

SEVERE WEATHER PROCEDURES & EMERGENCY PREPAREDNESS CHECKLIST

REVISED 3/1/2019

Weather is monitored daily by Campus Operations, Environmental Health & Safety (EH&S), and ECU Police Department (PD). The intent of these procedures and checklist is to provide an organized and efficient guide for the preparation for, response to, and recovery from severe weather.

Note: Human Resources should send out the Adverse Weather & Emergency Event Regulation at least two times a year (generally at the beginning of hurricane season and again during winter weather season). The regulation is also available at www.ecu.edu/prr/06/45/02.

Visit www.weather.gov for weather forecasts and products. *To zoom in and view warning polygons, visit www.weather.gov/mhx/ - scroll down to the radar. Click on the radar to view polygon warnings. Click on composite loop, then, when loaded, left-click on Greenville to zoom in, control + left-click to zoom out. Campus Operations, EH&S, and ECU PD have access to many other weather resources, listed below.*

SEVERE WEATHER PROCEDURES

WHEN A SEVERE WEATHER EVENT IS FORECAST:

- Campus Operations, EH&S, and ECU PD will continuously monitor for severe weather via various weather outlets.
 - Ways to receive weather information:
 - Weather.gov
 - NOAA Weather Radio
 - Television
 - Subscription to iNWS
 - NWSSChat
 - Law Enforcement Teletype System
 - NC First
 - WeatherSTEM
 - WeatherSentry
- ECU PD will be the lead agency to issue tornado warnings and severe thunderstorm warnings to the campus community as appropriate. EH&S will assist as needed.
 - See the **Criteria for Sending an ECU Alert for Severe Weather** below, as well as ECU PD's responsibilities listed in the checklist...

CRITERIA FOR SENDING AN ECU ALERT FOR SEVERE WEATHER:

TORNADO

- Once a tornado watch / warning is issued by NWS for Greenville, ECU PD will be notified immediately.

Note: An ECU Alert for Tornado Watch is rarely utilized on its own. The Tornado Watch should generally be used to dismiss or expire a Tornado Warning. In this fashion, the Tornado Watch serves as an "All Clear" message but reminds end-users that the severe weather may not be over.

- Criteria for sending an ECU Alert for **Tornado Warning**, the warning must include the following:
 - Greenville is mentioned in the text of the warning product; and
 - ECU is mentioned in the text of the warning product; or
 - Warning polygon must be touching or cover parts of any ECU campus or complex
- Criteria for sending an ECU Alert for **Tornado Watch**, the watch must include the following:
 - Those mentioned above; and
 - **“Particularly Dangerous Situation (PDS)”** is included in the text of the watch product

Exception: ECU PD may send an ALL CLEAR message when the warning expires or send a TORNADO WATCH message if a watch is continued for our area

- ECU PD will coordinate the issuing of an ECU Alert for Tornado Warning, which is saved as a template in the Emergency Notification System (ENS) for their convenience. EH&S will assist as needed.
 - ECU Alert messages will be sent via all notification methods to broadcast the life-threatening warnings to the campus.
 - This message provides instructions for self-protection including: seek shelter indoors, on the lowest floor, near the center of the building, away from windows and doors. The message will also ask that the ECU Alert message be shared with others in the area.

SEVERE THUNDERSTORM

- Once a severe thunderstorm warning is issued by NWS for Greenville, ECU PD will be notified immediately.

Note: An ECU Alert for Severe Thunderstorm Warning is rarely utilized on its own. The Severe Thunderstorm Warning should generally be used to dismiss or expire a Tornado Warning. In this fashion, the Severe Thunderstorm Warning serves as an “All Clear” message but reminds end-users that the severe weather may not be over.

- Criteria for sending an ECU Alert for **Severe Thunderstorm Warning**, the warning must include:
 - Greenville is mentioned in the text of the warning product; and
 - ECU is mentioned in the text of the warning product; or
 - Warning polygon must be touching or cover parts of any ECU campus or complex

Exception: ECU PD may send an ALL CLEAR message when a tornado warning expires or send a SEVERE WEATHER WARNING message if a warning is continued for our area

- ECU PD will coordinate the issuing of an ECU Alert for Severe Thunderstorm Warning, which is saved as a template in the ENS for their convenience. EH&S will assist as needed.
 - The ECU Alert messages will be sent through the same notification methods as the Tornado Warning or Watch.
 - This message explains that the tornado warning has expired, but a severe thunderstorm warning remains in effect and end-users should remain vigilant.
 - This template could be altered for high wind events or particularly dangerous situation (PDS) severe thunderstorm watch (as deemed appropriated).

ALL CLEAR

- ECU PD will continue to monitor the hazardous weather until the National Weather Service has expired or downgraded the watch / warning.
- An ECU Alert for all-clear / dismissal / expiration must always be sent after a tornado warning. ECU PD may choose to send an **All Clear – Severe Weather, Tornado Watch**, or **Severe Thunderstorm Warning**.
- ECU PD will coordinate the issuing of an ECU Alert to expire the tornado warning; there are 3 options as mentioned above and each has a saved template in the ENS for their convenience.

REPORTING OBSERVATIONS & DAMAGE:

- Storm observations and damage reports should be sent to EH&S (252-328-6166 or safety@ecu.edu) who will direct the report to the National Weather Service (NWS) and Campus Operations. Campus Operations may utilize Damage Assessment Teams (DATs) to assess damage across campus. The following observations should be shared with EH&S:
 - Tornado, funnel, or rotating / persistent wall cloud
 - Flash flooding
 - 1 inch or greater hail
 - Wind speed of 58 mph or greater
 - Persistent non-rotating wall cloud
 - Rainfall 1 inch or more per hour
 - Damage from thunderstorm
- Damage can also be reported using the LiveSafe app. Submit damage by reporting a tip and selecting the “Safety / Repair Issue” or “Other” tip-type. You can submit text, video, photos, and audio regarding the damage through the app. The tip will be received by ECU PD and will be shared with Campus Operations and EH&S for review.
 - If damage is found on campus, you may also submit a request for service through ECU Facilities Services’ online work management system: [AssetWorks](#) (login is required) or by contacting the Facilities Service Center by telephone at 252-328-6776.
- Trained storm spotters should report any severe weather observed (as listed above) immediately and directly to NWS (either by calling 1-800-889-6889, emailing wxobs.mhx@noaa.gov or using the online report form: www.weather.gov/mhx/OnlineSpotterReport. Please also contact EH&S (252-328-6166 or safety@ecu.edu) so we have record of your observation(s). Have your spotter ID number available.
- Members of the Emergency Management or Crisis Policy teams may also communicate observations and damage via [VEOCI](#) (login and permissions are required), the online situational awareness platform used to communicate hazards and impacts to the campus community.

SEVERE WEATHER EMERGENCY PREPAREDNESS CHECKLIST

GENERAL (ALL DIVISIONS / DEPARTMENTS)

- ❑ Understand the type of hazardous weather that can affect Greenville. Visit [ReadyNC.org](https://www.readync.org) to learn more.
- ❑ Check weather forecasts regularly and consider signing up for weather alerts.
- ❑ Develop and review emergency procedures for sheltering-in-place for severe weather. For more information, please see [Shelter-in-Place Procedures](#) and [Severe Weather Safety](#).
- ❑ Develop unit-specific severe weather notification and recall phone trees (if applicable) to insure vulnerable staff are notified in a timely manner.

MODULAR UNITS

- ❑ Most remaining modular units have NOAA Weather Radios that were distributed and programmed by EH&S. If you are in a modular unit and would like a weather radio or perhaps need your radio re-programmed, please contact EH&S (252-328-6166 or safety@ecu.edu).
 - Please take this time to test your weather radios.
- ❑ When the weather radio activates, or occupants receive an ECU Alert for a tornado warning, all modular unit occupants will evacuate to their designated areas, as listed later in this document.
 - All evacuees will remain in the designated shelter until given an all clear (or expiration) message through ECU Alert, ECU PD, or their departmental representative.
- ❑ Each department utilizing modular units should conduct a review of their tornado warning procedures annually (recommended February / March) and upon an employee's initial assignment to a modular unit. Topics to address include:
 - Modular-specific procedures for severe weather
 - Accountability and notification of modular unit occupants
 - Evacuation and/or shelter-in-place location(s)
 - Recall procedures
- ❑ It is the responsibility of each unit to notify EH&S if phone numbers or evacuation locations change.

Due to the rapid scaling of responsibilities for ECU PD during severe weather events, it is strongly advised that each division / department develop their own severe weather notification and recall phone trees to insure vulnerable staff are notified in a timely manner.

GROUPS SERVICES

- ❑ When the weather radio in the Grounds office alarms or occupants receive an ECU Alert for a tornado warning, the first employee hearing or reading the warning shall verify the warning threat on the NWS radar site (if time allows). That person will notify all grounds workers via radio of the tornado warning and instruct them to seek appropriate shelter. *Note: The digital radios have been added to the ENS and should sound for an ECU Alert for Tornado Warning.*
- ❑ Grounds supervisors will ensure all grounds workers are notified and accounted for.

- When the tornado warning is expired, or occupants receive an ECU Alert for warning expiration, Grounds supervisors should ensure all Grounds workers are notified and accounted for.

ECU TRANSIT

- When Transit dispatch receives an ECU Alert for a tornado warning, the first employee hearing or reading the warning shall verify the warning threat on the NWS radar site (if time allows). That person will notify all buses / vehicles via radio of the tornado warning and instruct them to park and evacuate to the nearest appropriate shelter. *Note: The digital radios have been added to the ENS and should sound for an ECU Alert for Tornado Warning.*
 - Buses / vehicles on-campus will shut down and evacuate to nearest safe building.
 - Buses / vehicles off-campus (at / near apartment complexes) will shut down and evacuate to the main office of the complex.
 - Buses / vehicles in route to / from campus will find the nearest safe building, shut down, and evacuate. Preference is a University structure (if conditions allow time to get there) but also encourage the use of retail centers for shelter.
- Transit dispatch will attempt to contact operators once the all clear is given and service can resume.

ECU POLICE DEPARTMENT

- When a severe weather warning is issued for the Greenville area, ECU PD may issue an ECU Alert (see “Criteria for Sending an ECU Alert for Severe Weather”):
 - The Tornado Warning message must always be sent when the criteria is met and one of the ‘all clear messages’ must also be sent to announce the expiration of the tornado warning.
 - The Tornado Watch and Severe Thunderstorm Warning messages are used sparingly as standalone alerts; typically, when there are large events occurring outdoors (North Recreational Complex / Athletics Complex) and to warn Grounds staff. Because the Greenville area is privy to see multiple tornado watches and severe thunderstorms during the spring and summer months, these alerts are reserved for particularly dangerous situations. Instead of standalone alerts, the Tornado Watch and Severe Thunderstorm Warning messages can be used to describe a tornado warning expiration, while also emphasizing the threat for severe weather remains.
 - An all clear message is warranted for tornado warnings; but is not required for either the tornado watch or severe thunderstorm warning.
- ECU PD will contact the recall phone numbers listed later in this document to communicate an all clear message to the modular unit evacuees (as available or appropriate).

HIGH WIND EVENT PROCEDURES

Occasionally, eastern North Carolina is subject to high wind speeds that may pose a hazard or is life-threatening. During these events, a severe thunderstorm warning or high wind warning may be issued by the NWS. If sustained winds are expected to exceed 40 mph, ECU PD can modify the Severe Thunderstorm Warning to include language regarding the high wind warning and need for modular units to evacuate to their designated areas.

Note: There are times when wind gusts may exceed 40 mph, but no ECU Alert would have been sent and no orderly shutdown could occur due to short lead time for such micro-scale weather events. Typically, high wind events (with sustained high winds) are forecasted days in advance and the departments listed in this document can prepare and monitor ongoing weather conditions.

- As sustained winds reach 40 mph and are expected to increase, there will be an orderly shutdown of outdoor activities and evacuation of the modular units.
 - All persons outdoors and occupants of modular units should be safely relocated before sustained winds reach 40 mph as this is the wind speed at which all outdoor University activities shall begin to shut down.
 - It is the responsibility of the student, faculty, and staff to determine if they can safely travel or not.
 - ECU Transit will halt services until winds fall below warning criteria.
 - Only emergency response and ECU patrols will be allowed to operate at this point.
- At wind gusts of 50 mph with the expectation that wind gust speeds will increase, all outdoor activities (i.e. ECU PD patrols) shall shut down, except in the case of a response to a life-threatening event.
- Once wind gusts and sustained winds decrease below the warning criteria (and continue dropping), ECU PD will coordinate an ECU Alert to be distributed to campus announcing the expiration of the high wind warning.
 - This message will provide specific instructions regarding the return to the modular units.
 - ECU PD will contact the recall phone numbers listed later in this attachment to communicate the All Clear message to the modular unit evacuees (as available and appropriate).

MODULAR UNIT CONTACTS

Modular Unit	Unit #	Evacuation Site	Recall #
Irons Modular Unit	737-1177	Irons Building	737-1177
HSC Grounds	744-2644	Large Storage Building	744-2644

*This information is provided for reference and informational purposes in the event ECU PD needs to make contact with the modular units for recall. **Note: It is the responsibility of each unit to notify EH&S (252-328-6166 or safety@ecu.edu) if phone numbers or evacuation locations change.***

GENERAL SEVERE WEATHER SAFETY INFORMATION

- Always be aware of the weather forecast for the day, check weather.gov or ECU's [WeatherSTEM](#) daily.
- Be aware to changing weather conditions; look and listen for approaching storms:
 - Dark (greenish) clouds, large hail, rotating clouds, loud roar (like a train), lightning, thunder
- Postpone outdoor activities during thunderstorms and secure outdoor objects that could blow away or cause damage.
- During thunderstorms, avoid contact with anything metal, electrical equipment/cords, and plumbing.
- After a severe storm has passed, continue to monitor weather resources for emergency information or subsequent storms.
- Never drive through a flooded roadway; turn around, don't drown!
- Stay away from downed power lines and report them immediately.
- Help people who may require special assistance and watch your animals closely.

TAKING SHELTER

Sturdy, Permanent Structure	Modular Unit	Outside with No Shelter
<p>Go to a pre-designated area:</p> <ul style="list-style-type: none"> – Safe room, basement, or lowest level – Center of interior room (closet, bathroom, or hallway) – Away from corners, windows, or exterior doors – Get under sturdy furniture – Protect your head and neck <p>Do not open windows.</p>	<p>Get out immediately and go to a pre-designated area in a sturdy, permanent structure.</p>	<p>If accessible, immediately get into vehicle, buckle seat belt and try to drive to closest sturdy, permanent structure.</p> <ul style="list-style-type: none"> – If vehicle is hit by flying debris, pull off the road and park <p>Take cover in a stationary vehicle.</p> <ul style="list-style-type: none"> – Buckle seat belt and cover your head and neck <p>Lie in an open area noticeably lower than level of roadway (ditch) and cover your head and neck.</p>
<ul style="list-style-type: none"> – Do not take shelter under an overpass or bridge. – Never try to outrun a tornado in an urban area; leave the vehicle and immediately seek a sturdy, permanent structure. – Watch out for flying debris. 		

Visit www.ready.gov/prepare-for-emergencies for more information.

DEFINITIONS: NWS SEVERE WEATHER AND TORNADO PRODUCTS

Tornado	
Watch	Warning
<p>This product is issued when <u>conditions are favorable for the development of tornadoes</u> in and close to the watch area. Their size can vary depending on the weather situation. They are usually issued for a duration of 4 to 8 hours. They are normally <u>issued well in advance</u> of the actual occurrence of severe weather. During the watch, people should review tornado safety procedures and be prepared to move a place of safety if threatening weather approaches.</p> <p>A Tornado Watch is issued by the SPC in Norman, Oklahoma. Prior to the issuance of a Tornado Watch, SPC will usually contact the affected local NWS office and they will discuss what their current thinking is on the weather situation. During the watch, the NWS office will keep the public informed on what is happening in the watch area and let the public know when the watch has expired or been cancelled.</p>	<p>This product is issued when a <u>tornado is indicated by radar or sighted by spotters</u>; therefore, people in the affected area should seek safe shelter immediately. They can be issued without a Tornado Watch being already in effect. They are usually issued for a duration of around 30 minutes. A Tornado Warning is issued by your local NWS office. It will include where the tornado was located and what towns will be in its path.</p> <p>After it has been issued, the affected NWS office will follow it up periodically with Severe Weather Statements. These statements will contain updated information on the tornado and they will also let the public know when the warning is no longer in effect.</p>

High Wind	
Watch	Warning
<p>This product is issued by the NWS when there is the <u>potential of high wind speeds developing</u> that may pose a hazard or is life-threatening. The product is issued when conditions are favorable for development of sustained winds of 40 mph or greater and / or gusts of 58 mph or greater within 24 to 48 hours.</p>	<p>This product is issued by NWS when <u>high wind speeds may pose a hazard or is life-threatening</u>. The product is issued for non-convective sustained wind speeds 40 mph and greater and / or frequent wind gusts 50 mph and greater or any winds gusts 58 mph and greater.</p>

Flash Flood	
Watch	Warning
<p>This product is issued to indicate current or developing hydrologic <u>conditions that are favorable for flash flooding</u> in and close to the watch area, but the occurrence is neither certain or imminent.</p>	<p>This product is issued to inform the public, emergency management, and other cooperating agencies that <u>flash flooding is in progress, imminent, or highly likely</u>.</p>

Severe Thunderstorm

Watch

This product is issued by the NWS when conditions are favorable for the development of severe thunderstorms in and close to the watch area. A severe thunderstorm, by definition, is a thunderstorm that produces one-inch hail or larger in diameter and / or winds equal to or exceeding 58 mph. The size of the watch can vary depending on the weather situation. They are usually issued for a duration of 4 to 8 hours. They are normally issued well in advance of the actual occurrence of severe weather. During the watch, people should **review severe thunderstorm safety procedures and be prepared to move a place of safety** if threatening weather approaches.

A Severe Thunderstorm Watch is issued by the SPC in Norman, Oklahoma. Prior to the issuance of a Severe Thunderstorm Watch, SPC will usually contact the affected local NWS office and they will discuss what their current thinking is on the weather situation. During the watch, the NWS office will keep the public informed on what is happening in the watch area and let the public know when the watch has expired or been cancelled.

Warning

This product is issued when either a severe thunderstorm is indicated by radar or a spotter reports a thunderstorm producing hail one-inch or larger in diameter and / or winds equal to or exceeding 58 mph; therefore, people in the affected area should **seek safe shelter immediately**. Severe thunderstorms can produce tornadoes with little or no warning. Lightning frequency is not a criterion for issuing a severe thunderstorm warning. They are usually issued for a duration of one hour. They can be issued without a Severe Thunderstorm Watch being already in effect.

The Severe Thunderstorm Warning is issued by your NWS office. Severe Thunderstorm Warnings will include where the storm was located, what towns will be affected by the severe thunderstorm, and the primary threat associated with the severe thunderstorm warning.

After it has been issued, the affected NWS office will follow it up periodically with Severe Weather Statements. These statements will contain updated information on the severe thunderstorm and let the public know when the warning is no longer in effect.