

HURRICANE PREPAREDNESS GUIDELINES FOR Florida Marinas

Prepared for the Sanibel Harbour Yacht Club

Prepared by

Sanibel Harbour Yacht Club Chad Edmonds, CMCA, AMS

> General Manager 15051 Punta Rassa Rd Fort Myers, Fl 33908

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Dr. Stuart Stevens

Ecological Services Section Coastal Resources Division Department of Natural Resources One Conservation Way, Suite 300 Brunswick, GA 31520

Telephone: (912) 264-7218

Matthew R. Gilligan, Ph.D.

Marine Sciences Program College of Sciences and Technology Savannah State University P.O. Box 20325 Savannah, GA 31404

> Telephone: (912) 356-2809 Fax: (912) 356-2996

Chad Edmonds, CMCA, AMS General Manager

Sanibel Harbour Yacht Club 15051 Punta Rassa Rd Fort Myers, Fl. 33908

Telephone: (239) 333-4200 Fax: (239) 333-4210

e-mail: chad@shycfl.com

HURRICANE PREPAREDNESS GUIDELINES FOR FLORIDA MARINAS

Introduction

A. Why Hurricane Guidelines for Marinas?

Successful preparation for a hurricane depends on how early and how orderly we act. 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 Florida Marinas" contains procedures agreed acceptable by the Florida Marine Business Association's (FAMBA) Hurricane Committee. 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 is critical. This will be 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. 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.

B. When To Take Action

Despite significant advancements in forecasting, the path of a storm—whether it will make landfall and where—remains highly unpredictable. Interestingly, some of the most catastrophic hurricanes have occurred during periods of low storm activity. Recent major storms like Irma, Harvey, Michael, and Maria caused unprecedented damage upon making landfall in the United States. Clearly, delaying action until a storm's arrival 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.

Observing barometric changes is helpful in predicting some weather patterns, but not for knowing when to prepare for a hurricane. The extreme low pressure associated with a hurricane occurs close to the eye of the storm. Local readings are too late for prediction of landfall.

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.

HURRICANE PREPAREDNESS GUIDELINES FOR FLORIDA MARINAS

SECTION I

HURRICANE TERMINOLOGY AND INFORMATION FOR MARINA MANAGERS

A. Hurricane Terminology

Tropical Disturbance: A moving area of concentrated showers in the tropics, which maintains its identity for 24 hours or more.

Tropical Depression: An area of disturbed weather associated with low pressure and wind circulation at the surface. Highest sustained winds are less than 39 mph.

Tropical Storm: Same as above except highest sustained winds range from 39 to 73 mph.

Hurricane: Same as above except highest sustained winds are 74 mph or higher.

<u>Advisory</u>: A message released by a Hurricane Center, usually at six-hour intervals, updating information on the storm or hurricane including watches and warning whenever they are in effect.

Special Advisory: Same as Advisory but is issued whenever there is a significant change in any information previously released.

<u>Intermediate Advisory</u>: Updates information contained in Advisories at 2-to-3-hour intervals whenever a watch or warning is in effect.

Gale Warning: Wind speed of 39 – 54 mph expected.

Storm Warning: Wind speed of 55 – 73 mph expected.

Hurricane Season: June 1st through November 30th.

Hurricane Watch: A hurricane may threaten your area.

Hurricane Warning: A hurricane is expected to strike your area within 24 hours or less.

Tornado Watch: Tornadoes and severe thunderstorms are possible in your area.

Tornado Warning: Tornado detected in your area, TAKE SHELTER.

Storm Surge: A rise in water level above normal levels due to wind stress or, in the case of a hurricane, wind stress plus very low atmospheric pressure. Storm surge can raise water levels 17 to 20 feet causing extreme flooding. The impact worsens because the deeper water levels caused by storm surge allow larger waves to approach and break on otherwise protected structures.

B. Hurricane Categories

<u>Category 1</u>: Winds 74 to 95 MPH - 4-to-5-foot storm surge. Damage primarily to shrubbery, trees, and unanchored mobile homes. No real damage to other structures. Some damage to poorly constructed signs. Low-lying coastal roads inundated, minor pier damage, some small craft in exposed anchorage torn from moorings.

<u>Category 2</u>: Winds 96 to 110 MPH - 6-to-8-foot storm surge. Considerable damage to shrubbery and tree foliage; some trees blown down. Major damage to exposed mobile homes. Extensive damage to poorly constructed signs; some damage to roofing materials of buildings and some window and door damage. No major damage to buildings. Coastal roads and low-lying escape routes inland cut by rising water two-four hours before arrival of the hurricane's center. Considerable damage to piers. Marinas will flood and small craft in unprotected anchorages may be torn from moorings.

<u>Category 3</u>: Winds 111 to 130 MPH - 9-to-12-foot storm surge. Foliage torn from trees and large trees blown down. Practically all poorly-constructed signs blown down; some damage to roofing materials of buildings; some window and door damage; and some structural damage to small buildings. Mobile homes destroyed. Serious flooding at coast and many smaller structures near coast destroyed; low-lying escape routes inland cut by rising water three-five hours before the hurricane's center arrives.

<u>Category 4</u>: Winds 131 to 155 MPH - 13-to-18-foot storm surge. Shrubs and trees blown down; all signs down. Extensive damage to roofing materials, windows and doors; complete failure of roofs on many small residences; complete destruction of mobile

homes. Major damage to lower floors of structures near shore due to flooding and battering by waves and floating debris.

<u>Category 5</u>: Winds 156 MPH and above - 18 foot and above storm surge. Shrubs and trees blown down; considerable damage to roofs of buildings; all signs down; very severe and extensive damage to windows and doors; complete failure of roofs on many residences and industrial buildings; extensive shattering of glass in windows and doors; some complete building failures; small buildings overturned or blown away and complete destruction of mobile homes. Low-lying escape routes inland cut by rising water three-five hours before the hurricane's center arrives.

C. Saffir-Simpson Hurricane Scale

Storm Category	Barometric Pressure (Inches)	Winds (MPH)	Storm Surge (Feet)
1	28.94	74 - 95	4-5
2	28.50 - 28.91	96 – 110	6-8
3	27.91 - 28.47	111 – 130	9-12
4	27.17 - 27.88	131 – 155	13 – 18
5	27.17	155	18+

D. Knowing What To Expect ⁽¹⁾

Preparing a marina and boats for a hurricane means defending against wind, rain, waves, and high water; all in proportions rarely experienced. Damage is usually due to a combination of factors.

SURGE

The damaging influence of high water, or storm surge, is often underestimated in preparing a marina or a boat for a storm. Storm surge raises the water level far above normal high tide, cutting off roads, forcing evacuation, and lifting boats above their docks and pilings. Surge accounts for major damage because it puts docks underwater as the boat tries to float above.

Surge is the result of several factors. Due to low barometric pressure, the ocean surface is drawn upward forming a mound about one foot higher than the surrounding ocean. Large swells generated by the storm reach land first, while storm winds drive water towards the coast. As the storm makes landfall, water levels 10 to 20 feet above normal high tide are possible. Surge is responsible for extensive flooding and much of the loss of life that accompany a hurricane. Dangerous high tides can reach outward 20 to 50 miles from the storm's center. Surge makes extra length and positioning of dock and mooring lines critical.

WIND

A hurricane, of course, brings high winds. Wind speeds of 70 to 130 mph are common, and winds of over 200 mph have been recorded. What may be less understood is the force created by such winds. When wind speed doubles, the wind pressure quadruples. When the wind speed increases, the damage it causes increases at a much greater rate. This illustrates the importance of reducing a boat's windage by removing as much rigging, canvas, and deck gear as possible, and facing the bow toward the greatest exposure.

WAVES

Waves in the ocean have tremendous energy and can reach mountainous heights. But even in relatively small harbors, sounds, and lakes, waves can build to surprising heights. In a hurricane, it is not unusual for steep, breaking waves three to six feet high to pound normally peaceful harbors. Sea walls, barrier beaches, and other structures that normally protect docks and moorings are submerged by the storm surge. This has the effect of greatly extending the "fetch", or distance, over which the wind can generate waves.

RAINFALL

Rainfall of 6 to 12" within 24 hours is normal during a hurricane with extremes of 24" having been recorded. A hurricane that struck Puerto Rico in 1928 is estimated to have dumped over two and a half billion tons of water on the island. Boats that are spared the worst high water and wind still can be sunk by the torrential rain. Cockpit decks are seldom 100% water tight; and the ability of a bilge pump and battery to handle rain accumulation is greatly overestimated. Deck drains and pump discharges located near the waterline can backflow when waves and rain put drains under water.

TORNADOES

Tornadoes are sometimes spawned by hurricanes. Of the 46 people who died during Hurricane Carla in 1961, 11 were killed by tornadoes. Little can be done to protect a boat from a tornado. The possibility of a "twister", however, is a strong reason for you, your family, and your boat, if it is trailerable, to be far from the coast when a hurricane makes landfall.

E. Estimating Storm Force at your Location

Marina location relative to the path of the hurricane will determine the force and damage you may expect. Plot the storm path from National Weather Service Reports. Hurricane winds run counterclockwise, and the greatest wind speed, tidal surge, and heaviest rainfall will be to the right of the storm's eye when looking in the direction of its path. Depending on the storm's intensity, the maximum tidal surge will be 15 to 20 miles to the right of the eye.

The left quadrant of the storm as you look in the direction of its path has less force than the right side but is still dangerous. Should the storm pass directly overhead, you will experience winds reducing to minor gusts within the eye until the "back side" of the hurricane arrives. When this happens, the winds will reverse direction and will be at or near the intensity experienced on the front side of the storm. It may take as long as 30 minutes for the eye to pass. Remember to anticipate a change in wave direction and reduced water depth when the backside of the storm arrives.

1. Source: BOAT/U.S. Marine Insurance Damage Avoidance Program

PREPAREDNESS GUIDELINES FOR FLORIDA HURRICANE MARINAS

SECTION II

Association Policy

A. Marina Management Issues Regarding Hurricane Preparedness

Summarized here are marina liability and economic issues of concern to industry management nationally and on the Florida coast. The intention of this section is to bring attention to the issue. More on how to address the issue is contained in subsequent sections of this manual.

- Marina Insurance Considerations: Marina insurance is normally underwritten with consideration to fire, casualty, liability, and associated hazards. Be aware that storm and flood damage is usually considered, but not as well defined and, in general, depends on the marina location and local topography. The normal insurance coverage for fire, casualty, liability, etc. is available from many underwriters who may or may not provide flood or wave damage insurance. Insurance coverage for damage associated with high winds and flooding may be only partially incorporated within flood insurance.
- **Boat Owner Insurance**: The declaration & condominium rules and regulations of the association require each unit owner to have a comprehensive boat insurance policy.
- **Avoid "Bailment"**: A bailment is a legal relationship between persons arising when one delivers personal property to another in trust for a specific purpose with the understanding the property is to be returned or otherwise properly accounted for.
- **Mandatory Wet Slip Evacuation**: Both boats and the marina will suffer less damage if boats are <u>not</u> left tied to docks during a hurricane. However, lessons learned from hurricane disasters in other states clearly indicate that mandatory evacuation requirements can lead to human safety issues and liability to the association. Consensus is to make it clear to boat owners that their boats will have a better chance at survival if evacuated and give them information and assistance to encourage the decision to voluntarily evacuate. Remind Lessee's of their interest in avoiding damage to the association that could affect the availability of a place to dock and the future cost of slips.

Dry Stack Evacuation: It is highly recommended that boats are evacuated before a storm. Historical data indicates that unloaded rack systems fare better during hurricanes. Boats have a higher chance of survival if evacuated. While some dry stack operators believe boats should be tied down if left in racks, there is no consensus. The decision depends on factors such as rack design, whether the system is enclosed, and available manpower. Lessons learned from Hurricane Ian suggest that if all boats on the first level had been tied down to the building's foundation, the entire structure might have collapsed. Therefore, the only allowable tie-down method, performed by the owner, is using straps to connect the bow eye and pulpit eye to the rack. No strapping to the building foundation is permitted. Access to tie down boats will not be available once we reach Condition 2, so if this is your preferred method, it must be completed beforehand.

SECTION III

Marina Hurricane Preparedness Plan

HURRICANE PREPAREDNESS PLAN

For

Sanibel Harbour Yacht Club

(Distribution: marina personnel, boat owners and volunteers)

May 2006/ Updated 2024

A. Introductory Comments

Priorities for Hurricane Preparedness at Sanibel Harbour Yacht Club:

- 1. Protect human life.
- 2. Minimize personal injury.
- 3. Reduce property damage exposure.
- 4. Minimize damage to non-relocatable property.
- 5. Restore normal operations quickly.

Having a workable plan in advance and being able to implement the plan in a timely and effective manner is the key ingredient in achieving these prioritized goals.

The most dangerous and most critical task is securing boats, which may move about and damage the association and other boats. The association is not a viable sanctuary for boats of any type during a direct hurricane hit. Experience has proven that marina docks and boats are most likely to survive a hurricane if all boats are evacuated. The wet slips and dry racks are not designed to accommodate boats during heavy winds and/or storm surge. These elements tend to push and pound boats against pilings, docks, and other vessels. The floating docks may rise over the tops of piling and become adrift. Dry racked boats are in danger of being moved by wind or being lifted into racks above with tide surge. Increased weight of water-filled boats could collapse the rack system. The management of Sanibel Harbour Yacht Club strongly encourages evacuation of all boats in wet slips and dry storage.

Of course, circumstances may prevent evacuation of some boats. This plan, in addition to describing evacuation procedures, outlines best practices for securing boats in the association. The plan also describes procedures for communicating and carrying out hurricane response for all other aspects of the association – before, during, and after the storm.

Preparing for a hurricane successfully depends on how early and how orderly we all act although chances may be great that the storm will not hit us. Remember - wet slips must be evacuated. We must be well into preparation procedures during the U.S. Weather Service Hurricane WATCH Phase. All boats must be secured by the time a hurricane WARNING is issued, our actions must occur as much as 24 to 36 hours prior to an Emergency Management Agency call to evacuate the area and at least 24 hours prior to storm landfall.

Previous storms have taught us that trailering or moving boats to wash racks for securing contents must be terminated early in the "watch" phase to allow marina personnel to secure the facility and evacuate the area. The recommended procedure is to launch your vessel and take it to a local boat ramp or facility that can load boats onto trailers. Once we move into Condition 2 of the Hurricane Plan, no further boat moves will be allowed to ensure we can secure the facility and prepare our own homes.

This Hurricane Preparedness Plan outlines the procedures Sanibel Harbour Yacht Club will follow throughout hurricane season and during hurricane watches, warnings, as well as during and after a hurricane. Association members are contractually required to be familiar with this plan.

Timetables for implementing the various stages of the plan will depend on the storm's forward speed/direction, probability of a storm hit, and the expected intensity of the storm. Our hit with Hurricane Ian illustrated that timetables must be built with flexibility. We will, of course, coordinate our timetables with those of the local Emergency Management Agency.

Be aware that these Hurricane Preparedness Plans may work only for lower category hurricanes. Certainly, a Category II or stronger storm at this location will result in major damage to the boats and association facilities. We prepare in order to limit the damage or in hopes of a "near miss". For a major storm our efforts may or may not be adequate - but the job must be done quickly in order for all personnel to evacuate to safety. Remember to attempt to secure boats while under storm influences is at the risk of the lives of association 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.

B. Hurricane Information

Association employees and boat owners should take the time to learn about hurricanes. Storm formation, the history of hurricanes on the East Coast and hurricane preparation is a fascinating subject. An in depth understanding will not only make you more valuable to the association and boat preparation efforts - but may save the lives of you and your family.

C. Sanibel Harbour	Yacht (Club	Hurricane	Preparedne	ess Plan
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Condition	Activities
Preseason	Review and revise plans, lists, and inventories. Generate customer awareness and conduct employee training.
Condition 5	Normal operation. Monitor weather and continue hurricane awareness – ensure all parties have updated plans.
Season Starts (June 1)	
Condition 4	A storm has developed and could pose a threat to Florida. Assemble Leaders of the Hurricane Response Team to evaluate
Storm in Vicinity	threat and review Hurricane Plan.
Condition 3	A storm is threatening. Activate the full Hurricane Response Team. Begin implementation of Hurricane Preparedness Plan.
72 – 48 Hours to Landfall	
by the Hurricane Eye	
Condition 2	A hurricane may strike within 36-48 hours. Complete securing of
48-36 Hours to Landfall	marina and boats. Hurricane WATCH has been issued by the National Hurricane Center and the County Emergency
by the Hurricane Eye	Management Agency probably recommends voluntary evacuation of islands and other low-lying areas. Determine association closing and employee evacuation schedule. Establish limited entry.
Condition 1	High probability of strike. Hurricane WARNING has been issued
24 Hours to Landfall	by the National Hurricane Center. Evacuation should be completed.
by the Hurricane Eye	
Condition 0	Winds and flooding could stop further evacuation efforts.
Hurricane Conditions	Hurricane Response Team maintains communication if possible.

Return and Recovery	After the Storm	Reestablish communications. Conduct search, rescue, damage assessment, salvage, and cleanup.
	Return and Recovery	

D. The Hurricane Response Team

Association management recruits the Hurricane Response Team (HRT). It is involved in all phases of hurricane preparation at the association and is recruited by Association management. The purpose of the team is to help develop and implement the association Hurricane Preparedness Plan, thereby maximizing human safety, while minimizing damage to the association and boats. The HRT includes association employees, boat owners and other volunteers. HRT members, representing both association and boat interests are in the best position to help educate other employees and boat owners – resulting in maximum acceptance and compliance with the plan. The Hurricane Preparedness Plan is premised on full cooperation of all employees and association members to act according to the plan.

Hurricane Response Team Leadership:

- 1. Board President Peter Mazzagatti
- 2. General Manager Chad Edmonds
- 3. Harbour Master- Javier Rodriguez
- 4. Fort Myers Police/ Fire Department
- 5. HRT Team Leader- Jeremy Larson

E. Sanibel Harbour Yacht Club Management Policy Regarding Hurricane Preparation

Hurricane Response Team:

- All association employees are part of the Hurricane Response Team.
- Employees report to their designated supervisors during hurricane response.

- No excused absences are allowed once Hurricane Condition III (storm in vicinity) is declared

It is uncertain how long crewmembers will be required to be on duty during storm preparation. Therefore, at first notice of a storm there will be staggered relief shifts to allow each person time to go home to prepare their homes and families. This will be done well in advance of anticipated storm effects (as much as 2-3 days in advance).

Each employee must have a personal preparation and evacuation plan to minimize their required leave time, allowing other crewmembers to have adequate leave time. The association manager will schedule leave time, with team leaders going first, to ensure they can return to preparations as soon as possible.

Association Responsibility

The association is not liable for any damage to boats caused by storms or other acts of God. If a boat poses a risk of bodily harm, loss of life, or property damage—such as being on fire or sinking—the association reserves the right to take any necessary action to ensure the safety of its customers, employees, and property. Any costs incurred for these actions will be charged to the boat owner.

Hold Harmless Agreement

The boat owner agrees to hold the association harmless for any accidental damage that occurs when the association takes prudent emergency action before or during a storm, as well as for salvage work performed by the association or salvage contractors. Emergency storm preparations and salvage operations include any activities deemed necessary by association management to protect individuals from injury or property from damage, excluding intentional acts that clearly increase the potential for damage to the lessee's boat.

Wet Slip Evacuation is Strongly Advised

Both boats and the association will suffer less damage if boats are <u>not</u> left tied to docks during a hurricane. However, lessons learned from hurricane disasters in other states clearly indicate that mandatory evacuation is nearly impossible to conduct. Also, mandatory evacuation requirements can lead to human safety issues. The association wishes to make it clear to boat owners that their boats will have a better chance at survival if evacuated. Remember that it is in everyone's best interest to avoid damage to the association - damage to the association could affect the availability of a place to dock and the future cost of slips.

Evacuation of wet slip boats must be completed prior to Condition 2. Once we reach Condition 2, no further boat moves will be allowed to ensure the remaining parts of the facility are secured.

Dry Stack Evacuation is Strongly Advised

Evacuation of the dry racks is the safest course of action for your boat. Hurricane history indicates that unloaded racks systems will fare better. The recommended procedure is to launch your vessel and take it to a local boat ramp or facility that can load boats onto trailers. Once we move into Condition 2 of the Hurricane Plan, no further boat moves will be allowed to ensure we can secure the facility.

Boat Handling Ceases When Winds Reach Sustained Speed of 25 Knots

Launching, recovering, or otherwise handling a boat is unsafe when wind speed reaches 25 knots. Forklift operations will cease at that time.

Command and Notification System

Association management will assemble a Hurricane Response Team as an advisory panel to assist in improving the hurricane plans. The group will assist in implementing the plan during a storm threat. The association manager makes the final decision on all policy and procedure. Recommended by the HRT.

Safety Consideration

The overriding consideration in hurricane preparation and decision making in the association Hurricane Preparedness Plan is the safety of employees and boat owners. Preventing damage to property is secondary to human safety.

F. Sanibel Harbour Yacht Club Hurricane Plan – Preseason

During "Preseason", prior to June 1, when hurricane season begins each year, there is no hurricane threat. This is the time to review the association Hurricane Preparedness Plan and update or revise it, as necessary. The association crew will receive hurricane training. The association will be inspected, and housekeeping and maintenance will be done with storm readiness in mind.

Responsibilities in Preseason are:

Association Manager

- Reassess association emergency procedures policy
- Review the association lease agreement to ensure clarity of lessee liability for property damage and personal injury. Specify that vessel owners will be billed for services and materials necessary for preparation, response, and recovery.
- Contact the County Emergency Management Director each spring to review:
- Overall disaster plan.
- Emergency assistance communications.
- Wet slips evacuation concerns, considering such factors as: severe weather, boat evacuation routes, safe harbors, etc.

- Regional map of the association's location with respect to storm surge, flood plain, wind damage potential, evacuation routes, and bridge locations.
- Review and update the detailed map of the association showing locations of utility equipment and power shutoff points; sources of auxiliary power; potential hazard areas such as from fallen objects, trees, poles, etc.; emergency equipment and supplies; communication equipment; first aid stations; and escape routes.
- Identify items for evacuation in each department of the association (Department managers to develop check lists)
- Review, revise Hurricane Preparedness Plan as necessary
- Review membership of the HRT and fill any vacancies
- Hold Hurricane Preparedness Plan training for association personnel, HRT, and volunteers.
- Emphasize cross training. Each person will have tasks as assigned in their own work area but must be prepared to assist elsewhere when necessary.
- Supervise /inspect all areas of the association for pre-hurricane season safety, housekeeping, repair and maintenance. Correct problems immediately!
- Review listings for repair and salvage companies. Pre-qualify companies with references, proof of insurance, performance bonds and releases.

Hurricane Response Team

- Review Hurricane Preparedness Plan (as revised for current year)
- Assist association manager with repair and maintenance inspection program.
- Update hurricane contact lists and distribute among HRT:
- Agency and storm forecast emergency numbers
- Association Employees, wet slip and dry rack customers (See Communications Coordinator)
- Materials and service vendors and contractors.

Communications Coordinator

 Organize and train a communications team. Include the Store Manager on this team. Be aware that communication is the key element in successfully carrying out the Hurricane Preparedness Plan. The communications team has the responsibility to make equipment available and to make certain that communication takes place between association management, the HRT, the various association departments, and boat owners.

- Plan a communication system with boat owners, including name, address, and telephone number of designated caretakers in the event they are out of town during hurricane season.
- Update employee emergency contact list
- Post and maintain a phone number list to include Emergency Management Agency, insurance agent, pre-qualified repair and salvage companies, utility companies, fire department, police and Marine Patrol, rescue service, hospital, and employees
- Inventory association handheld radios and weather alert radios

Dry Storage Boat Owners

• Review your boat liability insurance policy. The boat owner can be liable for damages caused by his boat.

Wet Slip Boat Owners

• Review your boat liability insurance policy. The boat owner can be liable for damages caused by his boat

G. Sanibel Harbour Yacht Club Hurricane Plan – <u>Condition 5, Season Starts (June 1)</u>

In Condition 5, beginning June 1 when hurricane season begins each year, there is no hurricane threat. This is the time to begin conscientiously monitoring the US Weather Service Radio and the Cable Weather Station for development of tropical systems. We will continue to heighten hurricane awareness and intensify pre-storm readiness.

Responsibilities in Condition 5 are:

Association Manager

- Monitor weather forecasts
- The association will use two sources of weather information to trigger Condition 4:
- a. National Weather Service/NOAA
- b. County EMA
 - Review membership of the HRT and fill any vacancies

- Convene HRT for an inspection of the association and boats for hurricane readiness
- Meet with managers of each department and association office to develop a prioritized list of equipment, records, stock, etc. for evacuation. Mark these items for quick identification and prepare a checklist. Consider the value of the item to getting business back in progress after a hurricane.

Hurricane Response Team

- Continually monitor weather forecasts
- Assist association manager in a full facility hurricane readiness inspection
- Work with association management to prepare and conduct hurricane preparation clinics and drills to instill a high degree of hurricane awareness and readiness among boat owners.

Communications Coordinator

- Develop assignment sheet for association handheld radios to issue to employees and volunteers
- Assemble/train team of 3 (with backups) for the emergency call network (In addition to store manager)

Dry Storage Boat Owners

- Prepare your boat evacuation plan file it with the association [*Note: Refer to Questionnaire at Appendix B*]
- Make your boat and trailer evacuation ready
- If you have no trailer, keep your boat ready for storms, by keeping the bilge plug pulled and canvas down
- Review your boat insurance policy with your agent keeping association contract requirements in mind

Wet Slip Boat Owners

- Prepare your boat evacuation plan file it with the association as [*Note: Refer to Questionnaire at Appendix B*]
- Make your boat evacuation ready.
- Practice your evacuation and storm preparation plan
- Review your boat insurance policy with your agent keeping marina contract requirements in mind

H. Sanibel Harbour Yacht Club Hurricane Plan – Condition 4, <u>Storm in the</u> <u>Vicinity</u>

In Condition 4 there is a tropical depression, tropical storm, or hurricane within a 1,200mile radius of the association. This is the time to assemble the Hurricane Response team to evaluate the threat to the area and to develop a preliminary action timetable for this particular storm.

All association employees are to make contact with their supervisor. Plan to be called to duty at or before Condition 4.

Be aware that progression from Condition 4 to Condition 0 – hurricane in progress, can happen swiftly!

Responsibilities in Condition 4 are:

Association Manager

- Schedule and conduct meetings with HRT to determine threat potential and action timetables
- Meet with Communications Coordinator and volunteer team to review Communications strategy and requirements.
- Meet with each marina department head to review Communications strategy and requirements.
- Review list of pre-selected equipment and records to be evacuated in each department
- Confirm with association office readiness to secure rental trucks for evacuation
- Meet with dry rack and wet slip managers and review "Boat Owner's Hurricane Readiness Questionnaire" on file for each boat. Obtain updates from boat owners as required
- Determine the number of absentee boat owners expected
- Schedule association crew for storm duties. Include "shore leave" for crew to prepare homes and families
- Coordinate securing association facilities & equipment
- Delegate supervision of volunteers. Assign HRT member for follow-up on each.

Hurricane Response Team

- Evaluates the storm threat potential by plotting the advance and assessing weather reports.
- Determines a timetable for action for this particular storm.
- Initiate notification of wet slip boat owners
- When the storm is perceived as a threat, the HRT activates Communications.

Communications Coordinator

- Assemble members of the communication team for briefing on the storm as advised by the HRT
- Disseminate <u>only</u> information from the HRT, as approved by association manager, regarding the storm to maintain standard information and to minimize confusion.
- Keep a list of persons not reached on the first call and continue to repeat this call list
- Distribute handheld radios as advised by association manager
- Perform initial communications regarding the storm and status of preparedness plan implementation to association employees, and volunteers s as directed by the association manager
- Conduct telephone alert of volunteers.
- Begin maintaining "storm notice posting" at the association office. Post storm information on bulletin board outside of store (to reduce the traffic of curious on-lookers in the store).

Dry Storage Boat Owners

- The association recommends that the "Boat Owner's Hurricane Readiness Questionnaire is current and complete and on file at the association
- Make final readiness checks on your boat trailer and on your towing vehicle

Wet Slip Boat Owners

- The association recommends that the "Boat Owner's Hurricane Readiness Questionnaire is current and complete and on file at the association
- Keep an adequate inventory of storm gear aboard and maintain dock and anchor lines of proper size and condition.
- Check your primary and alternate evacuation anchorages reevaluate your evacuation plans.

• Adhere to the association dockage contract provision that all boats must be able to get underway under its own power.

Association Operations – Office

- Meet with department managers to assist with preparing items for evacuation
- Place tentative order for lease evacuation transportation and storage units

Association Operations – Dry Storage Manager

• Perform storm readiness inspections on area and equipment

Association Operations – Wet Storage Manager

- Perform storm readiness inspections on area and equipment
- Thoroughly inspect floating docks and piers for potential problems. Pay special attention to areas where wave action will be severe
- Ready extra line, chafing gear and fendering.

Association Operations – Ships Store Manager

- Perform storm readiness inspections on area and equipment
- o Distribute Hurricane Kit Supplies as directed by association manager
- Order fuel, ice, and any other necessary supply
- Mark supplies in store stock for association use to avoid depletion of stock by member demands.
- Review the checklist for merchandise, store records, and cash that are to be evacuated.

I. Sanibel Harbour Yacht Club Hurricane Plan – <u>Condition 3: 72-48 Hours to</u> <u>Landfall</u>

In Condition 3, we are under a storm threat. This is the time to activate the full hurricane response team and to be well into implementation of the Hurricane Preparedness Plan. Everyone should frequently monitor radio, TV, or NOAA Weather Radio for official bulletins of the storm's progress. Also, everyone should review needs and working condition of emergency equipment, such as first aid kit, flashlights, and battery-powered radios.

All association employee leave is canceled – everyone is to report to their supervisor.

Responsibilities in Condition 3 are:

Association Manager

- Visit with each employee to increase his or her personal level of preparedness and to encourage prompt return to work after the threat passes
- Prepare to issue a notice that evacuation of wet slips and dry racks is recommended

Hurricane Response Team

- Evaluates the storm threat potential by plotting the advance and assessing weather reports.
- Advise manager on timing of issuing a notice that evacuation of wet slips is recommended. Do this very early in the U. S. Weather Service Hurricane WATCH stage in order that boats may be clear of the slips by the U. S. Weather Service Hurricane WARNING stage.
- Issue a notice that evacuation of dry racks is recommended early in the WATCH stage. The notice will include the deadline for access to boats in the racks. After this deadline boats in dry storage will not be moved to wash racks for securing of contents.
- Be prepared to step preparation timetables if forward speed and intensity increase.
- As time allows, work with association crew in <u>assigned areas</u> with boat evacuation and general facility preparations.
- Chair of HRT will report progress report hourly to Communications Coordinator.

Communications Coordinator

- Constant radio contact with association manger and HRT
- Continued efforts to contact boat owners to relay HRT messages
- o Maintain storm information on bulletin board outside of store
- Receive and log boat evacuation or preparation information. Designate a courier to convey information to wet slip and dry rack managers by carbon copy note.

- Post evacuation and return shuttle information schedules, with records of who departs and who returns (assign volunteer to this)
- Notify suppliers to hold shipments until further notice

Dry Storage Boat Owners

- Evacuation of your boat to safety is strongly advised
- Secure your boat according to your plan
- Be aware that any costs associated with securing a boat at the association will be charged to the boat owner
- Advise the association of your intention and schedule for evacuating your boat
- Be aware that launching will terminate when wind speed reaches 25 knots
 or at a specified time to allow completion of association storm preparations, so plan to move early
- The association will assist <u>only</u> with launch and recovery as weather conditions permit

Wet Slip Boat Owners

- Evacuation of your boat to safe anchorage or to haul out is strongly advised
- Secure your boat according to your plan
- Act soon ... Bridges will be locked down
- Advise the association of your intention and schedule for evacuating your boat by water or to take to a yard for haulout.
- Anticipate that the floating docks may float off the piling
- The association may be unusable to secure unattended boats.
- Be aware that any costs associated with securing a boat at the association will be charged to the boat owner
- Once your boat is secured, leave it and don't return once the wind and waves are up.
- Under NO circumstances should you ride the hurricane out on your boat.

Association Operations – Office

- Secure a rental truck for evacuation of pre-selected office equipment and records.
- Coordinate materials and equipment evacuation needs for each department.

Association Operations - Dry Storage Manager

- Launch boats for evacuation on first come, first serve basis.
- Launch boats <u>only</u> for evacuation by water
- Periodically check progress of all crews
- Once notice is given to secure all boats:
- Put all boats in dry racks if possible. Secure outside racks.
- PULL boat plugs and LOWER canvas. The additional weight of water in boats could collapse the rack system.
- Manager will inspect knots and plugs/canvas after crews pass. Ensure that proper knots are being used.
- Ensure crew is working with extreme caution, wearing non-skid shoes, hard hats, and safety harnesses
- Terminate work in upper racks if conditions warrant (high wind -25 Knots, rain)

Association Operations – Wet Storage Manager

- Assist with launch and haulout
- Continue fuel dock operations
- Determine best locations for boats likely to be left in the association.

Association Operations - Ships Store Manager

- According to the checklist, prepare merchandise, store records, and cash that are to be evacuated.
- As confusion in the stores mounts, close for retail business in order to assist with communications and to begin securing the store and contents for storm (Remain open for ice and hurricane supply items until the situation is prohibitive) As confusion in the stores mounts, the stores will be closed for retail business in order to function as a communications base and to begin securing the store and contents for storm (Remain open for ice and hurricane supply items until the situation is prohibitive).

J. Sanibel Harbour Yacht Club Hurricane Plan – <u>Condition 2: 48-36 Hours to</u> <u>Landfall</u>

In Condition 2, A hurricane may strike within 48-36 hours – a hurricane WATCH has been issued. This is the time to complete securing of association and boats. The

Emergency Management Agency probably has recommended voluntary evacuation of islands and other low-lying areas by this time. Association management, in consultation with the HRT will determine association closing and employee evacuation schedule. Entry to the association is limited at this time to employees, members of the HRT.

Responsibilities in Condition 2 are:

Association Manager

- o Make continual checks of storm readiness preparations in all departments
- Determine security requirements as confusion mounts. Reducing unnecessary traffic at the association may require a Security Guard

Hurricane Response Team

- Evaluates the storm threat potential by plotting the advance and assessing weather reports.
- Be prepared to step preparation timetables if forward speed and intensity increase.
- Assist association manager in checks of storm readiness preparations in all departments

Communications Coordinator

- Prepare communications equipment and contact lists for evacuation
- Put pre-qualified repair and salvage companies on stand-by

Dry Storage Boat Owners and Wet Slip Boat Owners

• Prohibited from entering Association grounds to allow the HRT to secure the facility.

Association Operations – Office

- Back up computer files
- Print out general ledger to date
- Process And mail all outgoing mail
- According to the checklist, load office equipment and files for evacuation

Association Operations – Dry Storage Manager

- Secure area flags, trashcans, carts, furniture, fire extinguishers, and other loose items that can be affected by wind.
- Secure dinghies, day sailors and outside dry rack boats
- Place association cart on the dinghy trailer for evacuation
- Load dry storage customer and operations files for evacuation

Association Operations – Wet Storage Manager

- Secure area flags, trashcans, carts, furniture, and other loose items that can be affected by wind.
- According to the checklist, load wet slip customer and operations files for evacuation

Association Operations – Ships Store Manager

- According to the checklist, load merchandise, store records, and cash for evacuation. Coordinate transportation with Association Office.
- Inventory and order fuel and ice
- Consolidate frozen items into 2 freezers, if possible.
- Freeze or release live bail once pump is shut down. Do early enough to allow freezing before electricity goes off.
- Set up 12v batteries to power VHF during electrical outages.
- Carefully monitor sales of ice, batteries, flashlights, rope and other storm supplies. Retain an adequate stock for marina's use.
- Relocate merchandise that cannot be evacuated but could be damaged by flooding. Ensure that storage room doors and vents are tightly secured with plywood and plastic.
- Assist Communications Coordinator as required

K. Sanibel Harbour Yacht Club Hurricane Plan – <u>Condition 1: 24 Hours to</u> <u>Landfall</u>

In Condition 1, there is a high probability that the hurricane will strike, and a hurricane WARNING has been issued. At this point, evacuation efforts should be completed.

Association management will announce the association closing and employee evacuation schedule. Everyone should be on standby to evacuate. Entry to the association is limited to employees and members of the HRT.

Everyone should continue to closely monitor radio, TV, NOAA Weather Radio, or hurricane. Follow instructions issued by local officials. LEAVE IMMEDIATELY IF ORDERED TO DO SO. Under any circumstances - leave areas that might be affected by storm tide or stream flooding.

Responsibilities in Condition 1 are:

Association Manager

- Prepare to evacuate
- Account for all personnel.
- Arrange for transportation.
- o Make final checks of storm readiness of all departments
- Prevent unnecessary traffic at the association
- Base a decision to evacuate on recommendations from local authorities and the condition of evacuation routes.
- Evacuate essential files, records, equipment and personnel when premises are secured or immediately on order from the Emergency Management Agency.

Hurricane Response Team

- Evaluate the storm threat potential by plotting the advance, assessing weather reports and listening to County Emergency Management Agency instructions.
- Be prepared to step preparation timetables if forward speed and intensity increase
- Advise association manager on final evacuation timing
- Assist association manager in final storm readiness checks
- Organize post-storm rendezvous

Communications Coordinator

• Communicate evacuation order as directed

- Communicate post-storm rendezvous
- Maintain telephone and radio operations as long as possible

Dry Storage Boat Owners

- Stay clear of the association, unless you are a member of the Hurricane Response Team
- Have completed all storm preparation efforts for your boat. Complete securing home and evacuating family as instructed by the County Emergency Management Agency

Wet Slip Boat Owners

- Stay clear of the association, unless you are a member of the Hurricane Response Team
- Have completed all storm preparation efforts for your boat. Complete securing home and evacuating family as instructed by the County Emergency Management Agency

Association Operations – Office

• Evacuate office equipment and files

Association Operations – Dry Storage Manager

- Prepare a list of boats left in association and photograph each.
- Use forklift to assist with removal of heavy items form docks
- Fuel and then park forklifts at highest ground point. Park boat elevators in down position.

Association Operations – Wet Storage Manager

- Stand by to position breakwater across association entrance with proper markings in place after evacuation efforts are complete
- Secure any boats not evacuated
- Prepare a list of boats left in association and photograph each.
- Lash dock boxes to cleats and wire/lock tops closed
- Secure all dock carts ashore
- Wire shut all power centers covers. Use 3" strips of wire.

- Decommission and secure fuel docks, including pump out station (Remove all oils and other inventory)
- Remove hose reels and other removable items
- Lash dispenser covers to the frames
- Seal fuel storage tanks
- Close all valves
- Disconnect ramps and pull/ secure ashore
- At last call for evacuation remove life rings and fire extinguishers from floats.

Association Operations – Ships Store Manager

- Collect and consolidate Hurricane Kit materials and equipment not in use
- Complete final boarding of building

L. Sanibel Harbour Yacht Club Hurricane Plan – Condition 0: Hurricane

In Condition 0, we will be under hurricane influence. No boat or association preparation will occur. Concern is for personal and family safety only.

Responsibilities in Condition 0 are:

Association Manager, Hurricane Response Team, Communications Coordinator, area managers and employees

• Remain in safe shelter

Dry Storage Boat Owners and Wet Slip Boat Owners

• Remain in safe shelter; do not be aboard in a Hurricane!

One of the most dangerous mistakes a skipper can make is to stay aboard during a hurricane. There is little, if anything, a skipper can do to save a boat when winds are blowing 100 mph, tides are surging, and visibility is only a few feet.

M. Sanibel Harbour Yacht Club Hurricane Plan – <u>Return and Recovery</u>

After the hurricane has passed, everyone is advised to remain in a protected area until announcements are made on radio or TV that dangerous winds and flooding have passed. Telephone communications may not be possible. Listen to public radio broadcasts for this information (FM Channel, W. J. C. L.). Association personnel are expected to return to

the association as soon as possible to begin the cleanup process and to return the association to operating conditions.

Controlling damage after the hurricane is important. This can save time and money for the association and boat owners. Someone with authority must be available to work with volunteers, owners, and insurance representatives. Security to limit access to the property. We will admit only boat owners, authorities, insurance personnel, and only contractors and surveyors on assignment. Salvage operations will be discussed with owners and their insurance companies before moving damaged boats. Calling insurers with a description of conditions at your association will help expedite removal of boats as well as the payment of salvage bills and claims.

If there have been high waters, be careful of snakes or other animals that may have gotten into buildings or other high points.

Responsibilities in Return and Recovery are:

Association Manager

- Communicate with HRT and assemble at a designated time and place
- o Re-enter association when cleared by authorities
- Prepare to assist in search and rescue activities
- Conduct a safety inspection and document damages photographically before permitting customers on the property. If necessary, request assistance from the Emergency Management Agency, fire department, utility companies, or police.
- Clearly mark and blockade hazard areas; be particularly careful of fallen electrical lines and leaking fuel.
- Deploy containment equipment for liquid spills
- Designate spokesperson(s) for media, insurance, and customers
- Evaluate boat condition reports as provided by wet and dry storage managers. Prepare reports for customer notification by Communications Coordinator
- Contact FL DNR CRD for any necessary permit requirements for rebuilding (refer to Coastal Marshlands Protection Act of 1970)
- Begin clean up and repair procedures only after insurance company has been contacted and legal documentation of damage has been accomplished.

• Determine the priorities for getting the association back in business – make assignments to HRT accordingly

Hurricane Response Team

- Assists association manager with damage assessments and planning a repair schedule
- Make recommendations for improving the marina "Hurricane Preparedness Plan" (in writing within two weeks of Hurricane)

Communications Coordinator

- Set up and supervise operations center, log in all arrivals and departures.
- Contact employees not returned
- Contact repair and salvage companies as directed
- Contact customers to report boat condition and when association is estimated to be open to inspect boats

Dry Storage Boat Owners and Wet Slip Boat Owners

- Remain clear of the association until notified.
- Review insurance policy and prepare to evaluate and report damages to insurance agency

Association Operations – Office

- Assist Communications Coordinator
- Restore offices to operation as soon as possible

Association Operations - Dry Storage Manager

- As approved by manager:
- o Evaluate boats in dry storage and submit a report to manager
- Put forklift and other lifts in service

Association Operations – Wet Storage Manager

- As approved by manager:
- Evaluate boats in wet storage and submit a report to manager
- Prepare Association boat for launch

Association Operations – Ships Store Manager

• Obtain and account for emergency equipment issued

• Assist Communications Coordinator

"We're all in this together" Captain Ahab

I have read, understand, and agree to Sanibel Harbour Yacht Club "Hurricane Preparedness Plan".

Print name: _____, Employee ___, Boat Owner: ___ Unit #____

Signed: _____

Date: _____

HURRICANE PREPAREDNESS GUIDELINES FOR FLORIDA MARINAS

SECTION IV Appendix A

EXAMPLE - MARINA HURRICANE PREPAREDNESS KIT INVENTORY SHEET

Inventory Date: _____

Inventoried By:

Reviewed By Management (signature/date):

ITEM	QUANTITY TO STOCK	QUANTITY ON HAND	DATE REPLENISHED	ITEM CONDITION OK/COMMENTS
SAFETY & FIRST AID:				
First Aid Kits				
Blankets				
Flares				
Medicine				
Barricades				
Warning Signs				
DC Powered Radios				
Sanitation Supplies				
Fire Extinguishers				
Potable Water Containers				
PERSONNEL GEAR				
Foul Weather Suits				
Foul Weather Boots				
Hard Hats				

Life Jackets		
Safety Harnesses		
VHF Handheld Radios		
Flash Lights & Batteries		
TOOLS AND EQUIPMENT		
Dock Bolt Wrench Set		
Small Tool Set		
Gasoline Powered Pump		
Hand Pump		
"Come-a-long"		
Generator w/ Fuel		
Extension Cords		
Sledge Hammer		
Hammers		
Shovel		
Pry Bar		
Ax		
Oil Spill Response Kit		
Mops, Brooms, Buckets		
Ice Chests		
Lanterns and Fuel		
Emergency Lights (DC)		
Emergency Lights (AC)		

Chain Saw		
SECURING MATERIALS		
Plywood, Bulk		
Plywood, Cut to Fit Windows		
Lumber (2"X4"X16')		
Rope		
Lashing Cord		
Wire Ties		
Chain		
Anchors		
Cable w/ Clamps		
Nails – Asst. Sizes		
Spikes		
Screws		
Lag Bolts		
Masking Tape		
Duct tape		
Sandbags		
Fenders and Fendering Material		
Chafing Gear		
HDuty Trash Bags (Asst. Sizes)		

HURRICANE PREPAREDNESS GUIDELINES FOR FLORIDA MARINAS

Appendix B boat owner's hurricane readiness questionnaire

Use this as a worksheet to describe your boat's state of hurricane readiness and your preparation plans. Return a copy to the association office and provide a copy to your alternates (an alternate must be named for the event of your absence).

Boat name:	, Leng	th:, Mod	lel:	, Power
, Sail				
Owner's name:	, Add	lress:		
City:	, State:,	Zip:	, Day phone:	
Night Phone:	, Other Phones:			
Captain's name:	, Ad	dress:		
City:	, State:	_, Zip:	, Day phone:	
Night Phone:	, Other Phones:			
•	, Access to hurri Alternate #1's name:			_, Address:
City:	, State: _	, Zip:	, Day ph	one:
Night Phone:	, Other Phones:	Has boat ke	wc?	Access to
			.ys	, Access to
Alternate #2's name:		, Address:		
City:	, State: _	, Zip:	, Day ph	one:
Night Phone:	, Other Phones:			
Has boat keys?	, Access to hurricane equi	ipment?		

Boat's current location:	, Planned location during a hurricane:				
If at a dock: Slip #,					
Additional lines no.:, Length:,	Size:, Ch	afing gear:	, Fenders:		
If at a hurricane hole:					
Travel time by water from present location:	, Are there bri	dges?, If yes, will th	ey open prior to hurricane?		
Has owner of surrounding land been contacted?		_, How will skipper and crew g	get ashore?		
Type of bottom:	, Depth:	_, Number/types of anchors ne	eded:		
Lines needed:	, Number:	, Length:	, Size:		
Chain needed:	, Number:	, Length:	, Size:		
Chafing gear:		, Swivels: _	, Shackle	es:	
If stored ashore, is boat already ashore and who made for hauling?			-		
Contact name (marina/property owner):		, Phone number:		,	

List all equipment needed to prepare boat: List equipment to be stripped from boat:

Equipment	Current location	Equipment	Storage location
• Extra lines		• Electronics	
Chafing gear		• Dinghy	
Fenders		Outboard fuel	
Anchors + Rodes		• Sails	

• Swivels + Shackles	• Bimini
• Wire ties	Galley fuel
Duct tape	• Ship's papers
Exhaust Port Plugs	Insurance Policy
Tool Kit	Boat inventory/Photos

Diagram of proposed hurricane docking or anchoring arrangement:	Hurricane plan final checklist:	• Remove bimini, sails, life rafts, etc.
	 Arrange dock/anchor lines Add chafe protection Place extra fenders/fenderboards Duct tape windows/hatches 	 Disconnect shore power Close fuel valves Close all but cockpit seacocks Lock boat Notify marina manager
	• Plugs in engine ports	

Appendix C EMERGENCY RESPONSE AGENCY PHONE NUMBERS

EMERGENCY	911
County Agencies	
Emergency Management Agency	477-3600
Fire Department	334-6222
Sheriff Department	477-1200
Police Department	334-4155
US Coast Guard	463-5754
Florida Fish & Wildlife Conservation Commission	888-404-3922
Hospital	433-7799
County Public Health	332-9501
County Public Works	479-8900
State Agencies	
Hazardous Materials Response Team	800-564-7577
Agriculture Department	202-720-2791
Florida Environmental Protection Division	(404) 562-9900
Florida Department of Natural Resources	(888) 275-8747
Florida State Patrol	(239) 278-7100
Florida Department of Transportation	(202) 366-4000
Federal Agencies	
Federal Emergency Management Agency (FEMA)	(770) 220-5430

Hurricane Program Manager: William G. Massey	(770) 220-5230 fax
U. S. Environmental Protection Agency	(800) 241-1754
	(404) 562-9900
National Response Center	(800) 424-8802
U.S. Coast Guard – Marine Safety Office	(912) 652-4353
Chemical Transportation Emergency Center (CHEMTREC)	(800) 424-9300

Appendix D Hurricane Preparedness Instructions for Boat Owners

The key to protecting your boat from hurricanes or any threatening severe weather is planning, preparation, and timely action. A boat owner/ operator may be held responsible for damages caused by his vessel during a natural disaster. Normally the National Weather Service will issue 48 and 24-hour warnings; however, in some instances only a 12-hour warning will be given. The association will evaluate the storm threat and recommend evacuation accordingly. Upon receiving first storm notice, the boat owner/operator should immediately take precautionary measures to see that his boat is properly secured.

Each boat owner needs a plan unique to the type of boat, the local boating environment, the severe weather conditions, and the characteristics of safe havens and/or plans for protection. The following preparation and precautionary suggestions are issued as guidelines to be used by the marine community. The following precautions and checklists are meant as guides only. It is stressed, however, that following these guidelines does not necessarily exempt the owner/operator from being held responsible should his boat cause damage to another's property; nor will acquisition of required safety equipment and following the suggested safety procedures necessarily assure that no damage will occur to the boat.

GENERAL PRECAUTIONS

- Prior to the hurricane season, develop a detailed plan of action to secure your vessel in the association, if permitted, or remove your boat from the threatened area, or take your boat to a previously identified hurricane refuge. Specifically identify and assemble needed equipment and supplies.
- Hurricane moorings should be located in advance. Permission should be obtained from appropriate persons. For keelboats, make certain there is enough water at low tide.
- A practice run should be made to check accessibility, depth of water, bridges, location of aids and/or obstructions to navigation and locations to secure lines or drop anchors. Drawbridges will not open for boats during evacuation procedures.
- Before a hurricane threatens, plan how you will remove valuable equipment from the boat. Determine how long it will take so you will have an accurate estimate of the time and work involved.
- After you have made anchoring or mooring provisions, remove all movable equipment such as canvas, sails, dinghies, radios, cushions, biminis and roller furling sails.
- Lash down everything you cannot remove, such as tillers, wheels, booms, etc. Seal all openings (use air conditioning duct tape) to make the boat as watertight as possible.
- Make sure the electrical system is off unless you plan to leave the boat in the water. If the boat is not to remain in the water, remove the battery to eliminate the risk of fire or other damage.
- Arrange for a reliable person to learn and carry out your hurricane plan if you are out of town during a hurricane or severe storm.
- Check your lease agreement with the association or storage area. Know your responsibilities and liabilities as well as those of the marina or storage area.
- Consolidate all documents including insurance policies, a recent photograph or video tape of your vessel, boat registration, equipment inventory, lease agreement with the association or storage area, and telephone numbers of appropriate authorities, i.e., harbor master, Coast Guard, insurance agent, National Weather Service, etc. Keep the documents in your possession in a locked water-proof box. They may be needed when you return to check on your boat after the hurricane.
- Maintain an inventory list of both the items removed and those left on board. Items of value should be marked so that they can be readily identified.