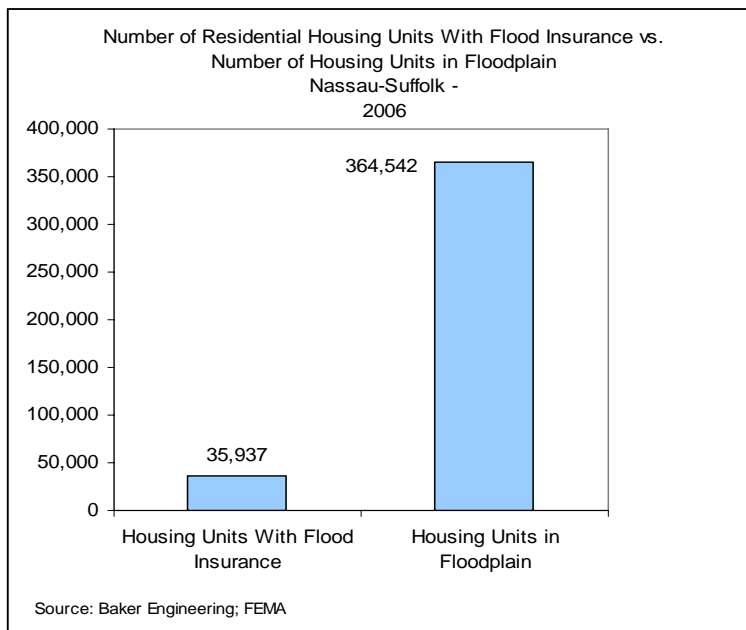


**Long Island Regional Planning Board
Draft Action Memo
July 2006
Prepared by Seth Forman, Ph.D., AICP
Acting Executive Director**

Flood Insurance

The Situation Today

In Nassau county only 16,886 residential housing units carry flood insurance, while there are 128,131 residential housing units in the 100-year floodplain, or what the Federal Emergency Management Agency (FEMA) considers to be a Special Flood Hazard Area (SFHA). In Suffolk county only 19,051 residential housing units carry flood insurance, while there are 236,411 housing units in the 100-year flood plain. In total, 35,937 residential housing units on Long Island carry flood insurance, while 364,542 housing units lie in the 100-year floodplain, a coverage ratio of 9.8 percent. Fewer than half of the nearly 40,000 residents of the vulnerable city of Long Beach carry federal flood insurance. Freeport, where 40,000 mostly middle-class people live, has flood insurance coverage of only 20 percent, while wealthier Southampton has a coverage rate of only 16 percent. There are approximately 350,000 residents in Nassau county living in the 100-year floodplain, and approximately 460,000 in Suffolk.



In short, Long Islanders aren't prepared for hurricanes, and this could be devastating to the regional economy, its infrastructure, and its tax base. Chances are slim that a storm would deluge most of the island's 2.8 million residents with Katrina-style flooding. That

is because the island's "spine" is mostly along high ground. But tens of thousands of eastern Long Islanders live in vulnerable coastal areas, where a major hurricane could trigger devastating storm surges. Even inland, a category 2 or 3 storm would cause miles of wind damage, requiring billions of dollars in repairs and leaving many homes uninhabitable for weeks or months.

Sooner or later, a big storm hitting Long Island is inevitable. The oceans have been warming for several years, fueling more intense storms. The last category 3 hurricane to hit Long Island was in 1938, which preceded an earlier warming cycle. Five storms of moderate or mild intensity hit the island from the 1950s through 1960. It's only a matter of time before one finds the path up the coast again. Today the damage would be worst because erosion and development has left the island with fewer natural barriers and weakened sand dunes.

Flood Insurance

Up until 1968 the only available financial recourse to assist flood victims was in the form of disaster assistance. In the 1950s, further development and encroachment in flood-prone areas made it clear that private insurance companies could not profitably provide such coverage at an affordable price. In 1968, the United States Congress passed the National Flood Insurance Act, creating the National Flood Insurance Program (NFIP). This program was created to reduce federal expenditures for disaster assistance and flood control. It created national flood insurance, floodplain management criteria, and a mapping program and rate structure for floodplains. A key component of the Act prohibits FEMA from providing flood insurance unless a community found to exist in a SFHA enforces floodplain management regulations that meet or exceed the floodplain management criteria established in accordance with Section 1361(c) of the Act.

In 1973 Congress passed the Flood Disaster Protection Act of 1973, prohibiting federal agencies from providing financial assistance for acquisition or construction of buildings and certain disaster assistance in the floodplains in any community that did not participate in the NFIP. In addition, this Mandatory Flood Insurance Purchase Requirement prohibited regulated lending institutions from making, increasing, extending, or renewing any loan for property in a SFHA in a participating community that was not insured. This resulted in an increase of insured properties from 95,000 in 1972 to 4.3 million today.

In 1994 Congress further amended the 1968 and 1973 Acts to increase the amount of insurance that could be purchased and to make other adjustments to the program. Currently, a residential homeowner in a floodplain may purchase up to \$250,000 of flood insurance for structural damage or loss and \$100,000 in damage or loss to personal property.

The 100-Year Flood Standard

In order to assess and manage the flood risk, a national standard was needed. The federal government decided on the 1-percent-annual-chance flood (or 100-year flood, also referred to as the 100-year or “Base Flood”). The 1-percent-annual-chance flood represents a magnitude and frequency that has a statistical probability of being equaled or exceeded in any given year, or stated alternatively, the 100-year flood has a 26 percent (or 1 in 4) chance of occurring over the life of a 30-year mortgage. The 100-year flood standard is used for floodplain management purposes in all of the 19,200 participating communities that have been issued flood hazard maps. It is roughly equivalent to homes that would be damaged or destroyed by flooding from a Category 3 hurricane.

NFIP uses a zone rating system to determine premium rates. High risk areas where mandatory flood insurance requirements are in place are categorized as either “A” zones (non-coastal areas with a 26 percent chance of flooding over the life of a 30-year mortgage) or “V” zones (coastal areas with a 26 percent chance of flooding over the life of a 30-year mortgage). The SFHAs are made up of both A and V zones. Moderate and Low Risk Areas are designated B, C, or X zones. In communities that participate in the NFIP, flood insurance is available to all property owners and renters with moderate to low risk.

The Community Rating System

The NFIP Community Rating System (CRS) is a voluntary incentive program that recognizes and encourages community floodplain management activities that exceed the minimum NFIP requirements. As a result, flood insurance premium rates are discounted to reflect the reduced flood risk resulting from community actions.

For CRS participating communities, flood insurance premium rates are discounted in increments of 5 percent; i.e. a Class 1 community would receive a 45 percent premium discount, while a Class 9 community would receive a 5 percent discount. The CRS classes for local communities are based on 18 creditable activities, organized under four categories; (i) Public Information, (ii) Mapping and Regulations, (iii) Flood Damage Reduction, and (iv) Flood Preparedness.

At the rates effective as of May 1, 2006 coverage of \$250,000 for a residential building constructed before 1974 (“pre-FIRM”) in an A zone would cost \$1,285. If that community gets the highest rating in the Community Rating System that premium could be reduced to \$642.

Long Island Communities and Flood Insurance

There are 46 communities in Nassau county that participate in the NFIP and 39 participating communities in Suffolk. Not all Long Island municipalities or residents are located in the 100-year floodplain, but most who are not are located in moderate risk flood zones, making them eligible for national flood insurance. The NFIP defines a “community” as “any State, or area or political subdivision thereof, or any Indian tribe or authorized tribal organization, or Alaska Native village or authorized native organization,

which has authority to adopt and enforce floodplain management regulations for the areas within its jurisdiction.”

**NFIP Participating Communities
Nassau County**

<u>Community</u>	<u>Type</u>	<u>No. of Res.</u>	<u>No. of Res.</u>
		<u>Properties Insured</u>	<u>Properties Insured</u>
		<u>V Zone</u>	<u>A Zone</u>
ATLANTIC BEACH	Vil.	0	5
BAXTER ESTATES	Vil.	0	2
BAY			
VILLEVILLAGE	Vil.	6	745
CEDARHURST	Vil.	0	77
CENTRE ISLAND	Vil.	6	7
COVE NECK	Vil.	1	4
EAST HILLS	Vil.	0	0
EAST ROCKAWAY	Vil.	0	308
FREEPORT	Vil.	0	2,611
GLEN COVE	CITY	2	78
GREAT NECK	Vil.	0	3
GREAT NECK	Vil.	2	6
HEMPSTEAD	TOWN	42	5,998
HEWLETT BAY	Vil.	0	2
HEWLETT HARBOR	Vil.	0	28
HEWLETT NECK	Vil.	0	17
ISLAND PARK	Vil.	0	497
KENSINGTON	Vil.	0	0
KINGS POINT	Vil.	0	30
LAKE SUCCESS	Vil.	0	0
LATTINGTOWN	Vil.	12	8
LAUREL HOLLOW	Vil.	0	2
LAWRENCE	Vil.	0	62
LONG BEACH	CITY	221	3,022
MALVERNE	Vil.	0	5
MANORHAVEN	Vil.	0	47
MASSAPEQUA			
PARK	Vil.	0	279
MILL NECK	Vil.	0	3
NORTH			
HEMPSTEAD	TOWN	0	32
NORTH HILLS	Vil.	0	0
OYSTER BAY	Vil.	0	5
OYSTER BAY	TOWN	11	2,425
PLANDOME			
HEIGHTS	Vil.	0	1
PLANDOME			
MANOR	Vil.	2	8
PLANDOME	Vil.	0	0
PORT			
WASHINGTON	Vil.	0	20
ROCKVILLE			
CENTRE	Vil.	0	6
ROSLYN HARBOR	Vil.	0	1
ROSLYN VILLAGE	Vil.	0	10
RUSSELL GARDENS	Vil.	0	0
SADDLE ROCK	Vil.	0	8
SANDS POINT	Vil.	1	31
SEA CLIFF	Vil.	0	10
THOMASTON	Vil.	0	0
VALLEY STREAM	Vil.	0	174
WOODSBURGH	Vil.	0	3
Nassau Total		306	16,580

**NFIP Participating Communities
Suffolk County**

<u>Community</u>	<u>Type</u>	<u>No. of Res.</u>	
		<u>Properties Insured</u>	<u>Properties Insured</u>
		<u>V Zone</u>	<u>A Zone</u>
AMITYVILLE	Vil.	0	691
ASHAROKEN	Vil.	2	103
BABYLON	Vil.	1	835
BABYLON	TOWN	132	1,724
BELLE TERRE	Vil.	0	1
BELLPORT	Vil.	0	19
BRIGHTWATERS	Vil.	0	76
BROOKHAVEN	TOWN	448	3,453
DERING HARBOR	Vil.	0	0
EAST HAMPTON	TOWN	231	820
EAST HAMPTON	Vil.	7	51
GREENPORT	Vil.	2	215
HEAD OF THE HARBOR	Vil.	0	0
HUNTINGTON BAY	Vil.	6	22
HUNTINGTON	TOWN	10	89
ISLIP	TOWN	132	2,658
LINDENHURST	Vil.	6	1,057
LLOYD HARBOR	Vil.	1	5
NISSEQUOGUE	Vil.	2	14
NORTH HAVEN	Vil.	4	43
NORTHPORT	Vil.	2	16
OCEAN BEACH	Vil.	38	516
OLD FIELD	Vil.	0	4
PATCHOGUE	Vil.	1	169
POQUOTT	Vil.	0	0
PORT JEFERSON	Vil.	1	12
QUOGUE	Vil.	110	192
RIVERHEAD	TOWN	10	362
SAG HARBOR	Vil.	0	219
SALTAIRE	Vil.	56	296
SHELTER ISLAND	TOWN	1	47
SHOREHAM	VILLAGE	0	0
SMITHTOWN	TOWN	0	7
SOUTHAMPTON	TOWN	375	1,551
SOUTHAMPTON	Vil.	72	78
SOUTHOLD	TOWN	56	736
THE BRANCH	Vil.	0	0
WEST HAMPTON DUNES	Vil.	132	11
WESTHAMPTON BEACH	Vil.	396	725
Suffolk Total		2,234	16,817

Only 8 Long Island communities currently participate in the Community Rating System, which provides insurance discounts.

Staff Recommendation for LIRPB Board Action

Justification: Coastal zone hazard mitigation effects both Nassau and Suffolk counties and comes under the purview of the LIRPB's functions as outlined in Resolution #1 2005 of the Nassau-Suffolk Regional Planning Board (14th Resolved Clause, section (f) "Homeland Security and Emergency Preparedness Planning") and the LIRPB's founding legislation of 1965 (Ordinance No. 6 of 1965 Nassau County Board of Supervisors Section 3, part (c) "collect and distribute information relative to regional planning in the

two counties” and Resolution No. 36 of 1965 Suffolk County Board of Directors Section 3, part (c) “collect and distribute information relative to regional planning in the two counties, through its own staff or such agencies as the Board may designate.”

**Community Rating System
Eligible Communities**

<u>Community Name</u>	<u>Current Class</u>	<u>% Discount SFHA</u>	<u>% Discount Non-SFHA</u>
Village of Bayville	8	10	5
Village of Brightwaters	10	0	0
Village of East Rockaway	10	0	0
Village of Freeport	8	10	5
Village of Lawrence	8	10	5
Village of Northport	9	5	5
Town of Southampton	8	10	5
Village of Southampton	10	0	0

Staff Findings: The LIRPB’s 1984 *Hurricane Damage Mitigation Plan for the South Shore – Nassau and Suffolk Counties, N.Y.* recommended that the NFIP be phased out in V zones. In addition, it was also recommended that the NFIP floodplain management criteria be amended to require communities to impose building moratorium in instances of large scale storm damage.

The reasoning behind these recommendations was that federal flood insurance for high risk coastal communities encourages development in those areas. By insulating people from the full market cost of their choice, in other words, federal flood insurance encourages people to live in vulnerable areas. Staff estimates that the value of two-family and single-family residential structures in the south shore floodplain is approximately \$44 billion (more than 5-1/2 times greater than the entire property tax warrant for both Nassau and Suffolk counties of roughly \$8 billion). Structures in the V zone (coastal high risk) account for almost \$12 billion of this amount.

Nevertheless, the LIRPB’s 1984 *Hurricane Damage Mitigation Plan for the South Shore – Nassau and Suffolk Counties, N.Y.* had as two of its stated goals to “minimize adverse economic impacts resulting from severe storm floods” and “minimize future government expenditures for post-storm disaster recovery assistance” (p. xviii). And while government subsidized insurance might encourage development in hazardous zones, it is still the best way to indemnify the island’s homeowners and municipalities against severe loss.

Staff Recommendation I:

The LIRPB could pass a resolution alerting Long Island homeowners and communities of the availability of NFIP, the mandate to have it in SFHA zones, and the benefits of having flood insurance.

Staff Recommendation II:

The resolution could be accompanied by the posting to the internet of a list of participating NFIP communities, a list of census blocks and/or places that are located in A and V zones, relevant maps, and other pertinent information.

Staff Recommendation III:

The LIRPB could take steps to encourage participating Long Island communities to become eligible for Community Rating System discounts. A catalyst for these activities might be setting aside a board meeting for a presentation by Baker Engineering, the consultants for FEMA who assist communities in floodplain management.

Possible areas of assistance from LIRPB could include providing communities with public information on flood zones, data on open space preservation, stormwater management, acquisition/relocation plans, flood protection, and drainage systems maintenance, flood warning programs, levee and dam safety. There may be small amounts of grant money available for these activities.

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Addendum

FROM NEWSDAY.COM

September 29, 2006, 9:24 AM EDT

While New Orleans is still considered the most vulnerable area in the nation if a hurricane should hit, Long Island is not immune to the wrath of a major storm.

Dr. Stephen P. Leatherman, director of the International Hurricane Research Center, has released the Top 10 List that nobody wants to be on -- "10 Most Vulnerable US Mainland Areas to Hurricanes" -- and Long Island's East End was ranked number eight on the list.

To nobody's surprise, "The Big Easy" tops the list with the protective levees of this below-sea level city being in little better shape than when Hurricane Katrina flooded 80 percent of New Orleans last year.

Florida dominates the list with four out of the ten most vulnerable areas, with its long shoreline that includes both the Atlantic and Gulf Coasts.

The only other area that is protected from flooding by levees (e.g., the 140-mile long Hoover Dike) is adjacent to Lake Okeechobee, Florida, where the second worst hurricane disaster for life loss in US history occurred in 1928.

Twelve criteria were used to evaluate the vulnerability of US mainland areas to hurricanes. Cyclonic energy (hurricane frequency and storm intensity) and levee/dike failure were primary determinants of vulnerability. Physical factors included storm surge and freshwater flooding potential as well as coastal erosion trends and island breaching history. Socioeconomic indicators involved populations at risk, evacuation distance and routes, what's at risk, and local/state capabilities to respond to major hurricane impacts.

The Florida Keys ranked number three on the list, coastal Mississippi was four, Miami/Ft. Lauderdale, Florida, was five, Galveston/Houston, Texas -- six, Cap Hatteras, North Carolina -- seven, the eastern Long Island, Wilmington North Carolina, and lastly, Tampa/St. Petersburg, Florida.

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