Attachment 6: Coastal Structures Evaluation

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GZA performed a desk-top, screening level analysis of the coastal structures in Old Saybrook. This screening-level analysis included: 1) development of an inventory of coastal structures, including structure type, material and length; 2) estimation of the structure top and bottom elevations using available Lidar data (for most structures the minimum elevation corresponds to ground surface at the structure toe or bottom); 3) comparison of the structure elevations to the stillwater elevations and wave heights at the structure location, corresponding to the 2-year, 10-year, 20-year, 50-year, 100-year and 500-year recurrence interval coastal flood; and 4) a screening-level evaluation of the potential for structure damage associated with different recurrence interval floods based on approximate correlations of damage to water level and wave heights and engineering judgement.

The screening level analysis was performed solely based on remotely-collected data (GIS and aerial photograph data for structure type, material and length and available Lidar) and should be considered highly approximate and unsuitable for evaluation of any individual structure. *No visual inspections or condition surveys were performed for this study. The purpose of the screening level analysis was to get an approximate idea of the degree of damage that can be expected on a Town-wide basis due to coastal flooding and sea level rise. Structure-specific survey and engineering calculations are required to evaluate individual structures.*

Old Saybrook coastal structures are a mix of privately-owned and Town-owned and managed structures. Most of the docks, groins, piers and seawalls are privately owned by residents, beach communities or commercial marinas. The structures are used for a combination of: 1) water access (piers and docks); 2) beach management/sediment trapping (groins); 3) wave attenuation (jetties and breakwater); and 4) shoreline and flood protection (bulkheads, seawalls and revetments).

The coastal structures within the Town (including Fenwick) include:

- Breakwater: one, approximately 285 foot long, granite quarry stone offshore breakwater (in Fenwick).
- Bulkheads: about 27 individual bulkheads collectively about 15,000 linear feet, made of wood, stone, steel or timber.
- Seawalls: about 88 individual seawalls collectively about 32,000 linear feet, made of concrete, stone or wood.
- Jetties: about 15 individual jetties collectively about 8,000 linear feet, made of granite quarry stone (one timber).
- Groins: about 67 individual groins collectively about 6,850 linear feet, made of timber (24), concrete (4) or stone (39).
- Docks: about 192 individual wood docks collectively about 27,500 linear feet.
- Piers: 3 individual piers collectively about 60 linear feet made of concrete or stone.
- Reinforced Bluffs/revetments: about 7 separate bluffs collectively about 2,000 linear feet, reinforced with stone.

Table 6-1 presents a detailed inventory of the coastal structures located within Old Saybrook. The structure, material and length was obtained from Town-provided GIS layer. The stillwater elevations and wave heights were derived form GZA's coastal flood hazard characterization - see **Attachment 2**. Structure elevations have been inferred using GIS and available Lidar data. *These elevations should be considered highly approximate and were used only for purposes of this screening level evaluation. No field confirmation or survey was performed.*

Figures 6-1 through **Figure 6-6** indicate the locations of the structures.

Vulnerability Evaluation

The following provides a brief overview of the most vulnerable coastal structures within the Town.

Docks: There are about 192 individual wood docks within Old Saybrook, collectively adding up to about 27,500 linear feet (average length of about 143 feet and a median length of about 91 feet). Almost all of the docks (if not all) appear to be privately owned with residences or marinas. The typical dock width appears to be about 4 feet (indicating about 110,000 square feet of dockage). The docks are timber and pile supported (the majority of residential docks appear to be fixed docks and marina docks are expected to be a combination of fixed and floating docks). The elevation of fixed docks is inferred based on available data to be on the order of 4 to 5 feet NAVD88. Most of these docks, in particular those with exposure to the Sound, Connecticut River, North Cove or South Cove are highly vulnerable to damage during coastal flood events greater than the 2-year recurrence interval flood. The estimate replacement value of the docks (based on typical construction costs) is on the order of $5M (based on a unit cost of $45/s.f.).

Groins: There are about 70 groins, collectively adding up to about 6,800 linear feet. The groins, which have an average length of about 100 feet and a median length of about 90 feet, are owned and managed by the beach communities. About 24 of the groins are constructed of wood and the remainder are constructed of stone or concrete. All of the groins are vulnerable to damage from coastal flooding. The wood groins are particularly vulnerable and in general, the majority of existing groins are likely undersized relative to surviving large coastal flood events (e.g., 100-year recurrence interval flood). New groin construction is not expected to be allowed in the future.

Seawalls: There are about 88 seawalls, collectively adding up to about 31,800 liner feet in Old Saybrook. The majority of the seawalls were constructed for private property and the material, height and condition of the seawalls is highly variable. In general, the majority of existing seawalls (excluding the large, Town-managed seawalls) are likely undersized relative to surviving large coastal flood events (e.g., 100-year recurrence interval flood). Based on inferred structure elevations, most of the existing seawalls (excluding the large, Town-managed seawalls) will be overtopped (if not significantly damaged) during more frequent flood events. The estimated replacement cost of the seawalls (based on a mid-range unit cost of $400/linear foot for a low seawall) is about $10.8M (excluding the large, Town-managed seawalls).

Major Coastal Structures

The Town's major coastal structures include the following. Note that the jetties were not considered in this analysis and that the responsibility for management and maintenance of the jetties identified below was not determined.

1. The seawalls/revetments that provide shoreline protection and flood protection along the portions of Maple Avenue (Rt. 154) that fronts directly on Long Island Sound and is vulnerable to coastal flood inundation and wave actions. These include the following. Based on a limited visual observations these structures appear to be of robust construction. A potential, issue is overtopping of the wall crest elevations during coastal floods. A more detailed analysis is required to confirm the structure crest elevation, overtopping probability and structural capacity of these structures. Seawall SW-101 may be vulnerable to damage or loss during a large coastal flood event.

    - SWL-94, an approximately 1,200 linear foot combined revetment and seawall, consisting of a concrete section and a grouted stone section. This revetment/seawall ends to the east at the Town pier (Pier-95) and to the west at a stairwell separating the revetment/seawall for a lightly-reinforced bluff with a low seawall (SWL-93). Based on available Lidar data, the top of the wall elevation ranges from about 20 feet NAVD88 along the western side to about 16 feet at the eastern end.
    - SWL-96, an approximately 100 foot long concrete seawall located to the east of Town Pier-95. Based on available Lidar, the top of the wall is about Elevation 10 feet NAVD88 and the toe of wall is about Elevation 4 feet NAVD88.
    - SWL-97, an approximately 1,560 long concrete and grouted stone revetment/seawall. Based on available Lidar, the top of the wall is about Elevation 14 feet NAVD88 and the toe of wall is about Elevation 4 feet NAVD88 (along the western section of wall) and is fronted by beach. The top of the wall along the eastern section drops down to about Elevation 10 feet NAVD88 and the toe of the wall is at about Elevation 0 feet, fronted by a cobble beach.
    - SW-101, an approximately 910 foot long grouted stone revetment/seawall. Based on available Lidar, the top of the wall is about Elevation 11 to 14 feet NAVD88 and the toe of wall is about Elevation 2 to 3 feet NAVD88. Along a small section at the western end of this wall, there is a second seaward concrete separated by a narrow beach. Based on available Lidar, the top of the seaward wall is about Elevation 4 feet NAVD88 and the toe of wall is about Elevation 0 feet NAVD88. The toe of the seaward wall is protected with a loose rubble revetment.
2. Piers 95 and 99 and Groins 307 and 100. The piers provide water access and both the piers and groins serve to manage sediment transport and maintain adequate beach in front of the Town seawalls/revetments identified above. Based on a limited visual observations these structures appear to be of robust construction.
3. SW-146, an approximately 1,600 foot long section of stone bulkhead (north side) and sheetpile bulkhead (south side) fronting private and Town-owned property along the Connecticut River at Saybrook Point. Based on available Lidar, the top of the wall is about Elevation 5 feet NAVD88 and the toe of wall is about Elevation 0 feet NAVD88. The construction and condition of this bulkhead is uncertain. Elevating and replacing the bulkhead will likely be required in the future, in particular if completed in conjunction with other flood mitigation measures within Saybrook Point. Assuming a replacement cost of about $2,000/liner foot, replacement of this bulkhead will cost on the order of $3.2M.
4. The two jetties (JTY139 and JTY 303) that create the navigation entrance at the mouth of the Connecticut River. These are major, robust navigation structures that are maintained by the US Army Corps of Engineers.
5. Quarry stone jetties JTY-11 and JTY-12, which create the inlet to Hager Creek at Indiantown and are collectively about 1,300 feet in length.

Figure 6-1: Coastal Structures starting from western Town border

Figure 6-2: Coastal Structures cont.

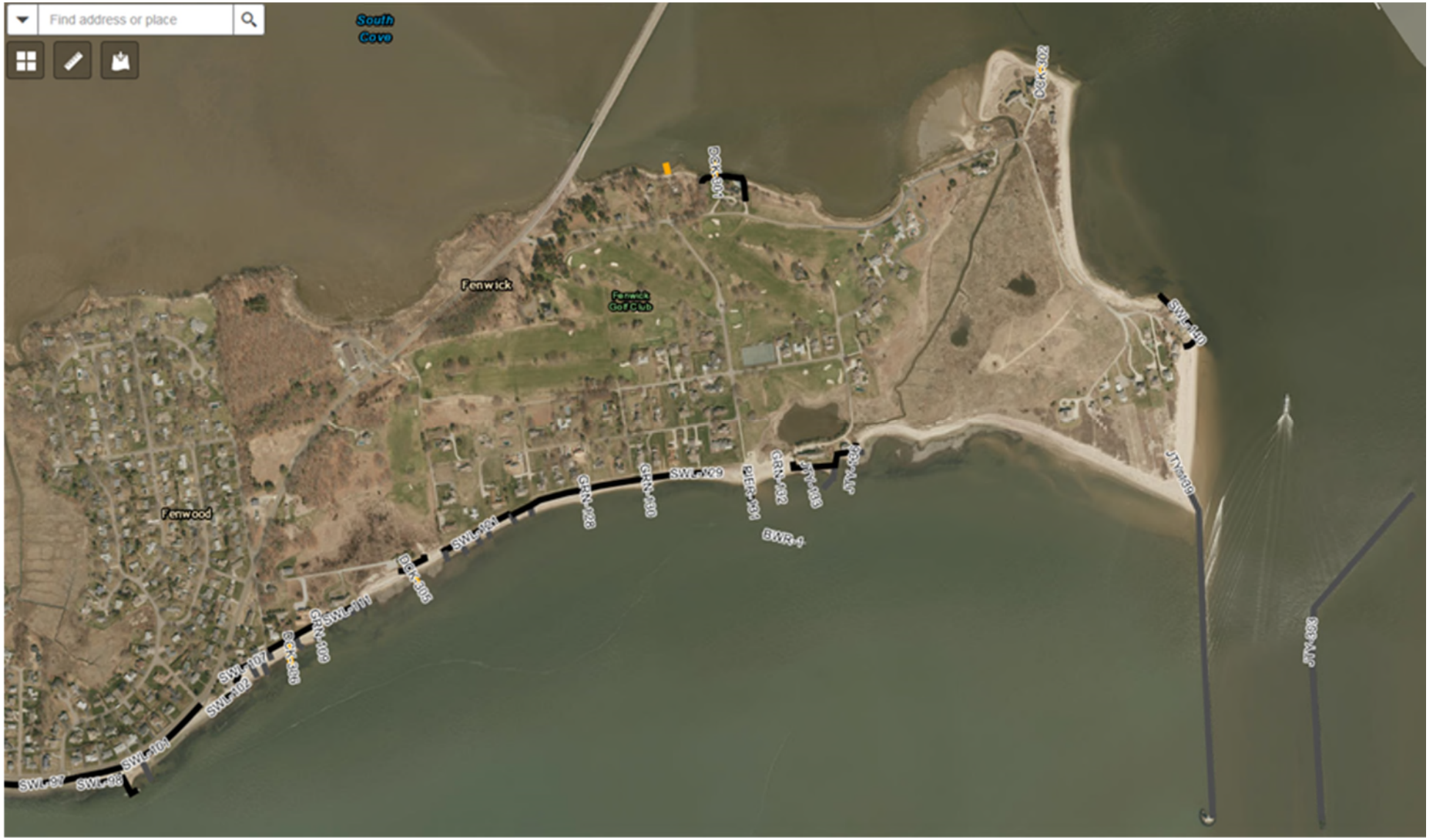

Figure 6-3: Coastal Structures cont.

Figure 6-4: Coastal Structures cont.

Figure 6-6: Coastal Structures cont.

Figure 6-5: Coastal Structures cont.

Table 6-1: Inventory of Old Saybrook Coastal Structures

Asset ID	OBJECTID	Category	Material	Length, feet	Min. Elevation (ft, NAVD88)	Max. Elevation (ft, NAVD88)	2 yr rec. int. stillwater elevation (ft, NAVD88)	10 yr rec. int. stillwater elevation (ft, NAVD88)	50 yr rec. int. stillwater elevation (ft, NAVD88)	100 yr rec. int. stillwater elevation (ft, NAVD88)	100 yr rec. int. wave ht. (ft)	FEMA Zone	FEMA BFE (ft, NAVD88)	500 yr rec. int. stillwater elevation (ft, NAVD88)	500 yr rec. int. wave Ht.	Exposure
Breakwater		**1**		**283**												
BWR-1	304	Breakwater	Stone	283	-4.2	-2.2	5.0	7.0	9.0	10.3	7.9	VE	13	12.2	8.9	Sound
Bulkheads		**27**		**14,879**												
BHD-19	154	Bulkhead	Wood	133	-2.1	4.3	5.0	7.0	9.0	10.3	2.2	VE	15	13.1	2.9	North Cove
BHD-20	155	Bulkhead	Wood	282	-1.0	4.4	5.0	7.0	9.0	10.3	2.1	VE	15	13.1	2.7	North Cove
BHD-21	157	Bulkhead	Wood	584	-1.9	10.2	5.0	7.0	9.0	10.3	2.5	VE	15	13.1	3.0	North Cove
BHD-22	158	Bulkhead	Stone	435	-1.7	2.9	5.0	7.0	9.0	10.3	4.0	VE	15	13.9	4.6	Connecticut River
BHD-3	160	Bulkhead	Wood	230	-0.6	4.8	5.0	7.0	9.0	10.3	1.7	AE	11	13.9	1.2	Connecticut River
BHD-4	161	Bulkhead	Concrete	684	0.2	5.5	5.0	7.0	9.0	10.3	3.2	AE	11	13.9	3.9	Connecticut River
BHD-5	162	Bulkhead	Wood	200	-1.7	5.6	5.0	7.0	9.0	10.3	3.9	AE	11	13.9	4.5	Connecticut River
BHD-6	163	Bulkhead	Stone	433	-1.7	4.8	5.0	7.0	9.0	10.3	3.7	AE	11	13.9	4.2	Connecticut River
BHD-7	164	Bulkhead	Wood	574	-2.0	2.9	5.0	7.0	9.0	10.3	3.7	AE	11	13.9	4.3	Connecticut River
BHD-8	165	Bulkhead	Wood	1813	-1.9	5.8	5.0	7.0	9.0	10.3	3.4	AE	11	14.0	3.9	Connecticut River
BHD-9	166	Bulkhead	Concrete	160	0.4	5.0	5.0	7.0	9.0	10.3	3.2	AE	11	14.1	3.7	Connecticut River
BHD-10	167	Bulkhead	Concrete	576	-1.4	5.0	5.0	7.0	9.0	10.3	3.4	AE	11	14.1	3.8	Connecticut River
BHD-11	168	Bulkhead	Wood	355	-1.5	4.0	5.0	7.0	9.0	10.3	3.4	AE	11	14.2	3.8	Connecticut River
BHD-12	169	Bulkhead	Wood	275	-0.9	5.0	5.0	7.0	9.0	10.3	3.3	AE	11	14.2	3.8	Connecticut River
BHD-13	173	Bulkhead	Concrete	95	-1.1	5.0	5.0	7.0	9.0	10.3	1.3	AE	11	14.2	1.7	Harbor
BHD-14	174	Bulkhead	Wood	4050	-1.8	6.9	5.0	7.0	9.0	10.3	2.1	AE	9	14.1	2.1	Harbor
BHD-15	175	Bulkhead	Wood	774	-0.3	6.0	5.0	7.0	9.0	10.3	1.8	AE	11	14.2	2.0	Harbor
BHD-16	180	Bulkhead	Concrete	163	0.8	4.5	5.0	7.0	9.0	10.3	1.8	AE	11	15.0	2.0	Connecticut River
BHD-17	201	Bulkhead	Wood	102	-0.1	2.2	5.0	7.0	9.0	10.3	1.4	AE	11	14.2	2.3	Connecticut River
BHD-18	217	Bulkhead	Wood	145	-1.2	4.6	5.0	7.0	9.0	10.3	3.3	AE	11	14.2	3.7	Connecticut River
BHD-2	248	Bulkhead	Steel	1820	-2.3	5.0	5.0	7.0	9.0	10.3	2.2	AE	11	14.1	2.9	Harbor
BHD-1	280	Bulkhead	Wood	34	0.3	3.5	5.0	7.0	9.0	10.3	2.5	VE	15	13.1	2.9	Connecticut River
BHD-23	329	Bulkhead	Unknown	77	4.2	5.5	5.0	7.0	9.0	10.3	2.7	AE	11	13.4	3.6	Oyster River
BHD-24	330	Bulkhead	Stone revetment	116	3.0	4.0	5.0	7.0	9.0	10.3	2.2	AE	11	13.4	3.1	Oyster River
BHD-25	335	Bulkhead	Wood	279	0.1	4.0	5.0	7.0	9.0	10.3	2.1	AE	11	13.4	2.7	Oyster River
BHD-26	336	Bulkhead	Concrete	129	1.2	3.0	5.0	7.0	9.0	10.3	1.8	AE	11	13.4	2.7	Oyster River
BHD-27	362	Bulkhead	Concrete	361	-1.4	5.0	5.0	7.0	9.0	10.3	1.3	AE	11	14.0	1.4	Oyster River
Docks		**192**		**27,430**												
DCK-182	182	Dock	Wood	96	-1.4	5.0	5.0	7.0	9.0	10.3	2.2	AE	11	14.9	2.6	Connecticut River
DCK-183	183	Dock	Wood	51	1.4	5.0	5.0	7.0	9.0	10.3	2.5	AE	11	14.9	2.8	Connecticut River
DCK-184	184	Dock	Wood	130	-1.5	5.0	5.0	7.0	9.0	10.3	1.6	AE	11	14.9	2.0	Connecticut River
DCK-185	185	Dock	Wood	172	-1.5	5.0	5.0	7.0	9.0	10.3	2.7	AE	11	14.8	3.1	Connecticut River
DCK-186	186	Dock	Wood	134	-0.8	5.0	5.0	7.0	9.0	10.3	2.9	AE	11	14.8	3.3	Connecticut River
DCK-187	187	Dock	Wood	344	-1.5	5.0	5.0	7.0	9.0	10.3	3.0	AE	11	14.8	3.5	Connecticut River
DCK-188	188	Dock	Wood	175	-1.5	5.0	5.0	7.0	9.0	10.3	2.8	AE	11	14.8	3.2	Connecticut River
DCK-189	189	Dock	Wood	151	-1.4	5.0	5.0	7.0	9.0	10.3	2.8	AE	11	14.8	3.2	Connecticut River
DCK-190	190	Dock	Wood	162	-0.1	5.0	5.0	7.0	9.0	10.3	2.9	AE	11	14.8	3.3	Connecticut River
DCK-192	192	Dock	Wood	42	-1.6	4.0	5.0	7.0	9.0	10.3	3.5	AE	11	14.6	3.9	Connecticut River
DCK-193	193	Dock	Wood	149	-1.9	4.0	5.0	7.0	9.0	10.3	3.4	AE	11	14.6	3.9	Connecticut River
DCK-194	194	Dock	Wood	206	-1.5	4.0	5.0	7.0	9.0	10.3	3.3	AE	11	15.0	3.9	Connecticut River
DCK-195	195	Dock	Wood	403	-1.7	4.0	5.0	7.0	9.0	10.3	2.1	AE	11	14.2	2.1	Connecticut River
DCK-196	196	Dock	Wood	347	-1.6	4.0	5.0	7.0	9.0	10.3	2.0	AE	11	14.2	2.1	Connecticut River
DCK-197	197	Dock	Wood	146	-1.6	4.0	5.0	7.0	9.0	10.3	1.6	AE	11	14.2	2.3	Connecticut River
DCK-198	198	Dock	Wood	23	-1.7	4.0	5.0	7.0	9.0	10.3	2.0	AE	11	14.2	2.3	Connecticut River
DCK-199	199	Dock	Wood	25	-1.8	4.0	5.0	7.0	9.0	10.3	2.1	AE	11	14.2	2.3	Connecticut River
DCK-200	200	Dock	Wood	14	-1.8	4.0	5.0	7.0	9.0	10.3	2.1	AE	11	14.2	2.3	Connecticut River
DCK-202	202	Dock	Wood	58	-1.2	3.0	5.0	7.0	9.0	10.3	1.4	AE	11	14.2	2.3	Connecticut River
DCK-203	203	Dock	Wood	10	-1.2	3.0	5.0	7.0	9.0	10.3	1.2	AE	11	14.2	1.9	Connecticut River
DCK-204	204	Dock	Wood	38	-1.4	3.0	5.0	7.0	9.0	10.3	1.2	AE	11	14.2	1.9	Connecticut River
DCK-205	205	Dock	Wood	213	-0.6	4.0	5.0	7.0	9.0	10.3	1.9	AE	11	14.2	2.1	Harbor

Table 6-1: Inventory of Old Saybrook Coastal Structures

Asset ID	OBJECTID	Category	Material	Length, feet	Min. Elevation (ft, NAVD88)	Max. Elevation (ft, NAVD88)	2 yr rec. int. stillwater elevation (ft, NAVD88)	10 yr rec. int. stillwater elevation (ft, NAVD88)	50 yr rec. int. stillwater elevation (ft, NAVD88)	100 yr rec. int. stillwater elevation (ft, NAVD88)	100 yr rec. int. wave ht. (ft)	FEMA Zone	FEMA BFE (ft, NAVD88)	500 yr rec. int. stillwater elevation (ft, NAVD88)	500 yr rec. int. wave Ht.	Exposure
DCK-206	206	Dock	Wood	211	-0.5	4.0	5.0	7.0	9.0	10.3	1.9	AE	10	14.1	2.1	Harbor
DCK-207	207	Dock	Wood	211	-0.5	4.0	5.0	7.0	9.0	10.3	1.9	AE	10	14.1	2.1	Harbor
DCK-208	208	Dock	Wood	198	-0.2	4.0	5.0	7.0	9.0	10.3	1.9	AE	10	14.1	2.0	Harbor
DCK-209	209	Dock	Wood	83	-0.2	4.0	5.0	7.0	9.0	10.3	2.0	AE	9	14.1	2.1	Harbor
DCK-210	210	Dock	Wood	43	-0.4	4.0	5.0	7.0	9.0	10.3	2.1	AE	9	14.1	2.0	Harbor
DCK-211	211	Dock	Wood	161	-0.4	4.0	5.0	7.0	9.0	10.3	2.1	AE	9	14.1	2.0	Harbor
DCK-212	212	Dock	Wood	41	-1.9	4.0	5.0	7.0	9.0	10.3	1.3	AE	10	14.2	1.8	Harbor
DCK-213	213	Dock	Wood	18	-1.9	4.0	5.0	7.0	9.0	10.3	1.3	AE	10	14.2	1.8	Harbor
DCK-214	214	Dock	Wood	153	-2.0	4.0	5.0	7.0	9.0	10.3	1.0	AE	11	14.2	1.2	Connecticut River
DCK-215	215	Dock	Wood	128	-1.9	4.0	5.0	7.0	9.0	10.3	1.0	AE	11	14.2	1.7	Connecticut River
DCK-218	218	Dock	Wood	113	-1.8	4.0	5.0	7.0	9.0	10.3	3.5	AE	11	14.2	3.9	Connecticut River
DCK-219	219	Dock	Wood	186	-1.9	4.0	5.0	7.0	9.0	10.3	3.4	AE	11	14.2	3.9	Connecticut River
DCK-220	220	Dock	Wood	368	-1.7	4.0	5.0	7.0	9.0	10.3	3.5	AE	11	14.2	4.0	Connecticut River
DCK-221	221	Dock	Wood	326	-0.7	4.0	5.0	7.0	9.0	10.3	3.6	AE	11	14.2	4.0	Connecticut River
DCK-222	222	Dock	Wood	338	-2.2	4.0	5.0	7.0	9.0	10.3	3.6	AE	11	14.2	4.0	Connecticut River
DCK-223	223	Dock	Wood	51	-2.2	4.0	5.0	7.0	9.0	10.3	3.8	AE	11	14.2	4.2	Connecticut River
DCK-224	224	Dock	Wood	317	-2.2	4.0	5.0	7.0	9.0	10.3	3.9	AE	11	14.0	4.3	Connecticut River
DCK-225	225	Dock	Wood	88	-1.9	4.0	5.0	7.0	9.0	10.3	4.0	AE	11	14.0	4.4	Connecticut River
DCK-226	226	Dock	Wood	318	-2.0	4.0	5.0	7.0	9.0	10.3	3.9	AE	11	14.0	4.3	Connecticut River
DCK-227	227	Dock	Wood	88	-1.9	4.0	5.0	7.0	9.0	10.3	4.0	AE	11	14.0	4.5	Connecticut River
DCK-228	228	Dock	Wood	377	-1.9	4.0	5.0	7.0	9.0	10.3	3.9	AE	11	14.0	4.3	Connecticut River
DCK-229	229	Dock	Wood	237	-1.9	4.0	5.0	7.0	9.0	10.3	4.0	AE	11	14.0	4.5	Connecticut River
DCK-230	230	Dock	Wood	384	-1.8	4.0	5.0	7.0	9.0	10.3	3.8	AE	11	14.0	4.3	Connecticut River
DCK-231	231	Dock	Wood	36	-1.8	4.0	5.0	7.0	9.0	10.3	4.0	AE	11	14.0	4.5	Connecticut River
DCK-232	232	Dock	Wood	360	-1.9	4.0	5.0	7.0	9.0	10.3	3.7	AE	11	14.0	4.2	Connecticut River
DCK-233	233	Dock	Wood	72	-1.9	4.0	5.0	7.0	9.0	10.3	4.0	AE	11	14.0	4.5	Connecticut River
DCK-234	234	Dock	Wood	370	-1.9	4.0	5.0	7.0	9.0	10.3	3.7	AE	11	14.0	4.2	Connecticut River
DCK-235	235	Dock	Wood	592	-2.0	4.0	5.0	7.0	9.0	10.3	3.9	AE	11	14.0	4.4	Connecticut River
DCK-236	236	Dock	Wood	29	-2.0	4.0	5.0	7.0	9.0	10.3	4.1	AE	11	14.0	4.6	Connecticut River
DCK-237	237	Dock	Wood	71	-2.1	4.0	5.0	7.0	9.0	10.3	3.8	AE	11	13.9	4.3	Connecticut River
DCK-238	238	Dock	Wood	99	-2.1	4.0	5.0	7.0	9.0	10.3	3.8	AE	11	13.9	4.3	Connecticut River
DCK-239	239	Dock	Wood	286	-2.2	4.0	5.0	7.0	9.0	10.3	3.8	AE	11	13.9	4.4	Connecticut River
DCK-240	240	Dock	Wood	30	-1.8	4.0	5.0	7.0	9.0	10.3	4.0	AE	11	13.9	4.6	Connecticut River
DCK-241	241	Dock	Wood	323	-2.0	4.0	5.0	7.0	9.0	10.3	3.9	AE	11	13.9	4.5	Connecticut River
DCK-242	242	Dock	Wood	181	-1.9	4.0	5.0	7.0	9.0	10.3	4.1	AE	11	13.9	4.7	Connecticut River
DCK-243	243	Dock	Wood	132	-2.2	4.0	5.0	7.0	9.0	10.3	3.5	AE	11	13.9	4.0	Connecticut River
DCK-244	244	Dock	Wood	151	-0.8	4.0	5.0	7.0	9.0	10.3	3.3	AE	11	13.9	3.9	Connecticut River
DCK-245	245	Dock	Wood	250	-2.4	4.0	5.0	7.0	9.0	10.3	3.9	AE	11	13.9	4.4	Connecticut River
DCK-246	246	Dock	Wood	64	-2.4	4.0	5.0	7.0	9.0	10.3	3.8	AE	11	13.9	4.4	Connecticut River
DCK-247	247	Dock	Wood	55	-2.2	4.0	5.0	7.0	9.0	10.3	3.8	AE	11	13.9	4.4	Connecticut River
DCK-249	249	Dock	Wood	18	-0.7	4.0	5.0	7.0	9.0	10.3	2.1	AE	11	14.1	2.8	Connecticut River
DCK-250	250	Dock	Wood	217	-1.8	5.0	5.0	7.0	9.0	10.3	2.1	AE	11	14.1	2.7	Harbor
DCK-251	251	Dock	Wood	91	-1.4	5.0	5.0	7.0	9.0	10.3	2.2	AE	11	14.1	3.2	Harbor
DCK-252	252	Dock	Wood	280	-2.0	5.0	5.0	7.0	9.0	10.3	2.2	AE	11	14.1	3.0	Harbor
DCK-253	253	Dock	Wood	320	-2.1	5.0	5.0	7.0	9.0	10.3	2.2	AE	11	14.1	3.0	Harbor
DCK-254	254	Dock	Wood	296	-2.3	5.0	5.0	7.0	9.0	10.3	2.1	AE	11	14.1	2.9	Harbor
DCK-255	255	Dock	Wood	182	-2.3	5.0	5.0	7.0	9.0	10.3	2.1	AE	11	14.1	2.9	Harbor
DCK-256	256	Dock	Wood	138	-2.3	5.0	5.0	7.0	9.0	10.3	2.1	AE	11	14.1	2.8	Harbor
DCK-257	257	Dock	Wood	293	-0.9	5.0	5.0	7.0	9.0	10.3	2.3	AE	11	14.0	2.8	Connecticut River
DCK-258	258	Dock	Wood	308	-0.2	5.0	5.0	7.0	9.0	10.3	3.9	AE	11	14.0	4.5	Connecticut River
DCK-259	259	Dock	Wood	46	-1.4	3.0	5.0	7.0	9.0	10.3	3.3	VE	15	13.8	4.3	Marsh
DCK-260	260	Dock	Wood	443	-0.7	4.0	5.0	7.0	9.0	10.3	3.2	VE	15	13.8	4.1	Marsh
DCK-261	261	Dock	Wood	55	-1.9	4.0	5.0	7.0	9.0	10.3	2.5	VE	15	13.0	3.0	North Cove
DCK-262	262	Dock	Wood	69	-1.9	4.0	5.0	7.0	9.0	10.3	2.4	VE	15	13.0	2.9	North Cove
DCK-263	263	Dock	Wood	66	-2.0	3.0	5.0	7.0	9.0	10.3	2.3	VE	15	13.0	2.9	North Cove

Table 6-1: Inventory of Old Saybrook Coastal Structures

Asset ID	OBJECTID	Category	Material	Length, feet	Min. Elevation (ft, NAVD88)	Max. Elevation (ft, NAVD88)	2 yr rec. int. stillwater elevation (ft, NAVD88)	10 yr rec. int. stillwater elevation (ft, NAVD88)	50 yr rec. int. stillwater elevation (ft, NAVD88)	100 yr rec. int. stillwater elevation (ft, NAVD88)	100 yr rec. int. wave ht. (ft)	FEMA Zone	FEMA BFE (ft, NAVD88)	500 yr rec. int. stillwater elevation (ft, NAVD88)	500 yr rec. int. wave Ht.	Exposure
DCK-264	264	Dock	Wood	208	-2.1	5.0	5.0	7.0	9.0	10.3	2.0	VE	15	13.0	2.7	North Cove
DCK-265	265	Dock	Wood	95	-2.3	3.0	5.0	7.0	9.0	10.3	2.3	VE	15	13.0	2.9	North Cove
DCK-266	266	Dock	Wood	19	-0.9	3.0	5.0	7.0	9.0	10.3	2.4	VE	15	12.9	3.1	North Cove
DCK-267	267	Dock	Wood	18	-0.6	3.0	5.0	7.0	9.0	10.3	2.4	VE	15	12.9	3.0	North Cove
DCK-268	268	Dock	Wood	64	-1.0	3.0	5.0	7.0	9.0	10.3	2.2	VE	15	12.9	2.9	North Cove
DCK-269	269	Dock	Wood	168	0.7	5.0	5.0	7.0	9.0	10.3	2.1	VE	15	12.8	2.7	North Cove
DCK-270	270	Dock	Wood	124	-1.4	5.0	5.0	7.0	9.0	10.3	2.0	VE	15	12.8	2.7	North Cove
DCK-271	271	Dock	Wood	97	-1.2	5.0	5.0	7.0	9.0	10.3	1.7	VE	15	12.8	2.4	North Cove
DCK-272	272	Dock	Wood	59	-1.9	5.0	5.0	7.0	9.0	10.3	1.6	VE	15	12.9	2.1	North Cove
DCK-273	273	Dock	Wood	57	-1.7	5.0	5.0	7.0	9.0	10.3	1.1	VE	15	13.0	1.6	North Cove
DCK-274	274	Dock	Wood	103	-1.8	5.0	5.0	7.0	9.0	10.3	1.2	VE	15	13.0	1.6	North Cove
DCK-275	275	Dock	Wood	15	-1.7	5.0	5.0	7.0	9.0	10.3	1.2	VE	15	13.0	1.6	North Cove
DCK-276	276	Dock	Wood	16	2.7	5.0	5.0	7.0	9.0	10.3	1.9	VE	15	13.0	2.3	North Cove
DCK-277	277	Dock	Wood	173	-1.7	5.0	5.0	7.0	9.0	10.3	1.5	VE	15	13.0	1.8	North Cove
DCK-278	278	Dock	Wood	41	-1.8	4.0	5.0	7.0	9.0	10.3	2.6	VE	15	13.1	2.9	Connectuct River
DCK-279	279	Dock	Wood	79	-1.9	4.0	5.0	7.0	9.0	10.3	2.6	VE	15	13.1	2.9	Connectuct River
DCK-281	281	Dock	Wood	98	-2.0	5.0	5.0	7.0	9.0	10.3	1.6	VE	15	13.1	2.1	Connectuct River
DCK-282	282	Dock	Wood	71	-1.9	5.0	5.0	7.0	9.0	10.3	1.6	VE	15	13.1	2.1	Connectuct River
DCK-283	283	Dock	Wood	87	-1.8	5.0	5.0	7.0	9.0	10.3	1.7	VE	15	13.1	2.2	Connectuct River
DCK-284	284	Dock	Wood	26	-1.6	5.0	5.0	7.0	9.0	10.3	3.8	VE	15	12.9	4.5	Connecticut River
DCK-285	285	Dock	Wood	78	-1.9	5.0	5.0	7.0	9.0	10.3	3.8	VE	15	12.9	4.5	Connecticut River
DCK-286	286	Dock	Wood	20	0.7	5.0	5.0	7.0	9.0	10.3	3.7	VE	15	12.9	4.4	Connecticut River
DCK-287	287	Dock	Wood	40	-1.1	5.0	5.0	7.0	9.0	10.3	3.7	VE	15	12.9	4.4	Connecticut River
DCK-288	288	Dock	Wood	771	-1.7	5.0	5.0	7.0	9.0	10.3	3.8	VE	15	12.8	4.5	Connecticut River
DCK-289	289	Dock	Wood	210	-1.7	5.0	5.0	7.0	9.0	10.3	3.9	VE	15	12.8	4.6	Connecticut River
DCK-290	290	Dock	Wood	44	-1.7	5.0	5.0	7.0	9.0	10.3	3.8	VE	15	12.8	4.5	Connecticut River
DCK-291	291	Dock	Wood	250	-0.6	5.0	5.0	7.0	9.0	10.3	3.4	VE	15	12.8	4.1	Connecticut River
DCK-292	292	Dock	Wood	34	-0.9	5.0	5.0	7.0	9.0	10.3	3.6	VE	15	12.8	4.3	Connecticut River
DCK-293	293	Dock	Wood	281	-1.5	5.0	5.0	7.0	9.0	10.3	3.3	VE	15	12.8	4.0	Connecticut River
DCK-294	294	Dock	Wood	304	-0.7	5.0	5.0	7.0	9.0	10.3	3.2	VE	15	12.8	3.9	Connecticut River
DCK-295	295	Dock	Wood	64	-1.8	5.0	5.0	7.0	9.0	10.3	3.3	VE	15	12.8	4.1	Connecticut River
DCK-296	296	Dock	Wood	523	-2.1	5.0	5.0	7.0	9.0	10.3	2.9	VE	15	12.8	3.8	Connecticut River
DCK-297	297	Dock	Wood	81	1.9	5.0	5.0	7.0	9.0	10.3	3.4	VE	15	12.8	4.1	Connecticut River
DCK-298	298	Dock	Wood	262	-2.1	5.0	5.0	7.0	9.0	10.3	3.9	VE	15	12.8	4.5	Connecticut River
DCK-299	299	Dock	Wood	149	-2.1	5.0	5.0	7.0	9.0	10.3	3.7	VE	15	12.8	4.4	Connecticut River
DCK-300	300	Dock	Wood	75	-3.4	4.0	5.0	7.0	9.0	10.3	1.3	VE	15	12.4	2.2	South Cove
DCK-301	301	Dock	Wood	93	-3.2	8.0	5.0	7.0	9.0	10.3	1.4	VE	15	12.4	2.1	South Cove
DCK-302	302	Dock	Wood	164	-2.4	8.0	5.0	7.0	9.0	10.3	2.9	VE	15	12.5	3.8	Connecticut River
DCK-305	305	Dock	Wood	98	-4.1	4.0	5.0	7.0	9.0	10.3	5.9	VE	13	12.2	7.0	Sound
DCK-306	306	Dock	Wood	129	-4.3	4.0	5.0	7.0	9.0	10.3	5.3	VE	14	12.2	6.5	Sound
DCK-313	313	Dock	Wood	26	-1.8	3.0	5.0	7.0	9.0	10.3	1.8	VE	14	12.8	2.6	Plum Bank Creek
DCK-315	315	Dock	Wood	25	-0.7	6.0	5.0	7.0	9.0	10.3	3.8	VE	14	13.2	4.7	Sound
DCK-316	316	Dock	Wood	30	-1.0	6.0	5.0	7.0	9.0	10.3	3.9	VE	14	13.2	4.8	Sound
DCK-317	317	Dock	Wood	30	-1.0	6.0	5.0	7.0	9.0	10.3	3.9	VE	14	13.2	4.8	Sound
DCK-318	318	Dock	Wood	30	-1.2	4.0	5.0	7.0	9.0	10.3	3.9	VE	14	13.0	4.8	Sound
DCK-321	321	Dock	Wood	91	-2.0	4.0	5.0	7.0	9.0	10.3	3.3	VE	14	13.1	4.4	Oyster River
DCK-322	322	Dock	Wood	30	-2.0	4.0	5.0	7.0	9.0	10.3	3.4	VE	14	13.2	4.3	Oyster River
DCK-323	323	Dock	Wood	40	-1.9	4.0	5.0	7.0	9.0	10.3	3.4	VE	14	13.2	4.3	Oyster River
DCK-325	325	Dock	Wood	322	-1.6	4.0	5.0	7.0	9.0	10.3	2.9	AE	11	13.4	3.8	Oyster River
DCK-326	326	Dock	Wood	276	-0.9	4.0	5.0	7.0	9.0	10.3	3.2	VE	14	13.2	4.2	Oyster River
DCK-327	327	Dock	Wood	30	-0.4	4.0	5.0	7.0	9.0	10.3	2.8	VE	14	13.2	3.6	Oyster River
DCK-328	328	Dock	Wood	58	-1.6	4.0	5.0	7.0	9.0	10.3	2.8	VE	14	13.2	3.6	Oyster River
DCK-331	331	Dock	Wood	14	0.3	4.0	5.0	7.0	9.0	10.3	2.2	AE	11	13.4	3.1	Oyster River
DCK-332	332	Dock	Wood	33	-1.0	4.0	5.0	7.0	9.0	10.3	2.4	AE	11	13.4	3.3	Oyster River
DCK-333	333	Dock	Wood	104	0.8	5.0	5.0	7.0	9.0	10.3	2.2	AE	11	13.4	3.1	Oyster River

Table 6-1: Inventory of Old Saybrook Coastal Structures

Asset ID	OBJECTID	Category	Material	Length, feet	Min. Elevation (ft, NAVD88)	Max. Elevation (ft, NAVD88)	2 yr rec. int. stillwater elevation (ft, NAVD88)	10 yr rec. int. stillwater elevation (ft, NAVD88)	50 yr rec. int. stillwater elevation (ft, NAVD88)	100 yr rec. int. stillwater elevation (ft, NAVD88)	100 yr rec. int. wave ht. (ft)	FEMA Zone	FEMA BFE (ft, NAVD88)	500 yr rec. int. stillwater elevation (ft, NAVD88)	500 yr rec. int. wave Ht.	Exposure
DCK-334	334	Dock	Wood	63	-1.1	4.0	5.0	7.0	9.0	10.3	2.2	AE	11	13.4	3.0	Oyster River
DCK-339	339	Dock	Wood	17	0.7	4.0	5.0	7.0	9.0	10.3	1.9	AE	11	13.4	2.6	Oyster River
DCK-340	340	Dock	Wood	28	-1.5	4.0	5.0	7.0	9.0	10.3	2.1	AE	11	13.4	2.7	Oyster River
DCK-341	341	Dock	Wood	21	-1.7	4.0	5.0	7.0	9.0	10.3	2.1	AE	11	13.4	2.7	Oyster River
DCK-342	342	Dock	Wood	30	-1.4	4.0	5.0	7.0	9.0	10.3	2.0	AE	11	13.4	2.6	Oyster River
DCK-343	343	Dock	Wood	31	-1.0	4.0	5.0	7.0	9.0	10.3	2.0	AE	11	13.4	2.6	Oyster River
DCK-344	344	Dock	Wood	27	-1.2	4.0	5.0	7.0	9.0	10.3	2.0	AE	11	13.4	2.6	Oyster River
DCK-345	345	Dock	Wood	312	-0.6	4.0	5.0	7.0	9.0	10.3	2.2	AE	11	13.4	2.9	Oyster River
DCK-346	346	Dock	Wood	138	-0.4	4.0	5.0	7.0	9.0	10.3	2.4	AE	11	13.7	3.2	Oyster River
DCK-347	347	Dock	Wood	66	-1.6	4.0	5.0	7.0	9.0	10.3	2.4	AE	11	13.7	3.2	Oyster River
DCK-348	348	Dock	Wood	14	-0.9	4.0	5.0	7.0	9.0	10.3	2.3	AE	11	13.7	3.1	Oyster River
DCK-349	349	Dock	Wood	42	-1.0	4.0	5.0	7.0	9.0	10.3	2.3	AE	11	13.7	3.0	Oyster River
DCK-350	350	Dock	Wood	85	-1.8	4.0	5.0	7.0	9.0	10.3	2.1	AE	11	13.7	2.8	Oyster River
DCK-351	351	Dock	Wood	76	-1.4	4.0	5.0	7.0	9.0	10.3	2.2	AE	11	13.7	2.9	Oyster River
DCK-352	352	Dock	Wood	335	-0.6	4.0	5.0	7.0	9.0	10.3	2.5	AE	11	13.7	3.1	Oyster River
DCK-353	353	Dock	Wood	239	-1.4	4.0	5.0	7.0	9.0	10.3	2.4	AE	11	13.7	3.0	Oyster River
DCK-354	354	Dock	Wood	330	-0.6	4.0	5.0	7.0	9.0	10.3	2.2	AE	11	13.7	2.8	Oyster River
DCK-355	355	Dock	Wood	304	-1.7	4.0	5.0	7.0	9.0	10.3	2.4	AE	11	13.7	3.0	Oyster River
DCK-356	356	Dock	Wood	401	-1.3	4.0	5.0	7.0	9.0	10.3	2.0	AE	11	13.7	2.7	Oyster River
DCK-357	357	Dock	Wood	10	-0.4	3.0	5.0	7.0	9.0	10.3	2.4	AE	11	13.7	2.9	Oyster River
DCK-358	358	Dock	Wood	364	-1.8	6.0	5.0	7.0	9.0	10.3	2.4	AE	11	13.7	3.0	Oyster River
DCK-359	359	Dock	Wood	88	-1.9	4.0	5.0	7.0	9.0	10.3	2.0	AE	11	13.7	2.5	Oyster River
DCK-360	360	Dock	Wood	121	-1.3	7.0	5.0	7.0	9.0	10.3	2.3	AE	11	13.7	2.8	Oyster River
DCK-361	361	Dock	Wood	321	-2.5	5.5	5.0	7.0	9.0	10.3	2.1	AE	11	13.7	2.5	Oyster River
DCK-363	363	Dock	Wood	21	-1.4	4.0	5.0	7.0	9.0	10.3	3.9	VE	14	13.2	4.8	Sound
DCK-364	364	Dock	Wood	34	-1.0	4.0	5.0	7.0	9.0	10.3	4.0	VE	14	13.2	4.6	Sound
DCK-365	365	Dock	Wood	150	-2.2	6.0	5.0	7.0	9.0	10.3	4.1	VE	14	13.2	4.8	Sound
DCK-366	366	Dock	Wood	36	-1.2	6.0	5.0	7.0	9.0	10.3	3.5	VE	14	13.2	4.3	Sound
DCK-369	369	Dock	Wood	46	-1.2	-0.8	5.0	7.0	9.0	10.3	4.1	VE	14	13.2	5.0	Sound
DCK-370	370	Dock	Wood	130	-1.0	4.7	5.0	7.0	9.0	10.3	4.1	VE	14	13.2	5.1	Behind Jetty
DCK-371	371	Dock	Wood	83	-1.0	5.0	5.0	7.0	9.0	10.3	4.0	VE	14	13.2	4.9	Behind Jetty
DCK-372	372	Dock	Wood	122	-1.6	5.0	5.0	7.0	9.0	10.3	3.1	VE	14	13.2	4.1	Behind Jetty
DCK-373	373	Dock	Wood	21	-1.5	5.0	5.0	7.0	9.0	10.3	3.1	VE	14	13.2	5.1	Behind Jetty
DCK-374	374	Dock	Wood	17	-1.6	5.0	5.0	7.0	9.0	10.3	3.2	VE	14	13.2	4.1	Behind Jetty
DCK-375	375	Dock	Wood	14	-0.5	5.0	5.0	7.0	9.0	10.3	3.3	VE	14	13.2	4.2	Behind Jetty
DCK-376	376	Dock	Wood	19	-0.5	5.0	5.0	7.0	9.0	10.3	3.3	VE	14	13.2	4.2	Behind Jetty
DCK-377	377	Dock	Wood	20	-0.8	5.0	5.0	7.0	9.0	10.3	3.4	VE	14	13.2	4.3	Behind Jetty
DCK-378	378	Dock	Wood	12	-0.6	5.0	5.0	7.0	9.0	10.3	3.4	VE	14	13.2	4.3	Behind Jetty
DCK-379	379	Dock	Wood	16	-1.2	5.0	5.0	7.0	9.0	10.3	3.7	VE	14	13.2	4.6	Behind Jetty
DCK-380	380	Dock	Wood	62	-0.9	4.0	5.0	7.0	9.0	10.3	4.3	VE	14	13.2	5.3	Behind Jetty
DCK-381	381	Dock	Wood	162	-1.7	4.0	5.0	7.0	9.0	10.3	4.2	VE	14	13.2	5.2	Behind Jetty
DCK-382	382	Dock	Wood	46	-1.1	4.0	5.0	7.0	9.0	10.3	4.3	VE	14	13.2	5.3	Behind Jetty
DCK-383	383	Dock	Wood	160	-1.8	4.0	5.0	7.0	9.0	10.3	4.2	VE	14	13.2	5.2	Behind Jetty
DCK-384	384	Dock	Wood	213	-1.7	4.0	5.0	7.0	9.0	10.3	2.7	AE	12	13.4	3.5	Marsh
DCK-385	385	Dock	Wood	383	-1.1	4.0	5.0	7.0	9.0	10.3	2.6	AE	12	13.4	3.7	Marsh
DCK-386	386	Dock	Wood	399	-0.3	4.0	5.0	7.0	9.0	10.3	2.6	AE	12	13.4	3.7	Marsh
DCK-387	387	Dock	Wood	403	-1.3	5.0	5.0	7.0	9.0	10.3	2.7	AE	12	13.4	3.7	Marsh
DCK-388	388	Dock	Wood	393	-1.9	4.0	5.0	7.0	9.0	10.3	2.7	AE	12	13.4	3.9	Marsh
DCK-389	389	Dock	Wood	76	-1.7	4.0	5.0	7.0	9.0	10.3	2.3	VE	14	13.1	3.6	Back River
DCK-390	390	Dock	Wood	237	-1.7	4.0	5.0	7.0	9.0	10.3	2.5	VE	14	13.1	3.6	Back River
DCK-391	391	Dock	Wood	24	-1.0	4.0	5.0	7.0	9.0	10.3	2.4	VE	14	13.1	3.6	Back River
DCK-392	392	Dock	Wood	25	-0.8	4.0	5.0	7.0	9.0	10.3	2.5	VE	14	13.1	3.6	Back River
DCK-393	393	Dock	Wood	23	-0.9	4.0	5.0	7.0	9.0	10.3	2.5	VE	14	13.1	3.6	Back River
DCK-394	394	Dock	Wood	23	-0.9	4.0	5.0	7.0	9.0	10.3	2.5	VE	14	13.1	3.6	Back River
DCK-395	395	Dock	Wood	23	-0.8	4.0	5.0	7.0	9.0	10.3	2.6	VE	14	13.1	3.6	Back River

Table 6-1: Inventory of Old Saybrook Coastal Structures

Asset ID	OBJECTID	Category	Material	Length, feet	Min. Elevation (ft, NAVD88)	Max. Elevation (ft, NAVD88)	2 yr rec. int. stillwater elevation (ft, NAVD88)	10 yr rec. int. stillwater elevation (ft, NAVD88)	50 yr rec. int. stillwater elevation (ft, NAVD88)	100 yr rec. int. stillwater elevation (ft, NAVD88)	100 yr rec. int. wave ht. (ft)	FEMA Zone	FEMA BFE (ft, NAVD88)	500 yr rec. int. stillwater elevation (ft, NAVD88)	500 yr rec. int. wave Ht.	Exposure
DCK-396	396	Dock	Wood	72	-1.4	5.0	5.0	7.0	9.0	10.3	3.9	VE	14	13.2	4.9	Behind Jetty
DCK	New	Dock	Wood	425	0.0	4.0	5.0	7.0	9.0	10.3	3.0	VE	14	13.2	4.0	Oyster River
DCK	New	Dock	Wood	110	0.0	5.0	5.0	7.0	9.0	10.3	4.0	VE	14	13.0	5.0	Sound
DCK	New	Dock	Wood	45	0.0	6.0	1.0	7.0	9.0	10.3	4.0	VE	14	13.0	5.0	Sound
DCK	New	Dock	Wood	50	0.0	6.0	5.0	7.0	9.0	10.3	4.0	VE	14	13.0	5.0	Sound
Groins		**67**		**6,836**												
GRN-15	15	Groin	Stone	186	-2.0	4.0	5.0	7.0	9.0	10.3	4.3	VE	14	13.2	5.0	Sound
GRN-21	21	Groin	Stone	124	-0.6	4.0	5.0	7.0	9.0	10.3	4.0	VE	14	13.2	4.8	Sound
GRN-23	23	Groin	Stone	128	-0.3	4.0	5.0	7.0	9.0	10.3	3.8	VE	14	13.2	4.7	Sound
GRN-34	34	Groin	Stone & Wood	126	-1.8	3.9	5.0	7.0	9.0	10.3	3.9	VE	14	12.9	4.7	Sound
GRN-35	35	Groin	Wood	127	-0.9	4.4	5.0	7.0	9.0	10.3	3.8	VE	14	12.9	4.7	Sound
GRN-36	36	Groin	Stone	79	0.3	4.0	5.0	7.0	9.0	10.3	3.4	VE	14	13.2	4.1	Sound
GRN-37	37	Groin	Wood	194	-2.3	4.0	5.0	7.0	9.0	10.3	4.6	VE	14	13.2	5.6	Sound
GRN-38	38	Groin	Wood	152	-2.1	4.0	5.0	7.0	9.0	10.3	4.6	VE	14	13.2	5.6	Sound
GRN-39	39	Groin	Wood	146	-2.0	4.0	5.0	7.0	9.0	10.3	4.6	VE	14	13.2	5.6	Sound
GRN-40	40	Groin	Wood	150	-1.8	4.0	5.0	7.0	9.0	10.3	4.6	VE	14	13.2	5.6	Sound
GRN-41	41	Groin	Wood	156	-2.1	4.0	5.0	7.0	9.0	10.3	4.7	VE	14	13.2	5.7	Sound
GRN-42	42	Groin	Wood	152	-1.9	4.0	5.0	7.0	9.0	10.3	4.4	VE	14	13.2	5.5	Sound
GRN-43	43	Groin	Wood	152	-2.0	4.0	5.0	7.0	9.0	10.3	4.6	VE	14	13.2	5.7	Sound
GRN-44	44	Groin	Wood	291	-2.0	4.0	5.0	7.0	9.0	10.3	4.5	VE	14	13.2	5.4	Sound
GRN-54	54	Groin	Wood	140	-1.6	4.5	5.0	7.0	9.0	10.3	4.3	VE	14	12.5	5.1	Sound
GRN-55	55	Groin	Wood	150	-3.2	5.0	5.0	7.0	9.0	10.3	4.2	VE	14	12.5	5.1	Sound
GRN-56	56	Groin	Wood	79	-2.5	5.5	5.0	7.0	9.0	10.3	4.5	VE	14	12.5	5.3	Sound
GRN-57	57	Groin	Wood	98	-3.2	4.5	5.0	7.0	9.0	10.3	4.5	VE	14	12.5	5.3	Sound
GRN-58	58	Groin	Wood	49	-2.1	3.0	5.0	7.0	9.0	10.3	4.5	VE	14	12.5	5.3	Sound
GRN-62	62	Groin	Stone	282	-3.2	5.0	5.0	7.0	9.0	10.3	4.8	VE	18	12.5	5.5	Sound
GRN-63	63	Groin	Stone	88	-4.1	3.0	5.0	7.0	9.0	10.3	4.4	VE	18	12.5	5.0	Sound
GRN-65	65	Groin	Stone	145	-3.7	5.0	5.0	7.0	9.0	10.3	4.1	VE	18	12.4	4.7	Sound
GRN-66	66	Groin	Stone	47	-1.4	4.0	5.0	7.0	9.0	10.3	3.6	VE	18	12.4	4.3	Sound
GRN-67	67	Groin	Stone	73	-2.8	4.0	5.0	7.0	9.0	10.3	4.1	VE	18	12.4	4.7	Sound
GRN-70	70	Groin	Stone	98	-3.5	4.0	5.0	7.0	9.0	10.3	4.1	VE	18	12.4	4.7	Sound
GRN-71	71	Groin	Stone	106	-4.2	8.5	5.0	7.0	9.0	10.3	4.0	VE	16	12.4	4.7	Sound
GRN-73	73	Groin	Concrete	68	-4.1	9.7	5.0	7.0	9.0	10.3	4.1	VE	16	12.4	4.8	Sound
GRN-74	74	Groin	Stone	82	0.0	0.0	5.0	7.0	9.0	10.3	4.1	VE	16	12.4	4.8	Sound
GRN-75	75	Groin	Concrete	113	-3.4	4.0	5.0	7.0	9.0	10.3	3.9	VE	16	12.4	4.7	Sound
GRN-76	76	Groin	Concrete	42	-2.1	4.0	5.0	7.0	9.0	10.3	4.1	VE	16	12.4	4.9	Sound
GRN-77	77	Groin	Stone	29	-2.9	4.0	5.0	7.0	9.0	10.3	4.2	VE	16	12.4	4.9	Sound
GRN-80	80	Groin	Stone	178	-4.4	4.0	5.0	7.0	9.0	10.3	4.3	VE	16	12.4	4.9	Sound
GRN-81	81	Groin	Stone	67	-3.4	2.0	5.0	7.0	9.0	10.3	3.9	VE	16	12.4	4.3	Sound
GRN-82	82	Groin	Concrete	69	-2.6	2.7	5.0	7.0	9.0	10.3	4.6	VE	14	12.5	5.3	Sound
GRN-88	88	Groin	Stone	73	-4.1	2.0	5.0	7.0	9.0	10.3	5.3	VE	14	12.5	6.3	Sound
GRN-100	100	Groin	Stone	136	-3.9	2.0	5.0	7.0	9.0	10.3	6.0	VE	19	12.2	7.2	Sound
GRN-103	103	Groin	Stone	66	-3.6	2.0	5.0	7.0	9.0	10.3	5.4	VE	14	12.2	6.6	Sound
GRN-104	104	Groin	Stone	75	-3.1	4.0	5.0	7.0	9.0	10.3	5.0	VE	14	12.2	6.1	Sound
GRN-105	105	Groin	Stone	113	-3.0	4.0	5.0	7.0	9.0	10.3	5.4	VE	14	12.2	5.9	Sound
GRN-106	106	Groin	Stone	66	-1.5	4.0	5.0	7.0	9.0	10.3	4.8	VE	14	12.2	6.0	Sound
GRN-108	108	Groin	Stone	97	-3.8	4.0	5.0	7.0	9.0	10.3	5.3	VE	14	12.2	6.5	Sound
GRN-109	109	Groin	Stone	108	-1.0	5.0	5.0	7.0	9.0	10.3	5.3	VE	14	12.2	6.5	Sound
GRN-112	112	Groin	Stone	34	-3.6	2.0	5.0	7.0	9.0	10.3	5.4	VE	14	12.2	6.5	Sound
GRN-113	113	Groin	Stone	50	-3.9	2.0	5.0	7.0	9.0	10.3	5.4	VE	14	12.2	6.5	Sound
GRN-114	114	Groin	Stone	56	-4.0	2.0	5.0	7.0	9.0	10.3	5.4	VE	14	12.2	6.6	Sound
GRN-115	115	Groin	Stone	44	-4.0	2.0	5.0	7.0	9.0	10.3	5.4	VE	14	12.2	6.6	Sound
GRN-116	116	Groin	Stone	34	-3.6	2.0	5.0	7.0	9.0	10.3	5.4	VE	14	12.2	6.6	Sound
GRN-122	122	Groin	Stone	90	-3.1	2.0	5.0	7.0	9.0	10.3	6.2	VE	14	12.2	7.2	Sound

Table 6-1: Inventory of Old Saybrook Coastal Structures

Asset ID	OBJECTID	Category	Material	Length, feet	Min. Elevation (ft, NAVD88)	Max. Elevation (ft, NAVD88)	2 yr rec. int. stillwater elevation (ft, NAVD88)	10 yr rec. int. stillwater elevation (ft, NAVD88)	50 yr rec. int. stillwater elevation (ft, NAVD88)	100 yr rec. int. stillwater elevation (ft, NAVD88)	100 yr rec. int. wave ht. (ft)	FEMA Zone	FEMA BFE (ft, NAVD88)	500 yr rec. int. stillwater elevation (ft, NAVD88)	500 yr rec. int. wave Ht.	Exposure
GRN-123	123	Groin	Stone	72	-3.0	2.0	5.0	7.0	9.0	10.3	6.1	VE	13	12.2	7.1	Sound
GRN-124	124	Groin	Stone	87	-3.4	2.0	5.0	7.0	9.0	10.3	5.7	VE	13	12.2	6.8	Sound
GRN-125	125	Groin	Stone	85	-3.8	2.0	5.0	7.0	9.0	10.3	5.7	VE	13	12.2	6.8	Sound
GRN-126	126	Groin	Stone	79	-4.1	2.0	5.0	7.0	9.0	10.3	5.9	VE	13	12.2	7.0	Sound
GRN-127	127	Groin	Stone	71	-3.7	2.0	5.0	7.0	9.0	10.3	5.9	VE	13	12.2	7.0	Sound
GRN-128	128	Groin	Stone	100	-3.1	3.0	5.0	7.0	9.0	10.3	6.1	VE	13	12.2	7.2	Sound
GRN-130	130	Groin	Stone	95	-3.5	5.0	5.0	7.0	9.0	10.3	6.2	VE	13	12.2	7.3	Sound
GRN-132	132	Groin	Stone	140	-3.8	4.0	5.0	7.0	9.0	10.3	5.6	VE	13	12.2	6.8	Sound
GRN-137	137	Groin	Stone	62	-1.7	4.0	5.0	7.0	9.0	10.3	5.5	VE	13	12.2	6.6	Sound
GRN-216	216	Groin	Wood	71	-1.8	2.0	5.0	7.0	9.0	10.3	3.2	AE	11	14.2	3.6	Connecticut River
GRN-307	307	Groin	Stone	192	-4.3	2.0	5.0	7.0	9.0	10.3	5.7	VE	19	12.2	6.7	Sound
GRN-308	308	Groin	Wood	48	-2.5	3.0	5.0	7.0	9.0	10.3	4.6	VE	14	12.5	5.3	Sound
GRN-309	309	Groin	Wood	50	-2.7	5.0	5.0	7.0	9.0	10.3	4.5	VE	14	12.5	5.3	Sound
GRN-310	310	Groin	Wood	76	-0.4	5.0	5.0	7.0	9.0	10.3	3.7	VE	14	12.5	4.7	Sound
GRN-311	311	Groin	Wood	93	-0.5	5.0	5.0	7.0	9.0	10.3	4.0	VE	14	12.5	4.9	Sound
GRN-312	312	Groin	Wood	34	0.2	3.5	5.0	7.0	9.0	10.3	3.4	VE	14	12.5	4.3	Sound
GRN-337	337	Groin	Wood	52	-0.1	4.0	5.0	7.0	9.0	10.3	1.9	AE	11	13.4	2.8	Oyster River
GRN-338	338	Groin	Wood	57	0.2	4.0	5.0	7.0	9.0	10.3	2.4	AE	11	13.4	3.2	Oyster River
GRN-367	367	Groin	Wood	60	-1.8	3.0	5.0	7.0	9.0	10.3	3.8	VE	14	13.2	4.9	Behind Jetty
GRN-368	368	Groin	Wood	106	-1.9	4.0	5.0	7.0	9.0	10.3	3.7	VE	14	13.2	4.7	Behind Jetty
Jetties		**15**		**7,925**												
JTY-11	11	Jetty	Stone	457	-1.8	5.0	5.0	7.0	9.0	10.3	4.4	VE	14	13.2	5.5	Sound
JTY-12	12	Jetty	Stone	878	-1.7	4.0	5.0	7.0	9.0	10.3	4.0	VE	14	13.2	5.1	Sound
JTY-51	51	Jetty	Wood	132	-1.3	3.4	5.0	7.0	9.0	10.3	3.4	VE	14	12.8	4.4	Sound
JTY-133	133	Jetty	Stone	177	-3.8	3.4	5.0	7.0	9.0	10.3	6.4	VE	13	12.2	7.5	Sound
JTY-134	134	Jetty	Stone	173	-3.8	3.2	5.0	7.0	9.0	10.3	6.4	VE	13	12.2	7.4	Sound
JTY-136	136	Jetty	Stone	188	-3.9	3.8	5.0	7.0	9.0	10.3	6.4	VE	13	12.2	7.4	Sound
JTY-139	139	Jetty	Stone	2201	-4.5	3.4	5.0	7.0	9.0	10.3	8.6	-	-	12.1	9.6	Sound
JTY-159	159	Jetty	Stone	265	-1.4	5.7	5.0	7.0	9.0	10.3	3.9				4.5	
JTY-177	177	Jetty	Stone	346	-0.3	4.9	5.0	7.0	9.0	10.3	3.4	AE	11	14.6	3.9	Connecticut River
JTY-178	178	Jetty	Stone	374	-0.9	2.0	5.0	7.0	9.0	10.3	3.5	AE	11	14.6	3.8	Connecticut River
JTY-179	179	Jetty	Stone	139	-0.8	4.4	5.0	7.0	9.0	10.3	2.1	AE	11	15.0	2.5	Connecticut River
JTY-181	181	Jetty	Stone	44	0.2	2.2	5.0	7.0	9.0	10.3	2.4				2.8	
JTY-191	191	Jetty	Stone	138	-1.4	4.0	5.0	7.0	9.0	10.3	3.5	AE	11	15.0	3.9	Connecticut River
JTY-303	303	Jetty	Stone	2261	-4.6	-0.9	5.0	7.0	9.0	10.3	7.5	-	-	12.1	8.6	Sound
JTY-324	324	Jetty	Stone	151	-1.7	0.5	5.0	7.0	9.0	10.3	3.9	VE	14	13.1	4.8	Sound
Piers		**3**		**626**												
PIER-95	95	Pier	Concrete	160	-4.5	12.6	5.0	7.0	9.0	10.3	4.9	VE	19	12.2	6.0	Sound
PIER-99	99	Pier	Stone	172	-4.5	3.3	5.0	7.0	9.0	10.3	6.2	VE	19	12.2	7.3	Sound
PIER-131	131	Pier	Concrete	294	-4.1	4.6	5.0	7.0	9.0	10.3	6.3	VE	13	12.2	7.3	Sound
Seawalls		**88**		**31,770**												
SWL-1	1	Seawall	Concrete	1051	3.9	5.0	5.0	7.0	9.0	10.3	3.5	VE	14	13.2	4.7	Sound
SWL-2	2	Seawall	Concrete	170	3.3	5.0	5.0	7.0	9.0	10.3	4.1	VE	14	13.2	5.2	Sound
SWL-3	3	Seawall	Concrete	1360	3.1	5.0	5.0	7.0	9.0	10.3	2.5	VE	14	13.2	4.0	Sound
SWL-4	4	Seawall	Concrete	212	5.4	7.0	5.0	7.0	9.0	10.3	3.5	VE	14	13.2	4.6	Sound
SWL-5	5	Seawall	Concrete	204	7.1	7.0	5.0	7.0	9.0	10.3	1.9	VE	14	13.2	3.4	Sound
SWL-6	6	Seawall	Concrete	52	6.5	7.0	5.0	7.0	9.0	10.3	2.4	VE	14	13.2	3.8	Sound
SWL-7	7	Seawall	Stone	239	1.4	5.0	5.0	7.0	9.0	10.3	3.1	VE	14	13.2	4.4	Sound
SWL-8	8	Seawall	Unknown	240	2.6	6.5	5.0	7.0	9.0	10.3	3.6	VE	14	13.2	4.8	Behind Jetty
SWL-9	9	Seawall	Concrete	290	-1.8	5.0	5.0	7.0	9.0	10.3	3.3	VE	14	13.2	4.4	Behind Jetty
SWL-10	10	Seawall	Concrete	1063	1.3	9.9	5.0	7.0	9.0	10.3	1.7	VE	14	13.1	3.2	Behind Jetty
SWL-13	13	Seawall	Stone	718	2.0	7.0	5.0	7.0	9.0	10.3	3.2	VE	14	13.2	4.1	Sound

Table 6-1: Inventory of Old Saybrook Coastal Structures

Asset ID	OBJECTID	Category	Material	Length, feet	Min. Elevation (ft, NAVD88)	Max. Elevation (ft, NAVD88)	2 yr rec. int. stillwater elevation (ft, NAVD88)	10 yr rec. int. stillwater elevation (ft, NAVD88)	50 yr rec. int. stillwater elevation (ft, NAVD88)	100 yr rec. int. stillwater elevation (ft, NAVD88)	100 yr rec. int. wave ht. (ft)	FEMA Zone	FEMA BFE (ft, NAVD88)	500 yr rec. int. stillwater elevation (ft, NAVD88)	500 yr rec. int. wave Ht.	Exposure
SWL-14	14	Seawall	Concrete	152	2.9	7.0	5.0	7.0	9.0	10.3	3.6	VE	14	13.2	4.4	Sound
SWL-16	16	Seawall	Concrete	125	3.5	6.0	5.0	7.0	9.0	10.3	2.6	VE	14	13.2	3.6	Sound
SWL-17	17	Seawall	Stone	41	4.4	6.0	5.0	7.0	9.0	10.3	2.8	VE	14	13.2	3.7	Sound
SWL-18	18	Seawall	Concrete	150	4.7	6.0	5.0	7.0	9.0	10.3	2.8	VE	14	13.2	3.8	Sound
SWL-19	19	Seawall	Concrete	266	1.1	4.0	5.0	7.0	9.0	10.3	4.2	VE	14	13.2	4.9	Sound
SWL-20	20	Seawall	Stone	100	0.6	4.0	5.0	7.0	9.0	10.3	3.9	VE	14	13.2	4.7	Sound
SWL-22	22	Seawall	Wood	131	-1.0	1.0	5.0	7.0	9.0	10.3	4.2	VE	14	13.2	4.9	Sound
SWL-24	24	Seawall	Stone	113	3.6	6.0	5.0	7.0	9.0	10.3	3.2	VE	14	13.2	4.3	Sound
SWL-25	25	Seawall	Wood	95	0.6	2.9	5.0	7.0	9.0	10.3	3.3	VE	14	13.1	4.5	Osyter River
SWL-26	26	Seawall	Stone	123	0.6	5.4	5.0	7.0	9.0	10.3	3.4	VE	14	13.1	4.4	Oyster River
SWL-27	27	Seawall	Stone	567	0.4	5.5	5.0	7.0	9.0	10.3	3.8	VE	14	13.1	4.7	Oyster River
SWL-28	28	Seawall	Concrete	88	2.1	3.4	5.0	7.0	9.0	10.3	3.7	VE	14	13.0	4.6	Sound
SWL-29	29	Seawall	Stone	140	1.5	3.5	5.0	7.0	9.0	10.3	3.8	VE	14	13.0	4.7	Sound
SWL-30	30	Seawall	Concrete	207	1.4	3.9	5.0	7.0	9.0	10.3	3.5	VE	14	13.0	4.5	Sound
SWL-31	31	Seawall	Concrete	161	2.5	3.6	5.0	7.0	9.0	10.3	3.8	VE	14	12.9	4.7	Sound
SWL-32	32	Seawall	Stone	90	3.3	4.9	5.0	7.0	9.0	10.3	3.2	VE	14	12.9	4.2	Sound
SWL-33	33	Seawall	Stone	52	2.6	4.3	5.0	7.0	9.0	10.3	3.6	VE	14	12.9	4.5	Sound
SWL-45	45	Seawall	Concrete	77	0.0	7.6	5.0	7.0	9.0	10.3	2.1	VE	14	12.8	3.2	Marsh
SWL-46	46	Seawall	Stone	21	2.8	4.5	5.0	7.0	9.0	10.3	2.0	VE	14	12.8	2.9	Marsh
SWL-47	47	Seawall	Wood	68	-0.1	3.1	5.0	7.0	9.0	10.3	2.0	VE	14	12.8	2.8	Marsh
SWL-48	48	Seawall	Wood	112	-1.1	2.6	5.0	7.0	9.0	10.3	1.9	VE	14	12.8	2.7	Marsh
SWL-49	49	Seawall	Wood	134	0.4	3.7	5.0	7.0	9.0	10.3	2.1	VE	14	12.8	3.3	Marsh
SWL-50	50	Seawall	Wood	283	-1.0	7.3	5.0	7.0	9.0	10.3	2.6	VE	14	12.8	3.6	Plum Bank Creek
SWL-52	52	Seawall	Concrete	804	3.2	8.9	5.0	7.0	9.0	10.3	3.7	VE	14	12.8	4.7	Sound
SWL-53	53	Seawall	Concrete	426	2.0	7.0	5.0	7.0	9.0	10.3	3.8	VE	14	12.5	4.8	Sound
SWL-59	59	Seawall	Concrete	118	4.5	8.2	5.0	7.0	9.0	10.3	3.8	VE	14	12.7	4.8	Sound
SWL-60	60	Seawall	Concrete	1067	-0.5	7.2	5.0	7.0	9.0	10.3	3.4	VE	14	12.5	4.5	Sound
SWL-61	61	Seawall	Concrete	246	-0.7	8.0	5.0	7.0	9.0	10.3	3.4	VE	14	12.5	4.4	Sound
SWL-64	64	Seawall	Stone	529	2.9	9.0	5.0	7.0	9.0	10.3	4.3	VE	18	12.4	4.9	Sound
SWL-68	68	Seawall	Concrete	74	5.0	9.0	5.0	7.0	9.0	10.3	3.1	VE	18	12.4	3.3	Sound
SWL-69	69	Seawall	Steel	139	2.2	9.0	5.0	7.0	9.0	10.3	3.7	VE	18	12.4	4.3	Sound
SWL-72	72	Seawall	Concrete	379	2.4	11.0	5.0	7.0	9.0	10.3	4.1	VE	16	12.4	2.1	Sound
SWL-74	74	Seawall	Stone	135	1.5	11.0	5.0	7.0	9.0	10.3	4.1	VE	16	12.4	4.9	Sound
SWL-79	79	Seawall	Stone	404	2.0	8.0	5.0	7.0	9.0	10.3	2.9	VE	16	12.4	3.9	Sound
SWL-86	86	Seawall	Concrete	134	2.4	13.0	5.0	7.0	9.0	10.3	5.3	VE	24	12.2	6.2	Sound
SWL-87	87	Seawall	Concrete	406	1.2	17.6	5.0	7.0	9.0	10.3	5.6	VE	24	12.2	6.6	Sound
SWL-92	92	Seawall	Concrete	93	6.2	8.0	5.0	7.0	9.0	10.3	5.2	VE	24	12.3	3.4	Sound
SWL-93	93	Seawall	Concrete	667	2.8	8.0	5.0	7.0	9.0	10.3	5.3	VE	19	12.2	6.3	Sound
SWL-94	94	Seawall	Stone	1222	0.0	15.0	5.0	7.0	9.0	10.3	5.4	VE	19	12.2	6.4	Sound
SWL-96	96	Seawall	Concrete	100	4.0	10.0	5.0	7.0	9.0	10.3	5.4	VE	19	12.2	6.4	Sound
SWL-97	97	Seawall	Stone	1560	4.0	12.0	5.0	7.0	9.0	10.3	4.6	VE	19	12.1	5.6	Sound
SWL-98	98	Seawall	Stone	299	-0.2	6.0	5.0	7.0	9.0	10.3	5.9	VE	19	12.1	7.1	Sound
SWL-101	101	Seawall	Concrete	912	2.1	12.0	5.0	7.0	9.0	10.3	5.7	VE	19	12.1	6.8	Sound
SWL-102	102	Seawall	Concrete	222	-0.5	3.5	5.0	7.0	9.0	10.3	4.0	VE	14	12.2	5.4	Sound
SWL-107	107	Seawall	Concrete	241	3.6	8.5	5.0	7.0	9.0	10.3	4.0	VE	14	12.2	3.9	Sound
SWL-110	110	Seawall	Stone	344	5.2	7.9	5.0	7.0	9.0	10.3	3.4	VE	14	12.2	4.9	Sound
SWL-111	111	Seawall	Stone	240	1.4	4.6	5.0	7.0	9.0	10.3	5.4	VE	14	12.2	6.5	Sound
SWL-117	117	Seawall	Stone	65	0.7	4.5	5.0	7.0	9.0	10.3	5.0	VE	14	12.2	6.2	Sound
SWL-118	118	Seawall	Stone	42	1.4	5.1	5.0	7.0	9.0	10.3	4.2	VE	14	12.2	5.6	Sound
SWL-119	119	Seawall	Stone	29	5.1	6.5	5.0	7.0	9.0	10.3	4.7	VE	14	12.2	5.9	Sound
SWL-120	120	Seawall	Concrete	221	2.1	5.7	5.0	7.0	9.0	10.3	3.6	VE	13	12.2	5.0	Sound
SWL-121	121	Seawall	Concrete	502	1.9	5.1	5.0	7.0	9.0	10.3	4.2	VE	13	12.2	5.6	Sound
SWL-129	129	Seawall	Concrete	1285	-0.5	5.9	5.0	7.0	9.0	10.3	5.9	VE	13	12.2	6.7	Sound
SWL-135	135	Seawall	Concrete	495	0.4	4.2	5.0	7.0	9.0	10.3	6.1	VE	13	12.2	7.2	Sound
SWL-138	138	Seawall	Concrete	54	1.1	3.0	5.0	7.0	9.0	10.3	4.7	VE	13	12.2	5.9	Sound

Table 6-1: Inventory of Old Saybrook Coastal Structures

Asset ID	OBJECTID	Category	Material	Length, feet	Min. Elevation (ft, NAVD88)	Max. Elevation (ft, NAVD88)	2 yr rec. int. stillwater elevation (ft, NAVD88)	10 yr rec. int. stillwater elevation (ft, NAVD88)	50 yr rec. int. stillwater elevation (ft, NAVD88)	100 yr rec. int. stillwater elevation (ft, NAVD88)	100 yr rec. int. wave ht. (ft)	FEMA Zone	FEMA BFE (ft, NAVD88)	500 yr rec. int. stillwater elevation (ft, NAVD88)	500 yr rec. int. wave Ht.	Exposure
SWL-140	140	Seawall	Concrete	459	-2.9	7.0	5.0	7.0	9.0	10.3	5.0	VE	15	12.3	6.0	Connecticut River
SWL-141	141	Seawall	Concrete	428	1.3	15.0	5.0	7.0	9.0	10.3	1.4	VE	15	12.4	1.9	South Cove
SWL-142	142	Seawall	Unknown	177	0.8	3.7	5.0	7.0	9.0	10.3	3.2	VE	13	12.6	3.8	South Cove
SWL-143	143	Seawall	Unknown	213	1.0	4.1	5.0	7.0	9.0	10.3	3.3	VE	13	12.6	4.0	South Cove
SWL-144	144	Seawall	Stone	740	-1.8	5.9	5.0	7.0	9.0	10.3	3.5	VE	15	12.8	4.3	Connecticut River
SWL-145	145	Seawall	Unknown	1606	-0.6	6.8	5.0	7.0	9.0	10.3	2.3	VE	15	12.8	3.4	Connecticut River
SWL-146	146	Seawall	Concrete	1022	-0.9	5.1	5.0	7.0	9.0	10.3	3.6	VE	15	12.9	4.3	Connecticut River
SWL-147	147	Seawall	Stone	864	0.9	5.6	5.0	7.0	9.0	10.3	1.6	VE	15	13.1	2.1	Connecticut River
SWL-148	148	Seawall	Unknown	538	1.6	5.2	5.0	7.0	9.0	10.3	1.0	VE	15	13.0	1.0	North Cove
SWL-149	149	Seawall	Concrete	565	-1.5	5.2	5.0	7.0	9.0	10.3	1.9	VE	15	13.0	2.3	North Cove
SWL-150	150	Seawall	Concrete	857	-0.9	7.8	5.0	7.0	9.0	10.3	1.2	VE	15	12.9	1.3	North Cove
SWL-151	151	Seawall	Wood	322	1.5	7.5	5.0	7.0	9.0	10.3	1.1	VE	15	12.9	1.3	North Cove
SWL-152	152	Seawall	Stone	89	1.7	4.0	5.0	7.0	9.0	10.3	1.1	VE	15	12.9	1.6	North Cove
SWL-153	153	Seawall	Concrete	365	2.0	6.2	5.0	7.0	9.0	10.3	1.1	VE	15	12.9	1.9	North Cove
SWL-156	156	Seawall	Stone	56	0.9	3.3	5.0	7.0	9.0	10.3	2.4	VE	15	12.9	2.9	North Cove
SWL-170	170	Seawall	Wood	323	24.3	30.5	5.0	7.0	9.0	10.3	2.6	AE	11	14.2	2.8	Connecticut River
SWL-171	171	Seawall	Stone	72	5.5	6.2	5.0	7.0	9.0	10.3	1.1	AE	11	14.2	1.1	Connecticut River
SWL-172	172	Seawall	Stone	288	7.7	14.2	5.0	7.0	9.0	10.3	1.0	AE	11	14.2	1.0	Connecticut River
SWL-176	176	Seawall	Stone	258	1.5	4.3	5.0	7.0	9.0	10.3	3.1	AE	11	14.6	3.6	Connecticut River
SWL-314	314	Seawall	Concrete	58	1.5	7.6	5.0	7.0	9.0	10.3	2.1	VE	14	12.8	3.2	Plum Bank Creek
SWL-319	319	Seawall	Concrete	54	1.8	4.1	5.0	7.0	9.0	10.3	3.3	VE	14	13.0	4.4	Sound
SWL-320	320	Seawall	Concrete	69	2.2	5.1	5.0	7.0	9.0	10.3	3.7	VE	14	13.0	4.6	Sound
Bluffs		**7**		**2,002**												
BLF-1	78	Bluff	Stone	446	1.3	10.7	5.0	7.0	9.0	10.3	5.2	VE	13	12.2	6.3	Sound
BLF-2	83	Bluff	Stone	335	1.6	11.7	5.0	7.0	9.0	10.3	5.3	VE	13	12.2	6.4	Sound
BLF-3	84	Bluff	Loose stone	262	3.2	8.8	5.0	7.0	9.0	10.3	5.3	VE	13	12.2	6.3	Sound
BLF-4	85	Bluff	Stone	471	4.5	8.9	5.0	7.0	9.0	10.3	3.9	VE	13	12.2	5.2	Sound
BLF-5	89	Bluff	Stone	121	3.7	7.0	5.0	7.0	9.0	10.3	4.0	VE	24	12.2	5.3	Sound
BLF-6	90	Bluff	Stone	164	6.0	7.4	5.0	7.0	9.0	10.3	4.4	VE	24	12.2	5.6	Sound
BLF-7	91	Bluff		201	7.1	8.5	5.0	7.0	9.0	10.3	4.8	VE	24	12.2	5.9	Sound

Notes:

1. Structure Asset ID, Category, Material and Length obtained from Old Saybrook GiS Data Table
2. Stillwater elevations and wave heights derived from GZA Coastal Flood Hazard characterization presented in Attachment 2.
3. Structure elevations obtained based on GIS analysis using available Lidar data. These values are inferred and should be considered highly approximate. No field survey has been performed to confirm structure elevations.
4. The maximum elevation represents the inferred top of structure elevation. The minimum elevation represents the inferred ground elevation at the bottom of structure.
5. FEMA flood hazard zones and Base Flood Elevations obtained from the effective FEMA Flood Insurance Study and Insurance Rate Maps. See Attachment 2.
6. Yellow highlighted structures represent the Town-managed major coastal structures.
7. See Town GIS layer for structure locations.