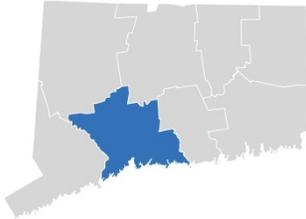


FLOOD INSURANCE STUDY

FEDERAL EMERGENCY MANAGEMENT AGENCY

VOLUME 4 OF 9



NEW HAVEN COUNTY, CONNECTICUT (ALL JURISDICTIONS)

COMMUNITY NAME	NUMBER	COMMUNITY NAME	NUMBER
TOWN OF PROSPECT	090151	TOWN OF PROSPECT	090151
CITY OF ANSONIA	090071	TOWN OF SEYMOUR	090088
TOWN OF BEACON FALLS	090072	TOWN OF SOUTHURY	090089
TOWN OF BETHANY	090144	TOWN OF WALLINGFORD	090090
TOWN OF BRANFORD	090073	CITY OF WATERBURY	090091
TOWN OF CHESHIRE	090074	CITY OF WEST HAVEN	090092
CITY OF DERBY	090075	TOWN OF WOLCOTT	090093
TOWN OF EAST HAVEN	090076	TOWN OF WOODBRIDGE	090153
TOWN OF GUILFORD	090077	BOROUGH OF WOODMONT	090168
TOWN OF HAMDEN	090078		
TOWN OF MADISON	090079		
CITY OF MERIDEN	090081		
TOWN OF MIDDLEBURY	090080		
CITY OF MILFORD	090082		
BOROUGH OF NAUGATUCK	090137		
CITY OF NEW HAVEN	090084		
TOWN OF NORTH BRANFORD	090085		
TOWN OF NORTH HAVEN	090086		
TOWN OF ORANGE	090087		
TOWN OF OXFORD	090150		

PRELIMINARY:

AUGUST 10, 2015

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09009CV004D

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FEMA

TABLE OF CONTENTS

Volume 1

	<u>Page</u>
SECTION 1.0 – INTRODUCTION	1
1.1 The National Flood Insurance Program	1
1.2 Purpose of this Flood Insurance Study Report	2
1.3 Jurisdictions Included in the Flood Insurance Study Project	2
1.4 Considerations for using this Flood Insurance Study Report	4
SECTION 2.0 – FLOODPLAIN MANAGEMENT APPLICATIONS	12
2.1 Floodplain Boundaries	12
2.2 Floodways	12
2.3 Base Flood Elevations	32
2.4 Non-Encroachment Zones	32
2.5 Coastal Flood Hazard Areas	32
2.5.1 Water Elevations and the Effects of Waves	32
2.5.2 Floodplain Boundaries and BFEs for Coastal Areas	34
2.5.3 Coastal High Hazard Areas	35
2.5.4 Limit of Moderate Wave Action	36
SECTION 3.0 – INSURANCE APPLICATIONS	37
3.1 National Flood Insurance Program Insurance Zones	37
3.2 Coastal Barrier Resources System	38
SECTION 4.0 – AREA STUDIED	39
4.1 Basin Description	39
4.2 Principal Flood Problems	42
4.3 Non-Levee Flood Protection Measures	44
4.4 Levees	45
SECTION 5.0 – ENGINEERING METHODS	50
5.1 Hydrologic Analyses	50

Figures

	<u>Page</u>
Figure 1: FIRM Panel Index	4
Figure 2: FIRM Notes to Users	5
Figure 3: Map Legend for FIRM	8
Figure 4: Floodway Schematic	13
Figure 5: Wave Runup Transect Schematic	34
Figure 6: Coastal Transect Schematic	36
Figure 7: Frequency Discharge-Drainage Area Curves	72

Tables

	<u>Page</u>
Table 1: Listing of NFIP Jurisdictions	2
Table 2: Flooding Sources Included in this FIS Report	15
Table 3: Flood Zone Designations by Community	37
Table 4: Coastal Barrier Resources System Information	38
Table 5: Basin Characteristics	40
Table 6: Principal Flood Problems	42
Table 7: Historic Flooding Elevations	44
Table 8: Non-Levee Flood Protection Measures	45
Table 9: Levees	49
Table 10: Summary of Discharges	51
Table 11: Summary of Non-Coastal Stillwater Elevations	79
Table 12: Stream Gage Information used to Determine Discharges	80

Volume 2

	<u>Page</u>
5.2 Hydraulic Analyses	80
5.3 Coastal Analyses	131
5.3.1 Total Stillwater Elevations	132
5.3.2 Waves	133
5.3.3 Coastal Erosion	133
5.3.4 Wave Hazard Analyses	133
5.4 Alluvial Fan Analyses	140
SECTION 6.0 – MAPPING METHODS	143
6.1 Vertical and Horizontal Control	143
6.2 Base Map	144
6.3 Floodplain and Floodway Delineation	144

Figures

	<u>Page</u>
Figure 8: 1% Annual Chance Total Stillwater Elevations for Coastal Areas	132
Figure 9: Transect Location Map	139

Tables

	<u>Page</u>
Table 13: Summary of Hydrologic and Hydraulic Analyses	82
Table 14: Roughness Coefficients	128
Table 15: Summary of Coastal Analyses	131
Table 16: Tide Gage Analysis Specifics	133

Table 17: Coastal Transect Parameters	135
Table 18: Summary of Alluvial Fan Analyses	141
Table 19: Results of Alluvial Fan Analyses	142
Table 20: Countywide Vertical Datum Conversion	143
Table 21: Stream-Based Vertical Datum Conversion	144
Table 22: Base Map Sources	144
Table 23: Summary of Topographic Elevation Data used in Mapping	145
Table 24: Floodway Data	154

Volume 3

Tables

	<u>Page</u>
Table 24: Floodway Data	154

Volume 4

	<u>Page</u>
6.4 Coastal Flood Hazard Mapping	301
6.5 FIRM Revisions	305
6.5.1 Letters of Map Amendment	306
6.5.2 Letters of Map Revision Based on Fill	306
6.5.4 Letters of Map Revision	306
6.5.3 Physical Map Revisions	307
6.5.4 Contracted Restudies	307
6.5.5 Community Map History	307
SECTION 7.0 – CONTRACTED STUDIES AND COMMUNITY COORDINATION	310
7.1 Contracted Studies	310
7.2 Community Meetings	311
SECTION 8.0 – ADDITIONAL INFORMATION	333
SECTION 9.0 – BIBLIOGRAPHY AND REFERENCES	335

Tables

	<u>Page</u>
Table 25: Flood Hazard and Non-Encroachment Data for Selected Streams	301
Table 26: Summary of Coastal Transect Mapping Considerations	302
Table 27: Incorporated Letters of Map Change	307
Table 28: Community Map History	308
Table 29: Summary of Contracted Studies Included in this FIS Report	311
Table 30: Community Meetings	326
Table 31: Map Repositories	333

Volume 5
Exhibits

Flood Profiles	<u>Panel</u>
Bailey Creek	001 P
Beacon Hill Brook	002-008 P
Beaver Brook No. 1	009-011 P
Beaver Brook No. 2	012-026 P
Beaver Brook No. 2 Overland Flow Along West Avenue	027 P
Beaver Brook No. 3	028 P
Beaver Pond Brook	029-033 P
Bladens River (Lower Reach)	034-036 P
Bladens River (Upper Reach)	037-040 P
Bladens River Tributary	041-042 P
Branford River	043-049 P
Bronson Brook	050-051 P
Bronson Brook Tributary	052-054 P
Brookdale Stream	055 P
Burr Brook	056-057 P
Camp Laurelwood Brook	058-060 P
Club Creek	061-062 P
Coginchaug River	063 P
Cold Spring Brook	064-070 P
Cove River	071-074 P
Crow Hollow Brook	075-076 P
East River	077-078 P
Eaton Brook	079-088 P
Eightmile Brook No. 1	089 P
Eightmile Brook No. 2	090-091 P
Farley Creek	092-099 P

Volume 6
Exhibits

Flood Profiles, continued	<u>Panel</u>
Farm Brook	100-101 P
Farm River	102-114 P
Five Mile Brook	115-117 P
Fivemile Brook	118-119 P
Fulling Mill Brook	120-123 P
Fulling Mill Brook Tributary	124 P
Grieb Court Brook	125 P
Gulf Brook	126 P
Hammonasset River (Lower Branch)	127-130 P
Hammonasset River (Upper Branch)	131-140 P
Hancock Brook	141-144 P

Hanover Street Brook	145-146 P
Harbor Brook	147-150 P
Hemp Swamp Brook	151-155 P
Hop Brook (Lower Branch)	156 P
Hop Brook (Upper Branch)	157-166 P
Hopeville Pond Brook	167-168 P
Hopp Brook	169-171 P
Housatonic River (Lower Reach)	172-177 P
Housatonic River (Upper Reach)	178-179 P
Indian River	180-185 P
Iron Stream	186-187 P
Jepp Brook	188-194 P
Jones Hill Road Brook	195 P
Judd Brook	196 P

Volume 7
Exhibits

Flood Profiles, continued	<u>Panel</u>
Karls Brook	197-203 P
Lindsley Brook	204-207 P
Little Meadow Brook	208-210 P
Little River	211-231 P
Long Meadow Pond Brook	232-234 P
Long Swamp Brook	235-239 P
Lyman Hall Brook	240 P
Mad River (Lower Reach)	241-245 P
Mad River (Upper Reach)	246-253 P
Maloney Brook	254-258 P
Mansion Road Brook	259-260 P
Meetinghouse Brook	261 P
Mill River	262-273 P
Mountain Brook	274 P
Muddy River	275-286 P
Muddy River Tributary C	287-289 P
Munger Brook	290-292 P

Volume 8
Exhibits

Flood Profiles, continued	<u>Panel</u>
Naugatuck River	293-312 P
Neck River	313-319 P
Oakdale Brook	320-322 P
Old Tannery Brook	323-326 P
Pine Brook	327-328 P
Pomperaug River	329-330 P
Quinnipiac River	331-343 P
Race Brook	344-350 P
Riggs Street Brook	351-360 P

Schildgen Pond Brook	361-364 P
Shepard Brook	365-368 P
Silver Brook	369-375 P
Sodom Brook	376-378 P
Spoon Shop Brook	379-387 P
Steele Brook	388-389 P

Volume 9
Exhibits

Flood Profiles, continued	<u>Panel</u>
Stubby Brook	390-403 P
Tenmile River	404-408 P
Tumble Brook	409-411 P
Tuttle Brook	412 P
Two Mile Brook	413-417 P
Watermans Brook	418-421 P
Webb Brook	422-423 P
Wepawaug River	424-436 P
West Branch Farm Brook	437-439 P
West River No. 1	440-443 P
West River No. 2	444-448 P
Wharton Brook	449-455 P
Whitemare Brook	456-457 P
Willow Brook No. 1	458-462 P
Willow Brook No. 2	463-465 P
Wintergreen Brook	466-467 P
Woodings Pond Brook	468-469 P
Wooster Brook	470-478 P

Published Separately

Flood Insurance Rate Map (FIRM)

Table 25: 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 23.

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% 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 (hv^2) is greater than or equal to $200 \text{ ft}^3/\text{sec}^2$. 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 26 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.

Table 26: Summary of Coastal Transect Mapping Considerations

Coastal Transect	Primary Frontal Dune (PFD) Identified	Wave Runup Analysis	Wave Height Analysis	Zone VE Limit	SFHA Boundary
		Zone Designation and BFE (ft NAVD 88)	Zone Designation and BFE (ft NAVD 88)		
1		10.6	VE 13-16 AE 11-13	Overland Wave Propagation	
2		12.5	VE 15-19 AE 12-15	Overtopping	
3		12.3	VE 14-18 AE 12-14	Overtopping	
4		10.8	VE 13-16 AE 11-13	Overland Wave Propagation	
5		11.8	VE 17	Overtopping	
6		10.7	VE 13-16 AE 11-13	Overland Wave Propagation	
7		12.4	VE 19 AE 13	Runup	
8		10.9	VE 13-16 AE 11-13	Overtopping	
9		12.4	VE 20 AE 12	Overtopping	
10		12.2	VE 24 AE 14	Runup	
11		11.1	VE 13-17 AE 11-13	Overland Wave	
12		11.6	VE 14-17 AE 12-14	Overtopping	
13		12.4	VE 14-19 AE 12-14	Overtopping	
14		12.4	VE 17	Runup	
15		10.7	VE 13-16 AE 11-13	Overland Wave Propagation	
16	✓	10.3	VE 12-16 AE 10-12	Primary Frontal Dune	
17		10.3	VE 12-15 AE 10-12	Overland Wave Propagation	

Table 26: Summary of Coastal Transect Mapping Considerations

Coastal Transect	Primary Frontal Dune (PFD) Identified	Wave Runup Analysis	Wave Height Analysis	Zone VE Limit	SFHA Boundary
		Zone Designation and BFE (ft NAVD 88)	Zone Designation and BFE (ft NAVD 88)		
18		9.7	VE 12-14 AE 10-12	Overland Wave Propagation	
19		11.3	VE 13-17 AE 11-13	Overtopping	
20		10.9	VE 13-16 AE 11-13	Overtopping	
21		12.5	VE 15-19 AE 13-15	Overtopping	
22		11.4	VE 12-15 AE 10-12	Overtopping	
23		10.5	VE 17 AE 11-13	Overtopping	
24		10.8	VE 13-16 AE 11-13	Overtopping	
25		11.7	VE 14-18 AE 12-14	Overtopping	
26		10.3	VE 12-15 AE 10-12	Overland Wave Propagation	
27		11.4	VE 13-17 AE 12-13	Overtopping	
28		10.6	VE 14-18 AE 12-14	Overland Wave Propagation	
29		10.9	VE 13-16 AE 11-13	Overland Wave Propagation	
30		11.3	VE 13-17 AE 11-13	Overtopping	
31		11.4	VE 14-17 AE 11-14	Overtopping	
32		10.7	VE 21	Overtopping	
33		12.2	VE 1-14 AE 13-14	Overtopping	

Table 26: Summary of Coastal Transect Mapping Considerations

Coastal Transect	Primary Frontal Dune (PFD) Identified	Wave Runup Analysis	Wave Height Analysis	Zone VE Limit	SFHA Boundary
		Zone Designation and BFE (ft NAVD 88)	Zone Designation and BFE (ft NAVD 88)		
34		11.3	VE 15-17 AE 11-12	Overland Wave Propagation	
35		11	VE 13-16 AE 11-13	Overland Wave Propagation	
36		11.7	VE 14-18 AE 12-14	Overtopping	
37		11.9	VE 14 AE 12-14	Overtopping	
38		10.3	VE 12-15 AE 10-12	Overland Wave Propagation	
39		11.7	VE 14-18 AE 12-14	Overland Wave	
40		10.5	VE 13-16 AE 10-13	Overland Wave Propagation	
41		11.2	VE 13-17 AE 11-13	Overtopping	
42		10.8	VE 13-16 AE 11-13	Overtopping	
43		11.3	VE 15	Overtopping	
44		10.2	VE 12-15 AE 10-12	Overland Wave Propagation	
45		12.2	VE 17 AE 12-14	Runup	
46		11.1	VE 13-17 AE 11-13	Overland Wave Propagation	
47		11	VE 13-16 AE 11-13	Overland Wave Propagation	
48		11.8	VE 14-18 AE 12-14	Overtopping	

Table 26: Summary of Coastal Transect Mapping Considerations

Coastal Transect	Primary Frontal Dune (PFD) Identified	Wave Runup Analysis	Wave Height Analysis	Zone VE Limit	SFHA Boundary
		Zone Designation and BFE (ft NAVD 88)	Zone Designation and BFE (ft NAVD 88)		
49		10.3	VE 12-16 AE 10-12	Overland Wave Propagation	
50		11.6	VE 14-17 AE 12-14	Overtopping	
51		11.2	VE 13-17 AE 11-13	Overland Wave Propagation	
52		11.8	VE 14-18 AE 12-14	Overtopping	
53		12	VE 14-18 AE 12-14	Overtopping	
54		11.7	VE 19	Overtopping	
55		11.1	VE 13-17 AE 12-13	Overland Wave Propagation	

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. To simplify representation, the LiMWA was continued immediately landward of the VE/AE boundary in areas where wave runup elevations dominate. Similarly, in areas where the Zone VE designation is based on the presence of a primary frontal dune or wave overtopping, the LiMWA was delineated immediately landward of the Zone VE/AE boundary.

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 31, “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 <http://www.fema.gov> 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 http://www.fema.gov/plan/prevent/fhm/ot_lmreq.shtm.

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 <http://www.fema.gov> 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 http://www.fema.gov/plan/prevent/fhm/ot_lmreq.shtm.

6.5.4 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 <http://www.fema.gov> 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 New Haven County FIRM are listed in Table 27. Please note that this table only includes LOMCs

that have been issued on the FIRM panels updated by this map revision. For all other areas within this county, users should be aware that revisions to the FIS Report made by prior LOMRs may not be reflected herein and users will need to continue to use the previously issued LOMRs to obtain the most current data.

Table 27: Incorporated Letters of Map Change

Case Number	Effective Date	Flooding Source	FIRM Panel(s)
12-01-1133P	02/01/2013	Harbor Brook	09009C0162H ¹ , 09009C0164H, 09009C0166H ¹ , 09009C0167H, 09009C0168H ¹

¹ Although a portion of LOMR 12-01-1133P falls within the scope of this map revision, panels 09009C0162H, 09009C0166H, and 09009C0168H were not revised. Therefore, users must continue to refer to the annotated FIRM attachment for this LOMR for FIRM panels 09009C0162H, 09009C0166H, and 09009C0168H.

6.5.3 Physical Map Revisions

PMRs are 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 <http://www.fema.gov> and visit the “Flood Map Revision Processes” section.

6.5.4 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 www.fema.gov to learn more about the CNMS or contact the FEMA Regional Office listed in Section 8 of this FIS Report.

6.5.5 Community Map History

The current FIRM presents flooding information for the entire geographic area of New Haven 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 28, “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 28 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 Flood Hazard Boundary Map (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. This is the first effective date that is shown on the FIRM panel.
- *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 Physical Map Revisions (PMR) 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 New Haven County FIRMs in countywide format was 12/17/2010.

Table 28: Community Map History

Community Name	Initial Identification Date (First NFIP Map Published)	Initial FHBM Effective Date	FHBM Revision Date(s)	Initial FIRM Effective Date	FIRM Revision Date(s)
City of Ansonia	05/03/1974	03/11/1977	None	09/02/1981	05/18/1992 12/17/2010 10/16/2013
Town of Beacon Falls	05/03/1974	None	None	03/01/1979	12/17/2010

Table 28: Community Map History

Community Name	Initial Identification Date (First NFIP Map Published)	Initial FHBM Effective Date	FHBM Revision Date(s)	Initial FIRM Effective Date	FIRM Revision Date(s)
Town of Bethany	07/26/1974	None	None	08/23/1977	12/02/1980 12/17/2010
Town of Branford	07/26/1974	None	None	12/15/1977	04/18/1983 06/16/1992 12/17/2010 07/08/2013
Town of Cheshire	04/05/1974	11/26/1976	None	07/16/1981	11/03/1989 08/02/1995 04/15/2002 12/17/2010
City of Derby	06/28/1974	06/21/1977	None	09/15/1977	07/16/1991 12/17/2010 10/16/2013
Town of East Haven	06/28/1974	08/27/1976	None	02/01/1978	03/16/1983 01/17/1991 11/19/1997 01/02/2003 12/17/2010 07/08/2013
Town of Guilford	08/02/1974	None	None	05/01/1978	08/19/1986 12/17/2010 07/08/2013
Town of Hamden	01/04/1974	05/17/1977	None	06/15/1979	12/17/2010 07/08/2013
Town of Madison	05/31/1974	None	None	09/15/1978	07/05/1984 11/04/1992 08/02/1995 12/17/2010 07/08/2013
City of Meriden	06/14/1974	08/16/1977	None	09/30/1982	11/20/2000 12/17/2010
Town of Middlebury	09/06/1974	04/15/1977	None	10/16/1979	12/17/2010
City of Milford	10/18/1974	08/02/1977	None	09/29/1978	08/15/1983 10/01/1983 07/02/1987 06/16/1992 11/06/1996 09/07/1999 12/17/2010 07/08/2013
Borough of Naugatuck	06/28/1974	02/18/1977	None	08/15/1979	12/17/2010
City of New Haven	06/07/1974	09/10/1976	None	07/16/1980	05/02/1983 06/16/1992 12/17/2010 07/08/2013

Table 28: Community Map History

Community Name	Initial Identification Date (First NFIP Map Published)	Initial FHBM Effective Date	FHBM Revision Date(s)	Initial FIRM Effective Date	FIRM Revision Date(s)
Town of North Branford	06/21/1974	None	None	07/03/1978	12/17/2010 07/08/2013
Town of North Haven	05/24/1974	None	None	09/17/1980	05/01/1985 12/17/2010 07/08/2013
Town of Orange	09/14/1973	12/10/1976	None	03/18/1980	08/02/1995 12/17/2010 07/08/2013
Town of Oxford	06/28/1974	12/17/1976	None	12/04/1979	03/18/1991 12/17/2010
Town of Prospect	06/21/1974	None	None	02/04/1977	05/16/1995 12/17/2010
Town of Seymour	07/26/1974 01/07/1977	None	None	07/03/1978	04/16/1991 12/17/2010 10/16/2013
Town of Southbury	02/08/1974	10/17/1975	None	03/28/1980	12/11/1981 12/17/2010
Town of Wallingford	08/02/1974	None	None	09/15/1978	06/04/1990 04/16/1991 09/07/2000 12/17/2010
City of Waterbury	03/22/1974	06/07/1977	None	11/01/1979	12/17/2010
City of West Haven	05/31/1974	None	None	01/17/1979	04/18/1983 06/16/1992 12/17/2010 07/08/2013
Town of Wolcott	05/03/1974	11/26/1976	None	07/05/1982	12/17/2010
Town of Woodbridge	06/28/1974	11/19/1976	None	03/16/1981	03/18/1991 12/17/2010
Borough of Woodmont	10/18/1974	08/02/1977	None	09/29/1978	08/15/1983 10/01/1983 07/02/1987 06/16/1992 11/06/1996 09/07/1999 12/17/2010 07/08/2013

SECTION 7.0 – CONTRACTED STUDIES AND COMMUNITY COORDINATION

7.1 Contracted Studies

Table 29 provides a summary of the contracted studies, by flooding source, that are included in this FIS Report.

Table 29: Summary of Contracted Studies Included in this FIS Report

Flooding Source	FIS Report Dated	Contractor	Number	Work Completed Date	Affected Communities
Bailey Creek	January, 1984	Dewberry & Davis LLC	EMW-C-0543	March, 1983	Madison
Bailey Creek	November 4, 1992	Soil Conservation Service	IAA-H-9-76, Project Order No. 1	1977	Madison
Beacon Hill Brook	September, 1978	Harris-Toups Associates	H-3987	August, 1977	Beacon Falls
Beacon Hill Brook	Feb, 1979	Harris-Toups Associates	H-3987	September, 1977	Naugatuck
Beaver Brook No. 1	May, 1992	Genovese & Associates	EMW-89-C-2818	November, 1989	Ansonia
Beaver Brook No. 1	Dec, 2010	USACE, GeoMaps International	not listed	not listed	Ansonia
Beaver Brook No. 1		Genovese & Associates	H-4711	June, 1979	Ansonia
Beaver Brook No. 2	July, 1987	Flaherty-Giavara Associates	EMW-84-C-1594	September, 1985	Milford
Beaver Brook No. 3	January, 1980	Soil Conservation Service	IAA-H-9-76, Project Order No. 1	October, 1977	New Haven
Beaver Pond Brook	May, 1979	Harris-Toups Associates	H-3987	November, 1977	Waterbury
Bladens River (Upper Reach)	June, 1980	U.S. Geological Survey	IAA-H-9-77, Project Order No. 27	December, 1978	Bethany
Bladens River (Lower Reach)	January, 1978	Harris-Toups Associates	H-3987	July, 1977	Seymour
Bladens River (Lower Reach)	April, 1991	FGA Services Inc	EMW-87-C-2447	March, 1988	Seymour
Bladens River (Upper Reach)	March, 1991	USACE, New England Division	EMW-84-E-1506, Project Order No. 26.	July, 1989	Woodbridge
Bladens River (Upper Reach)	September 16, 1980	U.S. Geological Survey	IAA-H-9-77, Project Order No. 27	December, 1978	Woodbridge
Bladens River Tributary	January, 1978	Harris-Toups Associates	H-3987	July, 1977	Seymour

Table 29: Summary of Contracted Studies Included in this FIS Report

Flooding Source	FIS Report Dated	Contractor	Number	Work Completed Date	Affected Communities
Bladens River Tributary	April, 1991	FGA Services Inc	EMW-87-C-2447	March, 1988	Seymour
Branford River	January, 1978	Anderson-Nichols and Co. Inc.	H-3862	February, 1977	North Branford
Branford River	Feb, 1977	Soil Conservation Service	IAA-H-9-76, Project Order No. 1	January, 1977	Branford
Bronson Brook	September, 1978	Harris-Toups Associates	H-3987	August, 1977	Beacon Falls
Bronson Brook Tributary (< 1 mi ²)	September, 1978	Harris-Toups Associates	H-3987	August, 1977	Beacon Falls
Brookdale Stream	December, 1978	Soil Conservation Service	IAA-H-9-76, Project Order No. 1	July, 1977	Hamden
Burr River	January, 1978	Anderson-Nichols and Co. Inc.	H-3862	February, 1977	North Branford
Camp Laurelwood Brook	January, 1984	Dewberry & Davis LLC	EMW-C-0543	March, 1983	Madison
Camp Laurelwood Brook	November 4, 1992	Soil Conservation Service	IAA-H-9-76, Project Order No. 1	1977	Madison
Club Creek	July, 1978	USACE, New England Division	IAA-H-19-74, Project Order No. 17 & 23.	February, 1976	West Haven
Cold Spring Brook	Feb, 1979	Harris-Toups Associates	H-3987	September, 1977	Naugatuck
Cove River	July, 1978	USACE, New England Division	IAA-H-19-74, Project Order No. 17 & 23.	February, 1976	West Haven
Crow Hollow Brook	September, 1982	U.S. Geological Survey	IAA-H-9-77, Project Order No. 27	December, 1979	Meriden
Crow Hollow Brook	November, 2000	U.S. Geological Survey	EMW-90-E-3266, Project Order No.2	January, 1995	Meriden

Table 29: Summary of Contracted Studies Included in this FIS Report

Flooding Source	FIS Report Dated	Contractor	Number	Work Completed Date	Affected Communities
East River	November, 1977	USACE, New England Division	IAA-H-19-74, Project Order No. 15.	May, 1977	Guilford
East River	August, 1986	CE Maguire Inc.	EMW-C-0278	December, 1982	Guilford
Eaton Brook	December, 1978	Soil Conservation Service	IAA-H-9-76, Project Order No. 1	July, 1977	Hamden
Eightmile Brook No. 1	January, 1978	Anderson-Nichols and Co. Inc.	H-3862	February, 1977	North Branford
Eightmile Brook No. 2	March, 1991	FGA Services Inc	EMW-87-C-2447	March, 1988	Oxford
Eightmile Brook No. 2	June, 1979	Harris-Toups Associates	H-3987	April, 1978	Oxford
Farley Creek	July, 1987	Flaherty-Giavara Associates	EMW-84-C-1594	September, 1985	Milford
Farm Brook	December, 1978	Soil Conservation Service	IAA-H-9-76, Project Order No. 1	July, 1977	Hamden
Farm River	March, 1983	Dewberry & Davis LLC	EMW-C-0543	September, 1981	East Haven
Farm River	January, 1991	Dewberry & Davis LLC	EMW-89-C-2906	January, 1990	East Haven
Farm River	January, 1978	Anderson-Nichols and Co. Inc.	H-3862	February, 1977	North Branford
Farm River	February, 1978	Soil Conservation Service	IAA-H-9-76	January, 1977	East Haven
Five Mile Brook	May, 1985	Dewberry & Davis LLC		August, 1983	North Haven
Five Mile Brook	March, 1980	CE Maguire Inc.	H-4560	July, 1978	North Haven
Fivemile Brook	March, 1991	FGA Services Inc	EMW-87-C-2447	March, 1988	Oxford
Fivemile Brook	June, 1979	Harris-Toups Associates	H-3987	April, 1978	Oxford
Fulling Mill Brook	Feb, 1979	Harris-Toups Associates	H-3987	September, 1977	Naugatuck

Table 29: Summary of Contracted Studies Included in this FIS Report

Flooding Source	FIS Report Dated	Contractor	Number	Work Completed Date	Affected Communities
Fulling Mill Brook Tributary	May, 1995	Green International Affiliates, Inc.	EMW-93-C-4144, Task No. 1	December, 1993	Prospect
Grieb Court Brook	March, 1978	Soil Conservation Service	H-3962	April, 1977	Wallingford
Gulf River	January, 1978	Anderson-Nichols and Co. Inc.	H-3862	February, 1977	North Branford
Hammonasset River	November, 1992	U.S. Geological Survey	EMW-89-E-2997, Project Order No. 5.	June, 1991	Madison
Hammonasset River	January, 1984	Dewberry & Davis LLC	EMW-C-0543	March, 1983	Madison
Hammonasset River	January, 1984	Dewberry & Davis LLC	EMW-C-0543	March, 1983	Madison
Hammonasset River	November 4, 1992	Soil Conservation Service	IAA-H-9-76, Project Order No. 1	1977	Madison
Hammonasset River	November 4, 1992	Soil Conservation Service	IAA-H-9-76, Project Order No. 1	1977	Madison
Hammonasset River		CE Maguire Inc.		January, 1979	Madison
Hancock Brook	May, 1979	Harris-Toups Associates	H-3987	November, 1977	Waterbury
Hanover Street Brook	June, 1990	U.S. Geological Survey	EMW-84-E-1548, project Order No.2	August, 1987	Wallingford
Harbor Brook	September, 1982	U.S. Geological Survey	IAA-H-9-77, Project Order No. 27	December, 1979	Meriden
Harbor Brook	November, 2000	U.S. Geological Survey	EMW-90-E-3266, Project Order No.2	January, 1995	Meriden
Hemp Swamp Brook	September, 1978	Harris-Toups Associates	H-3987	August, 1977	Beacon Falls
Hop Brook (Lower Reach)	Feb, 1979	Harris-Toups Associates	H-3987	September, 1977	Naugatuck

Table 29: Summary of Contracted Studies Included in this FIS Report

Flooding Source	FIS Report Dated	Contractor	Number	Work Completed Date	Affected Communities
Hop Brook (Upper Reach)	April, 1979	Harris-Toups Associates	H-3987	November, 1977	Middlebury
Hopeville Pond Brook	May, 1979	Harris-Toups Associates	H-3987	November, 1977	Waterbury
Hopp Brook	June, 1980	U.S. Geological Survey	IAA-H-9-77, Project Order No. 27	December, 1978	Bethany
Housatonic River (Upper Reach)	September, 1979	U.S. Geological Survey	IAA-H-8-76 Project Order No. 6	December, 1977	Southbury
Housatonic River (Lower Reach)	September, 1977	New England Division of the USACE	IAA-H-2-72, Project Order No.4	December, 1976	Derby
Housatonic River (Lower Reach)	September, 1979	CE Maguire Inc.	H-4560	July, 1978	Orange
Housatonic River (Lower Reach)	March, 1991	FGA Services Inc	EMW-87-C-2447	March, 1988	Oxford
Housatonic River (Lower Reach)	March, 1978	New England Division of the USACE	IAA-H-15-72	April, 1977	Milford
Housatonic River (Lower Reach)	June, 1979	Harris-Toups Associates	H-3987	April, 1978	Oxford
Housatonic River (Lower Reach)	July, 1991	FGA Services, Inc.	EMW-87-C-2447	March, 1988	Derby
Housatonic River (Lower Reach)	July, 1987	Flaherty-Giavara Associates	EMW-84-C-1594	September, 1985	Milford
Housatonic River (Lower Reach)	January, 1978	Harris-Toups Associates	H-3987	July, 1977	Seymour
Housatonic River (Lower Reach)	April, 1991	FGA Services Inc	EMW-87-C-2447	March, 1988	Seymour
Housatonic River (Lower Reach)	September, 1977	New England Division of the USACE	IAA-H-2-72, Project Order No.5	January, 1977	Derby

Table 29: Summary of Contracted Studies Included in this FIS Report

Flooding Source	FIS Report Dated	Contractor	Number	Work Completed Date	Affected Communities
Indian River	September, 1979	CE Maguire Inc.	H-4560	July, 1978	Orange
Indian River	March, 1978	New England Division of the USACE	IAA-H-15-72	April, 1977	Milford
Indian River	July, 1987	Flaherty-Giavara Associates	EMW-84-C-1594	September, 1985	Milford
Iron Stream	November, 1992	U.S. Geological Survey	EMW-89-E-2997, Project Order No. 5.	June, 1991	Madison
Iron Stream	January, 1984	Dewberry & Davis LLC	EMW-C-0543	March, 1983	Madison
Iron Stream	November 4, 1992	Soil Conservation Service	IAA-H-9-76, Project Order No. 1	1977	Madison
Jepp Brook	December, 1978	Soil Conservation Service	IAA-H-9-76, Project Order No. 1	July, 1977	Hamden
Jones Hill Road Brook	July, 1978	USACE, New England Division	IAA-H-19-74, Project Order No. 17 & 23.	February, 1976	West Haven
Judd Brook	Nov, 1989	U.S. Geological Survey	EMW-84-E-1548, project Order No.2	August, 1987	Cheshire
Judd Brook	July, 1981	U.S. Geological Survey	IAA-H-9-77, Project Order No. 27	December, 1979	Cheshire
Judd Brook	April, 2002	Roald Haestad Inc.	EMB-1999-CO-0564, Modification No.3	April, 2000	Cheshire
Karls Brook	July, 1987	Flaherty-Giavara Associates	EMW-84-C-1594	September, 1985	Milford
Lindsley Brook	January, 1982	Philip W. Genovese and Assoc. Inc.	H-4711	April, 1980	Wolcott
Little Meadow Brook	November, 1977	USACE, New England Division	IAA-H-19-74, Project Order No. 15.	May, 1977	Guilford

Table 29: Summary of Contracted Studies Included in this FIS Report

Flooding Source	FIS Report Dated	Contractor	Number	Work Completed Date	Affected Communities
Little Meadow Brook	August, 1986	CE Maguire Inc.	EMW-C-0278	December, 1982	Guilford
Little River	March, 1991	FGA Services Inc	EMW-87-C-2447	March, 1988	Oxford
Little River	June, 1979	Harris-Toups Associates	H-3987	April, 1978	Oxford
Little River	January, 1978	Harris-Toups Associates	H-3987	July, 1977	Seymour
Little River	April, 1991	FGA Services Inc	EMW-87-C-2447	March, 1988	Seymour
Long Meadow Pond Brook	Feb, 1979	Harris-Toups Associates	H-3987	September, 1977	Naugatuck
Long Swamp Brook	April, 1979	Harris-Toups Associates	H-3987	November, 1977	Middlebury
Lyman Hall Brook	March, 1978	Soil Conservation Service	H-3962	April, 1977	Wallingford
Mad River (Upper Reach)	January, 1982	Philip W. Genovese and Assoc. Inc.	H-4711	April, 1980	Wolcott
Mad River (Lower Reach)	May, 1979	Harris-Toups Associates	H-3987	November, 1977	Waterbury
Maloney Brook	March, 1983	Dewberry & Davis LLC	EMW-C-0543	September, 1981	East Haven
Maloney Brook	January, 2003	U.S. Geological Survey	EMW-98-IA-0175, Project Order No. 1.	October, 2000	East Haven
Maloney Brook	January, 1991	Dewberry & Davis LLC	EMW-89-C-2906	January, 1990	East Haven
Maloney Brook	February, 1978	Soil Conservation Service	IAA-H-9-76	January, 1977	East Haven
Mansion Road Brook	June, 1990	U.S. Geological Survey	EMW-84-E-1548, project Order No.2	August, 1987	Wallingford
Meetinghouse Brook	March, 1978	Soil Conservation Service	H-3962	April, 1977	Wallingford

Table 29: Summary of Contracted Studies Included in this FIS Report

Flooding Source	FIS Report Dated	Contractor	Number	Work Completed Date	Affected Communities
Mill River	Nov, 1989	U.S. Geological Survey	EMW-84-E-1548, project Order No.2	August, 1987	Cheshire
Mill River	May, 1985	Dewberry & Davis LLC		August, 1983	North Haven
Mill River	March, 1980	CE Maguire Inc.	H-4560	July, 1978	North Haven
Mill River	July, 1981	U.S. Geological Survey	IAA-H-9-77, Project Order No. 27	December, 1979	Cheshire
Mill River	December, 1978	Soil Conservation Service	IAA-H-9-76, Project Order No. 1	July, 1977	Hamden
Morris Creek	March, 1983	Dewberry & Davis LLC	EMW-C-0543	September, 1981	East Haven
Morris Creek	January, 1991	Dewberry & Davis LLC	EMW-89-C-2906	January, 1990	East Haven
Morris Creek	February, 1978	Soil Conservation Service	IAA-H-9-76	January, 1977	East Haven
Mountain Brook	May, 1995	Green International Affiliates, Inc.	EMW-93-C-4144, Task No. 1	December, 1993	Prospect
Muddy River	May, 1985	Dewberry & Davis LLC		August, 1983	North Haven
Muddy River	March, 1980	CE Maguire Inc.	H-4560	July, 1978	North Haven
Muddy River	March, 1978	Soil Conservation Service	H-3962	April, 1977	Wallingford
Muddy River Tributary C	January, 1978	Anderson-Nichols and Co. Inc.	H-3862	February, 1977	North Branford
Munger Creek	January, 1978	Anderson-Nichols and Co. Inc.	H-3862	February, 1977	North Branford
Naugatuck River	September, 1978	Harris-Toups Associates	H-3987	August, 1977	Beacon Falls
Naugatuck River	September, 1977	New England Division of the USACE	IAA-H-2-72, Project Order No.6	February, 1977	Derby

Table 29: Summary of Contracted Studies Included in this FIS Report

Flooding Source	FIS Report Dated	Contractor	Number	Work Completed Date	Affected Communities
Naugatuck River	May, 1992	Genovese & Associates	EMW-89-C-2818	November, 1989	Ansonia
Naugatuck River	May, 1979	Harris-Toups Associates	H-3987	November, 1977	Waterbury
Naugatuck River	July, 1991	FGA Services, Inc.	EMW-87-C-2447	March, 1988	Derby
Naugatuck River	January, 1978	Harris-Toups Associates	H-3987	July, 1977	Seymour
Naugatuck River	Feb, 1979	Harris-Toups Associates	H-3987	September, 1977	Naugatuck
Naugatuck River	April, 1991	FGA Services Inc	EMW-87-C-2447	March, 1988	Seymour
Naugatuck River		Genovese & Associates	H-4711	June, 1979	Ansonia
Neck River	November, 1992	U.S. Geological Survey	EMW-89-E-2997, Project Order No. 5.	June, 1991	Madison
Neck River	January, 1984	Dewberry & Davis LLC	EMW-C-0543	March, 1983	Madison
Neck River	November 4, 1992	Soil Conservation Service	IAA-H-9-76, Project Order No. 1	1977	Madison
Oakdale Brook	March, 1978	Soil Conservation Service	H-3962	April, 1977	Wallingford
Old Field Creek	July, 1978	USACE, New England Division	IAA-H-19-74, Project Order No. 17 & 23.	February, 1976	West Haven
Old Tannery Brook	January, 1982	Philip W. Genovese and Assoc. Inc.	H-4711	April, 1980	Wolcott
other streams studied (no names given)	May, 1985	Dewberry & Davis LLC		August, 1983	North Haven
other streams studied (no names given)	March, 1980	CE Maguire Inc.	H-4560	July, 1978	North Haven
Pine Brook	May, 1985	Dewberry & Davis LLC		August, 1983	North Haven

Table 29: Summary of Contracted Studies Included in this FIS Report

Flooding Source	FIS Report Dated	Contractor	Number	Work Completed Date	Affected Communities
Pine Brook	March, 1980	CE Maguire Inc.	H-4560	July, 1978	North Haven
Pomperaug River	September, 1979	U.S. Geological Survey	IAA-H-8-76 Project Order No. 6	December, 1977	Southbury
Quinnipiac River	September, 2000	U.S. Geological Survey		June, 1998	Wallingford
Quinnipiac River	September, 1982	U.S. Geological Survey	IAA-H-9-77, Project Order No. 27	December, 1979	Meriden
Quinnipiac River	November, 2000	U.S. Geological Survey	EMW-90-E-3266, Project Order No.2	January, 1995	Meriden
Quinnipiac River	Nov, 1989	U.S. Geological Survey	EMW-84-E-1548, project Order No.2	August, 1987	Cheshire
Quinnipiac River	May, 1985	Dewberry & Davis LLC		August, 1983	North Haven
Quinnipiac River	March, 1980	CE Maguire Inc.	H-4560	July, 1978	North Haven
Quinnipiac River	March, 1978	Soil Conservation Service	H-3962	April, 1977	Wallingford
Quinnipiac River	June, 1990	U.S. Geological Survey	EMW-84-E-1548, project Order No.2	August, 1987	Wallingford
Quinnipiac River	July, 1981	U.S. Geological Survey	IAA-H-9-77, Project Order No. 27	December, 1979	Cheshire
Farley Creek (formerly Quirks Pond)	July, 1987	Flaherty-Giavara Associates	EMW-84-C-1594	September, 1985	Milford
Race Brook	September, 1979	CE Maguire Inc.	H-4560	July, 1978	Orange
Race Brook	March, 1991	USACE, New England Division	EMW-84-E-1506, Project Order No. 26.	July, 1989	Woodbridge
Race Brook	August, 1995	Road Haestad Inc.	EMW-90-C-3126	March, 1993	Orange

Table 29: Summary of Contracted Studies Included in this FIS Report

Flooding Source	FIS Report Dated	Contractor	Number	Work Completed Date	Affected Communities
Race Brook	September 16, 1980	U.S. Geological Survey	IAA-H-9-77, Project Order No. 27	December, 1978	Woodbridge
Riggs Street Brook	March, 1991	FGA Services Inc	EMW-87-C-2447	March, 1988	Oxford
Riggs Street Brook	June, 1979	Harris-Toups Associates	H-3987	April, 1978	Oxford
Schildgen Pond Brook	Feb, 1979	Harris-Toups Associates	H-3987	September, 1977	Naugatuck
Shepard Brook	December, 1978	Soil Conservation Service	IAA-H-9-76, Project Order No. 1	July, 1977	Hamden
Sodom Brook	September, 1982	U.S. Geological Survey	IAA-H-9-77, Project Order No. 27	December, 1979	Meriden
Sodom Brook	November, 2000	U.S. Geological Survey	EMW-90-E-3266, Project Order No.2	January, 1995	Meriden
Spoon Shop Brook	September, 1982	U.S. Geological Survey	IAA-H-9-77, Project Order No. 27	December, 1979	Meriden
Spoon Shop Brook	November, 2000	U.S. Geological Survey	EMW-90-E-3266, Project Order No.2	January, 1995	Meriden
Steele Brook	May, 1979	Harris-Toups Associates	H-3987	November, 1977	Waterbury
streams studied by approximate methods (see FIS report Jan 1978)	January, 1978	Anderson-Nichols and Co. Inc.	H-3862	February, 1977	North Branford
Stubby Brook	July, 1987	Flaherty-Giavara Associates	EMW-84-C-1594	September, 1985	Milford
Tenmile River	Nov, 1989	U.S. Geological Survey	EMW-84-E-1548, project Order No.2	August, 1987	Cheshire
Tenmile River	May, 1995	Green International Affiliates, Inc.	EMW-93-C-4144, Task No. 1	December, 1993	Prospect

Table 29: Summary of Contracted Studies Included in this FIS Report

Flooding Source	FIS Report Dated	Contractor	Number	Work Completed Date	Affected Communities
Tenmile River	July, 1981	U.S. Geological Survey	IAA-H-9-77, Project Order No. 27	December, 1979	Cheshire
Tumble Brook	July, 1987	Flaherty-Giavara Associates	EMW-84-C-1594	September, 1985	Milford
Tuttle Brook	November, 1997	Milone & MacBroom Inc.	Not Known	September, 1995	East Haven
Tuttle Brook	March, 1983	Dewberry & Davis LLC	EMW-C-0543	September, 1981	East Haven
Tuttle Brook	January, 1991	Dewberry & Davis LLC	EMW-89-C-2906	January, 1990	East Haven
Tuttle Brook	February, 1978	Soil Conservation Service	IAA-H-9-76	January, 1977	East Haven
Two Mile Brook	May, 1992	Genovese & Associates	EMW-89-C-2818	November, 1989	Ansonia
Two Mile Brook		Genovese & Associates	H-4711	June, 1979	Ansonia
Watermans Brook	May, 1985	Dewberry & Davis LLC		August, 1983	North Haven
Watermans Brook	March, 1980	CE Maguire Inc.	H-4560	July, 1978	North Haven
Webb Brook	Feb, 1979	Harris-Toups Associates	H-3987	September, 1977	Naugatuck
Wepawaug River	September 16, 1980	U.S. Geological Survey	IAA-H-9-77, Project Order No. 27	December, 1978	Woodbridge
Wepawaug River	March, 1978	New England Division of the USACE	IAA-H-15-72	April, 1977	Milford
Wepawaug River	September, 1979	CE Maguire Inc.	H-4560	July, 1978	Orange
Wepawaug River	March, 1991	USACE, New England Division	EMW-84-E-1506, Project Order No. 26.	July, 1989	Woodbridge
Wepawaug River	July, 1987	Flaherty-Giavara Associates	EMW-84-C-1594	September, 1985	Milford

Table 29: Summary of Contracted Studies Included in this FIS Report

Flooding Source	FIS Report Dated	Contractor	Number	Work Completed Date	Affected Communities
West Branch Farm Brook	December, 1978	Soil Conservation Service	IAA-H-9-76, Project Order No. 1	July, 1977	Hamden
West River No. 2	January, 1980	Soil Conservation Service	IAA-H-9-76, Project Order No. 1	October, 1977	New Haven
West River No. 2	March, 1991	USACE, New England Division	EMW-84-E-1506, Project Order No. 26.	July, 1989	Woodbridge
West River No. 2	July, 1978	USACE, New England Division	IAA-H-19-74, Project Order No. 17 & 23.	February, 1976	West Haven
Wharton Brook	May, 1985	Dewberry & Davis LLC		August, 1983	North Haven
Wharton Brook	March, 1980	CE Maguire Inc.	H-4560	July, 1978	North Haven
Wharton Brook	March, 1978	Soil Conservation Service	H-3962	April, 1977	Wallingford
Whitemare Brook	May, 1992	Genovese & Associates	EMW-89-C-2818	November, 1989	Ansonia
Whitemare Brook	Dec, 2010	USACE, GeoMaps International			Ansonia
Whitemare Brook		Genovese & Associates	H-4711	June, 1979	Ansonia
Willow Brook No. 1	Nov, 1989	U.S. Geological Survey	EMW-84-E-1548, project Order No.2	August, 1987	Cheshire
Willow Brook No. 1	July, 1981	U.S. Geological Survey	IAA-H-9-77, Project Order No. 27	December, 1979	Cheshire
Willow Brook No. 1	December, 2010	Roald Haestad Inc.	EMB-1999-CO-0564	October, 2002	Hamden
Willow Brook No. 1	December, 1978	Soil Conservation Service	IAA-H-9-76, Project Order No. 1	July, 1977	Hamden
Willow Brook No. 2	September, 1982	U.S. Geological Survey	IAA-H-9-77, Project Order No. 27	December, 1979	Meriden

Table 29: Summary of Contracted Studies Included in this FIS Report

Flooding Source	FIS Report Dated	Contractor	Number	Work Completed Date	Affected Communities
Willow Brook No. 2	November, 2000	U.S. Geological Survey	EMW-90-E-3266, Project Order No.2	January, 1995	Meriden
Wintergreen Brook	January, 1980	Soil Conservation Service	IAA-H-9-76, Project Order No. 1	October, 1977	New Haven
Woodings Pond Brook	March, 1978	Soil Conservation Service	H-3962	April, 1977	Wallingford
Wooster Brook	May, 1979	Harris-Toups Associates	H-3987	November, 1977	Waterbury
Wooster Brook	April, 1979	Harris-Toups Associates	H-3987	November, 1977	Middlebury
coastal wave height analyses	July, 2013	Strategic Alliance for Risk Reduction (STARR)	HSFEHQ-09-D-0370	July, 2013	East Haven
coastal wave height analyses	July, 2013	Strategic Alliance for Risk Reduction (STARR)	HSFEHQ-09-D-0370	July, 2013	Guilford
coastal wave height analyses	July, 2013	Strategic Alliance for Risk Reduction (STARR)	HSFEHQ-09-D-0370	July, 2013	Hamden
coastal wave height analyses	July, 2013	Strategic Alliance for Risk Reduction (STARR)	HSFEHQ-09-D-0370	July, 2013	Madison
coastal wave height analyses	July, 2013	Strategic Alliance for Risk Reduction (STARR)	HSFEHQ-09-D-0370	July, 2013	Northaven
coastal wave height analyses	July, 2013	Strategic Alliance for Risk Reduction (STARR)	HSFEHQ-09-D-0370	July, 2013	Borough Of Woodmont

Table 29: Summary of Contracted Studies Included in this FIS Report

Flooding Source	FIS Report Dated	Contractor	Number	Work Completed Date	Affected Communities
coastal wave height analyses	July, 2013	Strategic Alliance for Risk Reduction (STARR)	HSFEHQ-09-D-0370	July, 2013	Branford
coastal wave height analyses	July, 1987	Dewberry & Davis LLC	EMW-C-0543	May, 1982	Milford
coastal wave height analyses	July, 2013	Strategic Alliance for Risk Reduction (STARR)	HSFEHQ-09-D-0370	July, 2013	Milford
coastal wave height analyses	November, 1982	Dewberry & Davis LLC	EMW-C-0543	July, 1982	Newhaven
coastal wave height analyses	July, 2013	Strategic Alliance for Risk Reduction (STARR)	HSFEHQ-09-D-0370	July, 2013	Newhaven
coastal wave height analyses	July, 2013	Strategic Alliance for Risk Reduction (STARR)	HSFEHQ-09-D-0370	July, 2013	Orange
coastal wave height analyses	July, 2013	Strategic Alliance for Risk Reduction (STARR)	HSFEHQ-09-D-0370	July, 2013	West Haven
coastal wave height analyses	October, 1982	Dewberry & Davis LLC			West Haven

7.2 Community Meetings

The dates of the community meetings held for this Flood Risk Project and any previous Flood Risk Projects are shown in Table 30. 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 30: Community Meetings

Community	FIS Report Dated	Date of Meeting	Meeting Type	Attended By
Ansonia	05/03/1974, 03/11/1977, 09/02/1981,	04/1978	Initial CCO	
		07/23/1980	Final CCO	
	05/18/1992	06/1988	Initial CCO	
		02/22/1991	Final CCO	
		03/06/2012	Discovery	USGS, CT DEEP, Town/City Officials & Representatives (FEMA on conference call)
		10/15/2014	Draft Work Map	USGS, CT DEEP, Town/City Officials & Representatives (FEMA on conference call)
Beacon Falls	05/03/1974, 03/01/1979	12/1976	Initial CCO	
		03/15/1978	Final CCO	
Bethany	07/26/1974, 08/23/1977, 12/02/1980	06/13/1977	Initial CCO	
		01/07/1980	Final CCO	
Branford	7/26/1974; 11/26/1976; 12/15/1977, 04/18/1983, 06/16/1992	03/1975, 04/1976	Initial CCO	
		10/28/1976	Final CCO	
		03/06/2012	Discovery	USGS, CT DEEP, Town/City Officials & Representatives (FEMA on conference call)
		10/15/2014	Draft Work Map	USGS, CT DEEP, Town/City Officials & Representatives (FEMA on conference call)
Cheshire	04/05/1974, 06/21/1977, 07/16/1981, 11/03/1989, 08/02/1995	02/28/1984	Initial CCO	
		11/09/1988	Final CCO	

Table 30: Community Meetings

Community	FIS Report Dated	Date of Meeting	Meeting Type	Attended By
	05/15/2002	06/21/2000	Initial CCO	
		03/16/2001	Final CCO	
		03/06/2012	Discovery	USGS, CT DEEP, Town/City Officials & Representatives (FEMA on conference call)
		10/15/2014	Draft Work Map	USGS, CT DEEP, Town/City Officials & Representatives (FEMA on conference call)
Derby	06/28/1974, 09/15/1977, 07/16/1991	10/29/1986	Initial CCO	
		03/22/1990	Final CCO	
		03/06/2012	Discovery	USGS, CT DEEP, Town/City Officials & Representatives (FEMA on conference call)
		10/15/2014	Draft Work Map	USGS, CT DEEP, Town/City Officials & Representatives (FEMA on conference call)
East Haven	06/28/1974, 08/27/1976, 02/01/1978, 03/16/1983, 01/17/1991	12/02/1976	Final CCO	
		10/27/1981	Final CCO	
	11/19/1997	12/06/1995	Initial CCO	
	01/02/2003	12/07/1998	Initial CCO	
		12/07/2001	Final CCO	
		07/20/2001	Final CCO	
		03/06/2012	Discovery	USGS, CT DEEP, Town/City Officials & Representatives (FEMA on conference call)
		10/15/2014	Draft Work Map	USGS, CT DEEP, Town/City Officials & Representatives (FEMA on conference call)
Guilford	08/02/1974,	10/01/1979	Initial CCO	

Table 30: Community Meetings

Community	FIS Report Dated	Date of Meeting	Meeting Type	Attended By
	05/01/1978, 08/19/1986	02/26/1985	Final CCO	
		03/06/2012	Discovery	USGS, CT DEEP, Town/City Officials & Representatives (FEMA on conference call)
		10/15/2014	Draft Work Map	USGS, CT DEEP, Town/City Officials & Representatives (FEMA on conference call)
Hamden	01/04/1974, 05/18/1977, 06/15/1979	06/23/1976	Initial CCO	
		06/28/1978	Final CCO	
		03/06/2012	Discovery	USGS, CT DEEP, Town/City Officials & Representatives (FEMA on conference call)
		10/15/2014	Draft Work Map	USGS, CT DEEP, Town/City Officials & Representatives (FEMA on conference call)
Madison	05/31/1974, 09/15/1978, 07/05/1984	04/1975 & 12/1975	Initial CCO	
		04/19/1983	Final CCO	
	11/04/1992, 08/02/1995	06/16/1989	Initial CCO	
		10/23/1991	Final CCO	
Meriden	06/14/1974, 08/16/1977, 09/30/1982	06/14/1977	Initial CCO	
		06/12/1981	Final CCO	
	11/20/2000	03/07/1995	Initial CCO	
		03/06/2012	Discovery	USGS, CT DEEP, Town/City Officials & Representatives (FEMA on conference call)
		10/15/2014	Draft Work Map	USGS, CT DEEP, Town/City Officials & Representatives (FEMA on conference call)
Middlebury	09/06/1974,	11/1976	Initial CCO	

Table 30: Community Meetings

Community	FIS Report Dated	Date of Meeting	Meeting Type	Attended By
	04/15/1977, 10/16/1979	09/26/1978	Final CCO	
Milford	10/18/1974, 08/02/1977, 09/29/1978, 08/15/1983, 10/01/1983, 07/02/1987, 06/16/1992, 11/06/1996, 09/07/1999	06/01/1986	Final CCO	
		03/06/2012	Discovery	USGS, CT DEEP, Town/City Officials & Representatives (FEMA on conference call)
		10/15/2014	Draft Work Map	USGS, CT DEEP, Town/City Officials & Representatives (FEMA on conference call)
Naugatuck	06/28/1974, 02/18/1977, 08/15/1979	09/1976	Initial CCO	
		06/28/1978	Final CCO	
New Haven	06/07/1974, 09/10/1976, 07/16/1980, 05/02/1983, 06/16/1992	03/1975, 04/1976	Initial CCO	
		03/12/1979	Final CCO	
	03/06/2012	Discovery	USGS, CT DEEP, Town/City Officials & Representatives (FEMA on conference call)	
		10/15/2014	Draft Work Map	USGS, CT DEEP, Town/City Officials & Representatives (FEMA on conference call)
North Branford	06/21/1974, 07/03/1978	09/1975	Initial CCO	
		05/03/1977	Final CCO	

Table 30: Community Meetings

Community	FIS Report Dated	Date of Meeting	Meeting Type	Attended By
		03/06/2012	Discovery	USGS, CT DEEP, Town/City Officials & Representatives (FEMA on conference call)
		10/15/2014	Draft Work Map	USGS, CT DEEP, Town/City Officials & Representatives (FEMA on conference call)
North Haven	05/24/1974, 09/17/1980, 05/01/1985	06/1977	Initial CCO	
		07/24/1979	Final CCO	
		03/06/2012	Discovery	USGS, CT DEEP, Town/City Officials & Representatives (FEMA on conference call)
		10/15/2014	Draft Work Map	USGS, CT DEEP, Town/City Officials & Representatives (FEMA on conference call)
Orange	09/14/1973, 12/10/1976, 03/18/1980	06/1977	Initial CCO	
		02/02/1979	Final CCO	
	08/02/1995	09/02/1992	Initial CCO	
		03/06/2012	Discovery	USGS, CT DEEP, Town/City Officials & Representatives (FEMA on conference call)
		10/15/2014	Draft Work Map	USGS, CT DEEP, Town/City Officials & Representatives (FEMA on conference call)
Oxford	06/28/1974, 12/17/1976, 12/04/1979, 03/18/1991	10/29/1986	Initial CCO	
		03/22/1990	Final CCO	
Prospect	06/21/1974, 02/04/1977, 05/16/1995	05/13/1993	Initial CCO	
			03/06/2012	Discovery

Table 30: Community Meetings

Community	FIS Report Dated	Date of Meeting	Meeting Type	Attended By
		10/15/2014	Draft Work Map	USGS, CT DEEP, Town/City Officials & Representatives (FEMA on conference call)
Seymour	07/26/1974, 01/07/1977, 07/03/1978, 04/16/1991	10/29/1986	Initial CCO	
		03/22/1990	Final CCO	
Southbury	02/08/1974, 10/17/1975, 03/28/1980, 12/11/1981	10/29/1986	Initial CCO	
		03/22/1990	Final CCO	
Wallingford	08/02/1974, 09/15/1978	04/1975	Initial CCO	
		08/23/1977	Final CCO	
	06/04/1990, 04/16/1991, 09/07/2000	02/28/1984	Initial CCO	
		02/24/1989	Final CCO	
		03/06/2012	Discovery	USGS, CT DEEP, Town/City Officials & Representatives (FEMA on conference call)
		10/15/2014	Draft Work Map	USGS, CT DEEP, Town/City Officials & Representatives (FEMA on conference call)
Waterbury	03/22/1974, 06/07/1977, 11/01/1979	09/1976	Initial CCO	
		11/02/1978	Final CCO	
West Haven	05/31/1974, 01/17/1979, 04/18/1983, 06/16/1992	06/10/1976	Final CCO	
Wolcott	05/03/1974, 11/26/1976, 07/05/1982	08/1978	Initial CCO	
		08/12/1981	Final CCO	

Table 30: Community Meetings

Community	FIS Report Dated	Date of Meeting	Meeting Type	Attended By
Woodbridge	06/28/1974, 11/19/1976, 03/16/1981, 03/18/1991	08/09/1983	Initial CCO	
		03/22/1990	Final CCO	
		03/06/2012	Discovery	USGS, CT DEEP, Town/City Officials & Representatives (FEMA on conference call)
		10/15/2014	Draft Work Map	USGS, CT DEEP, Town/City Officials & Representatives (FEMA on conference call)

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 <http://www.fema.gov>.

The additional data that was used for this project includes the FIS Report and FIRM that were previously prepared for New Haven County (FEMA 2013).

Table 31 is a list of the locations where FIRMs for New Haven 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.

Table 31: Map Repositories

Community	Address	City	State	Zip Code
City of Ansonia	253 Main Street	Ansonia	CT	06401
Town of Beacon Falls	10 Maple Avenue	Beacon Falls	CT	06403
Town of Bethany	40 Peck Road	Bethany	CT	06524
Town of Branford	1019 Main Street	Branford	CT	06405
Town of Cheshire	84 South Main Street	Cheshire	CT	06410
City of Derby	One Elizabeth Street	Derby	CT	06418
Town of East Haven	250 Main Street	East Haven	CT	06512
Town of Guilford	31 Park Street	Guilford	CT	06437
Town of Hamden	2750 Dixwell Avenue	Hamden	CT	06518
Town of Madison	8 Campus Drive	Madison	CT	06443
City of Meriden	142 East Main Street	Meriden	CT	06450
Town of Middlebury	1212 Whittemore Road	Middlebury	CT	06762
City of Milford	70 West River Street	Milford	CT	06460
Borough of Naugatuck	229 Church Street	Naugatuck	CT	06770
City of New Haven	200 Orange Street	New Haven	CT	06510
Town of North Branford	909 Foxon Road	North Branford	CT	06471
Town of North Haven	18 Church Street	North Haven	CT	06473
Town of Orange	617 Orange Center Road	Orange	CT	06477
Town of Oxford	486 Oxford Road	Oxford	CT	06478
Town of Prospect	36 Center Street	Prospect	CT	06712
Town of Seymour	One First Street	Seymour	CT	06483

Table 31: Map Repositories

Community	Address	City	State	Zip Code
Town of Southbury	501 Main Street South	Southbury	CT	06488
Town of Wallingford	45 South Main Street	Wallingford	CT	06492
City of Waterbury	236 Grand Street	Waterbury	CT	06702
City of West Haven	355 Main Street	West Haven	CT	06516
Town of Wolcott	10 Kenea Avenue	Wolcott	CT	06716
Town of Woodbridge	11 Meetinghouse Lane	Woodbridge	CT	06525
Borough of Woodmont	31 Clinton Street	Milford	CT	06460

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 32.

Table 32 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.

Table 32: Additional Information

FEMA and the NFIP	
FEMA and FEMA Engineering Library website	http://www.fema.gov
NFIP website	https://www.fema.gov/national-flood-insurance-program
NFHL Dataset	http://msc.fema.gov
FEMA Region I	99 High Street, 6 th Floor, Boston, MA 02210
Other Federal Agencies	
USGS website	http://www.usgs.gov
Hydraulic Engineering Center website	http://www.hec.usace.army.mil
State Agencies and Organizations	
State NFIP Coordinator	Diane Ifkovic Department of Energy and Environmental Protection 79 Elm Street Hartford, Connecticut 06106 (860) 424-3537 diane.ifkovic@ct.gov

State GIS Coordinator	GIS Section Department of Energy and Environmental Protection Office of Information Management 79 Elm Street Hartford, Connecticut 06106 (860) 424-3540 deep.gisdata@ct.gov
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SECTION 9.0 – BIBLIOGRAPHY AND REFERENCES

Table 33 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 33: Bibliography and References

Citation in this FIS	Publisher/ Issuer	Publication Title, "Article," Volume, Number, etc.	Author/Editor	Place of Publication	Publication Date/ Date of Issuance	Link
Aeroservice Corp., 1964	Aeroservice Corp.	<i>Topographic Maps, Scale 1:1,200, Contour Interval 1 Feet: City of New Haven, CT, 1964.</i>	Aeroservice Corporation, Philadelphia, Pennsylvania	New Haven, CT	1964	
Ahearn, 2004	U.S. Geological Survey	<i>Regression Equations for Estimating Flood Flows for the 2-, 10-, 25-, 50-, 100-, and 500-Year Recurrence Intervals in Connecticut: USGS SIR 2004-5160.</i>	E. Ahearn	U.S. Geological Survey, Connecticut	2004	
Bigwood-Thomas, 1955	U.S. Department of the Interior, Geological Survey	<i>Circular No. 365, A Flood-Flow Formula for Connecticut</i>	B.L. Bigwood and M. P. Thomas	Washington, D.C.	1955	
Bowe, Walsh and Assoc., 1977	Bowe, Walsh and Assoc.	<i>Topographic Maps, Scale 1:2,400, Contour Interval 1 and 10 Feet: City of West Haven, CT, 1977.</i>	Bowe, Walsh and Associates	West Haven, Ct	1977	
Branford, 1963	Town of Branford	<i>Topographic Maps, Scale 1:480, Contour Interval 2 Feet: Town of Branford, CT, 1963.</i>		Branford, CT	1963	
C.E. Maguire, Inc., 1977	C.E. Maguire, Inc.	<i>Topographic Maps, Scale 1:2,400, Contour Interval 5 Feet: Town of North Haven, CT, December, 1977.</i>	C.E. Maguire, Inc.	North Haven, CT	December, 1977	

Table 33: Bibliography and References

Citation in this FIS	Publisher/ Issuer	Publication Title, "Article," Volume, Number, etc.	Author/Editor	Place of Publication	Publication Date/ Date of Issuance	Link
C.E. Maguire, Inc., 1977	C.E. Maguire, Inc.	<i>Topographic Maps, Scale 1:2,400, Contour Interval 5 Feet: Town of Orange, CT, December, 1977.</i>	C.E. Maguire, Inc.	Orange, CT	December, 1977	
Cheshire, 1975	Town of Cheshire	<i>Topographic Maps, Scale 1:2,400, Contour Interval 2 Feet: Town of Cheshire, CT, March, 1975.</i>		Cheshire, CT	March, 1975	
CT DEP, 2007	Department of Environmental Protection	<i>Natural Hazards Mitigation Plan For 2007-2010</i>	Department of Environmental Protection		1-Dec-07	
Dewberry & Davis, 1982		<i>Topographic Maps, Scale 1:2,400, Contour Interval 4 Feet: Town of Madison, CT, 1982.</i>		Madison, CT	1982	
Geo Maps, 1978	Geo Maps	<i>Topographic Maps, Scale 1:4,800, Contour Interval 4 Feet: City of Ansonia, CT, April, 1978.</i>	Geo Maps	Ansonia, CT	April, 1978	
Geo Maps, 1978	Geo Maps	<i>Topographic Maps, Scale 1:4,800, Contour Interval 5 Feet: Town of Wolcott, CT, 1978.</i>	Geo Maps	Wolcott, CT	1978	
Geod Aerial Mapping, 1976	Geod Aerial Mapping	<i>Topographic Maps, Scale 1:2,400, Contour Interval 5 Feet: Town of North Branford, CT, September 1976.</i>	Geod Aerial Mapping	North Branford, CT	September, 1976	

Table 33: Bibliography and References

Citation in this FIS	Publisher/ Issuer	Publication Title, "Article," Volume, Number, etc.	Author/Editor	Place of Publication	Publication Date/ Date of Issuance	Link
Geod Aerial Mapping, 1980	Geod Aerial Mapping	<i>Topographic Maps, Scale 1:4,800, Contour Interval 5 Feet: Town of Guilford, CT, 1980.</i>	Geod Aerial Mapping	Guilford, CT	1980	
Hamden, 1964	Town of Hamden , New Haven County Soil and Water Conservation District	<i>Work Plan for the Farm Brook Watershed</i>	Town of Hamden and Connecticut and New Haven County Soil and Water Conservation District		1-Feb-64	
Hulsing, 1967	U.S. Department of the Interior, Geological Survey	<i>Techniques of Water Resources Investigation, Book 3, Chapter A5, Measurement of Peak Discharge at Dams by Indirect Methods</i>	U.S. Department of Interior, Geological Survey	Washington, D.C.	1967	
Johnston Assoc., 1983	Natural Resources Center	<i>Realizing the Risk: A History of the June 1982 floods in Connecticut</i>	L.R. Johnston Associates			
Meriden, 1965	Town of Meriden	<i>Topographic Maps, Scale 1:12,000, Contour Interval 2 Feet: City of Meriden, CT, April, 1965.</i>		Meriden, CT	April, 1965	

Table 33: Bibliography and References

Citation in this FIS	Publisher/ Issuer	Publication Title, "Article," Volume, Number, etc.	Author/Editor	Place of Publication	Publication Date/ Date of Issuance	Link
Middletown Press, 2010	The Middletown Press	<i>Flood warning issued for Middlesex County</i>	The Middletown Press		14-Dec-10	http://www.middletownpress.com/articles/2010/12/14/news/doc4d081895c9c94214339107.txt
Middletown Press, 2011	The Middletown Press	<i>14 buildings in Middletown deemed unsafe, evacuated (video)</i>	The Middletown Press		4-Feb-11	http://www.middletownpress.com/articles/2011/02/04/news/doc4d4b5283a5d29020146314.txt
Milford, 1979	City of Milford	<i>Topographic Maps, Scale 1:2,400, Contour Interval 2 Feet: City of Milford, CT, 1979.</i>		Milford, CT	1979	
New Haven Water Company, unpublished	New Haven Water Company	<i>Plan Illustrating Lake Gaillard Dam</i>	New Haven Water Company			
NRCS, 1986	U.S. Department of Agriculture, Soil Conservation Service	<i>Technical Release No. 20, Computer Program for Project Formation – Hydrology</i>	U.S. Department of Agriculture, Soil Conservation Service, Engineering Division		1-May-65	
Quinn and Associates, 1973	Quinn and Associates	<i>Topographic Maps, Scale 1:1,200, Contour Interval 2 Feet: Town of East Haven, CT, 1973.</i>	Quinn and Associates of Horsham, Pennsylvania	East Haven, CT	1973	

Table 33: Bibliography and References

Citation in this FIS	Publisher/ Issuer	Publication Title, "Article," Volume, Number, etc.	Author/Editor	Place of Publication	Publication Date/ Date of Issuance	Link
Sauer, 1983	U.S. Geological Survey	<i>Flood characteristics of urban watersheds in the United States: U.S. Geological Survey Water-Supply Paper 2207, 63 p.</i>	Sauer, V.B., Thomas, W.O. Jr., Stricker, V.A., and Wilson, K.V., 1983	U.S. Geological Survey, Connecticut	1983	
SCS, 1972	U.S. Department of Agriculture, Soil Conservation Service	<i>National Engineering Handbook, Section 4, Hydrology</i>	U.S. Department of Agriculture, Soil Conservation Service	Washington, D.C.	1-Aug-72	
SCS, 1976	U.S. Department of Agriculture, Soil Conservation Service	<i>Technical Release No. 61, WSP-2 Computer Program</i>	U.S. Department of Agriculture, Soil Conservation Service	Washington, D.C.	1-May-76	
Sewall Co., 1965	Sewall Co.	<i>Topographic Maps, Scale 1:1,200, Contour Interval 2 Feet: Town of Wallingford, CT, March, 1965.</i>	Sewall Co.	Wallingford, CT	March, 1965	
Sewall Co., 1965	Sewall Co.	<i>Topographic Maps, Scale 1:2,400, Contour Interval 5 Feet: Town of Wallingford, CT, March, 1965.</i>	Sewall Co.	Wallingford, CT	March, 1965	
Sewall Co., 1979	Sewall Co.	<i>Topographic Maps, Scale 1:200, Contour Interval 2 Feet: City of Milford, CT, March, 1979.</i>	Sewall Co.	Milford, CT	1979	

Table 33: Bibliography and References

Citation in this FIS	Publisher/ Issuer	Publication Title, "Article," Volume, Number, etc.	Author/Editor	Place of Publication	Publication Date/ Date of Issuance	Link
Shearman, 1976	U.S. Department of the Interior, Geological Survey	<i>E431, superseded by J635, Computer Applications for Step Backwater and Floodway Analyses, USGS Open-File Report 76-499</i>	James O. Shearman	Washington, D.C.		
Teledyne Geotronics Mapping, Inc., 1977	Teledyne Geotronics Mapping, Inc.	<i>Topographic Maps, Scale 1:2,400, Contour Interval 4 Feet: Borough of Naugatuck, CT, March 1977.</i>	Teledyne Geotronics Mapping, Inc.	Naugatuck, CT	March, 1977	
Teledyne Geotronics Mapping, Inc., 1977	Teledyne Geotronics Mapping, Inc.	<i>Topographic Maps, Scale 1:2,400, Contour Interval 4 Feet: City of Waterbury, CT, March, 1977.</i>	Teledyne Geotronics Mapping, Inc.	Waterbury, CT	March, 1977	
Teledyne Geotronics Mapping, Inc., 1977	Teledyne Geotronics Mapping, Inc.	<i>Topographic Maps, Scale 1:2,400, Contour Interval 4 Feet: Town of Beacon Falls, CT, March, 1977.</i>	Teledyne Geotronics Mapping, Inc.	Beacon Falls, CT	March, 1977	
Teledyne Geotronics Mapping, Inc., 1977	Teledyne Geotronics Mapping, Inc.	<i>Topographic Maps, Scale 1:2,400, Contour Interval 4 Feet: Town of Middlebury, CT, 1977.</i>	Teledyne Geotronics Mapping, Inc.	Middlebury, CT	1977	
Teledyne Geotronics Mapping, Inc., 1977	Teledyne Geotronics Mapping, Inc.	<i>Topographic Maps, Scale 1:2,400, Contour Interval 4 Feet: Town of Oxford, CT, 1977.</i>	Teledyne Geotronics Mapping, Inc.	Oxford, CT	1977	

Table 33: Bibliography and References

Citation in this FIS	Publisher/ Issuer	Publication Title, "Article," Volume, Number, etc.	Author/Editor	Place of Publication	Publication Date/ Date of Issuance	Link
TPA Design Group, 1989	TPA Design Group	<i>Topographic Maps, Scale 1:480, Contour Interval 2 Feet: Town of East Haven, CT, 1989.</i>	TPA Design Group	East Haven, CT	1989	
USACE, 1958	Dewey and Kropper, Engineers	<i>Report of Flood Control Improvements, Ansonia, Connecticut for the Connecticut Water Resources Commission</i>	Dewey and Kropper	Hartford, Connecticut	1-Aug-58	
USACE, 1965	U.S. Department of the Army, Corps of Engineers, New England District	<i>Ansonia- Derby Local Protection: Design Memorandum No. 1</i>	U.S. Department of the Army, Corps of Engineers, New England District	Waltham, Connecticut	1-Apr-65	
USACE, 1966	U.S. Department of the Army, Corps of Engineers, New England District	<i>Ansonia- Derby Local Protection: Design Memorandum No. 7</i>	U.S. Department of the Army, Corps of Engineers, New England District	Waltham, Massachusetts	1-Apr-66	
USACE, 1968a	U.S. Department of the Army, Corps of Engineers, New England District	<i>Ansonia-Derby Local Protection: Design Memorandum No. 3</i>	U.S. Department of the Army, Corps of Engineers, New England District		1-Apr-68	

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Citation in this FIS	Publisher/ Issuer	<i>Publication Title, "Article,"</i> Volume, Number, etc.	Author/Editor	Place of Publication	Publication Date/ Date of Issuance	Link
USACE, 1968b	U.S. Department of the Army, Corps of Engineers, New England District	<i>Plans for the Construction Of Local Protection Project, Ansonia-Derby, Waltham, Connecticut</i>	U.S. Department of the Army, Corps of Engineers, New England District		1-Jul-68	
USACE, 1969	U.S. Department of the Army, Corps of Engineers, New England District	<i>Hydraulic Model Investigation, Ansonia- Derby Local Protection Project, Naugatuck and Housatonic Rivers</i>	U.S. Department of the Army, Corps of Engineers, New England District, Waterwave Experiment Station	Vicksburg, Mississippi	1-Apr-69	
USACE, 1970	U.S. Department of the Army, Corps of Engineers, Hydrologic Engineering Center	<i>HEC-1 Flood Hydrograph Package</i>	U.S. Department of the Army, Corps of Engineers, Hydrologic Engineering Center	Davis, California	Oct-70	

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Citation in this FIS	Publisher/ Issuer	Publication Title, "Article," Volume, Number, etc.	Author/Editor	Place of Publication	Publication Date/ Date of Issuance	Link
USACE, 1973	U.S. Department of the Army, Corps of Engineers, New England District	<i>Flood Plain Information, Naugatuck River: Towns of Ansonia, Seymour, Beacon Falls, Naugatuck, Waterbury, Watertown, and Thomaston, prepared for the Central Naugatuck Valley Regional Planning Agency</i>	U.S. Department of the Army, Corps of Engineers, New England District		1-Jun-73	
USACE, 1973a	U.S. Department of the Army, Corps of Engineers, Hydrologic Engineering Center	<i>HEC-2 Water Surface Profiles, Generalized Computer Program</i>	U.S. Department of the Army, Corps of Engineers, Hydrologic Engineering Center	Davis, California	Oct-73	
USACE, 1976	U.S. Department of the Army, Corps of Engineers, New England District	<i>Ansonia - Derby Local Protection: Design Memorandum No. 9</i>	U.S. Department of the Army, Corps of Engineers, New England District	Waltham, Connecticut	1-May-76	

Table 33: Bibliography and References

Citation in this FIS	Publisher/ Issuer	<i>Publication Title, "Article,"</i> Volume, Number, etc.	Author/Editor	Place of Publication	Publication Date/ Date of Issuance	Link
USACE, 1976a	U.S. Department of the Army, Corps of Engineers, Hydrologic Engineering Center	<i>Gradually Varied Unsteady Flow Program</i>	U.S. Department of the Army, Corps of Engineers, Hydrologic Engineering Center	Davis, California	1-Jan-76	
USACE, 1976b	U.S. Department of the Army, Corps of Engineers, Hydrologic Engineering Center	<i>HEC-2 Water Surface Profiles, Generalized Computer Program</i>	U.S. Department of the Army, Corps of Engineers, Hydrologic Engineering Center	Davis, California	Nov-76	
USACE, 1981	U.S. Department of the Army, Corps of Engineers, Hydrologic Engineering Center	<i>HEC-2 Water Surface Profiles, Generalized Computer Program</i>	U.S. Department of the Army, Corps of Engineers, Hydrologic Engineering Center	Davis, California	Jan-81	

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Citation in this FIS	Publisher/ Issuer	Publication Title, "Article," Volume, Number, etc.	Author/Editor	Place of Publication	Publication Date/ Date of Issuance	Link
USACE, 1982	U.S. Department of the Army, Corps of Engineers, Hydrologic Engineering Center	<i>HEC-2 Water Surface Profiles, Generalized Computer Program</i>	U.S. Department of the Army, Corps of Engineers, Hydrologic Engineering Center	Davis, California	1982	
USACE, 1984	U.S. Department of the Army, Corps of Engineers, Hydrologic Engineering Center	<i>HEC-2 Water Surface Profiles, Generalized Computer Program</i>	U.S. Department of the Army, Corps of Engineers, Hydrologic Engineering Center	Davis, California	1-Apr-84	
USACE, 1988	U.S. Department of the Army, Corps of Engineers, Hydrologic Engineering Center	<i>HEC-2 Water Surface Profiles, Generalized Computer Program</i>	U.S. Department of the Army, Corps of Engineers, Hydrologic Engineering Center	Davis, California	1988	

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Citation in this FIS	Publisher/ Issuer	Publication Title, "Article," Volume, Number, etc.	Author/Editor	Place of Publication	Publication Date/ Date of Issuance	Link
USACE, 1991	U.S. Department of the Army, Corps of Engineers, Hydrologic Engineering Center	<i>HEC-2 Water Surface Profiles, Generalized Computer Program</i>	U.S. Department of the Army, Corps of Engineers, Hydrologic Engineering Center	Davis, California	1-May-91	
USACE, 1994	U.S. Department of the Army, Corps of Engineers	<i>Flood Warning Assessment for the Farm River East Haven & North Branford, CT</i>	U.S. Department of the Army, Corps of Engineers		November, 1994	
USACE, 2010	U.S. Department of the Army, Corps of Engineers, Hydrologic Engineering Center	<i>HEC-RAS River Analysis System 4.1.0</i>	U.S. Department of the Army, Corps of Engineers, Hydrologic Engineering Center	Davis, California	2010	

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Citation in this FIS	Publisher/ Issuer	<i>Publication Title, "Article," Volume, Number, etc.</i>	Author/Editor	Place of Publication	Publication Date/ Date of Issuance	Link
USGS, Topographic Maps	U.S. Department of the Interior, Geological Survey	<p><i>7.5-Minute Series Topographic Maps, Scale 1:24,000, Contour Interval 10 and/or 20 Feet: Ansonia, Connecticut 1951, 1964, Photorevised 1972 and 1984; Branford, Connecticut, 1967, Photorevised 1971 and 1972; Bristol, Connecticut, 1968 and 1972; Clinton, Connecticut, 1984; Durham, Connecticut, 1964, Photorevised 1972 and 1984; Guilford, Connecticut, 1968, Photorevised 1972 and 1984; Haddam, Connecticut, 1971; Long Hill, Connecticut, 1964, Photorevised 1973 and 1984; Meriden, Connecticut, 1972, Photorevised 1984; Middletown, Connecticut, 1972; Milford, Connecticut 1960, Photorevised 1971; Mt. Carmel, Connecticut, 1954, Photorevised 1967, 1972 and 1993; Naugatuck, Connecticut, 1964, Photorevised 1972 and 1993; New Haven, Connecticut, 1954, Photorevised 1967 and 1972; Newtown, Connecticut 1972; Roxbury, Connecticut, 1970; Southbury, Connecticut,</i></p>	U.S. Department of the Interior, Geological Survey			

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Citation in this FIS	Publisher/ Issuer	Publication Title, "Article," Volume, Number, etc.	Author/Editor	Place of Publication	Publication Date/ Date of Issuance	Link
Wallingford, 1965	Town of Wallingford	<i>Topographic Maps, Scale 1:2,400, Contour Interval 2 Feet: Town of Wallingford, CT, 1965.</i>		Wallingford, CT	1965	
Weiss, 1975	U.S. Geological Survey	<i>Flood flow formulas for urbanized and nonurbanized areas of Connecticut: Watershed and Management Symposium, Logan, Utah, Irrigation and Drainage Division, American Society of Civil Engineers, p. 658-675.</i>	L.A. Weiss	U.S. Geological Survey, Connecticut	1975	
Weiss, 1983	State of Connecticut, Department of Environmental Protection.	<i>Connecticut Water Resources Bulletin No. 36, Evaluation and Design of a Stream Flow - Data Network for Connecticut</i>	L.A. Weiss	U.S. Geological Survey, Connecticut	1983	
Woodbridge, 1981	Town of Woodbridge	<i>Topographic Map, Town of Woodbridge, Connecticut, Southeastern Section, Amity Road to Litchfield Turnpike Areas, Scale 1"=100', Contour Intervals 1 and 2 Feet, prepared from aerial photographs flown on April 8, 1981</i>	unknown	Woodbridge, CT	April, 1981	