

North Carolina MARINA / BOATYARD HURRICANE PREPARATIONS

NCwaterways.com

MARINA OPERATOR CHECKLIST

<http://www.ncwaterways.com/BusinessAssistance/Regulatory/Waterfront/Hurricane-preparedness-plan.PDF>

1. Be sure to locate the active insurance policies and insurance companies' contact(s) information for all of the marina / boatyard policies: flood, wind, building, docks, casualty, automotive, other property, marine, liability, business interruption and others
 - a. Take time to read so you know where your key liabilities are
 - b. Make copies and have one dry, safe and off-site
2. Request that boat owners with boats still at your docks during event do the same – if you are storing their boat – have your copy of their insurance rider
3. Take videos/photos of office equipment, trade equipment, everything that is insured

EQUIPMENT ON SITE

- | | |
|--|--|
| <input type="checkbox"/> lines | <input type="checkbox"/> camera/video equipment |
| <input type="checkbox"/> chafing gear | <input type="checkbox"/> mobile radio/cellular phone |
| <input type="checkbox"/> tarps | <input type="checkbox"/> spill containment gear |
| <input type="checkbox"/> screw anchor | <input type="checkbox"/> minimum repair kit |
| <input type="checkbox"/> batteries | <input type="checkbox"/> _____ |
| <input type="checkbox"/> first aid kit | <input type="checkbox"/> _____ |
| <input type="checkbox"/> portable generator | <input type="checkbox"/> _____ |
| <input type="checkbox"/> plywood | <input type="checkbox"/> _____ |
| <input type="checkbox"/> cut/patch equipment | <input type="checkbox"/> _____ |
| <input type="checkbox"/> duct tape | <input type="checkbox"/> _____ |
| <input type="checkbox"/> submersible pump | <input type="checkbox"/> _____ |
| <input type="checkbox"/> plastic sheeting | <input type="checkbox"/> _____ |

INSPECT YEARLY

- docks have quick shut off above the flood plain
- docks are attached to pilings that can sustain a 50 year storm surge and wind load
- there is enough storage space above the flood plain for boats and vehicles
- there is storage space above the flood plain for office records and equipment
- there is emergency power for winch operation, travel lift, pumps and communication
- cradles and jacks are stored and easily accessible
- moorings have been checked by a diver and set
- all employees are trained for hurricane plan actions
- all boaters have received checklists for hurricane planning
- all boaters have current insurance for their vessels
- _____
- _____
- _____

INSPECT MONTHLY

- building roofs, doors and windows
- fuel and sewer pumping lines
- fire-fighting gear
- spill containment gear
- lifts and cranes
- electrical supplies
- debris is removed from open areas
- trees and shrubs are trimmed
- trash bins and dumpsters are secured in protected areas
- salvage or abandoned hulls, equipment and parts are disposed of or secured
- dry storage areas and racks
- _____

CONTRACTORS FOR RECOVERY

SERVICE	NAME	PHONE/FAX	
NC Boating Industries	Mike Bradley	919-715-7668	919-715-7777
County Inspector			
FEMA Assistance			
CAMA Permit Rep			
Crane/Barge			
Diver			
Plumber			
Electrician			
Roofer			
Boat Repairs			
General Contractor			
Dock Supplier			
Fuel Spill			

ACTIONS DURING STORM APPROACH

72-48 HOURS PRIOR TO PROJECTED STORM ARRIVAL

MANAGER (this job is the same throughout the preparation stage)

- monitor NOAA weather station and/or the internet weather reports
- assist where needed
- coordinate volunteers
- acts as home base where employees can report jobs completed and where help is needed
- coordinate supplies, tools and labor

OFFICE

- notify customers that facility is on alert
- monitor NOAA weather station and/or internet weather reports
- process mail and all paperwork
- back up computer records
- delay orders of materials and stocks that are due to be shipped
- contact all contractors for post-storm clean-up
- contact volunteers to begin preparation work
- cover and tape windows

YARD

- remove or secure blowables (signs, tables, chairs, trash cans, etc.)
- fill fuel tanks
- remove or secure small dry storage boats (dinghies, kayaks, canoes etc.)

DOCKS

- begin hauling boats
- begin securing boats that have decided to remain at the docks
- allow boat owners to evacuate to an off-site location
- assist boaters in preparation

48-24 HOURS PRIOR TO PROJECTED STORM ARRIVAL

OFFICE

- remove equipment and records to safe storage
- cover remaining equipment and furniture with plastic
- move items that could sustain water damage to tables or off the ground
- purchase extra batteries, food and water for emergency securing and recovery workers
- have a source of ready cash for recovery work
- confirm insurance coverage and secure policies
- establish an "outside the area" contact person for communication during evacuation
- _____

YARD

- move all vehicles upland
- secure the marina from non-essential traffic
- remove floating docks if possible and tie them down
- turn off water supply if it is public
- turn off fuel pumps and main electricity
- take pictures/video of the facility and preparation conditions
- _____
- _____

DOCKS

- continue securing vessels
- check boats to see that no occupants are remaining
- _____

24-0 HOURS BEFORE PROJECTED STORM ARRIVAL

OFFICE

- lock doors and brace them against wind
- set up answering machine (have battery back-up installed)
- give instructions for post-storm activities
- give approximate time to return to the marina (to be confirmed by off-site contact)
- ensure everyone has the number of the off-site contact
- _____
- _____

YARD

- do a last patrol of the grounds
- secure all access points
- _____
- _____
- _____

DOCKS

- conduct a last patrol of the vessels, checking dock lines and moorings
- ensure no one remains on their vessel-if they choose to remain have them sign a waiver of liability and give you the next of kin address and phone number
- _____

Send All Employees Home Unless a Skeleton Crew is
needed to Remain for the Storm

DURING THE STORM

ON-SITE

- Monitor weather reports on radio, TV and/or internet
- Stay in a protected area
- Use extreme caution and stay off the docks
- Do not attempt to re-tie or board a loose vessel during the storm
- _____
- _____

OFF-SITE

- Monitor weather reports on radio, TV and/or computer
- Coordinate return of all employees
- Review recovery plan
- Review insurance policy
- _____
- _____

RECOVERY

Beware Of Snakes, Downed Electric Lines, Wet Electronic Equipment, Leaking Gas or Fuel

- contact employees regarding when they should return
- contact recovery crews
- contact insurance company to get an adjuster and surveyor to you
- set up security to prevent looting and for crowd control
- photograph/video everything
- complete a survey of the facility including equipment and inventory
- estimate damages and prepare a written assessment if possible
- if anything is stolen, file an incident report with local police
- set up an answering machine or volunteer to respond to customers' inquiries
- investigate to find a marina where your customers can berth temporarily
- begin clean-up efforts
- coordinate employees and contractors
- investigate boat repair facilities for customer referral
- control news media; no media exposure is usually better
- control conflicts between returning boat owners and recovery of damaged boats
- order repair supplies
- coordinate utility evaluation and reinstatement of service
- if your marina did not sustain damage, let other marinas know that you can take boats
- _____
- _____

CUSTOMER CHECKLIST

Equipment To Be Kept On Board:

- chafing gear
- fenders
- two sufficient anchors with 300' or more oversized rode
- flashlight with spare batteries
- battery-operated radio

Check Monthly:

- exterior lights operable
- auto bilge pump operating (check battery)
- hatches are watertight
- power and electric gear operating
- engine battery charged
- flashlight battery charged
- radio batteries charged

To Do At A New Marina:

- learn marina approaches and basin
- learn the size and type of your mooring
- ensure mooring and lines are sufficient for all likely wind direction and velocity
- ensure mooring has enough weight and scope and is properly set
- learn your moorage lease and rental agreement responsibilities
- learn responsibilities for your boat's safety when a hurricane is approaching
- develop a plan for securing your vessel outside the marina if you plan to evacuate
- if evacuating, visit the site by boat and time the trip
- learn what possible delays you may encounter when evacuating (drawbridges, boat traffic etc.)
- photograph your boat and surroundings
- keep a list of all equipment on board
- keep a list of all equipment that will be removed during storm preparations
- keep a complete set of records for your boat at home
- give the marina operator the name and number of your absentee skipper
- give the marina operator a description of your boat, registration number and location

DOCKED BOAT PREPARATIONS

- strip all removable items, including spare rigging
- clear self-bailing cockpit drains
- close all through-hull fittings
- set chafing gear where lines will rub (chocks, cross lines, deck edge, dock edge etc.)
- remove portable fuel and oil storage containers
- remove ship papers
- shut off fuel tanks
- leave anchor light on
- leave auto bilge pump on
- check openings to ensure boat is watertight
- set and check storm anchors
- consider attaching 3 sets of bow and stern spring lines
- consider attaching lines to cleats at a 45 degree angle
- consider tying your boat between two piers or along a pier and anchored off one side

MOORED BOAT PREPARATIONS

- Make Plans To Have Someone Pick You Up From Your Boat Before The Storm Arrives
- strip all removable items, including spare rigging
- clear self-bailing cockpit drains
- close all through hull fittings
- remove portable fuel and oil storage containers
- remove ship papers
- shut off fuel tanks
- leave anchor light on
- leave auto bilge pump on
- check openings to ensure boat is watertight
- use storm pennants to increase scope
- attach chains directly to pennants instead of swivels
- add an emergency catenary weight at the vessel end of the chain
- use double or triple chafe protection
- use chafing gear over entire length of pennants
- use two pennants
- if no permanent mooring is available, use two storm anchors at 45-degree angles

TRAILERABLE BOAT PREPARATIONS

Store in a garage:

- strip all removable items, including spare rigging
- clear self-bailing cockpit drains
- close all through-hull fittings
- remove portable fuel and oil storage containers
- remove ship papers
- shut off fuel tanks
- leave auto bilge pump on
- check openings to ensure boat is watertight
- _____
- _____
- _____

If no garage is available:

- secure trailer to a sturdy object
- let half the air out of the trailer tires
- put wood blocks between the frame and axle
- take out the drain plugs
- cover with tarp
- use tie-downs
- _____
- _____

ANCHORED BOAT PREPARATIONS

Make Plans To Have Someone Pick You Up From Your Boat Before The Storm Arrives

- strip all removable items, including spare rigging
- clear self-bailing cockpit drains
- close all through-hull fittings
- remove portable fuel and oil storage containers
- remove ship papers
- shut off fuel tanks
- leave auto bilge pump on
- check openings to ensure boat is watertight
- use 3 or 4 substantial anchors and good tie rope
- tie your boat high on the mainland to a substantial tree or similar structure
- do not tie parallel to the bank
- keep a navigable passage at your stern to allow other boats passage
- use enough line to allow for storm surge
- leave enough room between your boat and others to allow for swing
- take valuables off
- _____
- _____
- _____
- _____