Scope and Purpose

The purpose of this procedure is to describe the preparations to be made to protect the RYC Marina and members' boats during severe weather events in summer months. The scope of the procedure includes both Club and Member responsibilities. The preparations are planned in a phased approach dependant on forecast wind speeds/directions as follows:

- Strong Gale forecast (sustained wind speeds 40 – 50 knots/75 – 90 km/hr)
- Storm forecast (sustained wind speeds 50 – 64 knots/90 – 120 km/hr)
- Hurricane forecast (sustained wind speeds greater than 64 knots/120 km/hr)

Note that these are the sustained wind speeds. Gusts of 25% - 75% higher wind speeds than the sustained speeds can be expected.

The objective is to ensure that the required preparations are in place before the storm hits, to minimize risks to the health and safety of members and staff, and to the welfare of member boats and Club assets.

Roles and Responsibilities

- Commodore – communications with membership as requested by Harbourmaster; call-out for volunteers if requested by Club Manager/Foreman
- Harbourmaster – planning of measures to protect the marina, owner of this Procedure, decisions on closure of harbour, monitoring of storm forecasts; identification of storm preparation level based on forecast wind speeds/directions
- Berths & Docks Director – monitoring of storm forecasts, alternate to the Harbourmaster in their absence
- Membership Director – preparation of emergency contact list of boat names/owners/contact numbers
• Club Manager/Foreman – monitoring of storm forecasts, execution of work tasks as laid out for harbour protection, holding of list of boat names/owners/contact numbers; determining need for volunteers; managing work of volunteers if needed
• Boat Owners – preparation of own boat and/or having arrangements in place for an alternate in case you are away when a storm arises, monitoring of weather forecasts and club notifications.

1. Pre-Season Preparations – Harbour

   a. Drive additional piles at outer ends of A, B and C docks to provide storm support/tie points
   b. Prepare shore tie lines (rope, or rope/chain), ready to run from end eye plate on the breakwater to the outer ends of A and B docks
   c. Prepare shore tie line (rope), ready to run from eye plate on breakwater to end of C Dock
   d. Prepare shore tie line (rope, or rope/chain), ready to run from mooring to the inner end of A dock.
   e. Target for Preparations to be completed by end of June each season

2. Strong Gale and above – Harbour

   a. 48 hours before forecast arrival of the storm – notify membership that harbour will be CLOSED to all traffic and services to docks will be shut down 24 hours before forecast arrival
      i. Run lines from hurricane poles to ends of A, B, docks, not interfering with vessel traffic
      ii. Attach chains to ends of A (inner and outer ends) and B (outer end) docks, to attach shore tie lines
      iii. Attach shackles to shore tie points on breakwater. Attach tie lines, flaked ready for run-out to the docks
      iv. Attach shore line from breakwater to end of C Dock
      v. Lay lines of heavy chain (1”) on beaches for members to lash dinghies or other small craft if brought ashore.
   b. 24 hours before forecast arrival of the storm – notify membership that harbour will now be CLOSED and services to docks shut off
      i. Attach shore tie lines to outer ends of A and B Docks
      ii. Attach shore tie line to inner end of A Dock, once need for workboat access is finished
      iii. Shut off water supply at shore connection
iv. Shut off electrical supplies at main on shore panel
v. Shut off power supply to pump out station
c. Double up mooring chains on Thumper
d. Club boats to be removed from the water and stored in the Spar Shed for the duration of the storm with one workboat kept in the water for emergency use and post-storm recovery. Mooring lines on workboat to be doubled.

3. Strong Gale – Boat Owners
   a. 48 – 24 hours before forecast arrival of the storm
      i. Monitor weather forecasts for storm type and intensity
      ii. Double up mooring and spring lines
         1. Ensure chafing protection is fitted to mooring and/or dock lines where they cross deck edges or through fairleads on deck
      iii. Lower/lash biminis, dodgers or other canvas
      iv. Remove or lash main sails to booms
      v. Remove roller furling headsails or wrap with a spare halyard and tighten
      vi. Ensure cockpit and deck drains are clear
      vii. Close all internal overboard connections
   b. ALL PREPARATIONS SHOULD BE COMPLETED AHEAD OF HARBOUR CLOSURE. MEMBERS SHOULD NOT BE ABOARD BOATS OR ON THE DOCKS DURING THE STORM.

4. Storm Force and above – Boat Owners
   a. 48 – 24 hours before forecast arrival of the storm, preparations as per Strong Gale, with the following additions/modifications
      i. It is strongly recommended that trailerable boats be recovered from the water and safely stored on land for the duration of the storm
      ii. All dinghies should be removed from the dinghy dock to shore and stowed upside down/deflated and lashed down.
      iii. All boats 36’ length and over remaining on the docks to deploy anchors to ease loading on the dock system. Anchors should be deployed approx. 100’ from the boat, with a marker/retrieval float and line to make recovery easier after the storm. Direction of deployment should be into the forecast peak wind direction.
      iv. Dodger/bimini/side curtains to be removed and stowed inside the vessel or taken home. Frames to be lashed.
      v. Sails (other than in-boom or in-mast furling) to be removed and stowed inside the vessel or ashore
vi. Owners should consider that there may be large quantities of rainwater accumulating in a hurry. Open boats should ensure electronics, batteries etc. are either waterproof or are removed, if a cover is not on the boat.

5. Recovery after the storm – Harbour
   a. Additional club work boats to be launched as required
   b. Storm shore lines to be retrieved back to shore
   c. Restarting of services (water, pump-out, electrical) to be done pending inspection of condition. If they have been submerged during the storm, water lines to be flushed and chemical shocked before returning to service. Electrical boxes to be checked for water leakage prior to re-energizing.
   d. Members to be notified of harbour re-opening time
   e. Club staff to assist members with buoyed anchor retrieval, if applicable.

6. Illustrations

   a. Buoyed anchor:

   line size approx. ¼” - 3/8” for retrieval

   For additional guidance on additional storm moorings for you boat, please consult the guidance diagrams on the RYC web site.