FLOOD INSURANCE STUDY FEDERAL EMERGENCY MANAGEMENT AGENCY

VOLUME 2 OF 6



PALM BEACH COUNTY, FLORIDA AND INCORPORATED AREAS

COMMUNITY NAME	NUMBER	COMMUNITY NAME	NUMBER
ATLANTIS, CITY OF	120193	LANTANA, TOWN OF	120214
BELLE GLADE, CITY OF	120194	LOXAHATCHEE GROVES, TOWN OF	120309
BOCA RATON, CITY OF	120195	MANALAPAN, TOWN OF	120215
BOYNTON BEACH, CITY OF	120196	MANGONIA PARK, TOWN OF	120216
BRINY BREEZES, TOWN OF	120197	NORTH PALM BEACH, VILLAGE OF	120217
CLOUD LAKE, TOWN OF	120198	OCEAN RIDGE, TOWN OF	125134
DELRAY BEACH, CITY OF	125102	PAHOKEE, CITY OF	120219
GLEN RIDGE, TOWN OF	120200	PALM BEACH, TOWN OF	120220
GOLF, VILLAGE OF	120201	PALM BEACH COUNTY, UNINCORPORATED ARES	120192
GREENACRES, CITY OF	120203	PALM BEACH GARDENS, CITY OF	120221
GULF STREAM, TOWN OF	125109	PALM BEACH SHORES, TOWN OF	125137
HAVERHILL, TOWN OF	120205	PALM SPRINGS, VILLAGE OF	120223
HIGHLAND BEACH, TOWN OF	125111	RIVIERA BEACH, CITY OF	125142
HYPOLUXO, TOWN OF	120207	ROYAL PALM BEACH, VILLAGE OF	120225
JUNO BEACH, TOWN OF	120208	SOUTH BAY, CITY OF	120226
JUPITER, TOWN OF	125119	SOUTH PALM BEACH, TOWN OF	120227
JUPITER INLET COLONY, TOWN OF	125120	TEQUESTA, VILLAGE OF	120228
LAKE CLARKE SHORES, TOWN OF	120211	WELLINGTON, VILLAGE OF	125157
LAKE PARK, TOWN OF	120212	WEST PALM BEACH, CITY OF	120229
LAKE WORTH BEACH, CITY OF	120213	WESTLAKE, CITY OF	120018

REVISED: DECEMBER 20, 2024

FLOOD INSURANCE STUDY NUMBER 12099CV002B Version Number 2.6.3.4





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Flood Profiles	Panel	
C-51 Canal	01	Ρ
E-3 Canal	02-03	Ρ
E-4 Canal	04-06	Ρ
Jupiter Creek	07	Ρ
L-14 Canal	08	Ρ
L-16 Canal	09	Ρ
Loxahatchee River	10	Ρ

Volume 3

Transect Profiles	Panel
Transect 1	001-003 T
Transect 2	004 T
Transect 3	005 T
Transect 4	006 T
Transect 5	007 T
Transect 6	008-010 T
Transect 7	011 T
Transect 8	012-013 T
Transect 9	014-015 T
Transect 10	016-017 T
Transect 11	018 T
Transect 12	019 T
Transect 13	020 T
Transect 14	021-022 T
Transect 15	023-024 T
Transect 16	025 T
Transect 17	026-027 T
Transect 18	028 T
Transect 19	029 T
Transect 20	030 T
Transect 21	031-032 T
Transect 22	033 T
Transect 23	034 T
Transect 24	035 T
Transect 25	036-037 T
Transect 26	038 T
Transect 27	039 T
Transect 28	040 T
Transect 29	041-042 T
Transect 30a	043 T
Transect 31a	044-045 T
Transect 32a	046 T
Transect 33a	047-048 T
Transect 34a	049 T
Transect 35a	050 T
Transect 36a	051-052 T
Transect 37a	053-054 T
Transect 38	055 T
Transect 39	056 T

Volume 3 (continued)

Transect Profiles	<u>Panel</u>	
Transect 40	057	Т
Transect 41	058-059	Т
Transect 42	060-061	Т
Transect 43	062	Т
Transect 44	063	Т
Transect 45	064-065	Т
Transect 46	066	Т
Transect 47	067	Т
Transect 48	068-069	Т
Transect 49	070	Т
Transect 50	071	Т
Transect 51	072	Т
Transect 52	073-074	Т
Transect 53	075	Т
Transect 54	076	Т
Transect 55	077	Т
Transect 56	078-079	Т
Transect 57	080	Т
Transect 58	081	Т
Transect 59	082	Т
Transect 60	083-084	Т

Volume 4

Transect Profiles	Panel
Transect 61	085 T
Transect 62	086 T
Transect 63	087 T
Transect 64	088-089 T
Transect 65	090 T
Transect 66	091-092 T
Transect 67	093 T
Transect 68	094 T
Transect 69	095-096 T
Transect 70	097 T
Transect 71	098-099 T
Transect 72	100 T
Transect 73	101-102 T
Transect 74	103 T
Transect 75	104 T
Transect 76	105-106 T
Transect 77	107-108 T
Transect 78	109-110 T
Transect 79	111 T
Transect 80	112-113 T
Transect 81	114 T
Transect 82	115 T
Transect 83	116-117 T
Transect 84	118 T
Transect 85	119 T
Transect 86	120 T
Transect 87	121-122 T
Transect 88	123-124 T
Transect 89	125 T
Transect 90	126 T
Transect 91	127 T
Transect 92	128-129 T
Transect 93	130 T
Transect 94	131 T
Transect 95	132-133 T
Transect 96	134-136 T
Transect 97	137 T
Transect 98	138-139 T
Transect 99	140 T

Volume 4 (continued)

Transect Profiles	Panel
Transect 100	 141-142 T
Transect 101	143-144 T
Transect 102	145-146 T
Transect 103	147-148 T
Transect 104	149-150 T
Transect 105	151-152 T
Transect 106	153 T
Transect 107	154-155 T
Transect 108	156 T
Transect 109	157 T
Transect 110	158 T
Transect 111	159 T
Transect 112	160-161 T
Transect 113	162-163 T
Transect 114	164 T
Transect 115	165-166 T
Transect 116	167 T
Transect 117	168-169 T

Volume 5

Transect Profiles	Papal
Transect 118	<u>Panel</u> 170-171 T
	_
Transect 119	
Transect 120 Transect 121	174 T 175-176 T
Transect 122	177 T
Transect 123	178-179 T
Transect 124	180-181 T
Transect 125	182-183 T
Transect 126	184-185 T
Transect 127	186 T
Transect 128	187-188 T
Transect 129	189-190 T
Transect 130	191-192 T
Transect 131	193 T
Transect 132	194 T
Transect 133	195-196 T
Transect 134	197 T
Transect 135	198 T
Transect 136	199-201 T
Transect 137	202-203 T
Transect 138	204-206 T
Transect 139	207-209 T
Transect 140	210 T
Transect 141	211-213 T
Transect 142	214-215 T
Transect 143	216 T
Transect 144	217-219 T
Transect 145	220 T
Transect 146	221 T
Transect 147	222 T
Transect 148	223-225 T
Transect 149	226 T
Transect 150	227 T
Transect 151	228-230 T
Transect 152	231 T
Transect 153	232 T
Transect 154	233-235 T
Transect 155	236 T
Transect 156	237 T

Volume 5 (continued)

Transect Profiles	Panel	
Transect 157	238	Г
Transect 158	239	Г
Transect 159	240-242	Г
Transect 160	243	Г
Transect 161	244	Г
Transect 162	245-246	Г
Transect 163	247-248	Г
Transect 164	249-250	Г
Transect 165	251	Г
Transect 166	252	Г
Transect 167	253	Г
Transect 168	254	Г

Volume 6

<u>Exhibit 2</u>

Transect Profiles	Panel
Transect 169	255-257 T
Transect 170	258-259 T
Transect 171	260 T
Transect 172	261 T
Transect 173	262 T
Transect 174	263 T
Transect 175	264 T
Transect 176	265 T
Transect 177	266-267 T
Transect 178	268-269 T
Transect 179	270 T
Transect 180	271 T
Transect 181	272 T
Transect 182	273 T
Transect 183	274-275 T
Transect 184	276 T
Transect 185	277 T
Transect 186	278 T
Transect 187	279-280 T
Transect 188	281 T
Transect 189	282-283 T
Transect 190	284-285 T
Transect 191	286 T
Transect 192	287-288 T
Transect 193	289 T
Transect 194	290 T
Transect 195	291-292 T
Transect 196	293-294 T
Transect 197	295 T
Transect 198	296 T
Transect 199	297 T
Transect 200	298 T

Published Separately

Flood Insurance Rate Map (FIRM)

Table 16: Coasta	Transect Parameters
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	Coastal	Starting Wave Conditions for the 1% Annual Chance		Starting Stillwater Elevations (ft NAVD88) Range of Stillwater Elevations (ft NAVD88)				
Flood Source	Transect	Significant Wave Height H _s (ft)	Peak Wave Period T _p (sec)	10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
Atlantic Ocean	1	26.2	14.2	2.5 2.4-2.6	2.9 2.7-3.0	6.1 5.6-6.2	7.0 6.3-7.0	8.5 8.2-9.2
Atlantic Ocean	2	25.9	14.2	2.5 2.5-2.6	2.9 2.9-2.9	6.0 5.9-6.1	6.9 6.3-6.9	8.4 8.1-8.4
Atlantic Ocean	3	26.0	14.3	2.6 2.5-2.6	2.9 2.8-2.9	6.1 5.6-6.1	6.9 6.3-6.9	8.4 8.2-8.5
Atlantic Ocean	4	26.3	14.3	2.6 2.5-2.6	2.9 2.9-2.9	6.1 5.7-6.1	6.9 6.3-6.9	8.5 8.1-8.5
Atlantic Ocean	5	26.0	14.3	2.5 2.5-2.5	2.9 2.8-3.0	6.0 5.6-6.2	7.0 6.3-7.0	8.6 8.0-8.6
Atlantic Ocean	6	26.4	14.5	2.5 2.4-2.5	2.9 2.7-2.9	5.9 5.4-6.0	6.8 6.3-6.9	8.3 8.0-9.6
Atlantic Ocean	7	26.5	14.5	2.6 2.5-2.6	3.0 2.8-3.0	6.2 5.8-6.2	7.0 6.3-7.0	8.7 8.0-8.7
Atlantic Ocean	8	26.1	14.2	2.5 2.4-2.5	2.9 2.7-2.9	5.9 5.4-5.9	6.9 6.3-6.9	8.5 8.0-8.5
Atlantic Ocean	9	26.3	14.1	2.5 2.4-2.5	2.8 2.7-2.8	6.0 5.4-6.0	6.8 6.3-6.9	8.5 8.1-8.5
Atlantic Ocean	10	26.5	14.0	2.5 2.4-2.5	2.9 2.7-2.9	6.1 5.4-6.1	6.9 6.3-6.9	8.5 8.1-8.5
Atlantic Ocean	11	26.9	14.1	2.4 2.4-2.5	2.8 2.8-2.8	5.8 5.6-5.8	6.5 6.4-6.7	8.3 8.2-8.3
Atlantic Ocean	12	26.2	14.1	2.5 2.4-2.5	2.8 2.7-2.9	5.8 5.4-5.9	6.7 6.3-6.7	8.3 8.0-8.3

	Coastal	Starting Wave Conditions for the 1% Annual Chance		Starting Stillwater Elevations (ft NAVD88) Range of Stillwater Elevations (ft NAVD88)				
Flood Source	Transect	Significant Wave Height H _s (ft)	Peak Wave Period T _p (sec)	10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
Atlantic Ocean	13	26.5	14.1	2.5 2.5-2.5	2.9 2.8-2.9	5.9 5.6-5.9	6.6 6.3-6.7	8.4 8.1-8.4
Atlantic Ocean	14	27.0	14.1	2.5 2.3-2.5	2.9 2.7-3.0	6.0 5.3-6.2	7.0 6.2-7.1	8.6 8.0-8.6
Atlantic Ocean	15	26.1	14.1	2.5 2.3-2.5	2.9 2.7-2.9	6.0 5.3-6.0	6.8 6.2-6.8	8.4 8.1-8.5
Atlantic Ocean	16	25.9	14.0	2.5 2.5-2.5	2.9 2.8-2.9	6.0 5.8-6.0	6.7 6.3-6.8	8.3 8.1-8.3
Atlantic Ocean	17	26.0	13.7	2.5 2.4-2.5	2.9 2.7-2.9	5.9 5.4-5.9	6.8 6.3-6.8	8.3 8.2-8.7
Atlantic Ocean	18	25.5	13.6	2.5 2.5-2.5	2.9 2.8-2.9	6.0 5.9-6.0	6.8 6.5-6.8	8.4 8.3-8.4
Atlantic Ocean	19	25.4	13.6	2.5 2.5-2.5	2.9 2.8-2.9	6.0 5.8-6.0	6.9 6.5-6.9	8.5 8.4-8.4
Atlantic Ocean	20	25.0	13.6	2.5 2.5-2.5	2.9 2.8-2.9	6.0 5.8-6.0	6.8 6.5-6.8	8.4 8.4-8.4
Atlantic Ocean	21	25.0	13.6	2.5 2.4-2.5	2.9 2.8-2.9	6.0 5.8-6.0	6.8 6.5-6.8	8.4 8.4-8.6
Atlantic Ocean	22	25.8	13.9	2.5 2.5-2.5	2.9 2.8-2.9	5.9 5.8-6.0	6.8 6.7-6.8	8.3 8.3-8.5
Atlantic Ocean	23	25.0	13.7	2.5 2.4-2.5	2.9 2.8-2.9	6.0 5.9-6.0	6.8 6.7-6.8	8.4 8.3-8.6
Atlantic Ocean	24	25.1	13.7	2.5 2.5-2.5	2.9 2.8-2.9	5.9 5.8-5.9	6.8 6.7-6.8	8.4 8.4-8.6

	Coastal	Starting Wave Conditions for the 1% Annual Chance		Starting Stillwater Elevations (ft NAVD88) Range of Stillwater Elevations (ft NAVD88)				
Flood Source	Transect	Significant Wave Height H _s (ft)	Peak Wave Period T _p (sec)	10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
Atlantic Ocean	25	25.4	13.8	2.5 2.5-2.5	2.9 2.8-2.9	6.0 5.9-6.0	6.7 6.7-6.8	8.3 8.3-8.9
Atlantic Ocean	26	25.4	13.6	2.5 2.4-2.5	2.9 2.8-2.9	6.0 5.9-6.0	6.9 6.8-6.8	8.3 8.3-8.7
Atlantic Ocean	27	25.1	13.6	2.5 2.5-2.5	2.9 2.8-2.9	5.9 5.9-5.9	6.8 6.8-6.8	8.3 8.3-8.8
Atlantic Ocean	28	24.9	13.8	2.5 2.5-2.5	2.9 2.9-2.9	6.0 5.9-6.0	6.8 6.8-6.8	8.4 8.4-8.8
Atlantic Ocean	29	25.2	13.8	2.5 2.5-2.5	2.9 2.7-2.9	5.9 5.7-5.9	6.8 6.7-6.9	8.2 8.2-8.9
Atlantic Ocean	30a	24.7	13.6	2.5 2.4-2.5	2.9 2.9-2.9	6.0 5.9-6.0	6.8 6.8-6.8	8.4 8.3-8.8
Atlantic Ocean	31a	25.0	13.7	2.5 2.5-2.5	2.9 2.8-2.9	6.0 5.9-6.0	6.8 6.8-6.9	8.4 8.3-9.1
Atlantic Ocean	32a	24.7	13.8	2.5 2.4-2.5	2.9 2.9-2.9	6.0 5.9-6.0	6.8 6.8-6.9	8.5 8.3-9.0
Atlantic Ocean	33a	25.2	13.7	2.5 2.5-2.5	2.9 2.9-2.9	6.0 5.9-6.1	6.9 6.8-7.0	8.6 8.4-9.2
Atlantic Ocean	34a	25.2	13.8	2.6 2.5-2.6	2.9 2.9-2.9	6.1 6.0-6.2	7.0 6.9-7.0	8.6 8.5-9.1
Atlantic Ocean	35a	24.7	13.7	2.5 2.5-2.5	2.9 2.9-2.9	5.9 5.7-5.9	6.6 6.6-7.0	8.4 8.3-9.2
Atlantic Ocean	36a	24.5	13.8	2.5 2.5-2.5	2.9 2.9-2.9	5.9 5.8-6.1	6.9 6.9-7.1	8.5 8.5-9.4

	Coastal	Starting Wave Conditions for the 1% Annual Chance		Starting Stillwater Elevations (ft NAVD88) Range of Stillwater Elevations (ft NAVD88)				
Flood Source	Transect	Significant Wave Height H _s (ft)	Peak Wave Period T _p (sec)	10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
Atlantic Ocean	37a	24.8	14.0	2.6 2.5-2.6	3.0 2.9-3.0	6.2 5.9-6.2	7.0 7.0-7.1	8.7 8.6-9.4
Atlantic Ocean	38	23.7	13.7	2.5 2.5-2.6	2.9 2.9-2.9	6.0 6.0-6.0	6.9 6.9-7.1	8.4 8.4-9.4
Atlantic Ocean	39	23.9	13.8	2.5 2.5-2.5	2.9 2.9-2.9	6.0 6.0-6.1	6.8 6.8-7.1	8.5 8.5-9.4
Atlantic Ocean	40	23.0	13.9	2.5 2.5-2.5	2.9 2.9-2.9	6.1 6.0-6.1	6.9 6.9-7.1	8.6 8.5-9.5
Atlantic Ocean	41	23.1	13.7	2.6 2.5-2.6	2.9 2.9-3.0	6.2 6.0-6.2	7.0 6.9-7.2	8.5 8.5-9.6
Atlantic Ocean	42	23.9	13.9	2.6 2.5-2.6	2.9 2.9-3.0	6.1 6.1-6.2	7.0 6.9-7.3	8.5 8.5-9.7
Atlantic Ocean	43	23.7	13.7	2.5 2.5-2.5	2.9 2.9-2.9	6.1 6.1-6.1	6.7 6.6-7.2	8.4 8.4-9.6
Atlantic Ocean	44	25.4	14.2	2.5 2.5-2.5	2.9 2.9-3.0	5.9 5.7-6.1	6.7 6.6-7.3	8.4 8.4-9.7
Atlantic Ocean	45	24.4	13.9	2.5 2.5-2.6	2.9 2.9-3.0	5.9 5.7-6.3	6.6 6.6-7.4	8.3 8.3-9.9
Atlantic Ocean	46	25.0	14.0	2.5 2.5-2.5	2.9 2.9-2.9	5.9 5.7-6.1	6.6 6.6-7.4	8.3 8.3-9.9
Atlantic Ocean	47	24.7	14.1	2.5 2.5-2.5	2.9 2.9-2.9	6.0 6.0-6.1	6.8 6.8-7.4	8.3 8.3-9.9
Atlantic Ocean	48	24.5	14.1	2.5 2.5-2.7	2.9 2.8-3.1	5.9 5.9-6.4	6.7 6.7-7.5	8.3 8.3-10.2

	Coastal	Starting Wave Conditions for the 1% Annual Chance		Starting Stillwater Elevations (ft NAVD88) Range of Stillwater Elevations (ft NAVD88)				
Flood Source	Transect	Significant Wave Height H _s (ft)	Peak Wave Period T _p (sec)	10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
Atlantic Ocean	49	24.0	14.0	2.5 2.5-2.5	2.9 2.9-3.0	6.0 6.0-6.2	6.8 6.8-7.5	8.3 8.3-10.1
Atlantic Ocean	50	23.6	14.0	2.5 2.5-2.5	2.9 2.9-3.0	6.0 6.0-6.2	6.8 6.8-7.6	8.3 8.3-10.1
Atlantic Ocean	51	23.1	14.0	2.5 2.5-2.5	2.9 2.9-3.0	6.0 6.0-6.2	6.8 6.8-7.2	8.3 8.3-10.2
Atlantic Ocean	52	23.4	14.1	2.5 2.5-2.7	2.9 2.9-3.2	6.0 6.0-6.6	6.7 6.7-7.8	8.3 8.3-10.4
Atlantic Ocean	53	23.2	14.0	2.5 2.5-2.5	2.9 2.9-3.0	6.0 6.0-6.4	6.8 6.8-7.8	8.3 8.3-10.4
Atlantic Ocean	54	23.5	14.0	2.4 2.4-2.4	2.8 2.8-3.0	5.8 5.8-6.2	6.6 6.5-7.8	8.1 8.1-10.4
Atlantic Ocean	55	24.1	13.9	2.4 2.4-2.4	2.8 2.8-3.0	5.8 5.8-6.2	6.5 6.5-7.4	8.0 8.0-10.4
Atlantic Ocean	56	24.7	14.1	2.4 2.4-2.8	2.8 2.8-3.4	5.8 5.8-6.9	6.5 6.5-8.1	8.2 8.1-11.0
Atlantic Ocean	57	24.1	13.8	2.5 2.5-2.5	2.8 2.8-2.9	5.8 5.8-6.3	6.5 6.5-8.0	9.0 8.5-10.7
Atlantic Ocean	58	24.1	14.0	2.5 2.4-2.5	2.8 2.8-3.2	6.0 6.0-6.8	6.5 6.5-8.2	9.5 8.6-11.1
Atlantic Ocean	59	23.6	13.9	2.5 2.5-2.5	2.8 2.8-3.0	5.9 5.9-6.8	6.5 6.5-8.2	9.5 8.7-11.0
Atlantic Ocean	60	23.6	13.8	2.5 2.4-2.9	2.8 2.8-3.5	5.8 5.8-7.3	6.5 6.5-8.4	9.7 8.6-11.5

	Coastal	Starting Wave Conditions for the 1% Annual Chance		Starting Stillwater Elevations (ft NAVD88) Range of Stillwater Elevations (ft NAVD88)				
Flood Source	Transect	Significant Wave Height H _s (ft)	Peak Wave Period T _p (sec)	10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
Atlantic Ocean	61	24.1	13.9	2.5 2.5-2.5	2.8 2.8-3.2	5.9 5.9-6.8	6.7 6.7-8.4	8.2 8.2-11.5
Atlantic Ocean	62	23.7	14.0	2.5 2.5-2.5	2.9 2.9-3.2	5.9 5.9-6.9	6.8 6.8-8.7	8.3 8.3-11.6
Atlantic Ocean	63	24.5	14.0	2.5 2.5-2.5	2.9 2.9-3.2	5.9 5.9-7.2	6.8 6.7-8.9	8.5 8.2-11.8
Atlantic Ocean	64	21.5	14.4	2.5 2.5-3.2	2.9 2.9-3.6	6.0 5.9-7.6	6.7 6.7-9.1	8.3 8.3-12.1
Atlantic Ocean	65	21.8	14.3	2.5 2.5-2.5	2.9 2.9-3.4	5.9 5.7-7.1	6.5 6.5-8.7	8.3 8.3-11.7
Atlantic Ocean	66	21.8	14.4	2.5 2.5-3.2	2.9 2.9-3.6	6.0 6.0-7.6	6.8 6.8-9.1	8.4 8.4-11.9
Atlantic Ocean	67	21.2	14.3	2.5 2.5-2.5	2.9 2.9-3.3	6.0 6.0-7.2	6.8 6.7-8.9	8.4 8.3-11.9
Atlantic Ocean	68	21.3	14.3	2.5 2.5-2.6	2.9 2.9-3.2	6.0 6.0-7.0	6.8 6.8-8.8	8.3 8.3-11.6
Atlantic Ocean	69	23.8	13.9	2.5 2.5-3.1	2.9 2.9-3.6	6.0 6.0-7.5	6.8 6.7-8.9	8.3 8.3-11.7
Atlantic Ocean	70	24.1	13.9	2.4 2.4-2.5	2.9 2.9-3.3	5.7 5.6-7.0	6.6 6.6-8.6	8.2 8.2-11.5
Atlantic Ocean	71	24.0	13.9	2.5 2.5-3.1	2.9 2.9-3.5	6.0 6.0-7.3	6.7 6.7-8.7	8.2 8.3-11.4
Atlantic Ocean	72	24.1	13.8	2.5 2.5-2.5	2.9 2.9-3.2	6.1 6.1-6.8	6.8 6.8-8.4	8.4 8.3-11.1

	Coastal	Starting Wave Conditions for the 1% Annual Chance		Starting Stillwater Elevations (ft NAVD88) Range of Stillwater Elevations (ft NAVD88)				
Flood Source	Transect	Significant Wave Height H _s (ft)	Peak Wave Period T _p (sec)	10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
Atlantic Ocean	73	23.6	13.9	2.5 2.5-3.0	2.9 2.9-3.5	6.0 6.0-7.2	6.7 6.7-8.6	9.1 8.6-11.2
Atlantic Ocean	74	23.2	13.8	2.5 2.5-2.5	2.9 2.9-3.1	6.0 6.0-6.7	6.7 6.7-8.2	9.0 8.6-10.7
Atlantic Ocean	75	23.3	13.7	2.5 2.4-2.5	2.8 2.8-3.0	5.9 5.9-6.5	6.6 6.6-8.1	8.8 8.5-10.8
Atlantic Ocean	76	23.4	13.5	2.5 2.5-2.9	2.8 2.8-3.4	5.9 5.9-7.0	6.6 6.6-8.3	8.4 8.4-10.8
Atlantic Ocean	77	23.0	13.6	2.5 2.4-2.9	2.8 2.8-3.3	5.9 5.9-7.0	6.5 6.5-8.2	8.9 8.4-10.7
Atlantic Ocean	78	23.1	13.5	2.5 2.5-2.9	2.9 2.9-3.3	6.0 6.0-6.9	7.3 6.9-8.2	8.9 8.7-10.6
Atlantic Ocean	79	22.6	13.1	2.6 2.6-2.6	2.8 2.8-2.9	6.1 6.1-6.5	7.3 7.0-7.7	8.4 8.3-9.8
Atlantic Ocean	80	22.3	12.9	2.5 2.5-2.9	2.8 2.8-3.3	5.9 5.9-6.8	7.0 6.7-8.1	8.4 8.3-10.6
Atlantic Ocean	81	22.4	12.9	2.4 2.4-2.4	2.7 2.7-2.9	5.7 5.7-6.1	6.4 6.4-7.8	8.4 8.3-9.9
Atlantic Ocean	82	22.5	12.8	2.4 2.4-2.4	2.7 2.7-2.9	5.8 5.8-6.2	6.4 6.4-7.8	8.6 8.3-9.3
Atlantic Ocean	83	22.7	13.0	2.4 2.4-2.8	2.8 2.8-3.2	5.8 5.8-6.8	6.4 6.4-7.9	8.4 8.3-10.3
Atlantic Ocean	84	22.6	13.1	2.4 2.4-2.4	2.7 2.7-2.9	5.7 5.7-6.1	6.4 6.4-7.6	8.7 8.2-9.4

	Coastal	Starting Wave Conditions for the 1% Annual Chance		Starting Stillwater Elevations (ft NAVD88) Range of Stillwater Elevations (ft NAVD88)				
Flood Source	Transect	Significant Wave Height H _s (ft)	Peak Wave Period T _p (sec)	10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
Atlantic Ocean	85	23.6	13.5	2.4 2.4-2.4	2.8 2.8-3.0	5.8 5.8-6.2	7.1 6.5-7.6	8.3 8.2-9.4
Atlantic Ocean	86	23.1	13.6	2.4 2.4-2.4	2.8 2.8-2.9	5.8 5.8-6.2	6.5 6.5-7.6	8.7 8.1-9.3
Atlantic Ocean	87	23.2	13.7	2.4 2.4-2.7	2.7 2.7-3.2	5.8 5.8-6.6	6.5 6.4-7.8	7.9 7.9-10.1
Atlantic Ocean	88	23.1	13.7	2.4 2.4-2.7	2.7 2.7-3.1	5.7 5.7-6.6	6.8 6.5-7.7	8.0 8.0-10.0
Atlantic Ocean	89	23.2	13.8	2.4 2.4-2.4	2.8 2.8-2.8	5.7 5.7-6.1	6.8 6.5-7.4	8.0 8.0-9.7
Atlantic Ocean	90	22.8	13.7	2.4 2.4-2.4	2.7 2.7-2.9	5.7 5.7-6.0	6.5 6.4-7.4	8.0 8.0-9.6
Atlantic Ocean	91	22.7	13.5	2.4 2.4-2.4	2.7 2.7-2.9	5.6 5.6-6.2	6.5 6.4-7.4	8.0 7.9-9.6
Atlantic Ocean	92	23.0	13.6	2.3 2.3-2.6	2.7 2.7-3.1	5.6 5.6-6.4	6.3 6.3-7.5	7.8 7.8-9.7
Atlantic Ocean	93	23.1	13.7	2.4 2.4-2.4	2.8 2.8-2.9	5.7 5.7-6.0	6.6 6.5-7.2	8.0 8.0-8.8
Atlantic Ocean	94	23.0	13.6	2.4 2.4-2.4	2.7 2.7-2.8	5.7 5.7-5.8	6.7 6.5-7.1	7.9 7.9-9.3
Atlantic Ocean	95	22.9	13.5	2.4 2.4-2.6	2.7 2.7-3.0	5.7 5.7-6.2	6.4 6.4-7.3	7.9 7.9-9.5
Atlantic Ocean	96	22.5	13.6	2.4 2.4-2.6	2.7 2.7-3.0	5.7 5.7-6.2	6.4 6.4-7.2	7.9 7.9-9.3

	Coastal	Starting Wave Conditions for the 1% Annual Chance		Starting Stillwater Elevations (ft NAVD88) Range of Stillwater Elevations (ft NAVD88)				
Flood Source	Transect	Significant Wave Height H _s (ft)	Peak Wave Period T _p (sec)	10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
Atlantic Ocean	97	23.3	13.8	2.3 2.3-2.3	2.7 2.6-2.8	5.5 5.5-5.8	6.2 6.2-7.0	7.7 7.7-9.0
Atlantic Ocean	98	23.2	13.8	2.3 2.3-2.5	2.7 2.7-2.9	5.6 5.6-6.0	6.3 6.3-7.0	7.7 7.7-9.1
Atlantic Ocean	99	23.1	13.7	2.4 2.4-2.4	2.7 2.7-2.8	5.6 5.6-5.8	6.4 6.3-6.9	7.9 7.9-8.8
Atlantic Ocean	100	22.9	13.9	2.4 2.4-2.5	2.7 2.7-2.9	5.6 5.6-6.0	6.4 6.4-7.0	7.9 7.9-9.0
Atlantic Ocean	101	22.6	13.9	2.4 2.4-2.5	2.7 2.7-2.9	5.7 5.7-6.0	6.3 6.3-7.0	8.1 8.0-9.0
Atlantic Ocean	102	22.3	13.9	2.4 2.4-2.5	2.7 2.7-2.9	5.6 5.6-5.9	6.4 6.4-6.9	7.9 7.9-8.9
Atlantic Ocean	103	22.0	13.8	2.4 2.4-2.5	2.7 2.7-2.9	5.7 5.6-5.9	6.4 6.4-6.9	7.9 7.9-8.9
Atlantic Ocean	104	22.8	13.9	2.4 2.4-2.5	2.7 2.7-2.8	5.7 5.6-5.9	6.5 6.5-6.8	8.0 7.9-8.7
Atlantic Ocean	105	23.5	13.9	2.4 2.4-2.4	2.8 2.7-2.8	5.7 5.6-5.8	6.5 6.5-6.7	8.0 8.0-8.6
Atlantic Ocean	106	21.8	13.8	2.4 2.4-2.4	2.7 2.7-2.7	5.7 5.6-5.7	6.5 6.4-6.5	8.0 7.9-8.3
Atlantic Ocean	107	24.1	13.4	2.3 2.3-2.4	2.7 2.7-2.8	5.6 5.4-5.8	6.3 6.3-6.6	7.8 7.8-8.4
Atlantic Ocean	108	23.4	13.2	2.4 2.4-2.4	2.7 2.7-2.7	5.7 5.5-5.7	6.5 6.3-6.5	7.9 7.9-8.0

	Coostal	Starting Wave Conditions for the 1% Annual Chance		Starting Stillwater Elevations (ft NAVD88) Range of Stillwater Elevations (ft NAVD88)				
Flood Source	Coastal Transect	Significant Wave Height H _s (ft)	Peak Wave Period T _p (sec)	10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
Atlantic Ocean	109	23.7	13.1	2.3 2.3-2.3	2.7 2.7-2.7	5.4 5.3-5.4	6.3 6.3-6.3	7.8 7.7-8.0
Atlantic Ocean	110	23.9	13.2	2.2 2.2-2.2	2.6 2.6-2.7	5.4 5.3-5.4	6.2 6.2-6.3	7.7 7.7-8.0
Atlantic Ocean	111	24.2	13.2	2.3 2.3-2.3	2.6 2.6-2.7	5.5 5.5-5.6	6.2 6.2-6.4	7.7 7.7-8.1
Atlantic Ocean	112	24.5	13.4	2.3 2.3-2.4	2.7 2.7-2.8	5.5 5.4-5.7	6.3 6.3-6.5	7.8 7.8-8.3
Atlantic Ocean	113	24.9	13.4	2.4 2.3-2.4	2.7 2.6-2.8	5.6 5.4-5.6	6.4 6.2-6.5	7.9 7.9-8.2
Atlantic Ocean	114	24.9	13.4	2.4 2.4-2.4	2.7 2.7-2.7	5.6 5.4-5.6	6.5 6.1-6.5	8.0 7.7-8.0
Atlantic Ocean	115	24.5	13.5	2.4 2.3-2.4	2.7 2.6-2.7	5.6 5.2-5.6	6.4 6.1-6.4	7.9 7.7-8.1
Atlantic Ocean	116	24.4	13.5	2.3 2.3-2.3	2.7 2.7-2.7	5.5 5.4-5.5	6.3 6.2-6.3	7.8 7.8-7.8
Atlantic Ocean	117	24.7	13.5	2.3 2.3-2.3	2.7 2.6-2.7	5.5 5.3-5.5	6.3 6.2-6.3	7.9 7.7-8.1
Atlantic Ocean	118	24.6	13.4	2.3 2.3-2.3	2.7 2.6-2.7	5.5 5.1-5.5	6.3 6.0-6.3	7.9 7.6-8.1
Atlantic Ocean	119	24.7	13.4	2.4 2.3-2.5	2.8 2.6-2.8	5.8 5.1-5.8	6.6 5.9-6.6	8.1 7.6-8.1
Atlantic Ocean	120	24.4	13.4	2.5 2.5-2.5	2.8 2.8-2.8	5.9 5.6-5.9	6.7 6.0-6.7	8.2 7.6-8.2

	Coastal	Starting Wave Conditions for the 1% Annual Chance		Starting Stillwater Elevations (ft NAVD88) Range of Stillwater Elevations (ft NAVD88)				
Flood Source	Transect	Significant Wave Height H _s (ft)	Peak Wave Period T _p (sec)	10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
Atlantic Ocean	121	23.5	13.6	2.4 2.3-2.4	2.8 2.6-2.8	5.7 5.1-5.8	6.6 5.9-6.6	8.2 7.5-8.2
Atlantic Ocean	122	23.1	13.6	2.4 2.4-2.5	2.8 2.7-2.8	5.8 5.4-5.8	6.6 5.9-6.6	8.2 7.6-8.2
Atlantic Ocean	123	23.1	13.6	2.4 2.3-2.5	2.8 2.6-2.8	5.8 5.0-5.8	6.4 5.9-6.6	8.1 7.5-8.1
Atlantic Ocean	124	22.7	13.6	2.3 2.3-2.3	2.6 2.6-2.7	5.4 5.0-5.5	6.1 5.9-6.3	7.6 7.4-7.9
Atlantic Ocean	125	23.5	13.5	2.3 2.3-2.3	2.6 2.6-2.7	5.5 5.0-5.5	6.2 5.9-6.3	7.7 7.5-8.0
Atlantic Ocean	126	23.2	13.3	2.3 2.3-2.3	2.7 2.6-2.7	5.4 5.0-5.5	6.3 5.9-6.3	7.7 7.5-8.0
Atlantic Ocean	127	23.5	13.5	2.3 2.3-2.4	2.7 2.6-2.7	5.6 5.2-5.6	6.4 5.9-6.4	7.9 7.6-7.9
Atlantic Ocean	128	23.1	13.5	2.4 2.3-2.4	2.7 2.6-2.8	5.6 5.1-5.7	6.5 5.9-6.5	8.0 7.6-8.1
Atlantic Ocean	129	23.2	13.5	2.4 2.3-2.4	2.7 2.5-2.8	5.6 5.1-5.8	6.5 5.9-6.6	8.1 7.6-8.1
Atlantic Ocean	130	23.4	13.5	2.4 2.2-2.4	2.7 2.5-2.7	5.6 5.1-5.7	6.4 5.9-6.5	7.9 7.6-8.2
Atlantic Ocean	131	23.0	13.3	2.3 2.3-2.3	2.6 2.6-2.6	5.4 5.2-5.4	6.2 6.0-6.2	7.6 7.6-7.7
Atlantic Ocean	132	23.7	13.5	2.3 2.3-2.3	2.6 2.6-2.6	5.4 5.4-5.4	6.2 6.0-6.1	7.6 7.6-7.7

	Coostal	Starting Wave Conditions for the 1% Annual Chance		Starting Stillwater Elevations (ft NAVD88) Range of Stillwater Elevations (ft NAVD88)				
Flood Source Transect	Coastal Transect	Significant Wave Height H _s (ft)	Peak Wave Period T _p (sec)	10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
Atlantic Ocean	133	23.4	13.6	2.3 2.3-2.4	2.6 2.6-2.7	5.4 5.3-5.7	6.2 6.1-6.6	7.6 7.6-8.4
Atlantic Ocean	134	23.1	13.4	2.3 2.3-2.3	2.6 2.6-2.6	5.4 5.4-5.5	6.2 6.2-6.4	7.7 7.7-8.0
Atlantic Ocean	135	24.2	13.3	2.3 2.3-2.3	2.6 2.6-2.6	5.5 5.5-5.5	6.2 6.2-6.2	7.6 7.6-7.6
Atlantic Ocean	136	23.9	13.4	2.3 2.3-2.4	2.6 2.6-2.8	5.4 5.4-5.8	6.1 6.1-6.7	7.6 7.6-8.4
Atlantic Ocean	137	24.5	13.3	2.3 2.3-2.5	2.7 2.7-2.8	5.6 5.6-5.9	6.4 6.3-6.7	7.9 7.8-8.6
Atlantic Ocean	138	23.8	13.4	2.4 2.4-2.5	2.7 2.7-2.9	5.6 5.6-6.0	6.2 6.2-6.9	8.2 8.0-8.8
Atlantic Ocean	139	24.5	13.5	2.3 2.3-2.6	2.7 2.7-3.0	5.6 5.6-6.2	6.2 6.2-7.1	7.7 7.7-9.0
Atlantic Ocean	140	24.6	13.5	2.3 2.3-2.3	2.6 2.6-2.8	5.5 5.5-5.8	6.2 6.2-6.6	7.7 7.7-8.6
Atlantic Ocean	141	25.5	13.6	2.3 1.8-2.5	2.6 2.1-2.8	5.4 4.0-5.9	6.2 5.3-6.8	7.7 7.7-8.7
Atlantic Ocean	142	26.9	13.5	2.1 1.8-2.1	2.5 2.0-2.5	5.1 3.9-5.1	6.2 5.2-6.2	8.0 7.8-8.7
Atlantic Ocean	143	26.0	13.3	2.2 2.2-2.3	2.6 2.4-2.6	5.3 4.6-5.3	6.2 5.2-6.2	7.9 7.8-8.2
Atlantic Ocean	144	26.0	13.3	2.2 1.7-2.4	2.6 1.9-2.8	5.3 3.8-5.8	6.2 5.2-6.7	7.9 7.8-8.6

	Coastal	Starting Wave Conditions for the 1% Annual Chance		Starting Stillwater Elevations (ft NAVD88) Range of Stillwater Elevations (ft NAVD88)				
Flood Source	Transect	Significant Wave Height H _s (ft)	Peak Wave Period T _p (sec)	10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
Atlantic Ocean	145	25.6	13.4	2.3 2.3-2.3	2.6 2.3-2.6	5.5 4.3-5.5	6.3 5.2-6.3	7.9 7.7-8.8
Atlantic Ocean	146	25.7	13.4	2.3 2.3-2.3	2.7 2.7-2.7	5.6 5.6-5.6	6.3 5.8-6.3	7.8 7.8-8.9
Atlantic Ocean	147	25.3	13.3	2.3 2.3-2.3	2.6 2.6-2.6	5.4 5.4-5.5	6.2 6.2-6.2	7.7 7.7-7.7
Atlantic Ocean	148	25.1	13.3	2.3 1.9-2.4	2.7 2.3-2.7	5.5 4.7-5.7	6.3 5.9-6.5	7.8 7.7-8.1
Atlantic Ocean	149	25.3	13.6	2.3 2.3-2.3	2.6 2.6-2.7	5.5 5.5-5.6	6.3 6.2-6.3	7.8 7.8-7.8
Atlantic Ocean	150	24.2	13.7	2.3 2.3-2.3	2.7 2.7-2.7	5.6 5.5-5.6	6.3 6.2-6.4	7.9 7.8-7.9
Atlantic Ocean	151	23.9	13.7	2.3 2.2-2.3	2.6 2.6-2.7	5.5 5.2-5.5	6.3 5.3-6.3	7.8 7.7-7.9
Atlantic Ocean	152	24.2	13.5	2.3 2.3-2.3	2.6 2.6-2.6	5.4 5.4-5.5	6.2 5.3-6.2	7.7 7.7-7.7
Atlantic Ocean	153	24.1	13.5	2.3 2.3-2.3	2.6 2.6-2.6	5.5 5.4-5.5	6.2 5.3-6.2	7.7 7.1-7.7
Atlantic Ocean	154	24.6	13.5	2.3 2.2-2.3	2.6 2.5-2.6	5.4 5.0-5.5	6.2 5.3-6.2	7.7 7.1-7.8
Atlantic Ocean	155	24.5	13.8	2.1 2.1-2.1	2.5 2.5-2.5	5.0 5.0-5.0	6.0 5.3-6.0	7.5 7.4-7.5
Atlantic Ocean	156	24.9	13.8	2.2 2.2-2.2	2.6 2.5-2.6	5.3 5.1-5.3	6.1 5.3-6.1	7.6 7.1-7.6

	Coostal	Starting Wave Conditions for the 1% Annual Chance		Starting Stillwater Elevations (ft NAVD88) Range of Stillwater Elevations (ft NAVD88)				
Flood Source	Coastal Transect	Significant Wave Height H _s (ft)	Peak Wave Period T _p (sec)	10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
Atlantic Ocean	157	24.7	13.8	2.3 2.3-2.3	2.6 2.6-2.6	5.5 5.3-5.5	6.2 5.3-6.2	7.7 7.1-7.7
Atlantic Ocean	158	24.8	13.9	2.1 2.1-2.1	2.5 2.5-2.5	4.9 4.9-4.9	5.7 5.3-5.8	7.4 7.2-7.4
Atlantic Ocean	159	24.9	13.9	2.1 2.1-2.1	2.5 2.2-2.5	5.0 4.4-5.2	5.9 4.7-5.9	7.5 6.6-7.5
Atlantic Ocean	160	24.7	13.8	2.2 2.2-2.2	2.5 2.5-2.5	5.2 5.2-5.2	6.0 5.3-6.0	7.5 6.6-7.5
Atlantic Ocean	161	25.0	13.7	2.2 2.2-2.2	2.5 2.5-2.5	5.2 5.2-5.2	5.8 5.3-5.9	7.4 7.1-7.4
Atlantic Ocean	162	24.7	13.7	2.1 2.0-2.1	2.4 1.9-2.4	5.0 3.7-5.0	5.8 4.7-5.8	7.3 6.5-7.8
Atlantic Ocean	163	24.4	13.6	2.1 2.1-2.1	2.4 1.3-2.4	5.0 2.7-5.1	5.8 5.2-5.8	7.3 6.6-7.3
Atlantic Ocean	164	24.2	13.5	2.0 1.9-2.0	2.4 2.2-2.4	4.7 4.3-4.7	5.7 5.1-5.7	7.3 6.5-7.3
Atlantic Ocean	165	24.1	13.5	2.1 2.1-2.1	2.4 2.4-2.4	5.0 4.8-5.0	5.8 5.1-5.8	7.3 6.4-7.4
Atlantic Ocean	166	24.6	13.8	2.0 2.0-2.0	2.4 2.2-2.4	4.8 4.4-4.8	5.6 4.9-5.6	7.2 6.3-7.2
Atlantic Ocean	167	24.6	13.8	2.0 1.7-2.0	2.3 1.9-2.3	4.8 3.9-4.8	5.7 4.6-5.7	7.2 6.0-7.2
Atlantic Ocean	168	24.4	13.9	2.0 1.7-2.0	2.3 1.9-2.3	4.7 3.7-4.7	5.6 4.5-5.6	7.1 5.9-7.1

	Coostal	Starting Wave Conditions for the 1% Annual Chance		Starting Stillwater Elevations (ft NAVD88) Range of Stillwater Elevations (ft NAVD88)				
Flood Source	Coastal Transect	Significant Wave Height H _s (ft)	Peak Wave Period T _p (sec)	10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
Atlantic Ocean	169	24.5	13.9	2.0 1.7-2.0	2.3 1.8-2.3	4.6 3.7-4.6	5.6 4.4-5.6	7.1 5.8-7.1
Atlantic Ocean	170	24.8	13.9	1.8 1.8-1.9	2.0 2.0-2.3	4.3 4.1-4.9	5.5 4.5-5.5	7.0 5.7-7.4
Intracoastal Waterway	171	3.5	3.6	2.8 2.3-2.8	3.2 2.6-3.2	6.7 5.4-6.8	8.0 6.2-8.0	10.4 7.7-10.4
Intracoastal Waterway	172	3.1	3.3	2.7 2.7-2.7	3.1 2.9-3.1	6.5 6.2-6.5	7.7 7.6-7.7	10.0 9.4-10.0
Intracoastal Waterway	173	2.6	2.9	2.6 2.6-2.6	3.0 2.8-3.0	6.2 5.8-6.2	7.3 6.4-7.3	9.4 7.9-9.4
Intracoastal Waterway	174	2.9	3.1	2.5 2.5-2.5	2.8 2.7-2.8	5.9 5.7-5.9	6.9 6.4-6.9	8.9 7.8-8.9
Intracoastal Waterway	175	2.8	2.6	2.5 2.5-2.5	2.8 2.8-2.8	5.9 5.7-5.9	6.8 6.7-6.8	8.7 8.4-8.7
Intracoastal Waterway	176	3.2	3.1	2.4 2.4-2.4	2.8 2.7-2.8	5.8 5.6-5.8	6.7 6.6-6.7	8.5 8.2-8.5
Intracoastal Waterway	177	2.8	2.9	2.4 2.4-2.4	2.8 2.8-2.8	5.8 5.6-5.8	6.7 6.6-6.7	8.5 8.0-8.5
Intracoastal Waterway	178	3.4	3.1	2.4 2.4-2.4	2.7 2.7-2.7	5.7 5.5-5.7	6.5 6.3-6.5	8.2 8.0-8.2
Intracoastal Waterway	179	4.1	3.6	2.3 2.3-2.3	2.6 2.6-2.7	5.5 5.2-5.4	6.3 6.0-6.3	7.9 7.6-7.9
Intracoastal Waterway	180	3.6	3.3	2.2 2.2-2.2	2.6 2.6-2.7	5.3 5.1-5.3	6.1 6.0-6.1	7.7 7.6-7.7

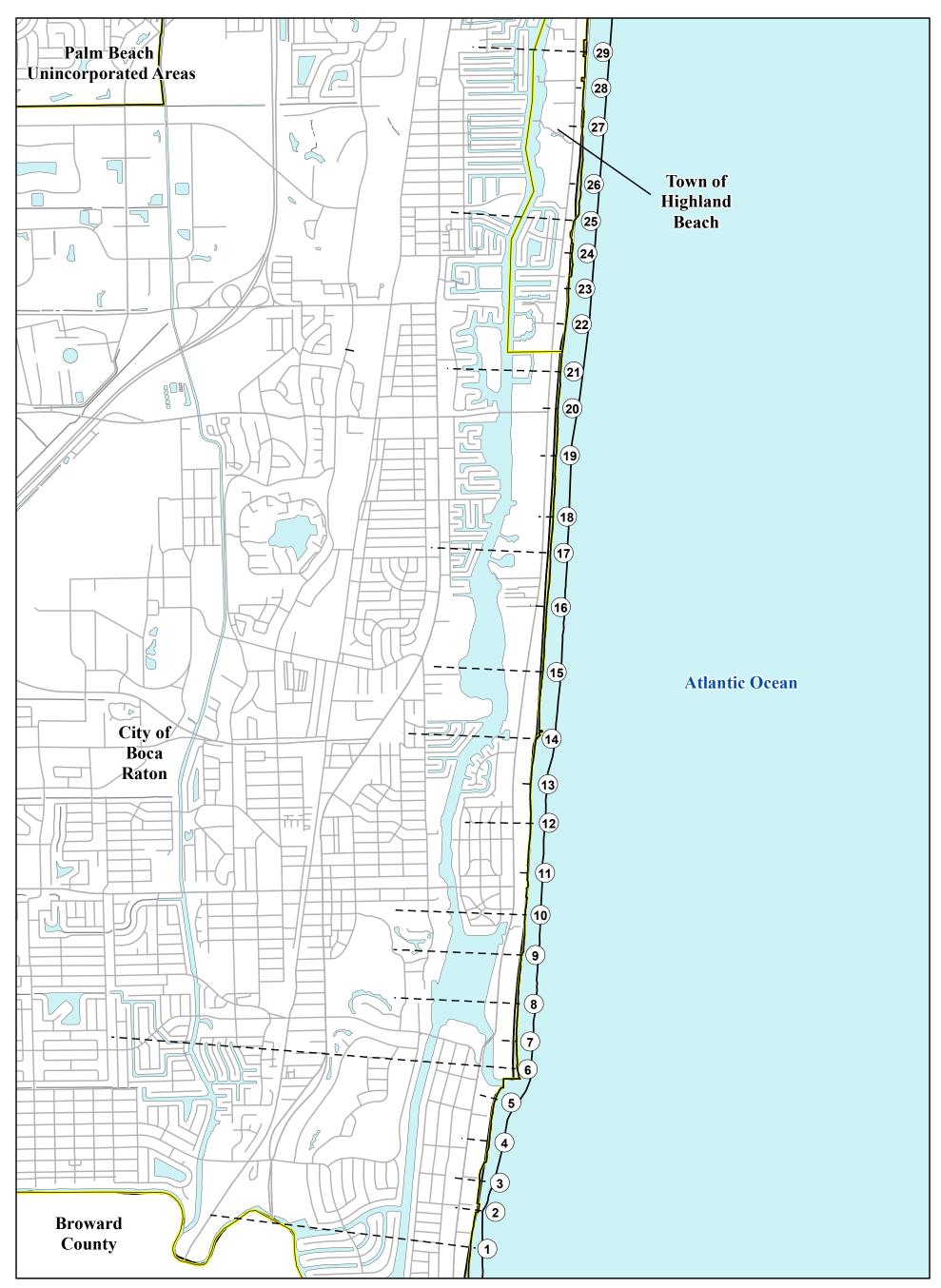
	Coostal	Starting Wave Conditions for the 1% Annual Chance		Starting Stillwater Elevations (ft NAVD88) Range of Stillwater Elevations (ft NAVD88)				
Flood Source Transect	Coastal Transect	Significant Wave Height H _s (ft)	Peak Wave Period T _p (sec)	10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
Intracoastal Waterway	181	3.3	3.0	2.3 2.3-2.3	2.6 2.6-2.7	5.4 5.1-5.4	6.2 5.9-6.2	7.7 7.6-7.7
Intracoastal Waterway	182	2.6	2.8	2.3 2.3-2.3	2.6 2.6-2.6	5.4 5.0-5.4	6.2 5.9-6.2	7.7 7.5-7.7
Intracoastal Waterway	183	3.8	3.2	2.3 2.2-2.3	2.6 2.5-2.7	5.5 5.1-5.5	6.3 5.9-6.3	7.9 7.6-7.9
Intracoastal Waterway	184	2.6	2.7	2.3 2.3-2.3	2.6 2.6-2.6	5.5 5.4-5.5	6.3 6.0-6.3	7.9 7.6-7.9
Intracoastal Waterway	185	3.4	3.0	2.4 2.4-2.4	2.7 2.6-2.7	5.6 5.5-5.6	6.4 6.3-6.4	8.1 7.6-8.1
Intracoastal Waterway	186	2.8	2.8	2.5 2.3-2.5	2.8 2.6-2.8	5.8 5.4-5.9	6.7 6.2-6.8	8.5 7.6-8.6
Intracoastal Waterway	187	4.0	3.5	2.5 2.2-2.6	2.9 2.5-2.9	6.0 5.3-6.1	6.9 6.0-7.1	8.8 7.5-8.9
Loxahatchee River	188	2.5	4.4	1.9 1.9-1.9	2.2 2.2-2.2	4.6 4.3-4.6	5.3 5.1-5.3	6.7 6.6-6.7
Loxahatchee River	189	2.7	2.9	1.9 1.8-1.9	2.1 2.0-2.2	4.4 4.2-4.5	5.2 5.1-5.5	7.4 6.6-7.6
Loxahatchee River	190	3.6	3.2	1.8 1.8-1.8	2.1 2.0-2.1	4.3 4.0-4.4	5.1 5.0-5.5	7.6 6.6-7.7
Loxahatchee River	191	3.8	3.3	1.9 1.9-1.9	2.1 2.0-2.1	4.4 4.1-4.4	5.3 5.1-5.3	7.0 6.8-7.2
Loxahatchee River	192	4.3	3.4	1.8 1.8-1.8	2.1 2.1-2.2	4.4 4.3-4.6	5.2 5.1-5.4	6.8 6.8-7.1

	Coastal	Starting Wave Conditions for the 1% Annual Chance		Starting Stillwater Elevations (ft NAVD88) Range of Stillwater Elevations (ft NAVD88)				
Flood Source Transect		Significant Wave Height H _s (ft)	Peak Wave Period T _p (sec)	10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
Loxahatchee River	193	3.8	3.3	1.9 1.9-1.9	2.1 2.1-2.2	4.5 4.3-4.5	5.3 5.1-5.3	6.9 6.8-7.0
Loxahatchee River	194	3.1	3.0	1.8 1.8-1.8	2.1 2.1-2.1	4.3 4.1-4.3	5.1 4.9-5.1	6.7 6.6-6.7
Loxahatchee River	195	3.0	2.7	1.8 1.8-1.8	2.1 2.0-2.1	4.3 4.0-4.3	5.1 4.9-5.1	6.5 6.4-6.6
Loxahatchee River	196	2.9	2.7	1.8 1.8-1.9	2.1 2.0-2.1	4.2 3.9-4.2	5.0 4.7-5.0	6.3 6.1-6.5
Loxahatchee River	197	2.6	4.1	1.9 1.9-1.9	2.2 2.0-2.2	4.6 4.0-4.6	5.3 5.0-5.3	6.5 6.4-6.7
Intracoastal Waterway	198	2.8	2.6	1.7 1.7-1.8	2.1 2.1-2.3	4.1 3.9-4.5	4.8 4.7-4.8	6.1 6.1-7.3
Intracoastal Waterway	199	2.7	2.6	1.6 1.6-1.6	2.0 2.0-2.2	3.9 3.8-4.3	4.6 4.5-5.1	6.2 5.9-7.1
Intracoastal Waterway	200	2.4	2.5	1.6 1.6-1.6	2.0 2.0-2.1	3.8 3.6-4.1	4.5 4.4-4.5	5.9 5.8-6.2
Lake Okeechobee	30	*	*	19.6	*	22.0	23.0	24.5
Lake Okeechobee	31	*	*	18.9	*	20.8	21.4	22.9
Lake Okeechobee	32	*	*	19.7	*	22.2	23.2	24.7
Lake Okeechobee	33	*	*	19.7	*	22.2	23.2	24.7

Table 16: Coastal Transect Parameters (continued)
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	Coastal Transect	Starting Wave Conditions for the 1% Annual Chance		Starting Stillwater Elevations (ft NAVD88) Range of Stillwater Elevations (ft NAVD88)				
Flood Source		Significant Wave Height H _s (ft)	Peak Wave Period T _p (sec)	10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
Lake Okeechobee	34	*	*	19.9	*	22.6	23.7	25.2
Lake Okeechobee	35	*	*	19.6	*	22.0	23.0	24.5
Lake Okeechobee	36	*	*	19.4	*	21.8	22.7	24.2
Lake Okeechobee	37	*	*	19.0	*	21.0	21.6	23.1

* Data not available

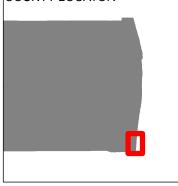


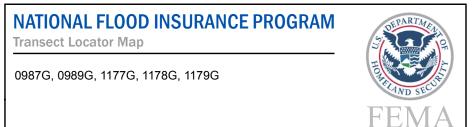
COUNTY LOCATOR

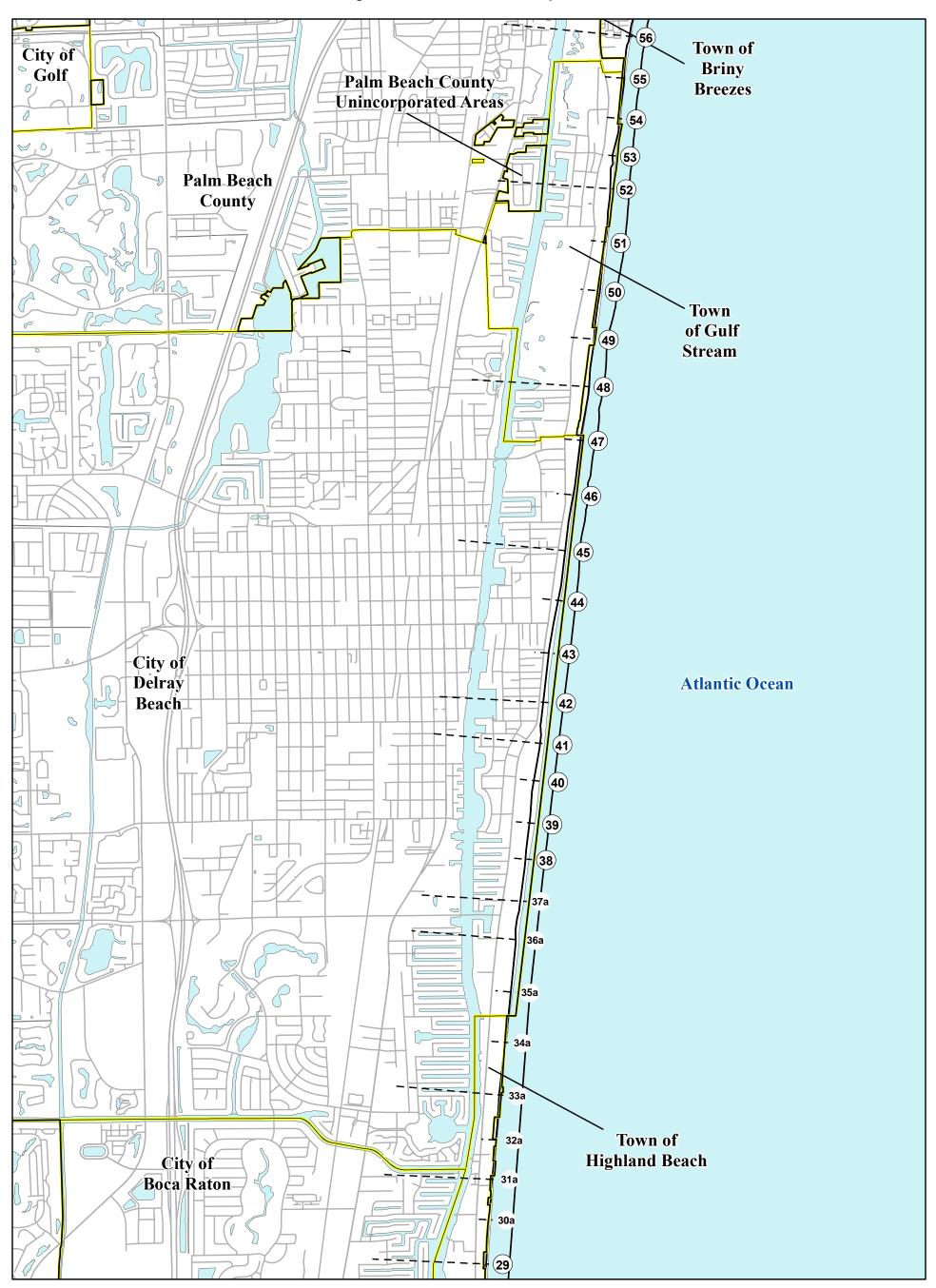
	1 i	nch = 2	,500 feet			1:30,000
N						Feet
	0	650	1,300	2,600	3,900	5,200

Map Projection:

State Plane Transverse Mercator, Florida East Zone 0901; North American Datum 1983; Western Hemisphere; Vertical Datum: NAVD 88



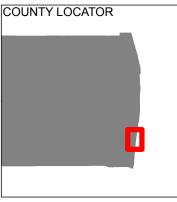


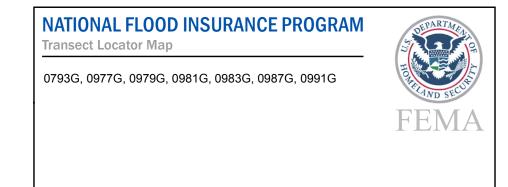


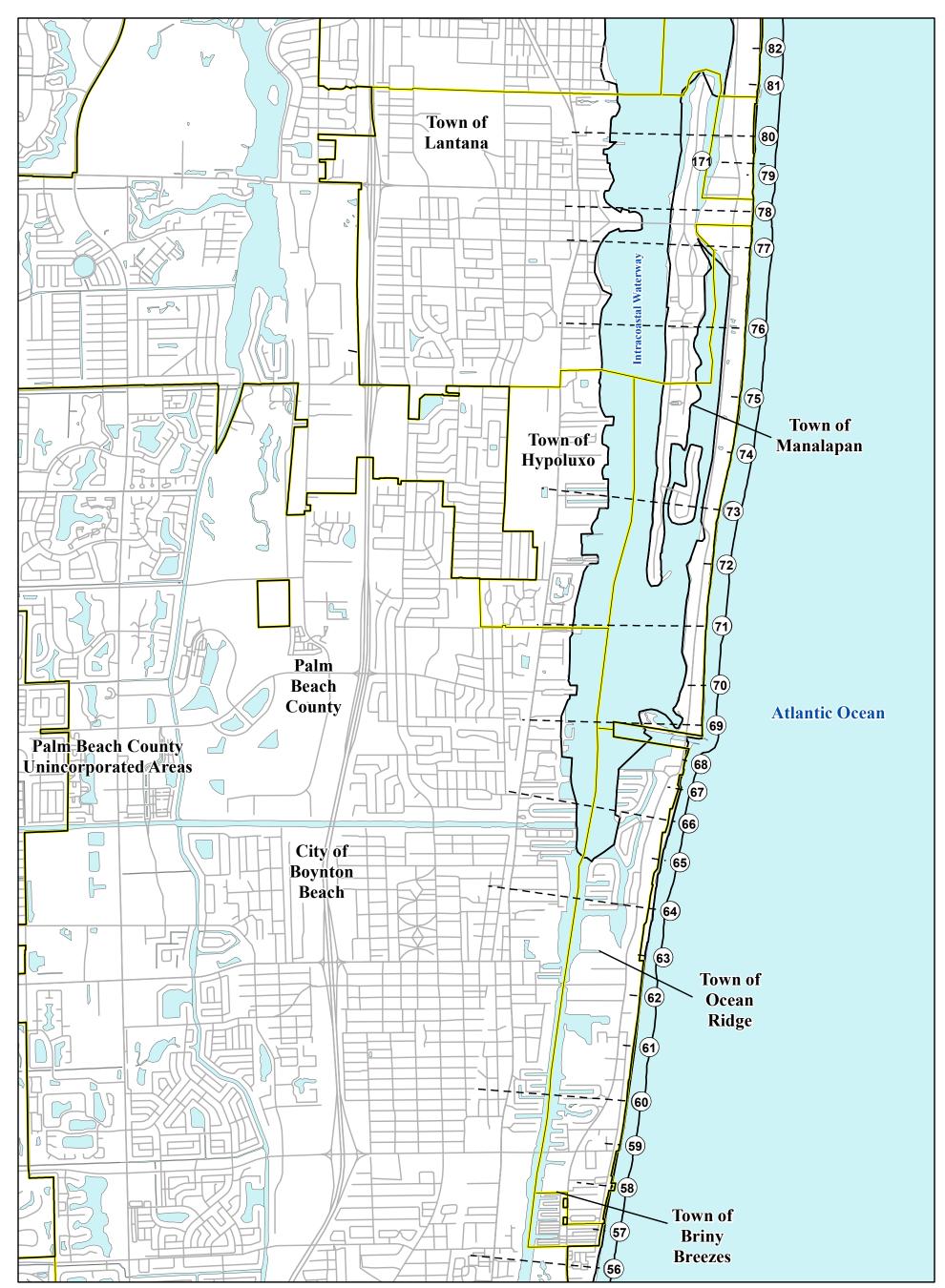


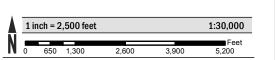
Map Projection:

State Plane Transverse Mercator, Florida East Zone 0901; North American Datum 1983; Western Hemisphere; Vertical Datum: NAVD 88



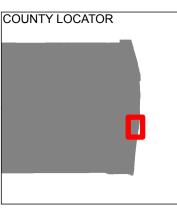


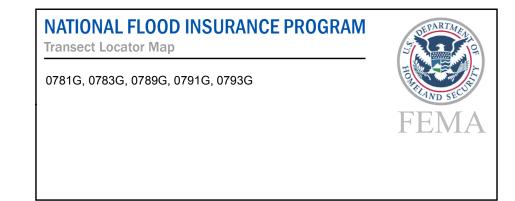


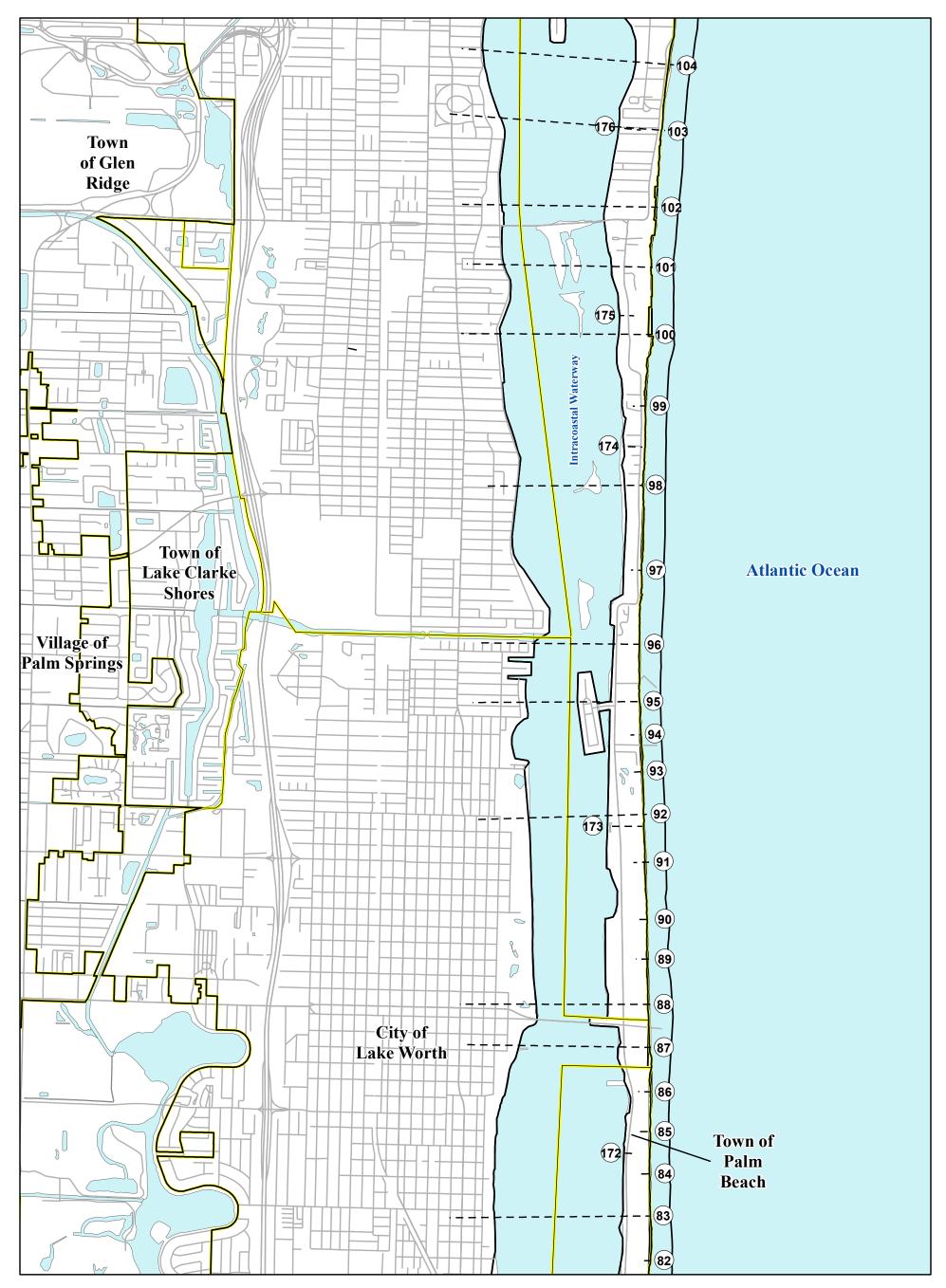


Map Projection:

State Plane Transverse Mercator, Florida East Zone 0901; North American Datum 1983; Western Hemisphere; Vertical Datum: NAVD 88



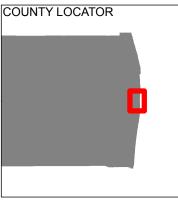




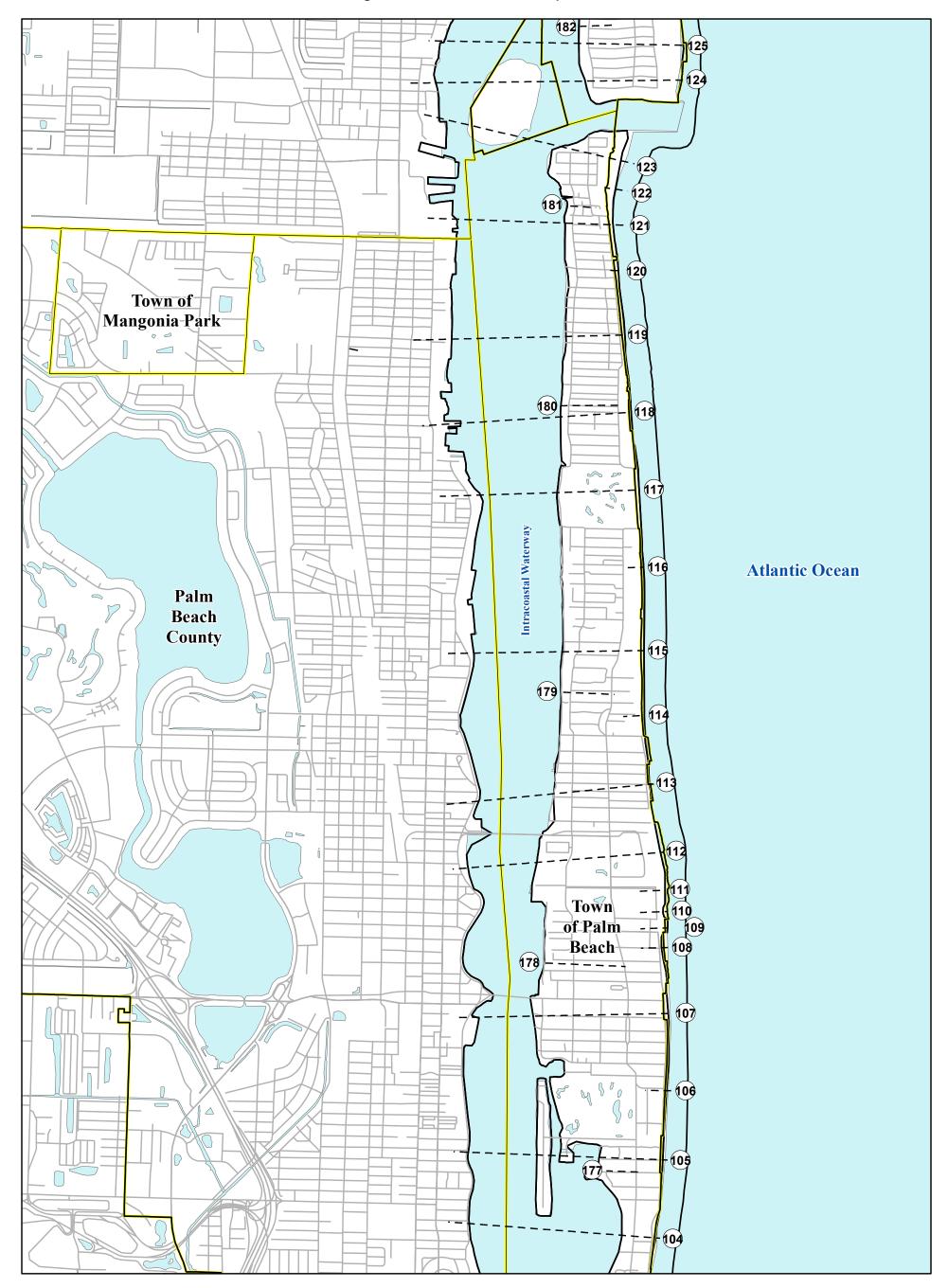
1 inch = 2,500 feet 1:30,000 0 650 1,300 2,600 3,900 5,200

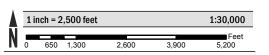
Map Projection:

State Plane Transverse Mercator, Florida East Zone 0901; North American Datum 1983; Western Hemisphere; Vertical Datum: NAVD 88



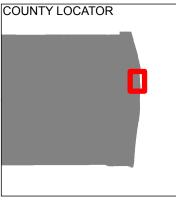
NATIONAL FLOOD INSURANCE PROGRAM Transect Locator Map 0591G, 0593G, 0583G, 0781G





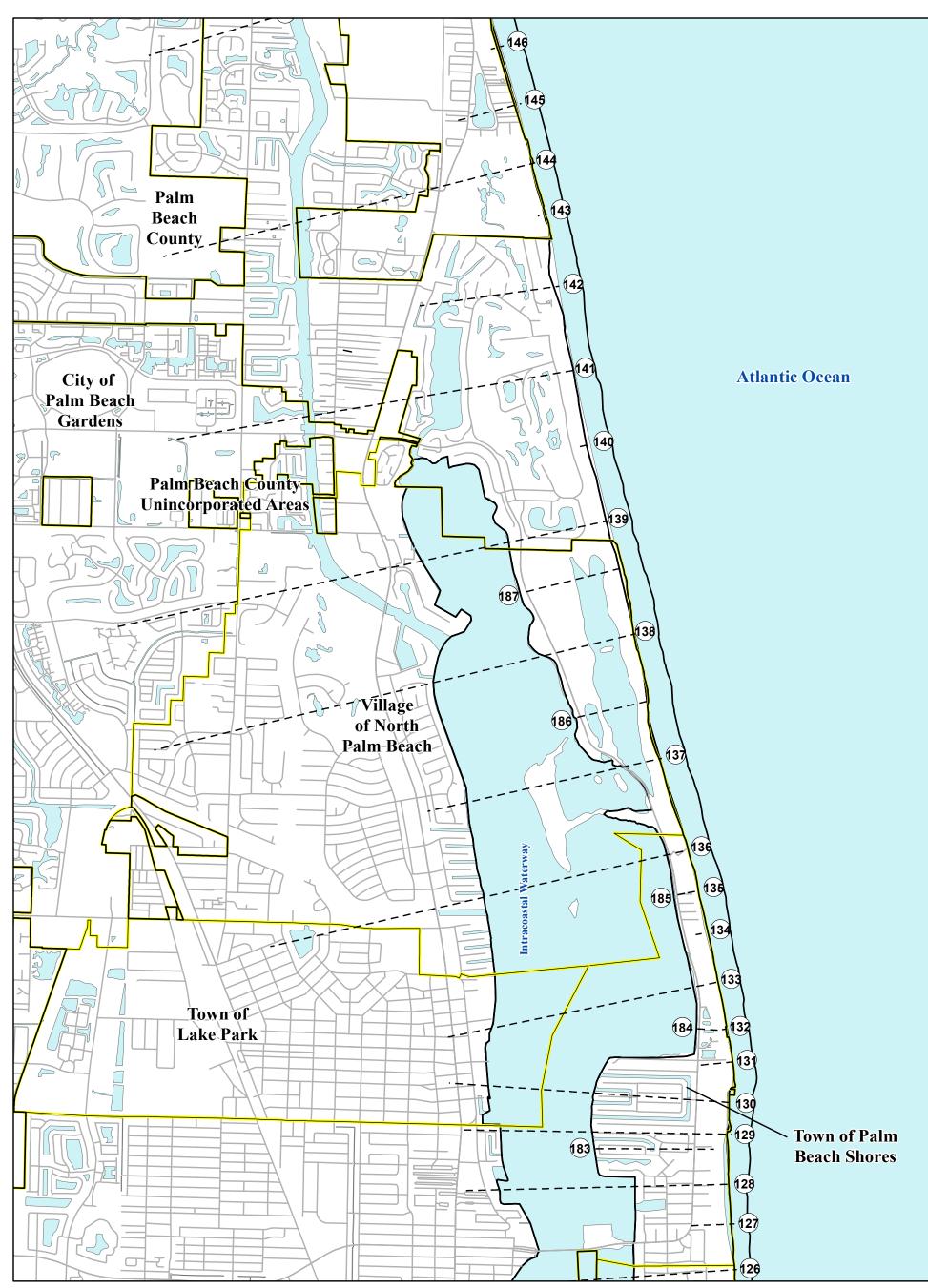
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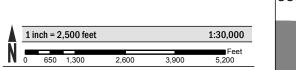
State Plane Transverse Mercator, Florida East Zone 0901; North American Datum 1983; Western Hemisphere; Vertical Datum: NAVD 88



NATIONAL FLOOD INSURANCE PROGRAM PARTM **Transect Locator Map** 0393G, 0395G, 0581G, 0583G

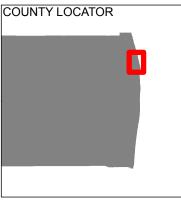






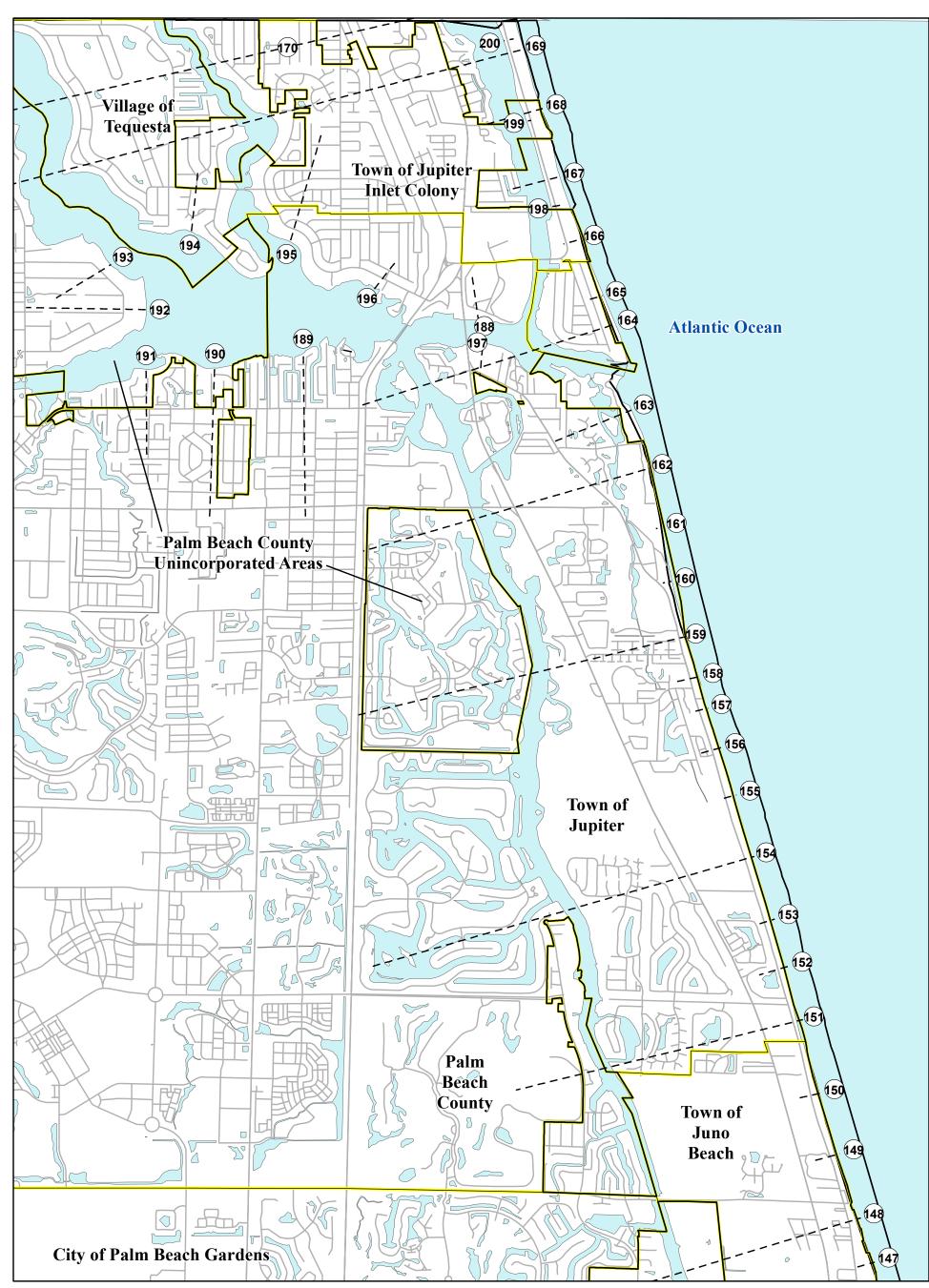
Map Projection:

State Plane Transverse Mercator, Florida East Zone 0901; North American Datum 1983; Western Hemisphere; Vertical Datum: NAVD 88



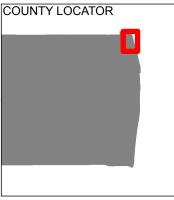
NATIONAL FLOOD INSURANCE PROGRAM PARTA **Transect Locator Map** 0377G, 0379G, 0381G, 0383G, 0387G, 0391G, 0393G, 0395G







State Plane Transverse Mercator, Florida East Zone 0901; North American Datum 1983; Western Hemisphere; Vertical Datum: NAVD 88

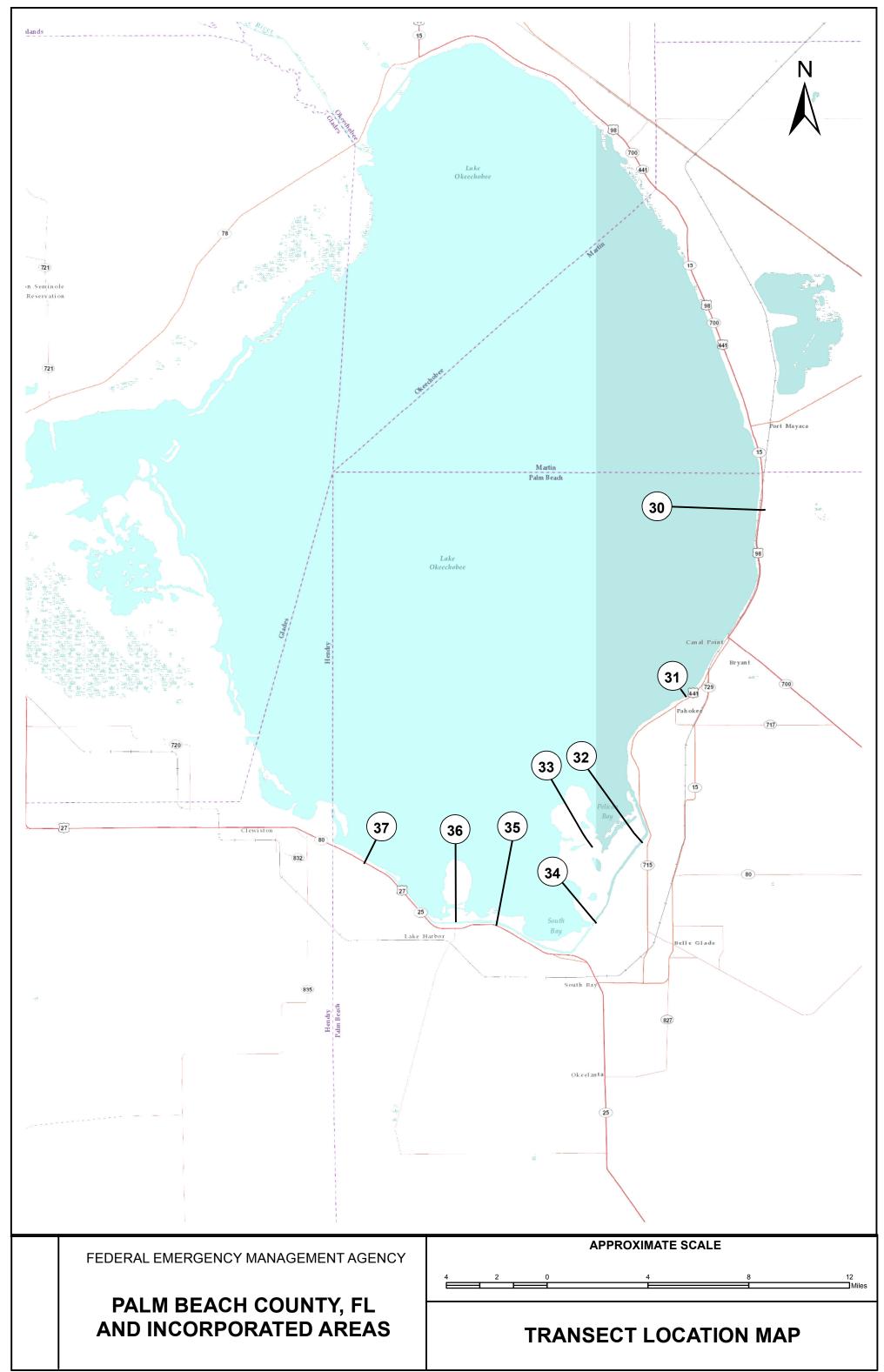


NATIONAL FLOOD INSURANCE PROGRAM

Transect Locator Map

0178G, 0179G, 0180G, 0186G, 0187G, 0189G, 0191G, 0193G, 0377G





5.4 Alluvial Fan Analyses

This section is not applicable to this Flood Risk Project.

Table 17: Summary of Alluvial Fan Analyses[Not Applicable to this Flood Risk Project]Table 18: Results of Alluvial Fan Analyses[Not Applicable to this Flood Risk Project]

SECTION 6.0 – MAPPING METHODS

6.1 Vertical and Horizontal Control

All FIS Reports and FIRMs are referenced to a specific vertical datum. The vertical datum provides a starting point against which flood, ground, and structure elevations can be referenced and compared. Until recently, the standard vertical datum used for newly created or revised FIS Reports and FIRMs was the National Geodetic Vertical Datum of 1929 (NGVD29). With the completion of the North American Vertical Datum of 1988 (NAVD88), many FIS Reports and FIRMs are now prepared using NAVD88 as the referenced vertical datum.

Flood elevations shown in this FIS Report and on the FIRMs are referenced to NAVD88. These flood elevations must be compared to structure and ground elevations referenced to the same vertical datum. For information regarding conversion between NGVD29 and NAVD88 or other datum conversion, visit the National Geodetic Survey website at <u>www.ngs.noaa.gov</u>.

Temporary vertical monuments are often established during the preparation of a flood hazard analysis for the purpose of establishing local vertical control. Although these monuments are not shown on the FIRM, they may be found in the archived project documentation associated with the FIS Report and the FIRMs for this community. Interested individuals may contact FEMA to access these data.

To obtain current elevation, description, and/or location information for benchmarks in the area, please visit the NGS website at <u>www.ngs.noaa.gov</u>.

The datum conversion locations and values that were calculated for Palm Beach County are provided in Table 19.

Quadrangle Name	Quadrangle Corner	Latitude	Longitude	Conversion from NGVD29 to NAVD88 (feet)				
Average Conversion from NGVD29 to NAVD88 = -1.560 ft.								

 Table 19: Countywide Vertical Datum Conversion

Table 20: Stream-Based Vertical Datum Conversion[Not Applicable to this Flood Risk Project]

6.2 Base Map

The FIRMs and FIS Report for this project have been produced in a digital format. The flood hazard information was converted to a Geographic Information System (GIS) format that meets FEMA's FIRM Database specifications and geographic information standards. This information is provided in a digital format so that it can be incorporated into a local GIS and be accessed more easily by the community. The FIRM Database includes most of the tabular information contained in the FIS Report in such a way that the data can be associated with pertinent spatial features. For example, the information contained in the FIO Profiles can be linked to the cross sections that are shown on the FIRMs. Additional information about the FIRM Database and its contents can be found in FEMA's *Guidelines and Standards for Flood Risk Analysis and Mapping*, www.fema.gov/media-library/resources-documents/collections/361.

Base map information shown on the FIRM was derived from the sources described in Table 21.

Data Type	Data Provider	Data Date	Data Scale	Data Description
Digital Orthophoto	United States Department of Agriculture, Aerial Photography Field Office	10/30/2017	N/A	Basemap imagery
Digital Orthophoto	Palm Beach County	01/09/2009	N/A	Ortho Imagery Base Index
HUC Boundaries	United States Geological Survey	01/01/1994	N/A	8-digit watershed boundary dataset
Political Boundaries	Palm Beach County	09/07/2019	N/A	S_POL_AR. Palm Beach County municipalities.
Public Land Survey System (PLSS)	United States Geological Survey	06/03/2004	N/A	S_PLSS_AR. Section, township and range lines representing the Public Land Survey System grid in Palm Beach County
Surface Water Features	Palm Beach County	01/09/2009	N/A	Spatial and attribute information for hydrologic features (WTR_LN and WTR_AR)
Transportation Features	ESRI Tiger Data	01/01/2000	N/A	Transportation
Transportation Features	Palm Beach County	09/07/2019	N/A	S_TRNSPORT_LN. Roads in Palm Beach County.
Political Boundaries	City of Palm Beach Gardens	01/17/2020	N/A	Municipal boundary and roadway centerlines for the City of Palm Beach Gardens.

Table 21: Base Map Sources

6.3 Floodplain and Floodway Delineation

The FIRM shows tints, screens, and symbols to indicate floodplains and floodways as well as the locations of selected cross sections used in the hydraulic analyses and floodway computations.

For riverine flooding sources, the mapped floodplain boundaries shown on the FIRM have been delineated using the flood elevations determined at each cross section; between cross sections, the boundaries were interpolated using the topographic elevation data described in Table 22. For each coastal flooding source studied as part of this FIS Report, the mapped floodplain boundaries on the FIRM have been delineated using the flood and wave elevations determined at each transect; between transects, boundaries were delineated using land use and land cover data, the topographic elevation data described in Table 22, and knowledge of coastal flood processes. In ponding areas, flood elevations were determined at each junction of the model; between junctions, boundaries were interpolated using the topographic elevation data described in Table 22.

In cases where the 1-percent and 0.2-percent-annual-chance floodplain boundaries are close together, only the 1-percent-annual-chance floodplain boundary has been shown. Small areas within the floodplain boundaries may lie above the flood elevations but cannot be shown due to limitations of the map scale and/or lack of detailed topographic data.

The floodway widths presented in this FIS Report and on the FIRM were computed for certain stream segments on the basis of equal conveyance reduction from each side of the floodplain. Floodway widths were computed at cross sections. Between cross sections, the floodway boundaries were interpolated. Table 2 indicates the flooding sources for which floodways have been determined. The results of the floodway computations for those flooding sources have been tabulated for selected cross sections and are shown in Table 23, "Floodway Data."

	Flooding	Source for Topographic Elevation Data					
Community	Flooding Source	Description	Vertical Accuracy	Horizontal Accuracy	Citation		
Entire Coastline of Palm Beach County	Atlantic Ocean	Light Detection and Ranging data (LiDAR)	9.5 cm RMSEz	1 meter at 95% confidence level	USACE 2016		
Entire Coastline of Palm Beach County	Atlantic Ocean	Light Detection and Ranging data (LiDAR)	9.1 cm RMSEz	1.15 meter at 95% confidence level	FDEM 2007		

 Table 22: Summary of Topographic Elevation Data used in Mapping

BFEs shown at cross sections on the FIRM represent the 1-percent-annual-chance water surface elevations shown on the Flood Profiles and in the Floodway Data tables in the FIS Report. Rounded whole-foot elevations may be shown on the FIRM in coastal areas, areas of ponding, and other areas with static base flood elevations.

	Table	23:	Floodway Data	
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ſ	LOCATION FLOODWAY 1% ANNUAL CHANCE FLOOD WATER SURFACE										
	LOCA	TION		FLOODWAY		ELEVATION (FEET NAVD88)					
	CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE		
	A B C D E F G H I J K	910 2,230 5,530 7,510 8,830 11,470 13,450 15,430 17,410 20,710 22,690	75.5 79.0 68.0 81.0 87.4 61.5 64.0 87.6 52.0 73.0 73.0	464 515 550 526 511 483 352 410 306 306 306	3.6 3.0 2.0 1.7 1.4 1.4 2.1 1.6 1.6 1.3 1.2	10.2 10.5 11.3 11.5 11.6 11.8 12.5 12.5 13.0 13.1 13.1	10.2 10.5 11.3 11.5 11.6 11.8 12.5 12.5 13.0 13.1 13.1	10.2 10.5 11.3 11.5 11.6 11.8 12.5 12.5 13.0 13.1 13.2	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0		
7	FEDERAL	EMERGENCY N	IANAGEMENT	AGENCY		EI	OODWAY				
	PALM	BEACH CO	UNTY, FLO	RIDA							
ນ ວ		AND INCORPOR				FLOOD	NG SOURCE:	E-3 CANAL			

	LOCA	TION		FLOODWAY		1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
	CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY ²	WITHOUT FLOODWAY ³	WITH FLOODWAY	INCREASE
	³ Elevation com	astal and riverine puted without co	nsideration of b	1,217 1,281 1,191 509 801 812 597 881 722 767 669 896 744	5.3 4.8 4.1 7.8 3.7 2.9 3.3 2.0 2.4 2.3 1.0 0.6 0.3		0.7 1.5 4.2 4.2 6.6 7.2 8.6 8.8 8.8 9.3 9.4 9.4	$\begin{array}{c} 0.7 \\ 1.5 \\ 4.2 \\ 4.2 \\ 6.6 \\ 7.4 \\ 8.6 \\ 8.9 \\ 8.8 \\ 8.9 \\ 9.3 \\ 9.4 \\ 9.4 \end{array}$	0.0 0.0 0.0 0.0 0.2 0.0 0.1 0.0 0.1 0.0 0.0 0.0 0.0
	-					base flood elevatio		ΤΔΤΔ	
FEDERAL EMERGENCY MANAGEMENT AGENCY FLOODWAY DATA PALM BEACH COUNTY, FLORIDA FLOODWAY DATA									

	LOCA	TION		FLOODWAY		1% ANNU	AL CHANCE FLO ELEVATION (FE	DOD WATER SU EET NAVD88)	RFACE
	CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
	A B C D E	867 2,547 4,828 6,788 7,980	96 172 78 100 24	590 1,091 427 630 117	2.6 1.4 2.8 0.8 4.2	* * * 5.0 ²	$ \begin{array}{c} 1.2^{3} \\ 1.6^{3} \\ 2.0^{3} \\ 2.5^{3} \\ 4.6^{3} \end{array} $	1.7 2.0 2.3 2.8 4.9	0.5 0.4 0.3 0.3 0.3
	 ² Combined coastal and riverine effects from Atlantic Ocean ³ Elevation computed without consideration of backwater effects from Atlantic Ocean * Controlled by coastal flooding – see Flood Insurance Rate Map for regulatory base flood elevation 								
TABLE		EMERGENCY M				FI	LOODWAY	DATA	
E 23			·			FLOODING	SOURCE: JU	JPITER CREE	К

Table 24: Flood Hazard and Non-Encroachment Data for Selected Streams [Not Applicable to this Flood Risk Project]

6.4 Coastal Flood Hazard Mapping

Flood insurance zones and BFEs including the wave effects were identified on each transect based on the results from the onshore wave hazard analyses. Between transects, elevations were interpolated using topographic maps, land-use and land-cover data, and knowledge of coastal flood processes to determine the aerial extent of flooding. Sources for topographic data are shown in Table 22.

Zone VE is subdivided into elevation zones and BFEs are provided on the FIRM.

The limit of Zone VE shown on the FIRM is defined as the farthest inland extent of any of these criteria (determined for the 1-percent-annual-chance flood condition):

- The *primary frontal dune zone* is defined in 44 CFR Section 59.1 of the NFIP regulations. The primary frontal dune represents a continuous or nearly continuous mound or ridge of sand with relatively steep seaward and landward slopes that occur immediately landward and adjacent to the beach. The primary frontal dune zone is subject to erosion and overtopping from high tides and waves during major coastal storms. The inland limit of the primary frontal dune zone occurs at the point where there is a distinct change from a relatively steep slope to a relatively mild slope.
- The *wave runup zone* occurs where the (eroded) ground profile is 3.0 feet or more below the 2-percent wave runup elevation.
- The *wave overtopping splash zone* is the area landward of the crest of an overtopped barrier, in cases where the potential 2-percent wave runup exceeds the barrier crest elevation by 3.0 feet or more.
- The *breaking wave height zone* occurs where 3-foot or greater wave heights could occur (this is the area where the wave crest profile is 2.1 feet or more above the total stillwater elevation).
- The *high-velocity flow zone* is landward of the overtopping splash zone (or area on a sloping beach or other shore type), where the product of depth of flow times the flow velocity squared (hv²) is greater than or equal to 200 ft³/sec². This zone may only be used on the Pacific Coast.

The SFHA boundary indicates the limit of SFHAs shown on the FIRM as either "V" zones or "A" zones.

Table 25 indicates the coastal analyses used for floodplain mapping and the criteria used to determine the inland limit of the open-coast Zone VE and the SFHA boundary at each transect.

Primary Frontal Dune (PFD) IdentifiedWave Runup AnalysisWave Height AnalysisZone Designation and BFE (ft NAVD88)Zone VE Designation and BFE (ft NAVD88)Zone VE Designation and BFE (ft NAVD88)Zone VE LimitSFHA Bounda1 \checkmark VE 12AE 6-7PFDSWEL2 \checkmark VE 12N/APFDSWEL3 \checkmark VE 12N/APFDSWEL3 \checkmark VE 12N/APFDSWEL4 \checkmark VE 11AE 6PFDSWEL5 \checkmark VE 11N/APFDSWEL6 \checkmark VE 13AE 6-8PFDSWEL7 \checkmark VE 13AE 6-8PFDSWEL9 \checkmark VE 12AE 6-7PFDSWEL10 \checkmark VE 12AE 6-7PFDSWEL11 \checkmark VE 12AE 6-7PFDSWEL13 \checkmark VE 12AE 6-7PFDSWEL
Coastal TransectFrontal Dune (PFD) IdentifiedDesignation and BFE (ft NAVD88)Designation and BFE (ft NAVD88)Zone VE LimitSFHA Bounda1✓VE 12AE 6-7PFDSWEL2✓VE 12N/APFDSWEL3✓VE 12N/APFDSWEL3✓VE 12N/APFDSWEL4✓VE 11AE 6PFDSWEL5✓VE 11AE 6PFDSWEL6✓VE 13AE 6-8PFDSWEL7✓VE 13AE 6-8PFDSWEL9✓VE 12AE 6-7PFDSWEL10✓VE 12AE 6-7PFDSWEL11✓VE 12AE 6-7PFDSWEL12✓VE 12AE 6-7PFDSWEL
2 \checkmark VE 12N/APFDSWEL3 \checkmark \bigvee E 12 AO 1N/ARunupSWEL4 \checkmark VE 11AE 6PFDSWEL5 \checkmark VE 11N/APFDSWEL6 \checkmark VE 13AE 6-8PFDSWEL7 \checkmark VE 13N/APFDSWEL8 \checkmark VE 12AE 6-8RunupSWEL9 \checkmark VE 12AE 6-7PFDSWEL10 \checkmark VE 12N/APFDSWEL11 \checkmark VE 12AE 6-7PFDSWEL12 \checkmark VE 12AE 6-7PFDSWEL
111 <th< td=""></th<>
3VAO 1N/ARunupSWEL4VVE 11AE 6PFDSWEL5VVE 11N/APFDSWEL6VVE 13AE 6-8PFDSWEL7VVE 13N/APFDSWEL8VVE 12AE 6-8RunupSWEL9VVE 12AE 6-8RunupSWEL10VVE 12AE 6-7PFDSWEL11VVE 12AE 6-7PFDSWEL12VVE 12AE 6-7PFDSWEL
1 1
6 \checkmark VE 13AE 6-8PFDSWEL 7 \checkmark VE 13N/APFDSWEL 8 \checkmark VE 12AE 6-8RunupSWEL 9 \checkmark VE 12AE 6-7PFDSWEL 10 \checkmark VE 13AE 6-7PFDSWEL 11 \checkmark VE 12N/APFDSWEL 12 \checkmark VE 12AE 6-7PFDSWEL
7✓VE 13N/APFDSWEL8✓VE 12AE 6-8RunupSWEL9✓VE 12AE 7-8RunupSWEL10✓VE 13AE 6-7PFDSWEL11✓VE 12N/APFDSWEL12✓VE 12AE 6-7PFDSWEL12✓VE 12AE 6-7PFDSWEL
8 ✓ VE 12 AE 6-8 Runup SWEL 9 ✓ VE 12 AE 7-8 Runup SWEL 10 ✓ VE 13 AE 6-7 PFD SWEL 11 ✓ VE 12 N/A PFD SWEL 12 ✓ VE 12 AE 6-7 PFD SWEL
9 ✓ VE 12 AE 7-8 Runup SWEL 10 ✓ VE 13 AE 6-7 PFD SWEL 11 ✓ VE 12 N/A PFD SWEL 12 ✓ VE 12 AE 6-7 PFD SWEL
10 ✓ VE 13 AE 6-7 PFD SWEL 11 ✓ VE 12 N/A PFD SWEL 12 ✓ VE 12 AE 6-7 PFD SWEL
11 ✓ VE 12 N/A PFD SWEL 12 ✓ VE 12 AE 6-7 PFD SWEL
12 ✓ VE 12 AE 6-7 PFD SWEL
13 ✓ VE 12 N/A PFD SWEL
14 ✓ VE 13 AE 6-7 PFD SWEL
15 ✓ VE 12 AE 6-8 PFD SWEL
16 🗸 VE 12 N/A Runup SWEL
17 ✓ VE 12 AE 6-7 Runup SWEL
18 ✓ VE 12 N/A Runup SWEL
19 ✓ VE 12 N/A Runup SWEL
20 ✓ VE 11 N/A Runup SWEL
21 ✓ VE 11 AE 7-8 Runup SWEL
22 ✓ VE 13 N/A PFD SWEL
23 ✓ VE 13 AE 7 Runup SWEL
24 ✓ VE 12 N/A PFD SWEL
25 ✓ VE 12 AE 7-8 PFD SWEL

Table 25: Summary of Coastal Transect Mapping Considerations

		Wave Runup Analysis	Wave Height Analysis		
	Primary Frontal Dune	Zone Designation	Zone Designation		
Coastal	(PFD)	and BFE	and BFE	Zone VE	SFHA
Transect	Identified	(ft NAVD88)	(ft NAVD88)	Limit	Boundary
26	~	VE 12	AE 7	PFD	SWEL
27	\checkmark	VE 12	AE 7	PFD	SWEL
28	✓	VE 12	N/A	PFD	SWEL
29	\checkmark	VE 12	AE 7-8	Runup	SWEL
30a	\checkmark	VE 12	AE 7	Runup	SWEL
31a	✓	VE 12	AE 7-8	Runup	SWEL
32a	✓	VE 12	AE 7	Runup	SWEL
33a	✓	VE 12	AE 7-8	Runup	SWEL
34a	✓	VE 12	N/A	Runup	SWEL
35a	\checkmark	VE 12	N/A	Runup	SWEL
36a	\checkmark	VE 12	AE 7-8	PFD	SWEL
37a	\checkmark	VE 12	AE 7-8	Runup	SWEL
38	~	VE 12 AE 12	N/A	PFD	SWEL
39	~	VE 12 AE 12	N/A	PFD	SWEL
40	✓	VE 12 AE 12	AE 7	PFD	SWEL
41	~	VE 12 AE 12	AE 7-8	PFD	SWEL
42	✓	VE 12	AE 7-8	PFD	SWEL
43	✓	VE 12	N/A	PFD	SWEL
44	✓	VE 12	N/A	PFD	SWEL
45	\checkmark	VE 12	AE 7-8	PFD	SWEL
46	\checkmark	VE 12	N/A	PFD	SWEL
47	\checkmark	VE 11	N/A	Runup	SWEL
48	\checkmark	VE 11	AE 7-9	Runup	SWEL
49	\checkmark	VE 11	N/A	Runup	SWEL

	Primary Frontal Dune	Wave Runup Analysis Zone Designation	Wave Height Analysis Zone Designation		
Coastal Transect	(PFD) Identified	and BFE (ft NAVD88)	and BFE (ft NAVD88)	Zone VE Limit	SFHA Boundary
50	~	VE 12	N/A	PFD	SWEL
51	~	VE 13 AO 1	N/A	PFD	SWEL
52	√	VE 11 AO 1	AE 8	Runup	SWEL
53	\checkmark	VE 12	N/A	PFD	SWEL
54		VE 11	N/A	PFD	SWEL
55	~	VE 11	N/A	PFD	SWEL
56	~	VE 11	AE 8-9	PFD	SWEL
57	~	VE 11 AO 1	N/A	Runup	N/A
58	~	VE 11	AE 8	Runup	SWEL
59	~	VE 11 AO 2	AE 8	Runup	N/A
60	~	VE 11	AE 8-9	Runup	SWEL
61	~	VE 12	N/A	PFD	SWEL
62	~	VE 12	N/A	PFD	SWEL
63	~	VE 12	AE 9	Runup	SWEL
64	~	VE 10	AE 9-10	Runup	SWEL
65	~	VE 10	N/A	Runup	SWEL
66	~	VE 10	AE 9-10	Runup	SWEL
67	~	VE 10	N/A	Runup	SWEL
68	~	VE 9-10	N/A	PFD	SWEL
69	~	VE 11	VE 11 AE 9-10	Runup	SWEL
70	~	VE 11	N/A	PFD	SWEL
71	~	VE 11 AE 11	VE 11 AE 9-10	Runup	SWEL

	1				
		Wave Runup Analysis	Wave Height Analysis		
Coastal Transect	Primary Frontal Dune (PFD) Identified	Zone Designation and BFE (ft NAVD88)	Zone Designation and BFE (ft NAVD88)	Zone VE Limit	SFHA Boundary
72	~	VE 11 AE 11	N/A	Runup	SWEL
73		VE 13	AE 9-10	Runup	SWEL
74		VE 14 AO 1	AE 9	Runup	SWEL
75		VE 13	AE 9	Runup	SWEL
76		VE 13	VE 11 AE 8-10	Runup	SWEL
77		VE 12	VE 11 AE 8-10	Runup	SWEL
78		VE 15	VE 11 AE 8-10	Runup	SWEL
79		VE 14	N/A	Runup	SWEL
80		VE 14	VE 11 AE 8-9	Runup	SWEL
81		VE 11	N/A	Runup	SWEL
82	~	VE 11	N/A	Runup	SWEL
83	~	VE 11	VE 11 AE 8-10	PFD	SWEL
84	~	VE 11	N/A	PFD	SWEL
85		VE 12	N/A	Runup	SWEL
86	~	VE 11	AE 8	PFD	SWEL
87	~	VE 11	VE 10 AE 8-9	PFD	SWEL
88	~	VE 11	VE 10 AE 8-9	PFD	SWEL
89	~	VE 11	N/A	PFD	SWEL
90	~	VE 11	N/A	PFD	SWEL
91	✓	VE 11	AE 8	Runup	N/A
92	√	VE 11	VE 10 AE 7-9	PFD	SWEL

		Wave Runup Analysis	Wave Height Analysis		
Coastal Transect	Primary Frontal Dune (PFD) Identified	Zone Designation and BFE (ft NAVD88)	Zone Designation and BFE (ft NAVD88)	Zone VE Limit	SFHA Boundary
93	~	VE 11	N/A	PFD	SWEL
94		VE 12	N/A	Runup	SWEL
95	~	VE 11	AE 7-9	PFD	SWEL
96	~	VE 11	VE 9 AE 7-9	PFD	SWEL
97		VE 14	N/A	Runup	SWEL
98		VE 14	VE 9 AE 7-8	Runup	SWEL
99		VE 14	N/A	Runup	SWEL
100		VE 11	VE 9 AE 7-8	Runup	SWEL
101	~	VE 11	VE 9 AE 7-8	PFD	SWEL
102		VE 11	VE 9 AE 7-8	Runup	SWEL
103		VE 11	VE 9 AE 7-8	Runup	SWEL
104		VE 11	VE 9 AE 7-8	Runup	SWEL
105		VE 11	VE 9 AE 7-8	Runup	SWEL
106		VE 10	N/A	Runup	SWEL
107	\checkmark	VE 10	VE 9 AE 6-8	PFD	SWEL
108	✓	VE 10	N/A	PFD	SWEL
109		VE 17 AO 3	N/A	Runup	SWEL
110		VE 10	N/A	Runup	SWEL
111		VE 13	N/A	Runup	SWEL
112	\checkmark	VE 11	VE 9 AE 7-8	Runup	SWEL

		Wave Runup Analysis	nalysis Analysis		
Coastal Transect	Primary Frontal Dune (PFD) Identified	Zone Designation and BFE (ft NAVD88)	Zone Designation and BFE (ft NAVD88)	Zone VE Limit	SFHA Boundary
113		VE 11	VE 9 AE 6-8	Runup	SWEL
114		VE 16 AO 2	N/A	Runup	N/A
115		VE 12	VE 9 AE 6-7	Runup	SWEL
116		VE 16	N/A	Runup	SWEL
117		VE 14	VE 9 AE 6-7	Runup	SWEL
118		VE 13	VE 9 AE 6-7	Runup	SWEL
119		VE 14	VE 9 AE 6-7	Runup	SWEL
120	~	VE 14 AO 2	N/A	Runup	N/A
121	~	VE 11	VE 9 AE 6-7	Runup	SWEL
122	~	VE 10	N/A	PFD	SWEL
123	~	VE 10	VE 9 AE 6-8	PFD	SWEL
124	~	VE 13	VE 9 AE 6-8	PFD	SWEL
125	~	VE 10	VE 9 AE 6-7	PFD	SWEL
126	√	VE 10	VE 9 AE 6-7	PFD	SWEL
127	~	VE 10	N/A	PFD	SWEL
128	~	VE 11	VE 9 AE 6-7	PFD	SWEL
129	~	VE 11 AO 1	VE 9 AE 6-7	PFD	SWEL
130	~	VE 11 AE 11	VE 9 AE 6-7	PFD	SWEL

	Primary	Wave Runup Analysis Zone	Wave Height Analysis Zone		
Coastal Transect	Frontal Dune (PFD) Identified	Designation and BFE (ft NAVD88)	Designation and BFE (ft NAVD88)	Zone VE Limit	SFHA Boundary
131	~	VE 11 AO 3	AE 6-7	Runup	SWEL
132	~	VE 11	N/A	PFD	SWEL
133	~	VE 11	VE 9-10 AE 6-7	PFD	SWEL
134	~	VE 10	N/A	PFD	SWEL
135	~	VE 10	N/A	PFD	SWEL
136	~	VE 10 AO 1	VE 9-10 AE 6-7	Runup	SWEL
137	~	VE 9-10	VE 9 AE 7-9	Wave Height	SWEL
138	~	VE 9-10	VE 10 AE 7-8	Wave Height	SWEL
139	~	VE 11	VE 10 AE 7-8	PFD	SWEL
140	~	VE 11	N/A	PFD	SWEL
141	~	VE 11	AE 5-7	PFD	SWEL
142	~	VE 10	AE 5-6	Runup	SWEL
143	~	VE 10	N/A	PFD	SWEL
144	~	VE 10	AE 5-7	PFD	SWEL
145	\checkmark	VE 10	AE 5-6	PFD	SWEL
146	~	VE 10	N/A	PFD	SWEL
147	~	VE 10	N/A	PFD	SWEL
148	✓	VE 10	AE 6-7	PFD	SWEL
149	✓	VE 10	N/A	PFD	SWEL
150	~	VE 10	N/A	PFD	SWEL
151	✓	VE 10	AE 6-7	PFD	SWEL
152	~	VE 10	N/A	PFD	SWEL
153	✓	VE 10	N/A	PFD	SWEL

Coastal	Primary Frontal Dune (PFD)	Wave Runup Analysis Zone Designation and BFE	Wave Height Analysis Zone Designation and BFE	Zone VE	SFHA
Transect	Identified	(ft NAVD88)	(ft NAVD88)	Limit	Boundary
154	\checkmark	VE 9	AE 5-7	PFD	SWEL
155	\checkmark	VE 9	N/A	PFD	SWEL
156	\checkmark	VE 9	N/A	PFD	SWEL
157	\checkmark	VE 9	N/A	PFD	SWEL
158	\checkmark	VE 12	N/A	PFD	SWEL
159	~	VE 9	AE 5-7	PFD	SWEL
160	\checkmark	VE 9	N/A	PFD	SWEL
161	~	VE 9	N/A	PFD	SWEL
162	\checkmark	VE 8	AE 5-7	PFD	SWEL
163	\checkmark	VE 8	AE 5-6	PFD	SWEL
164	~	VE 8	VE 8 AE 5-7	PFD	SWEL
165	\checkmark	VE 8	N/A	PFD	SWEL
166	\checkmark	VE 12	N/A	PFD	SWEL
167	\checkmark	VE 9	AE 5-6	PFD	SWEL
168	\checkmark	VE 9	AE 5-6	PFD	SWEL
169	✓	VE 9	AE 5-7	PFD	SWEL
170		N/A	AE 5-7	N/A	SWEL
171		N/A	VE 11 AE 8-9	N/A	SWEL
172		N/A	VE 11 AE 8-9	Wave Height	SWEL
173		N/A	VE 11 AE 7-9	Wave Height	SWEL
174		N/A	VE 9 AE 8	Wave Height	SWEL
175		N/A	VE 9 AE 7-8	Wave Height	SWEL

	-			-	
	Primary Frontal Dune	Wave Runup Analysis Zone Designation	Wave Height Analysis Zone Designation		
Coastal Transect	(PFD) Identified	and BFE (ft NAVD88)	and BFE (ft NAVD88)	Zone VE Limit	SFHA Boundary
176		N/A	VE 9 AE 7-8	Wave Height	SWEL
177		N/A	AE 7-9	Wave Height	SWEL
178		N/A	VE 9 AE 6-8	Wave Height	SWEL
179		N/A	VE 9 AE 6	Wave Height	SWEL
180		N/A	VE 9 AE 6	Wave Height	SWEL
181		N/A	VE 9 AE 6	N/A	SWEL
182		N/A	VE 9 AE 6	N/A	SWEL
183		N/A	VE 9 AE 6-7	Wave Height	SWEL
184		N/A	VE 9 AE 7	Wave Height	SWEL
185		N/A	VE 9 AE 7	Wave Height	SWEL
186		N/A	VE 9-10 AE 8	Wave Height	N/A
187		N/A	VE 9-10 AE 7-8	Wave Height	N/A
188		N/A	VE 8 AE 5-6	Wave Height	SWEL
189		N/A	VE 8 AE 5-6	Wave Height	SWEL
190		N/A	VE 8 AE 5-6	Wave Height	SWEL
191		N/A	VE 8 AE 5-6	Wave Height	SWEL
192		N/A	VE 8 AE 5-7	Wave Height	SWEL

		Wave Runup Analysis	Wave Height Analysis		
Coastal Transect	Primary Frontal Dune (PFD) Identified	Zone Designation and BFE (ft NAVD88)	Zone Designation and BFE (ft NAVD88)	Zone VE Limit	SFHA Boundary
193		N/A	VE 8 AE 5-7	Wave Height	SWEL
194		N/A	VE 8 AE 5-6	Wave Height	SWEL
195		N/A	VE 8 AE 5-6	Wave Height	SWEL
196		N/A	N/A VE 8 AE 5-6 Wave		SWEL
197		N/A	VE 8 AE 6	Wave Height	SWEL
198		N/A	AE 5-6	N/A	SWEL
199		N/A	AE 5-6	N/A	SWEL
200		N/A	AE 5-6	N/A	SWEL
30		*	*	*	*
31		*	*	*	*
32		*	*	*	*
33		*	*	*	*
34		*	*	*	*
35		*	*	*	*
36		*	*	*	*
37		*	*	*	*

* Data not available

A LiMWA boundary has also been added in coastal areas subject to wave action for use by local communities in safe rebuilding practices. The LiMWA represents the approximate landward limit of the 1.5-foot breaking wave.

6.5 **FIRM Revisions**

This FIS Report and the FIRM are based on the most up-to-date information available to FEMA at the time of its publication; however, flood hazard conditions change over time. Communities or private parties may request flood map revisions at any time. Certain types of requests require submission of supporting data. FEMA may also initiate a revision. Revisions may take several forms, including Letters of Map Amendment (LOMAs), Letters of Map Revision Based on Fill (LOMR-Fs), Letters of Map Revision (LOMRs) (referred to collectively as Letters of Map Change (LOMCs)), Physical Map Revisions (PMRs), and FEMA-contracted restudies. These types of revisions are further described below. Some of these types of revisions do not result in the republishing of the FIS Report. To assure that any user is aware of all revisions, it is advisable to contact the community repository of flood-hazard data (shown in Table 30, "Map Repositories").

6.5.1 Letters of Map Amendment

A LOMA is an official revision by letter to an effective NFIP map. A LOMA results from an administrative process that involves the review of scientific or technical data submitted by the owner or lessee of property who believes the property has incorrectly been included in a designated SFHA. A LOMA amends the currently effective FEMA map and establishes that a specific property is not located in a SFHA. A LOMA cannot be issued for properties located on the PFD (primary frontal dune).

To obtain an application for a LOMA, visit <u>www.fema.gov/letter-map-amendment-loma</u> and download the form "MT-1 Application Forms and Instructions for Conditional and Final Letters of Map Amendment and Letters of Map Revision Based on Fill". Visit the "Flood Map-Related Fees" section to determine the cost, if any, of applying for a LOMA.

FEMA offers a tutorial on how to apply for a LOMA. The LOMA Tutorial Series can be accessed at <u>www.fema.gov/online-tutorials</u>.

For more information about how to apply for a LOMA, call the FEMA Map Information eXchange; toll free, at 1-877-FEMA MAP (1-877-336-2627).

6.5.2 Letters of Map Revision Based on Fill

A LOMR-F is an official revision by letter to an effective NFIP map. A LOMR-F states FEMA's determination concerning whether a structure or parcel has been elevated on fill above the base flood elevation and is, therefore, excluded from the SFHA.

Information about obtaining an application for a LOMR-F can be obtained in the same manner as that for a LOMA, by visiting <u>www.fema.gov/letter-map-amendment-loma</u> for the "MT-1 Application Forms and Instructions for Conditional and Final Letters of Map Amendment and Letters of Map Revision Based on Fill" or by calling the FEMA Map Information eXchange, toll free, at 1-877-FEMA MAP (1-877-336-2627). Fees for applying for a LOMR-F, if any, are listed in the "Flood Map-Related Fees" section.

A tutorial for LOMR-F is available at <u>www.fema.gov/online-tutorials</u>.

6.5.3 Letters of Map Revision

A LOMR is an official revision to the currently effective FEMA map. It is used to change flood zones, floodplain and floodway delineations, flood elevations and planimetric features. All requests for LOMRs should be made to FEMA through the chief executive officer of the community, since it is the community that must adopt any changes and revisions to the map. If the request for a LOMR is not submitted through the chief executive officer of the community, evidence must be submitted that the community has been notified of the request.

To obtain an application for a LOMR, visit <u>www.fema.gov/media-library/assets/</u> <u>documents/1343</u> and download the form "MT-2 Application Forms and Instructions for Conditional Letters of Map Revision and Letters of Map Revision". Visit the "Flood Map-Related Fees" section to determine the cost of applying for a LOMR. For more information about how to apply for a LOMR, call the FEMA Map Information eXchange; toll free, at 1-877-FEMA MAP (1-877-336-2627) to speak to a Map Specialist.

Previously issued mappable LOMCs (including LOMRs) that have been incorporated into the Palm Beach County FIRM are listed in Table 26.

Table 26: Incorporated Letters of Map Change

[Not Applicable to this Flood Risk Project]

6.5.4 Physical Map Revisions

A Physical Map Revisions (PMR) is an official republication of a community's NFIP map to effect changes to base flood elevations, floodplain boundary delineations, regulatory floodways and planimetric features. These changes typically occur as a result of structural works or improvements, annexations resulting in additional flood hazard areas or correction to base flood elevations or SFHAs.

The community's chief executive officer must submit scientific and technical data to FEMA to support the request for a PMR. The data will be analyzed and the map will be revised if warranted. The community is provided with copies of the revised information and is afforded a review period. When the base flood elevations are changed, a 90-day appeal period is provided. A 6-month adoption period for formal approval of the revised map(s) is also provided.

For more information about the PMR process, please visit <u>www.fema.gov</u> and visit the "Flood Map Revision Processes" section.

6.5.5 Contracted Restudies

The NFIP provides for a periodic review and restudy of flood hazards within a given community. FEMA accomplishes this through a national watershed-based mapping needs assessment strategy, known as the Coordinated Needs Management Strategy (CNMS). The CNMS is used by FEMA to assign priorities and allocate funding for new flood hazard analyses used to update the FIS Report and FIRM. The goal of CNMS is to define the validity of the engineering study data within a mapped inventory. The CNMS is used to track the assessment process, document engineering gaps and their resolution, and aid in prioritization for using flood risk as a key factor for areas identified

for flood map updates. Visit <u>www.fema.gov</u> to learn more about the CNMS or contact the FEMA Regional Office listed in Section 8 of this FIS Report.

6.5.6 Community Map History

The current FIRM presents flooding information for the entire geographic area of Palm Beach County. Previously, separate FIRMs, Flood Hazard Boundary Maps (FHBMs) and/or Flood Boundary and Floodway Maps (FBFMs) may have been prepared for the incorporated communities and the unincorporated areas in the county that had identified SFHAs. Current and historical data relating to the maps prepared for the project area are presented in Table 27, "Community Map History." A description of each of the column headings and the source of the date is also listed below.

- Community Name includes communities falling within the geographic area shown on the FIRM, including those that fall on the boundary line, nonparticipating communities, and communities with maps that have been rescinded. Communities with No Special Flood Hazards are indicated by a footnote. If all maps (FHBM, FBFM, and FIRM) were rescinded for a community, it is not listed in this table unless SFHAs have been identified in this community.
- Initial Identification Date (First NFIP Map Published) is the date of the first NFIP map that identified flood hazards in the community. If the FHBM has been converted to a FIRM, the initial FHBM date is shown. If the community has never been mapped, the upcoming effective date or "pending" (for Preliminary FIS Reports) is shown. If the community is listed in Table 27 but not identified on the map, the community is treated as if it were unmapped.
- *Initial FHBM Effective Date* is the effective date of the first FHBM. This date may be the same date as the Initial NFIP Map Date.
- FHBM Revision Date(s) is the date(s) that the FHBM was revised, if applicable.
- Initial FIRM Effective Date is the date of the first effective FIRM for the community.
- *FIRM Revision Date(s)* is the date(s) the FIRM was revised, if applicable. This is the revised date that is shown on the FIRM panel, if applicable. As countywide studies are completed or revised, each community listed should have its FIRM dates updated accordingly to reflect the date of the countywide study. Once the FIRMs exist in countywide format, as PMRs of FIRM panels within the county are completed, the FIRM Revision Dates in the table for each community affected by the PMR are updated with the date of the PMR, even if the PMR did not revise all the panels within that community.

The initial effective date for the Palm Beach County FIRMs in countywide format was 10/05/2017.

Community Name	Initial Identification Date	Initial FHBM Effective Date	FHBM Revision Date(s)	Initial FIRM Effective Date	FIRM Revision Date(s)
Atlantis, City of	12/06/1974	12/06/1974	N/A	11/01/1978	12/20/2024 10/05/2017
Belle Glade, City of	07/19/1974	07/19/1974	02/27/1976	05/15/1978	10/05/2017 09/30/1982
Boca Raton, City of	01/24/1975	01/24/1975	10/10/1975	06/01/1978	12/20/2024 10/05/2017 09/19/1984
Boynton Beach, City of	03/08/1974	03/08/1974	10/31/1975	01/03/1979	12/20/2024 10/05/2017 09/30/1982
Briny Breezes, Town of	01/23/1974	01/23/1974	01/30/1976	05/15/1978	12/20/2024 10/05/2017 09/30/1982
Cloud Lake, Town of	12/06/1974	12/06/1974	N/A	05/15/1978	10/05/2017
Delray Beach, City of	04/09/1971	N/A	N/A	04/09/1971	12/20/2024 10/05/2017 01/05/1989 09/30/1982 03/09/1979 07/16/1976 07/01/1974
Glen Ridge, Town of	12/06/1974	12/06/1974	N/A	05/15/1978	10/05/2017
Golf, Village of ¹	10/05/2017	N/A	N/A	10/05/2017	12/20/2024
Greenacres, City of ¹	10/05/2017	N/A	N/A	10/05/2017	12/20/2024
Gulf Stream, Town of	11/24/1972	N/A	N/A	11/24/1972	12/20/2024 10/05/2017 09/30/1982 12/15/1978 09/26/1975 07/01/1974
Haverhill, Town of ¹	10/05/2017	N/A	N/A	10/05/2017	N/A
Highland Beach, Town of	10/17/1970	N/A	N/A	10/17/1970	12/20/2024 10/05/2017 09/30/1982 01/26/1979 01/09/1976 07/01/1974
Hypoluxo, Town of	08/23/1974	08/23/1974	N/A	05/15/1978	12/20/2024 10/05/2017

Community Name	Initial Identification Date	Initial FHBM Effective Date	FHBM Revision Date(s)	Initial FIRM Effective Date	FIRM Revision Date(s)
Juno Beach, Town of	01/04/1974	01/04/1974	05/28/1976	12/01/1978	12/20/2024 10/05/2017 09/30/1982
Jupiter, Town of	09/22/1972	N/A	N/A	09/22/1972	12/20/2024 10/05/2017 06/02/1992 09/30/1982 02/09/1979 05/14/1976 07/01/1974
Jupiter Inlet Colony, Town of	09/22/1972	N/A	N/A	09/22/1972	12/20/2024 10/05/2017 09/30/1982 01/26/1979 04/16/1976 07/01/1974
Lake Clarke Shores, Town of	01/09/1974	01/09/1974	10/24/1975	11/01/1978	10/05/2017
Lake Park, Town of	11/23/1973	11/23/1973	01/30/1976	09/15/1978	12/20/2024 10/05/2017
Lake Worth Beach, City of	08/02/1974	08/02/1974	03/26/1976	12/01/1978	12/20/2024 10/05/2017 09/30/1982
Lantana, Town of	03/12/1971	N/A	N/A	03/12/1971	12/20/2024 10/05/2017 10/15/1982 01/05/1979 10/01/1976 07/01/1974
Loxahatchee Groves, Town of ²	06/17/1970	06/17/1970	N/A	02/01/1979	10/05/2017 10/15/1982
Manalapan, Town of	07/18/1970	N/A	N/A	07/18/1970	12/20/2024 10/05/2017 09/30/1982 06/29/1979 10/01/1976 07/01/1974
Mangonia Park, Town of	01/16/1974	01/16/1974	02/13/1976	03/01/1978	10/05/2017
North Palm Beach, Village of	12/06/1974	12/06/1974	12/19/1975	08/15/1978	12/20/2024 10/05/2017 06/02/1992 04/04/1983

 Table 27: Community Map History (continued)

Community Name	Initial Identification Date	Initial FHBM Effective Date	FHBM Revision Date(s)	Initial FIRM Effective Date	FIRM Revision Date(s)
Ocean Ridge, Town of	09/18/1970	09/18/1970	N/A	04/09/1971	12/20/2024 10/05/2017 09/30/1982 06/29/1979 12/05/1975 07/01/1974
Pahokee, City of	09/05/1975	09/05/1975	N/A	05/15/1978	10/05/2017 10/15/1982
Palm Beach, Town of	09/13/1974	09/13/1974	09/05/1975	05/15/1978	12/20/2024 10/05/2017 09/30/1982
Palm Beach County, Unincorporated Areas	06/17/1970	06/17/1970	N/A	02/01/1979	12/20/2024 10/05/2017 06/02/1992 10/15/1982
Palm Beach Gardens, City of	01/18/1974	01/18/1974	08/06/1976	01/03/1979	12/20/2024 10/05/2017 01/06/1988
Palm Beach Shores, Town of	04/27/1970	04/27/1970	N/A	06/25/1971	12/20/2024 10/05/2017 09/30/1982 12/30/1977 05/23/1975 07/01/1974
Palm Springs, Village of	03/15/1974	03/15/1974	06/11/1976	03/01/1978	10/05/2017 12/22/1998 10/23/1981
Riviera Beach, City of	09/27/1972	N/A	N/A	09/27/1972	12/20/2024 10/05/2017 09/30/1982 06/29/1979 10/24/1975 07/01/1974
Royal Palm Beach, Village of ¹	10/05/2017	N/A	N/A	10/05/2017	N/A
South Bay, City of ¹	10/05/2017	N/A	N/A	10/05/2017	N/A
South Palm Beach, Town of	01/16/1974	01/16/1974	09/26/1975	05/15/1978	12/20/2024 10/05/2017 09/30/1982

 Table 27: Community Map History (continued)

Community Name	Initial Identification Date	Initial FHBM Effective Date	FHBM Revision Date(s)	Initial FIRM Effective Date	FIRM Revision Date(s)
Tequesta, Village of	06/11/1971	N/A	N/A	06/11/1971	12/20/2024 10/05/2017 09/30/1982 01/05/1979 10/08/1976 07/01/1974
Wellington, Village of ²	06/17/1970	06/17/1970	N/A	02/01/1979	10/05/2017 10/15/1982
West Palm Beach, City of	10/31/1975	10/31/1975	03/18/1977	03/01/1979	12/20/2024 10/05/2017
Westlake, City of ²	06/17/1970	06/17/1970	N/A	02/01/1979	10/05/2017 10/15/1982

Table 27: Community Map History (continued)

¹ This community did not have a FIRM prior to the first countywide FIRM for Palm Beach County

² Dates for this community were taken from Palm Beach County, Unincorporated Areas

SECTION 7.0 – CONTRACTED STUDIES AND COMMUNITY COORDINATION

7.1 Contracted Studies

Table 28 provides a summary of the contracted studies, by flooding source, that are included in this FIS Report.

Flooding Source	FIS Report Dated	Contractor	Number	Work Completed Date	Affected Communities
Atlantic Ocean	12/20/2024	BakerAECOM	HSFE04-13- J-0099	September 2019	Boca Raton, City of; Boynton Beach, City of; Briny Breezes, Town of; Delray Beach, City of; Gulf Stream, Town of; Highland Beach, Town of; Juno Beach, Town of; Jupiter, Town of; Jupiter Inlet Colony, Town of; Lake Worth Beach, City of; Lantana, Town of; Manalapan, Town of; North Palm Beach, Village of; Ocean Ridge, Town of; Palm Beach, Town of; Palm Beach County, Unincorporated Areas; Palm Beach Shores, Town of; Riviera Beach, City of; South Palm Beach, Village of; Tequesta, Village of

 Table 28: Summary of Contracted Studies Included in this FIS Report

Table 28: Summary of Contracted Studies Included in this FIS Report (continued)

Flooding Source	FIS Report Dated	Contractor	Number	Work Completed Date	Affected Communities
Atlantic Ocean ¹	12/20/2024	Compass	HSFE04-13- J-0099	September 2022	Atlantis, City of; Boca Raton, City of; Boynton Beach, City of; Briny Breezes, Town of; Delray Beach, City of; Golf, Village of; Greenacres, City of; Gulf Stream, Town of; Highland Beach, Town of; Hypoluxo, Town of; Jupiter, Town of; Lake Worth Beach, City of; Lantana, Town of; Manalapan, Town of; Ocean Ridge, Town of; Palm Beach Shores, Town of; Palm Beach County, Unincorporated; Palm Beach, Town of; Riviera Beach, City of; South Palm Beach, Town of; Tequesta, Village of; West Palm Beach, City of
C-51 Basin	10/05/2017	SFWMD	N/A	May 2015	Cloud Lake, Town of; Glen Ridge, Town of; Greenacres, City of; Haverhill, Town of; Lake Clarke Shores, Town of; Lake Worth Beach, City of; Loxahatchee Groves, Town of; Palm Beach County, Unincorporated Areas; Palm Beach Gardens, City of; Palm Springs, Village of; Royal Palm Beach, Village of; Wellington, Village of; West Palm Beach, City of
C-51 Canal	10/05/2017	SFWMD	N/A	May 2015	Lake Worth Beach, City of; West Palm Beach, City of
E-2E Canal	10/05/2017	Tomasello Consulting Engineers, Inc.	N/A	February 2014	Palm Beach County, Unincorporated Areas
E-3 Canal	10/05/2017	Tomasello Consulting Engineers, Inc.	N/A	February 2014	Boca Raton, City of; Palm Beach County, Unincorporated Areas
E-4 Canal	10/05/2017	Tomasello Consulting Engineers, Inc.	N/A	February 2014	Boca Raton, City of
Hillsboro Canal	10/05/2017	Engineering Methods & Applications	EMW-94-C- 4392	May 1996	Palm Beach County, Unincorporated Areas

Table 28: Summary of Contracted Studies Included in this FIS Report (continued)

Flooding Source	FIS Report Dated	Contractor	Number	Work Completed Date	Affected Communities
Intracoastal Waterway	12/20/2024	BakerAECOM	HSFE04-13- J-0099	September 2019	Boca Raton, City of; Boynton Beach, City of; Briny Breezes, Town of; Delray Beach, City of; Gulf Stream, Town of; Highland Beach, Town of; Hypoluxo, Town of; Juno Beach, Town of; Jupiter, Town of; Jupiter Inlet Colony, Town of; Lake Park, Town of; Lake Worth Beach, City of; Lantana, Town of; Manalapan, Town of; North Palm Beach, Village of; Ocean Ridge, Town of; Palm Beach, Town of; Palm Beach County, Unincorporated Areas; Palm Beach Gardens, City of; Palm Beach Shores, Town of; Riviera Beach, City of; South Palm Beach, Village of; Tequesta, Village of; West Palm Beach, City of
Jupiter Creek	10/05/2017	Watershed IV Alliance	EMA-2002- CO-0011A	September 2012	Jupiter, Town of; Palm Beach County, Unincorporated Areas
Keller Canal	10/05/2017	Dewberry & Davis LLC	N/A	May 2005	Lake Clarke Shores, Town of; Lake Worth Beach, City of; Palm Beach County, Unincorporated Areas; Palm Springs, Village of
L-14 Canal	10/05/2017	Dewberry & Davis LLC	N/A	May 2005	Atlantis, City of; Greenacres, City of; Palm Beach County, Unincorporated Areas
L-16 Canal	10/05/2017	Dewberry & Davis LLC	N/A	May 2005	Palm Beach County, Unincorporated Areas
Lake Okeechobee	10/05/2017	Watershed IV Alliance	EMA-2002- CO-0011A	September 2012	Pahokee, City of; Palm Beach County, Unincorporated Areas
Lake Osborne	10/05/2017	Dewberry & Davis LLC	N/A	May 2005	Lake Worth Beach, City of; Palm Beach County, Unincorporated Areas
Loxahatchee River	12/20/2024	BakerAECOM	HSFEHQ-09- D-0368	November 2016	Jupiter, Town of; Palm Beach County, Unincorporated Areas
Zone A Flooding Sources	10/05/2017	Engineering Methods & Applications	EMW-94-C- 4392	May 1996	Boca Raton, City of; Delray Beach, City of; Jupiter, Town of; Palm Beach County, Unincorporated Areas; West Palm Beach, City of
Zone AH Ponding	10/05/2017	Engineering Methods & Applications	EMW-94-C- 4392	May 1996	Boca Raton, City of; Lake Park, Town of; Mangonia Park, Town of; Palm Beach County, Unincorporated Areas; Palm Beach Gardens, City of; Riviera Beach, City of; West Palm Beach, City of

Table 28: Summar	y of Contracted Studies Included in this FIS Report (continued)
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Flooding Source	FIS Report Dated	Contractor	Number	Work Completed Date	Affected Communities
Zone AO Ponding	10/05/2017	Engineering Methods & Applications	EMW-94-C- 4392	May 1996	Jupiter, Town of; Palm Beach County, Unincorporated Areas; Palm Beach Gardens, City of

¹ The following revisions were made by Compass, per comments addressed during the appeal period

7.2 Community Meetings

The dates of the community meetings held for this Flood Risk Project and previous Flood Risk Projects are shown in Table 29. These meetings may have previously been referred to by a variety of names (Community Coordination Officer (CCO), Scoping, Discovery, etc.), but all meetings represent opportunities for FEMA, community officials, study contractors, and other invited guests to discuss the planning for and results of the project.

Table 29: Community Meetings

Community	FIS Report Dated	Date of Meeting	Meeting Type	Attended By
		06/26/2014	Discovery	FEMA, BakerAECOM, TCE (Tomasello Consulting Engineers, Inc.), Taylor Engineering, SFWMD (South Florida Water Management District), BCC, and the community
		05/10/2016 05/17/2017	Technical Update	FEMA, BakerAECOM, and the community
Atlantis, City of	12/20/2024	04/24/2018	Storm Surge Analysis Update	FEMA, BakerAECOM, and the community
		08/26/2019	Flood Risk Review	FEMA, BakerAECOM, and the community
		02/04/2020	Final CCO	FEMA, BakerAECOM, and the community
Belle Glade, City of	10/05/2017	09/30/2008	Initial CCO	FEMA, SFWMD, Florida Department of Emergency Management, Palm Beach County, local communities, government agencies, local engineers, and Watershed IV Alliance
		09/08/2014	Final CCO	FEMA, SFWMD, Palm Beach County, the community, and Watershed IV Alliance
	12/20/2024	06/26/2014	Discovery	FEMA, BakerAECOM, TCE (Tomasello Consulting Engineers, Inc.), Taylor Engineering, SFWMD (South Florida Water Management District), BCC, and the community
		05/10/2016 05/17/2017	Technical Update	FEMA, BakerAECOM, and the community
Boca Raton, City of		04/24/2018	Storm Surge Analysis Update	FEMA, BakerAECOM, and the community
		08/26/2019	Flood Risk Review	FEMA, BakerAECOM, and the community
		02/04/2020	Final CCO	FEMA, BakerAECOM, and the community

Community	FIS Report Dated	Date of Meeting	Meeting Type	Attended By
		06/26/2014	Discovery	FEMA, BakerAECOM, TCE (Tomasello Consulting Engineers, Inc.), Taylor Engineering, SFWMD (South Florida Water Management District), BCC, and the community
		05/10/2016 05/17/2017	Technical Update	FEMA, BakerAECOM, and the community
Boynton Beach, City of	12/20/2024	04/24/2018	Storm Surge Analysis Update	FEMA, BakerAECOM, and the community
		08/26/2019	Flood Risk Review	FEMA, BakerAECOM, and the community
		02/04/2020	Final CCO	FEMA, BakerAECOM, and the community
	12/20/2024	06/26/2014	Discovery	FEMA, BakerAECOM, TCE (Tomasello Consulting Engineers, Inc.), Taylor Engineering, SFWMD (South Florida Water Management District), BCC, and the community
		05/10/2016 05/17/2017	Technical Update	FEMA, BakerAECOM, and the community
Briny Breezes, Town of		04/24/2018	Storm Surge Analysis Update	FEMA, BakerAECOM, and the community
		08/26/2019	Flood Risk Review	FEMA, BakerAECOM, and the community
		02/04/2020	Final CCO	FEMA, BakerAECOM, and the community
Cloud Lake, Town of	10/05/2017	09/30/2008	Initial CCO	FEMA, SFWMD, Florida Department of Emergency Management, Palm Beach County, local communities, government agencies, local engineers, and Watershed IV Alliance
		09/08/2014	Final CCO	FEMA, SFWMD, Palm Beach County, the community, and Watershed IV Alliance

Community	FIS Report Dated	Date of Meeting	Meeting Type	Attended By
		06/26/2014	Discovery	FEMA, BakerAECOM, TCE (Tomasello Consulting Engineers, Inc.), Taylor Engineering, SFWMD (South Florida Water Management District), BCC, and the community
		05/10/2016 05/17/2017	Technical Update	FEMA, BakerAECOM, and the community
Delray Beach, City of	12/20/2024	04/24/2018	Storm Surge Analysis Update	FEMA, BakerAECOM, and the community
		08/26/2019	Flood Risk Review	FEMA, BakerAECOM, and the community
		02/04/2020	Final CCO	FEMA, BakerAECOM, and the community
Glen Ridge, Town of	10/05/2017	09/30/2008	Initial CCO	FEMA, SFWMD, Florida Department of Emergency Management, Palm Beach County, local communities, government agencies, local engineers, and Watershed IV Alliance
		09/08/2014	Final CCO	FEMA, SFWMD, Palm Beach County, the community, and Watershed IV Alliance
		06/26/2014	Discovery	FEMA, BakerAECOM, TCE (Tomasello Consulting Engineers, Inc.), Taylor Engineering, SFWMD (South Florida Water Management District), BCC, and the community
		05/10/2016 05/17/2017	Technical Update	FEMA, BakerAECOM, and the community
Golf, Village of	12/20/2024	04/24/2018	Storm Surge Analysis Update	FEMA, BakerAECOM, and the community
		08/26/2019	Flood Risk Review	FEMA, BakerAECOM, and the community
		02/04/2020	Final CCO	FEMA, BakerAECOM, and the community

Community	FIS Report Dated	Date of Meeting	Meeting Type	Attended By
		06/26/2014	Discovery	FEMA, BakerAECOM, TCE (Tomasello Consulting Engineers, Inc.), Taylor Engineering, SFWMD (South Florida Water Management District), BCC, and the community
		05/10/2016 05/17/2017	Technical Update	FEMA, BakerAECOM, and the community
Greenacres, City of	12/20/2024	04/24/2018	Storm Surge Analysis Update	FEMA, BakerAECOM, and the community
		08/26/2019	Flood Risk Review	FEMA, BakerAECOM, and the community
		02/04/2020	Final CCO	FEMA, BakerAECOM, and the community
	12/20/2024	06/26/2014	Discovery	FEMA, BakerAECOM, TCE (Tomasello Consulting Engineers, Inc.), Taylor Engineering, SFWMD (South Florida Water Management District), BCC, and the community
		05/10/2016 05/17/2017	Technical Update	FEMA, BakerAECOM, and the community
Gulf Stream, Town of		04/24/2018	Storm Surge Analysis Update	FEMA, BakerAECOM, and the community
		08/26/2019	Flood Risk Review	FEMA, BakerAECOM, and the community
		02/04/2020	Final CCO	FEMA, BakerAECOM, and the community
Haverhill, Town of	10/05/2017	09/30/2008	Initial CCO	FEMA, SFWMD, Florida Department of Emergency Management, Palm Beach County, local communities, government agencies, local engineers, and Watershed IV Alliance
	10/03/2017	09/08/2014	Final CCO	FEMA, SFWMD, Palm Beach County, the community, and Watershed IV Alliance

Community	FIS Report Dated	Date of Meeting	Meeting Type	Attended By
		06/26/2014	Discovery	FEMA, BakerAECOM, TCE (Tomasello Consulting Engineers, Inc.), Taylor Engineering, SFWMD (South Florida Water Management District), BCC, and the community
		05/10/2016 05/17/2017	Technical Update	FEMA, BakerAECOM, and the community
Highland Beach, Town of	12/20/2024	04/24/2018	Storm Surge Analysis Update	FEMA, BakerAECOM, and the community
		08/26/2019	Flood Risk Review	FEMA, BakerAECOM, and the community
		02/04/2020	Final CCO	FEMA, BakerAECOM, and the community
	12/20/2024	06/26/2014	Discovery	FEMA, BakerAECOM, TCE (Tomasello Consulting Engineers, Inc.), Taylor Engineering, SFWMD (South Florida Water Management District), BCC, and the community
		05/10/2016 05/17/2017	Technical Update	FEMA, BakerAECOM, and the community
Hypoluxo, Town of		04/24/2018	Storm Surge Analysis Update	FEMA, BakerAECOM, and the community
		08/26/2019	Flood Risk Review	FEMA, BakerAECOM, and the community
		02/04/2020	Final CCO	FEMA, BakerAECOM, and the community

Community	FIS Report Dated	Date of Meeting	Meeting Type	Attended By
		06/26/2014	Discovery	FEMA, BakerAECOM, TCE (Tomasello Consulting Engineers, Inc.), Taylor Engineering, SFWMD (South Florida Water Management District), BCC, and the community
		05/10/2016 05/17/2017	Technical Update	FEMA, BakerAECOM, and the community
Juno Beach, Town of	12/20/2024	04/24/2018	Storm Surge Analysis Update	FEMA, BakerAECOM, and the community
		08/26/2019	Flood Risk Review	FEMA, BakerAECOM, and the community
		02/04/2020	Final CCO	FEMA, BakerAECOM, and the community
	12/20/2024	06/26/2014	Discovery	FEMA, BakerAECOM, TCE (Tomasello Consulting Engineers, Inc.), Taylor Engineering, SFWMD (South Florida Water Management District), BCC, and the community
		05/10/2016 05/17/2017	Technical Update	FEMA, BakerAECOM, and the community
Jupiter, Town of		04/24/2018	Storm Surge Analysis Update	FEMA, BakerAECOM, and the community
		08/26/2019	Flood Risk Review	FEMA, BakerAECOM, and the community
		02/04/2020	Final CCO	FEMA, BakerAECOM, and the community

Community	FIS Report Dated	Date of Meeting	Meeting Type	Attended By
		06/26/2014	Discovery	FEMA, BakerAECOM, TCE (Tomasello Consulting Engineers, Inc.), Taylor Engineering, SFWMD (South Florida Water Management District), BCC, and the community
		05/10/2016 05/17/2017	Technical Update	FEMA, BakerAECOM, and the community
Jupiter Inlet Colony, Town of	12/20/2024	04/24/2018	Storm Surge Analysis Update	FEMA, BakerAECOM, and the community
		08/26/2019	Flood Risk Review	FEMA, BakerAECOM, and the community
		02/04/2020	Final CCO	FEMA, BakerAECOM, and the community
Lake Clarke Shores,	10/05/2017	09/30/2008	Initial CCO	FEMA, SFWMD, Florida Department of Emergency Management, Palm Beach County, local communities, government agencies, local engineers, and Watershed IV Alliance
Town of		09/08/2014	Final CCO	FEMA, SFWMD, Palm Beach County, the community, and Watershed IV Alliance
	12/20/2024	06/26/2014	Discovery	FEMA, BakerAECOM, TCE (Tomasello Consulting Engineers, Inc.), Taylor Engineering, SFWMD (South Florida Water Management District), BCC, and the community
		05/10/2016 05/17/2017	Technical Update	FEMA, BakerAECOM, and the community
Lake Park, Town of		04/24/2018	Storm Surge Analysis Update	FEMA, BakerAECOM, and the community
		08/26/2019	Flood Risk Review	FEMA, BakerAECOM, and the community
		02/04/2020	Final CCO	FEMA, BakerAECOM, and the community

Community	FIS Report Dated	Date of Meeting	Meeting Type	Attended By
Lake Worth Beach, City of		06/26/2014	Discovery	FEMA, BakerAECOM, TCE (Tomasello Consulting Engineers, Inc.), Taylor Engineering, SFWMD (South Florida Water Management District), BCC, and the community
		05/10/2016 05/17/2017	Technical Update	FEMA, BakerAECOM, and the community
	12/20/2024	04/24/2018	Storm Surge Analysis Update	FEMA, BakerAECOM, and the community
		08/26/2019	Flood Risk Review	FEMA, BakerAECOM, and the community
		02/04/2020	Final CCO	FEMA, BakerAECOM, and the community
	12/20/2024	06/26/2014	Discovery	FEMA, BakerAECOM, TCE (Tomasello Consulting Engineers, Inc.), Taylor Engineering, SFWMD (South Florida Water Management District), BCC, and the community
		05/10/2016 05/17/2017	Technical Update	FEMA, BakerAECOM, and the community
Lantana, Town of		04/24/2018	Storm Surge Analysis Update	FEMA, BakerAECOM, and the community
		08/26/2019	Flood Risk Review	FEMA, BakerAECOM, and the community
		02/04/2020	Final CCO	FEMA, BakerAECOM, and the community
Loxahatchee Groves,	10/05/2017	09/30/2008	Initial CCO	FEMA, SFWMD, Florida Department of Emergency Management, Palm Beach County, local communities, government agencies, local engineers, and Watershed IV Alliance
Town of		09/08/2014	Final CCO	FEMA, SFWMD, Palm Beach County, the community, and Watershed IV Alliance

Community	FIS Report Dated	Date of Meeting	Meeting Type	Attended By
		06/26/2014	Discovery	FEMA, BakerAECOM, TCE (Tomasello Consulting Engineers, Inc.), Taylor Engineering, SFWMD (South Florida Water Management District), BCC, and the community
Manalapan, Town of		05/10/2016 05/17/2017	Technical Update	FEMA, BakerAECOM, and the community
	12/20/2024	04/24/2018	Storm Surge Analysis Update	FEMA, BakerAECOM, and the community
		08/26/2019	Flood Risk Review	FEMA, BakerAECOM, and the community
		02/04/2020	Final CCO	FEMA, BakerAECOM, and the community
Mangonia Park,	10/05/2017	09/30/2008	Initial CCO	FEMA, SFWMD, Florida Department of Emergency Management, Palm Beach County, local communities, government agencies, local engineers, and Watershed IV Alliance
Town of		09/08/2014	Final CCO	FEMA, SFWMD, Palm Beach County, the community, and Watershed IV Alliance
		06/26/2014	Discovery	FEMA, BakerAECOM, TCE (Tomasello Consulting Engineers, Inc.), Taylor Engineering, SFWMD (South Florida Water Management District), BCC, and the community
		05/10/2016 05/17/2017	Technical Update	FEMA, BakerAECOM, and the community
North Palm Beach, Village of	12/20/2024	04/24/2018	Storm Surge Analysis Update	FEMA, BakerAECOM, and the community
		08/26/2019	Flood Risk Review	FEMA, BakerAECOM, and the community
		02/04/2020	Final CCO	FEMA, BakerAECOM, and the community

Community	FIS Report Dated	Date of Meeting	Meeting Type	Attended By
Ocean Ridge, Town of		06/26/2014	Discovery	FEMA, BakerAECOM, TCE (Tomasello Consulting Engineers, Inc.), Taylor Engineering, SFWMD (South Florida Water Management District), BCC, and the community
		05/10/2016 05/17/2017	Technical Update	FEMA, BakerAECOM, and the community
	12/20/2024	04/24/2018	Storm Surge Analysis Update	FEMA, BakerAECOM, and the community
		08/26/2019	Flood Risk Review	FEMA, BakerAECOM, and the community
		02/04/2020	Final CCO	FEMA, BakerAECOM, and the community
Pahokee, City of	10/05/2017	09/30/2008	Initial CCO	FEMA, SFWMD, Florida Department of Emergency Management, Palm Beach County, local communities, government agencies, local engineers, and Watershed IV Alliance
		09/08/2014	Final CCO	FEMA, SFWMD, Palm Beach County, the community, and Watershed IV Alliance
		06/26/2014	Discovery	FEMA, BakerAECOM, TCE (Tomasello Consulting Engineers, Inc.), Taylor Engineering, SFWMD (South Florida Water Management District), BCC, and the community
		05/10/2016 05/17/2017	Technical Update	FEMA, BakerAECOM, and the community
Palm Beach, Town of	12/20/2024	04/24/2018	Storm Surge Analysis Update	FEMA, BakerAECOM, and the community
		08/26/2019	Flood Risk Review	FEMA, BakerAECOM, and the community
		02/04/2020	Final CCO	FEMA, BakerAECOM, and the community

Community	FIS Report Dated	Date of Meeting	Meeting Type	Attended By
Palm Beach County, Unincorporated Areas		06/26/2014	Discovery	FEMA, BakerAECOM, TCE (Tomasello Consulting Engineers, Inc.), Taylor Engineering, SFWMD (South Florida Water Management District), BCC, and the community
		05/10/2016 05/17/2017	Technical Update	FEMA, BakerAECOM, and the community
	12/20/2024	04/24/2018	Storm Surge Analysis Update	FEMA, BakerAECOM, and the community
		08/26/2019	Flood Risk Review	FEMA, BakerAECOM, and the community
		02/04/2020	Final CCO	FEMA, BakerAECOM, and the community
	12/20/2024	06/26/2014	Discovery	FEMA, BakerAECOM, TCE (Tomasello Consulting Engineers, Inc.), Taylor Engineering, SFWMD (South Florida Water Management District), BCC, and the community
		05/10/2016 05/17/2017	Technical Update	FEMA, BakerAECOM, and the community
Palm Beach Gardens, City of		04/24/2018	Storm Surge Analysis Update	FEMA, BakerAECOM, and the community
		08/26/2019	Flood Risk Review	FEMA, BakerAECOM, and the community
		02/04/2020	Final CCO	FEMA, BakerAECOM, and the community

Community	FIS Report Dated	Date of Meeting	Meeting Type	Attended By
		06/26/2014	Discovery	FEMA, BakerAECOM, TCE (Tomasello Consulting Engineers, Inc.), Taylor Engineering, SFWMD (South Florida Water Management District), BCC, and the community
		05/10/2016 05/17/2017	Technical Update	FEMA, BakerAECOM, and the community
Palm Beach Shores, Town of	12/20/2024	04/24/2018	Storm Surge Analysis Update	FEMA, BakerAECOM, and the community
		08/26/2019	Flood Risk Review	FEMA, BakerAECOM, and the community
		02/04/2020	Final CCO	FEMA, BakerAECOM, and the community
Palm Springs,	10/05/2017	09/30/2008	Initial CCO	FEMA, SFWMD, Florida Department of Emergency Management, Palm Beach County, local communities, government agencies, local engineers, and Watershed IV Alliance
Village of		09/08/2014	Final CCO	FEMA, SFWMD, Palm Beach County, the community, and Watershed IV Alliance
		06/26/2014	Discovery	FEMA, BakerAECOM, TCE (Tomasello Consulting Engineers, Inc.), Taylor Engineering, SFWMD (South Florida Water Management District), BCC, and the community
		05/10/2016 05/17/2017	Technical Update	FEMA, BakerAECOM, and the community
Riviera Beach, City of	12/20/2024	04/24/2018	Storm Surge Analysis Update	FEMA, BakerAECOM, and the community
		08/26/2019	Flood Risk Review	FEMA, BakerAECOM, and the community
		02/04/2020	Final CCO	FEMA, BakerAECOM, and the community

Community	FIS Report Dated	Date of Meeting	Meeting Type	Attended By
Royal Palm Beach,	10/05/2017	09/30/2008	Initial CCO	FEMA, SFWMD, Florida Department of Emergency Management, Palm Beach County, local communities, government agencies, local engineers, and Watershed IV Alliance
Village of		09/08/2014	Final CCO	FEMA, SFWMD, Palm Beach County, the community, and Watershed IV Alliance
South Bay, City of	10/05/2017	09/30/2008	Initial CCO	FEMA, SFWMD, Florida Department of Emergency Management, Palm Beach County, local communities, government agencies, local engineers, and Watershed IV Alliance
		09/08/2014	Final CCO	FEMA, SFWMD, Palm Beach County, the community, and Watershed IV Alliance
	12/20/2024	06/26/2014	Discovery	FEMA, BakerAECOM, TCE (Tomasello Consulting Engineers, Inc.), Taylor Engineering, SFWMD (South Florida Water Management District), BCC, and the community
		05/10/2016 05/17/2017	Technical Update	FEMA, BakerAECOM, and the community
South Palm Beach, Town of		04/24/2018	Storm Surge Analysis Update	FEMA, BakerAECOM, and the community
		08/26/2019	Flood Risk Review	FEMA, BakerAECOM, and the community
		02/04/2020	Final CCO	FEMA, BakerAECOM, and the community

Community	FIS Report Dated	Date of Meeting	Meeting Type	Attended By
		06/26/2014	Discovery	FEMA, BakerAECOM, TCE (Tomasello Consulting Engineers, Inc.), Taylor Engineering, SFWMD (South Florida Water Management District), BCC, and the community
		05/10/2016 05/17/2017	Technical Update	FEMA, BakerAECOM, and the community
Tequesta, Village of	12/20/2024	04/24/2018	Storm Surge Analysis Update	FEMA, BakerAECOM, and the community
		08/26/2019	Flood Risk Review	FEMA, BakerAECOM, and the community
		02/04/2020	Final CCO	FEMA, BakerAECOM, and the community
Wellington, Village of	10/05/2017	09/30/2008	Initial CCO	FEMA, SFWMD, Florida Department of Emergency Management, Palm Beach County, local communities, government agencies, and local engineers, and Watershed IV Alliance
		09/08/2014	Final CCO	FEMA, SFWMD, Palm Beach County, the community, and Watershed IV Alliance
	12/20/2024	06/26/2014	Discovery	FEMA, BakerAECOM, TCE (Tomasello Consulting Engineers, Inc.), Taylor Engineering, SFWMD (South Florida Water Management District), BCC, and the community
		05/10/2016 05/17/2017	Technical Update	FEMA, BakerAECOM, and the community
West Palm Beach, City of		04/24/2018	Storm Surge Analysis Update	FEMA, BakerAECOM, and the community
		08/26/2019	Flood Risk Review	FEMA, BakerAECOM, and the community
		02/04/2020	Final CCO	FEMA, BakerAECOM, and the community
Westlake, City of	10/05/2017	09/30/2008	Initial CCO	FEMA, SFWMD, Florida Department of Emergency Management, Palm Beach County, local communities, government agencies, and local engineers, and Watershed IV Alliance
		09/08/2014	Final CCO	FEMA, SFWMD, Palm Beach County, the community, and Watershed IV Alliance

SECTION 8.0 – ADDITIONAL INFORMATION

Information concerning the pertinent data used in the preparation of this FIS Report can be obtained by submitting an order with any required payment to the FEMA Engineering Library. For more information on this process, see <u>www.fema.gov</u>.

Palm Beach County completed its first countywide FIS in 2000 (FIS 2000). It was comprised of detailed and approximate studies of coastal, riverine, and lacustrine sources. That study was designated "Preliminary" but the maps that were produced were not adopted. That study updated the flooding sources from previous effective FIS and also included new flooding sources.

Table 30 is a list of the locations where FIRMs for Palm Beach County can be viewed. Please note that the maps at these locations are for reference only and are not for distribution. Also, please note that only the maps for the community listed in the table are available at that particular repository. A user may need to visit another repository to view maps from an adjacent community.

Community	Address	City	State	Zip Code
Atlantis, City of	City Hall 260 Orange Tree Drive	Atlantis	FL	33462
Belle Glade, City of	Building Department 12876 Temple Boulevard	West Palm Beach	FL	33412
Boca Raton, City of	Zoning Department 200 Northwest Second Avenue	Boca Raton	FL	33432
Boynton Beach, City of	City Hall 100 East Ocean Avenue	Boynton Beach	FL	33435
Briny Breezes, Town of	Town Hall 4802 North Ocean Boulevard	Briny Breezes	FL	33435
Cloud Lake, Town of	Town Hall 100 Lang Road	West Palm Beach	FL	33406
Delray Beach, City of	Building Division 100 Northwest 1st Avenue	Delray Beach	FL	33444
Glen Ridge, Town of	Town Hall 1501 Glen Road	West Palm Beach	FL	33406
Golf, Village of	Village Hall 21 Country Road	Golf	FL	33436
Greenacres, City of	Building Department 5800 Melaleuca Lane	Greenacres	FL	33463
Gulf Stream, Town of	Town Hall 100 Sea Road	Gulf Stream	FL	33483
Haverhill, Town of	Building Department 4585 Charlotte Street	Haverhill	FL	33417

Table 30: Map Repositories

Table 30: Map Repositories (continued)

Community	Address	City	State	Zip Code
Highland Beach, Town of	Building Department 3616 South Ocean Boulevard	Highland Beach	FL	33487
Hypoluxo, Town of	Town Hall 7580 South Federal Highway	Hypoluxo	FL	33462
Juno Beach, Town of	Building Department 340 Ocean Drive	Juno Beach	FL	33408
Jupiter, Town of	Utilities Department 210 Military Trail	Jupiter	FL	33458
Jupiter Inlet Colony, Town of	Building and Zoning Department 50 Colony Road	Jupiter Inlet Colony	FL	33469
Lake Clarke Shores, Town of	Town Hall 1701 Barbados Road	Lake Clarke Shores	FL	33406
Lake Park, Town of	Community Development Department 535 Park Avenue	Lake Park	FL	33403
Lake Worth Beach, City of	Community Sustainability Department 1900 2nd Avenue North	Lake Worth Beach	FL	33461
Lantana, Town of	Building Department 504 Greynolds Circle	Lantana	FL	33462
Loxahatchee Groves, Town of	Town Hall 14579 Southern Boulevard, Suite 2	Loxahatchee Groves	FL	33470
Manalapan, Town of	Town Hall 600 South Ocean Boulevard	Manalapan	FL	33462
Mangonia Park, Town of	Town Hall 1755 East Tiffany Drive	Mangonia Park	FL	33407
North Palm Beach, Village of	Community Development Department 701 U.S. Highway	North Palm Beach	FL	33408
Ocean Ridge, Town of	Building Department 6450 North Ocean Boulevard	Ocean Ridge	FL	33435
Pahokee, City of	City Hall 207 Begonia Drive	Pahokee	FL	33476
Palm Beach, Town of	Building Division 360 South County Road	Palm Beach	FL	33480
Palm Beach County, Unincorporated Areas	Palm Beach County Planning, Zoning and Building Department 2300 North Jog Road	West Palm Beach	FL	33411
Palm Beach Gardens, City of	Engineering Department 10500 North Military Trail	Palm Beach Gardens	FL	33410
Palm Beach Shores, Town of	Building Department 247 Edwards Lane	Palm Beach Shores	FL	33404

Community	Address	City	State	Zip Code
Palm Springs, Village of	Land Development Office 226 Cypress Lane	Palm Springs	FL	33461
Riviera Beach, City of	Development Services 600 West Blue Heron Boulevard	Riviera Beach	FL	33404
Royal Palm Beach, Village of	Engineering Department 1050 Royal Palm Beach Boulevard	Royal Palm Beach	FL	33411
South Bay, City of	City Hall 335 Southwest Second Avenue	South Bay	FL	33493
South Palm Beach, Town of	Building Department 3577 South Ocean Boulevard	South Palm Beach	FL	33480
Tequesta, Village of	Building Department 345 Tequesta Drive	Tequesta	FL	33469
Wellington, Village of	Building Department 12300 Forest Hill Boulevard	Wellington	FL	33414
West Palm Beach, City of	Building Department 401 Clematis Street	West Palm Beach	FL	33401
Westlake, City of	City Hall 4001 Seminole Pratt Whitney Road	Westlake	FL	33470

Table 30: Map Repositories (continued)

The National Flood Hazard Layer (NFHL) dataset is a compilation of effective FIRM Databases and LOMCs. Together they create a GIS data layer for a State or Territory. The NFHL is updated as studies become effective and extracts are made available to the public monthly. NFHL data can be viewed or ordered from the website shown in Table 31.

Table 31 contains useful contact information regarding the FIS Report, the FIRM, and other relevant flood hazard and GIS data. In addition, information about the State NFIP Coordinator and GIS Coordinator is shown in this table. At the request of FEMA, each Governor has designated an agency of State or territorial government to coordinate that State's or territory's NFIP activities. These agencies often assist communities in developing and adopting necessary floodplain management measures. State GIS Coordinators are knowledgeable about the availability and location of State and local GIS data in their state.

	FEMA and the NFIP
FEMA and FEMA Engineering Library website	www.fema.gov/national-flood-insurance-program-flood- hazard-mapping/engineering-library
NFIP website	www.fema.gov/national-flood-insurance-program
NFHL Dataset	msc.fema.gov
FEMA Region IV	Federal Emergency Management Agency 3003 Chamblee Tucker Road Atlanta, GA 30341
	Other Federal Agencies
USGS website	www.usgs.gov
Hydraulic Engineering Center website	www.hec.usace.army.mil
5	State Agencies and Organizations
State NFIP Coordinator	Steve Martin, CFM, State NIP and Floodplain Manager Florida Division of Emergency Management 2555 Shumard Oak Boulevard Tallahassee, FL 32399-2100 (850) 922-5269 <u>Steve.Martin@em.myflorida.com</u>
State GIS Coordinator	Richard Butgereit GIS Administrator Florida Division of Emergency Management 2555 Shumard Oak Boulevard Tallahassee, FL 32399-2100 (850) 413-9907 <u>Richard.Butgereit@dca.state.fl.us</u>

Table 31: Additional Information

SECTION 9.0 – BIBLIOGRAPHY AND REFERENCES

Table 32 includes sources used in the preparation of and cited in this FIS Report as well as additional studies that have been conducted in the study area.

Table 32: Bibliography and References

Citation in this FIS	Publisher / Issuer	<i>Publication Title,</i> "Article," Volume, Number, etc.	Author / Editor	Place of Publication	Publication Date / Date of Issuance	Link
CWR 2014	Collective Water Resources	Technical Memorandum: Data Submittal July 28, 2014			July 28, 2014	
Eagleson 1970	McGraw Hill, Inc.	"Dynamic Hydrology"	Eagleson, Peter S.	New York	1970	
FDEM 2007	Florida Division of Emergency Management	LiDAR Project		Tallahassee, Florida	Collected July 7, 2007 to December 22, 2007	
FEMA 2008	Federal Emergency Management Agency	Tide Gage Analysis for the Atlantic and Gulf Open Coast			December 2008	
FEMA 2018	Federal Emergency Management Agency	Guidance for Flood Risk Analysis and Mapping, Coastal Wave Runup and Overtopping			February 2018	
FIS 2000	Federal Emergency Management Agency	Flood Insurance Study, Palm Beach County, Florida, and Incorporated Area- Preliminary FIS (not published)		Washington, D.C.	2000	FEMA Flood Map Service Center <u>msc.fema.gov</u>
FIS 2017	Federal Emergency Management Agency	Flood Insurance Study, Palm Beach County, Florida and Incorporated Areas		Washington, D.C.	October 5, 2017	FEMA Flood Map Service Center <u>msc.fema.gov</u>
Resio 2007	Resio, D.T.	White Paper on Estimating Hurricane Inundation Probabilities (with contributions from S.J. Boc, L. Borgman, V. Cardone, A. Cox, W.R. Dally, R.G. Dean, D. Divoky, E. Hirsh, J.L. Irish, d. Levinson, A. Niedoroda, M.D. Powell, J.J. Ratcliff, C. Stutts, J. Suhada, G.R. Toro, and P.J. Vickery). Appendix 8-2 (R2007) of USACE (2007), Interagency Performance Evaluation Taskforce (IPET) Final Report.	Resio, D.T.		2007	

Table 32: Bibliography and References (continued)

Citation in this FIS	Publisher / Issuer	<i>Publication Title,</i> "Article," Volume, Number, etc.	Author / Editor	Place of Publication	Publication Date / Date of Issuance	Link
SFWMD 2015	South Florida Water Management District	"C-51 Basin Rule Re-evaluation, C-51 HEC-HMS and HEC-RAS Model Update"			May 2015	
TCE 2013	Tomasello Consulting Engineers, Inc.	S2DMM Documentation Report, Version SRC11_07_12			January 15, 2013	
TCE 2014a	Tomasello Consulting Engineers, Inc.	E-2E/E-3/E-4 Basin Flood Study (Draft)			February 2014	FEMA Mapping Information Platform <u>hazards.fema.gov</u>
TCE 2014b	Tomasello Consulting Engineers, Inc.	Supplement to E-2E/E-3/E-4 Basin FLOOD STUDY: E-3/E-4 Floodway Analysis			April 2014	FEMA Mapping Information Platform hazards.fema.gov
Toro 2010	G. Toro, D.T. Resio, D. Divoky, A.W. Niedoroda, C.W. Reed	"Efficient Joint Probability Methods for Hurricane Surge Frequency Analysis," Ocean Engineering, Vo. 37, pp. 125-134	G. Toro, D.T. Resio, D. Divoky, A.W. Niedoroda, C.W. Reed		2010	FEMA Mapping Information Platform hazards.fema.gov
USACE 1991	U.S. Army Corps of Engineers, Hydrologic Engineering Center	HEC-2 version 4.6.2, Water Surface Profiles Program		Davis, California	May 1991	
USACE 1998	U.S. Army Corps of Engineers, Hydrologic Engineering Center	HEC-1, Flood Hydrograph Package, User's Manual, Version 4.1		Davis, California	June 1998	
USACE 1999	U.S. Department of the Army, Corps of Engineers	"Herbert Hoover Dike Major Rehabilitation Evaluation Report"			1999	
USACE 2001	U.S. Army Corps of Engineers, Hydrologic Engineering Center	HEC-UNET: One-dimensional unsteady flow program, Version 4.0, Includes RUNUNET a Windows User Interface			April 2001	

Table 32: Bibliography and References (continued)

Citation in this FIS	Publisher / Issuer	<i>Publication Title,</i> "Article," Volume, Number, etc.	Author / Editor	Place of Publication	Publication Date / Date of Issuance	Link
USACE 2004	U.S. Army Corps of Engineers, Hydrologic Engineering Center	HEC-RAS 3.1.2, River Analysis System, Version 3.1.2, Computer Software		Davis, California	April 2004	
USACE 2010a	U.S. Army Corps of Engineers, Hydrologic Engineering Center	HEC-RAS 4.1.0, River Analysis System, Version 4.1.0, Computer Software		Davis, California	January 2010	
USACE 2010b	U.S. Army Corps of Engineers, Hydrologic Engineering Center	HEC-HMS 3.5, Hydrologic Modeling System, Version 3.5		Davis, California	August 2010	
USACE 2016	U.S. Army Corps of Engineers	LiDAR Project			2016	
WHA 1982	Federal Emergency Management Agency	Wave Height Analysis, Palm Beach County, Florida, Unincorporated Areas		Washington, D.C.	April 15, 1982	FEMA Flood Map Service Center <u>msc.fema.gov</u>

