

Hurricane Response Annex

Introduction

It is the policy of RISD to view each hurricane threat as an extremely hazardous condition. As such, our goal is to minimize the risk to personnel, protect college property and assets, and provide for the continuity of college operations. Past experiences throughout the coastal region of our country have shown *timely preparation* is the key to survival when faced with such a dangerous force of nature.

This plan, in conjunction with the general Campus Emergency Response Plan, serves as a guide for effective and timely response to a hurricane event.

Forecasting/Tracking Resources

RISD relies on the National Hurricane Center (NHC) of the National Oceanic and Atmospheric Administration (NOAA) for forecasting and tracking information. The NHC closely monitors tropical weather in the Pacific and Atlantic oceans. The NHC website (www.nhc.noaa.gov) has frequently updated information about active and potential storms, including 2-day and 5-day forecasts, mapping tools, wind speed, and expected arrival times. The NHC should be considered the most reliable, accurate, and up-to-date resource available.

The National Hurricane Center is responsible for categorizing tropical weather activity, which are rated along a progressive scale (see Figure 1). The NHC is also responsible for issuing hurricane advisories, which includes watches and warnings.

A **Hurricane Watch** means that hurricane conditions are possible within the next 48 hours.

A **Hurricane Warning** means that hurricane conditions are expected in 36 hours or less.

Hazard Information

Hurricane season lasts from June 1st to November 30th. Most hurricanes occur during August and September, when ocean temperatures are warmest.

This plan will apply to any storm that has the potential to disrupt the day-to-day operations of the college. This will include tropical depressions and tropical storms in addition to hurricanes.

Tropical Depressions have closed circulation and sustained wind speeds up to 38 mph. These storms may have wind gusts at higher speeds.

Tropical Storms have wind speeds between 39 and 73 mph. At this level, thunderstorms develop into distinct bands, usually without an eye present. Although tropical storms are less intense than a hurricane, they can still produce significant damage. Tropical Storms are the first type of tropical cyclone that receives a name.

Hurricanes have sustained wind speeds greater than 74 mph and a strongly defined circular shape with a central 'eye' of relative calm.

A **Major Hurricane** is considered to be any hurricane that reaches sustained wind speeds greater than 111mph.

Further categorization of hurricanes is based on the Saffir-Simpson Hurricane Wind Scale, which determines rating based on sustained wind speed. This can be used to give an estimate of the potential property damage and flooding expected along the coast with a given category of hurricane.

Storm Type		Sustained Wind Speed	Potential Impact
Tropical Depression		38mph or less	Heavy rainfall and strong winds. Light damage to trees and structures.
Tropical Storm		39 to 73mph	Airborne objects can cause damage to power lines, roofing and siding. Heavy rainfall may cause inland flooding.
Hurricane	Category 1	74 to 95 mph	Very dangerous winds will produce some damage: Well-constructed frame homes could have damage to roof, shingles, vinyl siding and gutters. Large branches of trees will snap and shallowly rooted trees may be toppled. Extensive damage to power lines and poles likely will result in power outages that could last a few to several days. Expected storm surge 4-5 feet.
	Category 2	96 to 110 mph	Extremely dangerous winds will cause extensive damage: Well-constructed frame homes could sustain major roof and siding damage. Many shallowly rooted trees will be snapped or uprooted and block numerous roads. Near-total power loss is expected with outages that could last from several days to weeks. Expected storm surge 6 to 8 feet.
Major Hurricane	Category 3	111 to 129 mph	Devastating damage will occur: Well-built framed homes may incur major damage or removal of roof decking and gable ends. Many trees will be snapped or uprooted, blocking numerous roads. Electricity and water will be unavailable for several days to weeks after the storm passes. Expected storm surge 9 to 12 feet.
	Category 4	130 to 156 mph	Catastrophic damage will occur: Well-built framed homes can sustain severe damage with loss of most of the roof structure and/or some exterior walls. Most trees will be snapped or uprooted and power poles downed. Fallen trees and power poles will isolate residential areas. Power outages will last weeks to possibly months. Most of the area will be uninhabitable for weeks or months. Expected storm surge 13 to 18 feet.
	Category 5	157 mph or greater	Catastrophic damage will occur: A high percentage of framed homes will be destroyed, with total roof failure and wall collapse. Fallen trees and power poles will isolate residential areas. Power outages will last for weeks to possibly months. Most of the area will be uninhabitable for weeks or months. Expected storm surge 19 feet or greater.

Figure 1. Information from www.nhc.noaa.gov

Hurricane Preparedness Committee

The Hurricane Preparedness Committee is made up of representatives from departments that may be impacted by a hurricane or have an active role in hurricane preparedness. This group meets every year before peak hurricane season (July/August) to review the hurricane plan and revise as necessary. The HPC should also make sure that any major revisions to departmental plans have been shared with the group.

Committee members include personnel who have the authority within their departments to activate the resources necessary to effectively prepare for the pending hurricane threat. At the time of the pre-season meeting, these personnel should confirm that hurricane supplies have been properly maintained and are ready for use.

Once the hurricane threat has been raised to a Hurricane Watch, the EOCT takes over all response functions. Hurricane Preparedness Committee members continue to be involved in the response and recovery as needed under the direction of the EOCT.

Hurricane Preparedness Committee	
Department	Responsible Functions
Finance	Insurance, Emergency Management
Academic Affairs	Campus Closures, Evacuation
Student Affairs	Evacuation, Sheltering, Students with Access and Functional Needs
Media	External media, Communication with Parents/Students/Faculty/Staff
Facilities	Buildings/Grounds
Resident Life	Residential and Non-Residential Student Housing
Auxiliary Services	Bookstore, Dining and Catering
Health Services	Health
Library	Library Contents & Concerns
Environment, Health and Safety	Safety and Environmental Concerns
Information Technology Services	System Support and Maintenance

Emergency Operations Command Center and Back-up Locations

LOCATIONS	Landline Phone	Video	Back up Data	Backup Generator Power
Met Room B (EOC)	No	Yes	Cox	Yes
Met Room A (Alternate EOC)	Yes	No	No	Yes
Prov Wash 4th Floor Conference Room (Alternate EOC)	Verizon	No	No	No
What Cheer Garage Conference Room (Alternate EOC)	Verizon	Yes	Cox	Ability to run off a mobile generator
Carr House Conference Room (back up location for Media)	3 phones + jacks for Media staff	Yes	Cox	Yes
OTHER LOCATIONS FOR USE IN AN EMERGENCY				
123 Dyer Street	No	Yes	Cox	No
Call Center @ 123 Dyer St.	Yes - 10 landlines	No	No	No

Plan Stages

The college's plan for hurricanes is divided into 5 stages. They are:

- Stage 1- Pre-Hurricane Meeting (72 - 96 hours)
- Stage 2- Hurricane Watch (48 hours)
- Stage 3- Hurricane Warning (36 hours)
- Stage 4- During the Hurricane
- Stage 5- Post Hurricane Recovery

Stage 1: Pre-Hurricane Meeting (72 - 96 hours)

At the first sign of a hurricane with the potential to impact RISD, the Chair of the Hurricane Preparedness Committee or their designee will call a meeting to discuss the storm. At this meeting, steps should be taken to ensure that the needed resources will be available in a timely manner in the event that Stage 3 is implemented (Hurricane Warning).

- Facilities will ensure equipment readiness and protection of college buildings and property
- Departments requiring assistance in building/facility protection will notify Facilities at this time
- Dining will confirm that we have a 72 hour food and water supply available
- The Dean of Students will work with Media to draft and send an informal letter to all students regarding the hurricane. This letter will include an overview of the situation, and when to expect new information or further instruction from the college
- Media and Human Resources will determine if a message to the entire campus is appropriate
- Coordinate with Procurement Services for the purchase of supplies needed for cleanup and for housing personnel after the storm
- Print off any essential documents

The Chair of the Hurricane Preparedness Committee will also alert the EOCT and Cabinet that the hurricane is being monitored. This will be accomplished by sending a message through the listserv.

Even a weak hurricane or a hurricane that does not pass directly through Providence may require response and recovery actions. If it is determined that the campus will likely be affected, the EOCT will be convened.

Stage 2: Hurricane Watch (48 hours)

If a Hurricane Watch is issued by the National Hurricane Center OR any major storm seems likely to hit Providence in the next 48 hours, Stage 2 will be implemented.

The EOCT will be convened to manage response, and the Hurricane Preparedness Committee will continue to work under the direction of the EOCT.

The Emergency Manager or designee will open lines of communication with the Providence Emergency Management Agency (PEMA).

The EOCT will continue to track and monitor the storm.

48 hours

- The EOCT should determine which employees need to stay on campus
- The EOCT will start to consider evacuation of specific buildings or areas of campus (note: if we are going to evacuate the entire campus, we need at least 24 hours' notice)
- The EOCT chair should be in communication with the Cabinet about school cancellation or closure
- A communication to the entire campus will go out, to include:
 - What EOCT thinks the path of the storm is, including likelihood that it will affect our campus (based on predictions made by the NHC)
 - What the EOCT is doing to prepare
 - What employees are being asked to stay at, or return to work (at this time it could be work as usual with permission to leave if necessary)
 - What the community should be doing at this time
 - Departments need to consider moving basement storage items to higher ground, and, in conjunction with EHS, ensure chemicals and other materials are stored safely
 - Students should consider evacuation plans, communicate with their family members, and follow any additional directions given by RISD
 - When they'll hear from the EOCT again
 - Where they can get storm updates on their own

Stage 3: Hurricane Warning (36 hours)

If a Hurricane Warning is issued by the National Hurricane Center OR any major storm seems likely to hit Providence in the next 24 hours, Stage 3 will be implemented.

The Providence Emergency Management Agency will suggest evacuation actions for very specific areas of the city according to the storm forecast and its expected impact. Possible recommendations may include:

1. No recommendation to evacuate
2. An evacuation of low-lying areas including 15 West and Charles Landing residents may be ordered by state authorities due to potential flooding concerns
3. Significant evacuation of the city or of a larger portion of campus

After receiving information from the city/state the EOCT will make a recommendation to the Cabinet, who will decide on relocation, evacuation or 'shelter in place' for resident students. The EOCT will initiate appropriate plans to prepare for action.

In the event that we need to relocate students in low-lying areas:

- 15 West students will move to the Quad
- Students from the Charles Street side of Charles Landing will move to the North Main Street side apartments

In the event that the Chair of the EOCT determines that residents of other buildings (Hill Houses, Colonial Apartments, etc.) should also relocate, they will be directed to the Met. Residents will remain in their designated locations until the storm has passed.

Moving should be completed at least twelve hours before the storm is expected to hit land. Residence Life staff should maintain a list of all their students with information on their location on campus or where they intend to be during the storm.

In the event that PEMA or FEMA mandate a city wide (or state-wide) evacuation, the EOCT will coordinate transportation and accommodation for students and essential employees.

36 hours:

- If a decision is made to suspend classes and close school, the announcement should be made
- The EOCT should consider the best time to dismiss all non-essential staff, and develop a list of essential staff asked to stay or return to campus
- Residence Life will reach out to RA's to ensure they are checking in with their students and are aware of which students are going to remain on campus. If students are planning to leave, RA's should collect a list of those students' contact information and their intended location
- Dining Services initiates plan to feed a minimum of 1,000 people for 72 hours

- Facilities will secure outdoor equipment and college property which may be blown about during the storm
- If students are being relocated from 15 West or any other residence halls to the Met - Facilities and Public Safety will assist
- Public Safety will be checking buildings and grounds and advising responsible departments of potential hazards
- ITS will ensure that the switchboard can be kept in operation on a 24 basis, for as long as possible. Switchboard messages should be updated to reflect the current situation
- Media will be coordinating communications to the campus, external media and will update all social media sites and webpages to reflect current status
- Public Safety will take steps to have the required personnel and emergency first aid equipment available

24 hours

- Students should:
 - Contact their families to inform them of the weather situation and their planned location during the storm
 - Lock all doors when leaving their room or apartment
 - Tightly close and lock all windows
- Facilities will shut off natural gas in all non-essential buildings and fill and place sandbags as needed
- A communication to the entire campus will go out, to include:
 - What EOCT thinks the path of the storm is including likelihood that it will affect our campus (based on predictions made by the NHC)
 - What the EOCT is doing to prepare
 - What employees are being asked to stay at, or return to work (at this time it will likely be only essential employees - if not now, by 12 hours)
 - What the community should be doing at this time
 - Departments need to consider moving basement storage items to higher ground.
 - Departments, in conjunction with EHS, need to ensure chemicals and some materials are stored safely.
 - Whether all or part of the campus is going to be evacuated
 - If students have been or will be relocated
 - Where they can get storm updates on their own

12 hours:

- Residence Life and/or Public Safety Staff will respond to locations of students who need additional assistance.
- The Residence Life Staff will check all the residence halls and apartments to see that evacuations are complete.
- A communication update to the entire campus will go out, to include:
 - What EOCT thinks the path of the storm is including likelihood that it will affect our campus (based on predictions made by the NHC)
 - What essential employees will remain on campus during the hurricane
 - When they can expect to hear from the EOCT again
 - Information on what to do DURING the storm (i.e. stay indoors, move away from windows, wait for RISD! Alert that it's safe to go outside again, etc.)
 - Where they can get storm updates on their own

Stage 4: During the Hurricane:

It is essential that all employees and students stay indoors throughout the entire hurricane. Students must not leave their designated location until directed by the Residence Life Staff. During the peak of the storm, for maximum protection, it is suggested that everyone move away from windows and ensure that all doors are closed. Do not attempt to open windows/doors to see what is happening.

There is always a lull in the storm when the eye passes through the area. Once the eye passes through, the storm begins again, but with winds from the opposite direction. For everyone's protection, stay indoors.

Students should report problems of an emergency nature to Public Safety at 401.454.6666. Issues of a non-emergency nature should be reported to members of the Residence Life Staff.

Stage 5: Post-Hurricane Recovery

Once the Hurricane Watch has been lifted by the National Hurricane Center and weather permits, Facilities and Public Safety will inspect the campus and surrounding area for damage. If there is any concern of structural damage, they will close buildings until they can be assessed by a structural engineer or city assessor.

The Dean of Students will determine, based on reports from Facilities, which residence halls and apartments can be used safely.

Facilities will coordinate damage repair and clean up.

All wages, supplies, equipment, machinery, building damage, and costs related to cleanup should be tracked in the event that RISD needs to submit an insurance claim or for FEMA reimbursement. This process will be guided by the Department of Risk Management.

Students are to remain in the designated location until instructed to leave by Residence Life Staff that it is safe to go outside, or return to their residence halls. They are encouraged to contact their families regarding their safety and local conditions.

The President will issue necessary directives and instructions concerning the reopening of school.