# FLOOD INSURANCE STUDY FEDERAL EMERGENCY MANAGEMENT AGENCY

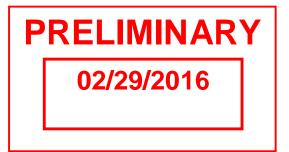
### VOLUME 2 OF 3



## HARRISON COUNTY, MISSISSIPPI AND INCORPORATED AREAS

COMMUNITY NAME	COMMUNITY NUMBER
BILOXI, CITY OF	285252
D'IBERVILLE, CITY OF	280336
GULFPORT, CITY OF	285253
HARRISON COUNTY UNINCORPORATED AREAS	285255
LONG BEACH, CITY OF	285257
PASS CHRISTIAN, CITY OF	285261





## **REVISED**:

#### **TBD**

FLOOD INSURANCE STUDY NUMBER 28047CV002B

Version Number 2.3.3.3

#### **TABLE OF CONTENTS** Volume 1

SEC	TION 1.0 – INTRODUCTION	1
1.1	The National Flood Insurance Program	1
1.2	Purpose of this Flood Insurance Study Report	2
1.3	Jurisdictions Included in the Flood Insurance Study Project	2
1.4	Considerations for using this Flood Insurance Study Report	6
SEC	TION 2.0 – FLOODPLAIN MANAGEMENT APPLICATIONS	16
2.1	Floodplain Boundaries	16
2.2	Floodways	26
2.3	Base Flood Elevations	27
2.4	Non-Encroachment Zones	27
2.5	Coastal Flood Hazard Areas	28
	2.5.1 Water Elevations and the Effects of Waves	28
	2.5.2 Floodplain Boundaries and BFEs for Coastal Areas	29
	2.5.3 Coastal High Hazard Areas	30
	2.5.4 Limit of Moderate Wave Action	31
SEC	TION 3.0 – INSURANCE APPLICATIONS	32
3.1	National Flood Insurance Program Insurance Zones	32
3.2	Coastal Barrier Resources System	32
SEC	TION 4.0 – AREA STUDIED	33
4.1	Basin Description	33
4.2	Principal Flood Problems	33
4.3	Non-Levee Flood Protection Measures	37
4.4	Levees	39
SEC	TION 5.0 – ENGINEERING METHODS	39
5.1	Hydrologic Analyses	39
5.2	Hydraulic Analyses	53
5.3	Coastal Analyses	67
	5.3.1 Total Stillwater Elevations	68
	5.3.2 Waves	70
	5.3.3 Coastal Erosion	70
	5.3.4 Wave Hazard Analyses	70
5.4	Alluvial Fan Analyses	81

Page

#### **SECTION 6.0 – MAPPING METHODS** 81 Vertical and Horizontal Control 81 6.1 6.2 Base Map 82 6.3 Floodplain and Floodway Delineation 83 Coastal Flood Hazard Mapping 133 6.4 **FIRM Revisions** 6.5 139

<ul> <li>SECTION 7.0 - CONTRACTED STUDIES AND COMMUNITY COORDINATION</li> <li>7.1 Contracted Studies</li> <li>7.2 Community Meetings</li> </ul>	<b>143</b> 143 149
SECTION 8.0 – ADDITIONAL INFORMATION	151
SECTION 9.0 – BIBLIOGRAPHY AND REFERENCES	152
Figures	<u>Page</u>
Figure 1: FIRM Panel Index Figure 2: FIRM Notes to Users Figure 3: Map Legend for FIRM Figure 4: Floodway Schematic Figure 5: Wave Runup Transect Schematic Figure 6: Coastal Transect Schematic Figure 7: Frequency Discharge-Drainage Area Curves Figure 8: 1% Annual Chance Total Stillwater Elevations for Coastal Areas Figure 9: Transect Location Map	8 9 12 26 29 31 52 69 80
Tables	<u>Page</u>
Table 1: Listing of NFIP Jurisdictions Table 2: Flooding Sources Included in this FIS Report Table 3: Flood Zone Designations by Community Table 4: Coastal Barrier Resources System Information Table 5: Basin Characteristics	2 17 32 33 33

139 139

140

140 140 141

6.5.1 Letters of Map Amendment6.5.2 Letters of Map Revision Based on Fill

6.5.3 Letters of Map Revision

6.5.4 Physical Map Revisions6.5.5 Contracted Restudies6.5.6 Community Map History

Table 5: Basin Characteristics	33
Table 6: Principal Flood Problems	34
Table 7: Historic Flooding Elevations	37
Table 8: Non-Levee Flood Protection Measures	38
Table 9: Levees	39
Table 10: Summary of Discharges	40
Table 11: Summary of Non-Coastal Stillwater Elevations	52
Table 12: Stream Gage Information used to Determine Discharges	52
Table 13: Summary of Hydrologic and Hydraulic Analyses	54
Table 14: Roughness Coefficients	65
Table 15: Summary of Coastal Analyses	68

Table 16: Tide Gage Analysis Specifics	70
Table 17: Coastal Transect Parameters	72
Table 18: Summary of Alluvial Fan Analyses	81
Table 19: Results of Alluvial Fan Analyses	81
Table 20: Countywide Vertical Datum Conversion	82
Table 21: Stream-by-Stream Vertical Datum Conversion	82
Table 22: Base Map Sources	82
Table 23: Summary of Topographic Elevation Data used in Mapping	84
Table 24: Floodway Data	85
Table 25: Flood Hazard and Non-Encroachment Data for Selected Streams	115
Table 26: Summary of Coastal Transect Mapping Considerations	134
Table 27: Incorporated Letters of Map Change	140
Table 28: Community Map History	142
Table 29: Summary of Contracted Studies Included in this FIS Report	143
Table 30: Community Meetings	150
Table 31: Map Repositories	151
Table 32: Additional Information	152
Table 33: Bibliography and References	153

#### Volume 2 Exhibits

Flood Profiles	Panel
Bernard Bayou	01-06 P
Bernard Bayou Tributary 3	07 P
Bernard Bayou Tributary 4	08 P
Bernard Bayou Tributary 5	09 P
Bernard Bayou Tributary 6	10 P
Big Creek	11-13 P
Biloxi River	14-21 P
Brickyard Bayou	22-24 P
Canal No. 1	25-29 P
Canal No. 3	30-31 P
Choctaw Creek	32 P
Crow Creek	33-34 P
Flat Branch	35-38 P
Flat Branch Tributary 1	39 P
Flat Branch Tributary 2	40 P
Fritz Creek	41-42 P
Fritz Creek Tributary 1	43-45 P
Fritz Creek Tributary 2	46 P
Hickory Creek	47-48 P
Hog Branch	49-51 P
Howard Creek	52-54 P
Little Biloxi River	55-61 P
Mill Creek	62-63 P
Palmer Creek	64-65 P
Parker Creek	66-68 P
Pole Branch	69-70 P

#### Volume 2

#### <u>Exhibits</u>

Flood Profiles	Panel
Sandy Creek	71-73 P
Saucier Creek	74-76 P
Tchoutacabouffa River	77-81 P
Turkey Creek	82-87 P
Tuxachanie Creek	88-94 P
Unnamed Tributary 1 to Bernard Creek	94a P
Unnamed Tributary 1A to Bernard Creek	94b-94c P
West Creek	95-96 P
Wolf River	97-103 P

#### Volume 3 Exhibits

0.2% Annual Chance Wave Envelopes	Panel
Transect 1	1
Transect 2	2
Transect 3	3
Transect 4	4
Transect 5	5
Transect 6	6
Transect 7	7
Transect 8	8
Transect 9	9
Transect 10	10-11
Transect 11	12
Transect 12	13
Transect 13	14
Transect 14	15-16
Transect 15	17
Transect 16	18
Transect 17	19
Transect 18	20
Transect 19	21
Transect 20	22
Transect 21	23
Transect 22	24-25
Transect 23	26
Transect 24	27
Transect 25	28
Transect 26	29-30
Transect 27	31-32
Transect 28	33
Transect 29	34
Transect 30	35
Transect 31	36

#### Volume 3 Exhibits

0.2% Annual Chance Wave Envelopes Transect 32 Transect 33	<u>Panel</u> 37 38
Transect 34 Transect 35	39 40
Transect 36	40
Transect 37	41
Transect 38	42
Transect 39	43
Transect 40	45-46
Transect 40	45-40
Transect 42	47
Transect 43	48
Transect 44	49 50
Transect 45	51
Transect 46	53
Transect 47	55
Transect 48	57-58
Transect 49	59
Transect 50	60
Transect 51	61
Transect 52	62
Transect 53	63-64
Transect 54	65-66
Transect 55	67-68
Transect 56	69
Transect 57	70
Transect 58	71
Transect 59	72
Transect 60	73
Transect 61	74
Transect 62	75
Transect 63	76
Transect 64	77
Transect 65	78
Transect 66	79
Transect 67	80
Transect 68	81

#### **Published Separately**

Flood Insurance Rate Map (FIRM)

