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Storm Preparedness Plan for Manchester, Massachusetts
Issued by the Manchester Harbormaster Department

A. Plan- Goals

The goal of this plan is to ensure that all boaters in Manchester are aware of approaching bad weather and to provide guidance in preparation for bad weather. Facilitating a return to normal operation as soon as is practical after the storm has passed is another primary facet of a good storm plan. Early and orderly preparations have a direct impact on the success of any storm plan. It is important to remember that the boat owner bears the ultimate responsibility for the safety of his/ her boat as well as the crew. This plan is meant to serve as a guide only. Rapidly changing conditions may require abandoning some aspects of this plan.

B. Plan - Priorities

The order of priority is as follows, (1) Prevent personal injury and loss of life, (2) Minimize property and environmental damage, (3) Quick restoration of normal harbor operations.

C. Plan- Alert Levels

Alert Level 0: June 1st hurricane season begins. At this time conscientiously monitor NOAA weather radio for any tropical system development.

Alert Level 1: Tropical conditions exist within 1,000 mile radius of Manchester. Prepare an action timetable for this particular storm. Storm movement and development can change rapidly.

Alert Level 2: 72-48 hours to storm landfall. Under a storm threat. Although a precise storm track will very likely be unknown, all planning should be for a direct hit. Activate volunteers; issue an alert to all boaters particularly those in Magnolia Harbor. Implement plan for securing all facilities including the possible removal of all floats and ramps. Timetable may change if the forward speed of the storm increases. Continue to evaluate the storm track and intensity.

Alert Level 3: 48-24 hours to storm landfall. Hurricane WATCH issued at this time. Communication with Police, Fire, MEMA and the Coast Guard should be established at this time. All waterfront tasks should be completed at this time. Secure any loose items that can be affected by the wind. Continue to monitor storm threat.

Alert Level 4: 24-0 hours to storm landfall. Hurricane WARNING issued at this time. Probability is high for the hurricane to strike. Any person working on the waterfront during this period is advised to wear a lifejacket. Monitor Radio, TV, NOAA weather radio and any other official information communication for storm threat potential. Avoid unnecessary traffic to and from the waterfront. Be prepared to evacuate the waterfront.

Alert Level 5: Hurricane. Remain in safe shelter. Water front activity is highly discouraged.

General Guidelines

Although the harbormaster tries to ensure that all boats in Manchester are safe, ultimate responsibility for any boat belongs to the owner. In order to protect your vessel and those around it you must a) know your boat and your skill level; b) know the surrounding area; and c) have a plan.
Preparation for the hurricane season begins before you launch in the spring. Is your mooring adequate to hold your boat during a storm? What other options are available to you? These are questions that need to be answered before a storm arrives.

Option 1: Get Out of the Water

If your boat is small and trailers easily take it out of the water and move it to higher ground. Be sure you move above any potential storm surge or wave action. Wind and rain can also cause damage to your vessel. Whenever possible store your vessel in a garage or covered area. Remove all fuel and equipment from the boat and store them inside. Place blocking under the axle on your trailer and remove the drain plug if your hull cannot support the extra weight. Consider tying the boat and trailer down with large tent pegs or house trailer tie-downs.

Option 2: Stay in the Water

This option assumes that you will; a) stay at the dock or mooring; b) anchor in a hurricane hole; or c) get underway and head offshore.
Mooring
The greatest threat to staying on your mooring is storm surge. A moderate surge can reduce mooring scope to unsafe levels. Check for expected surge levels before the storm arrives. Chain wear is another important factor. A loss of chain diameter amounting to one third of the original diameter is considered unsafe.

Please take the following fundamental steps.

- Moving of vessels to safer anchorage should be completed 48 hours before the storm makes landfall.

- Reduce wind-age or surface area that the wind can strike.

- Remove sails and stow below, especially roller furling jibs. If you cannot remove the sails then it is imperative to secure the sails to prevent them from coming loose. Look for any other object that may cause wind-age.

- Close all ports, remove funnels and install caps.
- Secure the tiller or wheel with line.
- Remove coils of line and other gear not permanently attached from the deck. Prepare for the likelihood that other vessels will break loose and drift onto your boat. Remove all protruding objects and set fenders alongside your boat.
- Consider installing a second pennant on your mooring. In the event that one chafes through there will still be a pennant securing your boat to the mooring.
- Lastly, GET OFF THE BOAT. Your safety is more important than your vessel.

Hurricane Holes

A crowded anchorage may necessitate moving to a protected hurricane hole or area of safe anchorage, a small cove with a soft bottom that is not a traditional anchorage. Be prepared, it is probable that the cove will fill rapidly with other boats. This is one reason not to move. Any hurricane hole should be identified, and inspected before the season begins. An area with high bluffs, tall trees on as many sides as possible with deep water is best. Identify several spots and test the bottom in each.

- Arrive at least 12 hours prior to storm landfall.
- Set your anchor with a scope of at least 7to1.
- Consider setting a second anchor approximately 30 degrees from the first anchor. Nylon anchor rode is best if you don't have chain as it has elasticity and reduces shock on the anchor rode and deck hardware.
- Use chafing gear at all points where the line makes contact with chocks coming onto the boat.
- Make sure bilge pump float switches are operating and
- **LEAVE THE BOAT.**
- If you decide to stay on the boat be sure to monitor weather channels and marine safety channels.
- Have ample fuel, water, food clothing, portable radio and flashlight with extra batteries. Bring any prescription medicines. If necessary engage the engine to reduce strain on the anchor.
- Maintain an anchor watch so as to keep on station.
- Check bilges and pumps regularly.

- Floating navigational aids can move off station so do not rely on them for position.

Do Not Go Offshore
Unless your vessel is 100 feet or greater and you have heavy weather experience do not go offshore. This is not a viable option.

These are general guidelines and should not be considered your only options. Only you know what will work best for you and your vessel. Time is of the essence and planning cannot happen when the storm is imminent. Plan early and it is likely you and your vessel will weather the storm with a minimum of difficulty and damage.

Manchester Harbor, Magnolia Harbor and Area G Guidelines

Given the extreme exposure to open water in Magnolia extra time and energy must be devoted to any vessel moored in Magnolia Harbor. This requires planning well in advance of any approaching storm. In the event of a major storm ALL vessels in Magnolia Harbor must be moved or removed from Magnolia Harbor. Vessels in Area G should also plan to evacuate in the event of a major storm. Vessel owners in Area G and Magnolia must have a viable storm plan for their vessel on file in Harbormasters office. The float and ramp system at Tuck's Point will be removed and secured in Area A alongside the Town Hall floats at Alert Level 2. Remove the chain securing the Town Hall floats to the access steps.

It is expected that many vessels moored in Manchester Harbor will be hauled in the event of a hurricane. Many of these empty moorings will be made available for vessels moored in Magnolia Harbor and Area G. Check with the harbormaster, Crocker's Boat Yard, Manchester Marine or Manchester Yacht Club to locate available appropriate moorings in Manchester Harbor. **Do not take a mooring without checking with one of the entities listed above.** The security and safety of your vessel and those around you could be compromised. Any damage caused by a vessel inappropriately using a mooring will be the responsibility of that vessels owner. Relying on the possibility of an available mooring is not an appropriate storm plan. Be sure you have developed at least one other viable option to secure your vessel.

First priority for available moorings in Manchester Harbor will be to Manchester and Magnolia boaters.

72 hours before the storm arrives; all necessary planning steps to secure your vessel should be completed

48 hours before storm arrival; begin securing Magnolia Harbor and Area G. In the event moorings are not available in Manchester Harbor each mooring holder must implement a Plan B.

24 hours before storm arrival; encourage boaters to finish preparing their vessels for heavy weather, all work should be completed at this time and your vessel evacuated. Surf may have already started to build causing unsafe conditions.

Close attention must be paid to storm track and speed so as to adjust timing for securing your vessel.

Step 3:
Hurricane, remain in shelter until storm passes.

- After the storm passes post lookouts at any boats that have come ashore to prevent looting.
- Contact the owners of any boats that have come ashore and advise them of the situation.
- Communication will be maintained between the harbormaster, assistant harbormasters and any other waterfront volunteers for the duration of the storm as well as the recovery period.

Step 4:
Assess any damage to pier structures and determine if they are safe to re-open. If damage is discovered contact an engineer to identify necessary repairs at the earliest convenience. Effect repairs as soon as possible.

Step 5:
If the facilities are undamaged bring all floats back, lower ramps, turn electricity and water back on.

These are general guidelines and should not be considered our only options. Time is of the essence and planning cannot happen when the storm is imminent. Early planning will ensure that vessels and valuable infrastructure will weather the storm with a minimum of damage.