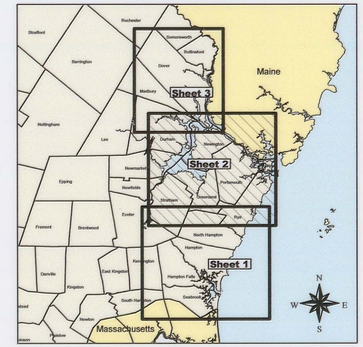
New Hampshire Hurricane Evacuation Study
Hurricane Surge Inundation Mapping

August 2001

Durham, Greenland, New Castle,
Newington, Newmarket, Portsmouth,
Rye and Stratham



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
- 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. FEMA 100-year flood zones are not shown for Durham and Dover. The FEMA data was not available in electronic format for those communities. Please refer to the Flood Insurance Rate Maps for those communities.
5. Ground elevation data was developed from 1:4800 scale aerial photography. The vertical accuracy is approximately +/- 5 feet, and the horizontal accuracy is approximately +/- 10 feet.
6. The locations of shelters were obtained from local Emergency Management Directors and State and Regional Red Cross Officials.
7. The locations of Hospitals and Medical Facilities were obtained from local Emergency Management Directors and existing mapping sources.
8. Basemap features such as roads and streams were obtained from NHGranit, and most have a source scale of 1:24,000.

Reference Points

Point ID	Ground Elevation	Peak Hurricane Surge Elevations			
		Category 1	Category 2	Category 3	Category 4
8	4.9	7.4	9.7	11.8	14.3
9	7.2	7.4	9.7	11.9	14.4
10	6.3	7.4	9.6	11.8	14.3
11	9.0	7.7	10.3	12.8	15.4
13	6.5	8.1	11.1	13.8	16.7
15	5.0	8.1	11.1	13.9	16.7
16	5.0	8.2	11.2	13.9	16.8
17	5.0	8.1	11.2	14.0	16.9
18	5.0	8.1	11.1	13.6	16.2
19	5.0	8.4	11.4	14.4	17.4

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

US Army Corps of Engineers®
New England District

FEMA

GRANIT Complex Systems Research Center

0.5 0 0.5 1 1.5 Miles

Scale: 1" = 1/2 mile

New Hampshire Stateplane Coordinate System, North American Datum 1983, Feet