SEVERE WEATHER PROCEDURES & EMERGENCY PREPAREDNESS CHECKLIST
REVISED 3/6/2017

The weather is monitored on a daily basis 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, response, and recovery from severe weather.

Note: Human Resources should send out the Adverse Weather & Emergency Event Policy at least two times a year (generally at the beginning of Hurricane Season and again during Winter Weather Season). The policy 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/ and scroll down the page 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, right 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.
  o Ways to receive weather information:
    ▪ NOAA Weather Radio
    ▪ Television
    ▪ Subscription to iNWS
    ▪ NWSChat
    ▪ Law Enforcement Teletype System (LETS)
    ▪ NC First
    ▪ 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.
  o 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 almost 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 for their convenience. EH&S will assist as needed.

- ECU Alert messages will be sent via email, text, webpage, Twitter, Alertus, LiveSafe, VOIP phones, LCD screens, and indoor / outdoor speakers to broadcast the warnings to the ECU 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 almost 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 Emergency Notification System 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 still remains 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 Emergency Notification System 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 NWS and Campus Operations. The following observations should be shared with EH&S:
  - Tornado, funnel, or rotating 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: wwwapps.ecu.edu/msworkrq_dotnet (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.
SEVERE WEATHER EMERGENCY PREPAREDNESS CHECKLIST

GENERAL (ALL DIVISIONS / DEPARTMENTS)

☐ Understand the type of hazardous weather that can affect Greenville. Visit 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

☐ Some 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).
☐ When the weather radio activates or occupants receive ECU Alert for a tornado warning, all modular unit occupants will evacuate to their designated areas, as listed later in this attachment.
  o All evacuees will remain in the designated shelter until given an all clear (expiration) message through ECU Alert, ECU PD, or their departmental representative.
☐ Each department utilizing modular units should conduct tornado warning procedures and information sessions annually (recommended February / March) and upon an employee’s initial assignment to a modular unit. Topics to address include:
  o Modular-specific procedures for severe weather
  o Accountability and notification of modular unit occupants
  o Evacuation and/or shelter-in-place location(s)
  o 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.

GROUNDS SERVICES

☐ When the weather radio in the Grounds office alarms or occupants receive an ECU Alert for a tornado warning for the Greenville area, 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.
☐ 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

☐ Transit dispatch will notify all buses/vehicles of the warning and will instruct them to park and evacuate to the nearest safe building.
  o Buses/vehicles on-campus will shut down and evacuate to nearest safe building.
  o Buses/vehicles off-campus (at/near apartment complexes) will shut down and evacuate to the main office of the complex.
  o 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 large stores for shelter.

☐ Transit dispatch will attempt to call 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”):
  o 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.
  o 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 attachment to communicate an all clear message to the modular unit evacuees (as available or appropriate).
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 are able to 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 outdoor 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).
<table>
<thead>
<tr>
<th>Modular Unit</th>
<th>Unit #</th>
<th>Evacuation Site</th>
<th>Recall #</th>
</tr>
</thead>
<tbody>
<tr>
<td>Irons Modular Unit</td>
<td>737-1177</td>
<td>Irons Building</td>
<td>737-1177</td>
</tr>
<tr>
<td>HSC Grounds</td>
<td>744-2644</td>
<td>Large Storage Building</td>
<td>(252) 916-0050</td>
</tr>
<tr>
<td>Unit 6, Biostatistics</td>
<td>744-4037</td>
<td>BSOM Auditorium</td>
<td>744-1010</td>
</tr>
<tr>
<td>Health Sciences Communication</td>
<td>744-1870</td>
<td>Brody 1S-10</td>
<td>744-2496</td>
</tr>
<tr>
<td>Public Health (Unit 6, 7 &amp; 8)</td>
<td>744-4037</td>
<td>BSOM Auditorium</td>
<td>744-1010</td>
</tr>
</tbody>
</table>

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 www.weather.gov for your area.
- Be alert 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.

<table>
<thead>
<tr>
<th>TAKING SHELTER</th>
<th>Sturdy, Permanent Structure</th>
<th>Modular Unit</th>
<th>Outside with No Shelter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Go to a pre-designated area:</td>
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<tr>
<td>- Safe room, basement, or lowest level</td>
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<tr>
<td>- Center of interior room (closet, bathroom, or hallway)</td>
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<td>- Away from corners, windows, or doors</td>
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<tr>
<td>- Get under sturdy furniture</td>
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<tr>
<td>- Protect your head and neck</td>
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<tr>
<td>Do not open windows.</td>
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<tr>
<td>Get out immediately and go to a pre-designated area in a sturdy, permanent structure.</td>
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<tr>
<td>If accessible, immediately get into vehicle, buckle seat belt and try to drive to closest sturdy, permanent structure.</td>
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<tr>
<td>- If vehicle is hit by flying debris, pull off road and park</td>
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<tr>
<td>Take cover in a stationary vehicle.</td>
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<tr>
<td>- Buckle seat belt and cover your head and neck</td>
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<td></td>
</tr>
<tr>
<td>Lie in an open area noticeably lower than level of roadway (ditch) and cover your head and neck</td>
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</tbody>
</table>

- 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

<table>
<thead>
<tr>
<th>Watch</th>
<th>Warning</th>
</tr>
</thead>
<tbody>
<tr>
<td>This is issued by NWS when <strong>conditions are favorable for the development of tornadoes</strong> 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 normally are <strong>issued well in advance of the actual occurrence of severe weather</strong>. During the watch, people should <strong>review tornado safety rules and be prepared to move a place of safety</strong> if threatening weather approaches. A Tornado Watch is issued by SPC in Norman, Oklahoma. Prior to the issuance of a Tornado Watch, SPC will usually contact the affected local National Weather Forecast 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 also let the public know when the watch has expired or been cancelled.</td>
<td>This is issued when a <strong>tornado is indicated by radar or sighted by spotters</strong>; therefore, people in the affected area should <strong>seek safe shelter immediately</strong>. 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 National Weather Service office. It will include where the tornado was located and what towns will be in its path. 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 warning is no longer in effect.</td>
</tr>
</tbody>
</table>

#### High Wind

<table>
<thead>
<tr>
<th>Watch</th>
<th>Warning</th>
</tr>
</thead>
<tbody>
<tr>
<td>This product is issued by NWS when there is the <strong>potential of high wind speeds developing</strong> that may pose a hazard or is life threatening. Product 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.</td>
<td>This product is issued by NWS when <strong>high wind speeds may pose a hazard or is life threatening</strong>. Product issued for non-convective sustained wind speeds 40 mph and greater and / or frequent wind gusts 50 mph and greater or any winds gusts 57 mph and greater.</td>
</tr>
</tbody>
</table>

#### Flash Flood

<table>
<thead>
<tr>
<th>Watch</th>
<th>Warning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Issued to indicate current or developing hydrologic conditions that are favorable for flash flooding in and close to the watch area, but the occurrence is neither certain or imminent.</td>
<td>Issued to inform the public, emergency management, and other cooperating agencies that <strong>flash flooding is in progress, imminent, or highly likely</strong>.</td>
</tr>
</tbody>
</table>
# Severe Thunderstorm

<table>
<thead>
<tr>
<th>Watch</th>
<th>Warning</th>
</tr>
</thead>
<tbody>
<tr>
<td>This is issued by 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 or exceed 58 miles an hour. 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 rules and be prepared to move a place of safety if threatening weather approaches.</td>
<td>This 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 or exceed 58 miles an hour; therefore, people in the affected area should seek safe shelter immediately. Severe thunderstorms can produce tornadoes with little or no advance warning. Lightning frequency is not a criteria 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.</td>
</tr>
<tr>
<td>A Severe Thunderstorm Watch is issued by the Storm Prediction Center (SPC) in Norman, Oklahoma. Prior to the issuance of a Severe Thunderstorm Watch, SPC will usually contact the affected local National Weather Service Forecast 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 also let the public know when the watch has expired or been cancelled.</td>
<td>The Severe Thunderstorm Warning is issued by your National Weather Service Forecast 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.</td>
</tr>
<tr>
<td>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 they will also let the public know when the warning is no longer in effect.</td>
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</tr>
</tbody>
</table>