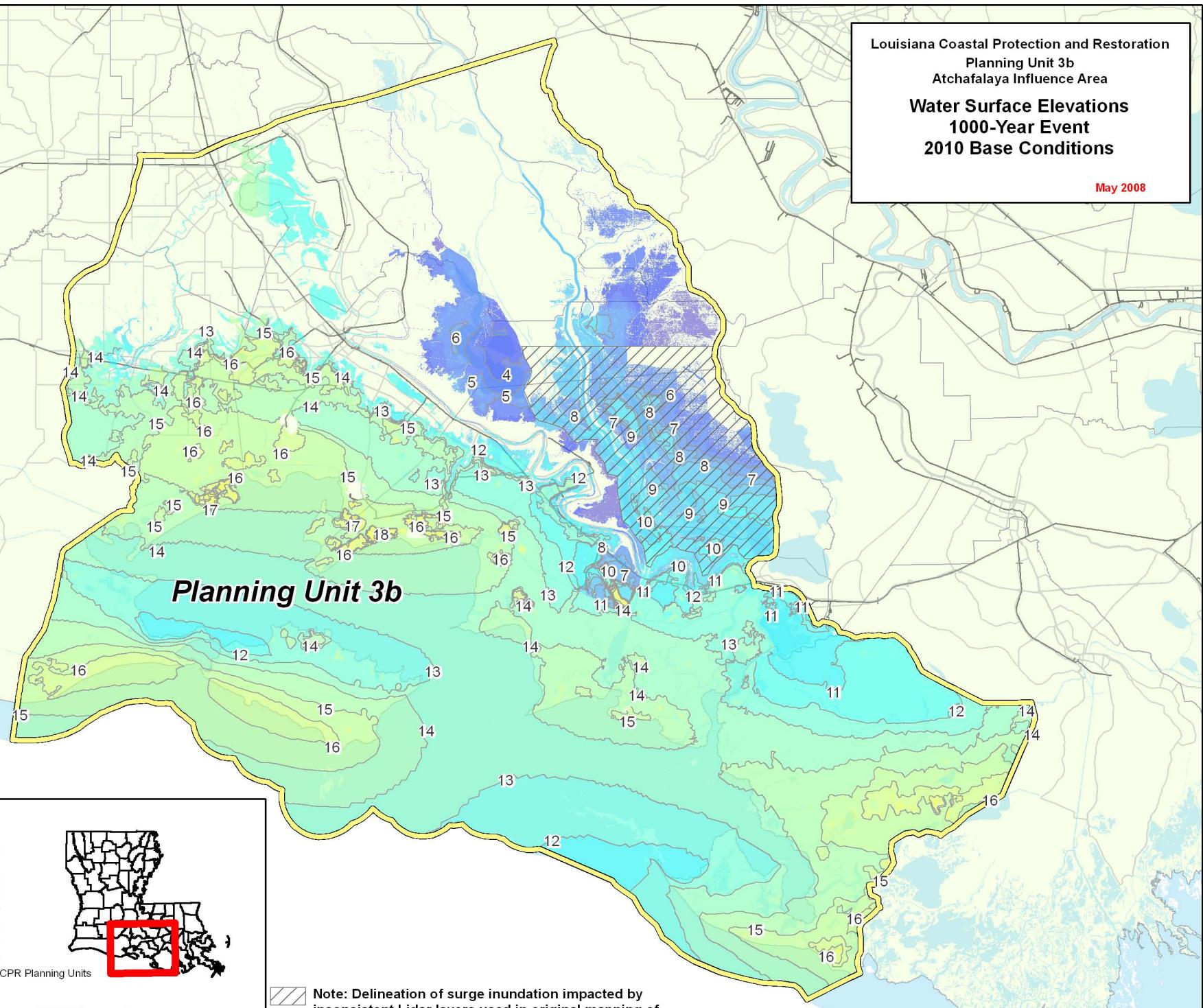
Louisiana Coastal Protection and Restoration

Planning Unit 3b
Atchafalaya Influence Area

Water Surface Elevations
1000-Year Event
2010 Base Conditions

May 2008

Planning Unit 3b



Miles
4 2 0 4 8 12 16

Louisiana Coastal Protection and Restoration

Planning Unit 3b
Atchafalaya Influence Area

Water Depths
1000-Year Event
2010 Base Conditions

May 2008

Planning Unit 3b

Legend

| | | | |
|---|----|----|---------------------|
| 0 | 7 | 14 | 21 |
| 1 | 8 | 15 | 22 |
| 2 | 9 | 16 | 23 |
| 3 | 10 | 17 | 24 |
| 4 | 11 | 18 | 25 |
| 5 | 12 | 19 | LACP Planning Units |
| 6 | 13 | 20 | |



Miles
4 2 0 4 8 12 16

Note: Delineation of surge inundation impacted by inconsistent Lidar layers used in original mapping of this area and is confined well within Atchafalaya floodway, causing no impact on evaluation of alternatives.

Louisiana Coastal Protection and Restoration

Planning Unit 3b
Atchafalaya Influence Area

**Water Surface Elevations
100-Year Event
2060 No Action**

May 2008

Planning Unit 3b

Legend

| | | | |
|----|----|----|----|
| -7 | 3 | 13 | 23 |
| -6 | 4 | 14 | 24 |
| -5 | 5 | 15 | 25 |
| -4 | 6 | 16 | 26 |
| -3 | 7 | 17 | 27 |
| -2 | 8 | 18 | 28 |
| -1 | 9 | 19 | 29 |
| 0 | 10 | 20 | 30 |
| 1 | 11 | 21 | 22 |
| 2 | 12 | 22 | |



Miles
4 2 0 4 8 12 16

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.

Louisiana Coastal Protection and Restoration

Planning Unit 3b
Atchafalaya Influence Area

**Water Surface Elevations
400-Year Event
2060 No Action**

May 2008

Planning Unit 3b

Legend

| | | | |
|----|----|----|----|
| -7 | 3 | 13 | 23 |
| -6 | 4 | 14 | 24 |
| -5 | 5 | 15 | 25 |
| -4 | 6 | 16 | 26 |
| -3 | 7 | 17 | 27 |
| -2 | 8 | 18 | 28 |
| -1 | 9 | 19 | 29 |
| 0 | 10 | 20 | 30 |
| 1 | 11 | 21 | 22 |
| 2 | 12 | 23 | |



Miles
4 2 0 4 8 12 16

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.

Louisiana Coastal Protection and Restoration

Planning Unit 3b
Atchafalaya Influence Area

**Water Surface Elevations
1000-Year Event
2060 No Action**

May 2008

Planning Unit 3b

Legend

| | | | |
|----|----|----|---------------------|
| -7 | 3 | 13 | 23 |
| -6 | 4 | 14 | 24 |
| -5 | 5 | 15 | 25 |
| -4 | 6 | 16 | 26 |
| -3 | 7 | 17 | 27 |
| -2 | 8 | 18 | 28 |
| -1 | 9 | 19 | 29 |
| 0 | 10 | 20 | 30 |
| 1 | 11 | 21 | LACP Planning Units |
| 2 | 12 | 22 | |



Miles
4 2 0 4 8 12 16

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.

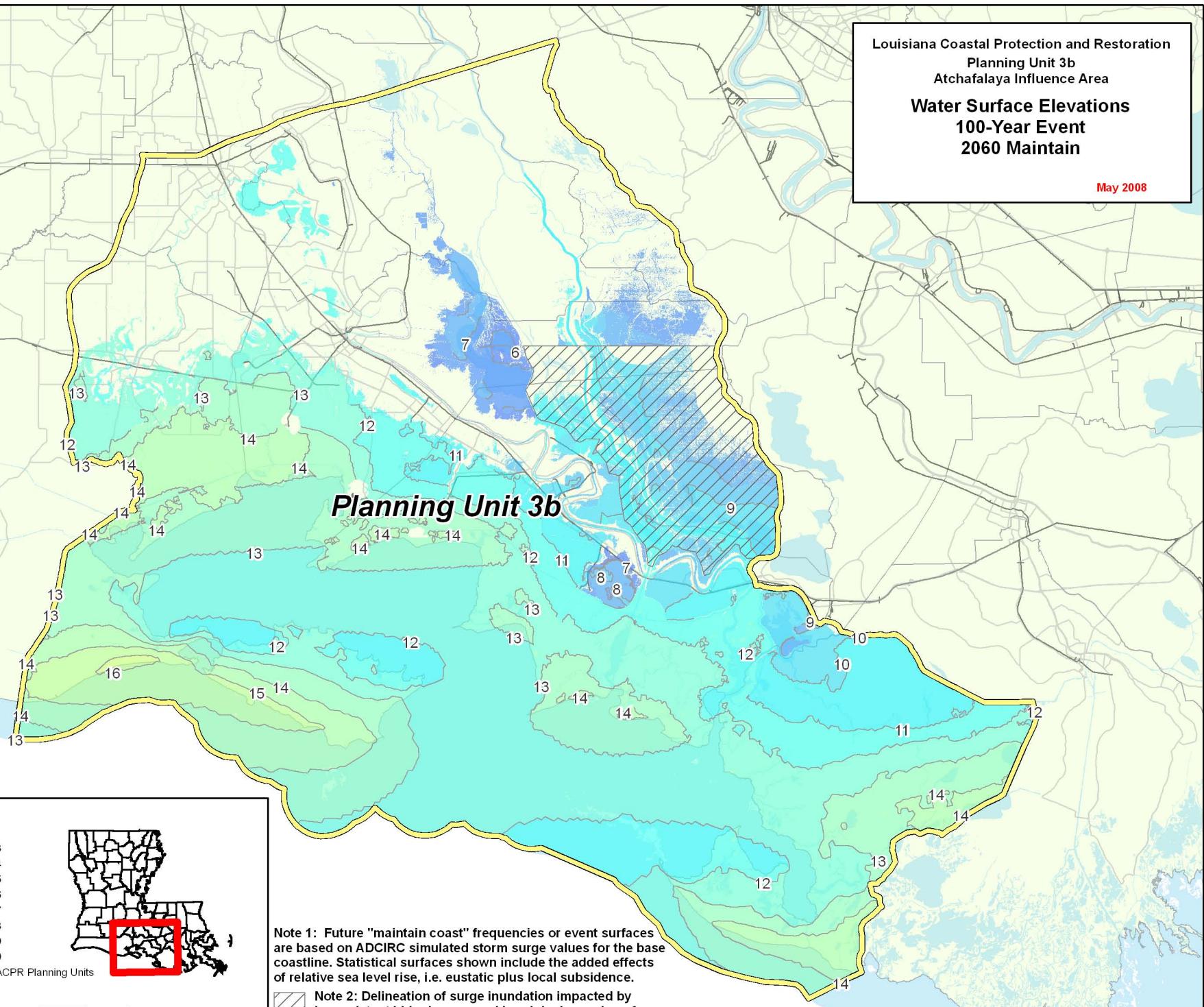
Louisiana Coastal Protection and Restoration

Planning Unit 3b
Atchafalaya Influence Area

Water Surface Elevations
100-Year Event
2060 Maintain

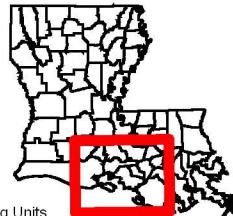
May 2008

Planning Unit 3b



Legend

| | | | | | | |
|--------------|--------------|------------|------------|------------------|-----------------|-------------------|
| [Yellow Box] | [Purple Box] | [Blue Box] | [Cyan Box] | [Light Blue Box] | [Dark Blue Box] | [Dark Purple Box] |
| -7 | 3 | 13 | 23 | | | |
| -6 | 4 | 14 | 24 | | | |
| -5 | 5 | 15 | 25 | | | |
| -4 | 6 | 16 | 26 | | | |
| -3 | 7 | 17 | 27 | | | |
| -2 | 8 | 18 | 28 | | | |
| -1 | 9 | 19 | 29 | | | |
| 0 | 10 | 20 | 30 | | | |
| 1 | 11 | 21 | | | | |
| 2 | 12 | 22 | | | | |



Miles
4 2 0 4 8 12 16

Note 1: 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.

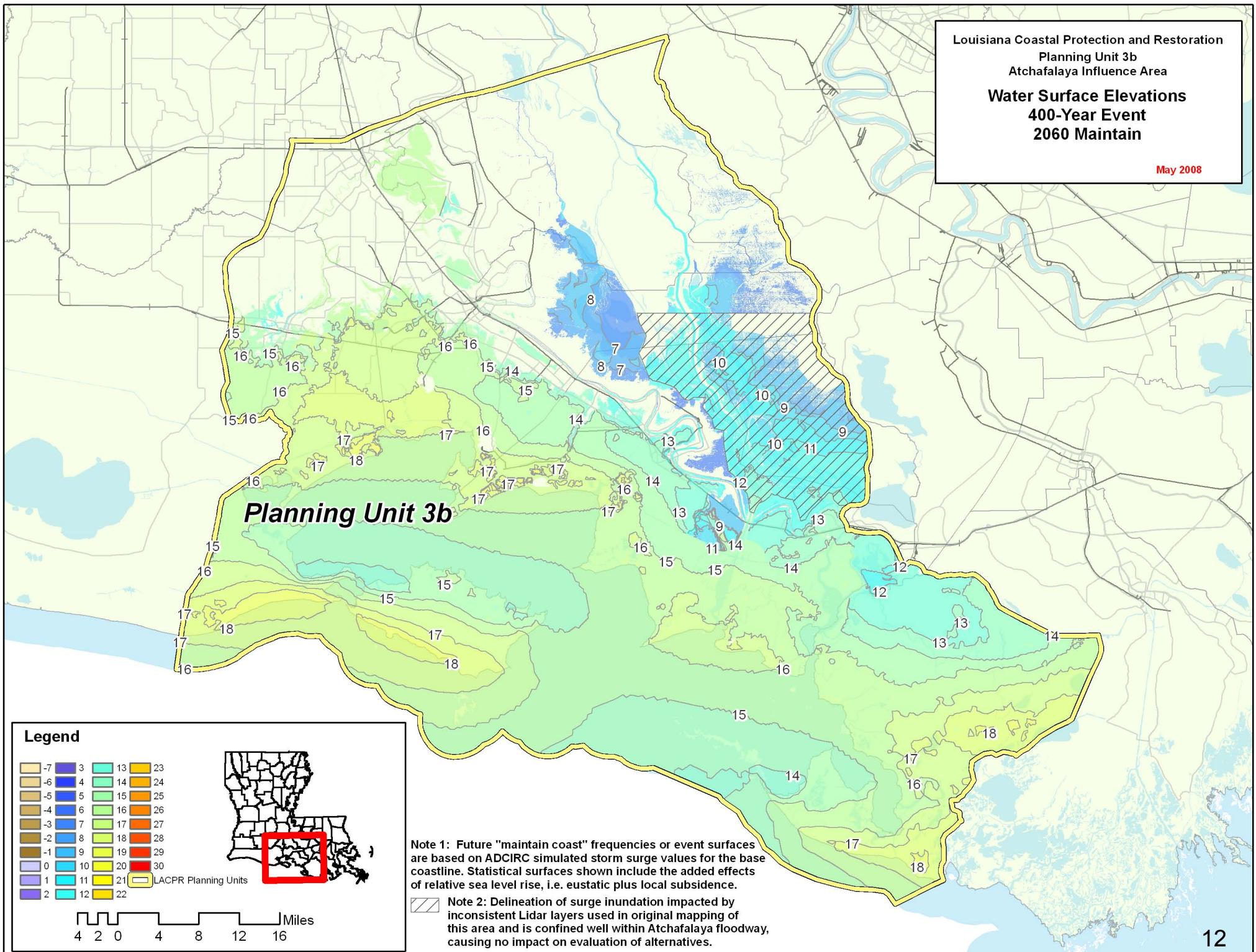
Note 2: Delineation of surge inundation impacted by inconsistent Lidar layers used in original mapping of this area and is confined well within Atchafalaya floodway, causing no impact on evaluation of alternatives.

Louisiana Coastal Protection and Restoration

Planning Unit 3b
Atchafalaya Influence Area

Water Surface Elevations
400-Year Event
2060 Maintain

May 2008

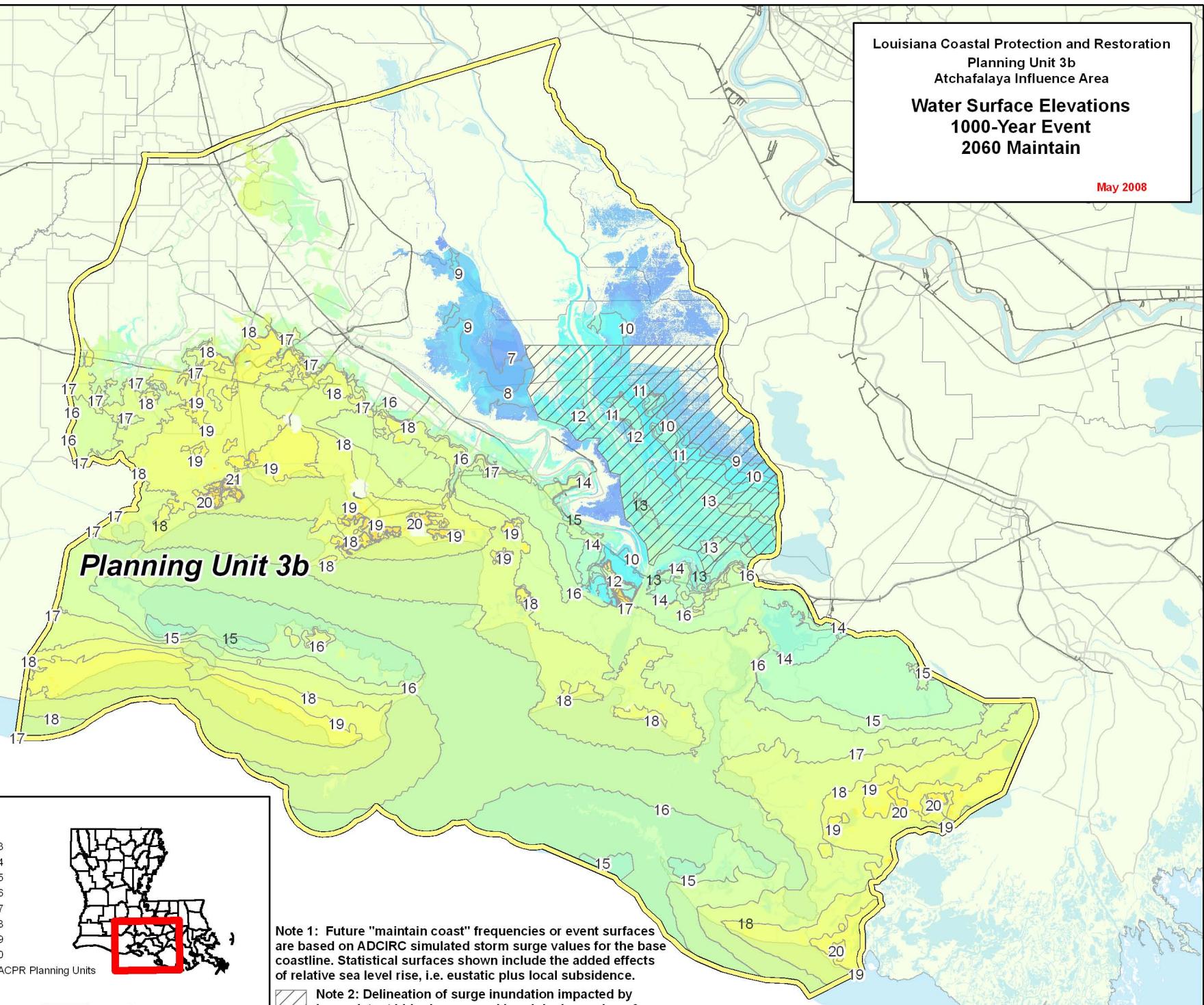


Louisiana Coastal Protection and Restoration

Planning Unit 3b
Atchafalaya Influence Area

Water Surface Elevations
1000-Year Event
2060 Maintain

May 2008



| | | | | | |
|--------------------------|---|--------------------------|--------|-----------|-----------|
| Planning Unit: | 3b | Alt. No.: | PU3b-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 | 4,331 | 203 | 343 | 1,176 | 78 | 19 | 13 | 1 |
| | | Mid | | 6,163 | 326 | 503 | 1,849 | 118 | 17 | 10 | 1 |
| | | Low | | 7,655 | 469 | 614 | 2,248 | 141 | 14 | 6 | 0 |
| 2 | High RSLR High Employment Dispersed Population | High | 0 | 4,852 | 242 | 272 | 1,347 | 94 | 19 | 11 | 1 |
| | | Mid | | 6,771 | 379 | 341 | 2,017 | 133 | 17 | 8 | 0 |
| | | Low | | 8,345 | 529 | 383 | 2,357 | 150 | 14 | 3 | 0 |
| 3 | Low RSLR Business-as-Usual Compact Population | High | 0 | 4,055 | 201 | 360 | 1,178 | 81 | 19 | 13 | 1 |
| | | Mid | | 5,863 | 323 | 525 | 1,826 | 119 | 17 | 10 | 1 |
| | | Low | | 7,317 | 460 | 645 | 2,207 | 142 | 14 | 6 | 0 |
| 4 | High RSLR Business-as-Usual Compact Population | High | 0 | 4,571 | 239 | 431 | 1,332 | 94 | 19 | 11 | 1 |
| | | Mid | | 6,445 | 373 | 605 | 1,997 | 135 | 17 | 8 | 0 |
| | | Low | | 8,000 | 516 | 706 | 2,338 | 153 | 14 | 3 | 0 |

| Other Results | | | Wetlands Created/Protected | | Scenario 1 | Scenario 2 | Scenario 3 | Scenario 4 |
|--|----------|---------------|---|--|------------|------------|------------|------------|
| Construction Time (years) | | | After 50 yrs (% of baseline) | | 97 | 95 | 97 | 95 |
| Direct Wetland Impacts (acres) | | | After 100 yrs (% of baseline) | | 94 | 89 | 94 | 89 |
| Indirect Impacts (unitless) | | | Present Value of Life Cycle Costs (\$ Millions) | | | | | |
| Spatial Integrity (unitless) | | | Coastal Component | | 0 | 0 | 0 | 0 |
| Non-Federal Share of Present Value of Life Cycle Costs | Scenario | (\$ Millions) | Nonstructural Component | | 0 | 0 | 0 | 0 |
| | 1 / 2 | 0 | Structural Component | | 0 | 0 | 0 | 0 |
| | 3 / 4 | 0 | Total Project | | 0 | 0 | 0 | 0 |

| 2075 Residual Risk / Damages - Low Uncertainty (\$ Millions) | | | | | | | | Planning Unit 3b No Action Plan | |
|--|------------|-----------|------------|-----------|------------|-----------|------------|--|--|
| Frequency | Scenario 1 | | Scenario 2 | | Scenario 3 | | Scenario 4 | | |
| | No Action | With Proj | |
| 10-year | 1,024 | N/A | 1,523 | N/A | 1,013 | N/A | 1,543 | N/A | |
| 100-year | 4,254 | N/A | 5,717 | N/A | 4,148 | N/A | 5,447 | N/A | |
| 400-year | 8,571 | N/A | 9,628 | N/A | 7,772 | N/A | 8,782 | N/A | |
| 1,000-year | 11,203 | N/A | 11,827 | N/A | 10,886 | N/A | 11,680 | N/A | |
| 2,000-year | 12,281 | N/A | 12,591 | N/A | 12,370 | N/A | 12,769 | N/A | |

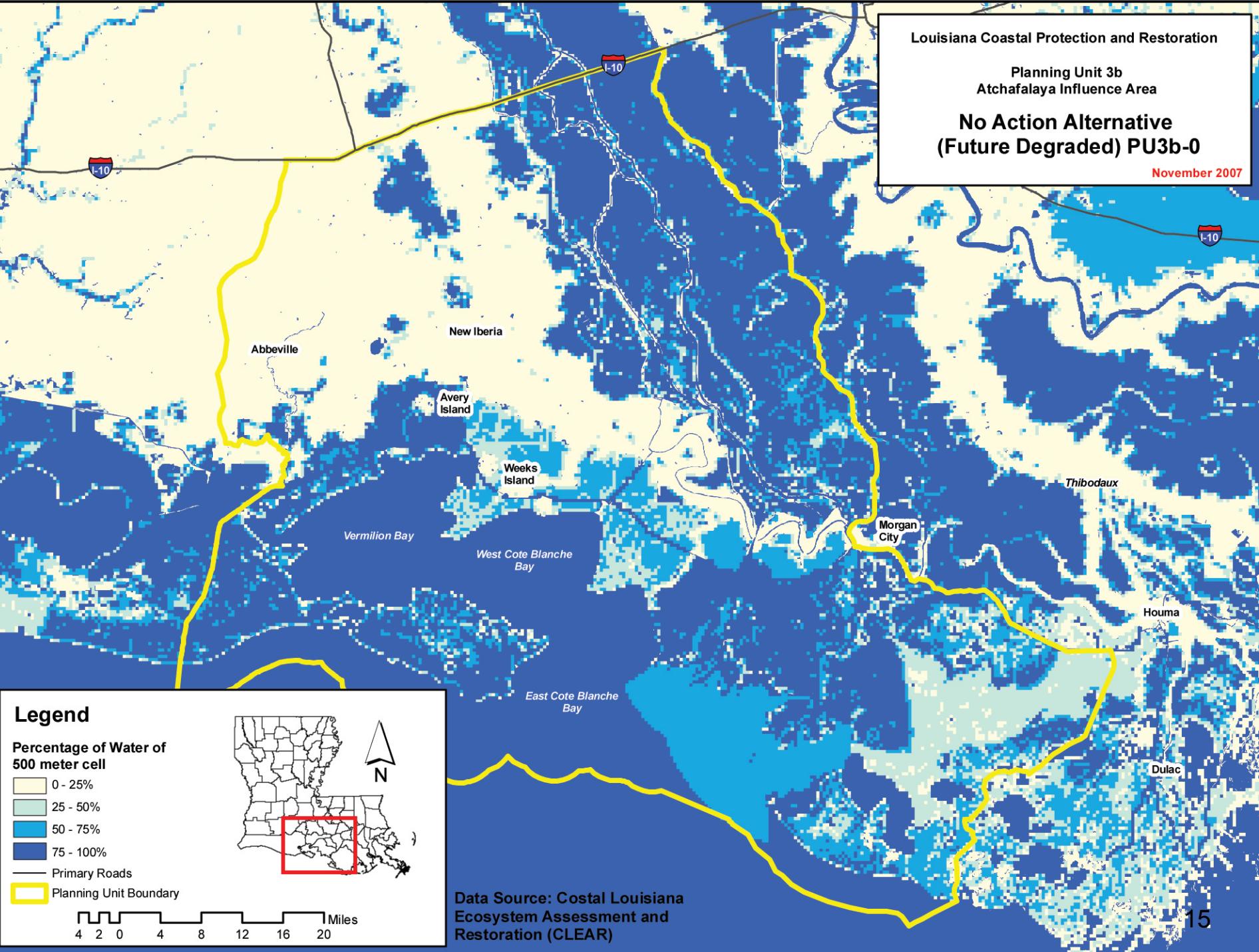
Note: Present Value costs and Annual Equivalent numbers are calculated for the period from 2010 to 2075 at common base year 2025 using a 4.7%/8% Federal discount rate. All dollar metrics are based on 2007 price levels.

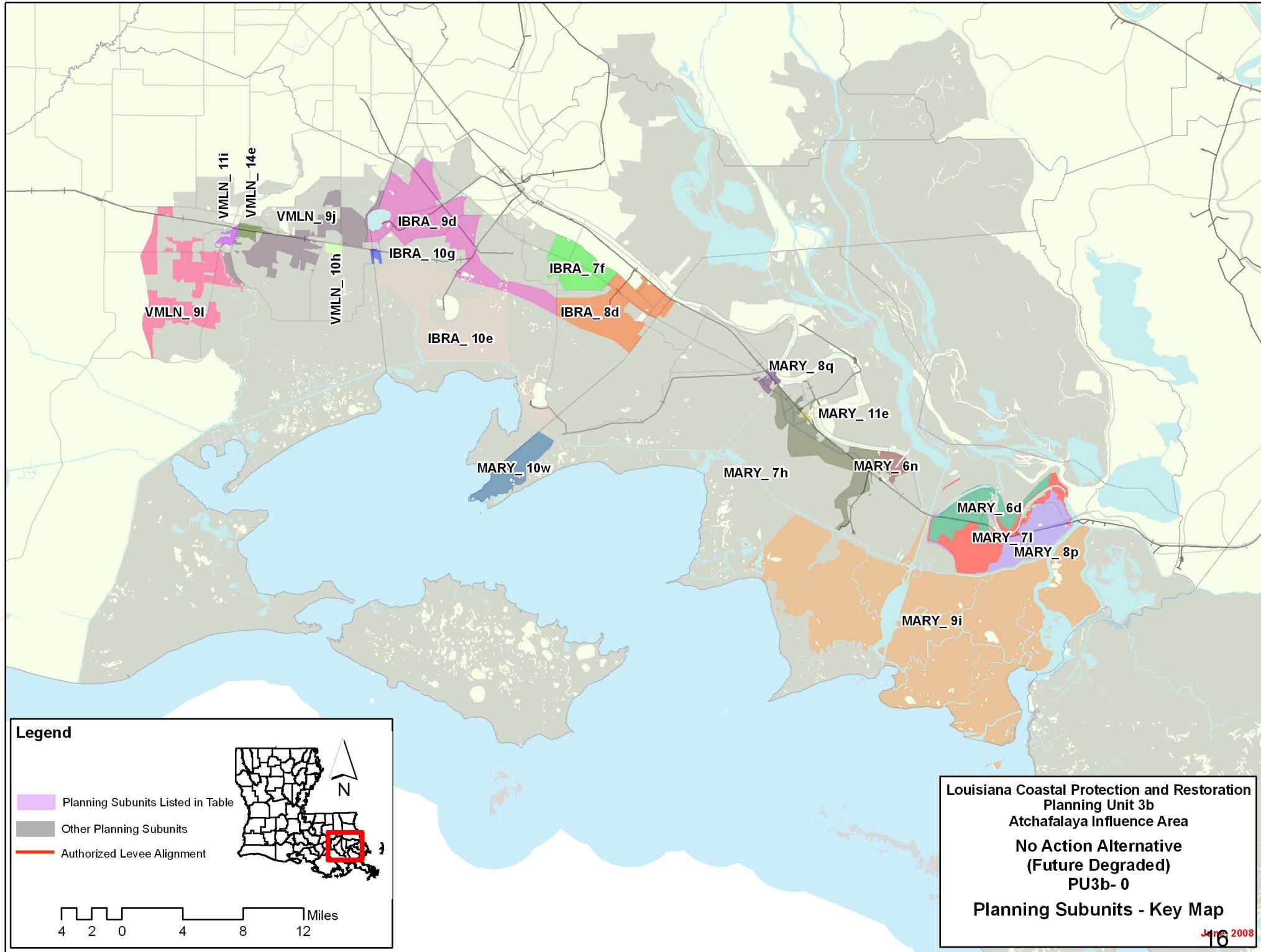
Louisiana Coastal Protection and Restoration

Planning Unit 3b
Atchafalaya Influence Area

**No Action Alternative
(Future Degraded) PU3b-0**

November 2007





Alternative: PU3b-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 |
| IBRA_10e | 11.7 | | 15.2 | | 17.0 | | 14.9 | | 18.4 | | 20.2 | |
| IBRA_10g | 11.5 | | 15.4 | | 17.8 | | 14.7 | | 18.6 | | 21.0 | |
| IBRA_7f | 8.1 | | 11.3 | | 14.5 | | 11.3 | | 14.5 | | 17.7 | |
| IBRA_8d | 10.1 | | 15.2 | | 19.1 | | 13.3 | | 18.4 | | 22.3 | |
| IBRA_9d | 9.0 | | 13.8 | | 17.1 | | 12.2 | | 17.0 | | 20.3 | |
| MARY_10w | 11.7 | | 16.0 | | 17.9 | | 13.9 | | 17.6 | | 20.0 | |
| MARY_11e | 7.8 | | 11.3 | | 14.1 | | 11.0 | | 14.5 | | 17.3 | |
| MARY_6d | 7.8 | | 9.6 | | 12.0 | | 11.0 | | 12.8 | | 15.2 | |
| MARY_6n | 7.9 | | 13.9 | | 14.8 | | 11.1 | | 17.1 | | 18.0 | |
| MARY_7h | 7.8 | | 10.9 | | 13.2 | | 11.0 | | 14.1 | | 16.4 | |
| MARY_7l | 7.8 | | 10.6 | | 13.1 | | 11.0 | | 13.8 | | 16.3 | |
| MARY_8p | 8.6 | | 12.4 | | 14.8 | | 11.8 | | 15.6 | | 18.0 | |
| MARY_8q | 8.2 | | 13.5 | | 17.2 | | 11.4 | | 16.7 | | 20.4 | |
| MARY_9i | 9.9 | | 13.4 | | 15.4 | | 13.1 | | 16.6 | | 18.6 | |
| VMLN_10h | 11.4 | | 15.6 | | 18.3 | | 14.6 | | 18.8 | | 21.5 | |
| VMLN_11i | 7.8 | | 11.3 | | 14.8 | | 11.0 | | 14.5 | | 18.0 | |
| VMLN_14e | 7.8 | | 9.4 | | 14.3 | | 11.0 | | 12.6 | | 17.5 | |
| VMLN_9j | 7.8 | | 13.1 | | 16.3 | | 11.0 | | 16.3 | | 19.5 | |
| VMLN_9l | 10.6 | | 13.7 | | 15.5 | | 13.8 | | 16.9 | | 18.7 | |
| Evaluation Parameters | Confidence Level: | | | 90% | 3.2 feet | Levee Design: | | | No Friction Waves | | | |
| | Future Relative Sea Level Rise: | | | | | Levee Overtopping: | | | No Friction Waves | | | |

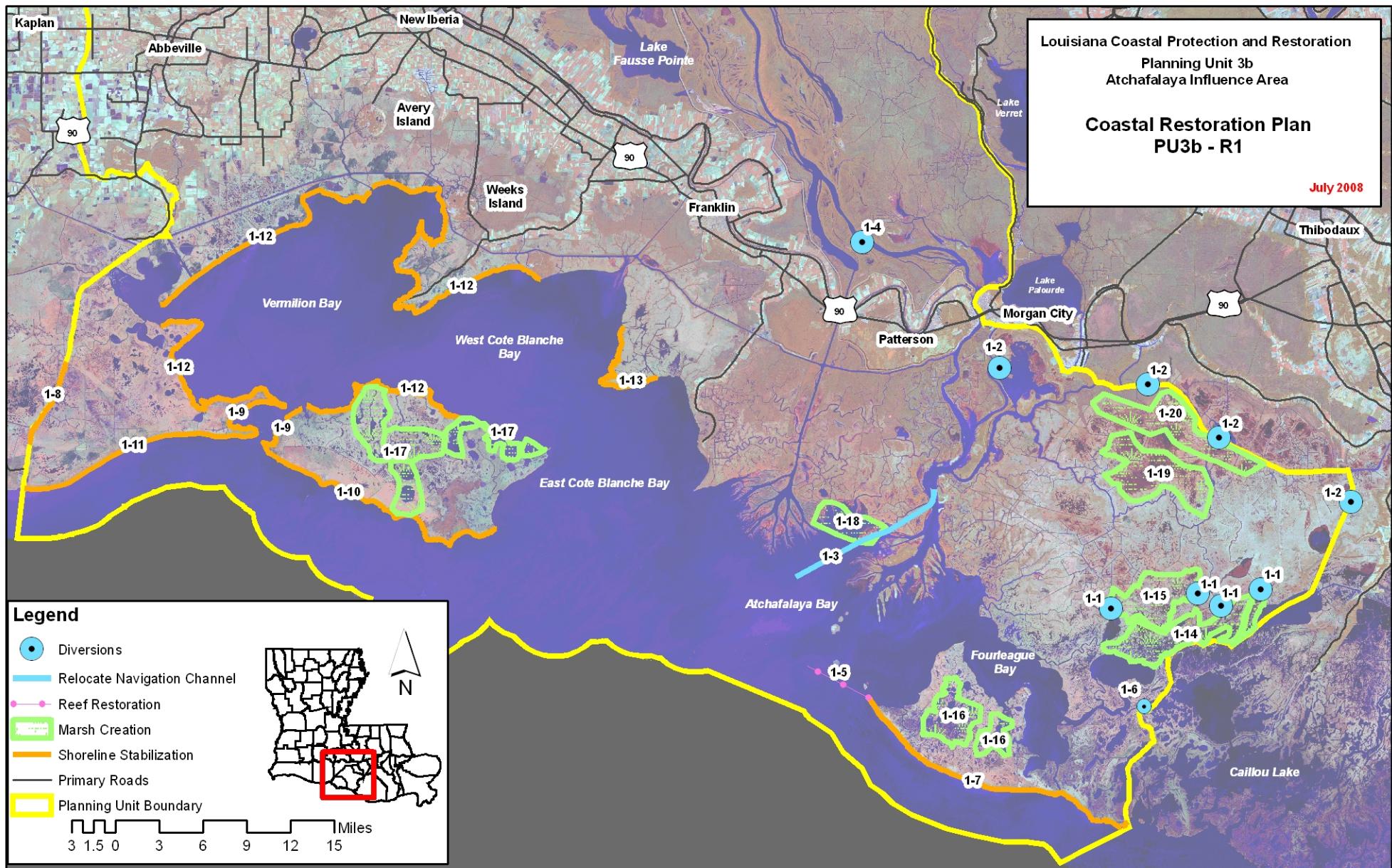
| | | | | | |
|--------------------------|--|--------------------------|---------|-----------|--------------------------|
| Planning Unit: | 3b | Alt. No.: | PU3b-R1 | Category: | Coastal Restoration Only |
| Alternative Description: | Sustain coastal landscape through restoration including shoreline protection, marsh creation, etc. | | | | |
| Coastal Component: | R1 | Nonstructural Component: | | None | |
| Structural Component: | No new levees or increases in risk reduction level for existing levees. | | | | |

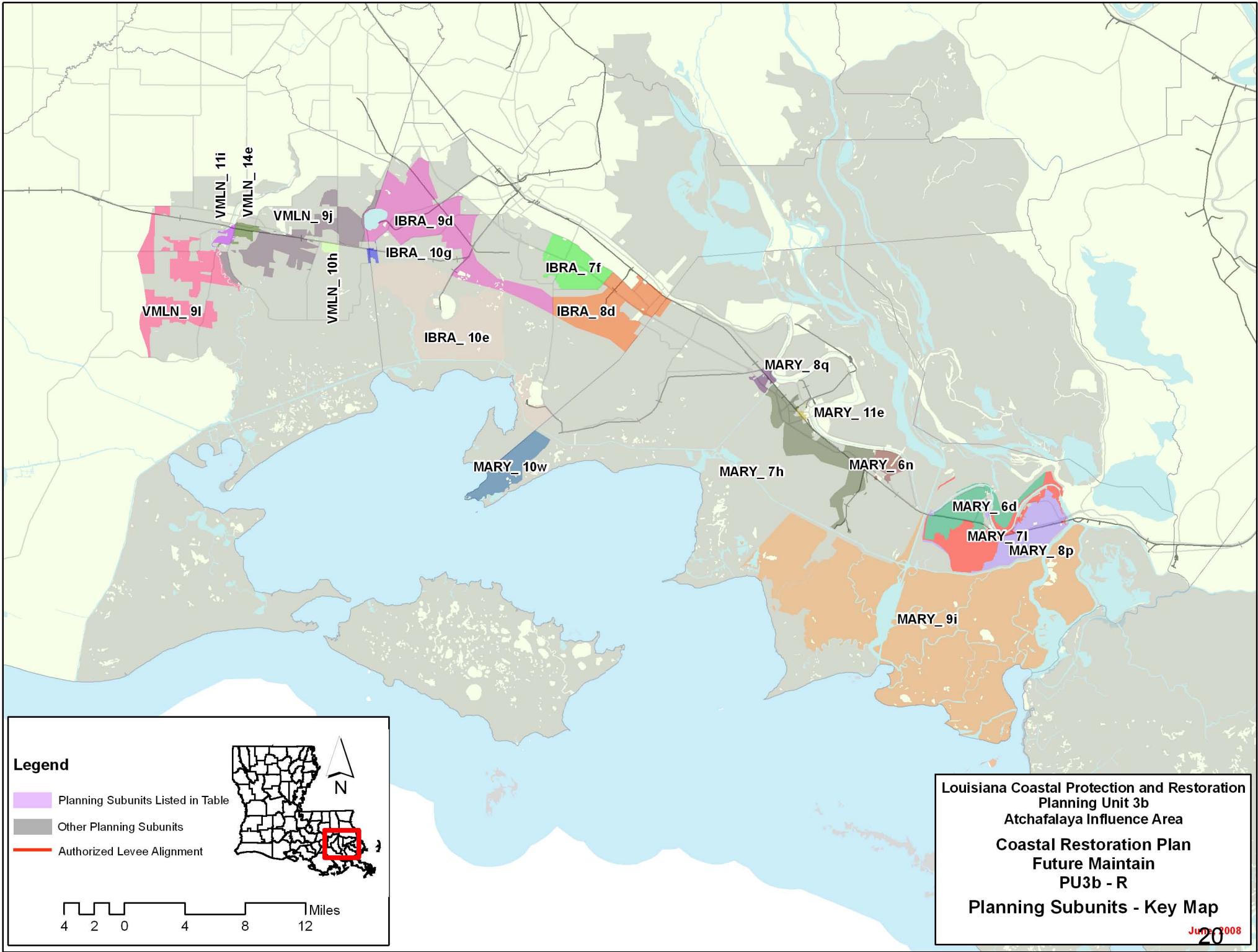
| Scenario | Future Conditions (Relative Sea Level Rise (RSLR) and Redevelopment Assumptions) | Uncertainty | Results by Scenario with Uncertainty Bands | | | | | | | | |
|----------|---|-------------|--|---------------------|----------------------------|--------------------------------|---------------------|---------------------------------|-------------------------|-------------------------------|------------------------------|
| | | | 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 | 243 | 4,326 | 203 | 343 | 1,177 | 78 | 154 | 2 | 2 |
| | | Mid | | 6,162 | 327 | 502 | 1,847 | 118 | 130 | 2 | 2 |
| | | Low | | 7,655 | 469 | 613 | 2,247 | 141 | 106 | 2 | 0 |
| 2 | High RSLR High Employment Dispersed Population | High | 245 | 4,854 | 242 | 413 | 1,347 | 94 | 154 | 4 | 2 |
| | | Mid | | 6,761 | 379 | 571 | 2,017 | 133 | 130 | 2 | 1 |
| | | Low | | 8,344 | 529 | 665 | 2,358 | 150 | 106 | 2 | 0 |
| 3 | Low RSLR Business-as-Usual Compact Population | High | 243 | 4,051 | 201 | 361 | 1,179 | 81 | 154 | 2 | 2 |
| | | Mid | | 5,862 | 323 | 524 | 1,823 | 119 | 130 | 2 | 2 |
| | | Low | | 7,316 | 460 | 645 | 2,207 | 142 | 106 | 2 | 0 |
| 4 | High RSLR Business-as-Usual Compact Population | High | 245 | 4,574 | 239 | 431 | 1,332 | 94 | 154 | 4 | 2 |
| | | Mid | | 6,440 | 373 | 605 | 1,997 | 135 | 130 | 2 | 1 |
| | | Low | | 7,998 | 516 | 706 | 2,339 | 153 | 106 | 2 | 0 |

| Other Results | | | Wetlands Created/Protected | | Scenario 1 | Scenario 2 | Scenario 3 | Scenario 4 |
|--|----------|---------------|---|--|------------|------------|------------|------------|
| Construction Time (years) | | | After 50 yrs (% of baseline) | | 105 | 104 | 105 | 104 |
| Direct Wetland Impacts (acres) | | | After 100 yrs (% of baseline) | | 105 | 100 | 105 | 100 |
| Indirect Impacts (unitless) | | | Present Value of Life Cycle Costs (\$ Millions) | | | | | |
| Spatial Integrity (unitless) | | | Coastal Component | | 4,756 | 4,796 | 4,756 | 4,796 |
| Non-Federal Share of Present Value of Life Cycle Costs | Scenario | (\$ Millions) | Nonstructural Component | | 0 | 0 | 0 | 0 |
| | 1 / 2 | 1,664 | Structural Component | | 0 | 0 | 0 | 0 |
| | 3 / 4 | 1,664 | Total Project | | 4,756 | 4,796 | 4,756 | 4,796 |

| 2075 Residual Risk / Damages - Low Uncertainty (\$ Millions) | | | | | | | | Planning Unit 3b Coastal Plan Coastal Restoration Alt | |
|--|------------|-----------|------------|-----------|------------|-----------|------------|--|--|
| Frequency | Scenario 1 | | Scenario 2 | | Scenario 3 | | Scenario 4 | | |
| | No Action | With Proj | |
| 10-year | 1,024 | 1,022 | 1,523 | 1,522 | 1,013 | 1,012 | 1,543 | 1,545 | |
| 100-year | 4,254 | 4,253 | 5,717 | 5,721 | 4,148 | 4,147 | 5,447 | 5,452 | |
| 400-year | 8,571 | 8,576 | 9,628 | 9,629 | 7,772 | 7,771 | 8,782 | 8,779 | |
| 1,000-year | 11,203 | 11,197 | 11,827 | 11,823 | 10,886 | 10,877 | 11,680 | 11,673 | |
| 2,000-year | 12,281 | 12,280 | 12,591 | 12,590 | 12,370 | 12,369 | 12,769 | 12,766 | |

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.





Alternative: PU3b-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 |
| IBRA_10e | 11.7 | 11.7 | 15.2 | 15.2 | 17.0 | 17.0 | 14.9 | 14.9 | 18.4 | 18.4 | 20.2 | 20.2 |
| IBRA_10g | 11.5 | 11.5 | 15.4 | 15.4 | 17.8 | 17.8 | 14.7 | 14.7 | 18.6 | 18.6 | 21.0 | 21.0 |
| IBRA_7f | 8.1 | 8.1 | 11.3 | 11.3 | 14.5 | 14.5 | 11.3 | 11.3 | 14.5 | 14.5 | 17.7 | 17.7 |
| IBRA_8d | 10.1 | 10.1 | 15.2 | 15.2 | 19.1 | 19.1 | 13.3 | 13.3 | 18.4 | 18.4 | 22.3 | 22.3 |
| IBRA_9d | 9.0 | 9.0 | 13.8 | 13.8 | 17.1 | 17.1 | 12.2 | 12.2 | 17.0 | 17.0 | 20.3 | 20.3 |
| MARY_10w | 11.7 | 11.7 | 16.0 | 16.0 | 17.9 | 17.9 | 13.9 | 14.9 | 17.6 | 19.2 | 20.0 | 21.1 |
| MARY_11e | 7.8 | 7.8 | 11.3 | 11.3 | 14.1 | 14.1 | 11.0 | 11.0 | 14.5 | 14.5 | 17.3 | 17.3 |
| MARY_6d | 7.8 | 7.8 | 9.6 | 9.6 | 12.0 | 12.0 | 11.0 | 11.0 | 12.8 | 12.8 | 15.2 | 15.2 |
| MARY_6n | 7.9 | 7.9 | 13.9 | 13.9 | 14.8 | 14.8 | 11.1 | 11.1 | 17.1 | 17.1 | 18.0 | 18.0 |
| MARY_7h | 7.8 | 7.8 | 10.9 | 10.9 | 13.2 | 13.2 | 11.0 | 11.0 | 14.1 | 14.1 | 16.4 | 16.4 |
| MARY_7l | 7.8 | 7.8 | 10.6 | 10.6 | 13.1 | 13.1 | 11.0 | 11.0 | 13.8 | 13.8 | 16.3 | 16.3 |
| MARY_8p | 8.6 | 8.6 | 12.4 | 12.4 | 14.8 | 14.8 | 11.8 | 11.8 | 15.6 | 15.6 | 18.0 | 18.0 |
| MARY_8q | 8.2 | 8.2 | 13.5 | 13.5 | 17.2 | 17.2 | 11.4 | 11.4 | 16.7 | 16.7 | 20.4 | 20.4 |
| MARY_9i | 9.9 | 9.9 | 13.4 | 13.4 | 15.4 | 15.4 | 13.1 | 13.1 | 16.6 | 16.6 | 18.6 | 18.6 |
| VMLN_10h | 11.4 | 11.4 | 15.6 | 15.6 | 18.3 | 18.3 | 14.6 | 14.6 | 18.8 | 18.8 | 21.5 | 21.5 |
| VMLN_11i | 7.8 | 7.8 | 11.3 | 11.3 | 14.8 | 14.8 | 11.0 | 11.0 | 14.5 | 14.5 | 18.0 | 18.0 |
| VMLN_14e | 7.8 | 7.8 | 9.4 | 9.4 | 14.3 | 14.3 | 11.0 | 11.0 | 12.6 | 12.6 | 17.5 | 17.5 |
| VMLN_9j | 7.8 | 7.8 | 13.1 | 13.1 | 16.3 | 16.3 | 11.0 | 11.0 | 16.3 | 16.3 | 19.5 | 19.5 |
| VMLN_9l | 10.6 | 10.6 | 13.7 | 13.7 | 15.5 | 15.5 | 13.8 | 13.8 | 16.9 | 16.9 | 18.7 | 18.7 |
| Evaluation Parameters | Confidence Level: | | | 90% | 3.2 feet | Levee Design: | | | No Friction Waves | | | |
| | Future Relative Sea Level Rise: | | | | | Levee Overtopping: | | | No Friction Waves | | | |

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

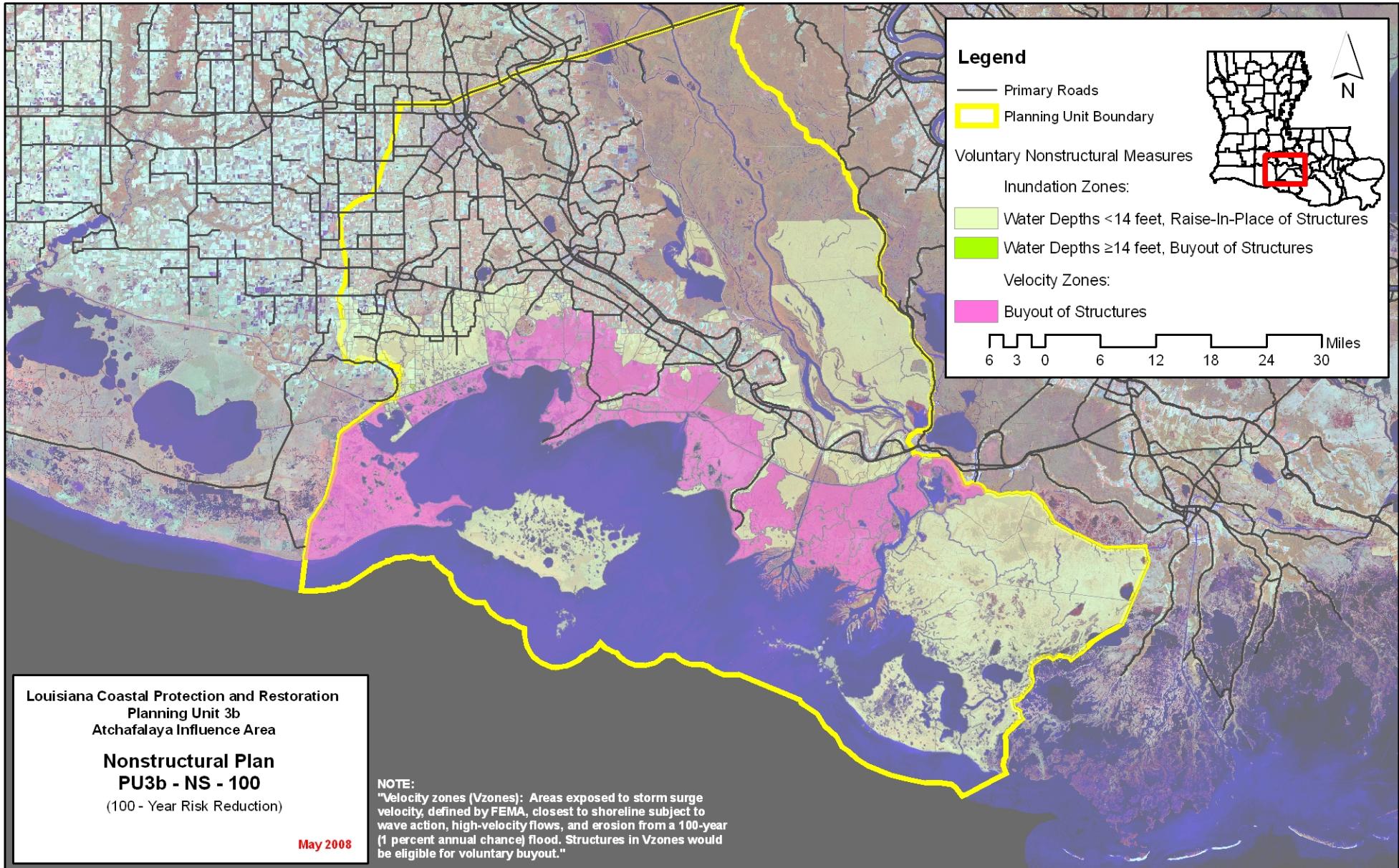
| | | | | | |
|--------------------------|---|--------------------------|-------------|-----------|--|
| Planning Unit: | 3b | Alt. No.: | PU3b-NS-100 | Category: | Coastal Restoration + Nonstructural Measures |
| Alternative Description: | Sustain coastal landscape through restoration. Implement comprehensive 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 | 377 | 3,848 | 81 | 82 | 383 | 19 | 154 | 2 | 2 |
| | | Mid | | 5,662 | 146 | 205 | 855 | 48 | 130 | 2 | 2 |
| | | Low | | 7,118 | 245 | 288 | 1,142 | 65 | 106 | 2 | 0 |
| 2 | High RSLR High Employment Dispersed Population | High | 379 | 4,117 | 90 | 72 | 509 | 31 | 154 | 4 | 2 |
| | | Mid | | 5,970 | 173 | 147 | 971 | 60 | 130 | 2 | 1 |
| | | Low | | 7,473 | 283 | 195 | 1,230 | 74 | 106 | 2 | 0 |
| 3 | Low RSLR Business-as-Usual Compact Population | High | 380 | 3,603 | 80 | 80 | 358 | 17 | 154 | 2 | 2 |
| | | Mid | | 5,396 | 143 | 208 | 812 | 47 | 130 | 2 | 2 |
| | | Low | | 6,818 | 237 | 296 | 1,082 | 63 | 106 | 2 | 0 |
| 4 | High RSLR Business-as-Usual Compact Population | High | 382 | 3,870 | 89 | 137 | 478 | 29 | 154 | 4 | 2 |
| | | Mid | | 5,693 | 169 | 263 | 933 | 59 | 130 | 2 | 1 |
| | | Low | | 7,169 | 272 | 339 | 1,188 | 73 | 106 | 2 | 0 |

| Other Results | | | Wetlands Created/Protected | | Scenario 1 | Scenario 2 | Scenario 3 | Scenario 4 |
|--|----------|---------------|---|--|------------|------------|------------|------------|
| Construction Time (years) | | | After 50 yrs (% of baseline) | | 105 | 104 | 105 | 104 |
| Direct Wetland Impacts (acres) | | | After 100 yrs (% of baseline) | | 105 | 100 | 105 | 100 |
| Indirect Impacts (unitless) | | | Present Value of Life Cycle Costs (\$ Millions) | | | | | |
| Spatial Integrity (unitless) | | | Coastal Component | | 4,756 | 4,796 | 4,756 | 4,796 |
| Non-Federal Share of Present Value of Life Cycle Costs | Scenario | (\$ Millions) | Nonstructural Component | | 2,628 | 2,628 | 2,698 | 2,698 |
| | 1 / 2 | 2,584 | Structural Component | | 0 | 0 | 0 | 0 |
| | 3 / 4 | 2,609 | Total Project | | 7,383 | 7,424 | 7,454 | 7,494 |

| 2075 Residual Risk / Damages - Low Uncertainty (\$ Millions) | | | | | | | | Planning Unit 3b Nonstructural Plan 100-year Design | |
|--|------------|-----------|------------|-----------|------------|-----------|------------|---|--|
| Frequency | Scenario 1 | | Scenario 2 | | Scenario 3 | | Scenario 4 | | |
| | No Action | With Proj | |
| 10-year | 1,024 | 141 | 1,523 | 331 | 1,013 | 137 | 1,543 | 347 | |
| 100-year | 4,254 | 2,344 | 5,717 | 4,542 | 4,148 | 2,237 | 5,447 | 4,259 | |
| 400-year | 8,571 | 7,954 | 9,628 | 9,163 | 7,772 | 7,133 | 8,782 | 8,294 | |
| 1,000-year | 11,203 | 10,805 | 11,827 | 11,505 | 10,886 | 10,465 | 11,680 | 11,338 | |
| 2,000-year | 12,281 | 11,993 | 12,591 | 12,328 | 12,370 | 12,068 | 12,769 | 12,492 | |

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.



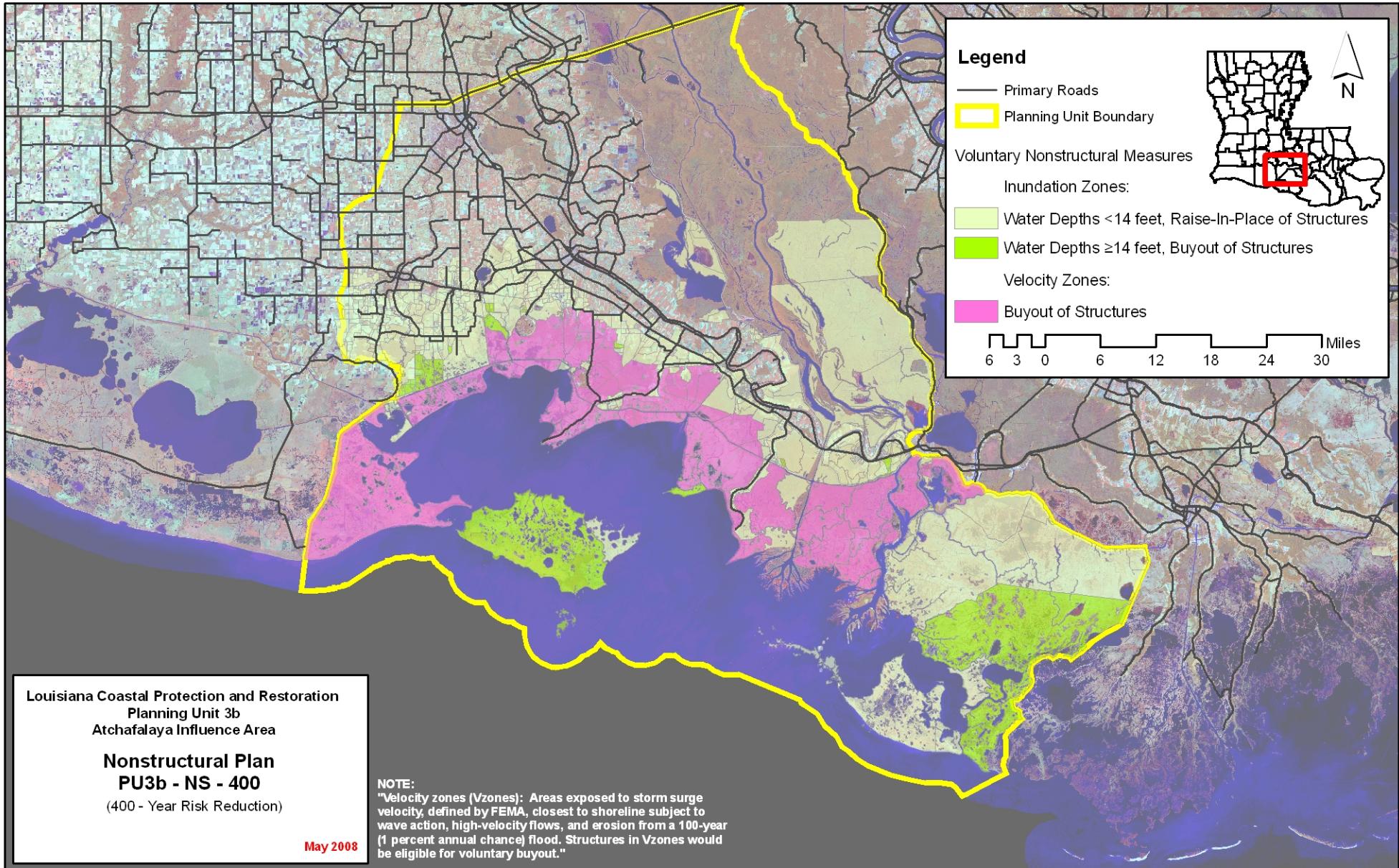
| | | | | | |
|--------------------------|---|--------------------------|-------------|-----------------------------|--|
| Planning Unit: | 3b | Alt. No.: | PU3b-NS-400 | Category: | Coastal Restoration + Nonstructural Measures |
| Alternative Description: | Sustain coastal landscape through restoration. 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 | 475 | 3,848 | 72 | 66 | 333 | 15 | 154 | 2 | 2 |
| | | Mid | | 5,661 | 119 | 119 | 598 | 29 | 130 | 2 | 2 |
| | | Low | | 7,117 | 183 | 162 | 781 | 37 | 106 | 2 | 0 |
| 2 | High RSLR High Employment Dispersed Population | High | 477 | 4,116 | 75 | 4 | 338 | 15 | 154 | 4 | 2 |
| | | Mid | | 5,969 | 125 | 20 | 615 | 30 | 130 | 2 | 1 |
| | | Low | | 7,472 | 193 | 66 | 845 | 44 | 106 | 2 | 0 |
| 3 | Low RSLR Business-as-Usual Compact Population | High | 481 | 3,602 | 72 | 63 | 311 | 14 | 154 | 2 | 2 |
| | | Mid | | 5,395 | 118 | 114 | 560 | 27 | 130 | 2 | 2 |
| | | Low | | 6,818 | 179 | 158 | 727 | 35 | 106 | 2 | 0 |
| 4 | High RSLR Business-as-Usual Compact Population | High | 484 | 3,869 | 74 | 65 | 316 | 14 | 154 | 4 | 2 |
| | | Mid | | 5,692 | 123 | 122 | 577 | 29 | 130 | 2 | 1 |
| | | Low | | 7,169 | 189 | 194 | 788 | 41 | 106 | 2 | 0 |

| Other Results | | | Wetlands Created/Protected | | Scenario 1 | Scenario 2 | Scenario 3 | Scenario 4 |
|--|----------|---------------|---|--|------------|------------|------------|------------|
| Construction Time (years) | | | After 50 yrs (% of baseline) | | 105 | 104 | 105 | 104 |
| Direct Wetland Impacts (acres) | | | After 100 yrs (% of baseline) | | 105 | 100 | 105 | 100 |
| Indirect Impacts (unitless) | | | Present Value of Life Cycle Costs (\$ Millions) | | | | | |
| Spatial Integrity (unitless) | | | Coastal Component | | 4,756 | 4,796 | 4,756 | 4,796 |
| Non-Federal Share of Present Value of Life Cycle Costs | Scenario | (\$ Millions) | Nonstructural Component | | 4,557 | 4,557 | 4,683 | 4,683 |
| | 1 / 2 | 3,259 | Structural Component | | 0 | 0 | 0 | 0 |
| | 3 / 4 | 3,303 | Total Project | | 9,313 | 9,353 | 9,438 | 9,479 |

| 2075 Residual Risk / Damages - Low Uncertainty (\$ Millions) | | | | | | | | Planning Unit 3b Nonstructural Plan 400-year Design | |
|--|------------|-----------|------------|-----------|------------|-----------|------------|---|--|
| Frequency | Scenario 1 | | Scenario 2 | | Scenario 3 | | Scenario 4 | | |
| | No Action | With Proj | |
| 10-year | 1,024 | 116 | 1,523 | 167 | 1,013 | 112 | 1,543 | 162 | |
| 100-year | 4,254 | 537 | 5,717 | 853 | 4,148 | 524 | 5,447 | 825 | |
| 400-year | 8,571 | 3,643 | 9,628 | 6,793 | 7,772 | 3,185 | 8,782 | 6,048 | |
| 1,000-year | 11,203 | 9,691 | 11,827 | 10,927 | 10,886 | 9,314 | 11,680 | 10,695 | |
| 2,000-year | 12,281 | 11,524 | 12,591 | 12,009 | 12,370 | 11,536 | 12,769 | 12,144 | |

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.



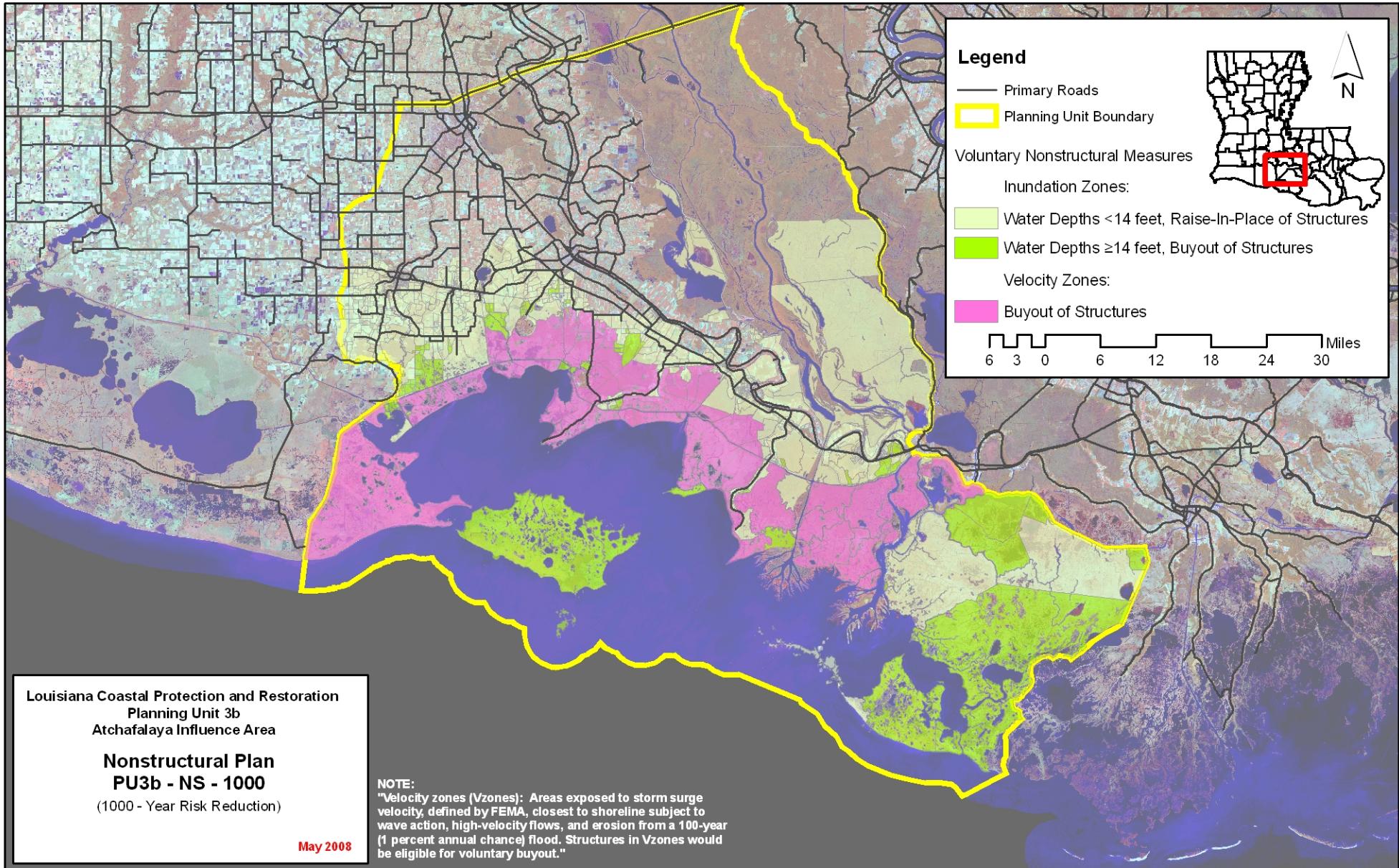
| | | | | | |
|--------------------------|--|--------------------------|--------------|-----------|--|
| Planning Unit: | 3b | Alt. No.: | PU3b-NS-1000 | Category: | Coastal Restoration + Nonstructural Measures |
| Alternative Description: | Sustain coastal landscape through restoration. Implement comprehensive 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 | 533 | 3,755 | 70 | 65 | 329 | 15 | 154 | 2 | 2 |
| | | Mid | | 5,562 | 114 | 107 | 568 | 27 | 130 | 2 | 2 |
| | | Low | | 7,016 | 166 | 138 | 705 | 32 | 106 | 2 | 0 |
| 2 | High RSLR High Employment Dispersed Population | High | 535 | 4,024 | 72 | 0 | 330 | 15 | 154 | 4 | 2 |
| | | Mid | | 5,870 | 117 | 4 | 575 | 27 | 130 | 2 | 1 |
| | | Low | | 7,370 | 171 | 15 | 723 | 34 | 106 | 2 | 0 |
| 3 | Low RSLR Business-as-Usual Compact Population | High | 567 | 3,519 | 70 | 62 | 308 | 14 | 154 | 2 | 2 |
| | | Mid | | 5,311 | 113 | 102 | 534 | 25 | 130 | 2 | 2 |
| | | Low | | 6,732 | 164 | 133 | 662 | 30 | 106 | 2 | 0 |
| 4 | High RSLR Business-as-Usual Compact Population | High | 569 | 3,786 | 71 | 62 | 309 | 14 | 154 | 4 | 2 |
| | | Mid | | 5,609 | 116 | 105 | 540 | 26 | 130 | 2 | 1 |
| | | Low | | 7,083 | 168 | 141 | 680 | 32 | 106 | 2 | 0 |

| Other Results | | | Wetlands Created/Protected | | Scenario 1 | Scenario 2 | Scenario 3 | Scenario 4 |
|--|----------|-------|---|----------------------|-------------------------|------------|------------|------------|
| Construction Time (years) | | | After 50 yrs (% of baseline) | | 105 | 104 | 105 | 104 |
| Direct Wetland Impacts (acres) | | | After 100 yrs (% of baseline) | | 105 | 100 | 105 | 100 |
| Indirect Impacts (unitless) | | | Present Value of Life Cycle Costs (\$ Millions) | | | | | |
| Spatial Integrity (unitless) | | | Coastal Component | | 4,756 | 4,796 | 4,756 | 4,796 |
| Non-Federal Share of Present Value of Life Cycle Costs | Scenario | | (\$ Millions) | | Nonstructural Component | | 5,701 | 5,701 |
| | 1 / 2 | 3,660 | 3,674 | Structural Component | | 0 | 0 | 6,353 |
| | 3 / 4 | 3,888 | 3,902 | Total Project | | 10,457 | 10,497 | 6,353 |

| 2075 Residual Risk / Damages - Low Uncertainty (\$ Millions) | | | | | | | | Planning Unit 3b Nonstructural Plan 1000-year Design | |
|--|------------|-----------|------------|-----------|------------|-----------|------------|--|--|
| Frequency | Scenario 1 | | Scenario 2 | | Scenario 3 | | Scenario 4 | | |
| | No Action | With Proj | |
| 10-year | 1,024 | 103 | 1,523 | 139 | 1,013 | 100 | 1,543 | 135 | |
| 100-year | 4,254 | 433 | 5,717 | 565 | 4,148 | 424 | 5,447 | 555 | |
| 400-year | 8,571 | 817 | 9,628 | 1,370 | 7,772 | 801 | 8,782 | 1,309 | |
| 1,000-year | 11,203 | 3,928 | 11,827 | 7,609 | 10,886 | 3,963 | 11,680 | 7,536 | |
| 2,000-year | 12,281 | 9,274 | 12,591 | 10,830 | 12,370 | 9,374 | 12,769 | 10,929 | |

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.



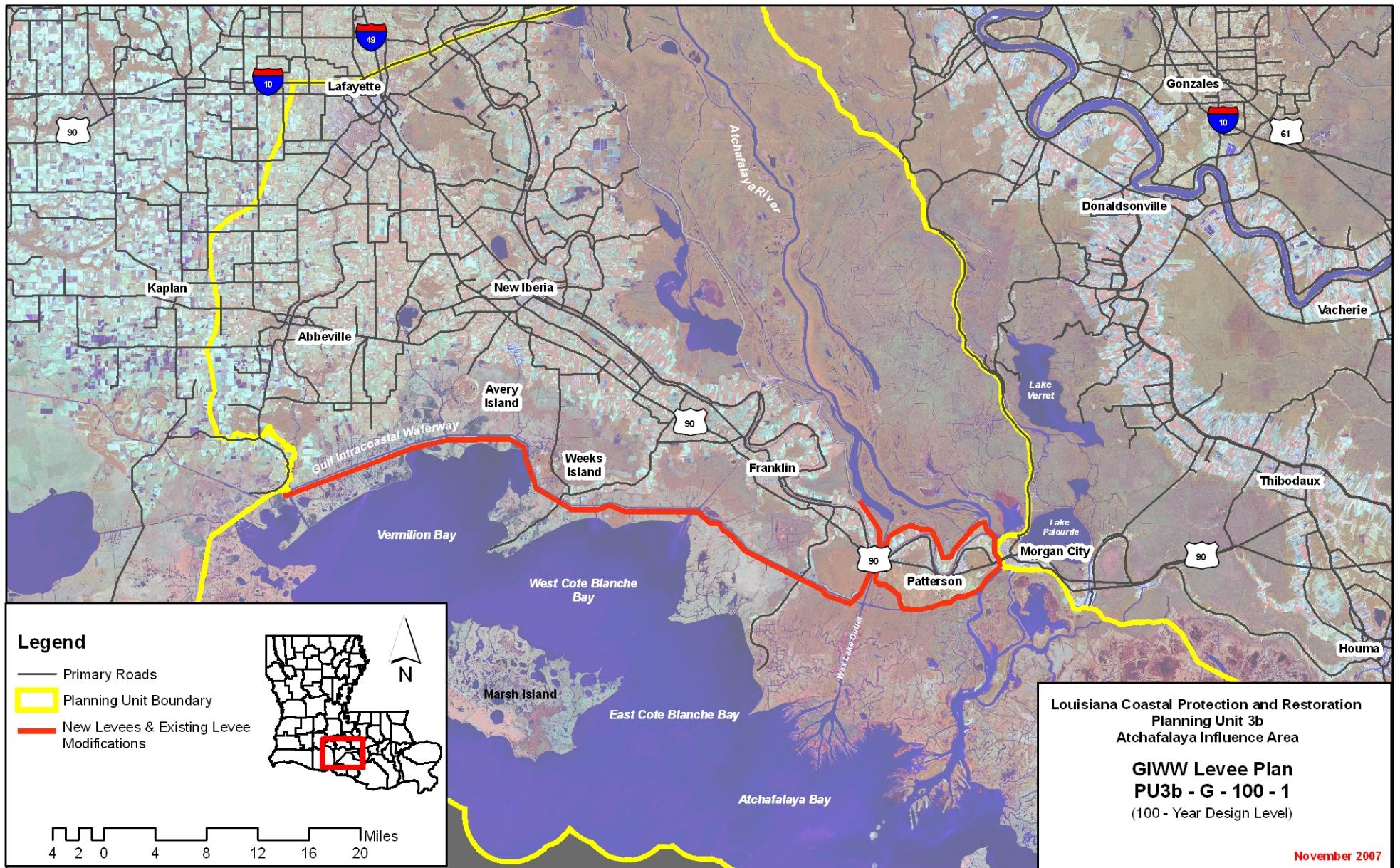
| | | | | | |
|--------------------------|--|--------------------------|--------------|-----------|---|
| Planning Unit: | 3b | Alt. No.: | PU3b-G-100-1 | Category: | Coastal Restoration + Structural Measures |
| Alternative Description: | Sustain coastal landscape through restoration. Raise ring levee 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 above. | | | | |

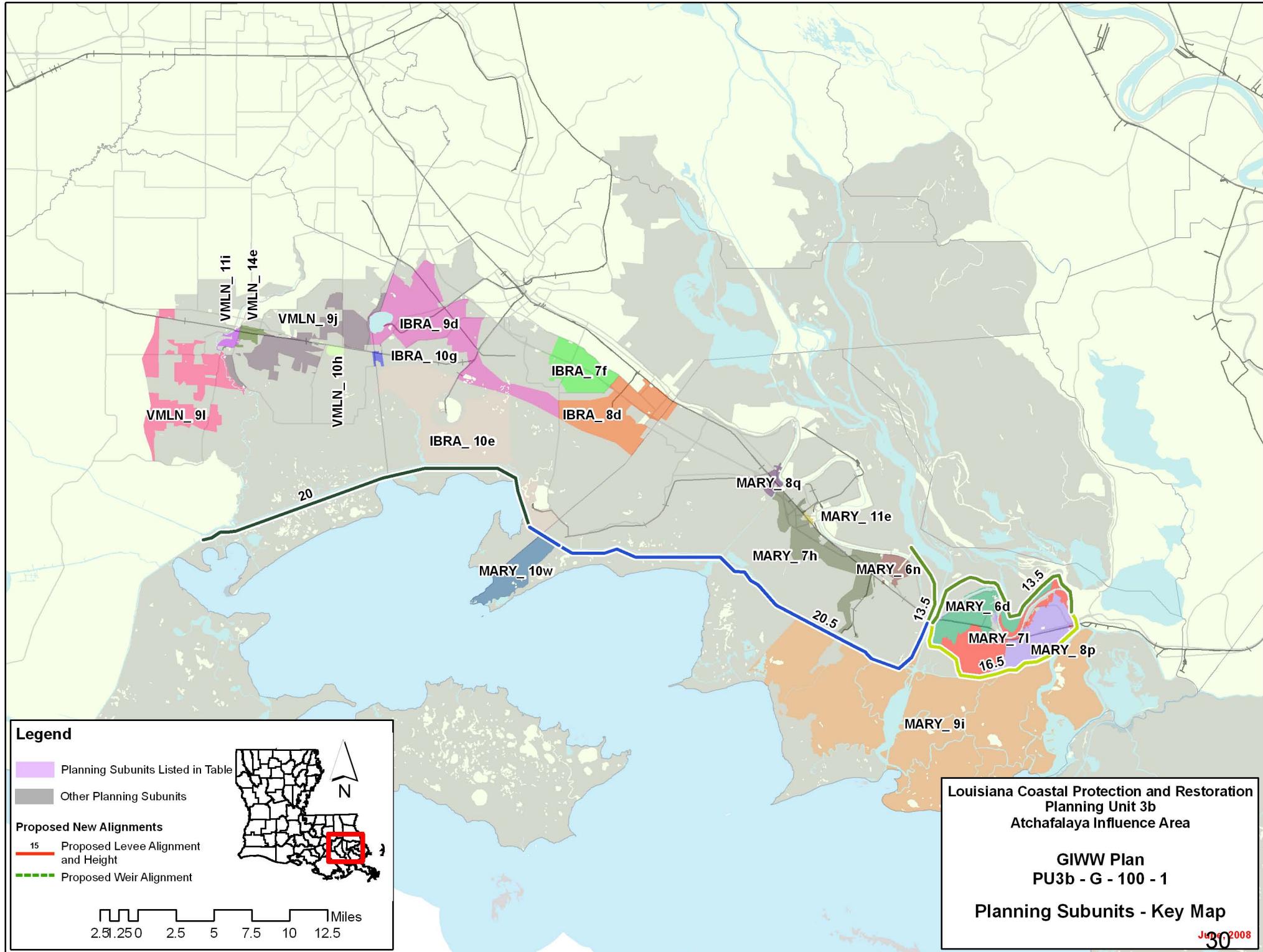
| Scenario | Future Conditions (Relative Sea Level Rise (RSLR) and Redevelopment Assumptions) | Uncertainty | Results by Scenario with Uncertainty Bands | | | | | | | | |
|----------|---|-------------|--|------------------------|----------------------------|---|------------------------|---------------------------------------|----------------------------|-------------------------------------|------------------------------------|
| | | | 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 | 1,020 | 1,660 | 94 | 121 | 514 | 27 | 312 | 20 | 5 |
| | | Mid | | 2,465 | 146 | 180 | 816 | 43 | 288 | 19 | 5 |
| | | Low | | 3,227 | 210 | 225 | 1,000 | 52 | 264 | 18 | 5 |
| 2 | High RSLR High Employment Dispersed Population | High | 1,023 | 1,733 | 100 | 54 | 536 | 29 | 312 | 20 | 5 |
| | | Mid | | 2,551 | 154 | 65 | 838 | 45 | 288 | 18 | 5 |
| | | Low | | 3,324 | 219 | 78 | 1,014 | 53 | 264 | 18 | 4 |
| 3 | Low RSLR Business-as-Usual Compact Population | High | 1,020 | 1,562 | 94 | 121 | 496 | 27 | 312 | 20 | 5 |
| | | Mid | | 2,357 | 145 | 179 | 782 | 42 | 288 | 19 | 5 |
| | | Low | | 3,101 | 208 | 226 | 957 | 50 | 264 | 18 | 5 |
| 4 | High RSLR Business-as-Usual Compact Population | High | 1,023 | 1,633 | 100 | 131 | 516 | 29 | 312 | 20 | 5 |
| | | Mid | | 2,439 | 153 | 191 | 806 | 44 | 288 | 18 | 5 |
| | | Low | | 3,198 | 216 | 233 | 973 | 52 | 264 | 18 | 4 |

| Other Results | | | Wetlands Created/Protected | | Scenario 1 | Scenario 2 | Scenario 3 | Scenario 4 |
|--|----------|---------------|---|--|------------|------------|------------|------------|
| Construction Time (years) | | | After 50 yrs (% of baseline) | | 105 | 104 | 105 | 104 |
| Direct Wetland Impacts (acres) | | | After 100 yrs (% of baseline) | | 105 | 100 | 105 | 100 |
| Indirect Impacts (unitless) | | | Present Value of Life Cycle Costs (\$ Millions) | | | | | |
| Spatial Integrity (unitless) | | | Coastal Component | | 4,756 | 4,796 | 4,756 | 4,796 |
| Non-Federal Share of Present Value of Life Cycle Costs | Scenario | (\$ Millions) | Nonstructural Component | | 0 | 0 | 0 | 0 |
| | 1 / 2 | 7,047 | Structural Component | | 15,214 | 15,238 | 15,214 | 15,238 |
| | 3 / 4 | 7,047 | Total Project | | 19,970 | 20,035 | 19,970 | 20,035 |

| 2075 Residual Risk / Damages - Low Uncertainty (\$ Millions) | | | | | | | | Planning Unit 3b Structural Plan GIWW Alt 100-year Design | |
|--|------------|-----------|------------|-----------|------------|-----------|------------|--|--|
| Frequency | Scenario 1 | | Scenario 2 | | Scenario 3 | | Scenario 4 | | |
| | No Action | With Proj | |
| 10-year | 1,024 | 158 | 1,523 | 194 | 1,013 | 159 | 1,543 | 196 | |
| 100-year | 4,254 | 318 | 5,717 | 359 | 4,148 | 318 | 5,447 | 357 | |
| 400-year | 8,571 | 567 | 9,628 | 614 | 7,772 | 579 | 8,782 | 633 | |
| 1,000-year | 11,203 | 2,867 | 11,827 | 2,883 | 10,886 | 2,950 | 11,680 | 2,969 | |
| 2,000-year | 12,281 | 6,368 | 12,591 | 6,412 | 12,370 | 6,321 | 12,769 | 6,338 | |

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.





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 | 14.8 | 2.4 | 18.7 | 3.9 | 21.2 | 8.2 |
| IBRA_10g | 11.5 | 2.4 | 15.4 | 3.9 | 17.8 | 8.2 | 14.7 | 2.4 | 18.6 | 3.9 | 21.0 | 8.2 |
| IBRA_7f | 8.1 | 2.4 | 11.3 | 3.9 | 14.5 | 8.2 | 11.3 | 2.4 | 14.5 | 3.9 | 17.7 | 8.2 |
| IBRA_8d | 10.1 | 2.4 | 15.2 | 3.9 | 19.1 | 8.2 | 13.3 | 2.4 | 18.4 | 3.9 | 22.3 | 8.2 |
| IBRA_9d | 9.0 | 2.4 | 13.8 | 3.9 | 17.1 | 8.2 | 12.2 | 2.4 | 17.0 | 3.9 | 20.3 | 8.2 |
| MARY_10w | 11.7 | 13.6 | 16.0 | 19.0 | 17.9 | 22.7 | 13.9 | 16.8 | 17.6 | 22.2 | 20.0 | 25.9 |
| MARY_11e | 7.8 | 1.3 | 11.3 | 3.5 | 14.1 | 9.1 | 11.0 | 1.3 | 14.5 | 3.5 | 17.3 | 9.1 |
| MARY_6d | 7.8 | -0.4 | 9.6 | 3.5 | 12.0 | 10.8 | 11.0 | -0.4 | 12.8 | 3.5 | 15.2 | 10.8 |
| MARY_6n | 7.9 | 1.3 | 13.9 | 3.5 | 14.8 | 9.1 | 11.1 | 1.3 | 17.1 | 3.5 | 18.0 | 9.1 |
| MARY_7h | 7.8 | 1.3 | 10.9 | 3.5 | 13.2 | 9.1 | 11.0 | 1.3 | 14.1 | 3.5 | 16.4 | 9.1 |
| MARY_7l | 7.8 | -0.4 | 10.6 | 3.5 | 13.1 | 10.8 | 11.0 | -0.4 | 13.8 | 3.5 | 16.3 | 10.8 |
| MARY_8p | 8.6 | -0.4 | 12.4 | 3.5 | 14.8 | 10.8 | 11.8 | -0.4 | 15.6 | 3.5 | 18.0 | 10.8 |
| MARY_8q | 8.2 | 1.3 | 13.5 | 3.5 | 17.2 | 9.1 | 11.4 | 1.3 | 16.7 | 3.5 | 20.4 | 9.1 |
| MARY_9i | 9.9 | 10.6 | 13.4 | 14.6 | 15.4 | 16.8 | 13.1 | 13.8 | 16.6 | 17.8 | 18.6 | 20.0 |
| VMLN_10h | 11.4 | 2.4 | 15.6 | 3.9 | 18.3 | 8.2 | 14.6 | 2.4 | 18.8 | 3.9 | 21.5 | 8.2 |
| VMLN_11i | 7.8 | 2.4 | 11.3 | 3.9 | 14.8 | 8.2 | 11.0 | 2.4 | 14.5 | 3.9 | 18.0 | 8.2 |
| VMLN_14e | 7.8 | 2.4 | 9.4 | 3.9 | 14.3 | 8.2 | 11.0 | 2.4 | 12.6 | 3.9 | 17.5 | 8.2 |
| VMLN_9j | 7.8 | 2.4 | 13.1 | 3.9 | 16.3 | 8.2 | 11.0 | 2.4 | 16.3 | 3.9 | 19.5 | 8.2 |
| VMLN_9l | 10.6 | 2.4 | 13.7 | 3.9 | 15.5 | 8.2 | 13.8 | 2.4 | 16.9 | 3.9 | 18.7 | 8.2 |
| Evaluation Parameters | Confidence Level: | | | 90% | 3.2 feet | Levee Design: | | | No Friction Waves | | | |
| | Future Relative Sea Level Rise: | | | | | Levee Overtopping: | | | No Friction Waves | | | |

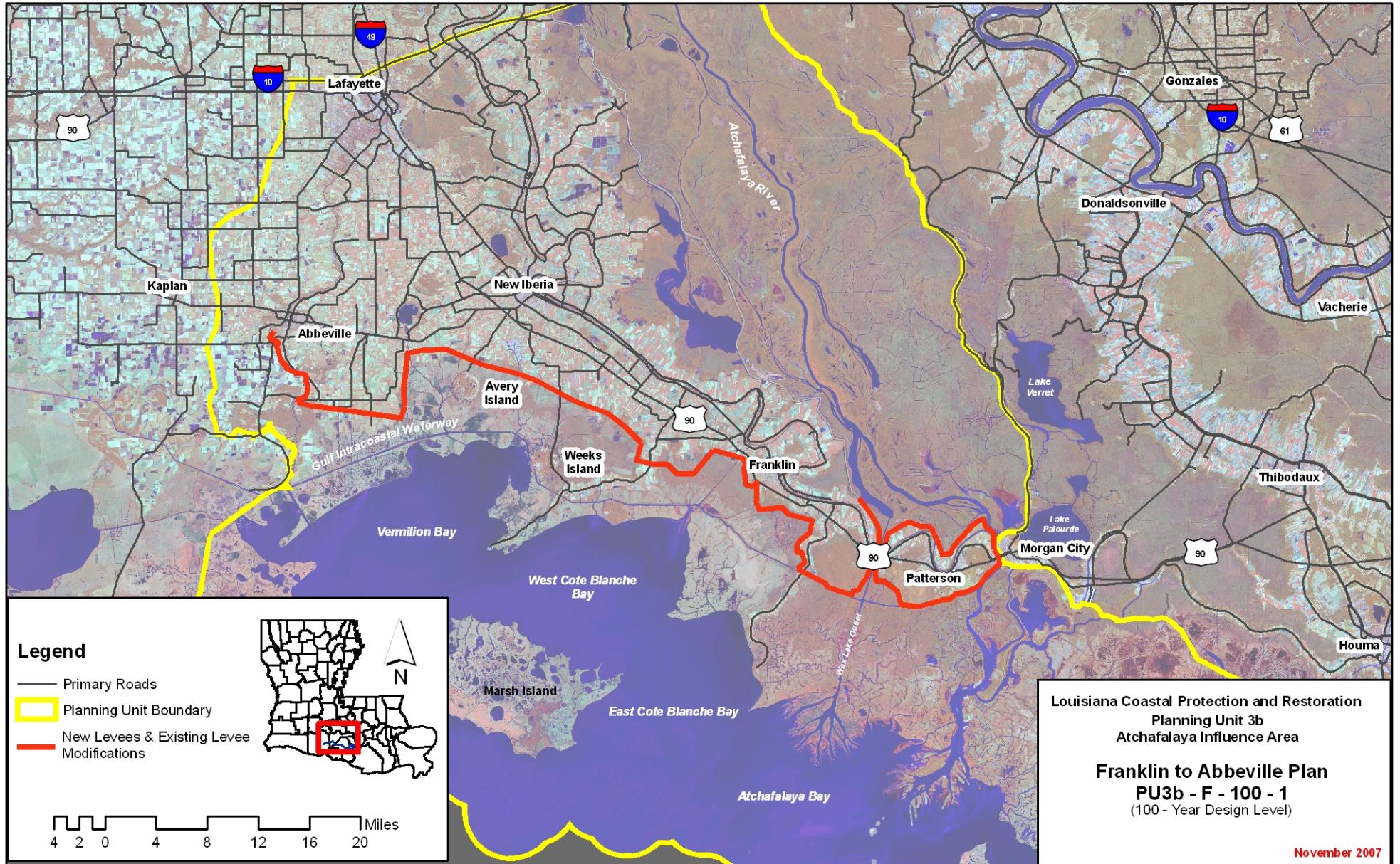
| | | | | | | |
|--------------------------|--|-----------|--------------------------|-----------|---|--|
| Planning Unit: | 3b | Alt. No.: | PU3b-F-100-1 | Category: | Coastal Restoration + Structural Measures | |
| Alternative Description: | Sustain coastal landscape through restoration. Raise ring 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 above. | | | | | |

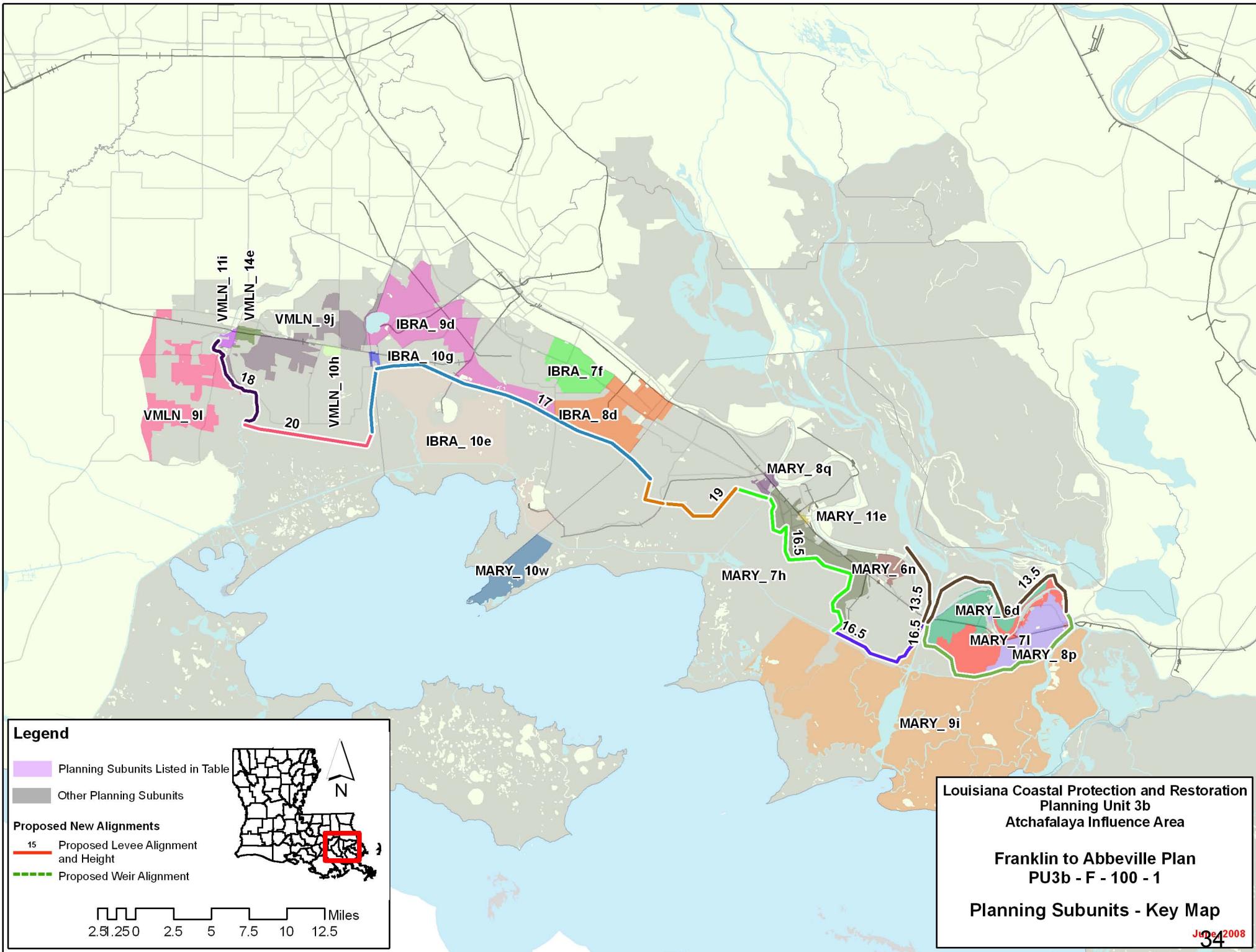
| Scenario | Future Conditions (Relative Sea Level Rise (RSLR) and Redevelopment Assumptions) | Uncertainty | Results by Scenario with Uncertainty Bands | | | | | | | | |
|----------|---|-------------|--|---------------------|----------------------------|--------------------------------|---------------------|---------------------------------|-------------------------|-------------------------------|------------------------------|
| | | | 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 | 954 | 1,958 | 107 | 126 | 546 | 29 | 202 | 16 | 3 |
| | | Mid | | 2,881 | 167 | 192 | 875 | 46 | 178 | 15 | 3 |
| | | Low | | 3,909 | 261 | 260 | 1,148 | 61 | 154 | 14 | 1 |
| 2 | High RSLR High Employment Dispersed Population | High | 958 | 2,059 | 115 | 60 | 569 | 31 | 202 | 16 | 3 |
| | | Mid | | 2,991 | 178 | 81 | 910 | 50 | 178 | 15 | 2 |
| | | Low | | 4,057 | 273 | 113 | 1,163 | 62 | 154 | 14 | 0 |
| 3 | Low RSLR Business-as-Usual Compact Population | High | 954 | 1,829 | 106 | 125 | 523 | 28 | 202 | 16 | 3 |
| | | Mid | | 2,729 | 165 | 191 | 835 | 45 | 178 | 15 | 3 |
| | | Low | | 3,734 | 254 | 255 | 1,067 | 57 | 154 | 14 | 1 |
| 4 | High RSLR Business-as-Usual Compact Population | High | 958 | 1,922 | 114 | 136 | 546 | 30 | 202 | 16 | 3 |
| | | Mid | | 2,836 | 175 | 203 | 859 | 47 | 178 | 15 | 2 |
| | | Low | | 3,869 | 265 | 264 | 1,088 | 59 | 154 | 14 | 0 |

| Other Results | | | Wetlands Created/Protected | | Scenario 1 | Scenario 2 | Scenario 3 | Scenario 4 |
|--|----------|---------------|---|--|------------|------------|------------|------------|
| Construction Time (years) | | | After 50 yrs (% of baseline) | | 105 | 104 | 105 | 104 |
| Direct Wetland Impacts (acres) | | | After 100 yrs (% of baseline) | | 105 | 100 | 105 | 100 |
| Indirect Impacts (unitless) | | | Present Value of Life Cycle Costs (\$ Millions) | | | | | |
| Spatial Integrity (unitless) | | | Coastal Component | | 4,756 | 4,796 | 4,756 | 4,796 |
| Non-Federal Share of Present Value of Life Cycle Costs | Scenario | (\$ Millions) | Nonstructural Component | | 0 | 0 | 0 | 0 |
| | 1 / 2 | 6,622 | Structural Component | | 13,918 | 13,955 | 13,918 | 13,955 |
| | 3 / 4 | 6,622 | Total Project | | 18,674 | 18,751 | 18,674 | 18,751 |

| 2075 Residual Risk / Damages - Low Uncertainty (\$ Millions) | | | | | | | | Planning Unit 3b Structural Plan Franklin to Abbeville Alt 100-year Design | |
|--|------------|-----------|------------|-----------|------------|-----------|------------|--|--|
| Frequency | Scenario 1 | | Scenario 2 | | Scenario 3 | | Scenario 4 | | |
| | No Action | With Proj | |
| 10-year | 1,024 | 222 | 1,523 | 282 | 1,013 | 223 | 1,543 | 285 | |
| 100-year | 4,254 | 713 | 5,717 | 879 | 4,148 | 636 | 5,447 | 750 | |
| 400-year | 8,571 | 5,508 | 9,628 | 5,680 | 7,772 | 5,128 | 8,782 | 5,287 | |
| 1,000-year | 11,203 | 10,913 | 11,827 | 11,013 | 10,886 | 10,668 | 11,680 | 10,828 | |
| 2,000-year | 12,281 | 11,431 | 12,591 | 11,510 | 12,370 | 11,339 | 12,769 | 11,416 | |

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 3b Atchafalaya Influence Area

**Franklin to Abbeville Plan
PU3b - F - 100 - 1**

Planning Subunits - Key Map

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 | 12.5 | 15.5 | 17.1 | 18.0 | 20.0 | 14.8 | 15.7 | 18.7 | 20.3 | 21.2 | 23.2 |
| IBRA_10g | 11.5 | 4.6 | 15.4 | 11.5 | 17.8 | 17.0 | 14.7 | 4.6 | 18.6 | 11.5 | 21.0 | 17.0 |
| IBRA_7f | 8.1 | 4.0 | 11.3 | 15.0 | 14.5 | 17.0 | 11.3 | 4.0 | 14.5 | 15.0 | 17.7 | 17.0 |
| IBRA_8d | 10.1 | 4.0 | 15.2 | 15.0 | 19.1 | 17.0 | 13.3 | 4.0 | 18.4 | 15.0 | 22.3 | 17.0 |
| IBRA_9d | 9.0 | 4.0 | 13.8 | 15.0 | 17.1 | 17.0 | 12.2 | 4.0 | 17.0 | 15.0 | 20.3 | 17.0 |
| MARY_10w | 11.7 | 11.9 | 16.0 | 16.2 | 17.9 | 19.2 | 13.9 | 15.1 | 17.6 | 19.4 | 20.0 | 22.4 |
| MARY_11e | 7.8 | 0.5 | 11.3 | 9.8 | 14.1 | 16.5 | 11.0 | 0.5 | 14.5 | 9.8 | 17.3 | 16.5 |
| MARY_6d | 7.8 | -0.4 | 9.6 | 3.5 | 12.0 | 10.8 | 11.0 | -0.4 | 12.8 | 3.5 | 15.2 | 10.8 |
| MARY_6n | 7.9 | 0.5 | 13.9 | 9.8 | 14.8 | 16.5 | 11.1 | 0.5 | 17.1 | 9.8 | 18.0 | 16.5 |
| MARY_7h | 7.8 | 0.5 | 10.9 | 9.8 | 13.2 | 16.5 | 11.0 | 0.5 | 14.1 | 9.8 | 16.4 | 16.5 |
| MARY_7l | 7.8 | -0.4 | 10.6 | 3.5 | 13.1 | 10.8 | 11.0 | -0.4 | 13.8 | 3.5 | 16.3 | 10.8 |
| MARY_8p | 8.6 | -0.4 | 12.4 | 3.5 | 14.8 | 10.8 | 11.8 | -0.4 | 15.6 | 3.5 | 18.0 | 10.8 |
| MARY_8q | 8.2 | 3.0 | 13.5 | 8.3 | 17.2 | 16.5 | 11.4 | 3.0 | 16.7 | 8.3 | 20.4 | 16.5 |
| MARY_9i | 9.9 | 10.5 | 13.4 | 14.2 | 15.4 | 16.4 | 13.1 | 13.7 | 16.6 | 17.4 | 18.6 | 19.6 |
| VMLN_10h | 11.4 | 4.6 | 15.6 | 11.5 | 18.3 | 17.0 | 14.6 | 4.6 | 18.8 | 11.5 | 21.5 | 17.0 |
| VMLN_11i | 7.8 | 4.6 | 11.3 | 11.5 | 14.8 | 17.0 | 11.0 | 4.6 | 14.5 | 11.5 | 18.0 | 17.0 |
| VMLN_14e | 7.8 | 4.6 | 9.4 | 11.5 | 14.3 | 17.0 | 11.0 | 4.6 | 12.6 | 11.5 | 17.5 | 17.0 |
| VMLN_9j | 7.8 | 4.6 | 13.1 | 11.5 | 16.3 | 17.0 | 11.0 | 4.6 | 16.3 | 11.5 | 19.5 | 17.0 |
| VMLN_9l | 10.6 | 10.9 | 13.7 | 12.5 | 15.5 | 14.0 | 13.8 | 14.1 | 16.9 | 15.7 | 18.7 | 17.2 |
| Evaluation Parameters | Confidence Level: | | | 90% | 3.2 feet | Levee Design: | | | No Friction Waves | | | |
| | Future Relative Sea Level Rise: | | | | | Levee Overtopping: | | | No Friction Waves | | | |

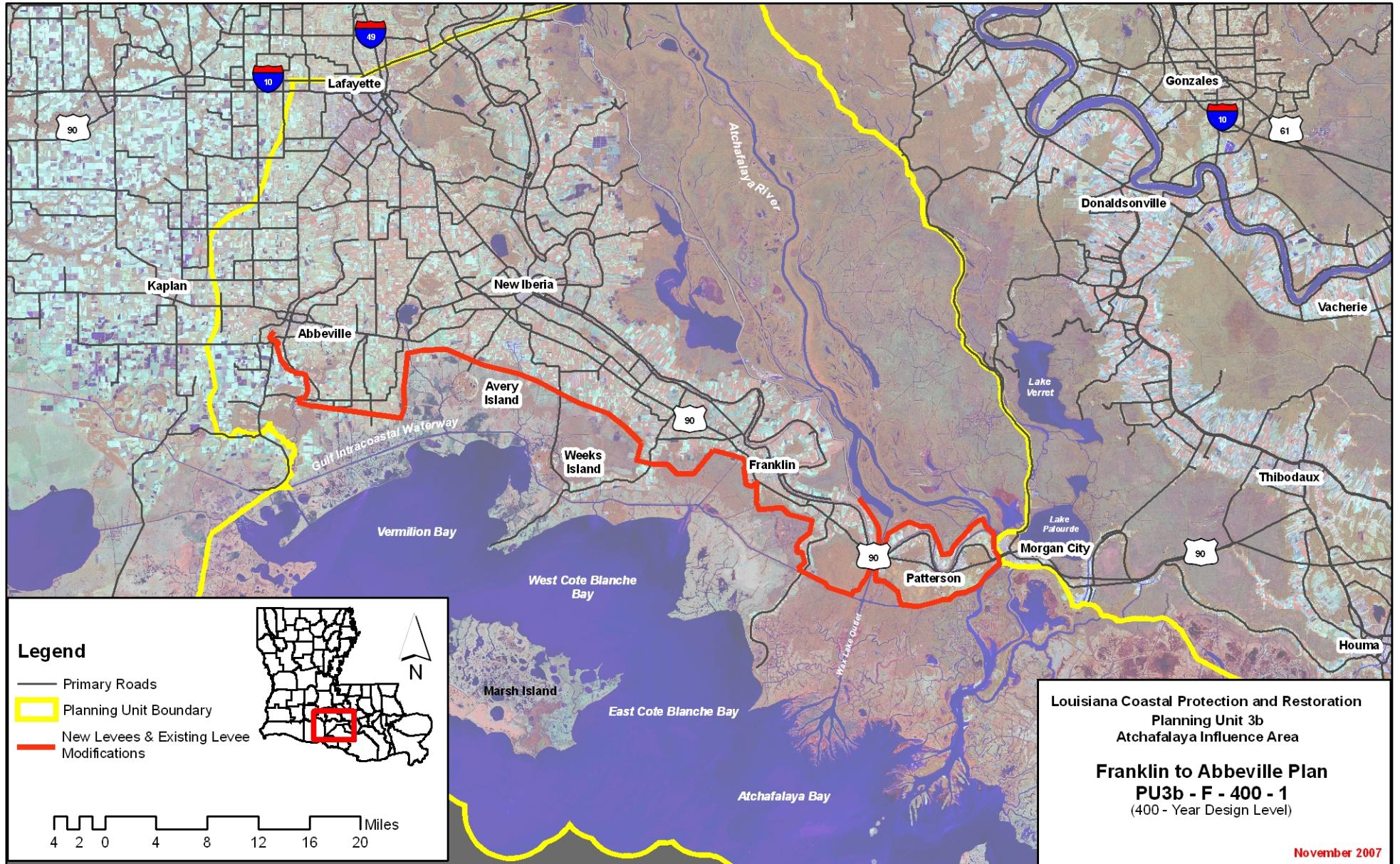
| | | | | | |
|---------------------------------|--|---------------------------------|--------------|------------------|---|
| Planning Unit: | 3b | Alt. No.: | PU3b-F-400-1 | Category: | Coastal Restoration + Structural Measures |
| Alternative Description: | Sustain coastal landscape through restoration. 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 above. | | | | |

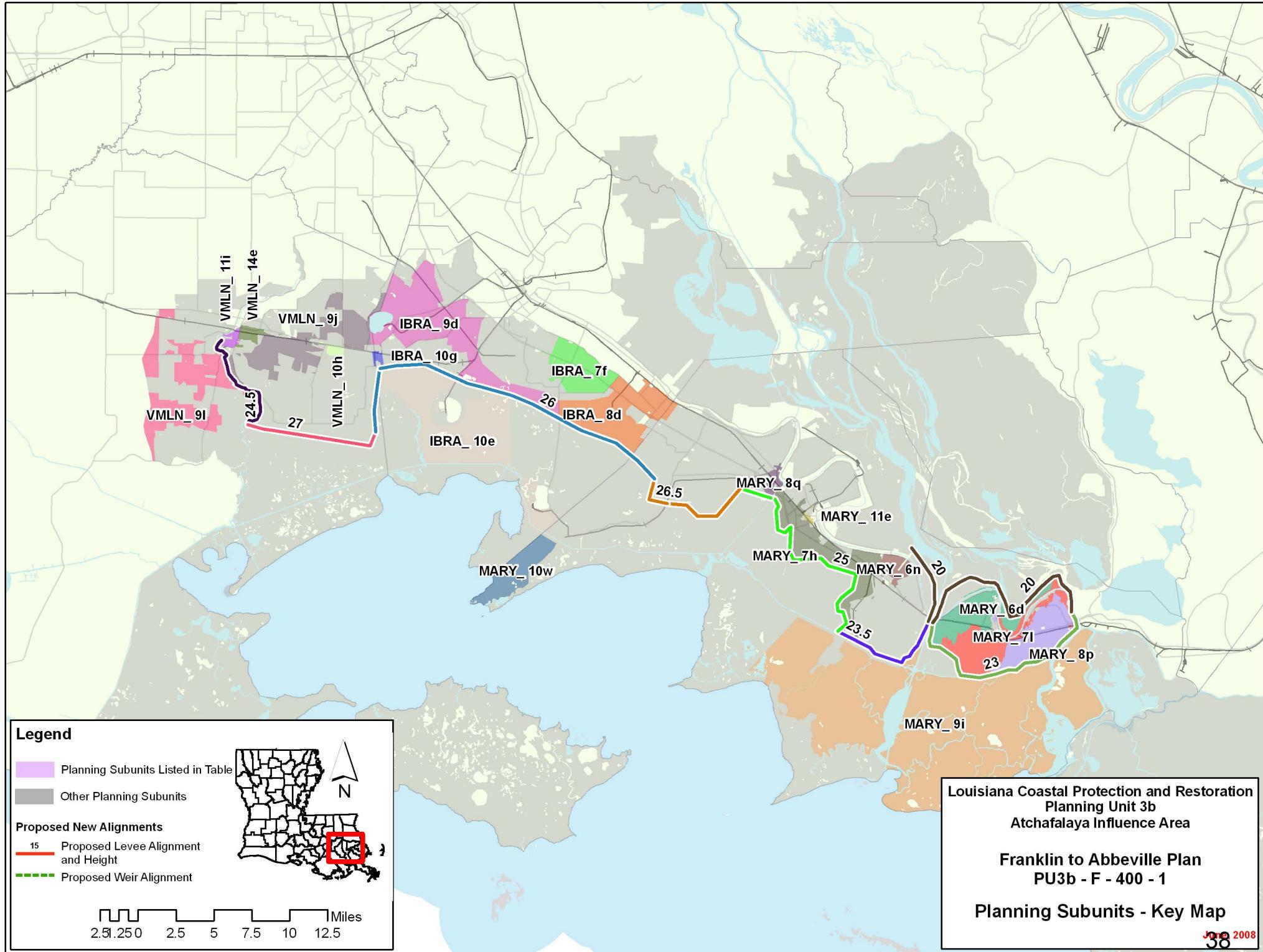
| Scenario | Future Conditions (Relative Sea Level Rise (RSLR) and Redevelopment Assumptions) | Uncertainty | Results by Scenario with Uncertainty Bands | | | | | | | | |
|----------|---|-------------|--|---------------------|----------------------------|--------------------------------|---------------------|---------------------------------|-------------------------|-------------------------------|------------------------------|
| | | | 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 | 1,440 | 2,146 | 114 | 140 | 598 | 32 | 202 | 19 | 5 |
| | | Mid | | 3,071 | 175 | 208 | 940 | 50 | 178 | 19 | 5 |
| | | Low | | 3,871 | 248 | 256 | 1,135 | 60 | 154 | 18 | 5 |
| 2 | High RSLR High Employment Dispersed Population | High | 1,452 | 2,264 | 123 | 67 | 628 | 35 | 202 | 19 | 5 |
| | | Mid | | 3,201 | 188 | 85 | 980 | 54 | 178 | 19 | 5 |
| | | Low | | 4,041 | 262 | 93 | 1,154 | 61 | 154 | 18 | 4 |
| 3 | Low RSLR Business-as-Usual Compact Population | High | 1,440 | 2,008 | 114 | 140 | 575 | 32 | 202 | 19 | 5 |
| | | Mid | | 2,914 | 173 | 206 | 899 | 49 | 178 | 19 | 5 |
| | | Low | | 3,692 | 242 | 253 | 1,074 | 57 | 154 | 18 | 5 |
| 4 | High RSLR Business-as-Usual Compact Population | High | 1,452 | 2,118 | 122 | 153 | 604 | 34 | 202 | 19 | 5 |
| | | Mid | | 3,040 | 185 | 222 | 930 | 52 | 178 | 19 | 5 |
| | | Low | | 3,849 | 255 | 264 | 1,099 | 59 | 154 | 18 | 4 |

| Other Results | | | Wetlands Created/Protected | | Scenario 1 | Scenario 2 | Scenario 3 | Scenario 4 |
|--|----------|---------------|---|-------------------------|------------|------------|------------|------------|
| Construction Time (years) | | | After 50 yrs (% of baseline) | | 105 | 104 | 105 | 104 |
| Direct Wetland Impacts (acres) | | | After 100 yrs (% of baseline) | | 105 | 100 | 105 | 100 |
| Indirect Impacts (unitless) | | | Present Value of Life Cycle Costs (\$ Millions) | | | | | |
| Spatial Integrity (unitless) | | | Coastal Component | | 4,756 | 4,796 | 4,756 | 4,796 |
| Non-Federal Share of Present Value of Life Cycle Costs | Scenario | (\$ Millions) | | Nonstructural Component | | 0 | 0 | 0 |
| | 1 / 2 | 9,958 | 10,041 | Structural Component | | 23,445 | 23,639 | 23,445 |
| | 3 / 4 | 9,958 | 10,041 | Total Project | | 28,200 | 28,436 | 28,200 |

| 2075 Residual Risk / Damages - Low Uncertainty (\$ Millions) | | | | | | | | Planning Unit 3b Structural Plan Franklin to Abbeville Alt 400-year Design | |
|--|------------|-----------|------------|-----------|------------|-----------|------------|--|--|
| Frequency | Scenario 1 | | Scenario 2 | | Scenario 3 | | Scenario 4 | | |
| | No Action | With Proj | |
| 10-year | 1,024 | 222 | 1,523 | 282 | 1,013 | 223 | 1,543 | 285 | |
| 100-year | 4,254 | 711 | 5,717 | 876 | 4,148 | 633 | 5,447 | 747 | |
| 400-year | 8,571 | 1,238 | 9,628 | 1,409 | 7,772 | 985 | 8,782 | 1,145 | |
| 1,000-year | 11,203 | 1,679 | 11,827 | 1,778 | 10,886 | 1,462 | 11,680 | 1,621 | |
| 2,000-year | 12,281 | 2,167 | 12,591 | 2,246 | 12,370 | 2,034 | 12,769 | 2,112 | |

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.





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 | 12.5 | 15.5 | 17.1 | 18.0 | 20.0 | 14.8 | 15.7 | 18.7 | 20.3 | 21.2 | 23.2 |
| IBRA_10g | 11.5 | 4.3 | 15.4 | 4.5 | 17.8 | 5.6 | 14.7 | 4.3 | 18.6 | 4.5 | 21.0 | 5.6 |
| IBRA_7f | 8.1 | 3.9 | 11.3 | 4.0 | 14.5 | 5.3 | 11.3 | 3.9 | 14.5 | 4.0 | 17.7 | 5.3 |
| IBRA_8d | 10.1 | 3.9 | 15.2 | 4.0 | 19.1 | 5.3 | 13.3 | 3.9 | 18.4 | 4.0 | 22.3 | 5.3 |
| IBRA_9d | 9.0 | 3.9 | 13.8 | 4.0 | 17.1 | 5.3 | 12.2 | 3.9 | 17.0 | 4.0 | 20.3 | 5.3 |
| MARY_10w | 11.7 | 11.9 | 16.0 | 16.2 | 17.9 | 19.2 | 13.9 | 15.1 | 17.6 | 19.4 | 20.0 | 22.4 |
| MARY_11e | 7.8 | 0.2 | 11.3 | 0.4 | 14.1 | 1.5 | 11.0 | 0.2 | 14.5 | 0.4 | 17.3 | 1.5 |
| MARY_6d | 7.8 | -0.6 | 9.6 | -0.5 | 12.0 | 0.1 | 11.0 | -0.6 | 12.8 | -0.5 | 15.2 | 0.1 |
| MARY_6n | 7.9 | 0.2 | 13.9 | 0.4 | 14.8 | 1.5 | 11.1 | 0.2 | 17.1 | 0.4 | 18.0 | 1.5 |
| MARY_7h | 7.8 | 0.2 | 10.9 | 0.4 | 13.2 | 1.5 | 11.0 | 0.2 | 14.1 | 0.4 | 16.4 | 1.5 |
| MARY_7l | 7.8 | -0.6 | 10.6 | -0.5 | 13.1 | 0.1 | 11.0 | -0.6 | 13.8 | -0.5 | 16.3 | 0.1 |
| MARY_8p | 8.6 | -0.6 | 12.4 | -0.5 | 14.8 | 0.1 | 11.8 | -0.6 | 15.6 | -0.5 | 18.0 | 0.1 |
| MARY_8q | 8.2 | 2.8 | 13.5 | 3.0 | 17.2 | 3.6 | 11.4 | 2.8 | 16.7 | 3.0 | 20.4 | 3.6 |
| MARY_9i | 9.9 | 10.5 | 13.4 | 14.2 | 15.4 | 16.4 | 13.1 | 13.7 | 16.6 | 17.4 | 18.6 | 19.6 |
| VMLN_10h | 11.4 | 4.3 | 15.6 | 4.5 | 18.3 | 5.6 | 14.6 | 4.3 | 18.8 | 4.5 | 21.5 | 5.6 |
| VMLN_11i | 7.8 | 4.3 | 11.3 | 4.5 | 14.8 | 5.6 | 11.0 | 4.3 | 14.5 | 4.5 | 18.0 | 5.6 |
| VMLN_14e | 7.8 | 4.3 | 9.4 | 4.5 | 14.3 | 5.6 | 11.0 | 4.3 | 12.6 | 4.5 | 17.5 | 5.6 |
| VMLN_9j | 7.8 | 4.3 | 13.1 | 4.5 | 16.3 | 5.6 | 11.0 | 4.3 | 16.3 | 4.5 | 19.5 | 5.6 |
| VMLN_9l | 10.6 | 10.9 | 13.7 | 12.5 | 15.5 | 14.0 | 13.8 | 14.1 | 16.9 | 15.7 | 18.7 | 17.2 |
| Evaluation Parameters | Confidence Level: | | | 90% | 3.2 feet | Levee Design: | | | No Friction Waves | | | |
| | Future Relative Sea Level Rise: | | | | | Levee Overtopping: | | | No Friction Waves | | | |

| | | | | | |
|--------------------------|--|--------------------------|---------------|-----------|---|
| Planning Unit: | 3b | Alt. No.: | PU3b-F-1000-1 | Category: | Coastal Restoration + Structural Measures |
| Alternative Description: | Sustain coastal landscape through restoration. Raise ring levee around Patterson/Berwick to 1000-year design level and construct levee along the edge of development north of the GIWW to high ground west of Abbeville at the 1000-year design level. | | | | |
| Coastal Component: | R1 | Nonstructural Component: | | None | |
| Structural Component: | See alternative description above. | | | | |

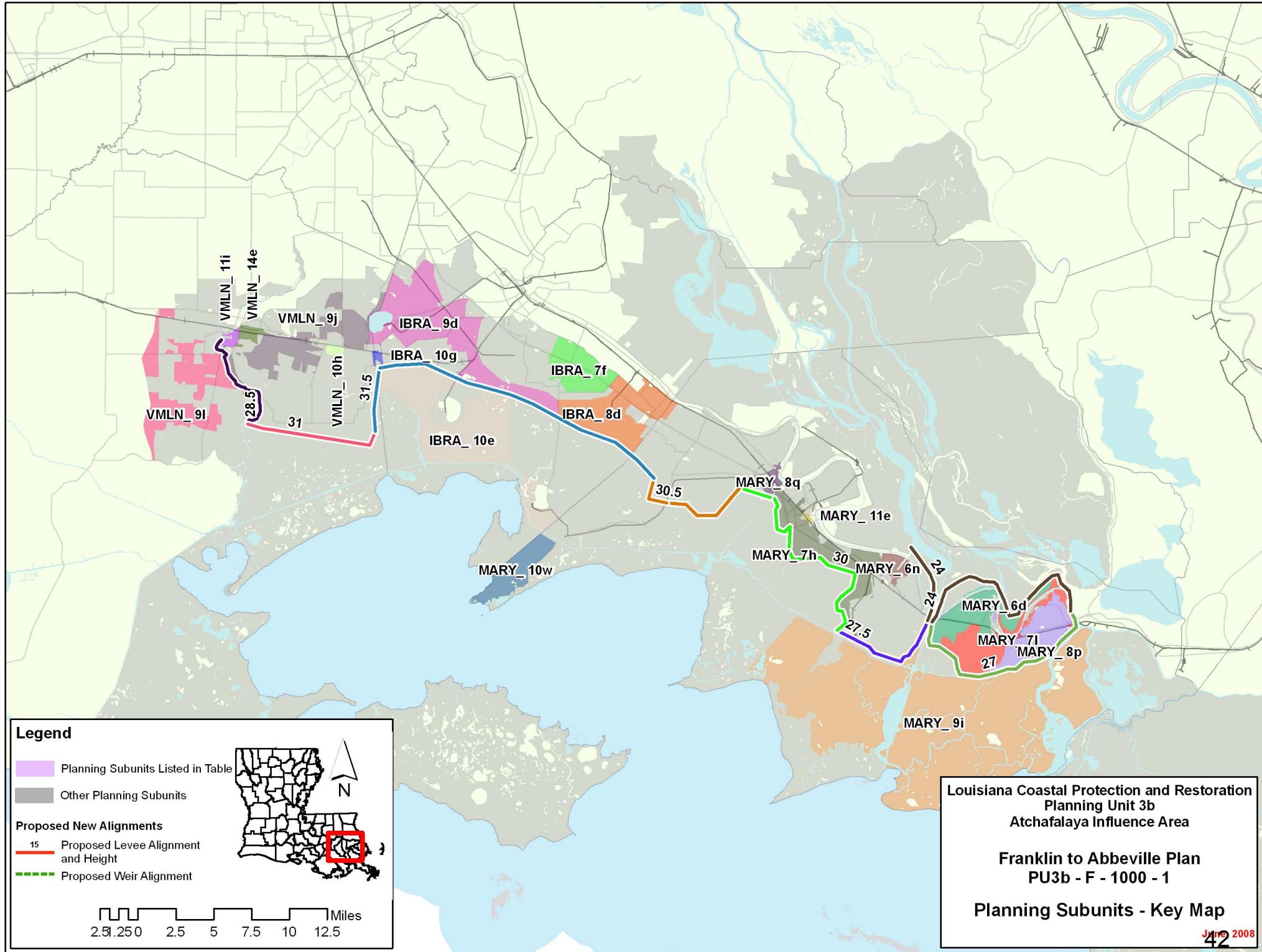
| Scenario | Future Conditions (Relative Sea Level Rise (RSLR) and Redevelopment Assumptions) | Uncertainty | Results by Scenario with Uncertainty Bands | | | | | | | | |
|----------|---|-------------|--|---------------------|----------------------------|--------------------------------|---------------------|---------------------------------|-------------------------|-------------------------------|------------------------------|
| | | | 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 | 1,830 | 2,327 | 121 | 154 | 647 | 35 | 202 | 19 | 5 |
| | | Mid | | 3,340 | 188 | 229 | 1,023 | 55 | 178 | 19 | 5 |
| | | Low | | 4,201 | 267 | 282 | 1,236 | 66 | 154 | 18 | 5 |
| 2 | High RSLR High Employment Dispersed Population | High | 1,832 | 2,463 | 132 | 76 | 684 | 38 | 202 | 19 | 5 |
| | | Mid | | 3,492 | 202 | 96 | 1,069 | 60 | 178 | 19 | 5 |
| | | Low | | 4,394 | 283 | 106 | 1,259 | 67 | 154 | 18 | 4 |
| 3 | Low RSLR Business-as-Usual Compact Population | High | 1,830 | 2,178 | 121 | 154 | 624 | 35 | 202 | 19 | 5 |
| | | Mid | | 3,172 | 186 | 229 | 981 | 54 | 178 | 19 | 5 |
| | | Low | | 4,011 | 261 | 280 | 1,173 | 63 | 154 | 18 | 5 |
| 4 | High RSLR Business-as-Usual Compact Population | High | 1,832 | 2,307 | 131 | 170 | 659 | 38 | 202 | 19 | 5 |
| | | Mid | | 3,319 | 199 | 247 | 1,019 | 57 | 178 | 19 | 5 |
| | | Low | | 4,191 | 275 | 294 | 1,204 | 66 | 154 | 18 | 4 |

| Other Results | | | Wetlands Created/Protected | | Scenario 1 | Scenario 2 | Scenario 3 | Scenario 4 |
|--|----------|---------------|---|--|------------|------------|------------|------------|
| Construction Time (years) | | | After 50 yrs (% of baseline) | | 105 | 104 | 105 | 104 |
| Direct Wetland Impacts (acres) | | | After 100 yrs (% of baseline) | | 105 | 100 | 105 | 100 |
| Indirect Impacts (unitless) | | | Present Value of Life Cycle Costs (\$ Millions) | | | | | |
| Spatial Integrity (unitless) | | | Coastal Component | | 4,756 | 4,796 | 4,756 | 4,796 |
| Non-Federal Share of Present Value of Life Cycle Costs | Scenario | (\$ Millions) | Nonstructural Component | | 0 | 0 | 0 | 0 |
| | 1 / 2 | 12,618 | Structural Component | | 31,074 | 31,087 | 31,074 | 31,087 |
| | 3 / 4 | 12,618 | Total Project | | 35,830 | 35,884 | 35,830 | 35,884 |

| 2075 Residual Risk / Damages - Low Uncertainty (\$ Millions) | | | | | | | | Planning Unit 3b Structural Plan Franklin to Abbeville Alt 1000-year Design | |
|--|------------|-----------|------------|-----------|------------|-----------|------------|---|--|
| Frequency | Scenario 1 | | Scenario 2 | | Scenario 3 | | Scenario 4 | | |
| | No Action | With Proj | |
| 10-year | 1,024 | 222 | 1,523 | 282 | 1,013 | 223 | 1,543 | 285 | |
| 100-year | 4,254 | 711 | 5,717 | 876 | 4,148 | 633 | 5,447 | 747 | |
| 400-year | 8,571 | 1,236 | 9,628 | 1,408 | 7,772 | 983 | 8,782 | 1,143 | |
| 1,000-year | 11,203 | 1,652 | 11,827 | 1,751 | 10,886 | 1,433 | 11,680 | 1,593 | |
| 2,000-year | 12,281 | 1,844 | 12,591 | 1,922 | 12,370 | 1,696 | 12,769 | 1,773 | |

Note: Present Value costs and Annual Equivalent numbers are calculated for the period from 2010 to 2075 at common base year 2025 using a 4.78% Federal discount rate. All dollar metrics are based on 2007 price levels.





Alternative: PU3b-F-1000-1
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 | 12.5 | 15.5 | 17.1 | 18.0 | 20.0 | 14.8 | 15.7 | 18.7 | 20.3 | 21.2 | 23.2 |
| IBRA_10g | 11.5 | 4.3 | 15.4 | 4.3 | 17.8 | 4.5 | 14.7 | 4.3 | 18.6 | 4.3 | 21.0 | 4.5 |
| IBRA_7f | 8.1 | 3.9 | 11.3 | 3.9 | 14.5 | 4.0 | 11.3 | 3.9 | 14.5 | 3.9 | 17.7 | 4.0 |
| IBRA_8d | 10.1 | 3.9 | 15.2 | 3.9 | 19.1 | 4.0 | 13.3 | 3.9 | 18.4 | 3.9 | 22.3 | 4.0 |
| IBRA_9d | 9.0 | 3.9 | 13.8 | 3.9 | 17.1 | 4.0 | 12.2 | 3.9 | 17.0 | 3.9 | 20.3 | 4.0 |
| MARY_10w | 11.7 | 11.9 | 16.0 | 16.2 | 17.9 | 19.2 | 13.9 | 15.1 | 17.6 | 19.4 | 20.0 | 22.4 |
| MARY_11e | 7.8 | 0.2 | 11.3 | 0.2 | 14.1 | 0.4 | 11.0 | 0.2 | 14.5 | 0.2 | 17.3 | 0.4 |
| MARY_6d | 7.8 | -0.6 | 9.6 | -0.6 | 12.0 | -0.5 | 11.0 | -0.6 | 12.8 | -0.6 | 15.2 | -0.5 |
| MARY_6n | 7.9 | 0.2 | 13.9 | 0.2 | 14.8 | 0.4 | 11.1 | 0.2 | 17.1 | 0.2 | 18.0 | 0.4 |
| MARY_7h | 7.8 | 0.2 | 10.9 | 0.2 | 13.2 | 0.4 | 11.0 | 0.2 | 14.1 | 0.2 | 16.4 | 0.4 |
| MARY_7l | 7.8 | -0.6 | 10.6 | -0.6 | 13.1 | -0.5 | 11.0 | -0.6 | 13.8 | -0.6 | 16.3 | -0.5 |
| MARY_8p | 8.6 | -0.6 | 12.4 | -0.6 | 14.8 | -0.5 | 11.8 | -0.6 | 15.6 | -0.6 | 18.0 | -0.5 |
| MARY_8q | 8.2 | 2.8 | 13.5 | 2.9 | 17.2 | 3.0 | 11.4 | 2.8 | 16.7 | 2.9 | 20.4 | 3.0 |
| MARY_9i | 9.9 | 10.5 | 13.4 | 14.2 | 15.4 | 16.4 | 13.1 | 13.7 | 16.6 | 17.4 | 18.6 | 19.6 |
| VMLN_10h | 11.4 | 4.3 | 15.6 | 4.3 | 18.3 | 4.5 | 14.6 | 4.3 | 18.8 | 4.3 | 21.5 | 4.5 |
| VMLN_11i | 7.8 | 4.3 | 11.3 | 4.3 | 14.8 | 4.5 | 11.0 | 4.3 | 14.5 | 4.3 | 18.0 | 4.5 |
| VMLN_14e | 7.8 | 4.3 | 9.4 | 4.3 | 14.3 | 4.5 | 11.0 | 4.3 | 12.6 | 4.3 | 17.5 | 4.5 |
| VMLN_9j | 7.8 | 4.3 | 13.1 | 4.3 | 16.3 | 4.5 | 11.0 | 4.3 | 16.3 | 4.3 | 19.5 | 4.5 |
| VMLN_9l | 10.6 | 10.9 | 13.7 | 12.5 | 15.5 | 14.0 | 13.8 | 14.1 | 16.9 | 15.7 | 18.7 | 17.2 |
| Evaluation Parameters | Confidence Level: | | | 90% | 3.2 feet | Levee Design: | | | No Friction Waves | | | |
| | Future Relative Sea Level Rise: | | | | | Levee Overtopping: | | | No Friction Waves | | | |

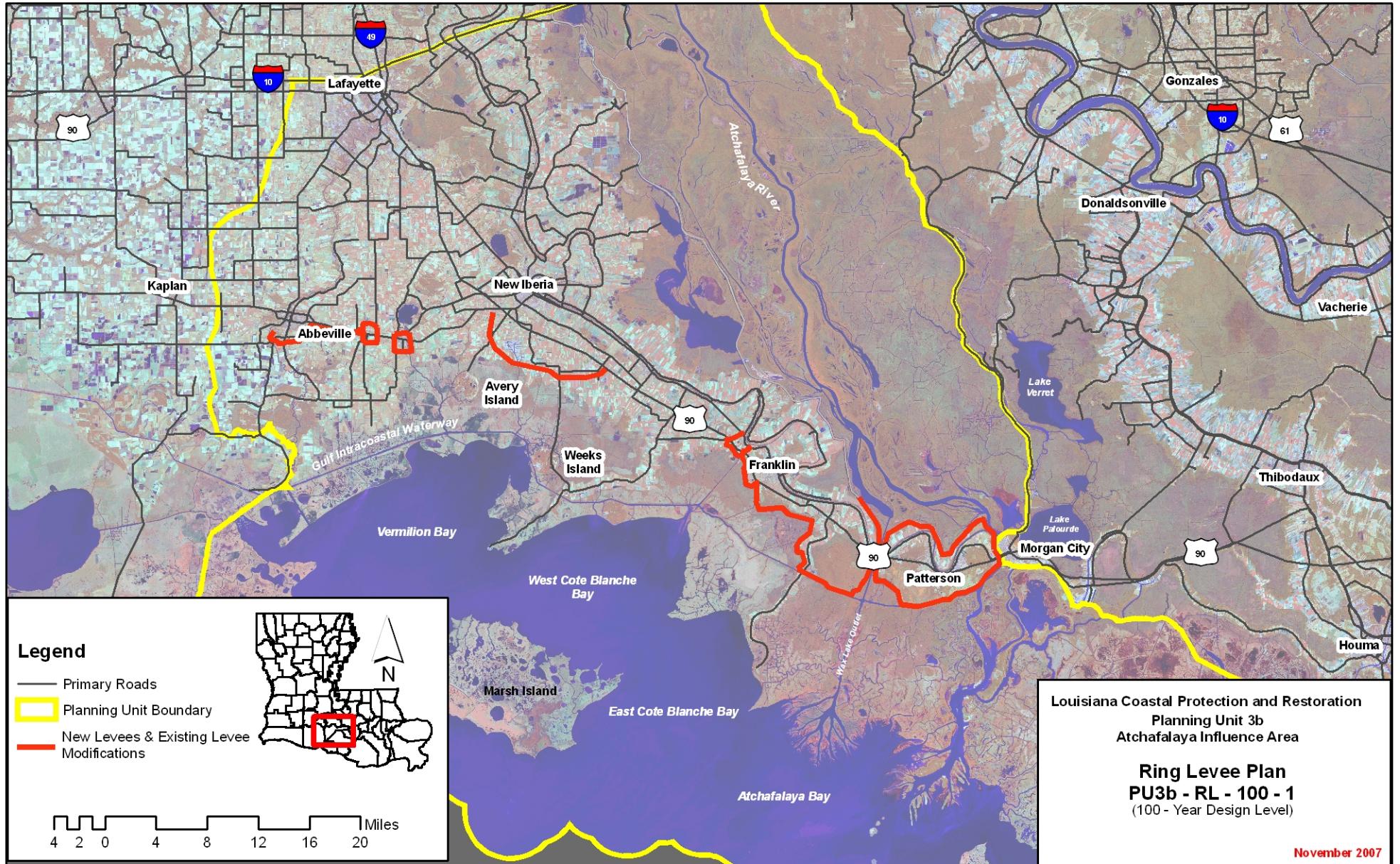
| | | | | | |
|--------------------------|--|--------------------------|---------------|-----------|---|
| Planning Unit: | 3b | Alt. No.: | PU3b-RL-100-1 | Category: | Coastal Restoration + Structural Measures |
| Alternative Description: | Sustain coastal landscape through restoration. Raise ring levee around Patterson/Berwick to 100-year design level and construct ring levees around Franklin/Baldwin, New Iberia, Erath, Delcambre, and Abbeville at the 100-year design level. | | | | |
| Coastal Component: | R1 | Nonstructural Component: | | None | |
| Structural Component: | See alternative description above. | | | | |

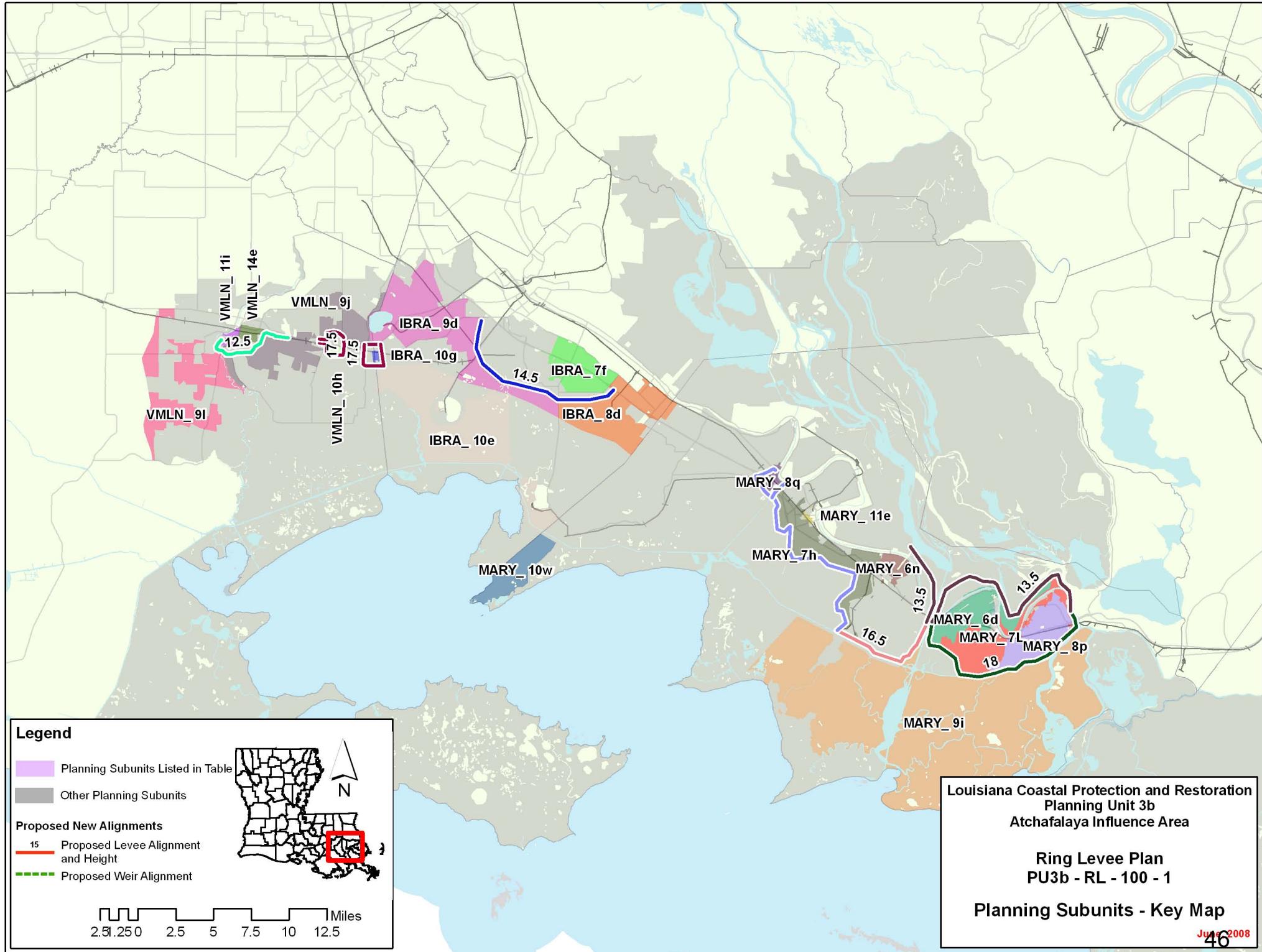
| Scenario | Future Conditions (Relative Sea Level Rise (RSLR) and Redevelopment Assumptions) | Uncertainty | Results by Scenario with Uncertainty Bands | | | | | | | | |
|----------|---|-------------|--|------------------------|----------------------------|---|------------------------|---------------------------------------|----------------------------|-------------------------------------|------------------------------------|
| | | | 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 | 834 | 2,785 | 132 | 159 | 615 | 34 | 171 | 15 | 3 |
| | | Mid | | 3,885 | 205 | 234 | 974 | 54 | 147 | 12 | 3 |
| | | Low | | 5,093 | 303 | 297 | 1,221 | 66 | 123 | 11 | 0 |
| 2 | High RSLR High Employment Dispersed Population | High | 838 | 2,959 | 146 | 101 | 664 | 39 | 171 | 13 | 3 |
| | | Mid | | 4,104 | 226 | 130 | 1,025 | 59 | 147 | 12 | 1 |
| | | Low | | 5,385 | 327 | 155 | 1,252 | 69 | 123 | 8 | 0 |
| 3 | Low RSLR Business-as-Usual Compact Population | High | 834 | 2,565 | 131 | 158 | 587 | 33 | 171 | 15 | 3 |
| | | Mid | | 3,644 | 203 | 233 | 925 | 52 | 147 | 12 | 3 |
| | | Low | | 4,811 | 296 | 295 | 1,141 | 63 | 123 | 11 | 0 |
| 4 | High RSLR Business-as-Usual Compact Population | High | 838 | 2,737 | 144 | 174 | 623 | 36 | 171 | 13 | 3 |
| | | Mid | | 3,848 | 221 | 252 | 966 | 56 | 147 | 12 | 1 |
| | | Low | | 5,088 | 316 | 307 | 1,174 | 66 | 123 | 8 | 0 |

| Other Results | | | Wetlands Created/Protected | | Scenario 1 | Scenario 2 | Scenario 3 | Scenario 4 |
|--|----------|-------|---|----------------------|-------------------------|------------|------------|------------|
| Construction Time (years) | | | After 50 yrs (% of baseline) | | 105 | 104 | 105 | 104 |
| Direct Wetland Impacts (acres) | | | After 100 yrs (% of baseline) | | 105 | 100 | 105 | 100 |
| Indirect Impacts (unitless) | | | Present Value of Life Cycle Costs (\$ Millions) | | | | | |
| Spatial Integrity (unitless) | | | Coastal Component | | 4,756 | 4,796 | 4,756 | 4,796 |
| Non-Federal Share of Present Value of Life Cycle Costs | Scenario | | (\$ Millions) | | Nonstructural Component | 0 | 0 | 0 |
| | 1 / 2 | 5,890 | 5,916 | Structural Component | | 11,579 | 11,612 | 11,579 |
| | 3 / 4 | 5,890 | 5,916 | Total Project | | 16,335 | 16,408 | 16,335 |

| 2075 Residual Risk / Damages - Low Uncertainty (\$ Millions) | | | | | | | | Planning Unit 3b Structural Plan Ring Levee Alt 100-year Design | |
|--|------------|-----------|------------|-----------|------------|-----------|------------|--|--|
| Frequency | Scenario 1 | | Scenario 2 | | Scenario 3 | | Scenario 4 | | |
| | No Action | With Proj | |
| 10-year | 1,024 | 316 | 1,523 | 453 | 1,013 | 315 | 1,543 | 456 | |
| 100-year | 4,254 | 1,664 | 5,717 | 2,321 | 4,148 | 1,564 | 5,447 | 2,055 | |
| 400-year | 8,571 | 6,800 | 9,628 | 7,302 | 7,772 | 6,294 | 8,782 | 6,694 | |
| 1,000-year | 11,203 | 9,637 | 11,827 | 9,951 | 10,886 | 9,032 | 11,680 | 9,388 | |
| 2,000-year | 12,281 | 10,525 | 12,591 | 10,723 | 12,370 | 10,107 | 12,769 | 10,340 | |

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.





Alternative: PU3b-RL-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 | 14.8 | 14.8 | 18.7 | 18.7 | 21.2 | 21.2 |
| IBRA_10g | 11.5 | 5.4 | 15.4 | 17.5 | 17.8 | 17.5 | 14.7 | 5.4 | 18.6 | 17.5 | 21.0 | 17.5 |
| IBRA_7f | 8.1 | 6.3 | 11.3 | 14.5 | 14.5 | 14.5 | 11.3 | 6.3 | 14.5 | 14.5 | 17.7 | 14.5 |
| IBRA_8d | 10.1 | 10.1 | 15.2 | 15.2 | 19.1 | 19.1 | 13.3 | 13.3 | 18.4 | 18.4 | 22.3 | 22.3 |
| IBRA_9d | 9.0 | 9.0 | 13.8 | 13.8 | 17.1 | 17.1 | 12.2 | 12.2 | 17.0 | 17.0 | 20.3 | 20.3 |
| MARY_10w | 11.7 | 11.7 | 16.0 | 16.0 | 17.9 | 17.9 | 13.9 | 14.9 | 17.6 | 19.2 | 20.0 | 21.1 |
| MARY_11e | 7.8 | 0.5 | 11.3 | 9.8 | 14.1 | 16.5 | 11.0 | 0.5 | 14.5 | 9.8 | 17.3 | 16.5 |
| MARY_6d | 7.8 | -0.4 | 9.6 | 3.5 | 12.0 | 10.8 | 11.0 | -0.4 | 12.8 | 3.5 | 15.2 | 10.8 |
| MARY_6n | 7.9 | 0.5 | 13.9 | 9.8 | 14.8 | 16.5 | 11.1 | 0.5 | 17.1 | 9.8 | 18.0 | 16.5 |
| MARY_7h | 7.8 | 0.5 | 10.9 | 9.8 | 13.2 | 16.5 | 11.0 | 0.5 | 14.1 | 9.8 | 16.4 | 16.5 |
| MARY_7l | 7.8 | -0.4 | 10.6 | 3.5 | 13.1 | 10.8 | 11.0 | -0.4 | 13.8 | 3.5 | 16.3 | 10.8 |
| MARY_8p | 8.6 | -0.4 | 12.4 | 3.5 | 14.8 | 10.8 | 11.8 | -0.4 | 15.6 | 3.5 | 18.0 | 10.8 |
| MARY_8q | 8.2 | 5.2 | 13.5 | 16.5 | 17.2 | 16.5 | 11.4 | 5.2 | 16.7 | 16.5 | 20.4 | 16.5 |
| MARY_9i | 9.9 | 9.9 | 13.4 | 13.4 | 15.4 | 15.4 | 13.1 | 13.1 | 16.6 | 16.6 | 18.6 | 18.6 |
| VMLN_10h | 11.4 | 6.5 | 15.6 | 17.5 | 18.3 | 17.5 | 14.6 | 6.5 | 18.8 | 17.5 | 21.5 | 17.5 |
| VMLN_11i | 7.8 | 9.3 | 11.3 | 12.5 | 14.8 | 12.5 | 11.0 | 9.3 | 14.5 | 12.5 | 18.0 | 12.5 |
| VMLN_14e | 7.8 | 9.3 | 9.4 | 12.5 | 14.3 | 12.5 | 11.0 | 9.3 | 12.6 | 12.5 | 17.5 | 12.5 |
| VMLN_9j | 7.8 | 7.8 | 13.1 | 13.1 | 16.3 | 16.3 | 11.0 | 11.0 | 16.3 | 16.3 | 19.5 | 19.5 |
| VMLN_9l | 10.6 | 10.6 | 13.7 | 13.7 | 15.5 | 15.5 | 13.8 | 13.8 | 16.9 | 16.9 | 18.7 | 18.7 |
| Evaluation Parameters | Confidence Level: | | | 90% | 3.2 feet | Levee Design: | | | No Friction Waves | | | |
| | Future Relative Sea Level Rise: | | | | | Levee Overtopping: | | | No Friction Waves | | | |

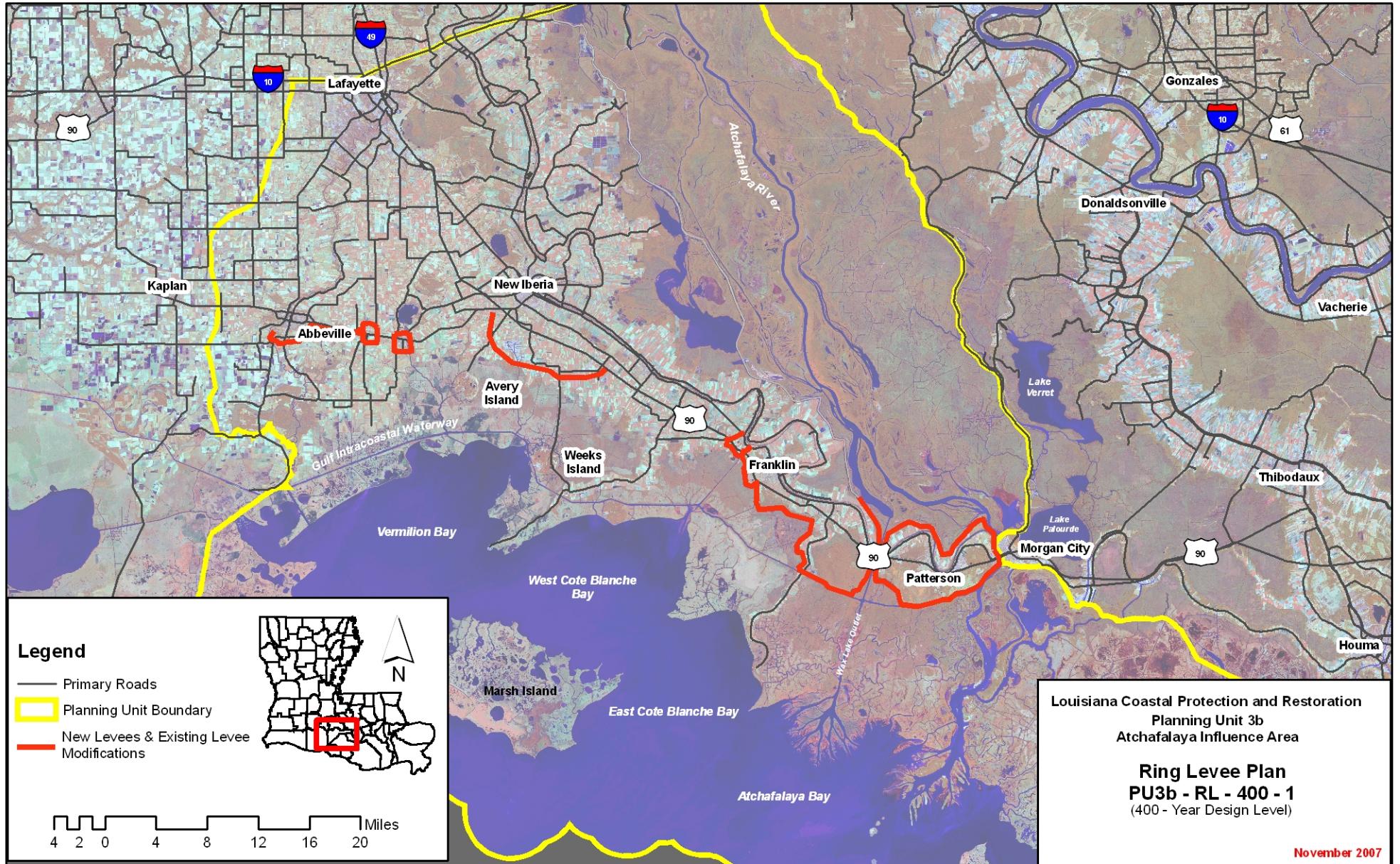
| | | | | | |
|--------------------------|--|--------------------------|---------------|-----------|---|
| Planning Unit: | 3b | Alt. No.: | PU3b-RL-400-1 | Category: | Coastal Restoration + Structural Measures |
| Alternative Description: | Sustain coastal landscape through restoration. Raise ring levee around Patterson/Berwick to 400-year design level and construct ring levees around Franklin/Baldwin, New Iberia, Erath, Delcambre, and Abbeville at the 400-year design level. | | | | |
| Coastal Component: | R1 | Nonstructural Component: | | None | |
| Structural Component: | See alternative description above. | | | | |

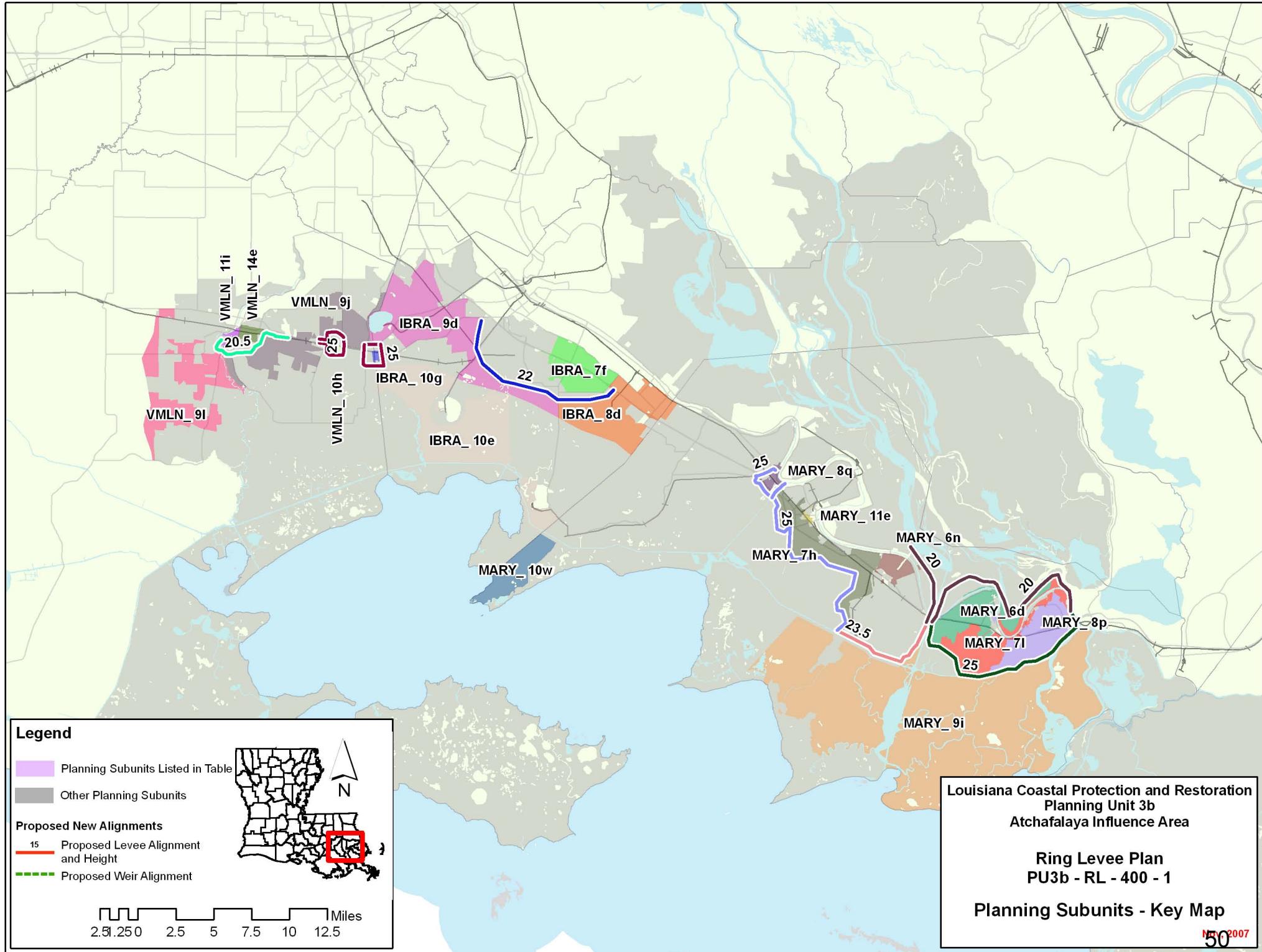
| Scenario | Future Conditions (Relative Sea Level Rise (RSLR) and Redevelopment Assumptions) | Uncertainty | Results by Scenario with Uncertainty Bands | | | | | | | | |
|----------|---|-------------|--|---------------------|----------------------------|--------------------------------|---------------------|---------------------------------|-------------------------|-------------------------------|------------------------------|
| | | | 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 | 1,162 | 2,842 | 134 | 165 | 646 | 36 | 171 | 17 | 3 |
| | | Mid | | 3,943 | 207 | 239 | 1,009 | 56 | 147 | 16 | 3 |
| | | Low | | 4,988 | 299 | 297 | 1,238 | 67 | 123 | 15 | 3 |
| 2 | High RSLR High Employment Dispersed Population | High | 1,165 | 3,027 | 150 | 100 | 698 | 41 | 171 | 15 | 3 |
| | | Mid | | 4,174 | 229 | 121 | 1,064 | 61 | 147 | 15 | 3 |
| | | Low | | 5,289 | 324 | 139 | 1,272 | 70 | 123 | 13 | 2 |
| 3 | Low RSLR Business-as-Usual Compact Population | High | 1,162 | 2,616 | 134 | 164 | 618 | 35 | 171 | 17 | 3 |
| | | Mid | | 3,695 | 204 | 237 | 960 | 54 | 147 | 16 | 3 |
| | | Low | | 4,698 | 290 | 294 | 1,163 | 64 | 123 | 15 | 3 |
| 4 | High RSLR Business-as-Usual Compact Population | High | 1,165 | 2,799 | 148 | 182 | 658 | 39 | 171 | 15 | 3 |
| | | Mid | | 3,911 | 223 | 259 | 1,006 | 58 | 147 | 15 | 3 |
| | | Low | | 4,986 | 311 | 308 | 1,200 | 67 | 123 | 13 | 2 |

| Other Results | | | Wetlands Created/Protected | | Scenario 1 | Scenario 2 | Scenario 3 | Scenario 4 |
|--|----------|---------------|---|--|------------|------------|------------|------------|
| Construction Time (years) | | | After 50 yrs (% of baseline) | | 105 | 104 | 105 | 104 |
| Direct Wetland Impacts (acres) | | | After 100 yrs (% of baseline) | | 105 | 100 | 105 | 100 |
| Indirect Impacts (unitless) | | | Present Value of Life Cycle Costs (\$ Millions) | | | | | |
| Spatial Integrity (unitless) | | | Coastal Component | | 4,756 | 4,796 | 4,756 | 4,796 |
| Non-Federal Share of Present Value of Life Cycle Costs | Scenario | (\$ Millions) | Nonstructural Component | | 0 | 0 | 0 | 0 |
| | 1 / 2 | 8,142 | Structural Component | | 17,996 | 18,024 | 17,996 | 18,024 |
| | 3 / 4 | 8,142 | Total Project | | 22,752 | 22,820 | 22,752 | 22,820 |

| 2075 Residual Risk / Damages - Low Uncertainty (\$ Millions) | | | | | | | | Planning Unit 3b Structural Plan Ring Levee Alt 400-year Design | |
|--|------------|-----------|------------|-----------|------------|-----------|------------|--|--|
| Frequency | Scenario 1 | | Scenario 2 | | Scenario 3 | | Scenario 4 | | |
| | No Action | With Proj | |
| 10-year | 1,024 | 316 | 1,523 | 453 | 1,013 | 315 | 1,543 | 456 | |
| 100-year | 4,254 | 1,628 | 5,717 | 2,284 | 4,148 | 1,526 | 5,447 | 2,017 | |
| 400-year | 8,571 | 3,993 | 9,628 | 4,495 | 7,772 | 3,117 | 8,782 | 3,516 | |
| 1,000-year | 11,203 | 6,852 | 11,827 | 7,166 | 10,886 | 5,917 | 11,680 | 6,273 | |
| 2,000-year | 12,281 | 9,058 | 12,591 | 9,256 | 12,370 | 8,573 | 12,769 | 8,807 | |

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.





Alternative: PU3b-RL-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 | 14.8 | 14.8 | 18.7 | 18.7 | 21.2 | 21.2 |
| IBRA_10g | 11.5 | 3.7 | 15.4 | 5.5 | 17.8 | 10.5 | 14.7 | 3.7 | 18.6 | 5.5 | 21.0 | 10.5 |
| IBRA_7f | 8.1 | 6.0 | 11.3 | 6.2 | 14.5 | 8.4 | 11.3 | 6.0 | 14.5 | 6.2 | 17.7 | 8.4 |
| IBRA_8d | 10.1 | 10.1 | 15.2 | 15.2 | 19.1 | 19.1 | 13.3 | 13.3 | 18.4 | 18.4 | 22.3 | 22.3 |
| IBRA_9d | 9.0 | 9.0 | 13.8 | 13.8 | 17.1 | 17.1 | 12.2 | 12.2 | 17.0 | 17.0 | 20.3 | 20.3 |
| MARY_10w | 11.7 | 11.7 | 16.0 | 16.0 | 17.9 | 17.9 | 13.9 | 14.9 | 17.6 | 19.2 | 20.0 | 21.1 |
| MARY_11e | 7.8 | 0.2 | 11.3 | 0.4 | 14.1 | 1.5 | 11.0 | 0.2 | 14.5 | 0.4 | 17.3 | 1.5 |
| MARY_6d | 7.8 | -0.6 | 9.6 | -0.5 | 12.0 | 0.1 | 11.0 | -0.6 | 12.8 | -0.5 | 15.2 | 0.1 |
| MARY_6n | 7.9 | 0.2 | 13.9 | 0.4 | 14.8 | 1.5 | 11.1 | 0.2 | 17.1 | 0.4 | 18.0 | 1.5 |
| MARY_7h | 7.8 | 0.2 | 10.9 | 0.4 | 13.2 | 1.5 | 11.0 | 0.2 | 14.1 | 0.4 | 16.4 | 1.5 |
| MARY_7l | 7.8 | -0.6 | 10.6 | -0.5 | 13.1 | 0.1 | 11.0 | -0.6 | 13.8 | -0.5 | 16.3 | 0.1 |
| MARY_8p | 8.6 | -0.6 | 12.4 | -0.5 | 14.8 | 0.1 | 11.8 | -0.6 | 15.6 | -0.5 | 18.0 | 0.1 |
| MARY_8q | 8.2 | 3.9 | 13.5 | 4.7 | 17.2 | 9.6 | 11.4 | 3.9 | 16.7 | 4.7 | 20.4 | 9.6 |
| MARY_9i | 9.9 | 9.9 | 13.4 | 13.4 | 15.4 | 15.4 | 13.1 | 13.1 | 16.6 | 16.6 | 18.6 | 18.6 |
| VMLN_10h | 11.4 | 5.6 | 15.6 | 6.5 | 18.3 | 10.2 | 14.6 | 5.6 | 18.8 | 6.5 | 21.5 | 10.2 |
| VMLN_11i | 7.8 | 8.4 | 11.3 | 9.3 | 14.8 | 16.8 | 11.0 | 8.4 | 14.5 | 9.3 | 18.0 | 16.8 |
| VMLN_14e | 7.8 | 8.4 | 9.4 | 9.3 | 14.3 | 16.8 | 11.0 | 8.4 | 12.6 | 9.3 | 17.5 | 16.8 |
| VMLN_9j | 7.8 | 7.8 | 13.1 | 13.1 | 16.3 | 16.3 | 11.0 | 11.0 | 16.3 | 16.3 | 19.5 | 19.5 |
| VMLN_9l | 10.6 | 10.6 | 13.7 | 13.7 | 15.5 | 15.5 | 13.8 | 13.8 | 16.9 | 16.9 | 18.7 | 18.7 |
| Evaluation Parameters | Confidence Level: | | | 90% | 3.2 feet | Levee Design: | | | No Friction Waves | | | |
| | Future Relative Sea Level Rise: | | | | | Levee Overtopping: | | | No Friction Waves | | | |

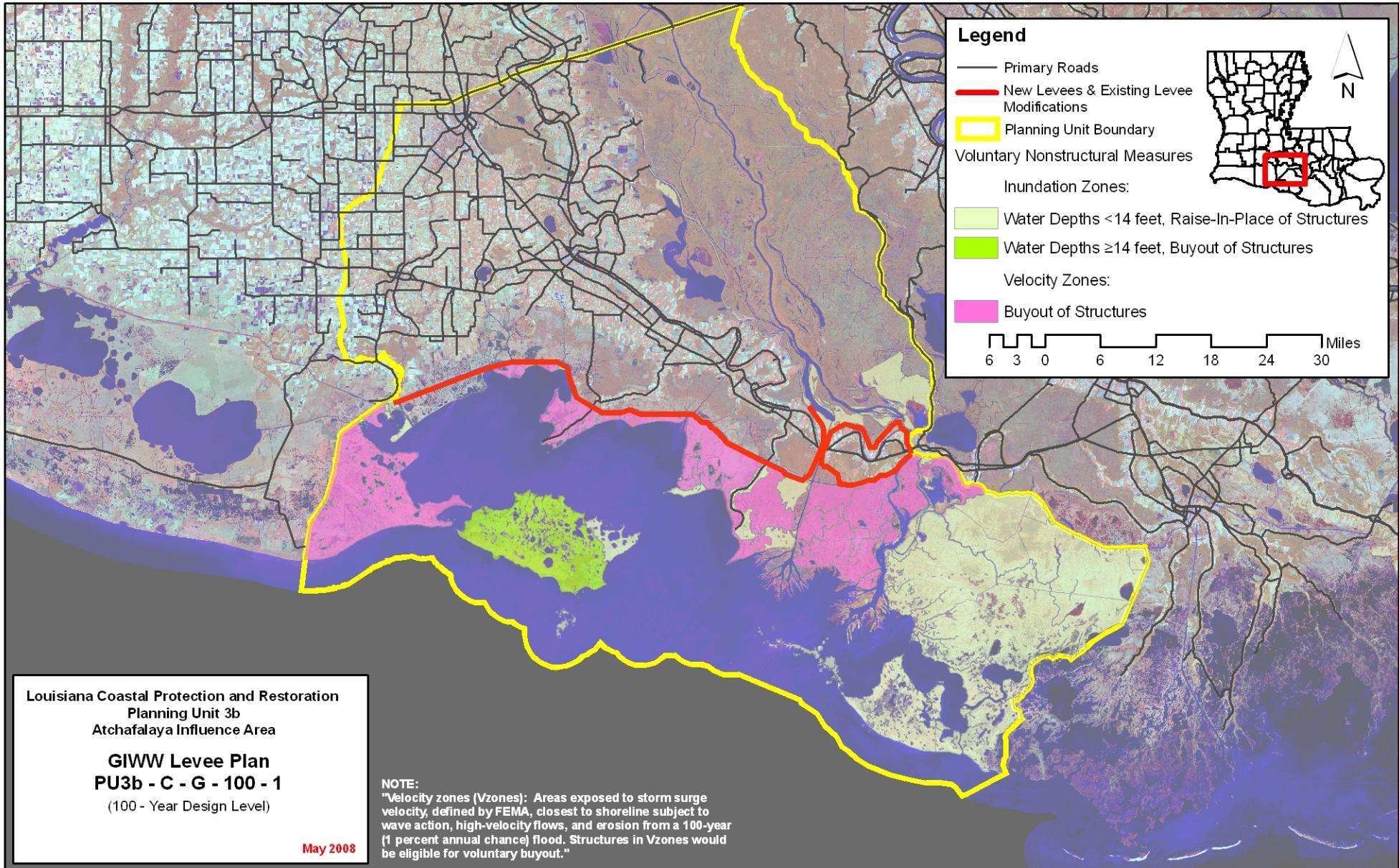
| | | | | | |
|--------------------------|---|--------------------------|----------------|-------------------------------|--|
| Planning Unit: | 3b | Alt. No.: | PU3b-C-G-100-1 | Category: | Comprehensive (Coastal+Structural+Nonstructural) |
| Alternative Description: | Comprehensive plan--Same coastal and structural measures as Alternative PU3b-G-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 PU3b-G-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 | 1,032 | 1,624 | 78 | 100 | 432 | 23 | 312 | 20 | 5 |
| | | Mid | | 2,429 | 129 | 163 | 744 | 39 | 288 | 19 | 5 |
| | | Low | | 3,191 | 191 | 208 | 928 | 48 | 264 | 18 | 5 |
| 2 | High RSLR High Employment Dispersed Population | High | 1,035 | 1,697 | 84 | 36 | 461 | 25 | 312 | 20 | 5 |
| | | Mid | | 2,515 | 136 | 48 | 766 | 41 | 288 | 18 | 5 |
| | | Low | | 3,288 | 201 | 61 | 942 | 49 | 264 | 18 | 4 |
| 3 | Low RSLR Business-as-Usual Compact Population | High | 1,033 | 1,526 | 78 | 100 | 415 | 22 | 312 | 20 | 5 |
| | | Mid | | 2,322 | 128 | 162 | 713 | 39 | 288 | 19 | 5 |
| | | Low | | 3,066 | 189 | 209 | 887 | 47 | 264 | 18 | 5 |
| 4 | High RSLR Business-as-Usual Compact Population | High | 1,036 | 1,597 | 83 | 113 | 444 | 25 | 312 | 20 | 5 |
| | | Mid | | 2,404 | 135 | 174 | 736 | 41 | 288 | 18 | 5 |
| | | Low | | 3,162 | 198 | 216 | 904 | 48 | 264 | 18 | 4 |

| Other Results | | | Wetlands Created/Protected | | Scenario 1 | Scenario 2 | Scenario 3 | Scenario 4 |
|--|----------|---------------|---|--|------------|------------|------------|------------|
| Construction Time (years) | | | After 50 yrs (% of baseline) | | 105 | 104 | 105 | 104 |
| Direct Wetland Impacts (acres) | | | After 100 yrs (% of baseline) | | 105 | 100 | 105 | 100 |
| Indirect Impacts (unitless) | | | Present Value of Life Cycle Costs (\$ Millions) | | | | | |
| Spatial Integrity (unitless) | | | Coastal Component | | 4,756 | 4,796 | 4,756 | 4,796 |
| Non-Federal Share of Present Value of Life Cycle Costs | Scenario | (\$ Millions) | Nonstructural Component | | 244 | 244 | 255 | 255 |
| | 1 / 2 | 7,132 | Structural Component | | 15,214 | 15,238 | 15,214 | 15,238 |
| | 3 / 4 | 7,136 | Total Project | | 20,214 | 20,278 | 20,225 | 20,290 |

| 2075 Residual Risk / Damages - Low Uncertainty (\$ Millions) | | | | | | | | Planning Unit 3b Comprehensive Plan GIWW Alt 100-year Design | |
|--|------------|-----------|------------|-----------|------------|-----------|------------|---|--|
| Frequency | Scenario 1 | | Scenario 2 | | Scenario 3 | | Scenario 4 | | |
| | No Action | With Proj | |
| 10-year | 1,024 | 68 | 1,523 | 83 | 1,013 | 68 | 1,543 | 84 | |
| 100-year | 4,254 | 147 | 5,717 | 204 | 4,148 | 146 | 5,447 | 200 | |
| 400-year | 8,571 | 426 | 9,628 | 478 | 7,772 | 435 | 8,782 | 496 | |
| 1,000-year | 11,203 | 2,733 | 11,827 | 2,754 | 10,886 | 2,815 | 11,680 | 2,839 | |
| 2,000-year | 12,281 | 6,240 | 12,591 | 6,286 | 12,370 | 6,192 | 12,769 | 6,211 | |

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.



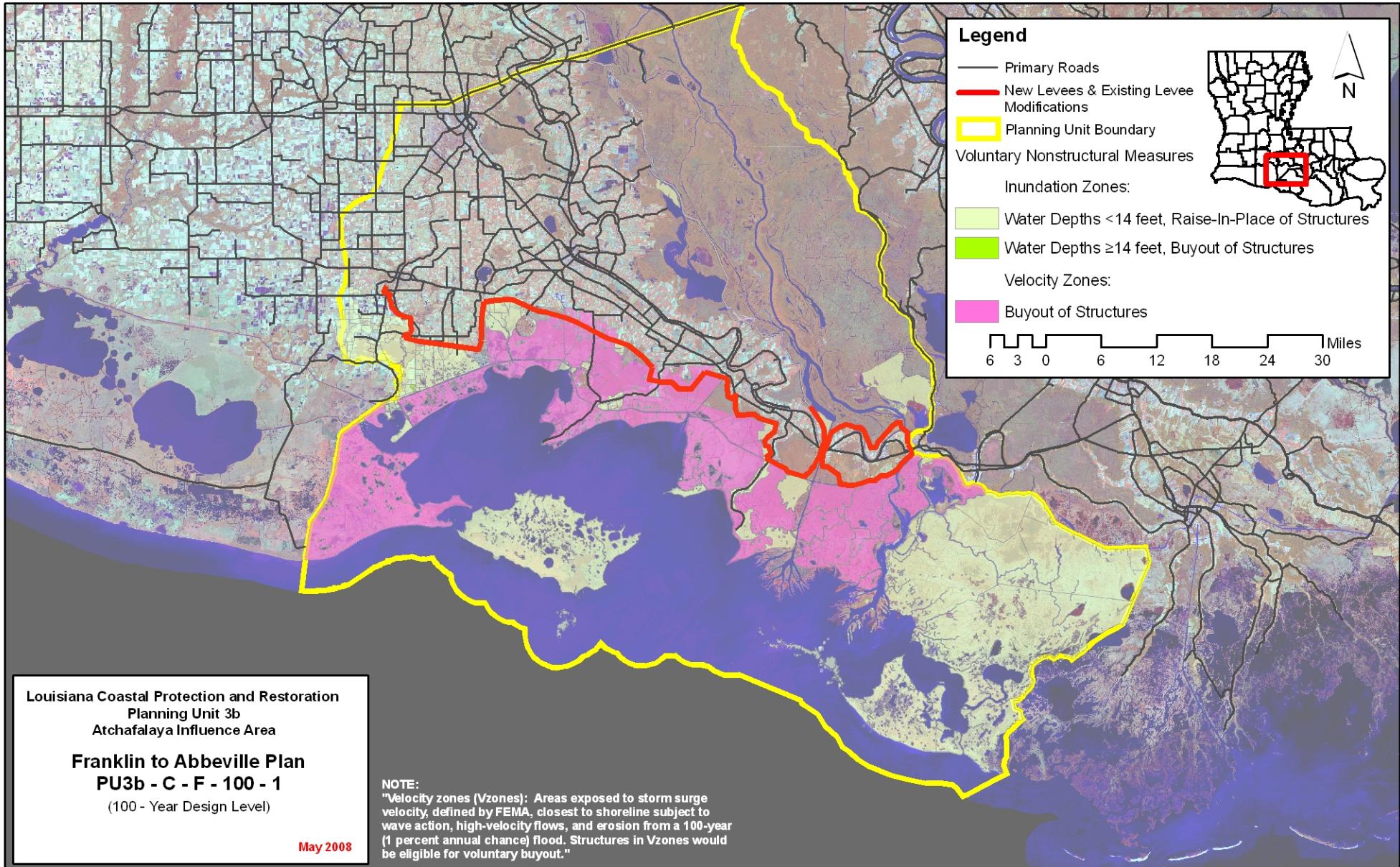
| | | | | | |
|--------------------------|---|--------------------------|----------------|-------------------------------|--|
| Planning Unit: | 3b | Alt. No.: | PU3b-C-F-100-1 | Category: | Comprehensive (Coastal+Structural+Nonstructural) |
| Alternative Description: | Comprehensive plan--Same coastal and structural measures as Alternative PU3b-F-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 PU3b-F-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 | 972 | 1,904 | 80 | 101 | 432 | 23 | 202 | 16 | 3 |
| | | Mid | | 2,825 | 137 | 171 | 773 | 42 | 178 | 15 | 3 |
| | | Low | | 3,839 | 229 | 238 | 1,046 | 56 | 154 | 14 | 1 |
| 2 | High RSLR High Employment Dispersed Population | High | 976 | 2,002 | 87 | 38 | 465 | 26 | 202 | 16 | 3 |
| | | Mid | | 2,934 | 148 | 60 | 808 | 45 | 178 | 15 | 2 |
| | | Low | | 3,987 | 242 | 92 | 1,060 | 57 | 154 | 14 | 0 |
| 3 | Low RSLR Business-as-Usual Compact Population | High | 973 | 1,775 | 80 | 100 | 414 | 23 | 202 | 16 | 3 |
| | | Mid | | 2,672 | 135 | 170 | 739 | 41 | 178 | 15 | 3 |
| | | Low | | 3,666 | 223 | 234 | 970 | 52 | 154 | 14 | 1 |
| 4 | High RSLR Business-as-Usual Compact Population | High | 977 | 1,866 | 87 | 115 | 447 | 25 | 202 | 16 | 3 |
| | | Mid | | 2,779 | 145 | 182 | 763 | 43 | 178 | 15 | 2 |
| | | Low | | 3,801 | 233 | 243 | 991 | 54 | 154 | 14 | 0 |

| Other Results | | | Wetlands Created/Protected | | Scenario 1 | Scenario 2 | Scenario 3 | Scenario 4 |
|--|----------|---------------|---|--|------------|------------|------------|------------|
| Construction Time (years) | | | After 50 yrs (% of baseline) | | 105 | 104 | 105 | 104 |
| Direct Wetland Impacts (acres) | | | After 100 yrs (% of baseline) | | 105 | 100 | 105 | 100 |
| Indirect Impacts (unitless) | | | Present Value of Life Cycle Costs (\$ Millions) | | | | | |
| Spatial Integrity (unitless) | | | Coastal Component | | 4,756 | 4,796 | 4,756 | 4,796 |
| Non-Federal Share of Present Value of Life Cycle Costs | Scenario | (\$ Millions) | Nonstructural Component | | 365 | 365 | 379 | 379 |
| | 1 / 2 | 6,749 | Structural Component | | 13,918 | 13,955 | 13,918 | 13,955 |
| | 3 / 4 | 6,754 | Total Project | | 19,039 | 19,116 | 19,053 | 19,130 |

| 2075 Residual Risk / Damages - Low Uncertainty (\$ Millions) | | | | | | | | Planning Unit 3b Comprehensive Plan Franklin to Abbeville Alt 100-year Design | |
|--|------------|-----------|------------|-----------|------------|-----------|------------|---|--|
| Frequency | Scenario 1 | | Scenario 2 | | Scenario 3 | | Scenario 4 | | |
| | No Action | With Proj | |
| 10-year | 1,024 | 83 | 1,523 | 102 | 1,013 | 82 | 1,543 | 102 | |
| 100-year | 4,254 | 418 | 5,717 | 631 | 4,148 | 351 | 5,447 | 508 | |
| 400-year | 8,571 | 5,300 | 9,628 | 5,482 | 7,772 | 4,923 | 8,782 | 5,092 | |
| 1,000-year | 11,203 | 10,720 | 11,827 | 10,826 | 10,886 | 10,477 | 11,680 | 10,643 | |
| 2,000-year | 12,281 | 11,245 | 12,591 | 11,328 | 12,370 | 11,154 | 12,769 | 11,236 | |

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.



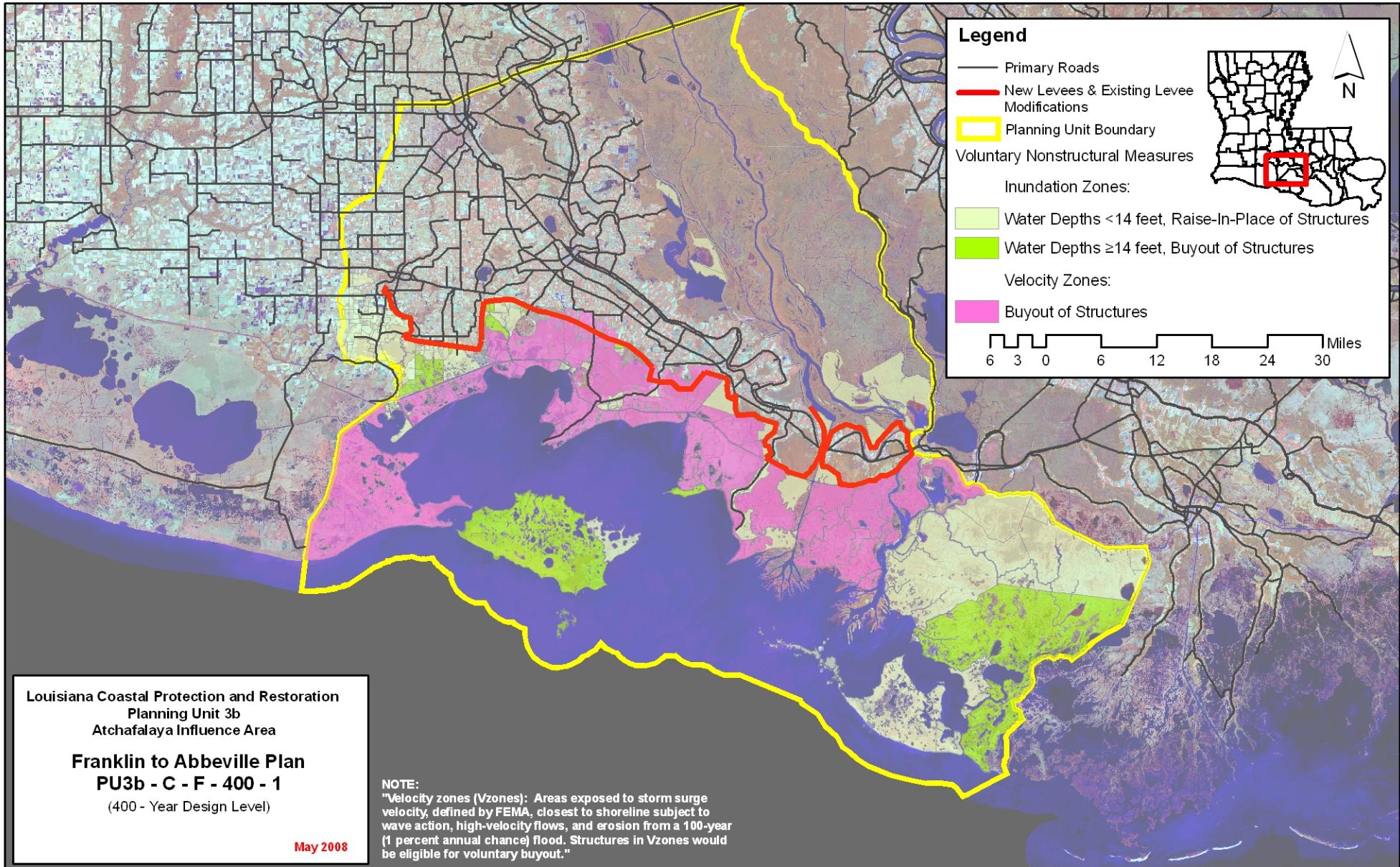
| | | | | | |
|--------------------------|---|--------------------------|----------------|-------------------------------|--|
| Planning Unit: | 3b | Alt. No.: | PU3b-C-F-400-1 | Category: | Comprehensive (Coastal+Structural+Nonstructural) |
| Alternative Description: | Comprehensive plan--Same coastal and structural measures as Alternative PU3b-F-400-1 but with complementary nonstructural measures to reduce residual risk. | | | | |
| Coastal Component: | R1 | Nonstructural Component: | | 400-yr complementary measures | |
| Structural Component: | Same as Alternative PU3b-F-400-1 | | | | |

| 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 | 1,455 | 2,092 | 85 | 115 | 482 | 26 | 202 | 19 | 5 |
| | | Mid | | 3,014 | 141 | 181 | 821 | 44 | 178 | 19 | 5 |
| | | Low | | 3,801 | 209 | 229 | 1,017 | 54 | 154 | 18 | 5 |
| 2 | High RSLR High Employment Dispersed Population | High | 1,467 | 2,207 | 93 | 41 | 511 | 29 | 202 | 19 | 5 |
| | | Mid | | 3,144 | 152 | 58 | 862 | 48 | 178 | 19 | 5 |
| | | Low | | 3,970 | 222 | 67 | 1,036 | 55 | 154 | 18 | 4 |
| 3 | Low RSLR Business-as-Usual Compact Population | High | 1,463 | 1,953 | 84 | 114 | 464 | 26 | 202 | 19 | 5 |
| | | Mid | | 2,857 | 139 | 180 | 785 | 43 | 178 | 19 | 5 |
| | | Low | | 3,624 | 204 | 226 | 960 | 51 | 154 | 18 | 5 |
| 4 | High RSLR Business-as-Usual Compact Population | High | 1,475 | 2,061 | 92 | 126 | 490 | 28 | 202 | 19 | 5 |
| | | Mid | | 2,983 | 149 | 195 | 816 | 46 | 178 | 19 | 5 |
| | | Low | | 3,781 | 215 | 238 | 985 | 53 | 154 | 18 | 4 |

| Other Results | | | Wetlands Created/Protected | | Scenario 1 | Scenario 2 | Scenario 3 | Scenario 4 |
|--|----------|---------------|---|--|------------|------------|------------|------------|
| Construction Time (years) | | | After 50 yrs (% of baseline) | | 105 | 104 | 105 | 104 |
| Direct Wetland Impacts (acres) | | | After 100 yrs (% of baseline) | | 105 | 100 | 105 | 100 |
| Indirect Impacts (unitless) | | | Present Value of Life Cycle Costs (\$ Millions) | | | | | |
| Spatial Integrity (unitless) | | | Coastal Component | | 4,756 | 4,796 | 4,756 | 4,796 |
| Non-Federal Share of Present Value of Life Cycle Costs | Scenario | (\$ Millions) | Nonstructural Component | | 293 | 293 | 452 | 452 |
| | 1 / 2 | 10,061 | Structural Component | | 23,445 | 23,639 | 23,445 | 23,639 |
| | 3 / 4 | 10,117 | Total Project | | 28,494 | 28,729 | 28,652 | 28,888 |

| 2075 Residual Risk / Damages - Low Uncertainty (\$ Millions) | | | | | | | | Planning Unit 3b Comprehensive Plan Franklin to Abbeville Alt 400-year Design | |
|--|------------|-----------|------------|-----------|------------|-----------|------------|---|--|
| Frequency | Scenario 1 | | Scenario 2 | | Scenario 3 | | Scenario 4 | | |
| | No Action | With Proj | |
| 10-year | 1,024 | 70 | 1,523 | 88 | 1,013 | 70 | 1,543 | 88 | |
| 100-year | 4,254 | 244 | 5,717 | 376 | 4,148 | 185 | 5,447 | 277 | |
| 400-year | 8,571 | 763 | 9,628 | 1,051 | 7,772 | 540 | 8,782 | 800 | |
| 1,000-year | 11,203 | 1,369 | 11,827 | 1,520 | 10,886 | 1,155 | 11,680 | 1,365 | |
| 2,000-year | 12,281 | 1,921 | 12,591 | 2,017 | 12,370 | 1,790 | 12,769 | 1,884 | |

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.



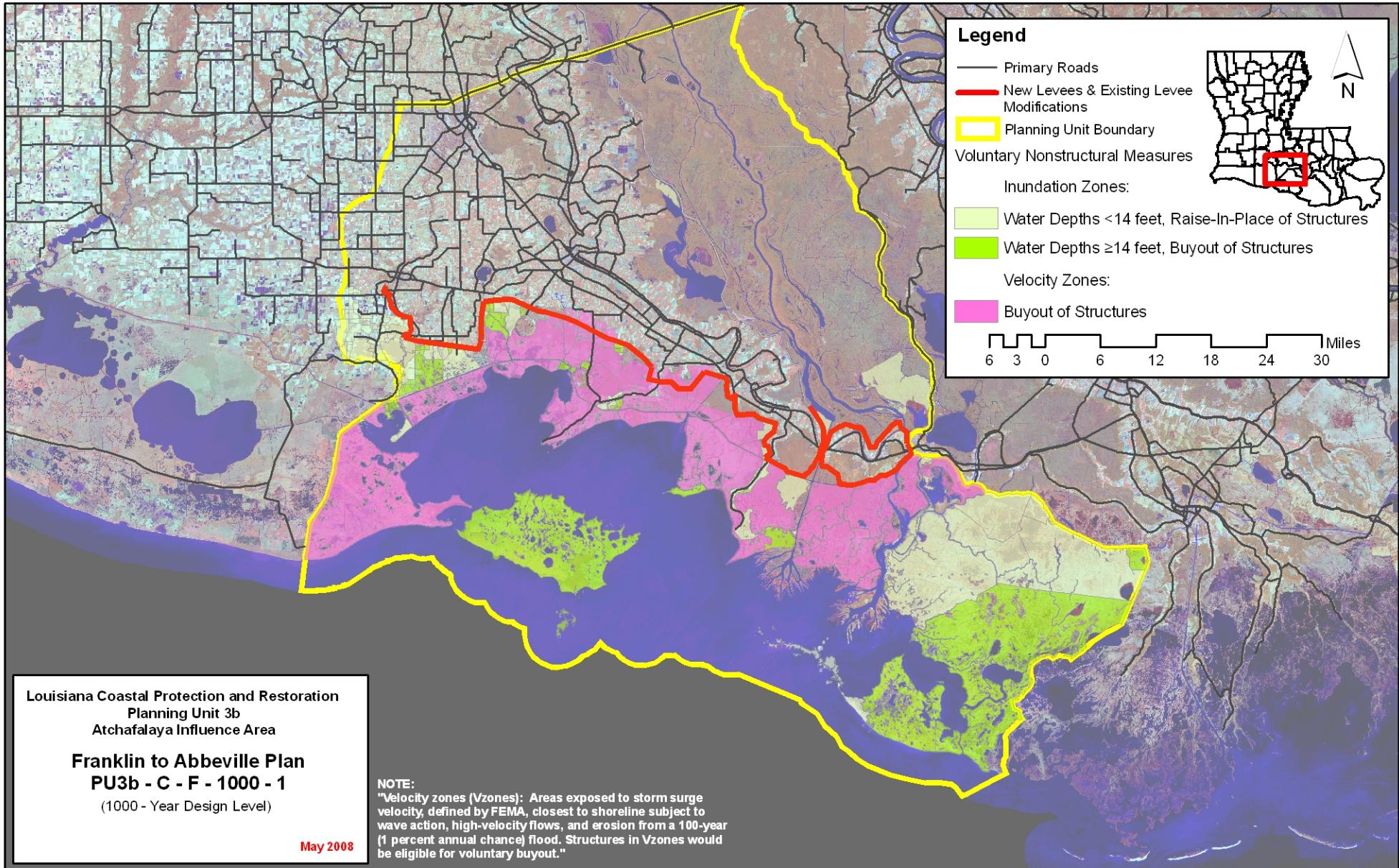
| | | | | | |
|--------------------------|--|--------------------------|-----------------|--------------------------------|--|
| Planning Unit: | 3b | Alt. No.: | PU3b-C-F-1000-1 | Category: | Comprehensive (Coastal+Structural+Nonstructural) |
| Alternative Description: | Comprehensive plan--Same coastal and structural measures as Alternative PU3b-F-1000-1 but with complementary nonstructural measures to reduce residual risk. | | | | |
| Coastal Component: | R1 | Nonstructural Component: | | 1000-yr complementary measures | |
| Structural Component: | Same as Alternative PU3b-F-1000-1 | | | | |

| 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 | 1,853 | 2,269 | 91 | 128 | 530 | 29 | 202 | 19 | 5 |
| | | Mid | | 3,280 | 152 | 202 | 900 | 49 | 178 | 19 | 5 |
| | | Low | | 4,128 | 224 | 251 | 1,104 | 58 | 154 | 18 | 5 |
| 2 | High RSLR High Employment Dispersed Population | High | 1,856 | 2,403 | 100 | 50 | 566 | 32 | 202 | 19 | 5 |
| | | Mid | | 3,431 | 164 | 65 | 937 | 52 | 178 | 19 | 5 |
| | | Low | | 4,320 | 239 | 78 | 1,137 | 61 | 154 | 18 | 4 |
| 3 | Low RSLR Business-as-Usual Compact Population | High | 1,855 | 2,119 | 91 | 129 | 512 | 29 | 202 | 19 | 5 |
| | | Mid | | 3,112 | 151 | 202 | 866 | 48 | 178 | 19 | 5 |
| | | Low | | 3,939 | 220 | 252 | 1,057 | 57 | 154 | 18 | 5 |
| 4 | High RSLR Business-as-Usual Compact Population | High | 1,857 | 2,246 | 99 | 144 | 545 | 32 | 202 | 19 | 5 |
| | | Mid | | 3,258 | 162 | 219 | 903 | 51 | 178 | 19 | 5 |
| | | Low | | 4,119 | 233 | 267 | 1,088 | 60 | 154 | 18 | 4 |

| Other Results | | | Wetlands Created/Protected | | Scenario 1 | Scenario 2 | Scenario 3 | Scenario 4 |
|--|----------|---------------|---|--|------------|------------|------------|------------|
| Construction Time (years) | | | After 50 yrs (% of baseline) | | 105 | 104 | 105 | 104 |
| Direct Wetland Impacts (acres) | | | After 100 yrs (% of baseline) | | 105 | 100 | 105 | 100 |
| Indirect Impacts (unitless) | | | Present Value of Life Cycle Costs (\$ Millions) | | | | | |
| Spatial Integrity (unitless) | | | Coastal Component | | 4,756 | 4,796 | 4,756 | 4,796 |
| Non-Federal Share of Present Value of Life Cycle Costs | Scenario | (\$ Millions) | Nonstructural Component | | 459 | 459 | 492 | 492 |
| | 1 / 2 | 12,779 | Structural Component | | 31,074 | 31,087 | 31,074 | 31,087 |
| | 3 / 4 | 12,790 | Total Project | | 36,288 | 36,343 | 36,321 | 36,375 |

| 2075 Residual Risk / Damages - Low Uncertainty (\$ Millions) | | | | | | | | Planning Unit 3b Comprehensive Plan Franklin to Abbeville Alt 1000-year Design | |
|--|------------|-----------|------------|-----------|------------|-----------|------------|--|--|
| Frequency | Scenario 1 | | Scenario 2 | | Scenario 3 | | Scenario 4 | | |
| | No Action | With Proj | |
| 10-year | 1,024 | 65 | 1,523 | 81 | 1,013 | 65 | 1,543 | 82 | |
| 100-year | 4,254 | 153 | 5,717 | 226 | 4,148 | 144 | 5,447 | 196 | |
| 400-year | 8,571 | 556 | 9,628 | 811 | 7,772 | 402 | 8,782 | 616 | |
| 1,000-year | 11,203 | 1,125 | 11,827 | 1,365 | 10,886 | 956 | 11,680 | 1,228 | |
| 2,000-year | 12,281 | 1,507 | 12,591 | 1,636 | 12,370 | 1,368 | 12,769 | 1,491 | |

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.



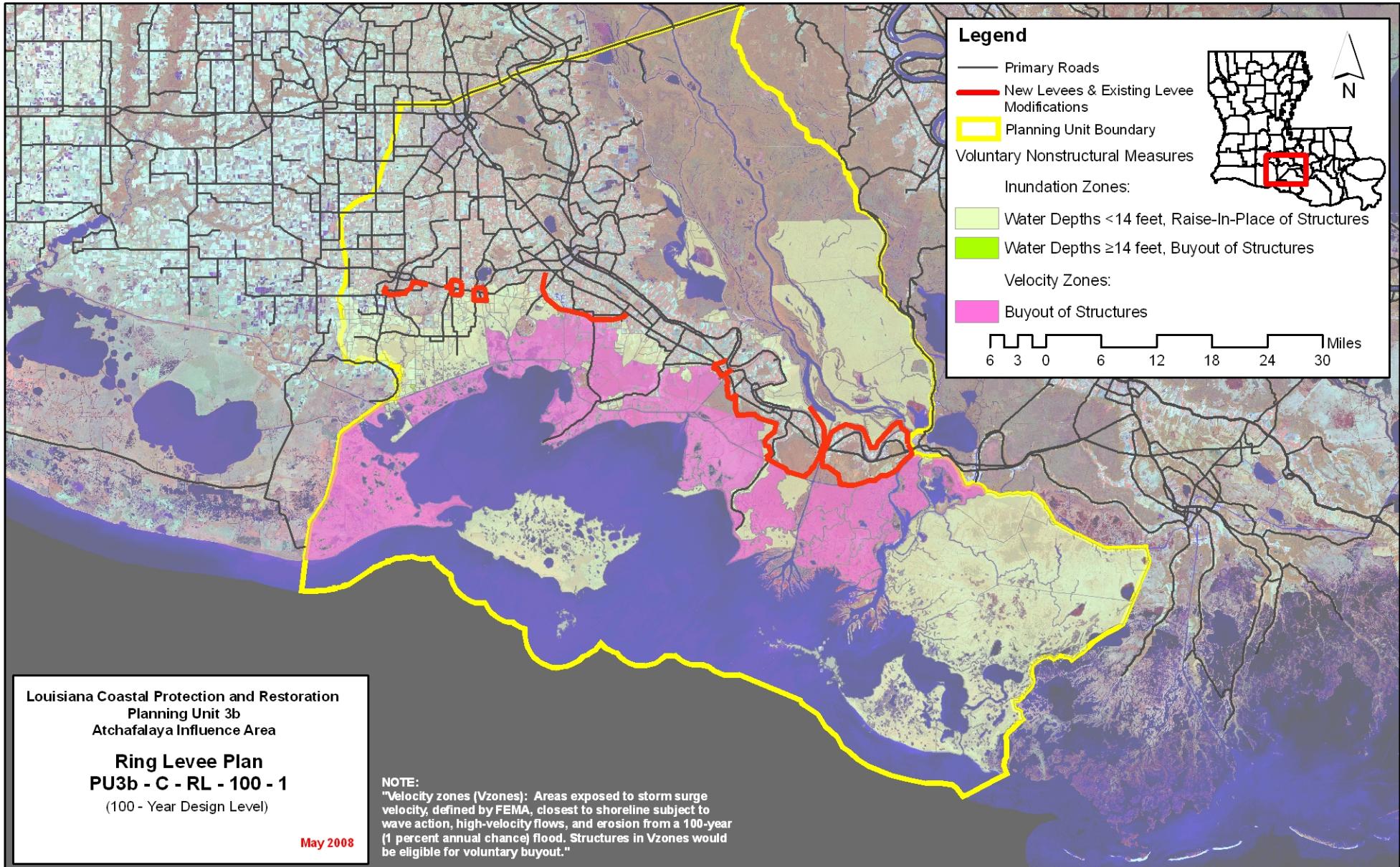
| | | | | | |
|--------------------------|--|--------------------------|-----------------|-------------------------------|--|
| Planning Unit: | 3b | Alt. No.: | PU3b-C-RL-100-1 | Category: | Comprehensive (Coastal+Structural+Nonstructural) |
| Alternative Description: | Comprehensive plan--Same coastal and structural measures as Alternative PU3b-RL-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 PU3b-RL-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 | 878 | 2,711 | 91 | 126 | 472 | 26 | 171 | 15 | 3 |
| | | Mid | | 3,807 | 154 | 204 | 841 | 47 | 147 | 12 | 3 |
| | | Low | | 4,988 | 244 | 267 | 1,085 | 60 | 123 | 11 | 0 |
| 2 | High RSLR High Employment Dispersed Population | High | 882 | 2,882 | 103 | 73 | 535 | 32 | 171 | 13 | 3 |
| | | Mid | | 4,026 | 174 | 100 | 889 | 52 | 147 | 12 | 1 |
| | | Low | | 5,280 | 269 | 124 | 1,110 | 62 | 123 | 8 | 0 |
| 3 | Low RSLR Business-as-Usual Compact Population | High | 880 | 2,487 | 90 | 127 | 455 | 26 | 171 | 15 | 3 |
| | | Mid | | 3,563 | 151 | 205 | 802 | 46 | 147 | 12 | 3 |
| | | Low | | 4,704 | 236 | 266 | 1,014 | 57 | 123 | 11 | 0 |
| 4 | High RSLR Business-as-Usual Compact Population | High | 884 | 2,657 | 101 | 147 | 504 | 30 | 171 | 13 | 3 |
| | | Mid | | 3,767 | 168 | 224 | 841 | 49 | 147 | 12 | 1 |
| | | Low | | 4,981 | 257 | 278 | 1,044 | 59 | 123 | 8 | 0 |

| Other Results | | | Wetlands Created/Protected | | Scenario 1 | Scenario 2 | Scenario 3 | Scenario 4 |
|--|----------|---------------|---|--|------------|------------|------------|------------|
| Construction Time (years) | | | After 50 yrs (% of baseline) | | 105 | 104 | 105 | 104 |
| Direct Wetland Impacts (acres) | | | After 100 yrs (% of baseline) | | 105 | 100 | 105 | 100 |
| Indirect Impacts (unitless) | | | Present Value of Life Cycle Costs (\$ Millions) | | | | | |
| Spatial Integrity (unitless) | | | Coastal Component | | 4,756 | 4,796 | 4,756 | 4,796 |
| Non-Federal Share of Present Value of Life Cycle Costs | Scenario | (\$ Millions) | Nonstructural Component | | 862 | 862 | 907 | 907 |
| | 1 / 2 | 6,192 | Structural Component | | 11,579 | 11,612 | 11,579 | 11,612 |
| | 3 / 4 | 6,208 | Total Project | | 17,197 | 17,271 | 17,242 | 17,315 |

| 2075 Residual Risk / Damages - Low Uncertainty (\$ Millions) | | | | | | | | Planning Unit 3b Comprehensive Plan Ring Levee Alt 100-year Design | |
|--|------------|-----------|------------|-----------|------------|-----------|------------|---|--|
| Frequency | Scenario 1 | | Scenario 2 | | Scenario 3 | | Scenario 4 | | |
| | No Action | With Proj | |
| 10-year | 1,024 | 107 | 1,523 | 128 | 1,013 | 105 | 1,543 | 125 | |
| 100-year | 4,254 | 1,038 | 5,717 | 1,859 | 4,148 | 926 | 5,447 | 1,585 | |
| 400-year | 8,571 | 6,486 | 9,628 | 7,016 | 7,772 | 5,973 | 8,782 | 6,399 | |
| 1,000-year | 11,203 | 9,360 | 11,827 | 9,686 | 10,886 | 8,745 | 11,680 | 9,113 | |
| 2,000-year | 12,281 | 10,261 | 12,591 | 10,468 | 12,370 | 9,833 | 12,769 | 10,075 | |

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.



| | | | | | |
|--------------------------|--|--------------------------|-----------------|-------------------------------|--|
| Planning Unit: | 3b | Alt. No.: | PU3b-C-RL-400-1 | Category: | Comprehensive (Coastal+Structural+Nonstructural) |
| Alternative Description: | Comprehensive plan--Same coastal and structural measures as Alternative PU3b-RL-400-1 but with complementary nonstructural measures to reduce residual risk. | | | | |
| Coastal Component: | R1 | Nonstructural Component: | | 400-yr complementary measures | |
| Structural Component: | Same as Alternative PU3b-RL-400-1 | | | | |

| 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 | 1,213 | 2,767 | 88 | 129 | 492 | 27 | 171 | 17 | 3 |
| | | Mid | | 3,864 | 143 | 196 | 832 | 46 | 147 | 16 | 3 |
| | | Low | | 4,882 | 213 | 247 | 1,037 | 56 | 123 | 15 | 3 |
| 2 | High RSLR High Employment Dispersed Population | High | 1,216 | 2,949 | 97 | 57 | 525 | 31 | 171 | 15 | 3 |
| | | Mid | | 4,095 | 156 | 72 | 869 | 49 | 147 | 15 | 3 |
| | | Low | | 5,184 | 229 | 85 | 1,058 | 58 | 123 | 13 | 2 |
| 3 | Low RSLR Business-as-Usual Compact Population | High | 1,253 | 2,537 | 87 | 131 | 478 | 27 | 171 | 17 | 3 |
| | | Mid | | 3,613 | 142 | 197 | 801 | 45 | 147 | 16 | 3 |
| | | Low | | 4,591 | 208 | 248 | 990 | 54 | 123 | 15 | 3 |
| 4 | High RSLR Business-as-Usual Compact Population | High | 1,256 | 2,718 | 96 | 144 | 506 | 30 | 171 | 15 | 3 |
| | | Mid | | 3,829 | 154 | 213 | 836 | 48 | 147 | 15 | 3 |
| | | Low | | 4,878 | 223 | 259 | 1,016 | 56 | 123 | 13 | 2 |

| Other Results | | | Wetlands Created/Protected | | Scenario 1 | Scenario 2 | Scenario 3 | Scenario 4 | |
|--|----------|-------|---|----------------------|------------|------------|------------|------------|--------|
| Construction Time (years) | | | After 50 yrs (% of baseline) | | 105 | 104 | 105 | 104 | |
| Direct Wetland Impacts (acres) | | | After 100 yrs (% of baseline) | | 105 | 100 | 105 | 100 | |
| Indirect Impacts (unitless) | | | Present Value of Life Cycle Costs (\$ Millions) | | | | | | |
| Spatial Integrity (unitless) | | | Coastal Component | | 4,756 | 4,796 | 4,756 | 4,796 | |
| Non-Federal Share of Present Value of Life Cycle Costs | Scenario | | Nonstructural Component | | 1,002 | 1,002 | 1,785 | 1,785 | |
| | 1 / 2 | 8,493 | 8,516 | Structural Component | | 17,996 | 18,024 | 17,996 | 18,024 |
| | 3 / 4 | 8,767 | 8,791 | Total Project | | 23,754 | 23,822 | 24,537 | 24,605 |

| 2075 Residual Risk / Damages - Low Uncertainty (\$ Millions) | | | | | | | | Planning Unit 3b Comprehensive Plan Ring Levee Alt 400-year Design | |
|--|------------|-----------|------------|-----------|------------|-----------|------------|---|--|
| Frequency | Scenario 1 | | Scenario 2 | | Scenario 3 | | Scenario 4 | | |
| | No Action | With Proj | |
| 10-year | 1,024 | 95 | 1,523 | 113 | 1,013 | 92 | 1,543 | 110 | |
| 100-year | 4,254 | 291 | 5,717 | 376 | 4,148 | 284 | 5,447 | 364 | |
| 400-year | 8,571 | 1,827 | 9,628 | 3,227 | 7,772 | 1,413 | 8,782 | 2,466 | |
| 1,000-year | 11,203 | 6,161 | 11,827 | 6,696 | 10,886 | 5,280 | 11,680 | 5,812 | |
| 2,000-year | 12,281 | 8,635 | 12,591 | 8,885 | 12,370 | 8,156 | 12,769 | 8,441 | |

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.

