

# OFFICE OF EMERGENCY MANAGEMENT



## Hurricane Disaster Response

### Background

A ***hurricane*** is a type of tropical cyclone or severe tropical storm that forms in the southern Atlantic Ocean, Caribbean Sea, Gulf of Mexico, and in the eastern Pacific Ocean, with a maximum sustained surface wind speed of 74 mph or more. Tropical cyclones are accompanied by thunderstorms, and in the Northern Hemisphere, a counterclockwise circulation of winds near the earth's surface. The Atlantic hurricane season lasts from June to November, with the peak season from mid-August to late October.

Hurricanes can cause catastrophic damage to coastlines and several hundred miles inland. They can produce winds exceeding 155 mph as well as tornadoes and microbursts. In addition, hurricanes can create storm surges along the coast and cause extensive damage from heavy rainfall.

To understand the severity of hurricanes, the National Weather Service may issue a hurricane "watch" or a "warning" to alert the public on what to expect and precautions to take. A ***watch*** and a ***warning*** differ in that:

- A ***WATCH*** means that a hurricane is possible within the expected area. A watch will be issued 48 hours in advance of the anticipated onset of tropical-storm-force winds.
- A ***WARNING*** means that a hurricane is expected somewhere within the specified area. A warning is issued 36 hours in advance of the anticipated onset of tropical-storm-force winds.

A ***tropical storm*** is a tropical cyclone in which the maximum sustained wind speed ranges from 39 mph (34 knots) to 73 mph (63 knots).

To understand the severity of tropical storms, the National Weather Service may issue a Tropical storm "watch" or "warning" to alert the public what to expect and precautions to take. A ***watch*** and a ***warning*** differ in that:

- A ***WATCH*** means that tropical storm conditions are possible within the specified area within 48 hours.
- A ***WARNING*** means that tropical storm conditions are expected somewhere within the specified area within 36 hours.

### **Before a Hurricane**

- Listen to your weather radio or TV for information. (Preferably a NOAA Weather Radio)
- Build an emergency kit and make a family communications plan
- Learn the elevation of your property and whether the land is flood-prone. This will help determine how your property will be affected when storm surge or tidal floodings are forecasted.
- Identify levees and dams in your area and determine whether they pose a hazard to you and your property.
- Learn community evacuation routes and how to find higher ground. Determine where you would go and how you would get there if you needed to evacuate.
- Make plans to secure your property and cover all of your home's windows. Permanent storm shutters offer the best protection for windows. A second option is to board up windows with 5/8" marine plywood.
- Install straps or additional clips to securely fasten your roof to the frame structure. This will reduce roof damage.
- Be sure trees and shrubs around your home are well trimmed so they are more wind resistant.
- Clear loose and clogged rain gutters and downspouts.
- Bring in all outdoor furniture, decorations, garbage cans, etc.
- If you live in a high-rise building, be prepared to take shelter on or below the 10th floor.
- Consider building a safe room.

### **During the Hurricane**

- Turn off utilities if instructed to do so; Otherwise turn your refrigerator thermostat to its coldest setting and keep it closed.
- Avoid using the phone, except for serious emergencies.
- Ensure a supply of water for sanitary purposes. Fill the bathtub and other large containers with water.

## During a Hurricane (Continued)

### If Instructed to Evacuate:

- Follow instructions by local authorities.
- Plan places where your family will meet, both within and outside of your immediate neighborhood.
- If you have a car, keep a full tank of gas in it if an evacuation seems likely. Keep a half tank of gas in it at all times in case of an unexpected need to evacuate. (Gas stations may be closed during emergencies and are unable to pump gas during power outages. Plan to take one car per family to reduce congestion and delay).
- Become familiar with alternate routes and other means of transportation out of your area. Choose several destinations in different directions, so you have options in an emergency.
- Leave early enough to avoid being trapped by severe weather, and heavy traffic congestion.
- Follow recommended evacuation routes. Do not take shortcuts; they may be blocked without notification.
- Be alert for road hazards such as washed-out roads or bridges and downed power lines. Do not drive into flooded areas.
- If you do not have a car, plan how you will leave if you have to. Make arrangements with family, friends or your local government.
- Take your emergency supply kit (also have one ready in your vehicle).
- Listen to your battery-powered radio and follow local evacuation instructions.
- Take your pets with you, but understand that only service animals may be permitted in public shelters. (Plan how you will care for your pets in an emergency ahead of time).

### If time allows, do the following prior to evacuation:

- Call or email the out-of-state contact in your family communications plan. Tell them where you are going.
- Secure your home by closing and locking all windows, doors and garage doors.
- Unplug electrical equipment such as radios, televisions, and small appliances. Leave freezers and refrigerators plugged in unless there is a risk of flooding. If there is damage to your home and you are instructed to do so, shut off water, gas and electricity before leaving.
- Leave a note telling others when you left and where you evacuated to on your front door.
- Wear sturdy shoes and clothing that provides some protection such as long pants, long-sleeved shirts and a cap.
- Check with neighbors who may need assistance or a ride.

### If you are unable to evacuate, go to your safe room. If you do not have one, follow these guidelines:

- Stay indoors during the hurricane and away from windows and glass doors.
- Close all interior doors - secure and brace external doors.
- Keep curtains and blinds closed. Do not be fooled if there is a lull; it could be the eye of the storm - winds will pick up again.
- Take refuge in a small interior room, closet, or hallway on the lowest level.
- Lie on the floor under a table or another sturdy object.
- Avoid Elevators.

## After a Hurricane

- Continue listening to a NOAA Weather Radio or the local news for the latest updates.
- Stay alert for extended rainfall and subsequent flooding after the hurricane or tropical storm has ended.
- If you have become separated from your family, use your family communications plan or contact the American Red Cross at 1-800-RED-CROSS/1-800-733-2767 or visit the American Red Cross Safe and Well site: [www.safeandwell.org](http://www.safeandwell.org)
- If you evacuated, return home only when officials say it is safe to do so.
- If you cannot return home and have immediate housing needs text SHELTER + your zip code to 43362 (4FEMA) to find the nearest shelter in your area.
- Drive only if necessary and avoid flooded roads and washed out bridges. If you must go out watch for fallen objects, downed electrical wires, and weakened walls, bridges, roads, and sidewalks.
- Keep away from loose or dangling power lines and report them immediately to the power company.
- Walk carefully around the outside of your home and check for loose power lines, gas leaks and structural damage before entering. Take pictures of damages.
- Stay out of any building if you smell gas.
- Use battery-powered flashlights. Do not use candles. (Turn on the flashlight outside before entering. The battery may produce sparks that could ignite leaking gas, if present).

## **Boater Preparedness during Hurricanes**

**Here are some general tips to help “boaters” develop a personal hurricane preparedness plan.**

- Purchase and stow lines specifically for use in the event of a hurricane. (As a general rule, the line should be twice the diameter of your normal line).
- Monitor National Weather Service marine broadcasts and begin preparing at the earliest hurricane alert stage.
- All boat hurricane preparations should be completed 48 hours before the hurricane arrives to allow you to concentrate on your family and home.
- Secure all hatches and doors.
- Seal all windows from the inside with tape.
- Check the battery for charge and make sure the bilge pumps are working properly.
- Shut off fuel lines at the tank and close thru hull fittings.
- Remove all electronics and valuables to prevent damage or theft.

**If you have a Boat on your trailer:**

- Remove the boat from the water and secure both the boat and the trailer on high land.
- Ensure that your trailer is firmly anchored to prevent or minimize damage.

**If your boat is on a dock:**

- DO NOT STAY ON YOUR BOAT DURING A HURRICANE.
- Remove all articles on dock-including Bimini tops, side enclosures, sails, and dinghies.
- If possible, unstep the mast and secure it on land.
- Double up lines, including the spring lines. Use several cleats to distribute load on the boat. Allow as much line as possible for tide and storm surge.
- Attach chafing gear such as reinforced radiator hose where lines will rub. Provide several feet of chafing hose on each side of rub locations.
- Disconnect electronic, water and other connections from dock.

**Anchored at a Mooring or elsewhere:**

- DO NOT STAY ON YOUR BOAT DURING A HURRICANE.
- Have a pre-planned Hurricane Hole: These are ideal locations to moor your boat during a hurricane; they are deep, narrow coves or inlets that are surrounded by a number of sturdy trees which block the wind and provide a tie-off for anchor lines. The best location for them is one far enough inland to avoid the most severe winds and tides, yet close enough to reach under short notice.
- Avoid shoal areas and look for areas with high embankments.
- Consult your boaters handbook “CHAPMAN’S” or other responsible literature to obtain the best anchoring methods.