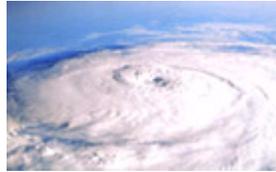


# **Roger Williams University**



## **Severe Weather Preparedness Plan**

Adopted: February 1, 2007  
Revised and Adopted: By President and Cabinet  
on December 9, 2014

## **SECTION I: INTRODUCTION AND PLANNING GUIDELINES**

### **1. Introduction**

Roger Williams University, through its administrative staff, recognizes its duty and responsibility to make and keep the campus community as safe as possible in the event of a major storm. This Severe Weather Preparedness Plan (“Plan”) has been established to provide direction for those individuals who are involved in the effort to mitigate the effect of a hurricane or any other type of tropical storm, snowstorm or blizzard or other significant weather-related event. It addresses pre-storm preparation and post-storm recovery, as well as on-campus management during the storm. The primary objectives of the Plan are as follows:

- Safety and security of faculty, staff, students, and visitors prior to and during a severe weather event
- Mitigation of damage
- Restoration of business and academic operations as quickly as possible

This Plan should be read in conjunction with the Roger Williams University Emergency Response Plan (“ERP”). All faculty, staff, and students have responsibilities and action steps that will be taken at the direction of the University’s Full Emergency Response Team (“FERT”)(*See* Section VI.E of the ERP). In addition, as noted below, each University department should have its own protocol consistent with this Plan to address departmental operations in the event of a severe weather emergency. These department protocols should be reviewed annually and updated as necessary.

This Plan may be amended from time to time to ensure the best course of action possible, given available resources and insight. At a minimum, this Plan will be reviewed annually and updated as necessary.

### **2. Purpose**

This Plan is designed as a guideline to coordinate and control the University’s severe weather preparation and response steps. The timing and implementation of any or all steps may be altered based upon the facts and circumstances surrounding any individual weather event. This Plan document includes sections on preparation, response during the storm and recovery.

### **3. Departmental Protocols**

All University departments should review steps to be taken in the event of a severe weather event. Steps to be considered, which may not be applicable to all departments, are:

- To identify department emergency response personnel (*See* Appendix C (Essential Services Personnel) of the ERP)
- To develop a procedure to establish contact with department personnel in the event of a severe weather event
- To secure department assets including equipment, data, lab samples, etc.
- To plan, as necessary, to maintain department operations during the severe weather event
- To assess damage to work areas following a severe weather event and to resume operations as soon as is practicable and safe to do so

## **SECTION II: PREPARATION AND RESPONSE**

### **1. Basic Tropical Storm, Hurricane and Snowstorm Information**

Tropical Weather Terms:

Tropical Wave or Disturbance – a cluster of clouds and/or thunderstorms without any organized circulation.

Tropical Depression – an organized, tropical, low-pressure system with sustained winds less than 39 mph.

Tropical Storm – an organized, tropical, low-pressure system with a defined circulation and with sustained winds between 39 and 73 mph. Storms are named upon reaching this level of strength.

Tropical Storm Watch – a tropical storm watch is issued when tropical storm conditions (winds between 39 - 73 mph) are possible within 36 hours.

Tropical Storm Warning – a tropical storm warning is issued when tropical storm conditions (winds between 39 - 73 mph) are expected in the warning area within 24 hours or less.

Hurricane – an intense tropical weather system with a well-defined circulation and sustained wind speed exceeding 73 mph.

Storm Surge – a dome of water pushed on shore with a hurricane.

Hurricane Watch – a hurricane threat exists for the next 24 to 36 hours.

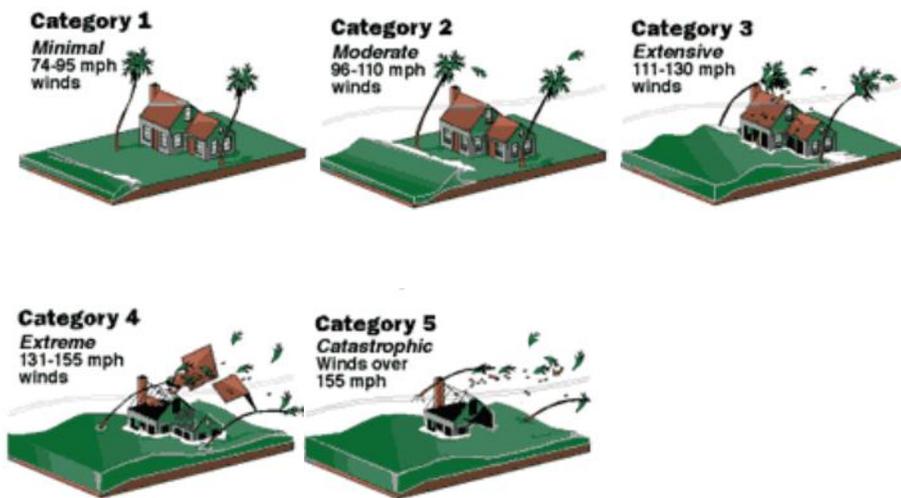
Hurricane Warning – a hurricane strike is expected within the next 24 hours.

Saffir – Simpson Classification – a system for classifying storm strength based on 5 categories of wind strength, storm surge height, and general storm damage capability.

Hurricane season extends from June 1 through November 30 each year. During that period of time, elevated, sustained movement of hurricane winds may be expected. The National Hurricane Center <http://www.nhc.noaa.gov> categorizes hurricanes in order of severity by the Saffir-Simpson Classification as follows:

Tropical Storm	Winds in excess of 39 MPH can be expected.	
Category 1	Winds 74 – 95 MPH	Damage primarily to unanchored mobile homes, shrubbery and trees.
Category 2	Winds 90 – 110 MPH	Considerable damage to shrubbery with some trees blown down.
Category 3	Winds 111 – 130 MPH	Damage to shrubbery and trees with foliage blown off trees, huge trees blown down, some signs destroyed.
Category 4	Winds 131 – 155 MPH	Shrubbery, trees and all signage blown down. Complete destruction of mobile homes. Complete roof structure failure.
Category 5	Winds greater than 155 MPH	Severe and extensive window, door and roof damage. Low-lying area escape routes are cut by rising water. Major damage to lower floors of all structures.

The following is a pictorial diagram showing the strength of the five categories of hurricanes:



## Basic Snowstorm Information

Snowstorms in the region can begin as early as October and continue through April. Unlike hurricanes, there is no official classification/scale of snowstorms. The following, however, provides basic information that is utilized by a number of state and local governments to identify the varying degrees of snowstorms:

Insignificant Event	Less than ¼ inch of ice or less than 3 inches of snow
Minor Icing Event	¼ to ½ inch of any form of ice
Major Icing Event	More than ½ inch of ice
Light Snow Event	3 to 5 inches of snow
Moderate Snow Event	6 to 9 inches of snow
Heavy Snow Event	10 to 14 inches of snow
Major Snow Event	15 to 20 inches of snow
Historical Snow Event	More than 20 inches of snow

### 2. Weather Advisories

Plan initiation and adequate preparation cannot be achieved without sufficient notification time to University community members, which requires continuous monitoring and tracking of potential storm activity. The University's Facilities Department, under the direction of the Director of Facilities, will monitor weather reports on a daily basis and identify any possible severe weather event that has the potential to impact the University. The Director of Facilities shall communicate with the Executive Vice President for Finance and Administration ("EVP-F&A") who, in consultation with the President, acts as the person to initiate storm preparation when weather report monitoring information indicates a storm threat.

### 3. Storm Preparation

At the first sign of a substantial storm that may affect the New England region, the EVP-F&A shall notify the FERT that the University may be impacted by a severe weather event. A pre-storm meeting will be scheduled as soon as possible with all FERT members and any others as designated by the President and/or EVP-F&A. The purpose of the meeting will be to discuss the local weather forecast; i.e., storm progress, potential classification category and to coordinate communication. Based upon the severity of the storm, discussions will be had regarding the Operating Level of the University (*See* Section VII.B of the ERP) and pre-planning for either a closure or evacuation of the University.

Pre-planning discussion topics may include, but not be limited to, the items listed below. In addition, specific steps for hurricanes, which may be used as a guide for other severe-weather events as applicable, is attached in Appendix A.

- *Communications*
- *Protection of Buildings & Other Infrastructure*
- *Facilities Equipment Readiness*
- *Dock Area & Other Outdoor Recreational Areas*
- *Food and Water Supply*
- *Medical Emergency Contingencies*
- *Security Issues*
- *Non-RWU operations on campus/in RWU facilities*
- *Emergency Shelter Planning*
- *Evacuation Plans*

The Rhode Island Emergency Management Agency has prepared a list of items that all University community members should consider utilizing in the event of a severe storm striking the region. (See Appendix B)(See also <http://www.riema.ri.gov/preparedness/preparenow/index.php> )

#### 4. **University Closure (Operating Level 3 (Partial) or 4 (Full))**

The President, or the President's express designee in his or her absence, will call for a full or partial University closure (either Operating Level 3 (All or Some Classes & Significant Events Cancelled; Other Operations Open as Usual) or Operating Level 4 (All University Operations Cancelled) when he or she deems it necessary. If the decision is made to close the University, the FERT will work in concert to efficiently and expeditiously notify the appropriate parties. In the event of a full University closing (Operating Level 4), only Essential Services Personnel will be required to report for duty. Faculty and staff will be instructed to secure work areas and relocate equipment if flooding is expected, and then they will be released. When the University is closed due to a severe weather event, non-essential personnel are advised to leave the campus and seek shelter outside of the University. Depending upon the anticipated severity and duration of the weather event, students may also be advised to return home or otherwise seek shelter outside of the University.

Students are responsible for securing their own lodging and transportation arrangements. When the University is fully closed (Operating level 4) and students elect to depart campus, students are encouraged to pursue the following options as they leave the area:

- Secure transportation via airline, train, or bus service. Depending upon the nature of the event and associated circumstances Roger Williams University may provide transportation between the University and the airline, train, and/or bus stations if possible.
- Share rides and sheltering options with students who do not have a personal means of transportation.

The FERT shall periodically update the University community as to operating status utilizing the various University communication systems (See Section VII of the ERP).

#### 5. **University Evacuation (Operating Level 5)**

If a University evacuation is declared (Operating Level 5), no students or non-Essential Services Personnel will be allowed to remain on campus. While students and staff maintain the responsibility for vacating the University by making their own transportation and lodging arrangements, the potential exists that a number

of on-campus students may not have the means to evacuate themselves and therefore will require University assistance. The Vice President for Student Affairs and Director of Public Safety will be the lead individuals working with the FERT to effectuate an orderly evacuation. University emergency evacuation action steps are as follows:

- Evacuations may involve some or all of the University's properties (i.e. the Baypoint Residence & Conference Center may need to be evacuated but not the main campus).
- Information regarding evacuation routes is provided in Appendix C (and available electronically here: [http://www.riema.ri.gov/preparedness/evacuation/hurricane\\_evac.php](http://www.riema.ri.gov/preparedness/evacuation/hurricane_evac.php) )
- The Vice President for Student Affairs will initiate the plan to move all students to the Recreation Center (or other designated location) for transport off campus.
- The Director of Public Safety will implement the relocation plan through the use of buses and shuttles to a designated shelter.
- During an evacuation, employees, other than those assigned to the Operations Center (see below) or other Essential Services Personnel, and as such may be modified by state or local emergency personnel instructions or directive, and all others are prohibited from occupying campus facilities. After the University evacuation is in effect, all buildings will be searched by the Department of Public Safety for persons attempting to use the campus as shelter. After each building is searched, it will be secured against key and card access by disabling the card readers and using special locks or other devices.

### **SECTION III: DURING THE SEVERE WEATHER EVENT**

**Operations Center:** A Severe Weather Operations Center shall be activated on campus (primary location: North Office Building, Facilities Department Conference Room; secondary location: Administration Building Conference Room). The Operations Center shall remain open and operational during the entire severe weather event and will serve as the central command area for those essential administrators and personnel who will remain on campus during a storm. The Operations Center shall be equipped with portable radios and other essential means of communication necessary as well as access to televisions and computers to monitor the storm's progress.

**Emergency Communications:** A determination will be made by the appropriate members of the FERT as to whether or not a Unified Command of federal, state, and local law enforcement / fire personnel is necessary. The Director of Public Safety will be responsible for establishing a Unified Command including any and all contacts with RIEMA or the Federal Emergency Management Agency (FEMA).

**Information for those remaining on campus:**

- It is essential that all remaining residents stay indoors throughout the entire storm. In the case of hurricanes, for maximum protection, residents should remain in the hallways. With hurricanes, 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 from the opposite direction. **STAY INDOORS.**
- Residents should follow the instructions of University officials including Public Safety and Residence Life & Housing.
- In the event of power failure during the height of a storm, there will be no elevator service. Do not attempt to travel between floors using elevators. First Aid and/or food service will be made available

whenever the storm passes or power is restored. Do not use candles during power outages due to the increased fire hazard.

- Do not attempt to open windows or doors to see what is happening outside.
- Report all accidents, injuries, broken windows, or excessive water to Public Safety (401) 254-3333 (from an on-campus phone x 3333).
- Telephone calls should be made only in case of emergency since non-emergency calls can overload the phone systems.

#### **SECTION IV: POST-STORM RECOVERY**

The timeline for recovery after a severe weather event will vary depending on the severity of storm damage and other factors.

The Director of Facilities Management and or his/her designee will conduct a post storm damage assessment and will, along with the Environmental Health & Safety Department, advise the FERT which buildings and facilities can be used safely for classes and other purposes. Recommendations for repair work or building closings will also be made. Only persons authorized by the Director of Facilities Management shall be engaged in any removal of debris due to the potential dangers associated with electrical lines and other areas of risk. Employees who are not authorized to be on campus (non-essential personnel) should monitor local media sources, the Roger Williams University web site, email, and the Roger Williams University Emergency Line.

The President will issue a directive to reopen the University after conferring with the appropriate personnel.

Upon returning to the University, employees are required to revert back to their normal course of business as soon as practical and any previously undetected damages are to be reported to Facilities Management in a timely fashion.

## APPENDIX A

### Hurricane Preparedness Steps

#### **96-72 Hours (depending upon conditions and acceleration of storm) before Hurricane Landfall**

- FERT activated to review current conditions and discuss general plans and readiness. Review Emergency Response Plan, Severe Weather Preparedness Plan and other emergency plans.
- Begin frequent monitoring of weather related media sources including but not limited to the National Weather Service, NOAA, FEMA, and RIEMA.
- Director of Facilities will begin discussion with CERT and generator suppliers regarding the decision to order temporary, large, portable generators.
- Facilities Management & Finance Department review FEMA claim requirements and meet with various department heads such as Dining and Public Safety for proper record-keeping.
- Facilities Management inventories pumps, hoses, cords, chain saws, and secure that these are readily accessible.
- Facilities Management meets with MNS Department to develop a plan to ensure the safety of live animals per IACUC Protocols.
- Conduct generator testing and top-off all diesel and gasoline supplies.
- Consider available supplies of food, water and fuel should shelter-in-place procedures be required.
- Check grounds and remove dead limbs, prop weakly rooted trees, clean up loose debris, and begin moving all loose equipment and materials.
- Make sure Public Safety, Facilities Management, Dining Services and others have current telephone numbers for support responders such as water suppliers, emergency generator suppliers, fuel suppliers, food suppliers, and others as needed.
- Dining Services will review inventory and ensure it can provide food and water for all students and essential staff for at least 72 hour duration.
- FERT begins communications to University community.

#### **48 Hours before Hurricane Landfall**

- FERT reviews current conditions and recommends actions.
- Decision may be made of University operating status during storm, which may include the evacuation of all non-essential faculty and staff and preparation to initiate shelter-in-place procedures. University commences implementation of evacuation and shelter-in-place procedures as needed depending on conditions and warnings.

- Facilities Management initiates procedures to protect buildings that are at risk to severe flooding and/or storm surge. Procedures may include providing sandbags and securing the buildings.
- Facilities & Athletics will begin preparations to secure the waterfront, boats and other equipment.
- Dining Services will coordinate with Facilities Management to help begin moving water bottles from the Dining Commons to other facilities throughout campus to ensure that water has been moved to accessible and secure locations well before the storm arrives.
- Backup of student records, library catalogs, alumni records and other relevant data should occur at this stage.
- The University's Emergency Information Line and University Homepage should begin to provide information and emails will be sent.
- Ensure that athletic equipment, outdoor research equipment, trash and recyclable receptacles, benches, and all other loose items that may become projectiles in high winds are appropriately secured.
- Ensure that contractors working on campus secure all equipment and materials from their site which may become projectiles in high winds.
- Make sure all storm drains are clear.
- Make sure all essential vehicles are fully fueled, stocked and inspected.
- Turn off unnecessary lighting and appliances, secure windows, doors, and shutters, locking when appropriate.
- Make sure all storm response equipment is inspected and ready for operation. This includes but is not limited to chainsaws, blowers, water pumps, tractors, portable generators.
- Status check and deployment of 800 mhz radios.

### **36 Hours before Hurricane Landfall or 750 miles as noted on Hurricane tracking map**

- If not done earlier, decision made of University operating status during storm, which may include the evacuation of all non-essential faculty and staff and preparation to initiate shelter-in-place procedures. University commences implementation of evacuation and shelter-in-place procedures as needed depending on conditions and warnings.
- All University related functions may be cancelled including classes, sporting events, lectures, and other functions if warranted given conditions and warnings.
- Student Affairs begins notification to students regarding evacuation procedures; shelter-in-place locations and other details should be arranged and/or coordinated.
- Marketing & Communications updates the University's Emergency Information Line and the University Homepage and notify the appropriate media of University plans and closings. Public

Safety (for police) and Environmental Health & Safety (for fire) notify municipal departments of University's plan.

- University departments initiate any specific departmental shut down procedures and begin evacuation of faculty and staff.
  - Departments should back up computer data at this time by following University guidelines. For essential data that may be necessary during or immediately after the storm, contact Information Technology for specific recommendations.
  - Unplug all office equipment including computers, and store off the floor.
  - Protect books, valuables and equipment by covering with plastic sheeting.
  - Close windows, lower all blinds/shades, close slats and draw curtains.
  - Remove personal items that may become damaged since they are not covered by University insurance.
  - Research staff shall begin preparations of laboratory facilities by completing experiments, backing up computer data, storing materials and securing rooms and equipment.
  - Animal Care staff will assess the needs of the animals and prepare for limited staffing until the storm has passed.
  - Close non-essential offices and departments at this time.
- Facilities Management hurricane procedures:
  - All essential personnel report to supervisors for team assignments.
  - Obtain a block of Purchase Order numbers or initiate other process to ensure that services of outside contractors can begin immediately after storm. Facilities will track all work and reconcile with Purchasing when that office resumes business.
  - Make final checks of roofs for loose debris and clear floor drains.
  - Open air vents leading to roofs to equalize pressure during storm.
  - Consider taping of windows adjacent to shelter-in-place locations to prevent personal injury from shattered glass. Consider boarding of windows for more vulnerable buildings depending on conditions and the directional approach of the storm.
  - Issue plastic sheeting and other protective materials as requested and deemed appropriate.
- Public Safety hurricane procedures:
  - Public Safety personnel report to Director or Shift Commanders for assignments.
  - Begin inspection of campus and help with evacuation of non-essential personnel.
  - Secure unoccupied buildings if building evacuation occurs.

- Student hurricane preparation procedures:
  - Off-campus students should prepare some snack items and water as part of their preparations. FEMA recommends one gallon per person per day for drinking and other uses.
  - Dining Services will have food and water at the Dining Commons for students and essential staff. Students should consider keeping several gallons of water per person available for emergencies.
  - Students who have access to bathtubs should clean the tub and fill it halfway with water. If the water supply is cut off, the water in the tub may be used for flushing toilets or for washing. Do not drink this water.
  - Each student should provide his or her own flashlight to be used during a power failure. Do not use candles or other flame type lighting under any circumstances. Fire can be uncontrollable during a hurricane due to high winds and limited access for emergency vehicles.
  - Students who have cars on campus should set the emergency brake, close all windows and leave in the designated parking area until after the storm.
  - When emergency shelter is provided, students should bring the following items to their temporary assigned living area:
    - Bedding and pillow
    - One small bag with clothing, etc.
    - Needed medications, glasses, etc.
    - Non-perishable food items
    - Small toiletry bag
    - Flashlight
    - No smoking, drugs or alcohol will be allowed in the shelter

**24 Hours before Hurricane Landfall or 500 miles as noted on Hurricane tracking map**

- Evacuate buildings that may be impacted by flooding and/or storm surge. Consider the shutdown of utilities in these buildings.
- Facilities Management refuels all vehicles and continues securing equipment, assessing buildings, and protecting properties from storm conditions, including rooftops.
- Public Safety helps verify that all non-essential personnel have evacuated the campus and unoccupied buildings have been secured.

- Student Affairs will communicate with students that they should plan to stay on campus if they have not already left, and report to designated shelters on campus only.

### **12 Hours before Hurricane Landfall**

- Turn off and isolate computer equipment.
- Avoid using the phone, except for emergencies.
- Turn up refrigerator thermostat to its coldest setting and keep door closed.
- Be prepared to seek shelter in an interior room on the lowest level of the building that is accessible.

## APPENDIX B

### Emergency Preparedness Kit

A disaster-supply kit should provide a collection of basic items that household members may need in the event of a disaster. A disaster-supply kit can be used in your home if there is an extended power outage or it could be used if you have to leave your home and go to a shelter. During an emergency, you will probably not have time to shop or search for the items you need. A basic disaster-supply should include recommended items for a disaster-supply kit:

- Water (one gallon per person per day)
- Food (preferably non-perishable)
- Flashlight and extra batteries
- Weather radio
- Cash (banks and ATMs may be unavailable)
- Manual can opener
- Disposable plates and utensils
- First aid supplies
- Bedding (blankets, pillows, sleeping bags)
- Clothing
- Sanitation supplies (toilet paper, soap/liquid detergent, feminine supplies, sanitary wipes)
- Toiletries/personal hygiene items (toothbrush, toothpaste, hand sanitizer)
- Prescriptions and medications
- Keys for house and car
- Toys, books, or games
- Important documents
- Tools
- Special needs items (walker, cane, glasses, oxygen, incontinence supplies, durable medical supplies)
- Infant needs (formula, diapers, wipes)
- Pet care needs
- Health insurance information

Once you have gathered all of your disaster kit supplies, it is important to store them properly so they are safe to use when you need them. Here are some tips to help keep your supplies safe and ready to use:

- Keep canned foods in a cool, dry place. Throw out any canned good that becomes swollen, dented or corroded.
- Keep boxed foods in tightly-sealed plastic or metal containers. This protects the boxed food from pests and extends its shelf life.
- Change stored food and water supplies every six months. Write the date that you store items on the containers.
- Twice a year, check your disaster kit and make sure all items are in good working order. At the same time, check to see if there are any new items that need to be added to the disaster kit.
- Put all of your supplies in one or two easy to carry containers like a backpack, duffel bag, or a suitcase with wheels.
- Consider making disaster kits for work and for the car.

# Appendix C

## Bristol / Portsmouth Hurricane Evacuation Routes

