11-5-2013

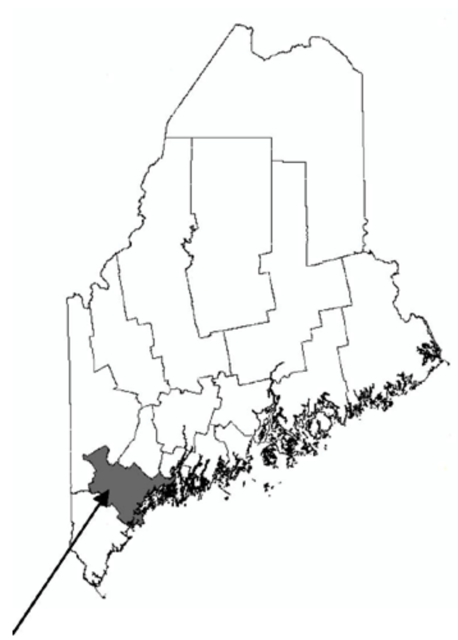
Flood Insurance Study: Cumberland County, Maine (All Jurisdictions), Vol. II

Federal Emergency Management Agency

FLOOD INSURANCE STUDY

CUMBERLAND COUNTY, MAINE (ALL JURISDICTIONS)

Volume 2 of 3



COMMUNITY NAME	COMMUNITY NUMBER
BALDWIN, TOWN OF	230200
BRIDGTON, TOWN OF	230041
BRUNSWICK, TOWN OF	230042
CAPE ELIZABETH, TOWN OF	230043
CASCO, TOWN OF	230044
CHEBEAGUE ISLAND, TOWN OF	231037
CUMBERLAND, TOWN OF	230162
FALMOUTH, TOWN OF	230045
FREEPORT, TOWN OF	230046
FRYE ISLAND, TOWN OF	231036
GORHAM, TOWN OF	230047
GRAY, TOWN OF	230048
HARPSWELL, TOWN OF	230169
HARRISON, TOWN OF	230049
LONG ISLAND, TOWN OF	231035
NAPLES, TOWN OF	230050
NEW GLOUCESTER, TOWN OF	230201
NORTH YARMOUTH, TOWN OF	230202
PORTLAND, CITY OF	230051
POWNAL, TOWN OF	230204
RAYMOND, TOWN OF	230205
SCARBOROUGH, TOWN OF	230052
SEBAGO, TOWN OF	230206
SOUTH PORTLAND, CITY OF	230053
STANDISH, TOWN OF	230207
WESTBROOK, CITY OF	230054
WINDHAM, TOWN OF	230189
YARMOUTH, TOWN OF	230055

PRELIMINARY
November 5, 2013

Federal Emergency Management Agency

FLOOD INSURANCE STUDY NUMBER
23005CV002A

NOTICE TO
FLOOD INSURANCE STUDY USERS

Communities participating in the National Flood Insurance Program have established repositories of flood hazard data for floodplain management and flood insurance purposes. This Flood Insurance Study (FIS) may not contain all data available within the repository. It is advisable to contact the community repository for any additional data.

The Federal Emergency Management Agency (FEMA) may revise and republish part or all of this Preliminary FIS report at any time. In addition, FEMA may revise part of this FIS report by the Letter of Map Revision (LOMR) process, which does not involve republication or redistribution of the FIS report. Therefore, users should consult community officials and check the Community Map Repository to obtain the most current FIS components. Flood Insurance Rate Map panels for this community contain the most current information that was previously shown separately on the corresponding Flood Boundary and Floodway Map panels (e.g., floodways and cross sections). In addition, former flood hazard zone designations have been changed as follows.

Old Zone(s)	New Zone
A1 through A30	AE
V1 through V30	VE
B	X (shaded)
C	X

Initial Countywide FIS Effective Date:

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4.0 FLOODPLAIN MANAGEMENT APPLICATIONS

The NFIP encourages state and local governments to adopt sound floodplain management programs. To assist in this endeavor, each FIS report provides 1-percent-annual-chance floodplain data, which may include a combination of the following: 10-, 2-, 1-, and 0.2-percent-annual-chance flood elevations; delineations of the 1- and 0.2-percent-annual-chance floodplains; and a 1-percent-annual-chance floodway. This information is presented on the FIRM and in many components of the FIS report, including Flood Profiles, Floodway Data tables, and Summary of Stillwater Elevation tables. Users should reference the data presented in the FIS report as well as additional information that may be available at the local community map repository before making flood elevation and/or floodplain boundary determinations.

4.1 Flood Boundaries

In order to provide a national standard without regional discrimination, the 1-percent-annual-chance flood has been adopted by FEMA as the base flood for floodplain management purposes. The 0.2-percent-annual-chance flood is employed to indicate additional areas of flood risk in the community.

The 1- and 0.2-percent-annual-chance floodplain boundaries are shown on the FIRM (Exhibit 2). On this map, the 1-percent-annual-chance floodplain boundary corresponds to the boundary of the areas of special flood hazards (Zones A, AE, AO, V, and VE), and the 0.2-percent-annual-chance floodplain boundary corresponds to the boundary of areas of moderate flood hazards. In cases where the 1- and 0.2-percent-annual-chance floodplain boundaries are close together, only the 1-percent-annual-chance floodplain boundary has been shown. Small areas within the floodplain boundaries may lie above the flood elevations but cannot be shown due to limitations of the map scale and/or lack of detailed topographic data.

For the streams studied by approximate methods, only the 1-percent-annual-chance floodplain boundary is shown on the FIRM.

For unrevised streams in Cumberland County, data were taken from previously printed FISs for each individual community and are compiled below.

In Baldwin, for each stream studied in detail, the boundaries of the 1-percent-annual-chance and the 0.2-percent-annual-chance floods have been delineated using the elevations determined at each cross section. Between cross sections, the boundaries were interpolated using photogrammetric maps at a scale of 1:4,800, with a contour interval of 5 feet (Reference 88). The flood boundaries of the approximate areas were delineated on topographic maps at a scale of 1:24,000, with a contour interval of 20 feet (Reference 89). The flood boundaries for Quaker Brook were obtained from the Baldwin Flood Hazard Boundary Map (FHBM) (Reference 90). These areas were checked by information gathered from the detail study areas and information from the town; no normal depth calculations were made.

In Bridgton, for each stream studied in detail, the boundaries of the 1-year and 0.2-percent-annual-chance floodplains have been delineated using the flood elevations determined at each cross section. Between cross sections, the boundaries were interpolated by stereoscoping aerial photographs and by using topographic maps at scales of 1:62,500 and 1:24,000, with contour intervals of 20 feet (References 91, 92, and 93).

The 1- and 0.2-percent-annual-chance flood boundaries for Highland Lake (Town of Bridgton) and Long Lake were delineated using the topographic maps referenced above. For the streams studied by approximate methods, the boundary of the 1-percent-annual-chance flood was delineated using the FHBM for the Town of Bridgton (Reference 94). Topographic maps and aerial photographs referenced above and field checks were utilized to verify the approximate flood boundaries.

In Brunswick, for the flooding sources studied in detail, the 1- and 0.2-percent-annual-chance floodplain boundaries, except for the Androscoggin River which has been redelineated as part of this study, have been delineated using topographic maps (Reference 66). For the areas studied by approximate methods, the boundary of the 1-percent-annual-chance flood was delineated using USGS topographic maps and the Flood Hazard Boundary Map for Brunswick (References 95 and 96).

For Trout Brook in Cape Elizabeth, the 1- and 0.2-percent-annual-chance floodplain boundaries have been delineated using the flood elevations determined at each cross section. Between cross sections, the boundaries were interpolated using topographic maps (Reference 66). For the areas studied by approximate methods, the boundary of the 1-percent-annual-chance flood was delineated using USGS topographic maps and the Flood Hazard Boundary Map for Cape Elizabeth (References 96 and 97).

In Casco, for the Songo and Crooked Rivers, the boundaries of the 1- and 0.2-percent-annual-chance floodplain have been delineated using the flood elevations determined at each cross section. Between cross sections and on Sebago Lake, the boundaries were interpolated from stereoplotted floodplain maps, with a contour interval of 4 feet (Reference 70). For the streams studied by approximate methods, the boundary of the 1-percent-annual-chance flood was taken from the Flood Hazard Boundary Map for Casco (Reference 98). Aerial photographs, topographic maps (References 70 and 99), and field checks were utilized to verify the approximate flood boundaries.

For the streams studied by approximate methods in Cumberland, the boundary of the 1-percent-annual-chance flood was delineated using aerial photographs, USGS topographic maps, the Flood Hazard Boundary Map for the Town of Cumberland, and onsite inspections (References 96, 88, and 100).

In Falmouth, for each stream studied in detail, the boundaries of the 1- and 0.2-percent-annual-chance floods have been delineated using the flood elevations determined at each cross section. Between cross sections, the boundaries were interpolated using topographic maps at a scale of 1:4,800, with a contour interval of 5 feet (Reference 67). For the unrevised areas studied by approximate methods, the boundary of the 1-percent-annual-chance floodplain was delineated using USGS topographic maps and the Flood Hazard Boundary Map for the Town of Falmouth (References 96 and 101).

In Freeport, for the flooding sources studied in detail, the 1- and 0.2-percent-annual-chance floodplain boundaries have been delineated using topographic maps (Reference 67). For the flooding sources studied by approximate methods, the boundary of the 1-percent-annual-chance flood was delineated using USGS topographic maps, the Flood Hazard Boundary Map for Freeport, and onsite field inspections (References 96 and 102).

For Gorham, for the stream studied in detail, the boundaries of the 1- and 0.2-percent-annual-chance floods have been delineated using the flood elevations determined at each cross section. Between cross sections, the boundaries were interpolated using topographic maps at a scale of l"=400', with a contour interval of 5 feet (Reference 68). The approximate 1-percent-annual-chance flood boundaries were delineated using USGS topographic maps (Reference 103). The 1-percent-annual-chance flood boundaries were then correlated with the Flood Hazard Boundary Map for Gorham (Reference 104).

In Gray, for each stream studied in detail, the boundaries of the 1- and 0.2-percent-annual-chance floods have been delineated using the flood elevations determined at each cross section. Between cross sections, the boundaries were interpolated by stereoscoping aerial photographs and the use of topographic maps at a scale of 1:62,500 and 1:24,000, with a contour interval of 20 feet (References 91, 92, and 93). Little Sebago Lake flood boundaries were determined from stereoplotted maps furnished by USGS at a scale of 1"=400', with a contour interval of 4 feet (Reference 105). For the flooding sources studied by approximate methods, the boundary of the 1-percent-annual-chance flood was delineated using the Flood Hazard Boundary Map for the Town of Gray (Reference 106). The topographic maps and aerial photographs referenced above and field checks were used to verify the approximate flood boundaries.

In Harrison, for each stream studied in detail, the boundaries of the 1- and 0.2-percent-annual-annual floodplain have been delineated using the flood elevations determined at each cross section. Between cross sections, the boundaries were interpolated from stereoplotted floodplain maps at a scale of 1:4,800, with a contour interval of 4 feet (Reference 70) and by the use of topographic maps at a scale of 1:62,500, with a contour interval of 20 feet (Reference 93). For streams studied by approximate methods, the boundary of the 1-percent-annual-chance flood was taken from the Flood Hazard Boundary Map (Reference 107). The topographic maps and aerial photographs referenced above as well as field checks were utilized to verify the approximate flood boundaries.

In Naples, for the streams studied in detail, the boundaries of the 1- and 0.2-percent-annual-chance floods have been delineated using the flood elevations determined at each cross section. Between cross sections and on Sebago Lake, the boundaries were interpolated from stereoplotted floodplain maps, with a contour interval of 4 feet (Reference 70). The boundaries on the Bay of Naples and Long Lake were delineated by field surveys, stereoscoping aerial photographs (Reference 70), the use of topographic maps (Reference 93), and the Flood Hazard Boundary Map (Reference 108). For the streams studied by approximate methods, the boundary of the 1-percent-annual-chance flood was taken from the Flood Hazard Boundary Map. Both the topographic maps and aerial photographs referenced above and field checks were utilized to verify the approximate flood boundaries.

In New Gloucester, for the stream studied in detail, the boundaries of the 1- and 0.2-percent-annual-chance floods have been delineated using the flood elevations determined at each cross section. Between cross sections, the boundaries were interpolated by stereoscoping aerial photographs and using topographic maps at a scale of 1:62,500, with a contour interval of 20 feet (References 93 and 70). For the streams studied by approximate methods, the boundary of the 1-percent-annual-chance flood was delineated using the Flood Hazard Boundary Map for the Town of New Gloucester (Reference 109). The topographic maps and aerial photographs referenced above and field checks were used to verify the approximate flood boundaries.

In North Yarmouth, for the stream studied in detail, the boundaries of the 1- and 0.2-percent-annual-chance floods have been delineated using the flood elevations determined at each cross section. Between cross sections, the boundaries were interpolated through the use of aerial photographs and topographic maps at scales of 1:62,500, with a contour interval of 20 feet (References 93 and 70). For the streams studied by approximate methods, the boundary of the 1-percent-annual-chance flood was delineated using the Flood Hazard Boundary Map for the Town of North Yarmouth (Reference 110). Topographic maps and aerial photographs referenced above and field checks were used to verify the boundaries.

In Portland, for the streams studied in detail, the 1- and 0.2-percent-annual-chance floodplains have been delineated using the flood elevations determined at each cross section. For the 1986 FIS, the boundaries were interpolated between cross sections using topographic maps at a scale of 1:4,800, with a contour interval of 5 feet (Reference 71). For the 1998 revision, the boundaries were interpolated between cross sections using topographic maps at a scale of 1:1,200, with a contour interval of 2 feet (Reference 111). For the flooding sources studied by approximate methods, the 1-percent-annual-chance floodplain boundaries were delineated using USGS topographic maps and the Flood Hazard Boundary Map for the city (Reference 89).

In Raymond, on Sebago Lake and Panther Pond, the elevations of the 1- and 0.2-percent-annual-chance floods were delineated using topographic maps of the study area at a scale of 1:4,800, with a contour interval of 5 feet (Reference 112). On Crescent Lake, the elevations of the 1- and 0.2-percent-annual-chance floods were delineated using topographic maps of the study area at a scale of 1:24,000, with a contour interval of 10 feet (Reference 103). The approximate 1-percent-annual-chance flood boundaries for a portion of Thomas Pond were delineated on a topographic map with a scale of 1:62,500 and a contour interval of 20 feet (Reference 93). The rest of the boundaries for the streams and ponds studied by approximate methods were delineated on topographic maps with a scale of 1:24,000 and a contour interval of 10 feet (Reference 89).

In Scarborough, for the areas studied by approximate methods, the boundary of the 1-percent-annual-chance flood was delineated using USGS topographic maps and the Flood Hazard Boundary Map for Scarborough (References 96 and 113).

In Sebago, the 1- and 0.2-percent-annual-chance boundaries were delineated using planimetric maps of the study area at a scale of 1:4,800 (Reference 87). For the streams studied by approximate methods, the 1-percent-annual-chance flood boundaries were plotted using a method developed by USGS hydrologists at the Augusta, Maine, office. They have determined a regional stage-frequency relationship and estimate a 10-foot rise over the mapped stream elevation to be the inundation limit of the 1-percent-annual-chance year flood (Reference 114). The 1-percent-annual-chance flood boundaries for the streams and ponds in Sebago studied by approximate methods were delineated on topographic maps enlarged to a scale of 1:12,000, with 20-foot contour intervals (References 93 and 96).

In South Portland, for each stream studied in detail, the 1-percent-annual-chance and 0.2-percent-annual-chance floodplain boundaries have been delineated using the flood elevations determined at each cross section. Between cross sections, the boundaries were interpolated using topographic maps (Reference 115). For the streams studied by approximate methods, the boundary of the 1-percent-annual-chance flood was delineated using USGS topographic maps and the original FIRM for South Portland (References 93 and 116).

In Standish, for each stream studied in detail, the boundaries of the 1- and 0.2-percent-annual-chance floods have been delineated using the flood elevations determined at each cross section. Between cross sections, the boundaries were interpolated using topographic maps at a scale of 1:4,800, with a contour interval of 4 feet (Reference 88). The approximate 1-percent-annual-chance flood boundaries were determined by a regional analysis method developed by the USGS office in Augusta, Maine (Reference 114). The boundaries were delineated on topographic maps at a scale of 1:1,200 and a contour interval of 20 feet (Reference 93).

In Westbrook, for each stream studied in detail, the boundaries of the 1- and the 0.2-percent-annual-chance floods have been delineated using the elevations determined at each cross section. Between cross sections, the boundaries were interpolated using photogrammetric maps at a scale of 1:4,800, with a contour interval of 5 feet (Reference 117). For the streams studied by approximate methods, the boundary of the 1-percent-annual-chance flood was determined taking into account the previously published Flood Hazard Boundary Map for Westbrook (Reference 118) and photogrammetric maps (Reference 117).

In Windham, for each stream studied in detail, the boundaries of the 1- and the 0.2-percent-annual-chance floods have been delineated using the elevations determined at each cross section. Between cross sections, the boundaries were interpolated using photogrammetric maps at a scale of 1"=400', with a contour interval of 5 feet (Reference 117). The approximate 1-percent-annual-chance flood boundaries were delineated using USGS topographic maps (Reference 93). The 1-percent-annual-chance flood boundaries were then correlated with the Flood Hazard Boundary Map for the Town of Windham (Reference 119).

In Yarmouth, for the riverine portion of the Royal River (downstream), the boundaries of the 1- and 0.2-percent-annual-chance floods have been delineated using the flood elevations determined at each cross section. Between cross sections, the boundaries were interpolated using topographic maps at a scale of 1:4,800, with a contour interval of 5 feet (Reference 117). For the flooding sources studied by approximate methods, the boundary of the 1-percent-annual-chance flood was delineated using USGS topographic maps, the Flood Hazard Boundary Map for the Town of Yarmouth, and onsite inspections (References 89 and 120).

In Falmouth, for the revised areas studied by approximate methods, the 1-percent-annual-chance floodplain was delineated using LiDAR data, with a contour interval of 2 feet (Reference 10).

For the Androscoggin River, the boundaries of the 10-, 2-, 1-, and 0.2-percent-annual-chance floodplains have been delineated using the flood elevations determined at each cross section. Between cross sections, the boundaries were interpolated using LiDAR data, with a contour interval of 2 feet (Reference 10).

For the coastal areas and riverine backwater effects in the cities of Portland and South Portland and the towns of Brunswick, Cape Elizabeth, Chebeague Island, Cumberland, Falmouth, Freeport, Harpswell, Long Island, Scarborough, and Yarmouth, the flood boundaries were delineated using the elevations determined at each transect (References 4, 5, 6, 7, and 8). Between transects, the boundaries were interpolated using engineering judgment, land-cover data, and the topographic maps referenced above. The l-percent-annual- chance floodplain was divided into whole-foot elevation zones based on the average wave envelope elevation in that zone. Where the map scale did not permit these zones to be delineated at 1 foot intervals, larger increments were used.

4.2 Floodways

Encroachment on floodplains, such as structures and fill, reduces flood-carrying capacity, increases flood heights and velocities, and increases flood hazards in areas beyond the encroachment itself. One aspect of floodplain management involves balancing the economic gain from floodplain development against the resulting increase in flood hazard. For purposes of the NFIP, a floodway is used as a tool to assist local communities in this aspect of floodplain management. Under this concept, the area of the 1-percent-annual-chance floodplain is divided into a floodway and a floodway fringe. The floodway is the channel of a stream, plus any adjacent floodplain areas, that must be kept free of encroachment so that the base flood can be carried without substantial increases in flood heights. Minimum federal standards limit such increases to 1 foot, provided that hazardous velocities are not produced. The floodways in this study are presented to local agencies as minimum standards that can be adopted directly or that can be used as a basis for additional floodway studies.

The floodways presented in this FIS were computed for certain stream segments on the basis of equal-conveyance reduction from each side of the floodplain. Floodway widths were computed at cross sections. Between cross sections, the floodway boundaries were interpolated. The results of the floodway computations are tabulated for selected cross sections (see Table 12, “Floodway Data”). In cases where the floodway and 1-percent-annual-chance floodplain boundaries are either close together or collinear, only the floodway boundary is shown.

The coastal study impacted the limit of backwater effects on some of the Floodway Data Tables and Flood Profiles by revising the annual 10-, 2-, 1-, and 0.2-percent-annual-chance flood elevations at the confluence of rivers and the coastal flooding sources. Affected Floodway Data Tables and Flood Profiles were updated for Androscoggin River (FDT only), Capisic Brook, Fall Brook, Long Creek, Presumpscot River, Royal River (downstream), Stroudwater River, and Trout Brook.

In Casco, portions of the floodway on the Songo and Crooked Rivers extend beyond the corporate limits of Casco.

For the Songo River in Naples, the floodway was computed up until Songo Lock Road, at which point all water-surface elevations remain static. For this reason, it was determined that a floodway was unnecessary upstream of this point.

A floodway was calculated for just the main channel of the Royal River (upstream) in Windham using the total discharge in the main channel. This reflects the possibility of filling the diversion and sending all discharge down the main channel.

The area between the floodway and 1-percent-annual-chance floodplain boundaries is termed the floodway fringe. The floodway fringe encompasses the portion of the floodplain that could be completely obstructed without increasing the water-surface elevation (WSEL) of the base flood more than 1 foot at any point. Typical relationships between the floodway and the floodway fringe and their significance to floodplain development are shown in Figure 3, “Floodway Schematic”.

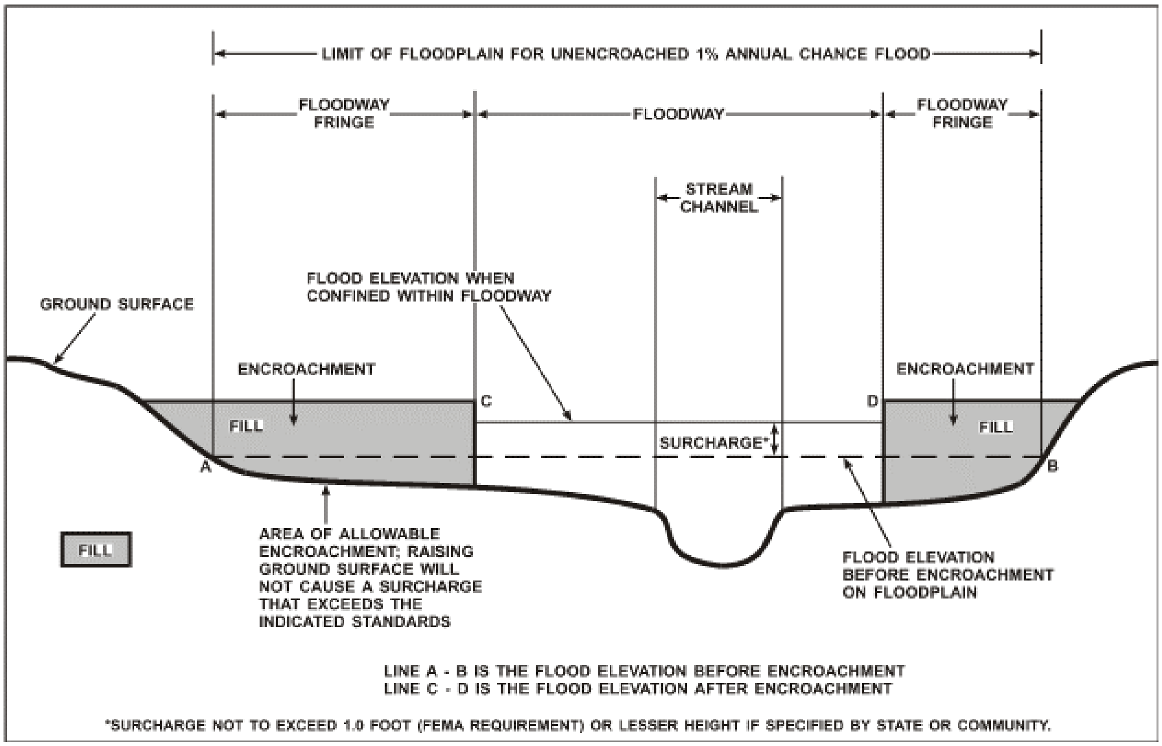

Figure 3. Floodway Schematic

Near the mouths of streams studied in detail, floodway computations are made without regard to flood elevations on the receiving water body. Therefore, "Without Floodway" elevations presented in Table 12, “Floodway Data,” for certain downstream cross sections of the Androscoggin, Presumpscot, Piscataqua, Royal, and Stroudwater Rivers; the Collyer, Eddy, Crystal Lake, Fall, Capisic, Nasons, Trout, and Thayer Brooks; and Long Creek are lower than the regulatory flood elevations in that area, which must take into account the 1-percent-annual-chance flooding due to backwater from other sources.

One aspect of floodway and floodplain encroachment is sometimes overlooked and more often neglected: the cumulative effect of encroachment on flood discharge magnitude. Generally, as encroachment occurs, temporary storage areas are lost, velocities increase, and the magnitude of the discharge increases. As floodwaters move downstream, that increase can become more significant. The combined effect of a narrower floodplain and greater discharge can, due to hydraulic effects alone, produce a flood stage that exceeds the anticipated 1-percent-annual-chance flood.

FEMA does not encourage the filling-in of the floodway fringe area. Local officials should be aware that even a 1-foot rise in the water-surface elevation can cause flooding in areas that would have received little or no flooding if such filling had not taken place.

Careful consideration of the economic and human dislocation that will be caused by a rise in flood heights should be made before filling is allowed. Large quantities of fill in the fringe area could also disrupt the floodplain ecosystem, causing a major impact on local environmental resources.

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	1,542	2880 / 1220 [2]	21,403	5.0	9.1	5.9 [3]	5.9	0.0
B	2,947	3060 / 935 [2]	23,037	4.6	9.1	7.4 [3]	7.6	0.2
C	3,669	3217 / 1300 [2]	35,461	3.0	9.1	8.0 [3]	8.2	0.2
D	6,257	2401 / 950 [2]	31,655	3.4	9.1	8.7 [3]	8.9	0.2
E	8,272	2528 / 735 [2]	25,510	4.2	9.3	9.3	9.6	0.3
F	10,332	1932 / 955 [2]	26,612	4.0	10.1	10.1	10.4	0.3
G	11,692	1921 / 1245 [2]	28,167	3.8	10.6	10.6	10.9	0.3
H	14,862	1480 / 665 [2]	23,996	4.5	11.5	11.5	11.8	0.3
I	16,362	1715 / 1150 [2]	28,481	3.8	12.1	12.1	12.4	0.3
J	18,122	2460 / 2400 [2]	25,132	4.3	12.6	12.6	12.9	0.3
K	20,022	2379 / 1550 [2]	51,698	2.1	13.0	13.0	13.2	0.2
L	22,122	1561 / 460 [2]	24,608	4.3	13.1	13.1	13.3	0.2
M	22,822	1870 / 485 [2]	24,311	4.4	13.4	13.4	13.6	0.2
N	24,922	2205 / 500 [2]	26,946	4.0	14.1	14.1	14.5	0.4
O	26,947	964 / 505 [2]	20,546	5.2	14.7	14.7	15.0	0.3
P	29,259	727 / 420 [2]	14,894	7.2	15.5	15.5	15.8	0.3
Q	29,984	884 / 485 [2]	21,429	5.0	16.3	16.3	16.6	0.3
R	33,098	780 / 375 [2]	10,504	10.2	18.0	18.0	18.6	0.6
S	35,285	294 / 165 [2]	4,565	14.1	50.2	50.2	50.2	0.0
T	36,287	325 / 135 [2]	902	11.8	52.8	52.8	52.9	0.1
U	37,343	861 / 355 [2]	19,197	5.6	55.4	55.4	55.5	0.1
V	38,510	620 / 420 [2]	18,660	5.7	55.8	55.8	55.8	0.0
W	40,035	747 / 410 [2]	18,528	5.8	56.3	56.3	56.4	0.1
X	41,330	1330 / 350 [2]	20,518	5.2	56.8	56.8	56.9	0.1
Y	44,620	524 / 265 [2]	14,203	7.5	57.5	57.5	57.9	0.4
Z	47,102	537 / 300 [2]	16,488	6.5	58.7	58.7	59.1	0.4
AA	49,077	491 / 230 [2]	13,817	7.7	59.3	59.3	59.7	0.4

[1] FEET ABOVE CUMBERLAND / SAGADAHOC COUNTY BOUNDARY

[2] TOTAL WIDTH / WIDTH WITHIN CUMBERLAND COUNTY

[3] ELEVATION COMPUTED WITHOUT CONSIDERATION OF TIDAL FLOODING.

TABLE 12

FEDERAL EMERGENCY MANAGEMENT AGENCY

CUMBERLAND COUNTY, ME

(ALL JURISDICTIONS)

FLOODWAY DATA

ANDROSCOGGIN RIVER

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
AB	52,752	300 / 155 [2]	10,316	10.4	61.1	61.1	61.9	0.8
AC	54,399	365 / 175 [2]	10,988	9.7	63.2	63.2	64.0	0.8
AD	56,553	378 / 240 [2]	17,406	6.1	65.1	65.1	66.0	0.9
AE	58,455	648 / 445 [2]	19,100	5.6	78.4	78.4	78.4	0.0
AF	61,605	854 / 400 [2]	22,482	4.8	79.2	79.2	79.2	0.0
AG	64,015	495 / 245 [2]	15,203	7.0	79.8	79.8	79.8	0.0
AH	65,675	560 / 285 [2]	17,053	6.3	80.7	80.7	80.7	0.0

[1] FEET ABOVE CUMBERLAND / SAGADAHOC COUNTY BOUNDARY
[2] TOTAL WIDTH / WIDTH WITHIN CUMBERLAND COUNTY

TABLE 12

FEDERAL EMERGENCY MANAGEMENT AGENCY

CUMBERLAND COUNTY, ME
(ALL JURISDICTIONS)

FLOODWAY DATA

ANDROSCOGGIN RIVER

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	120	60	315	4.3	285.8	273.2 [2]	274.2	1.0
B	1,350	25	157	8.6	285.8	277.9 [2]	278.4	0.5
C	2,585	32	121	11.1	313.2	313.2	313.2	0.0
D	3,110	31	132	10.3	324.6	324.6	324.9	0.3
E	3,420	84	729	1.9	335.4	335.4	335.4	0.0
F	3,990	205	1,177	1.1	335.6	335.6	335.7	0.1
G	4,900	89	210	5.8	341.5	341.5	341.5	0.0
H	5,260	67	296	4.1	347.0	347.0	347.7	0.7
I	6,235	32	131	9.4	366.9	366.9	367.1	0.2
J	6,985	30	119	10.3	379.9	379.9	379.9	0.0
K	9,105	20	90	12.2	405.9	405.9	405.9	0.0
L	9,985	106	399	2.8	411.7	411.7	412.4	0.7
M	11,585	72	321	3.4	423.8	423.8	424.8	1.0
N	12,535	32	111	9.9	434.1	434.1	434.4	0.3
O	13,232	43	133	8.3	446.2	446.2	446.3	0.1
P	14,107	61	218	5.0	455.0	455.0	455.4	0.4
Q	14,982	41	199	5.5	469.1	469.1	469.6	0.5
R	15,892	24	122	9.0	484.0	484.0	484.9	0.9
S	16,317	54	150	7.3	493.2	493.2	493.3	0.1
T	17,072	36	132	8.3	502.9	502.9	502.9	0.0
U	18,022	41	140	7.9	527.8	527.8	527.8	0.0
V	18,687	24	321	2.5	529.6	529.6	530.6	1.0
W	18,852	35	211	3.8	540.0	540.0	540.0	0.0

[1] FEET ABOVE CONFLUENCE WITH SACO RIVER
[2] ELEVATIONS CONSIDERING BACKWATER EFFECT FROM SACO RIVER

TABLE 12

FEDERAL EMERGENCY MANAGEMENT AGENCY

CUMBERLAND COUNTY, ME
(ALL JURISDICTIONS)

FLOODWAY DATA

BREAKNECK BROOK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	132	220	1,810	0.6	8.9 [2]	4.6 [2]	5.4	0.8
B	1,072	356	1,558	0.7	8.9 [2]	4.6 [2]	5.4	0.8
C	1,214	400	1,045	1.0	8.9 [2]	4.7 [2]	5.5	0.8
D	1,785	742	2,566	0.4	8.9 [2]	4.8 [2]	5.6	0.8
E	1,943	266	1,943	0.5	9.7	9.7	9.7	0.0
F	2,661	90	572	1.2	9.7	9.7	9.7	0.0
G*	3,062	121	902	0.8	33.5	33.5	33.5	0.0
H*	3,321	81	713	1.0	35.7	35.7	35.7	0.0
I*	4,425	142	1,198	0.6	35.7	35.7	35.7	0.0
J*	5,143	38	289	2.4	35.7	35.7	35.7	0.0
K*	6,067	18	110	4.6	36.4	36.4	36.5	0.1
L*	6,547	17	166	3.0	39.6	39.6	40.0	0.4
M*	7,191	70	390	1.3	39.7	39.7	40.2	0.5
N*	7,445	53	325	1.5	41.4	41.4	41.5	0.1
O*	7,851	148	741	0.7	41.4	41.4	41.6	0.2
P*	8,210	61	425	1.2	43.1	43.1	43.1	0.0
Q*	8,923	43	225	2.2	43.2	43.2	43.3	0.1
R*	9,905	10	73	6.9	45.4	45.4	45.4	0.0
S*	10,254	194	876	0.6	45.4	45.4	46.2	0.8
T*	10,829	71	453	0.6	48.5	48.5	49.3	0.8
U*	12,118	96	264	0.9	48.5	48.5	49.4	0.9
V*	14,018	55	217	1.2	51.6	51.6	52.1	0.5

[1] FEET ABOVE CONFLUENCE WITH FORE RIVER

[2] ELEVATION COMPUTED WITHOUT CONSIDERATION OF WAVE EFFECTS

*CROSS SECTION ORIENTATION AND FLOODWAY DELINEATION IS NOT AVAILABLE, THEREFORE IT IS NOT SHOWN ON THE FIRMS. FLOODWAY DATA IS SHOWN FOR INFORMATIONAL PURPOSES ONLY.

TABLE 12

FEDERAL EMERGENCY MANAGEMENT AGENCY

CUMBERLAND COUNTY, ME

(ALL JURISDICTIONS)

FLOODWAY DATA

CAPISIC BROOK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	800	14	73	5.1	47.0	43.5 [2]	44.5	1.0
B	1,020	156	1,564	0.2	54.0	54.0	55.0	1.0
C	2,590	22	53	4.0	54.0	54.0	55.0	1.0
D	3,170	20	72	2.9	57.3	57.3	58.2	0.9
E	3,960	33	112	1.9	60.0	60.0	60.9	0.9
F	5,510	42	47	9.5	69.3	69.3	69.4	0.1
G	6,240	24	63	3.3	81.5	81.5	81.6	0.1
H	7,100	45	60	3.5	92.9	92.9	93.0	0.1

[1] FEET ABOVE CONFLUENCE WITH STROUDWATER RIVER

[2] ELEVATIONS WITHOUT CONSIDERING BACKWATER EFFECT FROM STROUDWATER RIVER

TABLE 12

FEDERAL EMERGENCY MANAGEMENT AGENCY

CUMBERLAND COUNTY, ME

(ALL JURISDICTIONS)

FLOODWAY DATA

CLARK BROOK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	100	94	622	4.2	101.9	95.8 [2]	96.8	1.0
B	2,200	66	724	3.6	103.9	103.1 [2]	104.1	1.0
C	2,475	95	877	3.0	106.8	106.8	107.8	1.0
D	5,100	66	589	4.4	112.4	112.4	113.4	1.0
E	8,720	204	1,238	2.1	116.0	116.0	117.0	1.0
F	9,050	262	2,317	1.1	119.2	119.2	120.2	1.0
G	12,340	133	1,023	2.3	122.1	122.1	123.1	1.0
H	18,465	48	316	5.9	162.3	162.3	163.3	1.0
I	18,940	147	979	1.9	168.1	168.1	169.1	1.0
J	23,640	130	634	2.8	182.8	182.8	183.8	1.0
K	25,135	54	314	4.1	190.7	190.7	191.7	1.0
L	25,335	100	610	2.1	191.9	191.9	192.9	1.0
M	28,975	405	2,757	0.4	198.6	198.6	199.6	1.0
N	30,375	200	879	1.3	199.7	199.7	200.7	1.0
O	33,960	89	442	2.4	206.0	206.0	207.0	1.0
P	35,130	290	844	1.0	206.9	206.9	207.9	1.0
Q	35,575	132	331	2.7	207.7	207.7	208.7	1.0
R	37,179	59	223	1.7	216.2	216.2	217.2	1.0
S	41,800	23	88	3.9	289.8	289.8	290.8	1.0
T	41,997	161	1,512	0.2	304.9	304.9	305.9	1.0
U	42,465	*	215	0.6	305.0	305.0	305.0	0.0
V	43,065	25	82	1.7	306.2	306.2	307.2	1.0
W	43,520	21	62	2.1	309.4	309.4	310.4	1.0
X	43,675	17	58	2.2	310.4	310.4	311.4	1.0
Y	44,297	125	206	0.6	311.6	311.6	312.6	1.0

[1] FEET ABOVE CONFLUENCE WITH THE ROYAL RIVER
[2] ELEVATION COMPUTED WITHOUT CONSIDERATION OF BACKWATER EFFECTS FROM THE ROYAL RIVER
* FLOODWAY COINCIDENT WITH CHANNEL BANKS

TABLE 12

FEDERAL EMERGENCY MANAGEMENT AGENCY

CUMBERLAND COUNTY, ME
(ALL JURISDICTIONS)

FLOODWAY DATA

COLLYER BROOK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	210	84	484	0.6	401.9	401.9	402.9	1.0
B	580	28	138	2.1	402.3	402.3	403.3	1.0
C	1,060	253	1,353	0.2	404.2	404.2	405.2	1.0

[1] FEET ABOVE CONFLUENCE WITH STEVENS BROOK

TABLE 12

FEDERAL EMERGENCY MANAGEMENT AGENCY

CUMBERLAND COUNTY, ME
(ALL JURISDICTIONS)

FLOODWAY DATA

CORN SHOP BROOK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	540	448	4,056	2.7	272.3	272.3	273.3	1.0
B	730	516	4,972	2.2	273.4	273.4	274.4	1.0
C	2,330	732	6,986	1.6	273.9	273.9	274.9	1.0
D	2,915	664	6,619	1.7	274.1	274.1	275.1	1.0
E	4,020	564	5,047	2.2	274.5	274.5	275.5	1.0
F	5,945	288	3,645	3.0	275.9	275.9	276.9	1.0
G	8,160	744	9,356	1.2	276.4	276.4	277.4	1.0
H	10,070	726	8,017	1.4	277.2	277.2	278.2	1.0
I	12,745	811	9,314	1.2	277.7	277.7	278.7	1.0
J	15,715	775	6,320	1.7	279.1	279.1	280.1	1.0
K	17,355	457	6,523	1.7	279.4	279.4	280.4	1.0
L	18,400	920	9,919	1.1	279.6	279.6	280.6	1.0
M	22,295	905	7,217	1.5	280.7	280.7	281.7	1.0
N	22,835	150	2,178	5.1	280.7	280.7	281.7	1.0
O	23,320	136	2,086	5.3	281.0	281.0	282.0	1.0
P	24,645	517	5,435	2.0	281.6	281.6	282.6	1.0
Q	25,345	597	4,500	2.4	282.1	282.1	283.1	1.0
R	25,515	461	6,230	1.8	283.0	283.0	284.0	1.0
S	25,715	149	2,483	4.4	283.6	283.6	284.6	1.0
T	26,165	160	2,456	4.5	284.2	284.2	285.2	1.0
U	27,155	126	2,231	4.9	284.5	284.5	285.5	1.0
V	28,470	427	3,262	3.4	285.4	285.4	286.4	1.0
W	30,280	332	4,596	2.4	286.7	286.7	287.7	1.0
X	32,385	453	6,871	1.6	287.6	287.6	288.6	1.0
Y	35,030	442	5,030	2.2	288.3	288.3	289.3	1.0
Z	36,355	523	8,757	1.3	288.9	288.9	289.9	1.0
AA	37,090	287	3,851	2.9	289.0	289.0	290.0	1.0

[1] FEET ABOVE CONFLUENCE WITH SONGO RIVER

TABLE 12

FEDERAL EMERGENCY MANAGEMENT AGENCY

CUMBERLAND COUNTY, ME
(ALL JURISDICTIONS)

FLOODWAY DATA

CROOKED RIVER

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
AB	37,425	511	6,667	1.7	289.2	289.2	290.2	1.0
AC	37,985	671	9,403	1.2	289.2	289.2	290.2	1.0
AD	38,225	870	11,416	1.0	289.9	289.9	290.9	1.0
AE	38,835	774	9,811	1.1	289.9	289.9	290.9	1.0
AF	40,510	592	7,669	1.4	289.9	289.9	290.9	1.0
AG	40,925	178	2,780	4.0	289.9	289.9	290.9	1.0
AH	41,535	884	10,063	1.1	290.2	290.2	291.2	1.0
AI	43,040	123	2,349	4.7	290.9	290.9	291.9	1.0
AJ	46,100	809	8,784	1.3	291.5	291.5	292.5	1.0
AK	48,845	175	2,805	3.9	293.8	293.8	294.8	1.0
AL	50,475	175	2,787	4.0	294.8	294.8	295.8	1.0
AM	51,565	357	3,966	2.8	295.5	295.5	296.5	1.0
AN	52,455	172	2,882	3.8	296.2	296.2	297.2	1.0
AO	52,655	251	2,814	3.9	300.7	300.7	301.7	1.0
AP	52,950	147	2,049	5.4	301.4	301.4	302.4	1.0
AQ	53,045	303	3,559	3.1	301.8	301.8	302.8	1.0
AR	53,135	246	3,231	3.4	302.4	302.4	303.4	1.0
AS	53,290	156	1,848	6.0	302.4	302.4	303.4	1.0
AT	53,840	115	1,312	8.4	303.9	303.9	304.9	1.0
AU	54,390	171	2,165	5.1	305.3	305.3	306.3	1.0
AV	54,830	139	1,763	6.2	305.6	305.6	306.6	1.0
AW	55,910	170	2,178	5.1	306.6	306.6	307.6	1.0
AX	56,710	345	4,227	2.6	307.3	307.3	308.3	1.0
AY	58,070	1,419	12,851	0.9	307.8	307.8	308.8	1.0
AZ	59,355	1,714	15,713	0.7	307.8	307.8	308.8	1.0
BA	60,545	1,379	12,771	0.9	307.8	307.8	308.8	1.0

[1] FEET ABOVE CONFLUENCE WITH SONGO RIVER

TABLE 12

FEDERAL EMERGENCY MANAGEMENT AGENCY

CUMBERLAND COUNTY, ME
(ALL JURISDICTIONS)

FLOODWAY DATA

CROOKED RIVER

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	24,820	158 / 79 [2]	1,348	8.3	330.2	330.2	331.2	1.0
B	25,120	178 / 89 [2]	1,605	7.0	332.0	332.0	333.0	1.0
C	25,220	166 / 83 [2]	1,158	9.7	333.8	333.8	334.8	1.0
D	25,360	213 / 152 [2]	3,105	3.6	343.9	343.9	344.9	1.0
E	25,765	217 / 85 [2]	3,306	3.4	343.9	343.9	344.9	1.0
F	26,280	122 / 61 [2]	2,215	5.1	343.9	343.9	344.9	1.0
G	26,855	260 / 198 [2]	3,440	3.3	344.3	344.3	345.3	1.0
H	27,935	216 / 137 [2]	3,610	3.1	345.4	345.4	346.4	1.0
I	29,395	200 / 136 [2]	2,822	4.0	345.7	345.7	346.7	1.0
J	31,175	440 / 374 [2]	4,662	2.4	346.7	346.7	347.7	1.0
K	32,400	154 / 77 [2]	2,462	4.6	347.2	347.2	348.2	1.0
L	33,050	270 / 135 [2]	4,457	2.5	347.2	347.2	348.2	1.0
M	33,590	153 / 71 [2]	2,014	5.6	348.2	348.2	349.2	1.0
N	34,510	277 / 197 [2]	2,670	4.2	349.7	349.7	350.7	1.0
O	35,475	154 / 77 [2]	2,020	5.6	350.8	350.8	351.8	1.0
P	36,195	197 / 147 [2]	2,844	3.9	352.5	352.5	353.5	1.0
Q	37,155	212 / 106 [2]	2,207	5.5	356.0	356.0	357.0	1.0
R	37,975	182 / 91 [2]	1,788	6.3	360.0	360.0	361.0	1.0
S	38,460	162 / 81 [2]	1,211	9.3	363.6	363.6	364.6	1.0
T	38,800	146 / 73 [2]	1,253	8.9	367.0	367.0	368.0	1.0
U	38,930	158 / 79 [2]	1,881	6.0	374.8	374.8	375.8	1.0
V	39,055	170 / 85 [2]	2,033	5.5	374.8	374.8	375.8	1.0
W	39,205	154 / 77 [2]	2,720	4.1	377.6	377.6	378.6	1.0
X	39,545	194 / 83 [2]	2,950	3.8	377.6	377.6	378.6	1.0
Y	40,255	269 / 173 [2]	4,022	2.8	377.7	377.7	378.7	1.0
Z	41,265	174 / 62 [2]	2,680	4.2	378.0	378.0	379.0	1.0
AA	42,940	781 / 722 [2]	10,424	1.1	378.5	378.5	379.5	1.0

[1] FEET ABOVE TOWN OF NAPLES / TOWN OF HARRISON COMMUNITY BOUNDARY

[2] TOTAL WIDTH / WIDTH WITHIN CUMBERLAND COUNTY

TABLE 12

FEDERAL EMERGENCY MANAGEMENT AGENCY

CUMBERLAND COUNTY, ME
(ALL JURISDICTIONS)

FLOODWAY DATA

CROOKED RIVER (TOWN OF HARRISON)

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
AB	44,165	590 / 330 [2]	7,909	1.4	378.8	378.8	379.8	1.0
AC	44,985	856 / 321 [2]	9,301	1.2	378.8	378.8	379.8	1.0
AD	46,895	568 / 391 [2]	7,444	1.5	379.4	379.4	380.4	1.0
AE	47,890	597 / 548 [2]	7,731	1.5	379.8	379.8	380.8	1.0
AF	49,715	641 / 188 [2]	7,288	1.5	380.1	380.1	381.1	1.0
AG	51,315	585 / 350 [2]	6,333	1.8	380.4	380.4	381.4	1.0
AH	52,000	286 / 78 [2]	3,362	3.3	380.7	380.7	381.7	1.0
AI	52,505	361 / 43 [2]	3,245	3.5	380.8	380.8	381.8	1.0
AJ	52,945	366 / 289 [2]	3,673	3.1	381.4	381.4	382.4	1.0
AK	53,055	541 / 207 [2]	4,739	2.4	382.3	382.3	383.3	1.0
AL	53,630	582 / 505 [2]	5,689	2.0	382.4	382.4	383.4	1.0
AM	55,485	1124 / 62 [2]	8,764	1.3	382.7	382.7	383.7	1.0
AN	56,980	738 / 524 [2]	6,457	1.7	383.1	383.1	384.1	1.0
AO	57,610	140 / 70 [2]	2,264	5.0	383.4	383.4	384.4	1.0
AP	58,275	120 / 60 [2]	1,724	6.5	384.6	384.6	385.6	1.0
AQ	59,320	194 / 97 [2]	2,687	4.2	386.4	386.4	387.4	1.0
AR	60,175	196 / 98 [2]	2,066	5.4	390.5	390.5	391.5	1.0
AS	60,860	328 / 49 [2]	2,115	5.3	394.2	394.2	395.2	1.0
AT	61,760	172 / 86 [2]	2,670	4.2	399.3	399.3	400.3	1.0

[1] FEET ABOVE TOWN OF NAPLES / TOWN OF HARRISON COMMUNITY BOUNDARY

[2] TOTAL WIDTH / WIDTH WITHIN CUMBERLAND COUNTY

TABLE 12

FEDERAL EMERGENCY MANAGEMENT AGENCY

CUMBERLAND COUNTY, ME

(ALL JURISDICTIONS)

FLOODWAY DATA

CROOKED RIVER (TOWN OF HARRISON)

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	175	15	76	1.7	273.8	269.2 [2]	270.2	1.0
B	255	31	212	0.6	273.8	269.4 [2]	270.4	1.0
C	540	20	83	1.5	273.8	270.0 [2]	271.0	1.0
D	1,089	69	140	0.9	288.6	288.6	289.6	1.0

[1] FEET ABOVE CONFLUENCE WITH LONG LAKE

[2] ELEVATION COMPUTED WITHOUT CONSIDERATION OF BACKWATER EFFECTS FROM LONG LAKE

TABLE 12

FEDERAL EMERGENCY MANAGEMENT AGENCY

CUMBERLAND COUNTY, ME

(ALL JURISDICTIONS)

FLOODWAY DATA

CRYSTAL LAKE BROOK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	30	140	1,208	0.7	230.8	230.8	230.8	0.0
B	730	120	496	1.8	230.9	230.9	230.9	0.0
C	1,530	80	350	2.5	232.4	232.4	233.3	0.9
D	2,080	40	255	3.4	235.1	235.1	236.1	1.0
E	2,240	60	365	2.4	235.8	235.8	236.8	1.0
F	2,430	50	301	2.9	236.5	236.5	237.4	0.9
G	2,850	60	383	2.3	238.1	238.1	238.7	0.6
H	3,090	30	185	4.7	239.5	239.5	240.0	0.5
I	3,160	40	268	3.3	240.2	240.2	240.7	0.5
J	3,220	20	184	4.8	244.1	244.1	244.1	0.0
K	3,560	40	251	3.5	244.8	244.8	245.5	0.7
L	4,050	40	172	5.1	250.3	250.3	251.0	0.7
M	4,320	30	193	4.5	253.9	253.9	254.8	0.9
N	4,460	40	223	3.9	255.2	255.2	256.0	0.8
O	4,580	40	197	4.4	256.7	256.7	257.2	0.5
P	4,930	60	346	2.5	258.4	258.4	259.3	0.9
Q	5,130	70	431	2.0	258.8	258.8	259.7	0.9
R	5,380	60	362	2.4	259.4	259.4	260.3	0.9
S	5,750	50	335	2.6	260.6	260.6	261.6	1.0
T	6,180	70	495	1.8	261.5	261.5	262.5	1.0
U	6,620	80	337	2.6	262.6	262.6	263.5	0.9
V	6,910	60	292	3.0	264.1	264.1	265.1	1.0
W	7,230	50	275	3.2	266.0	266.0	266.7	0.7
X	7,450	60	417	2.1	266.6	266.6	267.4	0.8
Y	7,860	90	618	1.4	267.0	267.0	267.9	0.9
Z	8,270	40	258	3.4	267.9	267.9	268.7	0.8
AA	8,520	40	165	5.3	269.9	269.9	270.6	0.7

[1] FEET ABOVE VARNEY'S MILL DAM

TABLE 12

FEDERAL EMERGENCY MANAGEMENT AGENCY

CUMBERLAND COUNTY, ME

(ALL JURISDICTIONS)

FLOODWAY DATA

DITCH BROOK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
AB	8,630	210	1,791	0.5	272.0	272.0	272.0	0.0
AC	9,160	290	3,893	0.2	272.0	272.0	272.0	0.0
AD	10,160	620	11,425	0.1	272.0	272.0	272.0	0.0
AE	11,030	200	1,952	0.4	272.0	272.0	272.0	0.0
AF	11,870	580	4,545	0.2	272.0	272.0	272.0	0.0
AG	12,060	70	269	3.2	272.0	272.0	272.0	0.0
AH	12,320	40	192	4.6	272.6	272.6	273.5	0.9
AI	12,570	40	207	4.2	274.6	274.6	275.4	0.8
AJ	12,660	30	133	6.6	275.2	275.2	275.9	0.7
AK	12,760	20	109	8.0	277.3	277.3	277.4	0.1
AL	12,820	14	91	9.6	279.0	279.0	279.4	0.4

[1] FEET ABOVE VARNEY'S MILL DAM

TABLE 12

FEDERAL EMERGENCY MANAGEMENT AGENCY

CUMBERLAND COUNTY, ME

(ALL JURISDICTIONS)

FLOODWAY DATA

DITCH BROOK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	780	25	121	5.8	284.4	273.8 [2]	274.5	0.7
B	1,475	23	70	10.0	288.1	288.1	288.2	0.1
C	1,975	17	64	10.9	304.3	304.3	304.3	0.0
D	2,425	28	138	5.1	308.9	308.9	309.6	0.7
E	2,940	25	101	6.9	321.5	321.5	322.0	0.5
F	3,675	25	106	6.6	327.7	327.7	328.2	0.5

[1] FEET ABOVE CONFLUENCE WITH SACO RIVER

[2] ELEVATION WITHOUT CONSIDERING BACKWATER EFFECT FROM SACO RIVER

TABLE 12

FEDERAL EMERGENCY MANAGEMENT AGENCY

CUMBERLAND COUNTY, ME
(ALL JURISDICTIONS)

FLOODWAY DATA

DUG HILL BROOK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	100	26	131	3.4	188.7	188.5 [2]	189.5	1.0

[1] FEET ABOVE CONFLUENCE WITH COLLYER BROOK

[2] ELEVATION COMPUTED WITHOUT ANY CONSIDERATION OF BACKWATER EFFECTS FROM COLLYER BROOK

TABLE 12

FEDERAL EMERGENCY MANAGEMENT AGENCY

CUMBERLAND COUNTY, ME
(ALL JURISDICTIONS)

FLOODWAY DATA

EDDY BROOK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	222	41	232	2.1	8.9 [2]	5.7	6.1	0.4
B	742	12	45	11.1	9.0	9.0	9.1	0.1
C	1,382	10	164	2.9	29.3	29.3	29.5	0.2
D	1,847	20	232	2.0	29.3	29.3	29.6	0.3
E	2,147	59	446	1.1	29.3	29.3	29.9	0.6
F	2,367	54	360	0.9	29.4	29.4	30.0	0.6
G	2,547	114	963	0.3	32.0	32.0	32.5	0.5
H	3,042	73	370	0.8	32.1	32.1	32.7	0.6
I	3,436	13	40	7.8	34.6	34.6	34.7	0.1
J	4,111	6	33	4.3	48.7	48.7	49.1	0.4
K	5,191	21	58	2.4	52.7	52.7	53.6	0.9
L	5,811	30	64	2.2	55.3	55.3	55.3	0.0
M	6,386	7	34	3.7	57.3	57.3	58.0	0.7
N	7,588	34	98	1.3	60.8	60.8	61.1	0.3
O	8,183	14	35	7.7	66.1	66.1	66.1	0.0
P	8,883	120	196	1.4	69.1	69.1	69.1	0.0
Q	9,388	264	283	0.8	69.5	69.5	69.9	0.4

[1] FEET ABOVE CONFLUENCE WITH BACK COVE

[2] ELEVATION COMPUTED WITHOUT CONSIDERATION OF WAVE EFFECTS

TABLE 12

FEDERAL EMERGENCY MANAGEMENT AGENCY

CUMBERLAND COUNTY, ME

(ALL JURISDICTIONS)

FLOODWAY DATA

FALL BROOK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
F	7,872	*	6,738	0.1	24.8	24.8	24.8	0.0
G	8,226	*	3,625	0.2	24.8	24.8	24.8	0.0
H	8,944	60	444	1.3	24.8	24.8	24.8	0.0
I	9,620	124	727	0.8	24.9	24.9	24.9	0.0
J	10,344	30	180	2.4	26.1	26.1	26.1	0.0
K	11,431	30	147	2.4	27.4	27.4	27.7	0.3
L	12,804	30	177	1.8	30.9	30.9	31.3	0.4
M	13,358	25	118	2.6	32.2	32.2	32.9	0.7
N	14,388	30	158	2.0	34.3	34.3	35.2	0.9
O	15,919	30	115	2.7	37.6	37.6	38.2	0.6
P	16,389	20	135	2.3	40.9	40.9	41.4	0.5
Q	16,690	50	405	0.8	43.8	43.8	44.5	0.7
R	18,570	100	387	0.8	44.0	44.0	44.9	0.9

[1] FEET ABOVE CONFLUENCE WITH FORE RIVER

* FLOODWAY CONTAINED IN CHANNEL

TABLE 12

FEDERAL EMERGENCY MANAGEMENT AGENCY

CUMBERLAND COUNTY, ME

(ALL JURISDICTIONS)

FLOODWAY DATA

JACKSON BROOK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	591	120	1,207	0.7	8.9 [2]	3.9 [2]	4.9	1.0
B	2,529	120	829	1.1	8.9 [2]	3.9 [2]	4.9	1.0
C	4,372	150	1,057	0.9	8.9 [2]	4.0 [2]	5.0	1.0
D	5,977	140	576	1.6	8.9 [2]	4.1 [2]	5.1	1.0
E	7,619	30	98	8.6	8.9 [2]	5.6 [2]	5.8	0.2

[1] FEET ABOVE CONFLUENCE WITH FORE RIVER

[2] ELEVATION COMPUTED WITHOUT CONSIDERATION OF WAVE EFFECTS

TABLE 12

FEDERAL EMERGENCY MANAGEMENT AGENCY

CUMBERLAND COUNTY, ME

(ALL JURISDICTIONS)

FLOODWAY DATA

LONG CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	850	45	200	3.5	33.2	21.2 [2]	21.7	0.5
B	2,780	319	950	0.7	33.2	21.7 [2]	22.7	1.0
C	3,850	19	112	6.3	33.2	22.3 [2]	22.8	0.5
D	5,380	127	287	2.4	33.2	23.9 [2]	24.6	0.7
E	6,290	188	540	1.3	33.2	25.1 [2]	25.9	0.8
F	6,720	79	289	2.4	33.2	25.6 [2]	26.3	0.7
G	7,400	68	249	2.8	33.2	26.5 [2]	27.4	0.9
H	8,630	77	332	2.1	33.2	28.8 [2]	29.7	0.9
I	9,070	17	63	11.0	33.2	30.8 [2]	31.0	0.2

[1] FEET ABOVE CONFLUENCE WITH PRESUMPSCOT RIVER

[2] ELEVATION WITHOUT CONSIDERING BACKWATER EFFECT FROM PRESUMPSCOT RIVER

TABLE 12

FEDERAL EMERGENCY MANAGEMENT AGENCY

CUMBERLAND COUNTY, ME

(ALL JURISDICTIONS)

FLOODWAY DATA

MILL BROOK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	1,520	94	313	1.7	32.6	23.1 [2]	24.1	1.0
B	2,430	30	81	6.4	32.6	30.6 [2]	30.7	0.1
C	4,250	53	76	6.9	82.2	82.2	82.2	0.0
D	5,300	23	85	6.2	97.2	97.2	97.7	0.5
E	5,540	87	730	0.5	115.0	115.0	116.0	1.0
F	7,530	27	57	6.8	162.9	162.9	163.3	0.4
G	9,740	34	77	3.9	217.0	217.0	217.8	0.8
H	10,550	20	42	7.1	236.4	236.4	236.8	0.4
I	11,580	87	70	4.3	267.0	267.0	267.0	0.0
J	12,530	70	78	3.8	279.2	279.2	279.3	0.1

[1] FEET ABOVE CONFLUENCE WITH PRESUMPSCOT RIVER

[2] ELEVATIONS WITHOUT CONSIDERING BACKWATER EFFECT FROM PRESUMPSCOT RIVER

TABLE 12

FEDERAL EMERGENCY MANAGEMENT AGENCY

CUMBERLAND COUNTY, ME

(ALL JURISDICTIONS)

FLOODWAY DATA

MINNOW BROOK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	63	40	227	1.5	9.6	3.9 [2]	4.9	1.0
B	1,674	28	133	2.5	9.6	4.1 [2]	5.1	1.0
C	5,011	14	91	3.3	9.6	5.8 [2]	6.5	0.7
D	6,875	102	262	1.1	9.6	6.6 [2]	7.6	1.0
E	7,133	20	31	7.2	42.2	42.2	42.3	0.1
F	7,434	20	79	2.8	43.6	43.6	44.1	0.5
G	7,693	15	50	4.5	44.8	44.8	45.1	0.3
H	7,814	25	79	2.8	45.0	45.0	45.7	0.7
I	8,712	22	109	2.1	50.0	50.0	50.0	0.0
J	9,309	4	31	7.3	53.5	53.5	53.5	0.0

[1] FEET ABOVE CONFLUENCE WITH CAPISIC BROOK

[2] ELEVATION COMPUTED WITHOUT CONSIDERATION OF BACKWATER FROM CAPISIC BROOK

TABLE 12

FEDERAL EMERGENCY MANAGEMENT AGENCY

CUMBERLAND COUNTY, ME

(ALL JURISDICTIONS)

FLOODWAY DATA

NASONS BROOK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	3,080	125	576	2.2	271.5	265.4 [2]	266.2	0.8
B	6,000	18	65	9.8	292.6	292.6	292.6	0.0
C	6,230	58	320	2.0	297.0	297.0	297.2	0.2
D	6,780	17	77	8.3	297.0	297.0	297.2	0.2
E	7,040	20	63	10.2	302.1	302.1	302.1	0.0
F	8,040	23	88	7.3	317.3	317.3	318.2	0.9
G	9,485	21	64	10.0	352.8	352.8	353.0	0.2
H	9,660	21	64	10.1	365.0	365.0	365.5	0.5

[1] FEET ABOVE CONFLUENCE WITH SACO RIVER

[2] ELEVATION WITHOUT CONSIDERING BACKWATER EFFECT FROM SACO RIVER

TABLE 12

FEDERAL EMERGENCY MANAGEMENT AGENCY

CUMBERLAND COUNTY, ME

(ALL JURISDICTIONS)

FLOODWAY DATA

PIGEON BROOK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	1,225	35	119	6.1	279.7	279.7	280.3	0.6
B	1,975	106	439	1.7	282.2	282.2	282.9	0.7
C	3,320	47	112	6.5	285.5	285.5	286.0	0.5
D	4,275	73	289	2.5	290.8	290.8	291.7	0.9
E	4,470	145	1,115	0.7	297.1	297.1	297.2	0.1

[1] FEET ABOVE CONFLUENCE WITH PIGEON BROOK

[2] ELEVATION WITHOUT CONSIDERING BACKWATER EFFECT FROM SACO RIVER

TABLE 12

FEDERAL EMERGENCY MANAGEMENT AGENCY

CUMBERLAND COUNTY, ME

(ALL JURISDICTIONS)

FLOODWAY DATA

PIGEON BROOK TRIBUTARY

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	586	145	1,354	2.8	27.4	23.9 [2]	24.9	1.0
B	2,302	210	2,006	1.2	27.4	24.5 [2]	25.4	0.9
C	3,939	60	728	3.2	29.0	29.0	29.0	0.0
D	6,246	70	726	3.2	30.3	30.3	31.0	0.7
E	6,516	70	815	2.8	31.7	31.7	32.1	0.4
F	8,855	100	913	2.5	32.8	32.8	33.4	0.6
G	9,636	90	567	4.1	33.0	33.0	34.0	1.0
H	10,539	65	426	5.4	48.0	48.0	48.0	0.0
I	11,278	50	404	5.7	51.7	51.7	51.8	0.1
J	12,265	50	191	11.6	59.3	59.3	59.3	0.0
K	13,485	64	498	4.4	64.3	64.3	65.1	0.8
L	14,425	36	447	4.7	68.6	68.6	68.9	0.3
M	15,164	40	483	4.4	68.8	68.8	69.5	0.7

[1] FEET ABOVE CONFLUENCE WITH PRESUMPSCOT RIVER

[2] ELEVATION COMPUTED WITHOUT CONSIDERATION OF BACKWATER EFFECTS FROM PRESUMPSCOT RIVER

TABLE 12

FEDERAL EMERGENCY MANAGEMENT AGENCY

CUMBERLAND COUNTY, ME

(ALL JURISDICTIONS)

FLOODWAY DATA

PISCATAQUA RIVER

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	10,900	331	2,886	0.8	218.5	218.5	219.5	1.0
B	12,890	257	2,554	0.9	218.7	218.7	219.7	1.0
C	17,612	196	1,689	1.3	220.8	220.8	221.8	1.0
D	23,110	151	1,432	1.5	222.8	222.8	223.8	1.0
E	26,510	77	381	2.6	232.6	232.6	233.6	1.0
F	28,727	67	334	2.9	243.6	243.6	244.6	1.0
G	31,445	127	1,110	0.9	251.0	251.0	252.0	1.0

[1] FEET ABOVE FALMOUTH ROAD

TABLE 12

FEDERAL EMERGENCY MANAGEMENT AGENCY

CUMBERLAND COUNTY, ME
(ALL JURISDICTIONS)

FLOODWAY DATA

PLEASANT RIVER

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	13,332	168	1,732	8.8	8.8 [2]	4.0 [2]	5.0	1.0
B	14,409	286	4,072	3.8	8.8 [2]	7.2 [2]	7.7	0.5
C	14,636	271	3,745	4.1	15.9	15.9	15.9	0.0
D	15,877	114	1,657	9.2	17.2	17.2	17.2	0.0
E	17,281	185	2,641	5.8	20.5	20.5	20.5	0.0
F	18,454	164	2,610	5.9	21.7	21.7	21.8	0.1
G	19,515	190	2,666	5.7	22.9	22.9	23.1	0.2
H	20,486	221	3,838	4.0	26.9	26.9	27.2	0.3
I	21,754	106	2,353	6.2	27.4	27.4	27.5	0.1
J	22,841	236	3,520	4.1	28.0	28.0	28.4	0.4
K	24,182	197	3,335	4.3	28.5	28.5	29.1	0.6
L	24,816	200	3,347	4.3	29.0	29.0	29.4	0.4
M	27,414	101	2,482	5.8	30.6	30.6	31.4	0.8
N	27,931	180	3,385	4.3	31.1	31.1	31.8	0.7
O	29,251	315	4,827	3.0	31.6	31.6	32.4	0.8
P	30,677	303	5,054	2.9	32.0	32.0	32.9	0.9
Q	32,307	724	7,800	1.9	32.2	32.2	33.1	0.9
R	34,667	779	8,781	1.7	32.5	32.5	33.5	1.0
S	35,657	541	5,855	2.5	32.6	32.6	33.6	1.0
T	36,557	800	8,401	1.7	32.8	32.8	33.8	1.0
U	37,777	797	6,006	2.4	33.0	33.0	34.0	1.0
V	38,867	164	3,931	3.7	33.1	33.1	34.0	0.9
W	39,907	323	4,396	3.3	33.7	33.7	34.5	0.8
X	40,467	462	8,894	1.6	34.1	34.1	34.9	0.8
Y	41,577	461	7,139	2.0	34.2	34.2	35.0	0.8
Z	42,487	271	4,668	3.1	34.2	34.2	35.0	0.8
AA	43,407	274	3,991	3.6	34.3	34.3	35.1	0.8

[1] FEET ABOVE CONFLUENCE WITH CASCO BAY

[2] ELEVATION COMPUTED WITHOUT CONSIDERATION OF WAVE EFFECTS

TABLE 12

FEDERAL EMERGENCY MANAGEMENT AGENCY

CUMBERLAND COUNTY, ME

(ALL JURISDICTIONS)

FLOODWAY DATA

PRESUMPSCOT RIVER

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
AB	45,257	864	5,906	2.5	34.8	34.8	35.7	0.9
AC	46,457	259	4,453	3.3	35.1	35.1	36.0	0.9
AD	47,077	218	3,857	3.8	35.2	35.2	36.1	0.9
AE	48,047	267	4,039	3.6	35.4	35.4	36.2	0.8
AF	48,627	164	3,359	4.3	35.5	35.5	36.3	0.8
AG	49,177	429	3,692	3.9	35.5	35.5	36.4	0.9
AH	49,677	112	2,116	6.9	35.8	35.8	36.6	0.8
AI	51,077	333	4,318	3.1	45.8	45.8	46.8	1.0
AJ	51,767	155	1,965	6.8	45.8	45.8	46.8	1.0
AK	52,027	142	1,905	7.0	46.0	46.0	46.9	0.9
AL	52,387	147	1,998	6.7	46.8	46.8	47.6	0.8
AM	53,077	163	2,159	6.2	47.7	47.7	48.3	0.6
AN	53,777	203	5,640	5.0	48.3	48.3	49.0	0.7
AO	54,977	232	2,895	4.6	49.0	49.0	49.6	0.6
AP	55,277	424	4,875	2.7	49.1	49.1	50.0	0.9
AQ	55,677	145	1,903	7.0	49.1	49.1	50.0	0.9
AR	55,977	100	1,554	8.6	50.1	50.1	50.6	0.5
AS	57,177	457	4,849	2.7	73.8	73.8	74.8	1.0
AT	57,677	241	2,639	5.0	73.9	73.9	74.8	0.9
AU	58,777	217	2,584	5.1	74.7	74.7	75.6	0.9
AV	60,257	1,037	6,425	2.1	75.4	75.4	76.4	1.0
AW	61,487	300	3,438	3.9	75.7	75.7	76.6	0.9
AX	63,027	185	2,659	5.0	76.3	76.3	77.3	1.0
AY	64,077	616	4,518	2.9	76.4	76.4	77.4	1.0
AZ	64,786	200	4,190	3.2	76.5	76.5	76.9	0.4
BA	66,792	220	3,750	3.6	76.8	76.8	77.2	0.4
BB	68,376	180	4,180	3.2	77.1	77.1	77.5	0.4

[1] FEET ABOVE CONFLUENCE WITH CASCO BAY

TABLE 12

FEDERAL EMERGENCY MANAGEMENT AGENCY

CUMBERLAND COUNTY, ME

(ALL JURISDICTIONS)

FLOODWAY DATA

PRESUMPSCOT RIVER

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
BC	69,854	180	3,130	4.2	77.4	77.4	77.8	0.4
BD	71,174	160	3,430	3.9	77.8	77.8	78.2	0.4
BE	72,653	150	2,910	4.6	78.1	78.1	78.6	0.5
BF	75,029	140	2,740	4.9	79.3	79.3	79.7	0.4
BG	75,504	130	2,830	4.7	79.3	79.3	79.9	0.6
BH	76,296	160	3,120	4.3	79.7	79.7	80.2	0.5
BI	77,352	160	3,080	4.3	79.9	79.9	80.5	0.6
BJ	79,094	180	2,860	3.8	80.4	80.4	81.0	0.6
BK	80,626	300	3,490	3.1	80.7	80.7	81.4	0.7
BL	82,104	170	4,890	2.2	81.0	81.0	81.6	0.6
BM	83,266	190	2,960	3.6	81.0	81.0	81.7	0.7
BN	83,794	130	2,790	3.9	81.2	81.2	81.9	0.7
BO	83,952	200	1,610	6.7	81.2	81.2	81.9	0.7
BP	84,269	200	1,740	5.7	94.4	94.4	94.4	0.0
BQ	84,427	200	2,140	4.7	94.6	94.6	94.8	0.2
BR	85,536	170	1,850	5.4	95.6	95.6	95.6	0.0
BS	86,592	140	1,610	6.2	96.5	96.5	96.6	0.1
BT	87,226	170	1,900	5.3	114.5	114.5	114.5	0.0
BU	87,384	240	2,910	3.4	115.0	115.0	115.0	0.0
BV	87,859	300	2,140	4.7	115.2	115.2	115.2	0.0
BW	88,123	300	2,840	3.5	115.5	115.5	115.5	0.0
BX	89,338	220	3,560	2.8	115.8	115.8	115.9	0.1
BY	90,605	150	2,270	4.4	116.0	116.0	116.1	0.1
BZ	91,766	190	2,940	3.4	116.4	116.4	116.6	0.2
CA	93,614	200	2,900	3.4	116.8	116.8	117.0	0.2
CB	94,670	300	2,850	3.5	117.1	117.1	117.3	0.2
CC	94,987	380	3,340	3.0	117.3	117.3	117.5	0.2

[1] FEET ABOVE CONFLUENCE WITH CASCO BAY

TABLE 12

FEDERAL EMERGENCY MANAGEMENT AGENCY

CUMBERLAND COUNTY, ME

(ALL JURISDICTIONS)

FLOODWAY DATA

PRESUMPSCOT RIVER

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
CD	95,198	290	3,410	2.9	117.4	117.4	117.6	0.2
CE	96,307	340	7,140	1.4	138.8	138.8	138.8	0.0
CF	97,627	760	11,600	0.8	138.8	138.8	139.0	0.2
CG	98,736	300	5,050	1.9	139.0	139.0	139.0	0.0
CH	98,789	120	2,340	4.2	139.0	139.0	139.0	0.0
CI	100,637	120	1,930	5.1	139.0	139.0	139.1	0.1
CJ	101,851	530	5,990	1.6	139.8	139.8	139.8	0.0
CK	102,802	370	4,830	2.0	139.9	139.9	139.9	0.0
CL	103,594	760	7,960	0.8	140.0	140.0	140.0	0.0
CM	105,336	230	3,640	1.7	140.0	140.0	140.0	0.0
CN	105,442	130	2,070	3.0	140.1	140.1	140.2	0.1
CO	106,498	110	1,670	3.7	140.1	140.1	140.2	0.1
CP	107,818	160	1,640	3.8	140.5	140.5	140.6	0.1
CQ	110,035	180	3,110	2.0	140.9	140.9	141.0	0.1
CR	112,147	180	2,340	2.7	141.1	141.1	141.3	0.2
CS	112,939	140	1,430	4.3	141.7	141.7	142.0	0.3
CT	113,731	160	955	6.5	143.4	143.4	143.7	0.3
CU	116,054	1,270	29,000	0.2	189.5	189.5	189.5	0.0
CV	118,430	1,060	20,500	0.3	189.5	189.5	189.5	0.0
CW	119,170	980	14,800	0.4	189.5	189.5	189.5	0.0
CX	121,070	190	2,950	2.1	189.5	189.5	189.5	0.0
CY	121,070	120	925	6.6	190.0	190.0	190.0	0.0
CZ	121,968	170	1,470	4.2	191.5	191.5	191.6	0.1
DA	122,285	60	588	10.4	191.8	191.8	191.8	0.0
DB	122,443	60	606	10.0	192.2	192.2	192.9	0.7
DC	122,654	900	11,400	0.5	224.8	224.8	224.8	0.0
DD	123,446	1,000	19,500	0.3	224.8	224.8	224.8	0.0

[1] FEET ABOVE CONFLUENCE WITH CASCO BAY

TABLE 12

FEDERAL EMERGENCY MANAGEMENT AGENCY

CUMBERLAND COUNTY, ME

(ALL JURISDICTIONS)

FLOODWAY DATA

PRESUMPSCOT RIVER

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
DE	125,189	570	10,400	0.6	224.8	224.8	224.8	0.0
DF	126,509	500	5,800	1.0	224.8	224.8	224.8	0.0
DG	126,720	550	4,000	1.5	224.8	224.8	224.8	0.0
DH	126,984	480	3,030	2.0	224.8	224.8	224.8	0.0

[1] FEET ABOVE CONFLUENCE WITH CASCO BAY

TABLE 12

FEDERAL EMERGENCY MANAGEMENT AGENCY

CUMBERLAND COUNTY, ME
(ALL JURISDICTIONS)

FLOODWAY DATA

PRESUMPSCOT RIVER

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	1,930	50	452	3.8	263.9	260.6 [2]	261.6	1.0
B	3,510	56	254	6.7	263.9	262.0 [2]	262.8	0.8
C	4,195	32	261	6.5	266.5	266.5	267.3	0.8
D	4,820	37	309	5.5	269.4	269.4	270.1	0.7
E	5,275	141	1,044	1.6	270.8	270.8	271.5	0.7

[1] FEET ABOVE CONFLUENCE WITH SACO RIVER

[2] ELEVATIONS WITHOUT CONSIDERING BACKWATER EFFECT FROM SACO RIVER

TABLE 12

FEDERAL EMERGENCY MANAGEMENT AGENCY

CUMBERLAND COUNTY, ME

(ALL JURISDICTIONS)

FLOODWAY DATA

QUAKER BROOK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	269	115	876	0.5	24.8	24.8	24.8	0.0
B	1,542	70	174	2.5	24.8	24.8	24.8	0.0
C	2,550	20	87	5.0	27.8	27.8	27.8	0.0
D	3,289	45	197	2.0	28.5	28.5	29.5	1.0
E	3,516	35	179	2.2	28.8	28.8	29.7	0.9
F	3,918	15	98	4.0	37.7	37.7	37.7	0.0
G	4,118	25	111	3.5	37.7	37.7	38.6	0.9
H	4,224	30	146	2.7	38.3	38.3	39.0	0.7
I	4,446	15	66	5.9	38.6	38.6	39.0	0.4
J	4,609	25	186	2.1	41.7	41.7	41.8	0.1
K	4,784	25	151	2.6	41.7	41.7	41.9	0.2
L	4,895	25	255	1.5	41.7	41.7	42.0	0.3
M	5,169	20	153	2.2	43.6	43.6	43.7	0.1
N	6,526	35	336	1.0	43.7	43.7	44.5	0.8
O	6,785	20	131	2.6	46.2	46.2	46.2	0.0
P	8,327	40	186	1.8	46.6	46.6	47.5	0.9

[1] FEET ABOVE CONFLUENCE WITH JACKSON BROOK

TABLE 12

FEDERAL EMERGENCY MANAGEMENT AGENCY

CUMBERLAND COUNTY, ME

(ALL JURISDICTIONS)

FLOODWAY DATA

RED BROOK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	9,689	*	2,912	3.6	9.1 [2]	6.1 [2]	6.6	0.5
B	9,979	*	1,510	7.0	13.2	13.2	13.6	0.4
C	10,835	*	1,103	9.5	20.1	20.1	20.3	0.2
D	11,785	*	879	12.0	28.0	28.0	28.1	0.1
E	11,986	*	2,987	3.5	42.0	42.0	42.0	0.0
F	12,714	*	1,436	7.3	42.0	42.0	42.0	0.0
G	13,781	*	1,192	8.8	43.8	43.8	44.1	0.3
H	14,298	*	693	15.2	59.9	59.9	59.9	0.0
I	15,407	*	1,532	6.9	75.1	75.1	75.1	0.0
J	15,618	*	2,326	4.5	76.4	76.4	76.6	0.2
K	15,988	*	1,849	5.7	76.6	76.6	76.8	0.2
L	17,223	*	2,191	4.8	77.6	77.6	77.8	0.2
M	18,258	*	2,245	4.7	78.1	78.1	78.3	0.2
N	19,156	*	1,555	6.8	80.3	80.3	80.3	0.0
O	20,254	*	2,435	4.3	81.1	81.1	81.5	0.4

[1] FEET ABOVE CONFLUENCE WITH CASCO BAY
[2] ELEVATION COMPUTED WITHOUT CONSIDERATION OF WAVE EFFECTS
* FLOODWAY COINCIDENT WITH CHANNEL BANKS

TABLE 12

FEDERAL EMERGENCY MANAGEMENT AGENCY

CUMBERLAND COUNTY, ME
(ALL JURISDICTIONS)

FLOODWAY DATA

ROYAL RIVER (DOWNSTREAM)

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	13,000	204	6,153	1.6	84.0	84.0	85.0	1.0
B	20,070	137	3,202	3.2	85.4	85.4	86.4	1.0
C	30,370	262	3,690	2.7	87.5	87.5	88.5	1.0
D	30,450	458	6,628	1.5	88.2	88.2	89.2	1.0
E	40,730	125	1,967	2.8	90.2	90.2	91.2	1.0
F	40,790	157	2,296	2.4	92.6	92.6	93.6	1.0
G	43,730	352	4,438	1.2	92.8	92.8	93.8	1.0
H	47,350	222	3,198	1.7	93.2	93.2	94.2	1.0
I	47,500	502	4,734	1.1	93.5	93.5	94.5	1.0
J	53,360	236	2,558	2.1	95.7	95.7	96.7	1.0
K	57,680	113	1,702	3.1	97.9	97.9	98.9	1.0
L	59,750	266	2,488	2.1	99.1	99.1	100.1	1.0
M	62,310	*	1,589	3.3	101.4	101.4	102.4	1.0
N	62,885	171	2,499	1.7	102.1	102.1	103.1	1.0
O	65,875	157	2,131	2.0	103.2	103.2	104.2	1.0
P	68,245	288	3,681	1.2	104.2	104.2	105.2	1.0
Q	70,800	342	4,151	1.0	104.6	104.6	105.6	1.0
R	76,275	295	3,077	1.3	105.7	105.7	106.7	1.0
S	80,265	237	2,643	1.5	106.6	106.6	107.6	1.0
T	89,720	1,804	12,893	0.3	107.2	107.2	108.2	1.0
U	102,100	725	3,445	1.0	111.1	111.1	112.1	1.0
V	114,170	279	1,475	1.7	120.4	120.4	121.4	1.0
W	117,230	709	4,201	0.6	123.3	123.3	124.3	1.0
X	118,360	555	4,403	0.5	124.7	124.7	125.7	1.0
Y	120,625	102	869	2.6	126.7	126.7	127.7	1.0
Z	124,190	53	432	5.1	136.2	136.2	137.2	1.0
AA	127,550	55	386	5.6	157.5	157.5	158.5	1.0

[1] FEET ABOVE EAST ELM STREET

* FLOODWAY COINCIDENT WITH CHANNEL BANKS

TABLE 12

FEDERAL EMERGENCY MANAGEMENT AGENCY

CUMBERLAND COUNTY, ME

(ALL JURISDICTIONS)

FLOODWAY DATA

ROYAL RIVER (UPSTREAM)

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	0	89 / 30 [2]	763	5.3	182.0	182.0	182.0	0.0
B	1,954	400 / 280 [2]	11,800	3.7	221.4	221.4	221.4	0.0
C	2,904	380 / 170 [2]	6,960	6.3	221.6	221.6	221.6	0.0
D	3,907	340 / 190 [2]	8,020	5.5	222.2	222.2	222.2	0.0
E	5,861	420 / 300 [2]	10,700	4.1	222.7	222.7	222.7	0.0
F	6,706	340 / 180 [2]	9,140	4.8	222.8	222.8	222.8	0.0
G	9,293	420 / 240 [2]	11,100	3.9	223.3	223.3	223.3	0.0
H	10,138	510 / 310 [2]	12,800	3.4	223.5	223.5	223.5	0.0
I	11,616	690 / 310 [2]	18,500	2.4	223.6	223.6	223.6	0.0
J	12,778	250 / 130 [2]	6,600	6.6	223.6	223.6	223.6	0.0
K	13,992	290 / 150 [2]	10,200	4.3	223.9	223.9	224.0	0.1
L	15,787	760 / 550 [2]	12,200	3.6	224.2	224.2	224.4	0.2
M	17,371	330 / 170 [2]	8,490	5.2	224.4	224.4	224.6	0.2
N	18,163	380 / 210 [2]	10,700	4.1	224.6	224.6	224.8	0.2
O	19,114	690 / 190 [2]	13,100	3.4	224.8	224.8	225.0	0.2
P	19,906	740 / 280 [2]	11,600	3.8	224.9	224.9	225.1	0.2
Q	20,486	540 / 250 [2]	14,300	3.1	225.1	225.1	225.3	0.2
R	20,962	330 / 170 [2]	8,840	5.0	225.1	225.1	225.3	0.2
S	22,282	320 / 150 [2]	7,800	5.6	225.4	225.4	225.5	0.1
T	23,021	320 / 160 [2]	8,640	5.1	225.6	225.6	225.8	0.2
U	23,813	380 / 190 [2]	8,580	5.1	225.8	225.8	226.1	0.3
V	24,763	400 / 200 [2]	8,990	4.9	226.0	226.0	226.3	0.3
W	25,344	420 / 210 [2]	10,000	4.4	226.1	226.1	226.5	0.4
X	26,083	630 / 320 [2]	13,300	3.3	226.3	226.3	226.7	0.4
Y	26,822	560 / 280 [2]	12,000	3.7	226.3	226.3	226.7	0.4
Z	27,298	780 / 390 [2]	24,900	1.6	226.5	226.5	226.9	0.4
AA	27,826	490 / 260 [2]	9,732	4.1	226.5	226.5	226.9	0.4

[1] FEET ABOVE YORK / CUMBERLAND COUNTY BOUNDARY

[2] TOTAL WIDTH / WIDTH WIDTHIN CUMBERLAND COUNTY

TABLE 12

FEDERAL EMERGENCY MANAGEMENT AGENCY

CUMBERLAND COUNTY, ME

(ALL JURISDICTIONS)

FLOODWAY DATA

SACO RIVER

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
AB	28,354	380 / 190 [2]	5,500	7.2	226.5	226.5	226.9	0.4
AC	28,987	280 / 150 [2]	3,520	11.3	227.0	227.0	227.4	0.4
AD	29,410	370 / 70 [2]	4,250	9.4	231.3	231.3	231.3	0.0
AE	29,674	430 / 60 [2]	5,310	7.5	232.0	232.0	232.0	0.0
AF	29,779	510 / 60 [2]	5,620	7.1	232.1	232.1	232.1	0.0
AG	30,202	410 / 60 [2]	3,450	11.5	232.8	232.8	232.8	0.0
AH	30,571	400 / 60 [2]	5,450	7.3	234.7	234.7	235.3	0.6
AI	31,469	350 / 180 [2]	5,080	7.8	236.2	236.2	236.6	0.4
AJ	32,789	357 / 170 [2]	5,930	6.7	237.6	237.6	238.0	0.4
AK	34,056	380 / 190 [2]	7,550	5.3	238.6	238.6	238.8	0.2
AL	34,690	276 / 170 [2]	2,380	16.7	240.9	240.9	240.9	0.0
AM	34,901	280 / 100 [2]	5,550	7.2	245.1	245.1	245.1	0.0
AN	35,746	320 / 160 [2]	6,600	6.0	245.8	245.8	245.8	0.0
AO	38,438	310 / 150 [2]	6,480	6.1	246.8	246.8	247.0	0.2
AP	39,706	300 / 150 [2]	6,340	6.3	247.2	247.2	247.4	0.2
AQ	41,290	360 / 190 [2]	7,040	5.7	247.8	247.8	248.1	0.3
AR	43,296	240 / 110 [2]	6,080	6.6	248.2	248.2	248.7	0.5
AS	46,306	260 / 130 [2]	6,260	6.4	249.4	249.4	249.9	0.5
AT	47,520	300 / 110 [2]	5,630	7.1	249.8	249.8	250.4	0.6
AU	48,418	320 / 140 [2]	7,190	5.5	250.1	250.1	251.0	0.9
AV	50,582	240 / 100 [2]	4,960	8.0	251.0	251.0	252.0	1.0
AW	52,853	330 / 200 [2]	6,450	6.2	252.8	252.8	253.8	1.0
AX	53,434	500 / 230 [2]	13,000	3.1	253.5	253.5	254.4	0.9
AY	53,803	350 / 120 [2]	6,010	6.6	253.5	253.5	254.4	0.9
AZ	54,120	400 / 160 [2]	6,400	6.2	253.8	253.8	254.8	1.0
BA	54,384	450 / 210 [2]	7,880	5.1	254.3	254.3	255.2	0.9
BB	54,912	200 / 110 [2]	3,370	11.8	254.3	254.3	255.2	0.9

[1] FEET ABOVE YORK / CUMBERLAND COUNTY BOUNDARY
[2] TOTAL WIDTH / WIDTH WIDTHIN CUMBERLAND COUNTY

TABLE 12

FEDERAL EMERGENCY MANAGEMENT AGENCY

CUMBERLAND COUNTY, ME
(ALL JURISDICTIONS)

FLOODWAY DATA

SACO RIVER

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
BC	55,070	210 / 110 [2]	3,670	10.8	254.9	254.9	255.6	0.7
BD	55,387	190 / 110 [2]	2,330	17.1	255.0	255.0	255.7	0.7
BE	55,598	250 / 120 [2]	5,210	7.6	260.2	260.2	260.2	0.0
BF	56,074	250 / 150 [2]	4,680	8.5	260.4	260.4	260.4	0.0
BG	56,232	300 / 160 [2]	4,910	8.1	260.7	260.7	260.9	0.2
BH	56,813	400 / 200 [2]	6,620	6.0	261.7	261.7	261.9	0.2
BI	57,182	400 / 200 [2]	5,570	7.1	261.9	261.9	262.0	0.1
BJ	57,974	500 / 250 [2]	8,220	4.8	262.6	262.6	262.8	0.2
BK	60,294	685 / 485 [2]	9,748	4.1	264.2	264.2	265.1	0.9
BL	67,564	439 / 145 [2]	6,732	5.9	267.9	267.9	268.9	1.0
BM	76,004	3242 / 2455 [2]	38,964	1.0	270.1	270.1	271.1	1.0
BN	80,764	595 / 490 [2]	9,580	4.2	270.5	270.5	271.4	0.9
BO	82,334	1473 / 1335 [2]	16,438	2.4	271.4	271.4	272.4	1.0
BP	84,194	246 / 106 [2]	5,572	7.0	271.6	271.6	272.6	1.0
BQ	90,104	400 / 400 [2]	7,619	5.1	275.0	275.0	275.9	0.9
BR	91,734	344 / 210 [2]	6,326	6.2	276.0	276.0	276.9	0.9
BS	97,814	449 / 159 [2]	8,143	4.8	279.1	279.1	280.1	1.0
BT	102,434	284 / 124 [2]	7,675	5.1	280.4	280.4	281.4	1.0
BU	102,634	275 / 130 [2]	6,832	5.7	281.1	281.1	282.0	0.9
BV	104,634	240 / 115 [2]	5,462	7.1	281.8	281.8	282.7	0.9
BW	108,614	274 / 147 [2]	6,284	4.3	284.4	284.4	285.4	1.0
BX	112,904	576 / 126 [2]	6,896	4.0	285.8	285.8	286.8	1.0
BY	120,314	284 / 130 [2]	5,517	4.9	289.8	289.8	290.7	0.9
BZ	121,444	977 / 730 [2]	20,589	1.3	290.8	290.8	291.7	0.9
CA	122,394	280 / 135 [2]	3,800	7.2	351.7	351.7	352.5	0.8
CB	124,704	260 / 105 [2]	4,481	6.1	355.6	355.6	356.1	0.5

[1] FEET ABOVE YORK / CUMBERLAND COUNTY BOUNDARY

[2] TOTAL WIDTH / WIDTH WIDTHIN CUMBERLAND COUNTY

TABLE 12

FEDERAL EMERGENCY MANAGEMENT AGENCY

CUMBERLAND COUNTY, ME

(ALL JURISDICTIONS)

FLOODWAY DATA

SACO RIVER

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	111,408	263 [2]	2,360	17.0	203.5	203.5	203.5	0.0
B	111,936	354	3,490	11.4	209.9	209.9	209.9	0.0
C	112,358	285	5,080	7.9	212.1	212.1	212.1	0.0
D	112,517	275	4,140	9.7	213.4	213.4	213.4	0.0
E	112,675	330	4,430	9.0	214.5	214.5	214.5	0.0
F	113,045	210	2,990	13.4	215.3	215.3	215.3	0.0

[1] FEET ABOVE CATARACT DAM

[2] THIS WIDTH EXTENDS BEYOND CUMBERLAND COUNTY

TABLE 12

FEDERAL EMERGENCY MANAGEMENT AGENCY

CUMBERLAND COUNTY, ME
(ALL JURISDICTIONS)

FLOODWAY DATA

SACO RIVER LEFT CHANNEL

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	5,000	1,216	7,569	1.5	268.4	268.4	269.4	1.0
B	8,205	433	3,659	3.1	270.3	270.3	271.3	1.0
C	9,990	1,129	8,303	1.4	271.0	271.0	272.0	1.0
D	12,050	505	4,986	2.3	271.8	271.8	272.8	1.0
E	14,195	170	2,264	0.6	272.4	272.4	273.4	1.0

[1] FEET ABOVE CONFLUENCE WITH SEBAGO LAKE

TABLE 12

FEDERAL EMERGENCY MANAGEMENT AGENCY

CUMBERLAND COUNTY, ME
(ALL JURISDICTIONS)

FLOODWAY DATA

SONGO RIVER

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	804	121	491	6.3	345.7	345.7	346.7	1.0
B	1,359	117	407	7.5	369.9	369.9	370.9	1.0
C	2,364	191	1,197	2.6	388.9	388.9	389.9	1.0
D	2,948	99	678	4.5	389.9	389.9	390.9	1.0
E	3,431	74	447	6.8	393.7	393.7	394.7	1.0
F	3,846	76	377	8.1	397.7	397.7	398.7	1.0
G	4,396	124	788	3.9	400.7	400.7	401.7	1.0
H	4,828	75	624	4.9	401.5	401.5	402.5	1.0
I	5,412	117	1,015	2.9	402.8	402.8	403.8	1.0
J	6,748	95	673	1.0	402.9	402.9	403.9	1.0
K	7,720	44	180	4.1	409.8	409.8	410.8	1.0

[1] FEET ABOVE KANSAS ROAD

TABLE 12

FEDERAL EMERGENCY MANAGEMENT AGENCY

CUMBERLAND COUNTY, ME

(ALL JURISDICTIONS)

FLOODWAY DATA

STEVENS BROOK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	190	60	655	5.7	8.9 [2]	3.7 [2]	4.7	1.0
B	507	75	601	6.2	13.3	13.3	13.3	0.0
C	935	98	1,148	3.3	24.5	24.5	24.5	0.0
D	1,077	76	914	4.1	24.5	24.5	24.5	0.0
E	1,610	60	752	5.0	25.1	25.1	25.1	0.0
F	3,279	67	850	4.4	25.8	25.8	26.0	0.2
G	5,359	125	1,310	2.9	26.3	26.3	27.2	0.9
H	12,489	476	2,967	1.3	30.0	30.0	31.0	1.0
I	14,549	690	3,038	1.2	30.3	30.3	31.3	1.0
J	15,589	820	6,142	0.6	30.5	30.5	31.5	1.0
K	16,509	348	2,462	1.5	30.5	30.5	31.5	1.0
L	18,179	257	2,362	1.6	30.9	30.9	31.9	1.0
M	19,809	109	932	4.0	31.3	31.3	32.3	1.0
N	20,439	68	326	10.8	37.0	37.0	37.4	0.4
O	20,719	81	914	3.8	47.0	47.0	47.0	0.0
P	21,949	48	627	5.6	47.2	47.2	47.9	0.7
Q	23,509	50	274	12.8	55.8	55.8	56.0	0.2
R	24,739	92	869	4.0	60.1	60.1	61.1	1.0
S	25,669	84	645	5.4	60.9	60.9	61.7	0.8
T	26,109	48	394	8.9	61.3	61.3	62.1	0.8
U	26,299	70	795	4.4	65.0	65.0	65.8	0.8
V	27,889	322	2,222	1.6	65.7	65.7	66.7	1.0
W	30,029	312	2,364	1.5	66.2	66.2	67.2	1.0
X	32,609	126	905	3.9	67.1	67.1	68.1	1.0

[1] FEET ABOVE CONFLUENCE WITH FORE RIVER
[2] ELEVATION COMPUTED WITHOUT CONSIDERATION OF WAVE EFFECTS

TABLE 12

FEDERAL EMERGENCY MANAGEMENT AGENCY

CUMBERLAND COUNTY, ME
(ALL JURISDICTIONS)

FLOODWAY DATA

STROUDWATER RIVER

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	2,430	219	587	1.8	222.9	218.9 [2]	219.9	1.0
B	5,190	143	703	1.4	223.9	223.5 [2]	224.5	1.0
C	7,020	261	959	1.0	224.4	224.2 [2]	225.2	1.0
D	10,770	47	302	2.1	227.7	227.7	228.7	1.0

[1] FEET ABOVE CONFLUENCE WITH PLEASANT RIVER

[2] ELEVATION COMPUTED WITHOUT CONSIDERATION OF BACKWATER EFFECTS FROM THE PLEASANT RIVER

TABLE 12

FEDERAL EMERGENCY MANAGEMENT AGENCY

CUMBERLAND COUNTY, ME

(ALL JURISDICTIONS)

FLOODWAY DATA

THAYER BROOK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	1,200	38	110	1.7	226.5	226.5	227.5	1.0
B	1,490	68	306	0.6	229.5	229.5	230.5	1.0

[1] FEET ABOVE CONFLUENCE WITH THAYER BROOK

TABLE 12

FEDERAL EMERGENCY MANAGEMENT AGENCY

CUMBERLAND COUNTY, ME

(ALL JURISDICTIONS)

FLOODWAY DATA

TRIBUTARY A

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	870	11	32	6.6	57.2	57.2	57.6	0.4
B	2,220	33	116	1.8	65.7	65.7	66.6	0.9
C	2,870	16	34	6.3	69.4	69.4	69.9	0.5
D	3,480	30	89	2.4	76.1	76.1	76.9	0.8

[1] FEET ABOVE CONFLUENCE WITH CLARK BROOK

TABLE 12

FEDERAL EMERGENCY MANAGEMENT AGENCY

CUMBERLAND COUNTY, ME
(ALL JURISDICTIONS)

FLOODWAY DATA

TRIBUTARY TO CLARK BROOK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	623	20	140	3. 6	9.2 [2]	9.0 [2]	9.3	0.3
B	1,262	10	91	5.6	10.2	10.2	10.5	0.3
C	1,589	20	212	2. 4	15.2	15.2	15.2	0.0
D	2,006	100	418	1.2	15.3	15.3	15.6	0.3
E	3,421	20	67	5. 8	15.3	15.3	15.9	0.6
F	4,261	30	116	3.4	25.6	25.6	25.7	0.1
G	4,641	20	129	3.0	31.7	31.7	31.7	0.0
H	5,454	10	51	6.3	45.7	45.7	45.7	0.0
I	5,887	20	104	3.1	48.3	48.3	48.3	0.0
J	6,457	20	157	1 7	50.5	50.5	50.5	0.0
K	6,642	20	164	1.2	50.5	50.5	50.6	0.1
L	7,139	20	153	1.3	50.5	50.5	50.7	0.2
M	7,814	20	141	1 4	50.5	50.5	51.0	0.5
N	8,210	20	125	1.6	50.5	50.5	51.2	0.7
O	8,744	40	91	2.0	52.1	52.1	52.2	0.1
P	9,298	40	129	1.4	52.7	52.7	53.6	0.9

[1] FEET ABOVE CONFLUENCE WITH FORE RIVER
[2] ELEVATION COMPUTED WITHOUT CONSIDERATION OF WAVE EFFECT

TABLE 12

FEDERAL EMERGENCY MANAGEMENT AGENCY

CUMBERLAND COUNTY, ME
(ALL JURISDICTIONS)

FLOODWAY DATA

TROUT BROOK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	110	223	1,703	1.7	402.9	402.9	403.9	1.0
B	1,770	176	1,434	2.0	404.0	404.0	405.0	1.0
C	3,870	172	1,186	2.4	405.4	405.4	406.4	1.0

[1] FEET ABOVE CONFLUENCE WITH STEVENS BROOK

TABLE 12

FEDERAL EMERGENCY MANAGEMENT AGENCY

CUMBERLAND COUNTY, ME
(ALL JURISDICTIONS)

FLOODWAY DATA

WILLET BROOK

5.0 INSURANCE APPLICATION

For flood insurance rating purposes, flood insurance zone designations are assigned to a community based on the results of the engineering analyses. These zones are as follows:

Zone A

Zone A is the flood insurance rate zone that corresponds to the 1-percent-annual-chance floodplains that are determined in the FIS report by approximate methods. Because detailed hydraulic analyses are not performed for such areas, no base (1-percent-annual-chance) flood elevations (BFEs) or depths are shown within this zone.

Zone AE

Zone AE is the flood insurance rate zone that corresponds to the 1-percent-annual-chance floodplains that are determined in the FIS report by detailed methods. Whole-foot BFEs derived from the detailed hydraulic analyses are shown at selected intervals within this zone.

Zone AH

Zone AH is the flood insurance rate zone that corresponds to the areas of 1-percent-annual-chance shallow flooding (usually areas of ponding) where average depths are between 1 and 3 feet. Whole-foot base flood elevations derived from the detailed hydraulic analyses are shown at selected intervals within this zone.

Zone D

Zone D is the flood insurance rate zone that corresponds to unstudied areas where flood hazards are undetermined but possible.

Zone VE

Zone VE is the flood insurance rate zone that corresponds to the 1-percent-annual-chance coastal floodplains that have additional hazards associated with storm waves. Whole-foot BFEs derived from the detailed hydraulic analyses are shown at selected intervals within this zone.

Zone X

Zone X is the flood insurance rate zone that corresponds to areas outside the 0.2-percent-annual-chance floodplain, areas within the 0.2-percent-annual-chance floodplain, areas of 1-percent-annual-chance flooding where average depths are less than 1 foot, areas of 1-percent-annual-chance flooding where the contributing drainage area is less than 1 square mile (sq. mi.), and areas protected from the base flood by levees. No BFEs or depths are shown within this zone.

6.0 FLOOD INSURANCE RATE MAP

The FIRM is designed for flood insurance and floodplain management applications.

For flood insurance applications, the map designates flood insurance rate zones as described in Section 5.0 and, in the 1-percent-annual-chance floodplains that were studied by detailed methods, shows selected whole-foot BFEs or average depths. Insurance agents use zones and BFEs in conjunction with information on structures and their contents to assign premium rates for flood insurance policies.

For floodplain management applications, the map shows by tints, screens, and symbols, the 1- and 0.2-percent-annual-chance floodplains, floodways, and the locations of selected cross sections used in the hydraulic analyses and floodway computations.

The countywide FIRM presents flooding information for the entire geographic area of Cumberland County. Previously, FIRMs were prepared for each incorporated community and the unincorporated areas of the county identified as floodprone. This countywide FIRM also includes flood-hazard information that was presented separately on Flood Boundary and Floodway Maps (FBFMs), where applicable. Historical data relating to the maps prepared for each community are presented in Table 13, "Community Map History."

COMMUNITY NAME	INITIAL IDENTIFICATION	FLOOD HAZARD BOUNDARY MAP REVISION DATE(S)	FLOOD INSURANCE RATE MAP EFFECTIVE DATE	FLOOD INSURANCE RATE MAP REVISION DATE(S)
Baldwin, Town of	February 14, 1975	December 13, 1977	July 2, 1980	None
Bridgton, Town of	November 22, 1974	September 24, 1976	May 3, 1982	None
Brunswick, Town of	November 1, 1974	June 14, 1977	January 3, 1986	None
Cape Elizabeth, Town of	March 8, 1974	June 11, 1976 October 1, 1983	June 19, 1985	July 15, 1992
Casco, Town of	July 26, 1974	September 10, 1976	May 5, 1981	None
Chebeague Island, Town of*	August 30, 1977	None	May 19, 1981	None
Cumberland, Town of	August 30, 1977	None	May 19, 1981	October 1, 1983 October 15, 1985 July 15, 1992
Falmouth, Town of	March 29, 1974	August 6, 1976	October 16, 1984	None
Freeport, Town of	July 26, 1974	June 18, 1976	January 17, 1985	None
Frye Island, Town of	May 19, 1981	None	May 19, 1981	None
Gorham, Town of	November 15, 1974	March 26, 1976	October 15, 1981	None
Gray, Town of	February 18, 1977	None	January 6, 1982	None
Harpswell, Town of	November 1, 1974	October 8, 1976	July 3, 1985	July 15, 1992 July 20, 1998

* Dates for this community taken from the Town of Cumberland

TABLE 13

FEDERAL EMERGENCY MANAGEMENT AGENCY

CUMBERLAND COUNTY, ME
(ALL JURISDICTIONS)

COMMUNITY MAP HISTORY

COMMUNITY NAME	INITIAL IDENTIFICATION	FLOOD HAZARD BOUNDARY MAP REVISION DATE(S)	FLOOD INSURANCE RATE MAP EFFECTIVE DATE	FLOOD INSURANCE RATE MAP REVISION DATE(S)
Harrison, Town of	June 21, 1974	November 12, 1976	April 15, 1982	None
Long Island, Town of*	April 29, 1977	None	July 17, 1986	December 8, 1998
Naples, Town of	August 9, 1974	March 11, 1977	April 1, 1982	None
New Gloucester, Town of	March 21, 1975	August 16, 1977	April 1, 1982	None
North Yarmouth, Town of	January 31, 1975	November 15, 1977	July 16, 1981	None
Portland, City of	April 29, 1977	None	July 17, 1986	December 8, 1998
Pownal, Town of	January 31, 1975	March 5, 1976	December 2, 1980	None
Raymond, Town of	December 6, 1974	July 23, 1976	May 5, 1981	None
Scarborough, Town of	May 17, 1974	April 18, 1975 May 10, 1977 October 1, 1983	June 19, 1985	April 2, 1992
Sebago, Town of	January 17, 1975	March 11, 1977	April 1, 1981	None
South Portland, City of	February 22, 1974	September 3, 1976 July 6, 1979	August 17, 1981	April 17, 1985
Standish, Town of	April 18, 1975	November 19, 1976	May 19, 1981	October 16, 1984
Westbrook, City of	April 12, 1974	April 30, 1976	January 2, 1981	None

* Dates for this community taken from the City of Portland

TABLE 13

FEDERAL EMERGENCY MANAGEMENT AGENCY

CUMBERLAND COUNTY, ME (ALL JURISDICTIONS)

COMMUNITY MAP HISTORY

COMMUNITY NAME	INITIAL IDENTIFICATION	FLOOD HAZARD BOUNDARY MAP REVISION DATE(S)	FLOOD INSURANCE RATE MAP EFFECTIVE DATE	FLOOD INSURANCE RATE MAP REVISION DATE(S)
Windham, Town of	January 10, 1975	October 22, 1976	September 2, 1981	None
Yarmouth, Town of	March 1, 1974	September 17, 1976	November 15, 1984	None

TABLE 13

FEDERAL EMERGENCY MANAGEMENT AGENCY

CUMBERLAND COUNTY, ME
(ALL JURISDICTIONS)

COMMUNITY MAP HISTORY

7.0 OTHER STUDIES

Information pertaining to revised and unrevised flood hazards for each jurisdiction within Cumberland County has been compiled in this FIS. Therefore, this FIS supersedes all previously printed FIS reports, FIRMs, and/or FHBMs for all of the incorporated jurisdictions within Cumberland County.

Cumberland County is bordered by the Maine counties of Sagadahoc, Androscoggin, Oxford, and York. At the time of this revision, Sagadahoc and York counties were undergoing floodplain mapping revisions and will be in agreement with this countywide FIS.

This FIS report either supersedes or is compatible with all previous studies published on flooding sources studied in this report and should be considered authoritative for the purposes of the NFIP.

8.0 LOCATION OF DATA

Information concerning the pertinent data used in the preparation of this study can be obtained by contacting FEMA Region I, 99 High Street, 6th Floor, Boston, Massachusetts 02110.

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