

# Mitigation Education for Natural Disasters

What you need to know ...

# M.E.N.D.

Suffolk County applied for and received a grant from the Federal Emergency Management Agency (FEMA) through the NY State Emergency Management Office (SEMO) to conduct a public education campaign on coastal hazards.

Public meetings are being hosted by your local County Legislators in the most at-risk areas of the County.

# M.E.N.D.

The main natural hazards that we face in Suffolk County include:

- Nor'easters
- Severe Winter Storms
- Severe Thunderstorms
- Hurricanes
- Coastal Erosion
- Shallow Groundwater
- Flooding

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The effects of these hazards can be devastating

- Homes destroyed
- Homes damaged - unlivable
- Homes flooded
- Roads impassable
- Loss of power
- Loss of communications
- Inability to get help

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Eastern Long Island is in the top ten list of areas in the U.S. most vulnerable to hurricanes\*

We are sure to be hit again.....

\* Based on the International Hurricane Research Center at Florida International University

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**Do you remember.....**

**Hurricane Gloria – 1985**

- hundreds of thousands of people lost power
- 48 homes destroyed & thousands damaged
- \$4.3 Billion in damages (2010 \$)
- Category 1 Storm

**Fading from memory but all too real.....**

**Long Island Express – 1938**

- 63,000 people homeless
- 700 deaths and thousands of injuries
- \$6.1 Billion in damages (2010 \$)
- Weak Category 3 Storm

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## Potential for devastation –

In September 2008 a Category 2 Storm, Hurricane Ike, struck Galveston, Texas in an area very similar to Long Island with barrier beaches and a low lying flat shoreline. Based on FEMA's Impact Report, the storm brought

- 110 mph winds
- 20 foot storm surge
- \$ 24 Billion in damages
- \$ 3.4 Billion in private property damages
- 8,000 homes destroyed
- 150,000 homes damaged

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## NATIONAL WEATHER SERVICE – ATLANTIC BASIN SEASONAL HURRICANE FORECAST FOR 2010

Forecast Parameter and 1950–2000 Climatology (in parentheses)

2010	Issue Date 9 December 2009	Issue Date 7 April
Named Storms (NS) (9.6)	11–16	15
Named Storm Days (NSD) (49.1)	51–75	75
Hurricanes (H) (5.9)	6–8	8
Hurricane Days (HD) (24.5)	24–39	35
Major Hurricanes (MH) (2.3)	3–5	4
Major Hurricane Days (MHD) (5.0)	6–12	10
Accumulated Cyclone Energy (ACE) (96.1)	100–162	150
Net Tropical Cyclone Activity (NTC) (100%)	108–172	160



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## **IF A MAJOR STORM WAS APPROACHING –**

- what would you do?
- stay or leave?
- how would you decide?
- how would you prepare?
- where would you go?
- what would you take with you?

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## WHO OR WHAT IS GOING TO HELP YOU

Relatives  
Neighbors  
Friends  
Police  
Fire Departments  
Volunteer Agencies  
C.E.R.T. members

Ambulance Companies  
Town  
County  
State  
Federal  
Red Cross

????????????????????

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**IN THE SHORT TERM - THE ANSWER IS  
MAYBE NO ONE**

**YOU NEED TO HELP YOURSELF**

# M.E.N.D.

Do you know if you live in a storm flood zone?

SLOSH maps

FEMA Flood maps

Do you know where your local shelters are?

Visit the Suffolk County website at

[www.suffolkcountyny.gov](http://www.suffolkcountyny.gov)

and follow the links to the Department of Fire, Rescue and Emergency Services and then into the Office of Emergency Management


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Suffolk County Emergency Shelters - Windows Internet Explorer  
http://gis.co.suffolk.ny.us/website/flood/viewer.htm

## Suffolk County Emergency Shelters





Select from list to zoom to Town

### Locate Address



Map showing storm surge zones and shelter locations. A red pin marks the address 1 Baylawn Ave, 11726. Shelter locations are indicated by house icons.

### Storm Legend

-  **Category One:**  
Winds 74-95 mph.  
Storm surge generally 4-5 ft above normal.
-  **Category Two:**  
Winds 96-110 mph.  
Storm surge generally 6-8 feet above normal.
-  **Category Three:**  
Winds 111-130 mph.  
Storm surge generally 9-12 ft above normal.
-  **Category Four:**  
Winds 131-155 mph.  
Storm surge generally 13-18 ft above normal.

[Disclaimer](#)

To see the Storm Surge Map and Sheltering Facilities closest to your area, select the "Locate Address" icon on the top left side of this map and enter your address.

Suffolk County Department of Information Technology 2005 | 2010 ©

Done Internet 100%

Start 2 Microsoft... 3 Internet... AmityvilleCop... MEND Mitig... Microsoft Po... Search Desktop 3:41 PM

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The screenshot shows a Windows Internet Explorer browser window titled "Query/Selection Results - Windows Internet Explorer". The address bar shows "about:blank". The main content area has a blue background and is titled "Emergency Shelters". It contains a table with 4 rows and 7 columns. Below the table is a "Close Window" button. The Windows taskbar at the bottom shows the Start button, several open applications (Microsoft Office Word, Internet Explorer, AmityvilleCop..., MEND Mitig..., Microsoft Po...), a search bar, and system tray icons including the clock showing 3:42 PM.

Rec	Shelter Name	Address	Village	Township	Zip Code	School District
1	Edmund W. Miles Middle	501 Route 110 & North Dr.	Amityville	Babylon	11701	Amityville
2	Amityville Memorial High	250 Merrick Road	Amityville	Babylon	11701	Amityville
3	Lindenhurst Middle School	350 S. Wellwod Ave.	Lindenhurst	Babylon	11757	Lindenhurst
4	Lindenhurst Senior High School	300 Charles Street	Lindenhurst	Babylon	11757	Lindenhurst

# M.E.N.D.

## FEMA FLOOD MAPS

Visit the Federal Emergency Management Agency website at

[www.fema.com](http://www.fema.com)

and follow the links to flood information and flood maps

# M.E.N.D.

The screenshot displays a web browser window titled "Intranet Viewer [36103C0842H.png] - Windows Internet Explorer". The address bar shows the URL: [http://map1.msc.fema.gov/idms/IntraView.cgi?ROT=0&D\\_X=7200&D\\_Y=5175&D\\_ZM=0.038647&D\\_SX=55](http://map1.msc.fema.gov/idms/IntraView.cgi?ROT=0&D_X=7200&D_Y=5175&D_ZM=0.038647&D_SX=55). The browser interface includes a menu bar (File, Edit, View, Favorites, Tools, Help), a search bar with "Google" and "Go" buttons, and a toolbar with various navigation and utility icons. Below the browser window, the FEMA Intranet Viewer application is visible. It features a top navigation bar with the FEMA logo, an "Info" icon, a "Scale: 8%" indicator, and a "LOMC: 06-02-B071V-360790" dropdown menu. The main content area is a large map of a residential area, overlaid with a flood risk map. The map shows various zones, including "ZONE A", "ZONE B", and "ZONE C", and is labeled with "Village of Amherst 360790". A legend on the right side of the map provides details about the flood risk levels. On the left side of the map, there is a "Help" section with a question mark icon and a "Make a FIRMette" button. The bottom of the screen shows the Windows taskbar with the Start button, several open applications (Microsoft Office, FEMA Map S..., Intranetix ...), a search bar, and the system tray showing the time as 10:31 AM.



# M.E.N.D.

You need to Plan

You need to Prepare

You need to .....

# M.E.N.D.

## PLAN FOR

Evacuation – where to go – what to bring  
Shelter in Place – what to do – how to  
prepare – what supplies do you need  
until help arrives

# M.E.N.D.

## EVACUATION

Evacuating Suffolk County is NOT practical  
Local evacuations to higher ground are possible and if you live in a Flood Zone you will be expected to evacuate if the conditions warrant

County & Private Bus Companies

LIRR

Wheelchair Accessible Vehicles

Priorities – Hospitals, Nursing Homes, Mobile Home & Trailer Parks

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## SHELTERS

General Population – American Red Cross has 145 Shelters in Suffolk County – the Top 25 will be opened first – directions on website

County Run Shelters –

- For First Responders

- Pet Friendly Shelters – currently 3 at SC Fire Academy, Suffolk County Sports Park (LI Ducks Stadium) & SCCC Campuses

Special Needs Shelters –

- John J. Foley Nursing Facility

- SCCC Campuses

- Town Special Needs Shelters

# M.E.N.D.

## PREPARE FOR

your family's safety –

have a plan

physical storm damage –

mitigating actions

property and financial losses –

documentation

insurance claims –

understand coverage – options

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## DEVELOP EMERGENCY PLAN

Home / Workplace

Choose a person to contact – preferably  
an out of area friend or relative.

Choose a meeting area

Plan for Special Needs

Plan for pets \* IDENTITY TAGS/CHIPS \*

Post emergency numbers by the phone

Secure Emergency Supplies

Be Informed – Stay Informed

Listen to Local Radio / TV for information

BEFORE an emergency occurs **PREPARE!!!!**

# M.E.N.D.

## ASSEMBLE A GO KIT

Flash Light

Important Documents

First Aid Materials

Money – Cash

Keys

Non-perishable supply of food  
for 4–5 days

Water

Extra Clothes for all

Battery operated radio

Contact Information

Medications

Whistle

Batteries

Plastic Bags

Map

Copy of Family Plan

Personal Hygiene Items

Toys

# M.E.N.D.

## ASSEMBLE EMERGENCY SUPPLIES AT HOME

Flash Light

Important Documents

First Aid Materials

Money – Cash

Keys

Non-perishable supply of food  
for 4–5 days

Water

Extra Clothes for all

Battery operated radio

Contact Information

Medications

Whistle

Batteries

Plastic Bags

Map

Copy of Family Plan

Personal Hygiene Items

Toys



# M.E.N.D.

## BEFORE THE STORM

Secure all loose items in the yard

Trim trees that are close to the house

Board up windows

Fill car fuel tanks

Water supply – 1 gal/person/day – 3 days

Non-perishable food for 3 days

Turn refrigerator to coldest setting

Close all windows and interior doors

During the storm

Stay in an interior first floor room

Stay away from windows and doors

**STAY INFORMED AND KNOW WHERE TO GET  
INFORMATION**

# M.E.N.D.

## COMMUNICATIONS –IN CASE OF EMERGENCY – “ICE”

List emergency contact information in a secure place

Currently many cell providers are including “ICE” in the base menu of phone address books

Encourages people to enter emergency contacts

# M.E.N.D.

## WHAT IS HAZARD MITIGATION?

“Sustained action taken to reduce or eliminate the long-term risk to life and property from a hazard event”

OR

“Any action taken to reduce future disaster losses”

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## Mitigation Actions fall into Six General Categories

- ▶ **Prevention** – measures such as planning and zoning, open space preservation, land development regulations, building codes, storm water management
- ▶ **Property Protection** – measures such as acquisition, relocation, storm shutters, rebuilding, barriers, floodproofing, insurance, and structural retrofits for high winds
- ▶ **Public Education and Awareness** – measures such as outreach projects, real estate disclosure, hazard information centers, technical assistance
- ▶ **Natural Resource Protection** – measures such as erosion and sediment control, stream corridor protection, vegetative management and wetlands preservation
- ▶ **Emergency Services** – measures such as hazard threat recognition, hazard warning systems, emergency response, protection of critical facilities, and health and safety maintenance
- ▶ **Structural Projects** – measures such as seawalls, bulkheads, retaining walls, channel modifications, storm sewers, and retrofitting buildings and elevated roadways

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## **Mitigating Actions Can Include -**

Elevating appliances, heating systems & electrical equipment

Elevating homes

Installing sump pumps

Installing drainage systems

Installing shutters and weatherproofing

Relocating structures

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## MITIGATION FUNDING

Federal funding for Mitigation Projects is available to local governments through the following programs

- Hazard Mitigation Grant Program (HMGP)
- Pre-Disaster Mitigation Program (PDM)
- Flood Mitigation Grant Program (FMP)
- Repetitive Flood Claims Program (RFC)
- Severe Repetitive Loss Program (SRLP)

Suffolk County and most of the Towns and Villages in the county have the required FEMA approved Hazard Mitigation Plan in place and are eligible to apply for grants

Additional information available at

[www.semo.state.ny.us](http://www.semo.state.ny.us) and  
[www.suffolkcounyny.gov/RESPOND](http://www.suffolkcounyny.gov/RESPOND)

# M.E.N.D.

## **FOLLOWING A DISASTER – WHAT DO YOU DO?**

Ensure your Safety  
Take Pictures  
Document Losses  
Insurance Claims  
Await Assistance  
“Get Back to Normal”

# M.E.N.D.

## HOMEOWNERS INSURANCE

What is covered under a Homeowner Policy

What is NOT covered

What is the definition of Flood Insurance coverage

How does it apply to different types of water damage claims

What is a hurricane deductible and what does it really mean

What you can do to minimize hurricane damage to your home



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**WHAT WILL NATIONAL FLOOD INSURANCE  
PROGRAMS DO**

National Flood Insurance Program  
Community Rating System

# M.E.N.D.

## **NATIONAL FLOOD INSURANCE PROGRAM (NFIP)**

Background and History

Recent Mapping

Grandfathering

Coverage

Why do you need Insurance vs. Disaster  
Assistance

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## Here are some common myths and facts about the NFIP

- **MYTH: My homeowner's insurance will cover me for flood damage.**  
**FACT:** Homeowners' insurance does not cover flood damage. You need a separate flood insurance policy. Federal flood insurance, purchased through your insurance agent or company, is the only guaranteed flood insurance available.
- **MYTH: Flood insurance is only available to homeowners.**  
**FACT:** Renters can also purchase policies to cover personal property. Business owners can get coverage for buildings and their contents, including equipment.

# M.E.N.D.

## NFIP – continued

- **MYTH: I can't buy flood insurance because my home has been flooded before.**  
**FACT:** It doesn't matter if your home has been flooded before. As long as your community participates in the National Flood Insurance Program, you can buy flood insurance.
- **MYTH: I can get federal disaster aid if my home has flood damage. I don't need to buy flood insurance.**  
**FACT:** Federal Emergency Management Agency disaster assistance is only available after a Presidential disaster declaration that includes the county in which you live. You may have flood damage but your county might not be designated for federal disaster aid. Flood insurance policies pay claims whether or not a disaster is declared.

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## NFIP – continued

- The time to buy flood insurance is now. After you purchase a policy, there is a 30-day waiting period before it goes into effect.
- For more information talk to your insurance agent. You can also call toll-free 800-427-4661 or visit [www.floodsmart.gov](http://www.floodsmart.gov) to find out how to prepare for a flood, assess your risk, estimate the cost of flood insurance premiums, find local insurance agents and get links to community based information.
- FEMA's mission is to support our citizens and first responders to ensure that as a nation we work together to build, sustain, and improve our capability to prepare for, protect against, respond to, recover from, and mitigate all hazards.

# M.E.N.D.

## **COMMUNITY RATING SYSTEM – (CRS)**

Background of the CRS

NY State Facts

Discounts

Activities

What it takes to join

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## Community Rating System (CRS)

Method for Communities to reduce NFIP insurance premiums paid by homeowners through actions taken to control losses

NFIP Premium discounts of up to 45% can be achieved incrementally

**M.E.N.D.**

**HOW DOES GOVERNMENT'S DISASTER  
"PROCESS" WORK**



# M.E.N.D.

## **PUBLIC EXPECTATIONS**

Citizens Alerted in Advance  
Magnitude Assessed Quickly  
Citizens Kept Properly Informed  
Dangerous Areas Safely Evacuated  
Citizens Relocated to Safe Place If Necessary  
Services Rapidly Restored  
Recovery Assistance Provided  
Impact of Recurrence Mitigated

# M.E.N.D.

What will the local municipalities do?

What will the County do?

What will the State do?

**M.E.N.D.**

**ALL EMERGENCIES BEGIN & END LOCALLY**

# M.E.N.D.

## The County's Emergency Preparedness Efforts Focus on

Planning

Evacuation

Shelters

Special Needs Population

Pets

Logistics

Dissemination of Information

Communications

# M.E.N.D.

Suffolk County's Emergency Operations Center (EOC) is activated prior to an emergency and works with local, state and federal officials in

Shelter Management  
Planning

Resource Management  
Incident Response

In an emergency representatives from Local Governments, Utilities, Transportation, Fire, Police, Health, EMS, Public Works, Volunteers, and Private Sector work together in the EOC to address needs

# M.E.N.D.

## WHAT WILL FEDERAL AUTHORITIES DO

Public Assistance – for public property & critical facilities  
Threshold based on per-capita levels to be met at both county and state levels before PA can be provided

Individual Assistance – for private property  
Criteria for IA based on number of homes destroyed at county level before IA can be provided

Small Business Administration – low interest rate loans for residents, businesses and non-profit organizations  
Criteria for loan applications based on un-insured losses

# M.E.N.D.

## **PUBLIC ASSISTANCE (PA)**

Preliminary damage assessments conducted  
Damages summarized  
If County and State damage thresholds met  
Request for Presidential Disaster Declaration  
Disaster Declaration Announced  
Recovery Projects defined  
Funding 75% federal / 25% local cost share

# M.E.N.D.

## INDIVIDUAL ASSISTANCE (IA)

Preliminary damage assessments conducted  
Damages summarized  
If County damage criteria met  
Request for Presidential Disaster Declaration  
Disaster Declaration Announced  
Funding 100% federal / 0% local cost share



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## **SMALL BUSINESS ADMINISTRATION (SBA)**

At least 25 homes (primary residences) and/or businesses which have uninsured losses of 40% or more

Low interest rate loans made available to residents for un-insured losses to repair or replace damaged or destroyed real estate and personal property

Businesses and non-profit organizations may borrow to repair or replace damaged or destroyed real estate, machinery and equipment, inventory and other business assets

# M.E.N.D.

## WHAT SHOULD YOU DO

Educate Yourself

Prepare

**M.E.N.D.**

**BEING PREPARED IS NOT JUST  
KNOWING WHAT TO DO ...  
IT MIGHT BE KNOWING WHAT NOT  
TO DO ... OR WHEN TO DO IT!  
KNOWLEDGE IS POWER ... SO BE  
INFORMED AND STAY INFORMED  
BEFORE, DURING AND AFTER AN  
EVENT!**

# M.E.N.D.

For additional information about what to do and how to prepare please visit the following websites:

Federal Emergency Management Agency

[www.fema.gov](http://www.fema.gov)

NY State Emergency Management Office

[www.semo.state.ny.us](http://www.semo.state.ny.us)

Suffolk County Office of Emergency Management

[www.suffolkcountyny.gov](http://www.suffolkcountyny.gov)

– Office of Emergency Management

American Red Cross

[www.redcross.org](http://www.redcross.org)

# M.E.N.D.

Information such as the following and more is available at the Suffolk County Website

[www.suffolkcountyny.gov](http://www.suffolkcountyny.gov) (go to the Department of Fire, Rescue and Emergency Services – Office of Emergency Management)

[The Great Hurricane Blowout – Learn about Hurricane Preparedness](#)

[Plan it Now –Hurricane Preparedness– Disaster Happens When Preparation Doesn't](#)

[Flood Awareness in Spring](#)

[Hurricane Planning & Preparation](#)

[Are You Aware & Prepared?](#)

[Natural Disasters](#)

[What to do Ahead of Time](#)