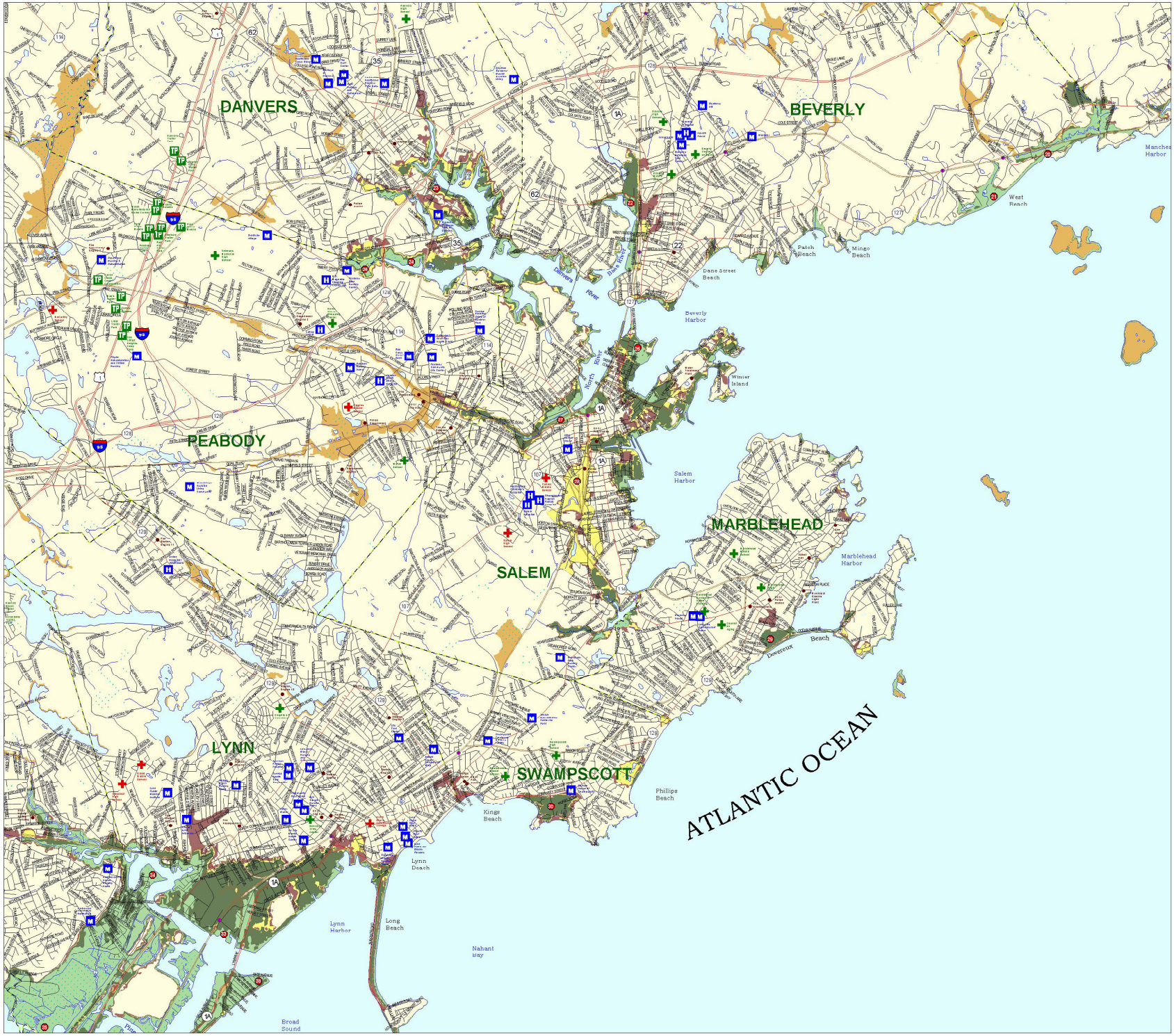
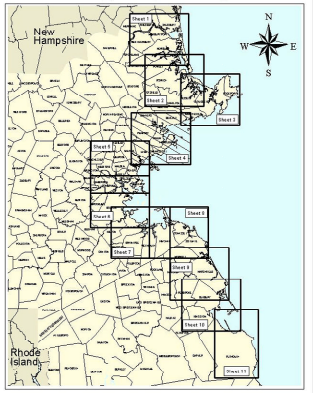


Eastern Massachusetts Hurricane Evacuation Study
Hurricane Surge Inundation Mapping

September 2000

Beverly, Danvers, Lynn, Marblehead, Nahant, Peabody, Salem, and Swampscott



LEGEND

Hurricane Surge Inundation Areas
(Worst Case Flooding by Hurricane Category)

- Category 1
- Category 2
- Category 3
- Category 4

FEMA 100-Year Flood Zone
(Only those areas beyond the hurricane surge inundation areas are shown)

- FEMA 100-year Flood Zone

Other Map Features

- Wetlands
- Water Bodies
- Non-Flooded Land
- Major Roads
- Other Roads
- Railroads
- Rivers & Streams
- Town Boundaries
- Commuter Rail Stations
- T Stops
- Reference Points
- Red Cross Shelters
- Local Shelters
- Hospitals
- Medical Facilities (Nursing Homes, First Aid Facilities)
- Trailer Parks
- Points of Interest

Notes:

1. Hurricane surge elevations were determined by the National Hurricane Center using the SLOSH model (Sea, Lake and Overland Surge from Hurricanes), and assume peak hurricane surge arrives at mean high water.
2. The hurricane surge inundation areas shown on this map depict the inundation that can be expected to result from a worst case combination of hurricane landfall location, forward speed, and direction for each hurricane category.
3. The FEMA 100-year flood zones are shown for reference to depict those areas beyond the hurricane surge inundation areas where coastal or inland flooding may be expected.
4. Ground elevation data was obtained from MassGIS, and were developed from 1:5000 scale aerial photography. The vertical accuracy is approximately +/- 5 feet, and the horizontal accuracy is approximately +/- 10 feet.
5. The locations of shelters were obtained from local Emergency Management Directors and State and Regional Red Cross Officials.
6. The locations of Hospitals and Medical Facilities were obtained from local Emergency Management Directors and existing mapping sources.
7. Basemap features such as roads and streams were obtained from MassGIS, and most have a source scale of 1:24,000.

Point ID	Ground Elevation	Reference Points Peak Hurricane Surge Elevations			
		Category 1	Category 2	Category 3	Category 4
20	8.4	7.9	10.7	12.0	14.2
21	0.0	7.9	10.8	12.1	14.4
22	6.6	8.5	12.0	14.3	17.1
23	5.0	9.1	13.0	16.2	19.6
24	7.1	9.1	13.0	16.2	19.6
25	5.3	8.8	12.5	15.3	18.5
26	6.9	8.2	11.4	13.5	16.1
27	6.3	8.4	11.8	14.0	16.8
28	6.7	8.4	11.7	13.8	16.6
29	3.7	7.9	10.9	11.5	13.4
30	6.1	8.1	11.2	11.7	14.0
33	6.1	8.9	12.5	13.9	16.2
34	6.7	9.3	12.6	13.9	16.8
35	4.7	8.9	13.8	14.1	18.2
38	7.9	8.6	12.4	13.4	16.0

Note:
All elevations are in feet above NGVD (National Geodetic Vertical Datum) of 1929.

US Army Corps of Engineers®
New England District

MASSGIS

0.5 0 0.5 1 Miles

Scale: 1" = 1/2 mile