NOTES TO USERS

is for use in administering the National Flood Insurance Program. It does
sarily identify all areas subject to flooding, particularly from local drainage
f small size. The **community map repository** should be consulted for
pdated or additional flood hazard information.

more detailed information in areas where **Base Flood Elevations** (BFEs)
oodways have been determined, users are encouraged to consult the Flood
nd Floodway Data and/or Summary of Stillwater Elevations tables contained
Flood Insurance Study (FIS) Report that accompanies this FIRM. Users
e aware that BFEs shown on the FIRM represent rounded whole-foot
. These BFEs are intended for flood insurance rating purposes only and
t be used as the sole source of flood elevation information. Accordingly,
ation data presented in the FIS Report should be utilized in conjunction with
for purposes of construction and/or floodplain management.

Base Flood Elevations shown on this map apply only landward of 0.0'
erican Vertical Datum of 1988 (NAVD 88). Users of this FIRM should be
t coastal flood elevations are also provided in the Summary of Stillwater
s table in the Flood Insurance Study Report for this jurisdiction. Elevations
the Summary of Stillwater Elevations table should be used for construction
odplain management purposes when they are higher than the elevations
this FIRM.

s of the **floodways** were computed at cross sections and interpolated
cross sections. The floodways were based on hydraulic considerations with
requirements of the National Flood Insurance Program. Floodway widths
pertinent floodway data are provided in the Flood Insurance Study Report
isdiction.

eas not in Special Flood Hazard Areas may be protected by **flood control**
s. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance
port for information on flood control structures for this jurisdiction.

ction used in the preparation of this map was Massachusetts State Plane
Zone (FIPS zone 2001). The **horizontal datum** was NAD 83, GRS 1980
Differences in datum, spheroid, projection or UTM zones used in the
n of FIRMs for adjacent jurisdictions may result in slight positional
s in map features across jurisdiction boundaries. These differences do not
accuracy of this FIRM.

vations on this map are referenced to the North American Vertical Datum of
ese flood elevations must be compared to structure and ground elevations
d to the same **vertical datum**. For information regarding conversion
the National Geodetic Vertical Datum of 1929 and the North American
Datum of 1988, visit the National Geodetic Survey website at
.ngs.noaa.gov or contact the National Geodetic Survey at the following

rmation Services
NGS12
Geodetic Survey
#9202
-West Highway
ing, Maryland 20910-3282
-3242

current elevation, description, and/or location information for **bench marks**
this map, please contact the Information Services Branch of the National
Survey at **(301) 713- 3242**, or visit its website at http://www.ngs.noaa.gov.

o information shown on this FIRM was derived from digital orthophotography
by the Massachusetts Geographic Information System. This information was
om photography dated 2005.

e baselines depicted on this map represent the hydraulic modeling baselines
the flood profiles in the FIS report. As a result of improved topographic data,
e baseline, in some cases, may deviate significantly from the channel
or appear outside the SFHA.

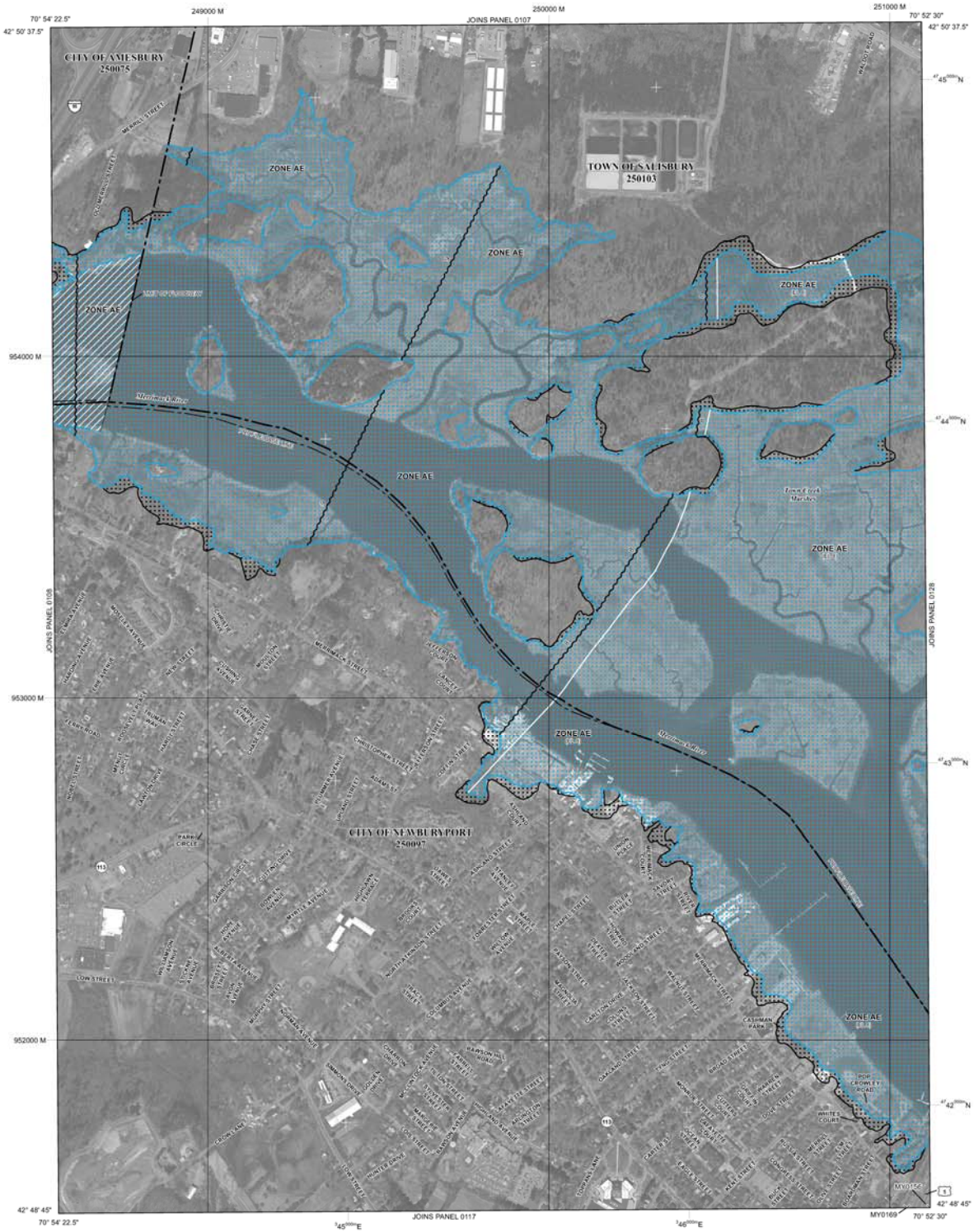
n updated topographic information, this map reflects more detailed and
e stream channel configurations and floodplain delineations than
own on the previous FIRM for this jurisdiction. As a result, the Flood
nd Floodway Data tables for multiple streams in the Flood
Study Report (which contains authoritative hydraulic data) may reflect
annel distances that differ from what is shown on the map. Also, the
floodplain relationships for unrevised streams may differ from what is
previous maps.

e limits shown on this map are based on the best data available at the time
tion. Because changes due to annexations or de-annexations may have
after this map was published, map users should contact appropriate
y officials to verify current corporate limit locations.

fer to the separately printed **Map Index** for an overview map of the
owing the layout of map panels; community map repository addresses;
ting of Communities table containing National Flood Insurance Program
each community as well as a listing of the panels on which each community

mation on available products associated with this FIRM visit the **Map
Center (MSC)** website at http://msc.fema.gov. Available products may
eviously issued Letters of Map Change, a Flood Insurance Study Report,
gital versions of this map. Many of these products can be ordered or
directly from the MSC website.

ve **questions about this map,** how to order products, or the National
urance Program in general, please call the **FEMA Map Information
e (FMIX)** at **1-877-FEMA-MAP** (1-877-336-2627) or visit the FEMA
http://www.fema.gov/business/nfip.



LEGEND

SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual chance flood (100-year flood), also known as the base flood, is the flood
a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard
the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazar
include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-s
elevation of the 1% annual chance flood.

ZONE A	No Base Flood Elevations determined.
ZONE AE	Base Flood Elevations determined.
ZONE AH	Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Ele determined.
ZONE AO	Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); ave depths determined. For areas of alluvial fan flooding, velocities also de
ZONE AR	Special Flood Hazard Areas formerly protected from the 1% annual ch flood by a flood control system that was subsequently decertified. Zo AR indicates that the former flood control system is being restored to p protection from the 1% annual chance or greater flood.
ZONE A99	Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations deter
ZONE V	Coastal flood zone with velocity hazard (wave action); no Base Flood determined.
ZONE VE	Coastal flood zone with velocity hazard (wave action); Base Flood Ele determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be k
encroachment so that the 1% annual chance flood can be carried without substantial incr
flood heights.

OTHER FLOOD AREAS

ZONE X Areas of 0.2% annual chance flood; areas of 1% annual chance flood wit average depths of less than 1 foot or with drainage areas less than 1 squa mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

ZONE X Areas determined to be outside the 0.2% annual chance floodplain.

ZONE D Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Area

1% Annual Chance Floodplain Boundary

0.2% Annual Chance Floodplain Boundary

Floodway boundary

Zone D boundary

CBRS and OPA boundary

Boundary dividing Special Flood Hazard Area Zones and bo dividing Special Flood Hazard Areas of different Base Flood flood depths, or flood velocities.

513	Base Flood Elevation line and value; elevation in feet*
(EL 987)	Base Flood Elevation value where uniform within zone; ele feet*

*Referenced to the North American Vertical Datum of 1988

A — A	Cross section line
23 - - - 23	Transect line
	Culvert
	Bridge
45° 02' 08", 93° 02' 12"	Geographic coordinates referenced to the North American D 1983 (NAD 83) Western Hemisphere
4989000 M	1000-meter ticks: Massachusetts State Plane Mainland Zone (FIPS Zone 2001), Lambert Conformal Conic projection
5000000 N	1000-meter Universal Transverse Mercator grid values, zone
DX5510 ×	Bench mark (see explanation in Notes to Users section of th panel)
• M1.5	River Mile

MAP REPOSITORIES
Refer to Map Repositories list on Map Index

EFFECTIVE DATE OF COUNTYWIDE
FLOOD INSURANCE RATE MAP
July 3, 2012

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL

For community map revision history prior to countywide mapping, refer to the Communit
Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your insurance ag
or call the National Flood Insurance Program at 1-800-638-6620.

MAP SCALE 1" = 500'

250 0 500 1000 FEET
150 0 150 300 METERS

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0109F

FIRM

FLOOD INSURANCE RATE MA

ESSEX COUNTY, MASSACHUSETTS (ALL JURISDICTIONS)

PANEL 109 OF 600

(SEE MAP INDEX FOR FIRM PANEL LAY

CONTAINS:

COMMUNITY	NUMBER	PANEL
AMESBURY, CITY OF	250075	0109
NEWBURYPORT, CITY OF	250097	0109
SALISBURY, TOWN OF	250103	0109

Notice to User: The **Map Number** show
should be used when placing map on
Community Number shown above sh
used on insurance applications for the
community.

**MAP NUM
25009CO**

**EFFECTIVE
JULY 3,**

Federal Emergency Management A