

HURRICANE PREPAREDNESS GUIDELINES FOR MARINAS

Introduction

A. Why Hurricane Guidelines for Marinas?

Successful preparation for a hurricane depends on how early and how orderly we act. Boat owners and marina operators all along the coast should consider hurricane preparation part of normal boat and marina maintenance. Just a few unprepared boats can inflict incredible damage on a marina, as can unsecured facilities and equipment. Marina managers must begin early in developing a formal written plan, including suggestions and diagrams. Hurricane Preparedness Guidelines for Marinas contains procedures agreed acceptable by the U. S. Federal Emergency Management Agency. These guidelines, when tailored into a plan for your facility and operation can be an important asset to your business.

Although these procedures are accepted as “standard,” it is very important to be aware that each procedure may or may not be suitable for your business. Read the manual, analyze your marina, and change the manual to fit your operation. Have your final plan reviewed by your attorney.

General timetables must be implemented for the various stages of hurricane preparation. Preseason marina repair and maintenance is vital to hurricane preparation, as is employee and customer training. When a storm threatens, there will not be time for these activities. Marina operators and staff must be well into preparation procedures during the U. S. Weather Service Hurricane WATCH Phase. After a hurricane watch is issued, timing becomes critical. This is the time for quick and decisive action in wet slip evacuation, securing dry storage boats and preparing other areas of the marina - even though chances may be great that the storm will not hit. Remember - wet slip evacuations mean boats must be anchored and crews returned ashore in time to prepare and possibly to evacuate their homes. Dry rack tie down operations can require several teams and many hours for completion. This operation has to be done prior to darkness, rainfall, or high winds. All boats, docks, buildings, and equipment must be secured by the time a hurricane WARNING is issued. Specific actions must occur as much as 72 to 36 hours prior to a call to evacuate the area and at least 24 hours prior to storm landfall. Remember that agency timetables refer to landfall of the hurricane EYE - severe weather can significantly precede the eye. Duties should be delineated in early planning. However, be prepared to make changes depending on storm characteristics, including the probability of a direct hit and the expected intensity of the storm.



Recreational fishing boats at San Juan Bay Marina, Puerto Rico.

Early action depends, of course, on early storm threat notice. Marina personnel must be taught to be aware of tropical weather conditions and to immediately report any storm news to their supervisors.

A marina hurricane preparedness plan needs to be specific. For example, your plan should include if/which dry rack boats will be tied down and define the amount of personnel and time required to do so. Describe necessary materials and equipment and their locations for the job. The plan also needs to be realistic. If you encourage (recommended) or require (not recommended) wet slip evacuation, suggest alternative locations that provide storm protection. If your plan recommends evacuation to a hurricane hole, boats and boat operators will be needed to bring people back (no one should stay aboard during a hurricane). Require each boat owner to submit hurricane readiness information at the beginning of the season. The boat owner may not be available at the time of a storm, so an alternate caretaker should be named. Another approach is for a marina to be contractually authorized to carry out the owner's plan (without liability). Establishing a written agreement with fee structures for emergency care by the marina will encourage owners to tend to their boats. Few marinas are staffed to secure the marina and unattended boats. Consider organizing emergency teams of dedicated boat owners to be called on when a storm is approaching. Boat owners are encouraged to volunteer when they realize the ultimate cost of disaster will fall on them in the form of the loss of the marina for their use, and perhaps higher insurance premiums, higher marina slip rentals, or both. Controlling damage after the hurricane is important, but often omitted from planning. This can save time and money for marinas and boat owners.

To successfully implement a hurricane plan someone must be in charge - a decision-maker. The marina manager, owner, or yacht club commodore must set the plan in motion and deal with contingencies. This person must be familiar with weather service warnings and storm tracks. Well-trained and organized staff and volunteer teams, with specific assignments will do the actual work of preparing for the storm. Each team should review its tasks, assign individual responsibilities, and identify needed equipment.

Be aware that preparation plans may work only for lower category hurricanes. Certainly, landfall by a Category II or stronger storm would result in major damage to marine facilities and boats. We prepare in order to minimize damage or for a "near miss". For a major storm our efforts may or may not be adequate - but the job must be done quickly for safety's sake. Remember - to attempt to secure boats at a marina while under storm influence is at the risk of the lives of marina personnel, boat owners, and volunteers. An approaching hurricane is a potential killer - the inconveniences of early action are a small price to pay for safety.

A final word – be prepared to evacuate personnel from the marina when directed by your local County Officials as recommended by The Emergency Management Agency!

B. When To Take Action

The track of a storm - whether or not it will hit land and where - remains highly unpredictable despite vastly improved forecasting methods. Years of low storm activity often have been the years of the greatest hurricane disasters. Alicia, Gloria, Hugo, and Andrew were the only

major storms to come ashore in the United States in recent years, and each caused record damage. It is clear that waiting until a storm's arrival to act is almost certainly inviting disaster.

A **hurricane "WATCH"** is posted when hurricane conditions pose a threat to a specified coastal area, usually within 36 hours. However, keep in mind these advisories are issued for all interests, not just for marinas and boats. Some hurricane observers believe waiting for a watch to be posted also may be too late to adequately prepare boats or marina facilities.

A **hurricane "WARNING"** is posted when sustained winds of 74 mph or higher are expected within 24 hours or less – probably too late to adequately prepare boats or marina facilities. Securing the home and evacuating the family become the primary focus at this point.

Implementation of the marina hurricane plan needs to begin when a hurricane is a substantial possibility -prior to the issuance of a "watch". Waiting longer may mean attempting to make preparations during times of heavy demand from customers to remove boats, during diminishing weather conditions and with employees and volunteers becoming increasingly restless to tend to family and home. Also, for evacuating boats, bridges may be locked down and the safer harbor you chose may be filled.

What if the storm turns away? Hurricane preparation procedures are like fire extinguishers and life jackets; the good news is when they are not put to the test.

Important Notes In Text

In some sections of *Hurricane Preparedness Guidelines for Marinas*, there are important **Notes** for management to consider. These Notes are in Italics.

(For example)

***NOTE:** Check the wording in all sections with your Marina's attorney, insurance company, and top management staff.*

Such Notes are meant to help Managers make decisions when changing this document into their customized Marina's Hurricane Preparedness Manual. The Notes are flags to indicate where further research and changes are thought to be necessary. The NOTES should be treated as alerts to Management that important questions exist, laws may differ, and/or that several options exist for decision.

***NOTE:** The Notes contained throughout this document are NOT meant to be seen by all Employees or Customers and should not appear in your edited Manual's final copy.*