

# **BIOS Hurricane Plan**

## **Hurricane Preparation Plan**

This Plan is written with the intent to produce a consolidated scheme of operations in order to brief BIOS employees (including students and visitors if applicable) on what is required to prepare BIOS and its infrastructure in the event of a hurricane strike on Bermuda. It should be stated from the outset that the infrastructure in Bermuda is built to be as resilient as possible to any direct hurricane strike, and those personnel who have experienced recent storms will bear testimony to this. The aim should always be to ensure personnel safety and minimize the risk of damage to research equipment, vehicles, buildings and resources in advance of any hurricane in order to allow personnel adequate time to return to their homes and families to make their own preparations there.

1. If a hurricane/tropical storm is forming in the Atlantic region during hurricane season (1st June to 30th November each year) there will always be adequate warning from various sources, including the US National Weather Service ([www.weather.gov](http://www.weather.gov)), the National Hurricane Centre ([www.nhc.noaa.gov](http://www.nhc.noaa.gov)) and more locally, the Bermuda Weather Service ([www.weather.bm](http://www.weather.bm)). The Bermuda Weather Service uses a set of definitions to inform the media and the public of any threat and these are as follows:

<b>Type</b>	<b>Definition</b>
Potential Threat	System center is forecast to come within <b>400nm</b> of Bermuda
Threat	System center is forecast to come within 100nm of Bermuda
Tropical Storm or Hurricane Watch	Issued 48 hrs. or less prior to possible onset of Tropical Storm force winds (24-63 kts) or hurricane force winds (64 kts+)
Hurricane Warning	Hurricane force winds expected within 36 hrs

2. **Hurricane Planning Committee (HPC)**. This Committee should meet prior to the start of hurricane season (1st June annually) in order to discuss preparations for the forthcoming hurricane season. The HPC is to consist of the following personnel/appointments and will be led by the Primary Coordinator (PC) who is responsible for coordinating preparations before and activities during and after a hurricane:  
Facilities Manager (PC)  
President and CEO  
Assistant to President and CEO  
Chief Financial & Operating Officer  
Accommodation & Catering Manager  
Marine Superintendent  
Small Boats Manager/Dive Safety Officer  
IT Manager  
Lab Operations Manager  
Education Director, University Programs  
Director of Ocean Academy  
Treasurer/Controller
3. **Pre-Hurricane Meeting**. In the event of a Potential Threat/Threat (as defined in para 1 above) being broadcast, the HPC should meet as soon as practicable to finalize preparation plans and resolve any outstanding issues and concerns.
4. **General Responsibilities**. The following table details general areas and those appointments responsible to ensuring they are prepared and relevant personnel briefed for any subsequent clean-up operations:

Area of Responsibility	Appointment Responsible	Notes
Building/grounds security	Facilities Manager	Pre-checks to remove debris and loose articles and post-storm safety
Visitor/student safety and instruction (if present)	Education Director, University Programs and Director of Ocean Academy	In conjunction with Accommodation & Catering Manager
Resident Accommodation	Residents	Take reasonable precautions to secure loose articles/prepare for
Waterfront, vessels and moorings	Marine Superintendent and Small Boats Manager/DSO	
Laboratories	Resident Scientists	In conjunction with Lab Ops Tech
Catering/rations	Accommodation & Catering Manager	In conjunction with Head Chef
Emergency ferry service	Small Boats Manager/DSO	In event of Causeway closure (50kts+) and to include identification of potential docking sites

5. **Specific Responsibilities.** Further to the general responsibilities outlined above, by 1st June each year the following preparations/planning are to have taken place:

Task	Appointment Responsible	Notes
Full inspection of BIOS grounds/property	Facilities Manager	Including pruning of trees, removal/securing of loose articles and debris and building
Ensure all fuel tanks and fresh water tanks are full	Facilities Manager	To include gasoline, diesel and propane tanks
Ensure adequate supplies and equipment are ready for use and distribution	Facilities Manager	To include including emergency generator(s), chainsaw(s) and pre-cut window/door protection
Inspection of small boat moorings	Small Boats Manager/DSO	
Inspection and permission to use moorings in St George's	Marine Superintendent	For RV Atlantic Explorer
Provision of emergency food/rations	Accommodation & Catering Manager	Sufficient to feed full house of visitors/students for 10 days
IT/communications preparations	IT Manager	To include detailed contact list for BIOS employees
Check ability to generate power from Atlantic Explorer	Marine Superintendent & Facilities Manager	Post-storm emergency power supply to critical areas (labs, accommodation)

6. **General Safety.** All on-site cottages, Wright Hall lounge/dining hall and the library are considered safe areas for residents, visitors and students, providing sufficient preparations are carried out to secure windows and doors and secure/remove loose articles. All personnel on site are to take all reasonable precautions to ensure their own safety and the safety of others; in the event of a hurricane strike stay indoors unless it is an emergency and evacuation/movement outside is totally unavoidable and absolutely necessary. **Common sense must prevail at all times. In the event of a hurricane or other severe storm, the Passing Wind is to be considered out of bounds to all personnel.**