



USCG AUX-IM Member Training

NOTICE:

The information contained within this document was taken from FEMA which is an open source document for training citizens of the United States.

Please feel free to modify anything in this presentation to fit the needs of your Flotilla members or Staff Incident Management (IM) team.

Respectfully,

Mr. Sankey Blanton, Flotilla 054-09-08, FSO-MT
Dr. Randall Egsegian, DSO-IM, 5th Southern District



No government funding was used to create this Power Point.

5SR Disaster and Emergency Preparedness for Flooding and Hurricanes



Hurricane Floyd

GOES-8 Colorized IR Image
September 16, 1999 @ 0645 UTC



TIPS TO PREPARE FOR A FLOOD

Flooding can occur in several ways: Strong winds from tropical cyclones cause a storm surge by pushing seawater onto land. Water containment systems break, such as levees, dams, and water or sewer systems. Excessive rain cannot be fully absorbed into the ground.

The strong winds of a hurricane can push large amounts of seawater up onto the land, causing a storm surge. A storm surge combines with the ocean's tide to produce a storm-tide surge. Storm-tide surges have been registered as high as almost 35 feet above normal sea level and can cause significant flooding across a large area. This generally occurs over a short period, typically 4 to 8 hours, but in some areas, it can take much longer for the water to recede to its pre-storm level.



Long Beach, NC, September 17, 1999 -- Hurricane Floyd brought a devastating 15-foot-high storm surge that destroyed or damaged hundreds of houses along this community's ocean front.

This house is one of many that are barely standing amidst the debris.

Photo by Dave Gatley
- FEMA News Photo





Evacuate

Avoid being trapped when floodwaters threaten your area, the best action to protect yourself and your family is to evacuate before flooding starts.

Know and follow the directions from local officials for community evacuation or seek high ground for localized flooding. If you do not evacuate before flooding occurs or you are trapped by flash flooding, do not enter flooded areas or moving water either on foot or in a vehicle, including areas that appear to have only inches of water.





Elevate, Waterproof, & Clear Debris

Your goal now, before a flood occurs, is to reduce risk of damage to structures from flooding. This means elevating critical utilities, such as electrical panels, switches, sockets, wiring, appliances, and heating systems, and waterproofing basements. Make sure that basements are waterproofed and your sump pump is working and then install a battery-operated backup in case of a power failure. Installing a water alarm will let you know if water is accumulating in your basement. Clear debris from gutters & downspouts. Move furniture, valuables and important documents to a safe place. Anchor any fuel tanks.





Know Your Flood Risk

Learn whether you live, work, or travel through areas that are prone to flooding. To help communities understand their risk of flooding, FEMA) creates flood maps (Flood Insurance Rate Maps, or FIRMs) to show the locations of high-risk, moderate-to-low risk, and undetermined risk areas. To check flood risk, enter your address at

www.floodsmart.gov/floodsmart/pages/flooding_flood_risks/defining_flood_risk.jsp

According to the National Flood Insurance Program (NFIP), more than 25 percent of all flood claims each year come from homes outside areas at high risk for flooding. To participate in the NFIP, local communities must adopt floodplain management regulations that meet or exceed its minimum requirements.





Know How to Stay Informed

Receiving timely information about weather conditions or other emergency events can make all the difference in knowing when to take action to be safe.

- Monitor the weather reports provided by your local news media.
- Many communities have text or email alerting systems for emergency notifications. To find out what alerts are available in your area, do an Internet search with your town, city, or county name and the word “alerts.”
- Consider buying a NOAA Weather Radio (NWR) All Hazards receiver, which receives broadcast alerts directly from NWS. You can purchase these at many retail outlets, electronics & big box stores, or online.





Know Evacuation Routes; Plan Transportation & a Place to Stay

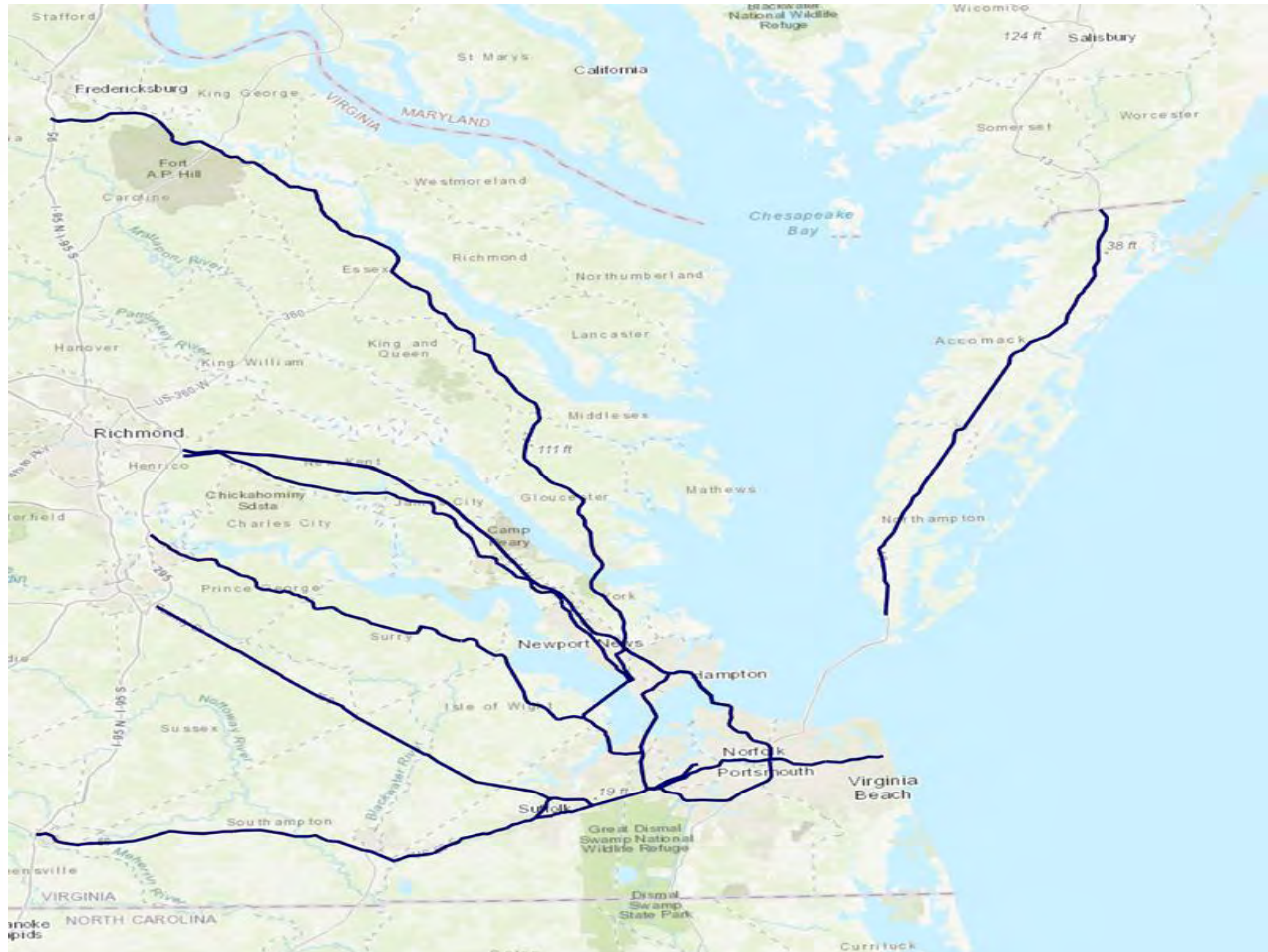
- The safest way to survive a flood is to evacuate the area if advised to leave. To ensure that you will be able to act quickly should the need arise, you need to plan ahead.
- Know your community's local flood evacuation plan and identify several escape routes for your location if roads are blocked; include plans to evacuate people with disabilities and others with access and functional needs, pets, service animals, and livestock.
- If you will evacuate by car, keep your car fueled and in good condition. Keep emergency supplies and a change of clothes in your car.





Virginia coastal evacuation plans & routes

(NOTE: check wind restrictions on ferry routes, the Chesapeake Bay Bridge Tunnel and all major highway bridges).





Maryland coastal evacuation plans & routes

(NOTE: check wind restrictions on ferry routes, The Governor Harry W. Nice Memorial Bridge, Chesapeake Bay Bridge, and all major highway bridges).

<http://news.maryland.gov/mema/>

<http://mema.maryland.gov/Pages/know-your-zone-md.aspx/UUknZ/MKacZ/WiLSZ/TpkPZ/RVLOZ/PZRdZ/>

<http://mema.maryland.gov/Documents/MDHurricaneEvacGuide.pdf>

WHAT DOES “KNOW YOUR ZONE” MEAN?

Know Your Zone serves roughly 275 thousand residents who live in areas of Maryland most vulnerable to hurricanes and other tropical storms – most notably the Eastern Shore and areas located near the Chesapeake Bay, tidal areas of the Potomac and along other tributaries. Nineteen localities, which include the City of Annapolis, City of Baltimore, Town of Ocean City, and the counties of Anne Arundel, Baltimore, Calvert, Caroline, Cecil, Charles, Dorchester, Harford, Kent, Prince George’s, Queen Anne’s, Somerset, St. Mary’s, Talbot, Wicomico, and Worcester, participated in the Know Your Zone evacuation initiative as part of Maryland’s Hurricane Evacuation Study . Tiered evacuation zones were developed in close coordination with local emergency managers throughout those high-risk areas based on the most up-to-date engineering data for the region.

Zones are designated A through C. They provide residents with clarity on whether they should evacuate in an emergency or shelter at home, based on their physical street address and the nature of the emergency event. When a serious storm is expected to threaten or impact those areas of Maryland, state and local emergency agencies will work with local news media outlets, as well as social media channels, that will then broadcast and publish evacuation directives to the public.

Find your evacuation zone at ***KnowYourZoneMD.com***. The website allows you to enter your physical residence or business address in a search bar. Then, it will display a detailed, interactive, color-coded map showing each evacuation zone. Residents can use the map to view their region or zoom in to their residential neighborhood and street. Residents without Internet access should contact their local emergency management office or call 2-1-1 for assistance.

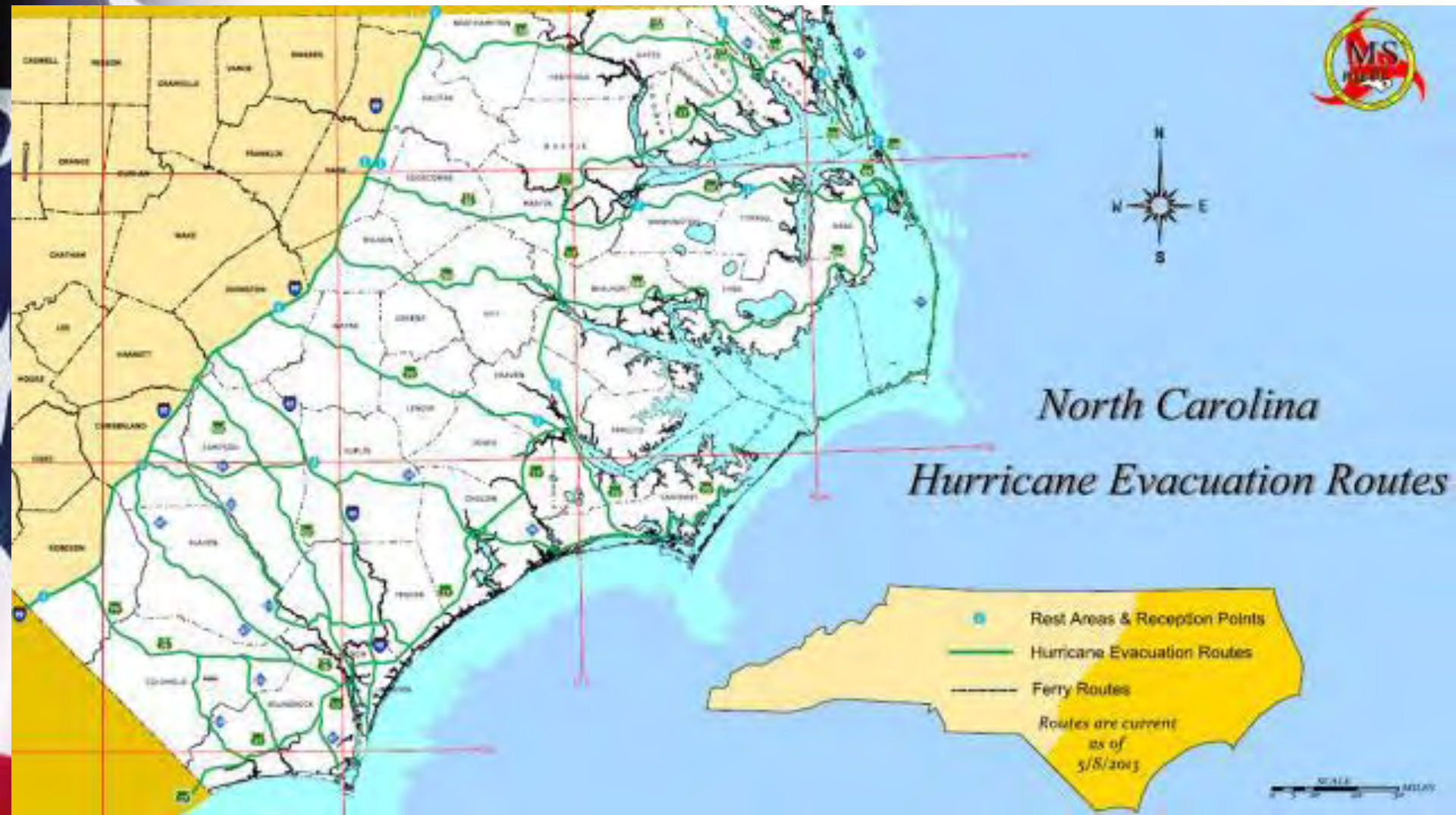
Residents not residing in a pre-identified evacuation zone should listen to local evacuation orders from local and state emergency agencies to determine if and when to evacuate.





NC coastal evacuation plans

(NOTE: check wind restrictions on ferry routes and all major highway bridges)





Practice How You Will Communicate with Family Members

In a dangerous situation, your first thoughts will be the safety of family and friends. In case you are not together when authorities issue a flood watch or warning, practice how you will communicate with each other.

Remember that sending a text is often faster than making a phone call. Keep important numbers written down in your wallet not just in your phone. Decide where members of your household will meet after the flood.

Visit www.ready.gov/make-a-plan for instructions on developing a Household Communication Plan.





BUILDING A SURVIVAL KIT

Basic Disaster Supplies Kit

To assemble your kit, store items in airtight plastic bags and put your entire disaster supplies kit in one or two easy-to-carry containers such as plastic bins or a duffel bag. A basic emergency supply kit could include the following recommended items:

Water - one gallon of water per person per day for at least three days, for drinking and sanitation

Food - at least a three-day supply of non-perishable food / manual can opener

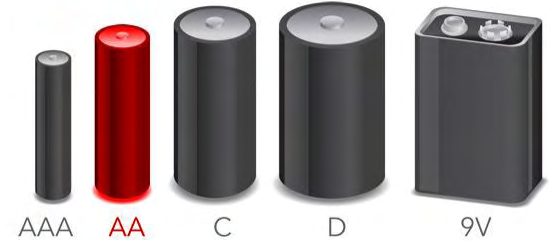
Battery-powered or hand crank radio and a NOAA Weather Radio with tone alert

Flashlight / Extra batteries

First aid kit Whistle to signal for help

Dust mask to help filter contaminated air and plastic sheeting and **duct tape** to shelter-in-place





Be sure and have enough for all members, but you don't have to have 5-star, high value (\$) items.





A KIT FOR YOUR VEHICLE

In case you are stranded, keep an emergency supply kit in your vehicle with the addition of these automobile extras: Jumper cables / Flares or reflective triangle / Ice scraper / Car cell phone charger.

Prepare Your Vehicle for Emergencies

Have a mechanic check the following on your vehicle prior to an emergency: Antifreeze levels / Battery & ignition system / Brakes / Exhaust system / Fuel and air filters / Heater and defroster / Lights and flashing hazard lights / Oil / Thermostat / Windshield wiper equipment and washer fluid level.



Vehicle Safety Tips



Keep your gas tank full in case of evacuation or power outages. Ensure tires have adequate tread or any required chains or studs.

Do not drive through flooded areas. Six inches of water can cause a vehicle to lose control or stall. A foot of water will float many cars.

Be aware of areas where floodwaters have receded. Roads may have weakened and could collapse under the weight of a car. If a power line falls on your car you are at risk of electrical shock, stay inside until a trained person removes the wire. If there is an explosion or other factor that makes it difficult to control the vehicle, pull over, stop the car and set the parking brake.





TIPS TO KEEP PETS SAFE

Make a plan. Remember, during a disaster what's good for you is good for your pet, so get them ready today.

Never leave a pet chained outdoors.

Plan options include:

Create a buddy system in case you're not home.

Ask a trusted neighbor to check on your animals.

Identify shelters.

For public health reasons, many emergency shelters cannot accept pets. Find pet friendly hotels along your evacuation route; keep a list in your pet's emergency kit.

Locate boarding facilities or animal hospitals near your evacuation shelter. For additional information please visit <https://www.ready.gov/animals>





HELPING NEIGHBORS

Comprehensive preparedness requires the whole community to participate and FEMA places tremendous value on communities that embrace a local "Neighbors Helping Neighbors" approach.

Neighbors Helping Neighbors empowers community leaders to involve and educate individuals from their community about simple steps one can take to become more prepared.

Forty-six percent of individuals expect to rely a great deal on people in their neighborhood for assistance within the first 72 hours (minimum) after a disaster.

When the whole community comes together to respond to and help recover from these emergencies - neighbor helping neighbor - we can often meet the needs of everyone.





PLACES TO TURN TO FOR ASSISTANCE

This link will provide disaster assistance:

<https://www.disasterassistance.gov/>

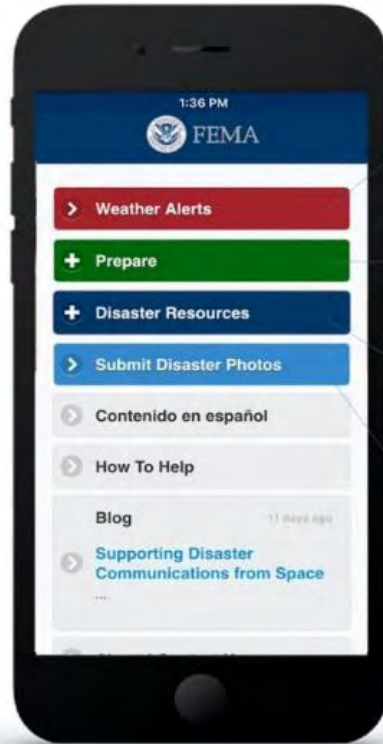
The site will provide links for the following:
Application Checklist / FAQs / National Flood Insurance Program / Food, Housing & Other Immediate Needs / Other Recovery Help / Form of Assistance / Transitional Sheltering Assistance (TSA) Hotel Locator





FEMA Mobile App

<https://www.fema.gov/mobile-app>



Receive alerts from the National Weather Service for up to five locations.



Get safety reminders, read tips to survive natural disasters, and customize your emergency checklist.



Locate open shelters and where to talk to FEMA in person (or on the phone).



Upload and share your disaster photos to help first responders.





State Emergency APPs



This app will provide the following information: Local Weather / Road Conditions / Power Outages / Open Shelters / Evacuations / NC Hazards / Emergency Plan & Kit info. / Flood Gages / Disaster Assistance

This app will provide the following information: Alerts / Planning / Supply Kit / Local Recourses / Disaster News / Threats



This app will provide the following information:

- Prepare Emergency Kits through interactive checklists
- View Emergency Preparation Guides for different types of emergencies
- Create customized Family Communication Plans
- Send an “I’m Safe” message via email, text, and social networks
- View real-time alerts for emergencies, weather and traffic





Training Modules of Interest:

FEMA IS-324.A: Community Hurricane Preparedness

<https://training.fema.gov/is/courseoverview.aspx?code=IS-324.a>

FEMA IS-321: Hurricane Mitigation Basics for Mitigation Staff

<https://training.fema.gov/is/courseoverview.aspx?code=IS-321>

FEMA IS-322: Flood Mitigation Basics for Mitigation Staff

<https://training.fema.gov/is/courseoverview.aspx?code=IS-322>

FEMA IS-10.A: Animals in Disasters: Awareness/Preparedness

<https://training.fema.gov/is/courseoverview.aspx?code=IS-10.a>

Comet/MetEd (UCAR) <https://www.meted.ucar.edu/index.php>

Tropical Cyclone Storm Surge: Forecasting and Communication

https://www.meted.ucar.edu/training_course.php?id=48

Tropical Cyclone Winds: Forecasting and Communication

https://www.meted.ucar.edu/training_course.php?id=50

Tropical Cyclone Rainfall: Forecasting and Communication

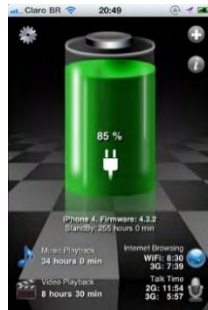
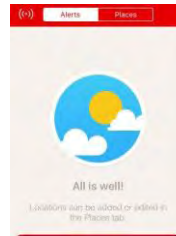
https://www.meted.ucar.edu/training_course.php?id=59





Other Disaster Apps

These apps are *examples* of available applications that may help during disaster.





(This slide intentionally left blank.)

