The University of Tennessee Martin's College of Agriculture & Applied Sciences Emergency Operations Plan

Revised September 2024

THE UNIVERSITY of TENNESSEE MARTIN

Table of Contents

Letter of Promulgation

The University of Tennessee Martin (UTM) is committed to protecting the safety, security, and welfare of its campus, community members, and property. This Emergency Operations Plan (EOP), herein referred to as the Plan, was developed to provide UTM's College of Agriculture & Applied Sciences a means to mitigate, prepare for, respond to, and recover from emergencies that may affect UTM's agricultural community, animals, livestock, crops, and equipment/resources – herein referred to as the Agricultural System. This Plan supplements the UTM Emergency Response Plan.

In accordance with Homeland Security Presidential Directive (HSPD) – 5, the Plan incorporates National Incident Management System (NIMS) concepts and principles, and utilizes the Incident Command System (ICS) for management of emergency events. The Plan provides the opportunity for UTM's agricultural community to better prepare for and to quickly recover from disasters. Thus, the Plan provides the College of Agriculture & Applied Sciences with a means to minimize the impact of an incident while saving and maximizing the effectiveness of the University's resources.

Faculty, staff, and students are encouraged to continue their on-going efforts in emergency preparedness, planning, and training in order to enhance disaster response and recovery. Those receiving the Plan shall review and become committed to the Plan's goal for protecting the welfare of the Agricultural System and the University's community.

Preface

This is The University of Tennessee Martin's College of Agriculture & Applied Sciences EOP. You have received a copy of the Plan because you will have important responsibilities during an agricultural crisis or disaster. Please read this document immediately, and re-read it periodically, so that you are thoroughly familiar with the contents of the Plan and fully understand your specific role.

The Plan set forth in this document is designed to rapidly and efficiently mobilize the University's resources, both personnel and equipment, to meet an emergency that may confront UTM's Agricultural System. The effectiveness of this Plan is dependent upon the full and rapid response of all personnel. In the event that the UTM's Agricultural System is faced with an emergency, the UTM Emergency Management Coordinator and the Agricultural System Emergency Response Coordinator, acting under the guidelines of this Plan, are authorized to implement those measures necessary to prepare for an emergency to minimize loss, to react to the emergency to save lives and property, and recover rapidly to minimize disruption of normal activity. Each member of the UTM Agricultural System who has a part in these important tasks will give matter his or her full and complete attention and support.

This Plan shall be activated under the following circumstances:

- When the UTM Chancellor or his designee deems it necessary to declare a local emergency for the purpose of safeguarding the lives and property of UTM's Agricultural System or to maintain orderly conduct of business.
- When governmental officials proclaim a state of emergency that affects the University, either locally, city-wide, regionally, or statewide.

1.0 Purpose

This document, with its associated information and contingencies, constitutes the EOP for UTM's College of Agriculture & Applied Sciences. This Plan is to be implemented to deal with emergencies and disasters, and is intended to protect lives and property through effective use of available manpower and resources during emergency operations. It is placed into operations whenever a natural or manmade emergency or disaster affecting the Agricultural System reaches proportions where such a situation cannot be controlled by routine measures.

This Plan incorporates NIMS concepts and principles, and the ICS organizational structure for handling major emergencies which disrupt normal operations of UTM's Agricultural System such as, but not limited to: tornadoes, floods, earthquakes, hazardous materials incidents, and other potential disasters.

The overall Plan begins with the end state of the emergency in mind. It is recognized that the UTM Agricultural System presents unique hazards and vulnerabilities that the UTM Main Campus does not encounter. With that in mind the Plan is meant to align and follow the UTM Emergency Response Plan whenever possible. The purposes of the Plan are:

- Protect the lives of people and animals, to preserve property, and to ensure the continuity of the Agricultural System functions through coordination between departments and local first responders.
- To establish a mutual understanding of authority, responsibilities, and operations of the UTM Agricultural System personnel during emergencies and disasters.
- To establish an emergency organization in order to direct and control operations during the emergency situation by assigning responsibilities to specific entities.
- To provide a basis for the conduct and coordination of emergency operations and the management of resources during emergencies and disasters.
- To provide contingencies for major potential disasters that may affect the UTM Agricultural System.
- To identify the UTM Agricultural System's role in coordinating emergency operations with University departments and outside agencies.

1.1 Plan Elements

This Plan consists of the basic plan and appendices. The basic plan provides an overview of the UTM Agricultural System's approach to emergency response and operations. It explains the policies, organization, and tasks that would be involved in response to an emergency. The appendices give definition to the terms and acronyms used throughout the basic plan, and are the location for supporting figures, maps, and forms.

1.2 Scope

This Plan and all its contents apply to the entire UTM Agricultural System. Personnel or partners who have a role will have access to and be knowledgeable of the Plan. This Plan will integrate seamlessly into the UTM Emergency Response Plan. Nothing in this Plan shall be construed in a manner that limits the use of good judgment and common sense in matters not foreseen or covered by the elements of the Plan or appendices hereto. UTM Emergency Response Plan's policies and procedures supersede this Plan.

2.0 Situation and Assumptions

2.1 Situation

The UTM College of Agriculture and Applied Sciences operates approximately 600 acres, including approximately 240 for field crop production and another 250 acres suitable for livestock. The remaining acreage includes buildings, waterways, and wooded areas not available for cropping or grazing. The Agricultural System consists of a Field Laboratory and the Animal Diagnostics Laboratory located in Martin, Tennessee.

The Field Laboratory is located on College Farm Road at latitude 36°21'01"N and longitude 88°51'27"W. The Field Laboratory covers approximately 240 acres and terrain is approximately 407 feet above sea level. The major transportation routes that are near the Field Laboratory are Highway 43 and TN-43 Bypass, Highway 431, and Highway 22.
The Field Laboratory consists of several facilities, to include:

- Ag & Natural Resources Headquarters
- Smith Livestock Merchandising Center
- Walker Cattle Management System
- Beef Barn & Feedlot
- Sheep & Goat Center
- Graves Stables
- Henderson Headquarters Veterinary Sciences Lab
- Veterinary Health Technology Building
- Plant Science Laboratory & Greenhouse
- Aquaculture facility
- Rhodes Golf Center
- West Tennessee Animal Disease Diagnostics Laboratory

Population on the Agricultural System fluctuates throughout the year and could affect plan implementation. On average during the school year (autumn and spring months), the Agricultural System consists of the following populations:

- The number of full time Agricultural System and University personnel on site is approximately 20
- The average number of students on the premises approximately 100
- There is one home on the Agricultural System, with a graduate assistant residing within

The Agricultural System produces a variety of crops including soybeans, corn, wheat, and hay. In addition to crops, the Agricultural System is home to several animals. The number of animals onsite vary due to events hosted on the Agricultural System, though on average, the number of animals on site is:

- Cattle:
  - 55 University owned
- Equine:
  - 36 University owned
- Animals:
  - 12 sheep
  - 18 goats
  - Up to 50 swine
  - 10-15 dogs
  - 10-15 cats

Of all the buildings within the Agricultural System, only three buildings house animals.

- Swine Facility Barn 2 – companion animals
- Barn 5 – pigs
- Henderson Headquarters Veterinary Sciences building – companion animals

The UTM Agricultural System is equipped with auxiliary lighting, building alarms, about 10 locking gates to prevent movement from 11pm until 5am, and the ability for a lockdown in case of an emergency.

The Agricultural System also has a significant amount of equipment that can be used as resources for disasters and emergencies not only on the Agricultural System, but in response to an event within the University and the community at large.

2.2 Assumptions

- Safety of human life will take precedence over protecting animals during incidents.
- In accordance with the UTM Emergency Response Plan, as amended, this Plan has been developed. This Plan will be staffed, revised, exercised, readopted, and reissued annually.
- The UTM Agricultural System will appoint an Emergency Response Coordinator who will be charged with ensuring all personnel with roles and assignments laid out in this Plan are trained and knowledgeable of their responsibilities.
- The UTM Agricultural System Emergency Response Coordinator, in concert with the UTM Emergency Management Coordinator will act for the President of UTM to coordinate all disaster and emergency response by and between all agencies and all political subdivisions in accordance with UTM's policies and procedures.
- The resources of local and state government may not be readily available to UTM officials to cope with emergencies and disasters affecting the UTM Agricultural System.
- The UTM Agricultural System may not be the top priority in the response effort.
- Severe weather, including flash floods, tornadoes, high winds, heavy snow, ice storms, droughts, and other weather related emergencies or natural disasters will continue to occur annually in the state of Tennessee.

- Incidents relating to the storage and transportation of hazardous materials will continue.
- Industrial accidents involving the release of hazardous materials, and fires affecting the safety, welfare, and economic well-being of the citizens of the surrounding area will continue to require the services of local emergency responders.
- Sabotage and criminal activity could disrupt response efforts.
- Civil unrest will require intervention by local and state agencies.
- The Agricultural System could be subjected to more than one disaster at a time.
- An emergency or disaster can occur at any time of the day or night, weekends or holidays, with little or no warning.
- Since events in an emergency or disaster are not predictable, this Plan will serve only as a guide and may require modification to meet the requirements of the emergency or disaster.
- Basic services, including electrical, water, natural gas, telecommunications, and other information systems may be interrupted.
- Buildings, other structures, and equipment may be damaged.
- Normal suppliers may not be able to deliver goods.
- UTM Agricultural System personnel and students are familiarized with the UTM Emergency Response Plan.

2.3 Potential Hazards

The following section depicts potential hazards for Weakley County. Weakley County developed a Mitigation Plan for the cities of Dresden, Gleason, Greenfield, Martin, and Sharon. The Weakley County Mitigation Plan and the Weakley County Emergency Operations Plan were used to assist with developing this Plan.

Drought and Heat (see Section 3.2.1 Drought and Extreme Heat)

- Drought and Extreme Heat: A drought is a prolonged period with little or no rain. Significant droughts occur about once every 15 years or so in Tennessee.

Winter Storms (see Section 3.2.2 Winter Storms)

- Winter Storms: The most destructive winter storm in Weakley County occurred in February 1994. Two-thirds of the counties in Tennessee were declared federal disasters. In Weakley County, many citizens went without power for over five consecutive days due to ice accumulations greater than two inches. Other historical events occurred in December 1983, January 1998, and December 2004.

Severe Weather (see Section 3.2.3 Severe Weather)

- Wind Storms/Thunderstorms: Wind storms and thunderstorms, while relatively short in duration, are quite frequent in Weakley County. In the past decade, Weakley County has been declared a federal disaster three times due to severe storms: January 1999, May 2003, and April 2006.

Flooding (see Section 3.2.4 Flooding)

- Flooding/Flash Flooding: Weakley County has never been declared a disaster due to flooding. River flooding is not a concern due to the limited structures near any major streams. However, there are several low-lying areas that are susceptible to flash flooding, which leads to the blocking off traffic flow and causing highway damage on an annual basis.
- Dam Failure: Dam failures are often the result of prolonged rainfall and flooding or, during very dry conditions, erosion. The primary danger associated with a dam failure is the swift,

unpredictable flooding of those immediately downstream of the dam. In Tennessee, there are more than 1,200 dams and fortunately, significant dam failures occur on average of less than once every 40 years.

Tornadoes (see Section 3.2.5 Tornadoes)

- Tornadoes: Martin-area historical tornado activity is above Tennessee state average. It is 146% greater than the overall U.S. average. On March 1, 1997, a F4 tornado 15.6 miles away from the Martin city center caused $100,000 in damages. On May 7, 1971, a F4 tornado 19.2 miles away from the city center killed three people and injured 137 people.

Earthquakes (see Section 3.2.6 Earthquakes)

- Earthquake: Geologic faults in several regions of the state increase the vulnerability to seismic disturbances. The highest seismic risk zone – the New Madrid Fault – extends through Arkansas, Illinois, Kentucky, Mississippi, Missouri, and Tennessee. The West Tennessee region, which includes Weakley county, is at risk due to the proximity to the New Madrid Seismic Zone. The strongest earthquakes on the North American continent occurred in this area over a three month period in 1811-1812.

Hazardous Materials (see Section 3.2.7 Hazardous Materials)

- Hazardous Materials Spills: Hazardous materials (fuel, fertilizers, herbicides, and insecticides) are stored and transported within the Agricultural System. Thus, there is a potential for having a chemical spill on the Agricultural System property.

Disease Outbreaks and Pests (see Section 3.2.8 Disease Outbreaks and Pests)

- Disease Outbreaks: The U.S. is free of most List A diseases such as Foot and Mouth Disease or Classical Swine Fever, though Vesicular Stomatitis and Bluetongue still occur sporadically. Many viruses are spreadable through air and can contaminate equipment, clothing, hands, etc. Because of the unconventional threats that face us today, a biological terrorism event is low probability, but a high consequence event that must be planned for. Such attacks could be directed against the animals that are housed on the property.
- Pests: Various pests exists and could become a nuisance at any time.

Fires (see Section 3.2.9 Fire)

- Fires: Fires can be set intentionally or initiated by several hazards such as drought, lightning, earthquakes, hazardous materials spills, etc. Agricultural Systems storing hay must be careful of combustion.

Criminal Activity (see Section 3.2.10 Criminal Activity)

- Criminal Activity: The UTM Agricultural System maintains a large amount of farm equipment, supplies, vaccines, and chemicals that can increase the probability of theft on the Agricultural System. Criminal activity such as burglary, theft, use of alcohol/narcotics, or simple assault is most likely to occur on Agricultural System property. Though, the UTM Agricultural System is less likely to experience criminal activity that poses a threat of imminent death or serious bodily injury to the UTM Agricultural System community, criminal activity such as a bomb threat, active shooter, violent protests/civil unrest, or bioterrorism could have devastating effects and must be planned for.

2.4 Critical Resource Dependencies on Other Jurisdictions

- The UTM Emergency Management Coordinator is ultimately responsible for responding to threats that may affect lives and property in an emergency or disaster situation.

- Should there be an occurrence(s) that affects only the UTM Agricultural System, emergency operations will take place under the Agricultural System Emergency Response Coordinator's direction and control, with University, city, and county agencies supporting the operations through resource augmentation of manpower, equipment, and materials.
- Should there be an occurrence that affects both the UTM Main Campus and the Agricultural System, operations will take place under the UTM Main Campus with Agricultural System personnel coordinating with the UTM Emergency Operations Center (EOC). The UTM Agricultural System will designate a person to operate out of the UTM EOC during its activation.
- Should there be an occurrence that affects the UTM Main Campus and Agricultural System, as well as the City of Martin or Weakley County, emergency operations will take place under each jurisdiction's direction and control with the county wide agency coordinating the operation and resources for all affected areas.
- This Plan is based on the assumption that initial emergency management response will, to the maximum extent possible, be by the UTM Agricultural System personnel. Assistance needed will be requested by executing existing mutual aid agreements (see Appendix E) with the UTM Main Campus, the City of Martin, and Weakley County.

3.0 Concept of Operations

3.1 General

The Plan is based on NIMS concepts and principles which addresses four phases of emergency management:

- Prevention/Mitigation
- Preparedness
- Response
- Recovery

Prevention/Mitigation

The UTM Agricultural System will conduct mitigation activities as an integral part of the emergency management program. Prevention/Mitigation is intended to eliminate hazards and vulnerabilities, reduce the probability of hazards and vulnerabilities causing an emergency situation, or lessen the consequences of unavoidable hazards and vulnerabilities. Prevention/Mitigation is a pre-disaster activity, although mitigation may also occur in the aftermath of an emergency situation with the intent of avoiding repetition of the situation. Prevention/Mitigation activities strengthen facilities and the UTM Agricultural System against potential hazards by eliminating or reducing the chance of occurrence or the effects of a disaster. Examples of prevention/mitigation activities include:

- Identify grant programs for loss reduction measures (if available).
- Work with the Tennessee Emergency Management Agency (TEMA) Mitigation Program to develop mitigation grant projects to assist in areas most at risk.
- Conduct routine maintenance on equipment such as generators, fire extinguishers, and smoke and carbon monoxide detectors.
- Coordination of Federal Flood Insurance operations and integration of mitigation with other program efforts.
- Verify and update all call down and contact lists routinely.
- Identify potential hazards and take steps to remedy them (e.g., remove dead/rotting trees and branches).
- Early documentation of losses avoided due to previous hazard mitigation measures.
- Implement mitigation measures in the rebuilding of infrastructure damaged in incidents.
- Ensure all livestock have identification such as ear tags, tattoos, or brands.

Preparedness

The UTM Agricultural System will conduct Preparedness activities to develop the response capabilities needed in the event of an emergency. Anticipating what can go wrong, determining effective responses, and developing preparation of resources are critical steps in preparing for the unexpected. Examples of preparedness activities include:

- Provide public information and educational materials to students, faculty, and visitors via newsletters, brochures, yearly training, websites, and other media.
- Develop, review, exercise, and maintain the Plan.
- Assure the viability and accuracy of emergency contact lists, resource lists, and mutual aid agreements/emergency contracts.
- Alert emergency response personnel and develop a staffing pattern.

- Determine any protective action measures that need to be implemented in preparation for the situation.
- Ensure students who have animals on campus are notified of impeding hazardous conditions.
- Provide emergency equipment and facilities.
- Involve emergency responders, emergency management personnel, other local officials, and volunteer groups who assist UTM during emergencies in training opportunities.
- Conduct periodic exercises to test emergency plans.
- Complete an After Action Report/Improvement Plan (AAR/IP) after exercises to provide the basis for continuous improvement of this Plan.

Response

Response is based on the aggressive delivery of resources to the hardest hit areas as soon as possible. The Plan has divided response into two phases, Initial Response and Sustainment. These phases are not explicitly distinct but represent an overlapping continuum of information gathering translating into parallel informed actions synchronized across all of the responding personnel and organizations.

The UTM Agricultural System Emergency Response Coordinator may be tasked to work in the UTM EOC when an emergency or disaster impacts both the UTM Main Campus and the Agricultural System. The decision about whether they are to report will be determined by the Operations Manager and approved by the UTM Emergency Management Coordinator.

Initial Response Phase: The Initial Response Phase typically takes place during the first 48-72 hours after the emergency or incident. This timeline is predicated on the severity of the disaster. In the Initial Response Phase the UTM Agricultural System must accomplish the following basic tasks:

- Preserve life, property, the environment, and the social, economic, and political structure of the community.
- Establish communications.
  - Normal methods of communication may not exist. In many disasters cell phone and land line service is disrupted.
  - Alternative means of communication must be developed in order to fill this void.
- Establish command and control.
  - Command and control for all emergencies and disasters on UTM Agricultural System property will be the responsibility of the UTM Agricultural System Emergency Response Coordinator.
  - The UTM Agricultural System Emergency Response Coordinator will work in-conjunction with the UTM Emergency Management Coordinator and local authorities to respond to any event which may affect the Agricultural System.
    - Due to the specific nature of the UTM Agricultural System, the UTM Agricultural System Emergency Response Coordinator will have the technical subject matter expertise to guide the response on the Agricultural System.
- Gain situational awareness.
  - Situational awareness must come from on-scene reports from first responders.
  - This information is then sent to the UTM EOC for personnel to analyze.

- Notify local emergency response agencies.
  - Upon learning of an accident or emergency on UTM Agricultural System property, personnel shall contact appropriate local emergency response agencies. The numbers to these agencies can be found in Appendix A – Communications.
- Notify UTM emergency management personnel.
  - The UTM Emergency Management Coordinator should be notified of any instance on UTM Agricultural System property which could result in this Plan being implemented.
- Determine the course of action students and personnel, impacted by the incident, should take.
  - UTM Agricultural System personnel shall take appropriate action to ensure that all students, personnel, and visitors remain safe while the emergency situation is being corrected.
- Take immediate actions to preserve life of students, faculty, and visitors.
- Take immediate action to preserve life of animals and prevent further suffering of animals.
- Any inquiry for information by media sources shall be directed to contact the UTM Emergency Management Coordinator or the Public Information Officer (PIO) that has been identified.

Sustainment Phase: The Sustainment Phase takes place after the Initial Response Phase of an emergency or incident. This phase typically takes place after the first 48-72 hours of an incident, but is dependent on the severity of the disaster. In the Sustainment Phase the UTM Agricultural System must accomplish the following tasks:

- Preserve life, property, the environment, and the social, economic, and political structure of the community.
- Support students, personnel, and visitors that cannot care for themselves socially, economically, and/or medically.
- Support on site and off site animals that have been impacted by the disaster.
- Repair critical infrastructure. All infrastructures shall be inspected following a disaster even if it is not believed to have been involved in the disaster itself. This includes all Agricultural System vehicles, storage buildings, fences, and housing located on the Agricultural System.
- Continue to support the response effort.
- Acquire food stock for animals left on site.
- Acquire sufficient water supplies for animals left on site.
- Arrange for animals not owned by the school to be transported to a location agreed upon by their owner.
- Dispose of animal's remains in a manner agreed upon by owner, Tennessee State Veterinarian Office and UTM Agricultural System personnel.
- Provide Support to UTM Main Campus in disaster response efforts.
- Resume normal day to day activities.

Recovery

If a disaster occurs, the UTM Agricultural System will carry out a recovery program that involves both short-term and long-term efforts. Short-term operations seek to restore vital services to the UTM Agricultural System and provide for the basic needs of the students, personnel, and visitors. Long-term recovery focuses on restoring the UTM Agricultural System to normal operations. While

the federal government, pursuant to the Stafford Act, provides the vast majority of disaster recovery assistance, UTM must be prepared to provide quick recovery to normal business operations. The long-term recovery process includes assistance to students and Agricultural System personnel. During the Recovery Phase UTM Agricultural System personnel will need to interact with many governmental agencies. It is important for the UTM Agricultural System to designate one person to interact with the officials to ensure a consistent recovery process. Examples of recovery actions include:

- Repair damaged infrastructure.
- Conduct a hot wash after actual emergencies to provide the basis for the Corrective Action Plan and continuous improvement of this Plan.
- Develop a Corrective Action Plan.

3.2 Hazard-Specific Response Guidance

Actions identified in the concept of operations above identify what needs to be done in general for a disaster; hazard-specific response guidance is depicted in the subsequent sections.

3.2.1 Drought and Extreme Heat

➢ 3.2.1.1 Purpose

The purpose of the Drought & Extreme Heat response guidance is to provide an effective and systematic means for the UTM Agricultural System personnel to assess and respond to a drought and extreme heat conditions.

➢ 3.2.1.2 Situation

Drought

- Drought is defined as a prolonged period of abnormally dry weather, where the lack of sufficient precipitation causes a serious hydrologic imbalance, having consequences which may affect all or a portion of the UTM Agricultural System. Drought is a cyclical weather phenomenon, which can have a profound effect upon UTM Agricultural System property. It is progressive in nature, and its presence may not be recognized until it has reached a severe level. Droughts are often associated with conditions that lead to extreme heat. When drought and extreme heat occur at the same time, the conditions can be very dangerous. Droughts bring reduced availability of forage and decreased growth rates in animals, and make livestock production less efficient. During droughts, watering holes can dry up and animals may become dehydrated and suffer from starvation.

Extreme Heat

- Extreme heat is defined as temperatures that are 10 degrees or more above the normal average high temperature.
- Heat stress can occur during extreme heat conditions, but it can also occur at lower temperatures, e.g., when ambient temperatures are hot (>105°F), humidity is high (>90 percent), and there is little or no air movement or cloud cover.
- Heat stress can occur in livestock when animals have not had time to adjust to a sudden increase in temperatures.
- Excessive heat can affect cellular and landline phones, and other electronic equipment.

- Excessive drain on power supplies can lead to power blackouts.
- Exposure to excessive heat can cause canisters to explode.
- Heat and droughts are stressful to livestock.
- Exposure to excessive heat may endanger or destroy/kill crops, animals, and people.

➢ 3.2.1.3 Assumptions

- Drought and extreme heat will create unusual farm management problems due to the uncertainty surrounding its occurrence, duration, magnitude, and severity.
- Local preparedness, community action, and cooperation will be keys to coping with a water shortage.
- UTM and UTM Agricultural System will cooperate fully with water conservation recommendations made by Weakley County.

➢ 3.2.1.4 Concept of Operations

Initial Response

- The National Weather Service (NWS) provides daily weather forecasts that will allow the UTM Agricultural System Emergency Response Coordinator and personnel to make informed decisions about work schedules. If excess heat is forecasted appropriate work rest cycles shall be followed to avoid heat related injuries.
- The UTM Agricultural System personnel shall ensure that water and shade is available for workers, students, and visitors who will be exposed to extreme heat for long periods of time.
- Personnel should be educated on the signs and symptoms of heat related injuries.
- If drought is occurring, the UTM Agricultural System Emergency Response Coordinator, or designee, shall monitor local regulations on burn bans and water consumption. All Agricultural System equipment should be equipped with a working fire extinguisher.
- The UTM Agricultural System Emergency Response Coordinator will make contact with emergency first responders and the UTM Emergency Management Coordinator if the situation dictates.
- During the response phase to drought and extreme heat, it is important for emergency phone numbers to be posted in visible areas.
- If a grass-land fire were to occur due to drought conditions, personnel should refer to fire response guidance (see Section 3.2.9 Fire).
- UTM Agricultural System personnel will plan accordingly for animal water and food consumption. If these sources run low, personnel will look for alternate means of animal water and feed.
- As a last resort, animals should be sold to provide for more productive animals on site.

Sustainment

- Shade and water shall be provided in multiple locations on the Agricultural System for personnel, students, and visitors.
- Appropriate work/rest cycles shall be implemented for Agricultural System personnel exposed to extreme heat.
- UTM Agricultural System personnel will identify short comings in food and water sources for livestock on the property. Once these short comings have been identified, the UTM

Agricultural System Emergency Response Coordinator will develop courses of action to solve these issues.

- Livestock should be monitored throughout the day for signs of heat related health issues. If these issues are found, livestock should be treated for heat related illness and the UTM Agricultural System veterinarian should be contacted.
- If irrigation is possible, Agricultural System personnel should begin irrigation of crops.
- UTM Agricultural System Emergency Response Coordinator should work with local agriculture officials, insurance representatives, and University personnel to access damage to crops.

Checklists are provided in Appendix B – Checklists of this Plan. Refer to the Drought and Extreme Heat Checklist for detailed specific actions to be taken during the mitigation, preparedness, response, and recovery phases of a drought and extreme heat incident. The checklist can be used as a guide, and should be modified to best reflect actions that will be taken by the Agricultural System.

3.2.2 Winter Storms

➢ 3.2.2.1 Purpose

The purpose of the Winter Storms response guidance is to provide an effective and systematic means for the UTM Agricultural System to assess and respond to winter storm related hazards such as cold waves, snowfall, ice storms, and blizzards.

➢ 3.2.2.2 Situation

Winter storms in Tennessee occur on average about once every five years. In 1993, a storm dubbed the 'Storm of the Century' hit the eastern part of the state. The state suffered 18 deaths and $18 million in damages. Then in 1994, another major ice store hit, resulting in over $100 million in damages, massive utility outages, and road damage to over two-thirds of the state. Major snowstorms in 1996 and 1998 required both State and Federal Government response with a combined cost of $25 million.

Severe winter storms can have a tremendous impact on individuals, animals, and communities. Winter storms can last for days. Accumulations of snow and ice can result in road closures or blockages – isolating homes and farms for days. Roofs may collapse due to heavy weight burden, and knock trees and power lines down resulting in power outages and subsequent loss of heat in homes. Dangerous driving conditions can lead to travelers being stranded on the road. Prolonged exposure to low temperatures, wind, or moisture can result in serious or life threatening conditions, such as frost bite or hypothermia. Each year, dozens of Americans die due to cold-related illnesses with additional fatalities occurring from vehicle accidents, fires following the misuse of heaters, and other winter weather fatalities (e.g., carbon monoxide poisoning). Animals are also at risk during severe winter weather and are subject to wind chill
factors, hypothermia, and frostbite just as humans are. Unprotected livestock may be lost. Deaths can also occur due to dehydration, when water sources freeze and become unavailable. Winter conditions may make getting food and water to animals more difficult. The UTM Agricultural System must make preparations for winter storm situations. Protection of personnel, students, and visitors will be necessary to ensure their safety. Those that must work outdoors during extreme situations should be provided the necessary education on risk and measures to stay safe.

➢ 3.2.2.3 Assumptions

- Winter storms, ice storms, and cold waves will occur during the late fall through the early spring seasons.
    - Extreme cold temperatures can occur during these events.
    - People are more susceptible to cold weather injuries during these months.
    - Fatalities can occur due to these events.
    - Food and water consumption increases for animals during these months.
- Depending on the degree of preparedness, even small amounts of snow or unexpected low temperatures and wind can have devastating effects on animal health and survival, animal care businesses, and personal life.
- Loss of livestock during heavy snowfall and blizzards can be very high.
- Ice storms can break power lines, causing widespread blackouts.
- Water supply may be compromised due to frozen pipes and potential pipe burst.
- Large amounts of snow can lead to localized flooding when warmer temperatures melt the snow in a short period of time.
- Snow accumulation and/or heavy icicles can cause barn and building roof collapse.
- Severe cold may prevent animals from maintaining proper body heat and may distress animals.

➢ 3.2.2.4 Concept of Operations

Initial Response

- The NWS provides winter storm warnings when conditions present themselves. UTM Agricultural System personnel shall monitor the local weather forecast for weather conditions before planning outdoor activities during the winter months.
- Appropriate work rest cycles shall be implemented and followed to allow personnel time for their bodies to recover. This will also help prevent cold weather injuries. Warming facilities with warm beverages and food should be provided if personnel are required to work outside for long periods of time.
- If a winter storm warning is issued, outside activities shall be limited to mission essential tasks. All personnel who are required to work outside should wear appropriate clothing.
- Animals should be brought inside or provided shelter from the elements. If buildings are not available for shelter, alternative shelters should be looked upon (windbreaks, stacks of round bales, etc.).
- If a winter storm warning is issued, personnel should ensure that animals have access to large amounts of feed and a clean water source that is not frozen over.
- The UTM Agricultural System Emergency Response Coordinator shall coordinate with the UTM Emergency Management Coordinator on the current weather conditions. If a storm becomes too dangerous, all students, visitors, and non-essential personnel should go home if conditions allow.
- The UTM Agricultural System Emergency Response Coordinator shall make contact with emergency first responders and the UTM Emergency Management Coordinator if the situation dictates.
- During winter storms, personnel and livestock are susceptible to cold weather injuries; if it is suspected that a cold weather injury has occurred seek medical attention immediately.

Sustainment

- During the sustainment phase, officials will concentrate on the health and welfare of personnel, students, and visitors. During long periods of cold weather, animals will require large amounts of food and water sources due to increased energy requirements. Alternative food sources should be identified. UTM Agricultural System personnel will monitor structural integrity of the buildings on the property. Snow accumulation can cause structural instability on roof tops. Snow and ice should be removed from roof tops. Personnel shall continue to monitor for cold weather injuries and coordinate with local health and government officials to ensure a timely response is made during the event.
- For debris removal, the UTM Agricultural System Emergency Response Coordinator should contact the UTM Emergency Management Coordinator or the Weakley County Emergency Management Director for guidance on disposal and reimbursement.

Checklists are provided in Appendix B – Checklists of this Plan. Refer to the Winter Storms Checklist for detailed specific actions to be taken during the mitigation, preparedness, response, and recovery phases of a winter storm incident. The checklist can be used as a guide, and should be modified to best reflect actions that will be taken by the Agricultural System.

3.2.3 Severe Weather

➢ 3.2.3.1 Purpose

The purpose of the Severe Weather response guidance is to provide an effective and systematic means for the UTM Agricultural System to assess and respond to summer storm related hazards.

➢ 3.2.3.2 Situation

A severe thunderstorm may be accompanied by strong winds, hail, or other phenomena, which can produce considerable damage to buildings and crops. Thunderstorms also present conditions for tornadoes. In stormy weather, livestock frequently gather under trees to seek shelter or are trapped in barns where a lightning strike can destroy an entire herd.

- Severe Storms: Wind storms and thunderstorms, while relatively short in duration, are quite frequent in Weakley County and can occur at any time of the year.

➢ 3.2.3.3 Assumptions

- Severe weather can transpire at any time.
- Strong winds, heavy rain, hail, and lightning often will accompany severe weather.
- Severe weather can uproot trees, blow down utility poles, and blow down buildings.
- Lighting can strike causing fires, electrocution, and damage equipment.
- Severe weather can last for several hours.
- Severe weather can result in fatalities.

➢ 3.2.3.4 Concept of Operations

Initial Response

- The NWS typically warns of impeding severe storms. With this in mind, the UTM Agricultural System Emergency Response Coordinator or designated personnel in their absences shall be forewarned of predicted severe weather. Upon receiving the daily forecast of severe weather, Agricultural System personnel shall plan the day's activities accordingly.

- If outdoor classroom activities are planned, students shall be briefed on where to go in case of severe weather. If community activities are planned, participants shall have access to shelter locations and evacuation routes.
- If a severe thunderstorm watch or warning is issued, personnel in charge of activities shall begin moving personnel to safe locations and suspend activities that present a large amount of risk.
- If lightning strikes are present, activities shall be suspended for 30 minutes past the last lightning strike.
- During a severe weather event, the UTM Agricultural System Emergency Response Coordinator and other UTM personnel shall remain in contact with one another to monitor the situation.
- The UTM Agricultural System Emergency Response Coordinator shall make contact with emergency first responders and the UTM Emergency Management Coordinator if the situation dictates.
- All personnel and students on UTM Agricultural System property shall seek shelter during the duration of the storm.
- All personnel will notify the UTM Agricultural System Emergency Response Coordinator of people seeking shelter in their designated building.
- The UTM Agricultural System Emergency Response Coordinator or their designated personnel shall gain accountability of all known personnel, students, and visitors on the Agricultural System.
- Any injury sustained requires notification to the UTM Agricultural System Emergency Response Coordinator. If an injury requires advanced medical treatment, personnel will follow UTM's Emergency Response Plan for guidance.
- A spot check should be conducted at each building to provide a rapid damage assessment, and plan future actions.
- Personnel conducting the rapid damage assessment will check for downed power lines, damaged equipment, damaged facilities, injured animals, or damage to crops.
    - If there are downed power lines all personnel will leave the area immediately and the electric company will be contacted.
    - If injured animals are found, the veterinarian should be notified.
- After severe weather has passed, and watches and warnings have expired, activities can proceed as normal.
- Account for inventory.
    - Account for all livestock, fuels, chemicals, machinery, and equipment; use the inventory list previously prepared.
    - Note any animal losses.
    - Check machinery and equipment for damage.
    - Take photographs of all damage for insurance or emergency assistance purposes.
    - Report any hazardous materials (e.g., fuels, agricultural chemicals) spills or leaks to emergency response personnel.

Sustainment

- If further action is needed, the UTM Agricultural System Emergency Response Coordinator or designated personnel will contact appropriate personnel to aid in returning the UTM Agricultural System to normal operations.
- The UTM Agricultural System Emergency Response Coordinator or designated personnel will contact the local Extension Office or Tennessee Department of Agriculture for any matter regarding livestock or crop issues which cannot be resolved.
- For disaster assistance, UTM Agricultural System Emergency Response Coordinator should coordinate with UTM Emergency Management Coordinator and the Weakley County Emergency Management Agency.
- Wear sturdy shoes or boots, long sleeves, and gloves to protect your body from injury.
- Stay away from downed power lines and report them.
- Be aware of hazards that may cause injury to you or others cleaning up (e.g., chain saws, electrical or chemical hazards).
- Use caution when clearing broken tree branches; downed or damaged power lines can send electrical current through them.
- Use caution with gas powered equipment – dangerous carbon monoxide can be generated; use in well ventilated areas.
- For debris removal, the UTM Agricultural System Emergency Response Coordinator should contact the UTM Emergency Management Coordinator or the Weakley County Emergency Management Director for guidance on disposal and reimbursement.

Checklists are provided in Appendix B – Checklists of this Plan. Refer to the Severe Weather Checklist for detailed specific actions to be taken during the mitigation, preparedness, response, and recovery phases of a severe weather incident. The checklist can be used as a guide, and should be modified to best reflect actions that will be taken by the Agricultural System.

3.2.4 Flooding

➢ 3.2.4.1 Purpose

The purpose of the Flooding response guidance is to provide an effective and systematic means for the UTM Agricultural System to assess and respond to flooding related hazards such as high water, river erosion, dam failure, and debris. Flooding is one of the most common and most costly disasters. Preparing for flood situations can minimize injury or death, and speed the recovery process.

➢ 3.2.4.2 Situation

Floods are one of the leading causes of death from natural disasters in the United States. On average, more than 300,000 people are driven from their homes by floods, 200 flood-related fatalities occur, and $6 billion in total flood damages are sustained each year. Flood situations are variable. The impact can be local, affecting a neighborhood or community, or very large, affecting entire river basins and multiple states. Some floods develop slowly – allowing time to prepare and evacuate. Others (e.g., flash floods) can develop quickly, even within a few minutes and without any visible signs of rain.

- Flooding/Flash Flooding: Most of the precipitation in the state occurs between December and late March. Weakley County has never been declared a disaster due to flooding, but has

had one death attributed. There have been less than 25 structures that have received damage due to flooding in Weakley County.

- Dam Failure: Tennessee has more than 1,200 dams. Significant dam failures occur on an average of less than once every 40 years.

➢ 3.2.4.3 Assumptions

- Flooding can happen during any month of the year.
- Flooding can occur very rapidly depending on a number of variables.
- Flooding, dam failure, or river erosion could hinder transportation in/out of the UTM Agricultural System area.
- Evacuations may be necessary due to risk of flooding.
- Some areas are more prone to flooding. The UTM Agricultural System personnel should have floodplain maps on hand to verify where the most at risk areas are at.
- Response to floods is a very dynamic response which will incorporate many response agencies.
- UTM Agricultural System personnel should not expect to receive aid initially from local and state responses.
- UTM Agricultural System has equipment that could be used during response actions.

➢ 3.2.4.4 Concept of Operations

Initial Response

- UTM Agricultural System personnel shall monitor the NWS and local news stations for potential flooding in the area. When a flood warning is issued, Agricultural System personnel shall begin taking action to secure personnel, students, and visitors; equipment; and animals that may be endangered due to the flooding.
- The UTM Agricultural System Emergency Response Coordinator shall monitor local news and emergency management for evacuation orders.
    - If an evacuation order is given, personnel, students, and visitors on the Agricultural System shall evacuate immediately using pre-designated evacuation routes.
- During response to flooding, the UTM Agricultural System Emergency Response Coordinator shall maintain accountability of all UTM Agricultural System personnel, students, and visitors. These individuals, if not active in the flood response, shall move to a safe location.
- The UTM Agricultural System Emergency Response Coordinator shall make contact with emergency first responders and the UTM Emergency Management Coordinator if the situation dictates.
- Animals kept outside, in enclosed areas, should be allowed into open pasture to avoid rising flood waters.
- If animals must be evacuated from the Agricultural System, UTM Agricultural System personnel should utilize all assets available to them to accomplish this mission.
    - UTM Agricultural System personnel can utilize cattle/equine trailers on site, from neighboring farms, and other agriculture entities in the community.
    - If this is not feasible then animals can be herded utilizing large numbers of volunteers.
- All UTM Agricultural System equipment should be moved to highest ground possible in order to avoid flooding.

Sustainment

- During prolonged flooding, animals' food sources may not be readily available. If this occurs outside food sources must be shipped in.
- Flood waters may not be safe for animals to drink due to hazardous materials and other substances in the water. If this occurs, water should be shipped in for animal consumption.
- During prolonged flood response, the UTM Agricultural System Emergency Response Coordinator or his/her designee should maintain an accurate inventory of all animals and equipment on site.
- Animals should be monitored daily for signs of illness or stress. Flooding can cause large amounts of debris to move which can injure animals.
- For debris removal, the UTM Agricultural System Emergency Response Coordinator should contact the UTM Emergency Management Coordinator, or the Weakley County Emergency Management Director for guidance on disposal and reimbursement.

Checklists are provided in Appendix B – Checklists of this Plan. Refer to the Flooding Checklist for detailed specific actions to be taken during the mitigation, preparedness, response, and recovery phases of a flooding incident. The checklist can be used as a guide, and should be modified to best reflect actions that will be taken by the Agricultural System.

3.2.5 Tornadoes

➢ 3.2.5.1 Purpose

The purpose of the Tornadoes response guidance is to provide an effective and systematic means for the UTM Agricultural System to assess and respond to tornado conditions.

➢ 3.2.5.2 Situation

Tornadoes are defined as a violently rotating column of air extending from a thunderstorm to the ground, often formed when warm and cold air masses clash. They are capable of tremendous destruction, creating damage paths in excess of one mile wide and 50 miles long. Tornadoes speed can vary from nearly stationary to up to 70 mph; however, the wind speed from these formations can exceed 250 mph. Tornadoes are classified using the Enhanced Fujita Scale. Most tornadoes (~88%) are considered weak (F0 or F1) and about 95% of all U.S. tornadoes are below F3 intensity.

In the United States, on average, 1,000 tornadoes are reported nationwide each year, resulting in 70 deaths and over 1,500 injuries. They occur most frequently east of the Rocky Mountains during the spring and summer months. Tornado Alley is a nickname given to an area in the southern plains of the central U.S. that consistently experiences a high frequency of tornadoes each year. Tornadoes can cause rapid destruction of homes and property, as well as injury and death to humans and animals.

Tennessee historical data shows an average of 11 tornadoes, five deaths, and about a dozen injuries annually. Mid-March through the first of June are the peak months for tornado activity, however tornadoes can and have occurred every month of the year.

➢ 3.2.5.3 Assumptions

- Tornadoes are unpredictable and can cause major damage and destruction in seconds.
- The extremely high winds, flying debris, as well as the wreckage left behind, can cause personal injury or possibly death.
- Nothing can be done to prevent tornadoes.
- Tornadoes often cause injuries and fatalities.
- Tornadoes can happen any time of year.

➢ 3.2.5.4 Concept of Operations

Initial Response

- The NWS issues tornado watches and warnings. UTM Agricultural System personnel shall monitor the weather for these warnings. Upon hearing the alarms, all personnel on site shall proceed to the nearest emergency shelter on the Agricultural System.
- The UTM Agricultural System Emergency Response Coordinator shall gain accountability of all personnel on site. This will ensure that all personnel, students, and visitors are safe during the duration of the storm.
- All UTM Agricultural System personnel should maintain communication during the storm.
- The first priority in the response effort is saving life, limb, and eyesight of injured personnel, students, and visitors.
- The UTM Agricultural System Emergency Response Coordinator shall make contact with emergency first responders and the UTM Emergency Management Coordinator if the situation dictates.
- Any injury sustained requires notification to the UTM Agricultural System Emergency Response Coordinator.
- If an injury requires advanced medical treatment, personnel will follow the UTM Emergency Response Plan for guidance.
- A spot check will be conducted at each building to provide a rapid damage assessment, and plan future actions.
- Personnel conducting the rapid damage assessment shall check for downed power lines, damaged equipment, damaged facilities, injured animals, or damage to crops.
    - If there are downed power lines, all personnel will leave the area immediately and the electric company will be contacted.
    - If injured animals are found, the veterinarian should be notified.
- After severe weather has passed and watches and warnings have expired activities can proceed as normal.
- Account for inventory.
    - Account for all animals, fuels, chemicals, machinery and equipment; use the inventory list previously prepared.
    - Note any animal losses.
    - Check machinery and equipment for damage.
    - Take photographs of all damage for insurance or emergency assistance purposes.
- Report any hazardous materials (e.g., fuels, agricultural chemicals) spills or leaks to emergency response personnel.

- When needed to protect lives and property, the appropriate law enforcement agency will order/conduct evacuations, in coordination with the fire service.
- Options available to the on-scene Incident Commander include in-place sheltering of citizens, evacuation of affected areas, implementing mutual aid resource augmentation, and implementation of other functions as may be necessary. Decisions made by the on-scene Incident Commander will be enforced by the supporting law enforcement agency. The supporting law enforcement agency will provide traffic control, area security, communications support and conduct evacuations. The Local Health Department will advise the on-scene Incident Commander on public health, environmental impacts, and air/water quality issues.
- If the situation dictates additional support for the incident, the UTM EOC can be activated.
- Hospitals in the area have the capability to treat any injured persons.

Sustainment

- The UTM Agricultural System will work to set up rest areas for responders while they are on scene.
- If animals have become severely injured, they can be euthanized by a licensed veterinarian or trained personnel. If animals must be euthanized it is important to document all information concerning the event. If an animal is not owned by the UTM Agricultural System, attempts to notify the owner of the animal must be made immediately.
- Animals must be monitored for an extended period of time following the incident. Animals will most likely display abnormal behavior following the event due to the stress associated with the event.
- If further action is needed the UTM Agricultural System Emergency Response Coordinator or designated personnel shall begin contacting appropriate personnel to aid in returning the UTM Agricultural System to normal operations.
- The UTM Agricultural System Emergency Response Coordinator or designated personnel will contact the local Extension Office or Tennessee Department of Agriculture for any matter regarding livestock or crop issues which cannot be resolved.
- For disaster assistance, UTM Agricultural System Emergency Response Coordinator should coordinate with UTM Emergency Management Coordinator and the Weakley County Emergency Management Agency.
- For debris removal, the UTM Agricultural System Emergency Response Coordinator should contact the UTM Emergency Management Coordinator or the Weakley County Emergency Management Director for guidance on disposal and reimbursement.
    - For debris cleanup and recovery:
- Wear sturdy shoes or boots, long sleeves, and gloves to protect your body from injury.
- Stay away from downed power lines and report them.
- Be aware of hazards that may cause injury to you or others cleaning up (e.g., chain saws, electrical or chemical hazards, etc.).
- Use caution when clearing broken tree branches; downed or damaged power lines can send electrical current through them.
- Use caution with gas powered equipment – dangerous carbon monoxide can be generated; use in well ventilated areas.

Checklists are provided in Appendix B – Checklists of this Plan. Refer to the Tornadoes Checklist for detailed specific actions to be taken during the mitigation, preparedness, response, and recovery phases of a tornado incident. The checklist can be used as a guide, and should be modified to best reflect actions that will be taken by the Agricultural System.

3.2.6 Earthquakes

➢ 3.2.6.1 Purpose

The purpose of the Earthquake response guidance is to provide an effective and systematic means for the UTM Agricultural System to assess and respond to the conditions that follow an earthquake.

➢ 3.2.6.2 Situation

An earthquake is a shaking or trembling of the earth's crust, caused by the breaking and shifting of rock beneath the surface or underground volcanic forces. While scientists are able to measure the amount of energy that is building beneath the earth's surface, they are not able to predict exactly when an earthquake will occur. Therefore, earthquakes are unpredictable and can strike without warning. They can range in intensity from slight tremors to great shocks and can last from a few seconds to as long as five minutes. Earthquakes can either occur by themselves or in a series over a period of several days, or even months. However, they are almost always accompanied by aftershocks, which can be equally as damaging as the quakes that they follow.

Earthquakes can be experienced in any part of Tennessee with the majority of Tennessee's population at risk from earthquakes. The state of Tennessee is vulnerable to a significant threat of damage from earthquakes from both identified and unidentified faults. This threat includes deaths and injuries to residents, as well as widespread property damage.

Geologic faults in several regions of the state increase the vulnerability to seismic disturbances. The highest seismic risk zone – the New Madrid Fault – extends through parts of five states, including Tennessee. Due to the geologic make-up of the Weakley County area seismic activity presents a large concern. The strongest earthquakes on the North American continent occurred in this area over a three month period in 1811-1812.

➢ 3.2.6.3 Assumptions

- Weakley County is vulnerable to a significant threat of damage from earthquakes in the New Madrid Fault Region that could affect the entire state.
- Earthquakes may occur in areas where faults have not yet been identified, as with the 1980 Sharpsburg event, and could result in damage to property and injuries to people. Typical damage could be buildings destroyed, infrastructure disrupted, and landslides on steep slopes.
- A major earthquake would create extraordinary requirements for Emergency Medical Services (EMS).
- Injuries serious enough to require hospitalization are estimated to be about four times greater than fatalities.
- Business and industry may not be prepared for adequate response to an earthquake. Businesses that rely on computer-based systems are particularly vulnerable.

- In the event rubble and debris resulting from an earthquake prevent access to the affected area for a prolonged time, helicopters may be necessary to bring rescue teams in and remove casualties from the area.
- Food supply lines could break down.
- The first few hours following an earthquake are critical in saving the lives of people trapped in collapsed buildings. Therefore, the use of local resources during the initial response period will be essential until state and federal support is available.
- It may be several hours before personnel and equipment can be mobilized and initial teams deployed to affected areas. Therefore, state and local resources will be relied upon heavily in the period immediately following the earthquake.
- The earthquakes and aftershocks may trigger one or more secondary events such as landslides, release of hazardous materials, dam failure or flooding, and transportation disturbances.

➢ 3.2.6.4 Concept of Operations

Initial Response

- Earthquakes are no-notice events, however upon initial shaking all UTM Agricultural System personnel, students, and visitors should immediately begin the Drop/Cover/Hold Drill. This drill will help to protect them from falling debris.
- The UTM Agricultural System Emergency Response Coordinator shall immediately, after the shaking stops, gain accountability of all personnel, students and visitors. Personnel trained in first aid should begin treating any injured person. These individuals should follow their scope of practice and not perform interventions in which they are not trained.
- The UTM Agricultural System Emergency Response Coordinator shall make contact with emergency first responders and the UTM Emergency Management Coordinator if the situation dictates.
- When an earthquake occurs, local authorities within damaged areas will use available resources to protect life and property, and reduce to the extent possible, the suffering and hardships on individuals. If local resources prove to be inadequate, or are exhausted, assistance will be requested from other jurisdictions through mutual aid procedures.
- The UTM Agricultural System owns resources that will be valuable in the response efforts. The UTM Agricultural System Emergency Response Coordinator should consider using this equipment to aid in the response effort.
- It can be expected that numerous animals will be injured during the earthquake from falling debris. UTM Agricultural System personnel should be prepared to euthanize these animals if help is not readily available.
- In order to reach many of these trapped or injured animals, large animal rescue teams may be required.

Sustainment

- After all life saving measures have been accomplished, responders should turn to stabilization activities.
- Animals on site should be monitored by trained personnel for signs of distress following the event.
- Feed and water sources should be identified and provided to animals.

- For debris removal, the UTM Agricultural System Emergency Response Coordinator should contact the UTM Emergency Management Coordinator or the Weakley County Emergency Management Director for guidance on disposal and reimbursement.
- Animal disposal procedures should be followed based upon guidance provided by local and state officials.

Checklists are provided in Appendix B – Checklists of this Plan. Refer to the Earthquakes Checklist for detailed specific actions to be taken during the mitigation, preparedness, response, and recovery phases of an earthquake incident. The checklist can be used as a guide, and should be modified to best reflect actions that will be taken by the Agricultural System.

3.2.7 Hazardous Materials

➢ 3.2.7.1 Purpose

The purpose of the Hazardous Materials response guidance is to provide an effective and systematic means for the UTM Agricultural System to assess and respond to a hazardous materials spill.

➢ 3.2.7.2 Situation

Hazardous materials (chemical, radiological, biological, and explosive) are transported and used throughout Weakley County and the state of Tennessee. Fuel, fertilizers, herbicides, and insecticides are transported and within the Agricultural System. The presence of hazardous materials on UTM Agricultural System property presents the risk of personnel, students, and visitors coming in contact with these substances. There is a potential for a chemical spill to occur. All hazardous materials planning will be completed in conjunction with the requirements of Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) of 1980.

Hazardous Material: Any substance harmful or injurious to human and animal life, the environment, and/or public or private property.

- **Chemical:** Toxic, corrosive, or injurious substance because of inherent chemical properties and including, but not limited to, such items as petroleum products, paints, plastics, acids, gases, caustics, industrial chemicals, poisons, solvents, pesticides, and mineral fibers.
- **Radiological:** Any radioactive substance emitting ionizing radiation at a level that could produce a health hazard. Radiopharmaceuticals, industrial radiographic equipment, and uranium products involved in transportation accidents and nuclear weaponry are a few sources of radiological hazardous materials.
- **Biological:** Micro-organisms or associated products which may cause disease in humans, animals, or economic crops, and includes pathogenic wastes from medical institutions, slaughterhouses, poultry processing plants, etc.
- **Explosive:** Material capable of releasing energy with blast effect immediately upon activation; the released energy usually damages or destroys objects in close proximity to the blast; may produce shrapnel or other projectiles caused by explosives.
- **Etiological:** Infectious materials. Substances that contain disease producing micro-organisms, including bacterial viruses and biological preparations of pathogenic organisms affecting humans, animal life, and plants.

➢ 3.2.7.3 Assumptions

- State and federal agencies will respond with technical expertise and resources upon request by the UTM Agricultural System Emergency Response Coordinator or his/her designee.
- Emergency services personnel will be trained in hazardous materials control and they will carry emergency response guidebooks and instructions to help control possible incidents in their vehicles.
- The UTM Agricultural System will provide Material Safety Data Sheets (MSDS) to the appropriate fire department. These MSDS sheets will also be posted in each building.
- Fire services has only limited capability for initial spill/release containment.
- Fire services does not have the capability or responsibility for cleanup of any spills/releases.
- The Weakley County Emergency Management Agency, in addition to the Weakley County Fire Chief's Association, have a Hazardous Material Team with enhanced training and equipment for response to a Chemical, Biological, Radiological, Nuclear, Explosive (CBRNE) event with the capability to perform on-scene decontamination.
- Hospitals in the Weakley County area have the capability to perform decontamination for both ambulatory and non-ambulatory victims.

➢ 3.2.7.4 Concept of Operations

Initial Response

- Notification of hazardous materials spills/releases will be made through the 911 systems from the general public or the UTM Agricultural System Emergency Response Coordinator. The UTM Agricultural System Emergency Response Coordinator is required to notify the UTM Emergency Management Coordinator upon learning of the spill. When reporting, the following information should be provided:
  - Location of the incident
  - Type of incident (spill, leak, fire, explosion, etc.).
  - General description of the type of hazardous material (caustic, poison, flammable liquid or gas, biological agent, etc.).
  - Best direction of approach by emergency response units, taking into account wind direction, blocked streets, and access.
  - Estimated number of ambulances.
- Fire service (normally the first local government responder) will secure the scene, coordinate with the UTM Agricultural System Emergency Response Coordinator to obtain an updated facility emergency plan, available chemical information, and make an assessment of the situation. Emergency response information from computer files can also be made available to the first responders, including chemical characteristics, MSDSs, and site plans showing locations of chemicals. An attempt will be made to identify the hazard, stabilize the situation, and mitigate the danger to life safety and property.
- Depending on the chemical present, weather conditions, amount of spill, etc., the on-scene Incident Commander will establish a hot zone (contamination area), warm zone corridor (decontamination corridor), and a cold zone. The Incident Command Post will be located outside the warm zone.
- When needed to protect lives and property, the appropriate law enforcement agency will order/conduct evacuations, in coordination with the fire service.

- Options available to the on-scene Incident Commander include, in-place sheltering of citizens, evacuation of affected areas, implementing mutual aid resource augmentation, and implementation of other functions as may be necessary. Decisions made by the on-scene Incident Commander will be enforced by the supporting law enforcement agency. The supporting law enforcement agency will provide traffic control, area security, communications support and conduct evacuations. The Weakley County Health Department will advise the on-scene Incident Commander on public health, environmental impacts, and air/water quality issues.
- If the situation dictates additional support for the incident, the UTM EOC can be activated.
- Hospitals in the Weakley County area have the capability to perform decontamination for both ambulatory and non-ambulatory victims.

Sustainment

- Once the immediate threat to public safety is abated, the scene will be turned over to the responsible party (spiller) who will have primary responsibility for cleanup, disposal, restoration, and damages. The Incident Commander and Safety Officer will maintain a close oversight role. Fire service response units may, if necessary, provide on-scene backup medical, fire, and rescue capability.
- The UTM Agricultural System will work to set up rest areas for responders while they are on scene.
- Any response gear that is contaminated will be left on the scene for disposal by the responsible party. This will include materials used for decontamination, containment, etc.
- Any livestock or animals on site of the spill will need to be decontaminated. This will be completed in coordination with the Tennessee Department of Agriculture. The Tennessee Department of Agriculture has trained personnel to decontaminate large animals.
- If animals have become severely injured, they will be euthanized by a licensed veterinarian or trained personnel. If animals must be euthanized it is important to document all information concerning the event. If an animal is not owned by the UTM Agricultural System, attempts to notify the owner of the animal must be made immediately.
- Animals must be monitored for an extended period of time following the incident. Animals will most likely display abnormal behavior following the event due to the stress associated with the event.
- All buildings and equipment located in or around contaminated buildings will need to be decontaminated. It is possible that all resources will be expended during the initial response. External private agencies can be turned to, in order to complete this requirement.
- The UTM Agricultural System will work with all agencies in the investigative process to determine cause, and extent of damage following the incident. The UTM Agricultural System will appoint a liaison to work with these agencies to answer their questions to the best extent possible.
- Personnel, students, and visitors will not be able to access the site until the Tennessee Department of Environment and Conservation (TDEC) and/or the Environmental Protection Agency (EPA) has determined that the site is clear and safe for people to resume normal operations.

Checklists are provided in Appendix B – Checklists of this Plan. Refer to the Hazardous Materials Checklist for detailed specific actions to be taken during the mitigation, preparedness, response, and recovery phases of a hazardous materials incident. The checklist can be used as a guide, and should be modified to best reflect actions that will be taken by the Agricultural System.

3.2.8 Disease Outbreaks and Pests

➢ 3.2.8.1 Purpose

The purpose of the Disease Outbreak response guidance is to provide an effective and systematic means for the UTM Agricultural System to assess and respond to an epidemiological outbreak.

➢ 3.2.8.2 Situation

Biological emergencies for rural communities can involve any number of infectious microorganisms. While there are hundreds of bacteria, viruses, fungi, and other pathogens constantly present in our environment, many pose little threat. However, some of these organisms are of special concern, even of emergency priority, based on their ability to rapidly spread or cause severe disease in humans, animals, or plants. Many can lead to large outbreaks or involve new (or emerging) pathogens that may be unfamiliar.

Diseases

Diseases can be spread by any number of ways, including person-to-person, from the environment (air or contaminated surfaces), insects (e.g., mosquitoes and ticks), even animals (directly or food products). Greater than 60% of all human infectious diseases are zoonotic. Zoonosis refers to diseases that can be transmitted between animals and humans (e.g., salmonellosis, rabies, West Nile Virus, etc.). Contagious diseases are those that can be spread quickly and easily. Because of the unconventional threats that face us today, a biological terrorism event is low probability, but a high consequence event that must be planned for. Such attacks could be directed against the animals that are housed on the Agricultural System.

Pests

Pests are organisms that diminish the value of resources in which man is interested, as they interfere with the production and utilization of crops and livestock used for food or fiber. The term pest applies to all noxious insects, mites, nematodes, plant pathogens, weeds, and vertebrates. Pests can also spread many diseases to animals, crops, and humans.

➢ 3.2.8.3 Assumptions

- State and federal agencies will respond with technical expertise and resources upon request by the UTM Agricultural System Emergency Response Coordinator or his/her designee.
- The UTM Agricultural System will provide a list of known biological outbreaks that have occurred in the area to the appropriate emergency response organizations.
- Fire services does not have the capability or responsibility for response or cleanup of any biological incident. Emergency response personnel with biological response training will be needed to respond.
- Weakley County has a hazardous material team with enhanced training and equipment for response to a CBRNE event with the capability to perform on-scene decontamination.

- Emergency services personnel will be trained in hazardous materials control and they will carry emergency response guidebooks and instructions to help control possible incidents in their vehicles.
- Hospitals in the area have the capability to perform decontamination for both ambulatory and non-ambulatory victims.

➢ 3.2.8.4 Concept of Operations

Initial Response:

- Upon initial notification of a suspected disease outbreak the UTM Agricultural System Emergency Response Coordinator will contact the UTM Emergency Management Coordinator, the Tennessee Department of Agriculture, the Tennessee Department of Public Health and the United States Department of Agriculture (USDA).
- The UTM Agricultural System Emergency Response Coordinator shall quarantine any livestock/animal suspected of having contact with a disease until the UTM veterinarian can examine them.
- If the situation dictates, a quarantine area will be established at the Ned R. McWherter Agricultural Pavilion.
- Options available to the on-scene Incident Commander include, in-place sheltering of citizens, evacuation of affected areas, implementing mutual aid resource augmentation, and implementation of other functions as may be necessary. Decisions made by the on-scene Incident Commander will be enforced by the supporting law enforcement agency. The supporting law enforcement agency will provide traffic control, area security, communications support and conduct evacuations. The Weakley County Health Department will advise the on-scene Incident Commander on public health, environmental impacts, and air/water quality issues.
- If the situation dictates additional support for the incident, the UTM EOC can be activated.
- Hospitals in the Weakley County area have the capability to perform decontamination for both ambulatory and non-ambulatory victims.
- A list of all animals transported on and off the property in the past 72 hours should be provided to emergency response and public health officials.

Sustainment

- Once the immediate threat to public safety is abated, the scene will be turned over to the UTM Agricultural System who will have primary responsibility for cleanup, disposal, restoration, and damages. The Incident Commander and Safety Officer will maintain a close oversight role. Fire service response units may, if necessary, provide on-scene backup medical, fire, and rescue capability.
- The UTM Agricultural System will work to set up rest areas for responders while they are on scene.
- Any response gear that is contaminated will be left on the scene for disposal by the responsible party. This will include materials used for decontamination, containment, etc.
- Any livestock or animals on site of the outbreak will need to be decontaminated. This will be completed in coordination with the Tennessee Department of Agriculture. The Tennessee Department of Agriculture has trained personnel to decontaminate large animals.

- If animals have become severely injured, they will be euthanized by a licensed veterinarian or trained personnel. If animals must be euthanized it is important to document all information concerning the event. If an animal is not owned by the UTM Agricultural System, attempts to notify the owner of the livestock must be made immediately. Disposal of animal carcasses will be based on recommendations of Tennessee Department of Agriculture.
- Animals must be monitored for an extended period of time following the incident. Animals will most likely display abnormal behavior following the event due to the stress associated with the event.
- All buildings and equipment located in or around contaminated buildings will need to be decontaminated. It is possible that all resources will be expended during the initial response. External private agencies can be turned to, in order to complete this requirement.
- The UTM Agricultural System will work with all agencies in the investigative process to determine cause, and extent of damage following the incident. The UTM Agricultural System will appoint a liaison to work with these agencies to answer their questions to the best extent possible.
- UTM students, visitors, and community citizens will not be able to access the site until the TDEC and/or the EPA has determined that the site is clear and safe for people to resume normal operations.

Checklists are provided in Appendix B – Checklists of this Plan. Refer to the Disease Outbreaks and Pests Checklist for detailed specific actions to be taken during the mitigation, preparedness, response, and recovery phases of a disease outbreak and pest incident. The checklist can be used as a guide, and should be modified to best reflect actions that will be taken by the Agricultural System.

3.2.9 Fire

➢ 3.2.9.1 Purpose

The purpose of the Fire response guidance is to provide an effective and systematic means for the UTM Agricultural System to assess and respond to a fire on the Agricultural System.

➢ 3.2.9.2 Situation

Each year, more than 4,000 Americans die and more than 25,000 are injured in fires, many of which could be prevented. Direct property loss due to fires is estimated at $8.6 billion annually.

To protect yourself, it is important to understand the basic characteristics of fire. Fire spreads quickly; there is no time to gather valuables or make a phone call. In just two minutes, a fire can become life-threatening. In five minutes, a residence can be engulfed in flames.

Heat and smoke from fire can be more dangerous than the flames. Inhaling the super-hot air can sear your lungs. Fire produces poisonous gases that make you disoriented and drowsy. Instead of being awakened by a fire, you may fall into a deeper sleep. Asphyxiation is the leading cause of fire deaths, exceeding burns by a three-to-one ratio.

The UTM Agricultural System must take special care when dealing with fire prevention. The Agricultural System stores large amounts of flammable materials that can easily start a fire. Once a fire has been started it can quickly engulf entire buildings or fields. With livestock and large

amounts of forage being stored or kept on site this presents a grave risk and liability to the Agricultural System. Fires can be initiated by several other hazards such as drought, lightning, earthquakes, hazardous materials spills, etc. Agricultural Systems/farms storing hay must be careful of combustion.

➢ 3.2.9.3 Assumptions

- Fire personnel will assume the role of incident command upon arriving on scene.
- The UTM Agricultural System will provide MSDSs to the appropriate fire department. These MSDSs will also be posted in each building.
- UTM Agricultural System personnel have only limited capability for containing fires.
- Depending on the severity of the fire and locations involved, multiple alarms may be required.
- Human life will take precedence over animal life.
- If arson is suspected, investigation will be conducted by trained personnel.

➢ 3.2.9.4 Concept of Operations

Initial Response

- Notification of an existing fire or suspected fire will be made through the 911 systems from the general public or the UTM Agricultural System Emergency Response Coordinator. The UTM Agricultural System Emergency Response Coordinator is required to notify the UTM Emergency Management Coordinator upon learning of the fire.
- Fire service (normally the first local government responder) will secure the scene and will coordinate with the UTM Agricultural System Emergency Response Coordinator to obtain information about facilities, chemicals, etc., to make an assessment of the situation. Emergency response information from computer files can be made available to the first responders, including chemical characteristics, MSDSs, and site plans showing locations of chemicals. An attempt will be made to identify any hazard, stabilize the situation, and mitigate the danger to life safety and property.
- Depending on the hazards such as chemicals present, weather conditions, amount of animal food source, etc., the on-scene Incident Commander will establish a hot zone (contamination area), warm zone corridor (decontamination corridor), and a cold zone. The Incident Command Post will be located outside the warm zone.
- When needed to protect lives and property, the appropriate law enforcement agency will order/conduct evacuations, in coordination with the fire service.
- Options available to the on-scene Incident Commander include, in-place sheltering of citizens, evacuation of affected areas, implementing mutual aid resource augmentation, and implementation of other functions as may be necessary. Decisions made by the on-scene Incident Commander will be enforced by the supporting law enforcement agency. The supporting law enforcement agency will provide traffic control, area security, communications support and conduct evacuations. The Weakley County Health Department will advise the on-scene Incident Commander on public health, environmental impacts, and air/water quality issues.
- If the situation dictates additional support for the incident, the UTM EOC can be activated.
- Hospitals in the Weakley County area have the capability to treat any injured persons.

- If animal treatment is necessary, UTM Agricultural System personnel should make every attempt to contact regular veterinarians to treat animals.

Sustainment

- The UTM Agricultural System will work to set up rest areas for responders while they are on scene.
- If animals have become severely injured, they will be euthanized by a licensed veterinarian or trained personnel. If animals must be euthanized it is important to document all information concerning the event. If an animal is not owned by the UTM Agricultural System, attempts to notify the owner of the animal must be made immediately.
- This will be completed in coordination with the Tennessee Department of Agriculture. The Tennessee Department of Agriculture has trained personnel to treat large animals. They also maintain a listing of large animal rescue teams.
- Animals must be monitored for an extended period of time following the incident. Animals will most likely display abnormal behavior following the event due to the stress associated with the event.
- All buildings and equipment located in or around those building will need to be decontaminated. It is possible that all resources will be expended during the initial response. External private agencies can be turned to, in order to complete this requirement.
- The UTM Agricultural System will work with all agencies in the investigative process to determine cause, and extent of damage following the incident. The UTM Agricultural System will appoint a liaison to work with these agencies to answer their questions to the best extent possible.
- UTM students, visitors, and community citizens will not be able to access the site until the Martin Fire Department or the Tennessee State Fire Marshal's Office has determined that the site is clear and safe for people to resume normal operations.
- For debris removal, the UTM Agricultural System Emergency Response Coordinator should contact the UTM Emergency Management Coordinator or the Weakley County Emergency Management Director for guidance on disposal and reimbursement.

Checklists are provided in Appendix B – Checklists of this Plan. Refer to the Fire Checklist for detailed specific actions to be taken during the mitigation, preparedness, response, and recovery phases of a fire incident. The checklist can be used as a guide, and should be modified to best reflect actions that will be taken by the Agricultural System.

3.2.10 Criminal Activity

➢ 3.2.10.1 Purpose

The purpose of the Criminal Activity response guidance is to provide an effective and systematic means for the UTM Agricultural System to assess and respond to criminal activity that could pose as a threat of imminent death or serious bodily injury to the UTM Agricultural System.

➢ 3.2.10.2 Situation

The UTM Agricultural System maintains a large amount of farm equipment, supplies, vaccines, and chemicals that can increase the probability of theft on the Agricultural System. Criminal activity such as burglary, theft, use of alcohol/narcotics, or simple assault is most likely to occur on UTM

Agricultural System property. Though, the UTM Agricultural System is less likely to experience criminal activity that poses a threat of imminent death or serious bodily injury to the UTM Agricultural System community, criminal activity such as a bomb threat, active shooter, violent protests/civil unrest, or bioterrorism could have devastating effects and must be planned for.

➢ 3.2.10.3 Assumptions

- In the event of an incident threatening the UTM Agricultural System community, property, or infrastructure, the UTM Police Department will respond with available resources and also determine additional resource requirements to effectively manage the incident.
- The UTM Police Department will provide communication resources in support of emergency operation needs.
- The Disease Outbreaks and Pests response guidance will be referenced by UTM Agricultural System personnel for specific responsibilities related to bioterrorism targeting crops and/or livestock.

➢ 3.2.10.4 Concept of Operations

Initial Response

- Notification of criminal activity will be reported immediately (as soon as possible depending upon circumstances) to UTM Police Department.
- Crimes that pose imminent death/bodily injury, or a threat there of, will be reported utilizing 911, as well as, crimes in progress. The non-emergency number can be used for crimes not in progress.
- When needed to protect lives the UTM Police Department will order/conduct evacuations.
- In the event of an evacuation, UTM Agricultural System personnel will take role call to account for their students and inform the UTM Agricultural System Emergency Response Coordinator. The UTM Agricultural System Emergency Response Coordinator or delegate will account for all personnel and students.
- In the event of an evacuation, Building Managers are to ensure no one enters the buildings until an "all clear" is given by law enforcement.
- The UTM Director of Public Safety or delegate will establish Incident Command.
- The supporting law enforcement agency will provide traffic control, area security, communications support, and conduct evacuations.
- Hospitals in the Weakley County area have the capability to treat any injured persons.

Sustainment

- The UTM Agricultural System personnel will work with all agencies in the investigative process of a criminal activity.
- The UTM Agricultural System Emergency Response Coordinator or delegate will work with facilities management to determine the extent of facilities damage (if applicable) following the incident.
- The UTM Agricultural System Emergency Response Coordinator or delegate will document Agricultural System loss due to criminal activity.
- The UTM Agricultural System Emergency Response Coordinator will appoint a liaison to work with agencies to answer questions related to the incident to the best extent possible.

- UTM students, visitors, and community citizens will not be able to access a crime scene area until law enforcement has collected evidence, and determined that the site is clear and safe for people to resume normal operations.
- If animals have become severely injured, they will be euthanized by a licensed veterinarian or trained personnel. If animals must be euthanized it is important to document all information concerning the event. If an animal is not owned by the UTM Agricultural System, attempts to notify the owner of the livestock must be made immediately.
- This will be completed in coordination with the Tennessee Department of Agriculture. The Tennessee Department of Agriculture has trained personnel to treat large animals. They also maintain a listing of large animal rescue teams.
- Animals must be monitored for an extended period of time following the incident. Animals will most likely display abnormal behavior following the event due to the stress associated with the event.
- All buildings or equipment contaminated will need to be decontaminated prior to re-use.
- Crops contaminated will be destroyed; they must not be used as feed.

Checklists are provided in Appendix B – Checklists of this Plan. Refer to the Criminal Activity Checklist for detailed specific actions to be taken during the mitigation, preparedness, response, and recovery phases of a criminal activity incident. The checklist can be used as a guide, and should be modified to best reflect actions that will be taken by the Agricultural System.

4.0 Organization and Responsibilities

Emergency Management Coordinator: The UTM Emergency Management Coordinator, or in his absence, his/her alternate is responsible for the basic policies which govern the UTM Main Campus and Agricultural System's emergency organization, and the overall coordination and execution of the UTM Emergency Response Plan.

Agricultural System Emergency Response Coordinator: The UTM Agricultural System Emergency Response Coordinator, or in his absence, his/her designee should be located near the incident site to coordinate with emergency first responders in order to provide the UTM Emergency Management Coordinator with up to date situational awareness as the emergency or disaster plays out. In the event that the Agricultural System Emergency Response Coordinator must be present in the UTM EOC, his/her designee will perform their duties for the Agricultural System.

4.1 Organizational Structure

ICS will be utilized for managing emergencies occurring on the Agricultural System. ICS is a management system designed to enable effective and efficient domestic incident management by integrating a combination of facilities, equipment, personnel, procedures, and communications operating within a common organizational structure. ICS is used for a broad spectrum of emergencies, from small to complex incidents, both natural and manmade. ICS is used by all levels of government—Federal, State, local, and tribal—as well as by many private-sector and nongovernmental organizations. ICS is also applicable across disciplines. It is normally structured to facilitate activities in five major functional areas: command, operations, planning, logistics, and finance and administration as depicted in **Figure 1: Example ICS Organizational Structure**.

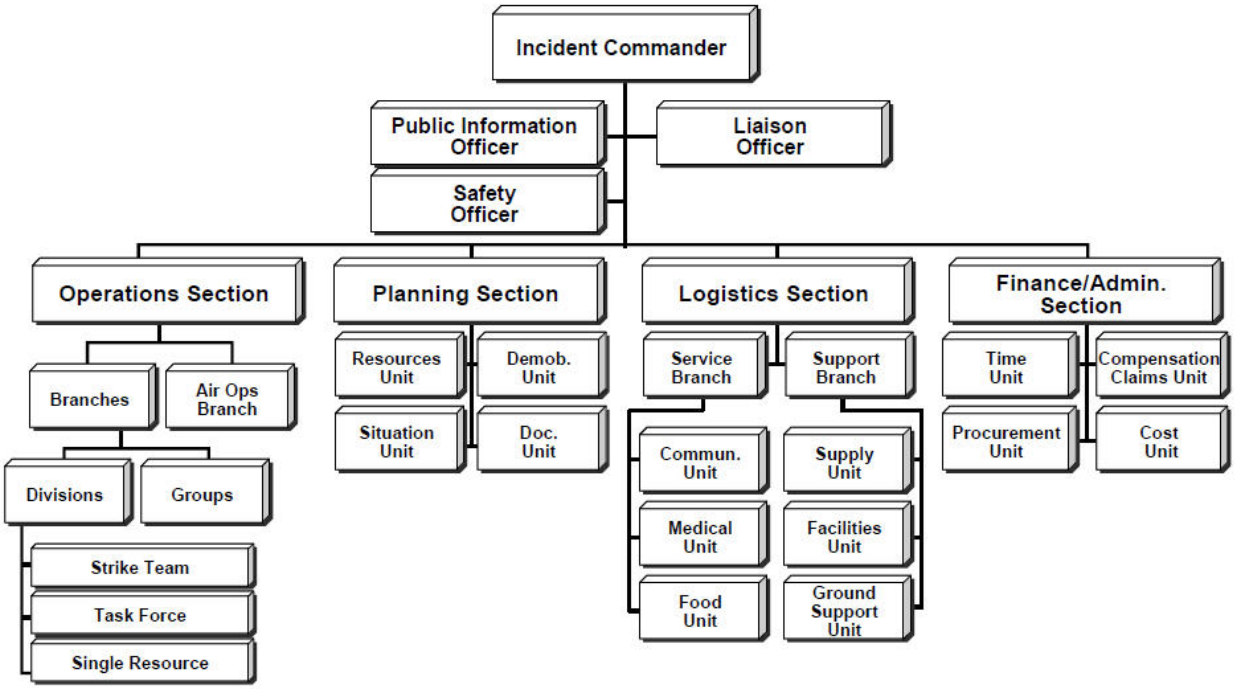


Figure 1: Example ICS Organizational Structure

The ICS organizational structure is flexible. The structure can be expanded from a very small size organization for routine operations to a larger organization capable of handling catastrophic events. For example, a small scale incident affecting the UTM Agricultural System may only require a few key personnel to handle all five major functional areas (each Agricultural System personnel could potentially carry out multiple ICS functions). However, larger incidents, such as one involving UTM's Main Campus and Agricultural System, will require more individuals in the organizational structure to manage the incident.

This Plan is ultimately under the command of the UTM Emergency Management Coordinator and is directed by the UTM Agricultural System Emergency Response Coordinator. The UTM Agricultural System Emergency Response Coordinator is the principal staff member charged with all emergency management activities occurring on UTM Agricultural System property. Changes in the organization structure may be required to satisfy specific situations. Each position alternate will fill vacant positions as they become available.

4.2 Task Assignments

The following are task assignments and/or responsibilities of Plan positions and operations areas:

UTM Emergency Management Coordinator

- Establishes basic policies which govern the University's emergency organization.
- Proclaims a University emergency.
- Acts as the highest level of authority during a crisis.
- Responsible for the overall operation of the UTM Emergency Response Plan.
- When the UTM Emergency Response Plan is implemented, ensures notification of those persons on the roster of the UTM EOC and ensures that all necessary aspects of the disaster preparedness are activated.
- Determines the appropriate location of the UTM EOC.
- When the emergency/crisis is over and the campus is deemed safe, implements the "All Clear" signal. This will be communicated by whatever means available.

Agricultural System Emergency Response Coordinator

- The UTM Agricultural System Emergency Response Coordinator shall be responsible for the overall operation of emergency response to disasters and emergencies that take place on UTM Agricultural System property. Upon activation of the Plan the UTM Agricultural System Emergency Response Coordinator will liaison with local first responders, government agencies, and the UTM Emergency Management Coordinator to ensure an effective timely response to all incidents.
- During a large scale event that impacts the UTM Main Campus and Agricultural System, the UTM Agricultural System Emergency Response Coordinator will work from the UTM EOC as requested, in order to provide the most current situational awareness of events taking place on the Agricultural System. In the UTM Agricultural System Emergency Response Coordinator's absence, his/her designee will fill their role on the Agricultural System.

Agricultural System Personnel

- Agricultural System personnel are responsible for assisting the Agricultural System Emergency Response Coordinator and/or designee with emergency response to disasters and emergencies that take place on UTM Agricultural System property. Responsibilities include tasks involved with mitigating, planning, responding, and recovering from incidents.

Building Managers

- UTM has assigned a leading faculty or staff member to each academic, administrative, and general purpose building on UTM's campus and Agricultural System as a Building Manager. Building Managers are knowledgeable of emergency response activities, and can assist with basic, initial response efforts, for incidents occurring within the facility they are assigned to on the Agricultural System.

Student/Volunteer Involvement

The UTM Agricultural System has approximately 100 – 150 students/volunteers that would be available to assist with emergency preparedness, response, and recovery activities. Student organizations that would be available are as follows:

- Disaster Animal Relief Team
- Vet Science Club
- Student Cattleman's Association
- Future Farmers of America

These organizations are potential sources of volunteers that would be able to share their expertise in their clubs area of interest. Many of these individuals have advanced training in first aid and emergency response that can be utilized. Students and volunteers have the responsibility to:

- Participate in emergency response training and exercises as requested by the UTM Agricultural System Emergency Response Coordinator (a list of trained students and volunteers should be maintained).
- Provide initial first-responder response to events as requested by the UTM Agricultural System Emergency Response Coordinator.
- Assist in additional emergency response activities as requested by the UTM Agricultural System Emergency Response Coordinator.

Private Sector

The UTM Agricultural System Emergency Response Coordinator can request the private sector for emergency assistance.

The private sector may consist of the following:

- Private owners of critical infrastructure (either a facility that could be impacted by a disaster or used as a resource).
- A response organization (e.g., private ambulance services, environmental clean-up services, etc.).
- A regulated or responsible party: owner operators of certain regulated facilities may have responsibility under law to prepare for and prevent incidents from occurring.
- A local emergency organization member.

The private sector has the responsibility to:

- Plan for personal and business disaster preparedness, mitigation, response, and recovery.
- Have knowledge of local emergency response plans and procedures.
- Provide assistance as requested by the UTM Agricultural System Emergency Response Coordinator.

5.0 Administration, Finance, and Logistics

In a crisis or grave emergency, the normal operations of the UTM Agricultural System are not possible or practical, and the emergency structure of this Plan is implemented. The Chancellor of the University has authorized that when an emergency or disaster occurs and the Plan is activated, the organizational structure contained in this Plan shall be used to direct operations of the UTM Agricultural System.

All assets (human resources, facility, and equipment resources) of the University will become the purview of the UTM Emergency Management Coordinator to direct in any way to respond to an emergency.

The UTM Agricultural System stores records at the West Tennessee Diagnostics Lab. The UTM Agriculture System is responsible for establishing its own records protection program. Records deemed essential for continuing Agricultural System functions should be identified and procedures should be established for their protection; this includes backing up electronic files.

Identify policies and procedures for tracking and reporting of any costs due to an emergency. In many cases, normal procurement and financial policies will remain in effect, but in extraordinary events, additional provisions must be followed to increase the speed of which these actions can take place.

Identify required tracking and record-keeping procedures that will be put in place to assure all emergency costs are easily identified.

Upon activation of the Plan the above identified procedures should be implemented to aid in the tracking and record keeping of expended resources. During the late stages of sustainment and recovery process these records will be utilized to determine reimbursement.

6.0 Plan Development & Maintenance

The UTM Agricultural System will perform a review and revision of this Plan to ensure it remains current and the revised Plan shall be adopted formally by UTM and UTM Agricultural System. Drafting an emergency plan is a community effort and relies heavily on the administrators and experts in the community to provide comprehensive guidance on hazard analysis, exercise design, evacuation planning, emergency management, mitigation, recovery, emergency preparedness, and educational awareness.

Examples of Plan participants can include:

- University Chancellor
- Deans, Directors, and Department Heads
- UTM Emergency Management Coordinator
- UTM Director of Public Safety
- UTM Agricultural System Emergency Response Coordinator
- UTM Building Managers
- UTM Police
- Emergency Operations Center Personnel
- University Legal Counsel
- Director of Weakley County Emergency Management
- Tennessee Emergency Management Agency
- City of Martin, Mayor's Office
- City of Martin Police Department
- Martin Fire Department
- Tennessee State Police

The UTM Agricultural System Emergency Response Coordinator will update the Plan annually. The UTM Agricultural System Emergency Response Coordinator will coordinate with emergency response organizations/officials and the UTM Emergency Management Coordinator to assure the development and maintenance of an appropriate emergency response capability. It is the responsibility of the UTM Agricultural System Emergency Response Coordinator or UTM Emergency Management Coordinator to assure that the Plan is tested and exercised on a scheduled basis.

- The UTM Agricultural System Emergency Response Coordinator will maintain the exercise schedule and assure that the appropriate resources are available to complete these activities. After each drill, exercise, or actual event, a hot wash will take place. Any findings from these postevent reviews will be analyzed and incorporated as deemed necessary into a revised Plan.

7.0 Authorities and References

1. Extension Disaster Education Network.
2. Homeland Security Exercise and Evaluation Program.
3. FEMA/EMI ICS Review Material.
4. IS-111 Livestock in Disasters.
5. Local and Tribal NIMS Integration: Integrating the National Incident Management System into Local and Tribal EOPs and Standard Operating Procedures, V. 1, Department of Homeland Security.
6. Mitigation Plan for Weakley County, Tennessee and the Incorporated Cities of Dresden, Gleason, Greenfield, Martin and Sharon, September 2008.
7. National Incident Management System.
8. National Response Framework.
9. The Center for Food Security and Public Health; All Hazards Preparedness for Rural Communities.
10. The Homeland Security Act.
11. The Robert T. Stafford Disaster Relief and Emergency Assistance Act, Public Law 93-288, as amended.
12. The University of Tennessee Martin, Emergency Response Plan, Revised June 2011, Media Version.
13. Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) of 1980.
14. USDA, Animal and Plant Health Inspection Service.
15. USDA, Pest Management in U.S. Agriculture.
16. UTM Police Department Annual Campus Security Report and Fire Safety Report 2010.
17. Weakley County Emergency Operations Plan, Revised 2011.
18. West Tennessee Seismic Safety Commission Strategic Planning Goals, 2007.

Appendix A – Communications

Agricultural System Emergency Contact List

CONTACT	PHONE NUMBERS
Police • University Safety and Security • Tennessee Highway Patrol • Weakley County Sheriff's Department	**911** - emergencies • 731.881.7777 • 800.736.3993 • 731.364.5454
City Fire Dept	**911** - emergencies
Emergency Medical Service - Ambulance	**911** - emergencies
Agriculture, Geosciences, and Natural Resources	731.881.7262
Department Chair: Dr. Wes Totten	256.777.8440
College of Agriculture and Applied Sciences Dean:	731.881.7251
Dr. Todd Winters	618.967.6817
Emergency Management Coordinator: Doug Sliger	731.881.7726
Director Of Public Safety: Charlie Jahr	731.881.7583
Emergency Management And Environmental Health	731.364.2210
and Safety: Weakley County Health Department	
Farm Manager: Jamie Crockett	731.819.1165
Zach Forsythe	731.571.2789
Equestrian: Kim Leiter-Janes	651.503.7228
Caitlin Marshall	209.896.7192
Small ruminants, swine, and companion animals:	
Tara Woods	731.225.9676
Weakley County Emergency Management	731.364.5454
Student Health Services	731.881.7750
Electric Company	731.587.9521
Gas Company	731.587.3126
Water Company	731.587.3126
FEMA Disaster	800.621.3362
Poison Control Center	800.222.1222
Agriculture System Veterinarian: Dr. Jason Roberts	731.881.1011
	731.514.1475

Area Veterinarian in Charge: Dr. Tatum Odland	901.422.4994
State Veterinarian: Dr. Samantha Beaty	615.837.5120
State Plant Health Director: Anni Self	615.837.5313
Tennessee Department of Agriculture	615.837.5103
Agriculture Extension Agent: Bronson Bass	731.364.3164
Livestock shipper: UTM Farm	731.514.0451
Fuel Supplier: Motor Pool	731.881.7655
Grain Hauler: Southern Milling	731.587.2219
American Red Cross Services	731.427.5543
Public Information Officer	731.881.7777
Emergency Maintenance	731.881.7640
Facilities Maintenance	731.881.7640
Student Escort Services	731.881.7777
Search and Rescue - Human	**911** - emergencies
Search and Rescue – Animals: UTM Regional Disaster Animal Response Team (DART)	731.881.1011

Emergency and Weather Related Communications

General

In the event of a serious incident which poses an immediate threat to the UTM community, the University has various systems in place for communicating information quickly to individuals. Some or all of these methods of communication may be activated and includes emails, text messages, outdoor warning speakers/sirens, indoor phone speakers, indoor phone displays, and emergency alerts (posted on UTM's website).

- UTM offers emergency notifications via mobile alerts to the campus community. Students, faculty, and staff are able to opt-in to receive emergency alerts as text messages sent to their Short Message Service (SMS)-capable cell phones. Messages will only be sent to users in the event of an emergency situation after they opt-in and verify their mobile number.

Local Weather Stations

In addition to National Oceanic and Atmospheric Administration's (NOAA) NWS, local radio and television stations to monitor weather-related reports include:

- WUTM (90.3FM)
- WCMT (100.5FM)
- WLJT (Channel 11)

Amateur Radio

The UTM Amateur Radio Club can use the W4UTM Repeater (146.625-600) during times of emergencies to communicate with agencies and institutions.

Emergency Call Boxes and Community Announcement Horns

UTM has equipped the campus with emergency call boxes. Emergency call boxes are directly linked to the UTM Police Department's 911 Dispatch Center. When activated, the dispatcher will immediately know the call box location and ask the caller questions regarding the situation. A call box is located at Henderson Headquarters. A community announcement horn/tornado siren is located on the feed lot.

Agricultural System Emergency Contact List for Appendix B - Checklists

CONTACT PERSON REFERENCE ID	CONTACT PERSON	PHONE NUMBERS
WT	Dr. Wes Totten	731.881.7262 256.777.8440
JR	Dr. Jason Roberts	731.881.1011 731.514.1475
JC	Jamie Crockett	731.819.1165
ZF	Zach Forsythe	731.571.2789
TW	Tara Woods	731.881.1071 731.225.9676
KLJ	Kim Leiter-Janes	651.503.7228
CM	Caitlin Marshall	209.896.7192

Appendix B – Checklists

Drought and Extreme Heat

Mitigation Actions

Action	Complete	Responsible Person
Avoid excessive exercise in equine.		KLJ, CM
Avoid transporting animals.		KLJ, CM, JC, ZF
Establish cool housing or shaded areas. Adequate shade is important and can be provided by trees, buildings or sunshades.		KLJ, CM, JC, ZF, TW
▪ Ensure building roofs are high enough to allow for air movement.		
Prepare access to water.		KLJ, CM, JC, ZF, TW
▪ Animals will require more water during extreme heat conditions – prepare up to twice as much as normal.		
▪ Ensure animals always have access to cool, clean water.		
▪ Shade above ground water lines or tanks to keep water cool.		
▪ Additional watering tanks may be necessary; if possible provide these in advance so animals can become used to multiple water sources.		
Provide ventilation.		KLJ, CM, JC, ZM, TW
▪ Install fans, open windows, front of stalls or roof ventilation to increase air movement in buildings.		
▪ Cut tall vegetation 150 feet back from perimeter of holding pens.		
▪ Consider building earth mounds to minimize bunching of animals.		
▪ Increase floor space per animal or reduce the number of animals in an area.		
Prepare for power outages. High summertime temperatures increase energy demand for cooling; overloaded energy systems will result in power outages.		KLJ, CM, JC, ZF, TW
Install irrigation systems for row crops.		
Review crop insurance plans.		
Test soil types for appropriate locations of crops.		

Preparedness Actions

Action	Complete	Responsible Person
Monitor weather forecasts and local regulations (e.g., burn bans, water advisories) and communicate information to UTM Agricultural System personnel.		
Review available data sources and existing drought reports, and analyze potential threats.		
Ensure water and shade is available for personnel, students, and visitors who will be exposed to extreme heat for long periods of time.		KLJ, CM, JC, ZF, TW
Monitor animals frequently for heat-related illness and sunburn. ▪ Signs of heat stress can be subtle initially, so watch animals closely. ▪ Signs of heat stress include: increased respiration rate or panting, excessive salivation, elevation of head to make it easier to breathe, and open mouth breathing. ▪ Animals with darker fur (e.g., black haired beef cattle) may be more susceptible. ▪ Animals can get sunburned just like people, especially their ears and noses. ▪ Animals with pink skin are at greatest risk for sunburn		KLJ, CM, JC, ZF, TW
If animals are showing signs of heat stress:		KLJ, CM, JC, ZF, TW
▪ Contact the Agricultural System's local veterinarian immediately.		
▪ Move animals to the shade immediately.		
▪ Offer plenty of cool, clean water.		
▪ Spray animals with cool water, especially on the legs and feet, or stand them in water.		
▪ Increase air movement around them.		

Response Actions

Action	Complete	Responsible Person
Avoid or limit handling of animals. Processing or working animals can elevate body temperature.		KLJ, CM, JC, ZF, TW
▪ Avoid handling during mid-day. If animals must be handled, work them early in the morning (prior to 8 AM – not after 10 AM) and if possible in a shaded facility or area.		
Monitor Agricultural System personnel, students, and visitors for heat related health conditions:		KLJ, CM, JC, ZF, TW
▪ Dehydration is a condition that occurs when the loss of body fluids, mostly water, exceeds the amount that is taken in. With dehydration, more water is moving out of our cells and then out of our bodies than the amount of water we take in through drinking. The signs and symptoms of dehydration range from minor to severe. They include: increased thirst, dry mouth and swollen tongue, weakness, dizziness, palpitations (feeling that the heart is jumping or pounding), confusion, sluggishness, fainting, inability to sweat, and decreased urine output. ▪ Encourage people who are dehydrated (even those who have been vomiting) to take in fluids in the following ways: ▪ Sip small amounts of water. ▪ Drink carbohydrate/electrolyte-containing drinks. Good choices are sports drinks such as Gatorade or prepared replacement solutions (Pedialyte is one example). ▪ Suck on popsicles made from juices and sports drinks. ▪ Suck on ice chips.		
▪ Heat stroke is a life-threatening situation. It occurs when the body is unable to regulate its temperature and cool itself. Signs include: extremely high body temperature (above 103°F); red, hot, and dry skin (no sweating); rapid, strong pulse; throbbing headache; dizziness; nausea; confusion; and unconsciousness. If you see heat stroke signs, get medical assistance immediately!		

▪ Heat exhaustion is a milder form of heat-related illness that can develop after several days of exposure to high temperatures and inadequate or unbalanced replacement of fluids. Signs include: cool, moist, pale or flushed skin; heavy sweating; headache; nausea; dizziness; and weakness. ▪ Cool the victim by providing cool, nonalcoholic beverages; rest in a cool or air-conditioned environment; cool shower, bath, or sponge bath; lightweight clothing. ▪ If the person vomits or begins to lose consciousness, get medical assistance immediately!		
▪ Heat cramps are muscle pains or spasms (usually in the legs or abdomen) that occur in association with loss of fluids and electrolytes following strenuous activity. It is often an early sign that the body is having trouble with heat. Treatment of heat cramps includes: ▪ Acclimatization (the process of adjusting to a gradual change in the environment). ▪ Rest in a cool place and drink fluid mixed with salt. ▪ Make a salt solution by mixing 1/4 to 1/2 teaspoon table salt dissolved in a quart of water. ▪ Commercially available electrolyte beverages will provide adequate dietary salt intake, too. ▪ Salt tablets by themselves should not be used. They can cause stomach upset and don't adequately replace fluid volume lost.		
▪ Sunburn is damage to the skin that significantly slows the skin's ability to release heat. Usually sunburns are a minor discomfort that heals in a week. Signs include: redness of the skin and blistering in severe cases. ▪ Seek medical attention for severe sunburns.		

▪ Heat rash is skin irritation caused by excessive sweating during hot, humid weather. Signs include: Red cluster of pimples or small blisters that are most common on the neck, upper chest, or folds of the skin (e.g., elbow creases). ▪ To prevent heat rash, avoid situations that can lead to excessive sweating, such as hot, humid environments and strenuous physical activity. In hot weather, use air conditioning, fans, and cool showers and baths to stay cool; dry skin thoroughly; and wear lightweight, loose-fitting clothes.		
Provide animals with water.		KLJ, CM, JC, ZF, TW
▪ Provide adequate amounts of cool, clean water. Water should be made available at a rate of at least 25 percent body weight per day.		
▪ Check water delivery systems periodically for plugs or other problems.		
▪ Monitor the water temperature and keep it cool.		
▪ If possible, keep water in a shaded area.		
Keep animals cool.		KLJ, CM, JC, ZF, TW
▪ Move livestock to designated shaded areas.		
▪ Spray with oscillating sprinklers; water can have a cooling effect for animals.		
▪ Run water on the ground to keep hooves cooled.		
▪ Run water across roofs of buildings where animals are housed to cool the area.		
▪ Transport animals at night or early morning (e.g., arrival time before 7AM).		
▪ Cool animals after exercise with sprays of water.		
Flies and other insects are more active in warm weather; animals may increase their activity trying to avoid insects and risk overheating. ▪ Reduce insect breeding areas to control biting insects by:		KLJ, CM, JC, ZF, TW
▪ Remove weeds/brush.		
▪ Remove standing pools of water or mud.		
▪ Remove manure.		

Provide animals with feed and encourage feed intake.		KLJ, CM, JC, ZF, TW
▪ Feed later in the day.		
▪ Offer high quality and aromatic feeds and clean feed bunk out completely at least once a day.		
▪ Do not feed animals during the hottest periods of the day.		
▪ Shift feeding toward the evening after peak day temperature.		
▪ Cover feed bunks to prevent spoilage from heating in the sun.		
If a grass-land fire occurs due to drought conditions, refer to fire response guidance (see Section 3.2.9 Fire)		

Recovery Actions

Action	Complete	Responsible Person
UTM Agricultural System Emergency Response Coordinator should coordinate with University officials, local emergency management officials, and local agriculture officials to receive disaster assistance.		
Livestock should be monitored for prolonged health issues. If conditions persist, livestock may need to be sold.		KLJ, CM, JC, ZF, TW
Animal disposal:		KLJ, CM, JC, ZF, TW
▪ Record any animal deaths.		
▪ Dispose of dead carcasses.		
▪ Check with state or local authorities for proper disposal methods for animal carcasses.		
Crops should be monitored for long term damage due to drought conditions.		
Mitigation projects shall be reviewed to prevent further drought conditions from occurring.		
Provide mental health services to those personnel involved in the event.		
Conduct a hot wash and discuss lessons learned to identify additional mitigation activities or updates for the Plan.		

Winter Storms

Mitigation Actions

Action	Complete	Responsible Person
In the event of road closures, be sure to have extra food available for animals.		KLJ, CM, JC, ZF, TW
For animals requiring continual medications, have at least a two-week supply on hand.		KLJ, CM, JC, ZF, TW
Install a smoke detector and a battery-operated carbon monoxide detector near the area to be heated.		
▪ Test smoke detectors monthly.		
▪ Replace batteries twice yearly.		

Preparedness Actions

Action	Complete	Responsible Person
Monitor weather forecasts and local regulations (e.g., road closures) and communicate information to UTM Agricultural System personnel.		KLJ, CM, JC, ZF, TW
Winterize any buildings that provide shelter for Agricultural System personnel, students, visitors, livestock, or equipment.		KLJ, CM, JC, ZF, TW
▪ Install storm shutters, doors, and windows.		
▪ Caulk and weather-strip doors and windows.		
▪ Check the roof structure for its ability to hold heavy weight accumulations of snow and ice.		
▪ Repair any roof leaks.		
▪ Add insulation, insulated doors, storm windows, or thermal-pane windows.		
▪ Insulate any water lines that run along exterior walls so they will be less likely to freeze.		
Provide warming facilities, and warm food and beverages to personnel, students, and visitors who will be exposed to extreme cold weather for long periods of time.		KLJ, CM, JC, ZF, TW
Survey and monitor animal health and care.		KLJ, CM, JC, ZF, TW
Monitor UTM Agricultural System buildings for structural integrity.		

Response Actions

Action	Complete	Responsible Person
Monitor UTM Agricultural System personnel, students, and visitors for cold weather related health conditions; if it is suspected that a cold weather injury has occurred, seek medical attention immediately.		
Monitor animals for cold weather injuries. ▪ Frostbite: Extremities (ears, tail) are particularly subject to frostbite. Male reproductive organs may be affected and impair animal fertility. Frozen or chapped teats will impact milk production. Signs may not be immediately obvious or show for several days and may include white, waxy, or pale appearance to affected area, signs of freeze-damaged tissue. ▪ Hypothermia signs include: extreme shivering, increased respiration, confused, erratic or clumsy behavior; especially young animals.		KLJ, CM, JC, ZF, TW
Seek veterinary care immediately if signs of cold weather injuries are identified.		KLJ, CM, JC, ZF, TW
Provide food.		KLJ, CM, JC, ZF, TW
▪ Haul extra feed to feeding areas.		
▪ Check mechanized feeders in case of power outages; provide for emergency feeding procedures.		
▪ Provide enough space for all animals to get to the feed.		
▪ Check to ensure snow is not covering feed bunkers.		
Provide water.		KLJ, CM, JC, ZF, TW
▪ Remove ice buildup around waterers.		
▪ Keep water fresh and unfrozen.		
▪ Use heaters in water tanks.		
▪ If pipes freeze or power is out haul water to animals.		
Get frozen water pipes fixed.		KLJ, CM, JC, ZF, TW
Provide shelter.		KLJ, CM, JC, ZF, TW
▪ If possible, move animals to an indoor shelter or building, especially younger or weaker animals.		
▪ Provide additional bedding to keep animals insulated from the ground and keep them dry.		
▪ Place sand or other non-toxic gritty material on icy feedlots to provide good footing.		

▪ Ensure heaters are working properly and are located in an area with adequate ventilation.		
Ensure adequate ventilation in the building.		KLJ, CM, JC, ZF, TW
▪ If mechanically ventilated facilities are not functioning properly, animals could suffocate from lack of oxygen.		
▪ Open vents to facilitate natural air flow. ▪ Clear ice and snow from vents.		

Recovery Actions

Action	Complete	Responsible Person
Animal disposal.		KLJ, CM, JC, ZF, TW
▪ Record any animal deaths.		
▪ Dispose of dead carcasses.		
▪ Check with state or local authorities for proper disposal methods for animal carcasses.		
Check fences and buildings for damage from downed tree branches, contact with downed power lines, or inoperable electric fencing.		KLJ, CM, JC, ZF, TW
Continue to monitor animals daily for signs of illness, dehydration, frostbite, or hypothermia.		KLJ, CM, JC, ZF, TW
▪ If any of these conditions are suspected, seek veterinary care immediately!		
Provide mental health services for those personnel involved in the event.		
Conduct a hot wash and discuss lessons learned to identify additional mitigation activities or updates for the Plan.		
For debris removal, the UTM Agricultural System Emergency Response Coordinator should contact the UTM Emergency Management Coordinator or the Weakley County Emergency Management Director for guidance on disposal and reimbursement.		

Severe Weather

Mitigation Actions

Action	Complete	Responsible Person
Establish storm safe areas in different buildings on the property.		
Establish multiple modes of communications between the Agricultural System's storm safe areas.		
Ensure each building has a first aid kit located near the storm safe area.		
Identify potential hazards on the property:		
▪ Remove dead/rotting trees and branches that could fall and cause injury/damage.		
▪ Trim limbs that are crossing power lines or buildings.		
Train Agricultural System personnel on how to turn off electrical power, gas, and water supplies.		
Keep roofs of buildings clear of debris.		
Make sure buildings have proper drainage systems installed.		
Consider installing a lightning protection system.		
Install surge protectors on all electronic devices.		
Repair loose siding, roofing, and fencing, as these can become dangerous projectiles.		
Remove or fence off single trees in pastures to prevent animals from congregating under them.		
Ensure all livestock have identification, examples include: ▪ Ear tags ▪ Tattoos ▪ Brands		KLJ, CM, JC, ZF, TW

Preparedness Actions

Action	Complete	Responsible Person
Train key personnel on the Plan's procedures.		
Conduct first aid training.		
Monitor weather forecasts and local regulations (e.g., road closures) and communicate information to UTM Agricultural System personnel and students. ▪ A Severe Weather WATCH is issued when weather conditions favor the formation of severe weather, for example, during a severe thunderstorm -- be prepared to take shelter immediately if conditions worsen. ▪ A Severe Weather WARNING is issued when severe weather is sighted or indicated by weather radar -- You should take shelter immediately!		
Severe Weather Watch:		
Stop work operations in outdoor areas.		
Secure unstable materials that are outside of facilities.		
Unplug appliances and other electrical items such as computers, and turn off air conditioners. Power surges from lightning can cause serious damage to equipment.		
Locate flashlights and first aid kits.		
If possible, bring animals into a barn or shelter well in advance of a storm.		KLJ, CM, JC, ZF, TW
Move injured or ill livestock to indoor location.		KLJ, CM, JC, ZF, TW
Ensure animals kept indoors have ample water and feed.		KLJ, CM, JC, ZF, TW
Keep animals away from areas with windows.		KLJ, CM, JC, ZF, TW
NEVER leave animals tied up or restrained outside.		KLJ, CM, JC, ZF, TW
Remove equipment and debris from fields.		KLJ, CM, JC, ZF, TW
Open drainage ditches if applicable.		
Ground wire fences.		

Response Actions

Action	Complete	Responsible Person
Severe Weather Warning:		
Avoid open fields during severe weather.		
Move personnel and students to storm safe areas as warning sirens sound.		
Account for all personnel, students, and visitors.		
Keep all personnel and students away from doors and windows.		
▪ Watch for flying debris.		
Draw blinds and shades over windows to prevent glass from shattering into facilities (in case high winds break the windows).		
Avoid corded telephones and metal; telephone lines and metal pipes can conduct electricity.		
Do not allow anyone to leave a safe location until the storm has passed.		
Monitor weather for updated information.		
Maintain accountability of all personnel and students.		
Treat any injuries.		
▪ Call 911 if serious injury.		
▪ Notify EMS of any injury sustained.		
If a power outage occurs, do not try to turn the power back on. ▪ Call campus facilities management to assist.		
If a natural gas or propane leak is smelled, vacate the area immediately.		
▪ Call the natural gas or propane provider and call campus facilities management.		
Ensure all controlled substances are locked in a secure location.		
Be aware, animal behavior may change before, during, and even after a disaster.		

Recovery Actions

Action	Complete	Responsible Person
Stay away from storm-damaged areas.		
Attend to anyone who is injured by lightning.		
▪ Call 911 or local EMS.		
▪ Check the person for burns or other injuries; being struck by lightning can also cause nervous system damage, broken bones, and loss of hearing or eyesight.		
▪ If breathing has stopped, begin rescue breathing.		
▪ If the heart has stopped beating, a trained person should give Cardiopulmonary Resuscitation (CPR).		
Assess the situation.		
▪ Survey damage to Agricultural System buildings, equipment, livestock, and crops.		
▪ Report any downed power lines.		
Account for inventory.		KLJ, CM, JC, ZF, TW
▪ Account for all livestock, fuels, chemicals, machinery, and equipment; use the inventory list previously prepared.		
▪ Note any livestock losses.		
▪ Check machinery and equipment for damage.		
▪ Take photographs of all damage for insurance or emergency assistance purposes.		
Report any hazardous materials (e.g., fuels, agricultural chemicals) spills or leaks to emergency response personnel (see Section 3.2.7 Hazardous Materials).		
Cleanup safely.		
▪ Wear sturdy shoes or boots, long sleeves, and gloves to protect your body from injury.		
▪ Stay away from downed power lines and report them.		
▪ Be aware of hazards that may cause injury to you or others cleaning up (e.g., chain saws, electrical or chemical hazards).		

▪ Gather and dispose of trash, limbs, wire, and damaged equipment that could harm livestock.		
▪ Use caution when clearing broken tree branches; downed or damaged power lines can send electrical current through them.		
Use caution with gas powered equipment – dangerous carbon monoxide can be generated; use in well ventilated areas.		
Examine animals closely; notify the Agricultural System's veterinarian if injuries are observed.		KLJ, CM, JC, ZF, TW
Provide animals non-contaminated feed or water.		KLJ, CM, JC, ZF, TW
▪ Provide clean, uncontaminated water.		
▪ Do not feed flood damaged/moldy feed or hay.		
▪ Do not use any feed or forage that may have been contaminated by chemical or pesticides.		
Animal disposal.		KLJ, CM, JC, ZF, TW
▪ Record any animal deaths.		
▪ Dispose of dead carcasses.		
▪ Check with state or local authorities for proper disposal methods for animal carcasses.		
Assess crops.		
▪ Survey the damage to crops from wind, hail, or flooding.		

▪ Determine how much of the Agricultural System's crops are water logged (only roots flooded) and how much are fully submerged (entire plants under water).
▪ Evaluate injured plants to determine whether the growing potential is still viable; this is best done 3-5 days after the storm to allow time for plant recovery – if it occurs.
▪ Factors affecting the extent of crop damage include:
  ▪ Degree of submergence of plant.
  ▪ Weather conditions prior to the situation (e.g., temperature).
  ▪ Plant growth stage and height – younger stages are more vulnerable.
  ▪ Significant loss of soil nitrogen.
  ▪ Mud deposited on plants can stress plants and reduce photosynthesis.
▪ Yield losses due to hail damage may include:
  ▪ Stand reduction due to plant death.
  ▪ Leaf area reduction due to hail damage to leaves.
  ▪ Severe bruising of leaf tissue.		

Consider replanting crops.		
▪ Contact the Agricultural System's crop insurance agent prior to destroying or replanting crops to discuss coverage.		
▪ The USDA Farm Service Agency has a number of disaster assistance programs to aid farms in recovering from severe weather damage to crops. www.fsa.usda.gov/		

▪ Evaluating whether to replant will depend on: ▪ The existing plant stand. ▪ Distribution of the plant stand. ▪ Calendar date. ▪ Weed situation. ▪ Seed availability of earlier maturing hybrids. ▪ Cost to replant. ▪ Yield potential of the existing crop.		
Monitor for diseases.		
▪ Flood conditions can increase disease incidence in surviving plants; scout the fields often to determine if and when problems occur.		
Do not feed heated, molded, or sour feed/moldy legume hays (alfalfa, clover) to any livestock. ▪ Rain damaged grain is likely to contain toxins as warm wet conditions are ideal for mold growth.		
Do not use flood damaged or wet feeds until tested. It may be possible to dry and clean rain damaged grain, but it must be tested for mycotoxins before use. ▪ Soaked grain will spoil within a day or two at high moisture and summer temperatures. ▪ Flood damaged grain should always be destroyed due to the potential contaminants that can enter through the water. ▪ Wet seed grain will probably not be suitable for planting, as wetness causes the seed to germinate.		
Provide mental health services for those personnel involved in the event.		
The UTM Agricultural System Emergency Response Coordinator or designated personnel will contact the local Extension Office or Tennessee Department of Agriculture for any matter regarding livestock or crop issues which cannot be resolved.		

For disaster assistance, UTM Agricultural System Emergency Response Coordinator should coordinate with UTM Emergency Management Coordinator and the Weakley County Emergency Management Agency.		
For debris removal, the UTM Agricultural System Emergency Response Coordinator should contact the UTM Emergency Management Coordinator or the Weakley County Emergency Management Director for guidance on disposal and reimbursement.		
Conduct a hot wash and discuss lessons learned to identify additional mitigation activities or updates for the Plan.		

Flooding

Mitigation Actions

Action	Complete	Responsible Person
Determine the risk of flooding for the UTM Agricultural System.		
Identify potential hazards on UTM Agricultural System property.		
▪ Know how to turn off electrical power, gas, and water supplies.		
▪ Secure structurally unstable materials (e.g., lumber, logs, equipment, fuel tanks).		
Prepare buildings.		
▪ Build with or install flood resistant material.		
▪ Raise electrical components above the projected flood elevation.		
Stockpile emergency building materials and food stocks.		
▪ Store plywood, plastic sheeting, lumber, nails, sandbags, sand, etc.		
▪ Maintain at least a 14 day supply of food sources for livestock on premises.		KLJ, CM, JC, ZF, TW
Make a list of Agricultural System inventory.		
▪ Inventory animals.		KLJ, CM, JC, ZF, TW
▪ Inventory crops.		
▪ Inventory machinery and equipment (Make and Model).		

▪ Inventory hazardous substances (pesticides, fertilizers, fuels, medicines, and other chemicals).		
Identify areas of higher ground to relocate valuable or hazardous materials.		
Obtain/Ensure the UTM Agricultural System has flood insurance.		
Secure all important documents in flood proof safe or in areas that are not reachable by flood.		
Develop relationships with local emergency management officials and flood plain management officials.		
Review floodplain maps for hazards on UTM Agricultural System property.		

Preparedness Actions

Action	Complete	Responsible Person
Provide personnel and student training on flood response.		
Monitor local weather forecasts. ▪ Listen to the radio, television, internet, and Emergency Alert System (EAS) messages for situation developments and evacuation instructions.		
Communicate with UTM Agricultural System personnel about current weather forecasts and develop courses of actions for response.		
If an evacuation order is given, identify evacuation routes and evacuate immediately.		
Move animals and equipment to safe areas likely not to be affected by rising flood waters.		
Develop work plan based off of current forecasts.		
Ensure all electrical devices are safe from rising flood waters.		

Response Actions

Action	Complete	Responsible Person
Maintain accountability of personnel, students, and visitors.		
Turn off all utilities at the main power switch and close the main gas valve of buildings on site.		
Open building doors and windows at least 2 inches to equalize pressure and help prevent building from shifting.		

If possible, move motors and portable electric equipment to dry location.		
Be aware of animal behavior change before, during, and after a disaster.		KLJ, CM, JC, ZF, TW
Avoid leaving animals behind.		KLJ, CM, JC, ZF, TW
▪ Establish escape routes to safe locations with higher elevations.		
▪ If there is time, move or evacuate livestock and horses to higher ground.		
▪ If there is no other alternative, keep gates and buildings open so animals can escape high water.		
▪ Provide access to safe free-choice food sources (hay, grain, open pasture, etc.), clean water, and the safest living area possible.		
▪ Do not rely on automatic watering systems, because power may be lost.		
▪ Place the UTM Agriculture System Emergency Response Coordinator's contact number, and the name and number of the Agricultural System's veterinarian on the building.		
Move equipment to higher ground if there is time.		

Recovery Actions

Action	Complete	Responsible Person
Only return to Agricultural System after officials have declared the area safe.		
Assess the situation.		
▪ Assess the impact and areas of damage to the different properties on the Agricultural System.		
▪ Identify dangerous materials, downed power lines, damaged gas lines, damaged water lines, damaged sewage lines, and other hazards.		
▪ If a natural gas or propane leak is found, leave the area immediately, and contact the natural gas or propane provider.		

▪ Report any hazardous materials spills immediately (see Section 3.2.7 Hazardous Materials).		
Keep power off until an electrician has inspected the Agricultural System for safety.		
Check the status of all animals on the property.		
Account for all equipment.		
▪ Check for damage.		
▪ Photograph all damage of equipment and facilities for the insurance company.		
Clean up Safely.		
▪ Wear Protective Clothing.		
▪ Do not use contaminated water for consumption, nor for washing or brushing teeth.		
Prevent and treat injuries. ▪ Exposure to flood waters in cold weather can lead to hypothermia.		
Take precautions to minimize insect exposures.		
Prevent illness.		
▪ Wash hands frequently.		
▪ Use clean, boiled, or disinfected water.		
Animal disposal.		KLJ, CM, JC, ZF, TW
▪ Record any animal deaths.		
▪ Dispose of dead carcasses.		
▪ Check with state or local authorities for proper disposal methods for animal carcasses.		
Assess the crops.		
▪ Determine how much of the crops are water logged (only the roots flooded) and fully submerged (entire plants under water).		
Contact crop insurance agent to discuss coverage.		
Provide mental health services for those personnel involved in the event.		
Conduct a hot wash and discuss lessons learned to identify additional mitigation activities or updates for the Plan.		

For debris removal, the UTM Agricultural System Emergency Response Coordinator should contact the UTM Emergency Management Coordinator or the Weakley County Emergency Management Director for guidance on disposal and reimbursement.		

Tornadoes

Mitigation Actions

Action	Complete	Responsible Person
Establish storm safe areas in different buildings on Agricultural System property.		
Determine the risk of tornadoes in the area. A map of high risk areas is available at www.fema.gov/areyouready/tornadoes.shtm.		
Post shelter in place and evacuation plans in high traffic areas in buildings.		
Store NOAA Weather Alert Radios in key locations.		
Have a way of receiving weather information while you work, especially at remote locations.		
Identify potential hazards on UTM Agricultural System.		
▪ When inspecting facilities, pay particular attention to the windows, doors, roof, gables and connections (roof-to-wall, wall-to-foundation). Weaknesses in these elements of buildings make it more vulnerable to significant damage.		
▪ Secure unstable materials that are outside of buildings (e.g., patio furniture, fuel tanks).		
▪ Remove dead/rotting trees and branches that could fall and cause injury/damage during a tornado.		
▪ Keep trees and shrubbery trimmed. Cut weak branches and trees that could fall on buildings.		
Protect buildings.		
▪ Place furniture so that chairs and beds are away from windows, mirrors, and picture frames.		
▪ Place heavy or large items on lower shelves.		
▪ Secure large appliances, equipment, and electronics, especially water heaters, air compressors, and table saws with flexible cable, or metal strapping.		
▪ Secure top-heavy, free-standing furniture (e.g., bookcases) that could topple to the wall, by using "L" brackets, corner brackets, or aluminum molding.		

Safeguard valuable equipment and sensitive items:		
▪ Create a room-by-room inventory of sensitive items. ▪ Equipment above $250 ▪ Vaccinations ▪ Controlled substances		
▪ Consider developing backup procedures and policies for electronic records.		
▪ Gather copies of critical documents, such as finance records, insurance policies, and animal records. Keep these in a secure place (e.g., safe deposit box, waterproof container).		
Create an inventory.		
▪ Inventory livestock and animals (species, number of animals, location, and records of ownership).		KLJ, CM, JC, ZF, TW
▪ Inventory crops (acres, type).		
▪ Inventory machinery and equipment (make, model #).		
▪ Inventory hazardous substances (e.g., pesticides, fertilizers, fuels, medicines, other chemicals).		
Have identification for all animals.		KLJ, CM, JC, ZF, TW
▪ Make sure animals have some form of permanent identification (e.g., ear tags, tattoos, microchips, etc.).		
Review insurance coverage.		
In the event of animal escape, have handling equipment (e.g., halters, nose leads) and safety and emergency items for Agricultural System vehicles and trailers.		KLJ, CM, JC, ZF, TW
Ensure a safe environment.		KLJ, CM, JC, ZF, TW
▪ Assess the stability and safety of barns and other structures.		
▪ Remove loose objects from fields or livestock areas that may become potential flying debris.		

Preparedness Actions

Action	Complete	Responsible Person
Check weather reports before planning work activities.		
Develop a communication plan with personnel and students.		
▪ Know how to contact each other in the event of severe weather, especially if you are in separate locations.		
Establish shelter locations on Agricultural System property.		
Identify potential hazards on property.		

▪ Secure structurally unstable materials (e.g. lumber, logs, equipment, fuel tanks), and loose equipment and materials (e.g., buckets, tools, etc.) which can become dangerous if airborne.		
▪ Fix loose siding, roofing, fence posts, etc., as these can become dangerous projectiles in high winds.		
▪ Know how to turn off electrical power, gas, and water supplies for buildings on the property.		
Stockpile emergency materials.		
▪ Store plywood, lumber, nails, hammer, saw, pry bar.		
▪ Store wire and rope to secure objects.		
▪ Store fire extinguishers at all barns and in all vehicles.		
▪ Store a safe supply of food to feed livestock.		KLJ, CM, JC, ZF, TW
Secure items that could jar off of walls or that could be come flying debris.		
Turn off unused electronics.		
In the event of animal escape, have handling equipment (e.g., halters, nose leads) and safety and emergency items for Agricultural System vehicles and trailers.		KLJ, CM, JC, ZF, TW
Ensure a safe environment.		KLJ, CM, JC, ZF, TW
▪ Assess the stability and safety of barns and other structures.		
▪ Remove loose objects from fields or livestock areas that may become potential flying debris.		

Response Actions

Action	Complete	Responsible Person
Monitor weather forecasts and communicate information to UTM Agricultural System personnel and students. ▪ A tornado WATCH is issued when weather conditions favor the formation of tornadoes, for example, during a severe thunderstorm -- be prepared to take shelter immediately if conditions worsen. Never try to outrun a tornado. Get off of machinery and get as far away from it as possible. ▪ A tornado WARNING is issued when a tornado funnel is sighted or indicated by weather radar -- You should take shelter immediately!		
Direct students and personnel to move to the designated shelter area immediately. ▪ If possible, get inside a sturdy building. The safest place is an inside room on the lowest floor. ▪ Avoid long span buildings as these are often supported solely by the outside walls and can be dangerous during severe weather situations.		
After moving to a safe location, listen to the radio for further alerts and updates, and inform Agricultural System personnel.		
If there is time, move any large objects that could be a potential danger, out of the room.		
Do not open windows. You won't save buildings, as once thought, and may actually make things worse by giving wind and rain a chance to get inside.		
▪ Avoid windows, or glass doors, which can be broken by strong winds or hail, and cause damage or injury.		
▪ For added protection, get under something sturdy, such as a heavy table or workbench.		
▪ If possible, cover your body with a blanket or sleeping bag; protect your head with anything available--even your hands.		
If adequate shelter is not immediately available:		
▪ Lie flat in the nearest ditch or other low lying area.		
▪ Cover your head and neck with your arms.		
▪ Stay away from trees.		
▪ Do not get under any vehicle, no matter what its size.		
Account for all personnel and students on site.		
Be aware, animal behavior may change before, during, and even after a disaster. Animals sense tornadoes in advance.		KLJ, CM, JC, ZF, TW

If Agricultural System personnel, students, or visitors are at risk, ignore animals.		
If your personal security isn't threatened, you may only have time to open routes of escape for livestock.		
If possible, make animals safe.		KLJ, CM, JC, ZF, TW
▪ Bring animals into a barn or shelter well in advance of a storm.		
▪ Make sure they have plenty of food and water.		
▪ Keep them away from areas with windows.		
▪ NEVER leave animals tied up or restrained outside.		
Seek medical attention for the injured.		

Recovery Actions

Action	Complete	Responsible Person
Continue to monitor battery-powered radios or television for emergency information.		
Assess the situation.		
▪ Survey damage to the outside and inside of Agricultural System buildings, equipment, livestock, and crops.		
▪ Identify sharp objects, dangerous materials, downed power lines, damaged gas lines, or other hazards (e.g., chemical spills).		
▪ Be aware of possible structural, electrical, or gas-leak hazards in buildings. If you suspect any damage, do not attempt to turn utilities off, contact facilities management immediately.		
▪ Check for power outages.		
Account for inventory.		KLJ, CM, JC, ZF, TW
▪ Account for all animals, fuels, chemicals, machinery and equipment; use the inventory list prepared prior to the incident.		
▪ Check machinery and equipment for damage.		
▪ Take photographs of all damage for insurance or emergency assistance purposes.		
▪ Note any animal losses.		
▪ Report any hazardous materials (e.g., fuels, agricultural chemicals) spills or leaks to emergency response personnel (see Section 3.2.7 Hazardous Materials).		

▪ Report any property damage to the Agricultural System's insurance agent or company representative immediately after a natural disaster and make temporary repairs to prevent further damage.		
Cleanup safely.		
▪ Wear sturdy shoes or boots, long sleeves, and gloves when handling or walking on or near debris.		
▪ Be aware of hazards that may cause injury to you or others cleaning up - these can include chain saw injuries, electrical or chemical hazards.		
▪ Do not touch downed power lines or objects in contact with downed lines.		
▪ Use caution with gas powered equipment – dangerous carbon monoxide can be generated; use in well ventilated areas.		
▪ Gather and dispose of trash, limbs, wire, and damaged equipment that could harm livestock.		
Care for animals.		KLJ, CM, JC, ZF, TW
▪ Make sure that animals have food and water.		
▪ Remove any debris that may cause injury.		
Provide non-contaminated feed or water.		KLJ, CM, JC, ZF, TW
Provide clean, uncontaminated water.		KLJ, CM, JC, ZF, TW
Do not use any feed or forage that may have been contaminated by chemical or pesticides.		KLJ, CM, JC, ZF, TW
Assess animals and building structures.		KLJ, CM, JC, ZF, TW
▪ Survey damage to barns and other structures; assess the stability and safety.		
▪ Examine animals closely; contact the Agricultural System's veterinarian if injuries are observed.		
Animal disposal:		KLJ, CM, JC, ZF, TW
▪ Record any animal deaths.		
▪ Dispose of dead carcasses.		
▪ Check with state or local authorities for proper disposal methods for animal carcasses.		
Provide mental health services for those personnel involved in the event.		

For disaster assistance, UTM Agricultural System Emergency Response Coordinator should coordinate with UTM Emergency Management Coordinator and the Weakley County Emergency Management Agency.		
For debris removal, the UTM Agricultural System Emergency Response Coordinator should contact the UTM Emergency Management Coordinator or the Weakley County Emergency Management Director for guidance on disposal and reimbursement.		
Conduct a hot wash and discuss lessons learned to identify additional mitigation activities or updates for the Plan.		

Earthquakes

Mitigation Actions

Action	Complete	Responsible Person
Assess hazards on UTM Agricultural System.		
▪ Fasten shelves securely to walls.		
▪ Place large or heavy objects on lower shelves.		
▪ Store breakable items such as bottled vaccinations, medical supplies, and glass in low, closed cabinets with latches.		
▪ Brace overhead light fixtures.		
▪ Repair defective electrical wiring and leaky gas connections. These are potential fire risks.		
▪ Secure a water heater by strapping it to the wall studs and bolting it to the floor.		
▪ Repair any deep cracks in ceilings or foundations. Get expert advice if there are signs of structural defects.		
▪ Store weed killers, pesticides, and flammable products securely in closed cabinets with latches and on bottom shelves.		
▪ Store fuel in secure locations that are not easily damaged from falling debris.		

Identify safe places indoors and outdoors: ▪ Under sturdy furniture such as a heavy desk or table. ▪ Against an inside wall. ▪ Away from where glass could shatter around windows, mirrors, pictures, or where heavy bookcases or other heavy furniture could fall over. ▪ In the open, away from buildings, trees, telephone and electrical lines, overpasses, or elevated expressways.		
Develop an Emergency Communication Plan.		
▪ Post emergency phone numbers in visible locations.		

Preparedness Actions

Action	Complete	Responsible Person
Earthquakes are no notice events, the best preparedness actions are to educate personnel, students, and visitors on what to do in the event of an earthquake.		

Response Actions

Action	Complete	Responsible Person
Stay as safe as possible during an earthquake. Be aware that some earthquakes are actually foreshocks and a larger earthquake might occur. Minimize your movements to a few steps to a nearby safe place and if you are indoors, stay there until the shaking has stopped and you are sure exiting is safe.		
The UTM Agricultural System Emergency Response Coordinator shall immediately gain accountability of all personnel, students, and visitors on UTM Agricultural System property.		
Notify EMS if any injuries have been sustained.		
Notify the UTM Emergency Management Coordinator of any injuries sustained along with name, address, phone number, and hospital where transported to.		
If indoors, complete the following:		
▪ DROP to the ground; take COVER by getting under a sturdy table or other piece of furniture; and HOLD ON until the shaking stops. If there isn't a table or desk near you, cover your face and head with your arms and crouch in an inside corner of the building.		
▪ Stay away from glass, windows, outside doors and walls, and anything that could fall, such as lighting fixtures or furniture.		

▪ Stay in bed if you are there when the earthquake strikes. Hold on and protect your head with a pillow, unless you are under a heavy light fixture that could fall. In that case, move to the nearest safe place.		
▪ Use a doorway for shelter only if it is in close proximity to you and if you know it is a strongly supported, load bearing doorway.		
▪ Stay inside until the shaking stops and it is safe to go outside. Research has shown that most injuries occur when people inside buildings attempt to move to a different location inside the building or try to leave.		
▪ Be aware that the electricity may go out, or the sprinkler systems or fire alarms may turn on.		
▪ DO NOT use the elevators.		
If outdoors, complete the following:		
▪ Stay there.		
▪ Move away from buildings, streetlights, and utility wires.		
▪ Once in the open, stay there until the shaking stops. The greatest danger exists directly outside buildings, at exits and alongside exterior walls. Many of the 120 fatalities from the 1933 Long Beach earthquake occurred when people ran outside of buildings only to be killed by falling debris from collapsing walls. Ground movement during an earthquake is seldom the direct cause of death or injury. Most earthquake-related casualties result from collapsing walls, flying glass, and falling objects.		
If in a moving vehicle, complete the following:		
▪ Stop as quickly as safety permits and stay in the vehicle. Avoid stopping near or under buildings, trees, overpasses, and utility wires.		
▪ Proceed cautiously once the earthquake has stopped. Avoid roads, bridges, or ramps that might have been damaged by the earthquake.		
If trapped under debris, complete the following:		
▪ Do not light a match or lighter.		
▪ Do not move about or kick up dust.		
▪ Cover your mouth with a handkerchief or clothing.		

▪ Tap on a pipe or wall so rescuers can locate you. Use a whistle if one is available. Shout only as a last resort. Shouting can cause you to inhale dangerous amounts of dust.		

Recovery Actions

Action	Complete	Responsible Person
Expect aftershocks. These secondary shockwaves are usually less violent than the main quake but can be strong enough to do additional damage to weakened structures and can occur in the first hours, days, weeks, or even months after the quake.		
Listen to a battery-operated radio or television. Listen for the latest emergency information.		
Use the telephone only for emergency calls.		
Open cabinets cautiously. Beware of objects that can fall off shelves.		
Stay away from damaged areas unless your assistance has been specifically requested by police, fire, or relief organizations. Return home only when authorities say it is safe.		
Help injured or trapped persons. Do not move seriously injured persons unless they are in immediate danger of further injury. Call for help.		
The UTM Main Campus may require special assistance. The UTM Agricultural System has equipment that will be valuable in the response effort. Give first aid where appropriate.		
Clean up spilled medicines, bleaches, gasoline or other flammable liquids immediately. Leave the area if you smell gas or fumes from other chemicals.		
Inspect utilities.		
▪ Check for gas leaks. If you smell gas or hear blowing or hissing noise, open a window and quickly leave the building. Turn off the gas at the outside main valve if you can and call the gas company from another building/location. If you turn off the gas for any reason, it must be turned back on by a professional.		
▪ Look for electrical system damage. If you see sparks or broken or frayed wires, or if you smell hot insulation, turn off the electricity at the main fuse box or circuit breaker. If you have to step in water to get to the fuse box or circuit breaker, call an electrician first for advice.		

▪ Check for sewage and water lines damage. If you suspect sewage lines are damaged, avoid using the toilets and call a plumber. If water pipes are damaged, contact the water company and avoid using water from the tap. You can obtain safe water by melting ice cubes.		
Check animals for injuries, beware that injured animals can cause injury to personnel treating them.		KLJ, CM, JC, ZF, TW
▪ If animals are injured, notify the veterinarian.		
▪ Animals can be euthanized if injuries are severe.		
Animal disposal:		KLJ, CM, JC, ZF, TW
▪ Record any animal deaths.		
▪ Dispose of dead carcasses.		
▪ Check with state or local authorities for proper disposal methods for animal carcasses.		
Animals that are housed in structures should be released into open pasture in the event of aftershocks.		KLJ, CM, JC, ZF, TW
Conduct rapid damage assessment of facilities and equipment.		
Provide mental health services for those involved in the event.		
Conduct a hot wash and discuss lessons learned to identify additional mitigation activities or updates for the Plan.		
For debris removal, the UTM Agricultural System Emergency Response Coordinator should contact the UTM Emergency Management Coordinator or the Weakley County Emergency Management Director for guidance on disposal and reimbursement.		

Hazardous Materials

Mitigation Actions

Action	Complete	Responsible Person
Limit storage areas to the minimum needed to discourage storing unneeded chemicals.		
Store chemicals in a secure area:		
▪ Keep chemicals in locked, weather proof storage areas. Make sure these areas are well lit.		
▪ Post a sign indicating the storage area contains chemicals. The sign should also include at least two emergency contact numbers – the UTM Agricultural System Emergency Response Coordinator's and a local emergency response agency (e.g., law enforcement or fire).		

▪ Keep storage areas dry and well ventilated; keep it from freezing and extreme high temperatures.		
▪ Store chemicals above ground level to prevent moisture problems (rusting or disintegration).		
▪ Locate storage areas at a safe site that will not be subjected to flooding.		
▪ Keep chemicals out of reach of children and pets.		
Notify first responders of where chemicals are stored.		
Store chemicals in their original containers.		
▪ Keep containers tightly closed and clearly labeled.		
▪ If labels become worn or damaged, re-label the container with its contents or discard the chemical.		
▪ Do not store chemicals in damaged containers.		
▪ Never use food or beverage containers to store chemicals.		
Develop a plan for responding to spills. This should include: ▪ Emergency phone numbers to call should a spill occur – include the state's agrochemical hotline. ▪ An inventory of chemical products on the Agricultural System; include any protective equipment. ▪ A copy of MSDSs for all chemicals on the Agricultural System. ▪ Evacuation plans for the room or building containing chemicals. ▪ Instructions for containing and cleaning up spills. Separate instructions for different chemicals may be needed.		
Post copies of MSDSs near the chemical storage area; keep an additional set in a separate location.		
Post signs with chemical spill response procedures.		

Preparedness Actions

Action	Complete	Responsible Person
Always read packaging labels for information on their proper use, handling and actions in case of spills.		
Use original or appropriate containers to store and transport chemicals.		
After using application equipment make sure valves are closed, hoses are empty, and pumps are turned off.		

Clean equipment frequently, especially before switching to a new mix.		
Inspect equipment routinely for damage that could cause a leak.		
▪ Keep a record of these inspections and repairs.		
Visually inspect chemical storage area(s) regularly for signs of tampering or illegal activity.		

Response Actions

Action	Complete	Responsible Person
If personnel have not been trained in hazmat response do not let them near the site of the spill!		
Spills not immediately dangerous to life or health:		
▪ Evacuate the area; set up barriers to keep people (and animals) out.		
▪ Immediately notify the Building Managers and the Office of Environmental Health and Safety (if no answer/after-hours, call 911).		
If trained and familiar with the hazard, follow the 3 C's: Caution, Control/Contain, and Clean up		
▪ Do not expose yourself unnecessarily to chemicals.		
▪ Avoid situations where you may become trapped.		
▪ Wear Personal Protective Equipment (PPE), such as rubber gloves, boots, long sleeves, long pants; use additional PPE as instructed by the label.		
▪ Approach the spill from a safe direction (e.g., upwind/ upstream).		
▪ Avoid spills that are reacting (hissing, bubbling, smoking, gassing, and/or burning).		
▪ If possible, safely stop the spill (e.g., place a leaking container in a larger container, close a valve), immediately!		
▪ Do what you can to keep the spill from spreading (e.g., apply absorbent material, place sandbags around the area, dig a trench to contain fluid).		
▪ Stay with the spill site until someone relieves you.		
Spills immediately dangerous to life or health:		

▪ Immediately notify all building occupants or those in the area which the spill has occurred. ▪ Pull fire alarm if necessary.		
▪ Call 911 (or 7777 if line is busy).		
▪ Ensure the HVAC (heating, ventilation, and air conditioning) for the building is shut down – Call facilities management if needed.		
▪ Evacuate the area; set up barriers to keep people (and animals) out; meet in designated area.		
▪ Account for all occupants of the building/area.		
▪ Ensure all personnel, students, and visitors are accounted for.		
In case of exposure:		
▪ If chemicals get into your eyes, follow emergency directions on the label. Flush eyes with water for 10-15 minutes and get medical attention.		
▪ If you accidently swallow the chemical or become ill shortly after use, call your health care provider or get medical attention immediately! Take the chemical label with you.		
▪ If a chemical gets on your skin:		
▪ Immediately remove all contaminated clothing.		
▪ Wash the exposed area for 15 minutes, including hair, with generous amounts of water and soap.		
▪ Put on fresh, clean clothes.		
▪ See your healthcare provider immediately.		
If anyone has become incapacitated, call 911.		
Dispose of any contaminated foods or crops utilized for food.		
Identify any exposure to animals and contact the local Extension Agency and veterinarian for appropriate actions (decontamination, euthanized, etc.).		

Recovery Actions

Action	Complete	Responsible Person
Work with TDEC and EPA as required to return area to normal.		
Maintain accurate records and provide to Campus Administration.		
Clean up for general spills:		
▪ Spread absorbent material (fine sand, vermiculite, clay, pet litter) on the spill area.		

▪ Avoid using sawdust. Strong oxidizing chemicals can combust and be a potential fire hazard.		
▪ Sweep and scoop all material; work from the outside toward the inside to reduce further spread.		
▪ Scoop material into a steel or fiber drum lined with a heavy duty plastic bag.		
▪ Repeat until the spill is soaked up.		
▪ Seal the bag. Double bag it, label it clearly and dispose of it properly.		
▪ Some chemicals will require special handling. Check the product label for more information.		
Clean up for spills on soil:		
▪ For minor spills, apply activated charcoal immediately.		
▪ For larger spills, the top 2-3 inches of soil must be removed and disposed of properly. Then cover the area with at least 2 inches of lime, followed by fresh top soil.		
Animal disposal:		KLJ, CM, JC, ZF, TW
▪ Record any animal deaths.		
▪ Dispose of dead carcasses.		
▪ Check with state or local authorities for proper disposal methods for animal carcasses.		
Provide mental health services for those personnel involved in the event.		
Conduct a hot wash and discuss lessons learned to identify additional mitigation activities or updates for the Plan.		

Disease Outbreaks and Pests

Mitigation Actions

Action	Complete	Responsible Person
Develop a Pest Management Program to identify known pest that affect, or have a high probability of affecting the Agricultural System, and provide mitigation, preparedness, response, and recovery actions.		KLJ, CM, JC, ZF, TW
Develop a plan for responding to disease outbreaks. This should include: ▪ Emergency phone numbers to call should an outbreak occur – include the state's veterinarian hotline. ▪ An inventory of animals on the Agricultural System; include vaccination history.		KLJ, CM, JC, ZF, TW

Implement strict biosecurity measures on the Agricultural System.		KLJ, CM, JC, ZF, TW
▪ Restrict access to property, crops, and animals.		
▪ Test or vaccinate any new or returning animals to the Agricultural System before placing them with resident stock.		
▪ Isolate any new or returning animals to the Agricultural System before placing them with resident stock.		
▪ Develop and implement a visitor tracking system for the UTM Agricultural System.		
▪ Prohibit visitors near animals unless absolutely necessary.		
▪ Have all personnel or allowed visitors wear clean footwear (disposable boots) and clothing (coveralls) while on the Agricultural System.		
▪ Clean and disinfect clothes, shoes, equipment, vehicles, and hands after contact with animals.		
▪ Clean vehicles before leaving the Agricultural System.		
▪ Do not share equipment with other farms or Agricultural Systems, unless items have been cleaned and disinfected.		

Preparedness Actions

Action	Complete	Responsible Person
Get vaccinated with the human flu vaccine.		
Wear protective clothing or equipment when working with animals: ▪ Coveralls that can be laundered or disposed or after each use. ▪ Rubber boots that can be cleaned and disinfected or disposable protective shoe coverings. ▪ Disposable gloves or heavy duty waterproof gloves that can be disinfected. ▪ Head or hair covers help prevent contamination of hair if a shower-out facility is not available. ▪ Masks, especially if working in confined areas or in close contact with animals.		KLJ, CM, JC, ZF, TW
Wash hands thoroughly for at least 20 seconds with soap and water. ▪ Before and after working with animals. ▪ After removal of any personal protective clothing.		KLJ, CM, JC, ZF, TW
Avoid contact with animals having signs of flu-like illness.		KLJ, CM, JC, ZF, TW
▪ Notify the veterinarian.		

Be aware for flu-like symptoms in yourself or others working on the Agricultural System. These include: fever, cough, sore throat, runny or stuffy nose, body aches, headache, chills, and fatigue.		KLJ, CM, JC, ZF, TW
▪ Limit contact with other people or animals.		
▪ Stay home for 7 days after symptoms begin or until symptom free for 24 hours (whichever is longer).		
▪ Contact your healthcare provider.		
Notify the UTM Emergency Management Coordinator.		
Notify Weakley County Health Department.		
Notify Tennessee Department of Agriculture.		
Notify Tennessee Department of Public Health.		
The response needed for a high consequence livestock disease will involve various state and federal agencies in efforts to control the further spread of the disease. ▪ To learn more about the necessary response to a high consequence disease, visit the Animal and Plant Health Inspection Service (APHIS) site: http://www.aphis.usda.gov/.		KLJ, CM, JC, ZF, TW
Cooperate with veterinarians and officials to prevent the disease from spreading further.		KLJ, CM, JC, ZF, TW
Monitor animals for signs of illness and crops health.		KLJ, CM, JC, ZF, TW
In some situations, vaccines may be available and used to aid in controlling the disease spread.		KLJ, CM, JC, ZF, TW

Response Action

Action	Complete	Responsible Person
Contact the UTM veterinarian for assistance.		KLJ, CM, JC, ZF, TW
Contact all local, state, and federal agriculture officials, to inform them to potential disease outbreak.		KLJ, CM, JC, ZF, TW
Coordinate with UTM veterinarian on quarantine recommendations.		KLJ, CM, JC, ZF, TW
If criminal activity is suspected, contact local law enforcement personnel.		KLJ, CM, JC, ZF, TW
Decontaminate personnel and animals that have had contact with the disease.		KLJ, CM, JC, ZF, TW
Given appropriate vaccinations to personnel and animals who have had contact with the disease.		KLJ, CM, JC, ZF, TW
If animals cannot be treated, euthanize based on guidance from UTM Veterinarian.		KLJ, CM, JC, ZF, TW
Dispose of animal bodies in accordance with guidance given by local, state, and federal agriculture officials.		KLJ, CM, JC, ZF, TW

Implement equipment quarantine for any equipment that may have come in contact with diseased crops. This equipment will need to be cleaned of all soil, plant life, and debris that is on the equipment.		KLJ, CM, JC, ZF, TW

Recovery Actions

Action	Complete	Responsible Person
Monitor livestock for further symptoms and report any to UTM veterinarian.		KLJ, CM, JC, ZF, TW
Coordinate with local and state agriculture and emergency management officials to determine eligibility of disaster assistance.		KLJ, CM, JC, ZF, TW
Animal disposal:		KLJ, CM, JC, ZF, TW
▪ Record any animal deaths.		
▪ Dispose of dead carcasses.		
▪ Check with state or local authorities for proper disposal methods for animal carcasses.		
Provide mental health services to personnel, students, visitors, first responders, and others who were involved in the disease outbreak.		
Decontaminate or replace equipment used during the response.		KLJ, CM, JC, ZF, TW
Conduct a hot wash and discuss lessons learned to identify additional mitigation activities or updates for the Plan.		

Fire

Mitigation Actions

Action	Complete	Responsible Person
Limit storage areas to the minimum needed to discourage storing unneeded chemicals.		
Store chemicals in a secure area:		
▪ Keep chemicals in locked, weather proof storage areas. Make sure these areas are well lit.		
▪ Post a sign indicating the storage area contains chemicals. The sign should also include at least two emergency contact numbers – the UTM Agricultural System Emergency Response Coordinator's and a local emergency response agency's (e.g., law enforcement or fire).		
▪ Keep storage areas dry and well ventilated; keep it from freezing and extreme high temperatures.		

▪ Store chemicals above ground level to prevent moisture problems (rusting or disintegration).		
▪ Locate storage areas at a safe site that will not be subjected to flooding.		
▪ Keep chemicals out of reach of children and pets.		
Notify first responders of where chemicals and hazardous materials are stored on UTM Agricultural System property.		
Store chemicals in their original containers. Never use food or beverage containers to store chemicals.		
▪ Keep containers tightly closed and clearly labeled.		
▪ If labels become worn or damaged, re-label the container with its contents or discard the chemical.		
▪ Do not store chemicals in damaged containers.		
Install sprinkler systems and fire alarms in all buildings.		
Separate hay storage areas to limit potential for loss.		
Keep flammable materials away from heat sources.		
Install fire extinguishers.		
Develop a plan for fires. This should include: ▪ Emergency phone numbers to call should a fire occur. ▪ An inventory of chemical products on the Agricultural System; include any protective equipment. ▪ A copy of the MSDS for all chemicals on the Agricultural System. ▪ Evacuation plans for all rooms and buildings on the Agricultural System.		
Post signs with chemical spill response procedures.		

Preparedness Actions

Action	Complete	Responsible Person
Test fire alarms on a monthly basis.		
Conduct fire evacuation drills on a regular basis.		
Test fire extinguishers on a semi-annual basis or according to state law.		
Coordinate with local fire department to inspect buildings for potential fire hazards.		
▪ Ensure fire exits are clear of debris.		

Clean equipment frequently.		
▪ Clean up fuel, oil, grease, and other flammable liquid spills.		
Inspect equipment routinely for damage that could cause a fire.		
▪ Keep a record of these inspections and repairs.		
Maintain grassy and overgrown areas near buildings, these areas should be mowed on a regular basis to keep fire from spreading.		

Response Actions

Action	Complete	Responsible Person
If fire, smoke, or an explosion occurs in a building, activate the nearest fire pull station.		
▪ Evacuate using established evacuation routes and call 911 (or 7777 if phone line is busy).		
If fire, smoke, or an explosion occurs in a building such as a barn/shed or in a field, evacuate the area and inform other personnel/students.		
Call 911 immediately (or 7777 if phone line is busy).		
If anyone has become incapacitated, call 911 (or 7777 if phone line is busy).		
If trained, control the fire/contain the fire.		
▪ If possible, safely stop the fire (e.g., use fire extinguisher, turn on sprinklers manually if they have not started themselves).		
▪ Do what you can to keep the fire from spreading (e.g., apply water, use fire extinguisher, dig a trench to contain fire, move roll bales of hay).		
▪ If the fire is too big for one person to control and extinguish, call 911 or the local emergency number.		
If personnel are not trained as a fire fighter, do not let them near the site of the fire!		
Notify the UTM Emergency Management Coordinator.		
Notify UTM Police Department.		
Take caution: Personal Safety.		
▪ Do not expose yourself unnecessarily to danger.		
▪ Avoid situations where you may become trapped.		

▪ Approach the fire from a safe direction. Only do this if trying to extinguish a small fire with a fire extinguisher.		
▪ Avoid spills that are reacting (hissing, bubbling, smoking, gassing, burning).		
▪ Evacuate the area; set up barriers to keep people (and animals) out.		KLJ, CM, JC, ZF, TW
Evacuate animals if time allows.		KLJ, CM, JC, ZF, TW
Ensure all personnel, students, and visitors are accounted for.		
If arson is suspected notify Tennessee State Fire Marshal's Office or Tennessee State Police.		

Recovery Actions

Action	Complete	Responsible Person
Coordinate with local fire department and Tennessee State Fire Marshal's Office to determine cause of fire. Once cause is determined work to mitigate the causing factors in other buildings.		
Report building damage to campus facilities management.		
Update fire evacuation routes.		
Monitor animals for signs of stress.		KLJ, CM, JC, ZF, TW
Animal disposal:		KLJ, CM, JC, ZF, TW
▪ Record any animal deaths.		
▪ Dispose of dead carcasses.		
▪ Check with state or local authorities for proper disposal methods for animal carcasses.		
Provide mental health services for personnel involved in the response.		
For debris removal, the UTM Agricultural System Emergency Response Coordinator should contact the UTM Emergency Management Coordinator or the Weakley County Emergency Management Director for guidance on disposal and reimbursement.		
Conduct a hot wash and discuss learned to identify additional mitigation activities or updates for the Plan.		

Criminal Activity

Mitigation Actions

Action	Complete	Responsible Person
Coordinate with UTM Police Department periodically to receive tours and become familiar with UTM Agricultural System grounds and buildings.		
Work with UTM Police Department to identify security vulnerabilities on the Agricultural System and develop a plan to minimize susceptibility to criminal activity.		
Develop a building floor plan for each facility.		
Minimize vehicular access to areas of the UTM Agricultural System in which visitors do not need access (e.g., insuring gates are locked).		
Install surveillance cameras near entrance and exit ways of buildings and critical resources.		
Ensure UTM Agricultural System personnel are aware of specific roles/responsibilities and emergency procedures to take in response to a criminal activity.		

Preparedness Actions

Action	Complete	Responsible Person
Watch for suspicious activity or abnormal behavior.		
Educate and train UTM Agricultural System personnel on procedures for responding to identified threats.		
Identify, coordinate, and train with additional law enforcement agencies that may provide assistance in an incident.		
Conduct exercises periodically to test response actions for criminal activities (e.g., practice lockdown drills for emergencies such as a shooting/intruder in the building).		
Keep the Bomb Threat Checklist accessible at all phones (see Appendix B – Checklist).		
Take photographs of buildings and equipment; maintain records.		
Test building security alarms on a regular basis.		
Ensure auxiliary lighting is functional.		

Response Actions

Action	Complete	Responsible Person
Threat of Harm/Criminal Activity – In General		
▪ Do not threaten your safety or safety of others in attempt to deter a crime – Never put yourself in a dangerous situation.		
▪ Move away from the vicinity of incident.		
▪ Call 911 immediately (or 7777 if line is busy) to report a crime in progress or if you suspect criminal activity that may be life threatening.		
▪ Assist law enforcement response efforts as requested; this typically includes providing information (answering questions, providing maps/blueprints, access to video footage, etc.) and providing accessibility to secured/locked locations.		
▪ Do not report any information related to a criminal activity to the media. Any inquiry for information by media sources shall be directed to contact the UTM Emergency Management Coordinator or the PIO that has been identified.		
▪ Do not disturb the scene of any crime.		
▪ After evacuating from buildings or leaving an area due to a criminal act, do not re-enter the area until an "All Clear" is issued.		
Protest/Riots/Civil Unrest		
▪ In the event one or more people begin to protest an issue, or make verbal remarks publically that disturb normal operations on the Agricultural System, call UTM Police at 911 (or 7777 if line is busy). ▪ Peaceful protest can quickly turn into a riot/civil unrest; informing police early can mitigate the situation.		
▪ In the event a riot/civil unrest occurs, evacuate buildings using established evacuation routes, or if outside, move away from the vicinity of the incident.		
Terrorist Threats/Terrorism		
▪ Toxic/Irritant Gas		
▪ Immediately vacate the building using established evacuation routes.		

▪ Call UTM Police at 911 (or 7777 if line is busy).		
▪ Account for all building occupants upon arrival at the designated meeting area.		
▪ Infectious Agents		
▪ Do not move or handle the material. Immediately vacate the building using the established evacuation route.		
▪ Call UTM Police at 911 (or 7777 if line is busy).		
▪ Account for all building occupants upon arrival to the designated meeting area.		
▪ Segregate individuals who may have been exposed to an infectious agent.		
Bomb Threats ▪ Most bomb threats are received by telephone, although some may be made via email or letter. ▪ Maintain calm and gather as much information as possible (refer to Appendix B – Checklist).		
▪ Call 911 immediately (or 7777 if line is busy).		
▪ Do not touch suspicious/unfamiliar objects. ▪ If the bomb threat is made by note or mail, stop handling the letter/package.		
▪ Do not use radios or walkie-talkies after receiving a bomb threat, as electronic devices can activate bombs.		
▪ Evacuate upon response from the Building Managers, department chair, and/or UTM police officer.		
▪ Upon an evacuation, account for all building occupants at the designated meeting area.		
Gunshots heard		
▪ If you are involved in a situation where gunshots are heard, the following actions are recommended:		
▪ Exit the building immediately.		
▪ Notify anyone you may encounter to exit the building immediately.		
▪ Call UTM Police at 911 (or 7777 if line is busy) and provide details of the situation.		

▪ If you are directly involved and exiting the building is not possible, the following actions are recommended:		
▪ Go to the nearest room or office.		
▪ Close and lock or barricade the door.		
▪ Cover the door windows and turn off lights.		
▪ Keep quiet and act as if no one is in the room.		
▪ DO NOT answer the door.		
▪ Call UTM Police at 911 (or 7777 if line is busy).		
▪ Wait for emergency responders to assist you out of the building.		
Hostage Situation		
▪ Immediately evacuate the building, using the established evacuation route. Carefully avoid the attention of those taking hostages.		
▪ Take no action to intervene.		
▪ Call UTM Police at 911 (or 7777 if line is busy). Provide as much accurate information as possible, and if it is safe to do so, stay on the line with the dispatcher.		

Recovery Actions

Action	Complete	Responsible Person
Inform the UTM Emergency Management Coordinator of criminal activity that occurs on the Agricultural System.		
Continue to work with law enforcement on investigation/follow-up activities.		
Provide mental health service support/information for victims/witnesses to a crime that occurred on UTM Agricultural System property.		
Take pictures of any damages and identify property losses to insurance companies.		
Contact facilities management for damages that affect Agricultural System buildings.		
Decontaminate any buildings or Agricultural System equipment.		
In the event animals or crops are harmed:		KLJ, CM, JC, ZF, TW
▪ Inform the veterinarian of any animal injuries or contamination.		

▪ The veterinarian shall aide the injured animals, and depending upon the situation, will decontaminate or euthanize animals as deemed necessary.		
▪ Animal disposal:		
▪ Record any animal deaths.		
▪ Dispose of dead carcasses.		
▪ Check with your state or local authorities for proper disposal methods for animal carcasses.		
▪ Destroy contaminated crops used for feed.		
Conduct a hot wash and discuss learned to identify additional mitigation activities or updates for the Plan.		

Bomb Threat

A Bomb Threat Checklist should be readily available at each phone.

QUESTIONS TO ASK:

1. When is the bomb going to explode?
2. Where is it right now?
3. What does it look like?
4. What kind of bomb is it?
5. What will cause it to explode?
6. Did you place the bomb?
7. Why?
8. What is your address?
9. What is your name?

CALLER'S VOICE:

Calm	Nasal	Angry	Stutter	Excited	Lisp
Slow	Raspy	Rapid	Deep	Soft	Ragged
Loud	Laughter		Clearing Throat	Deep Breathing	
Crying	Normal		Cracking Voice	Disguised	

THREAT LANGUAGE:

Distinct	Accent	Well Spoken (educated)		Message read by threat maker
Incoherent	Whispered	Foul	Familiar	
Irrational	Taped	Slurred		

If voice is familiar, who did it sound like? _____

Write the Exact Wording of the Threat:

BACKGROUND SOUNDS

Street noises	Factory machinery	Crockery	Animal noises	Voices
Clear	PA System	Static	Music	Local
Long distance	House noises	Motor	Office machinery	

Other_____

CALLER INFORMATION:

Sex of Caller:_____Race:_____Age:_____

NUMBER AT WHICH CALL IS RECEIVED: _____

Time:_____Date:____/_____/_____

REMARKS:

_____

_____

Name: _____

Position: _____

Phone Number: _____

Appendix C – Maps

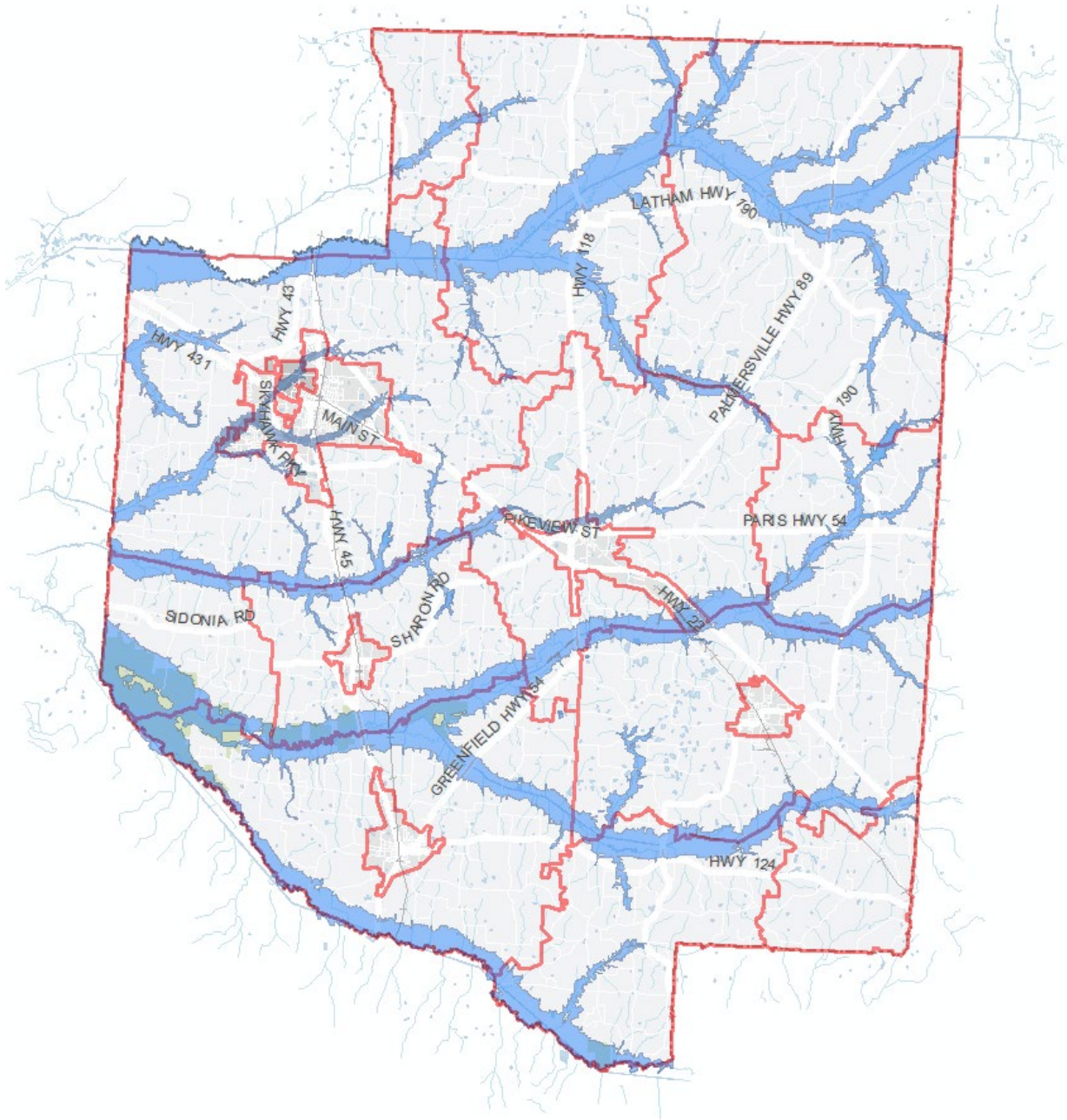


Figure 2: Weakley County Flood Map

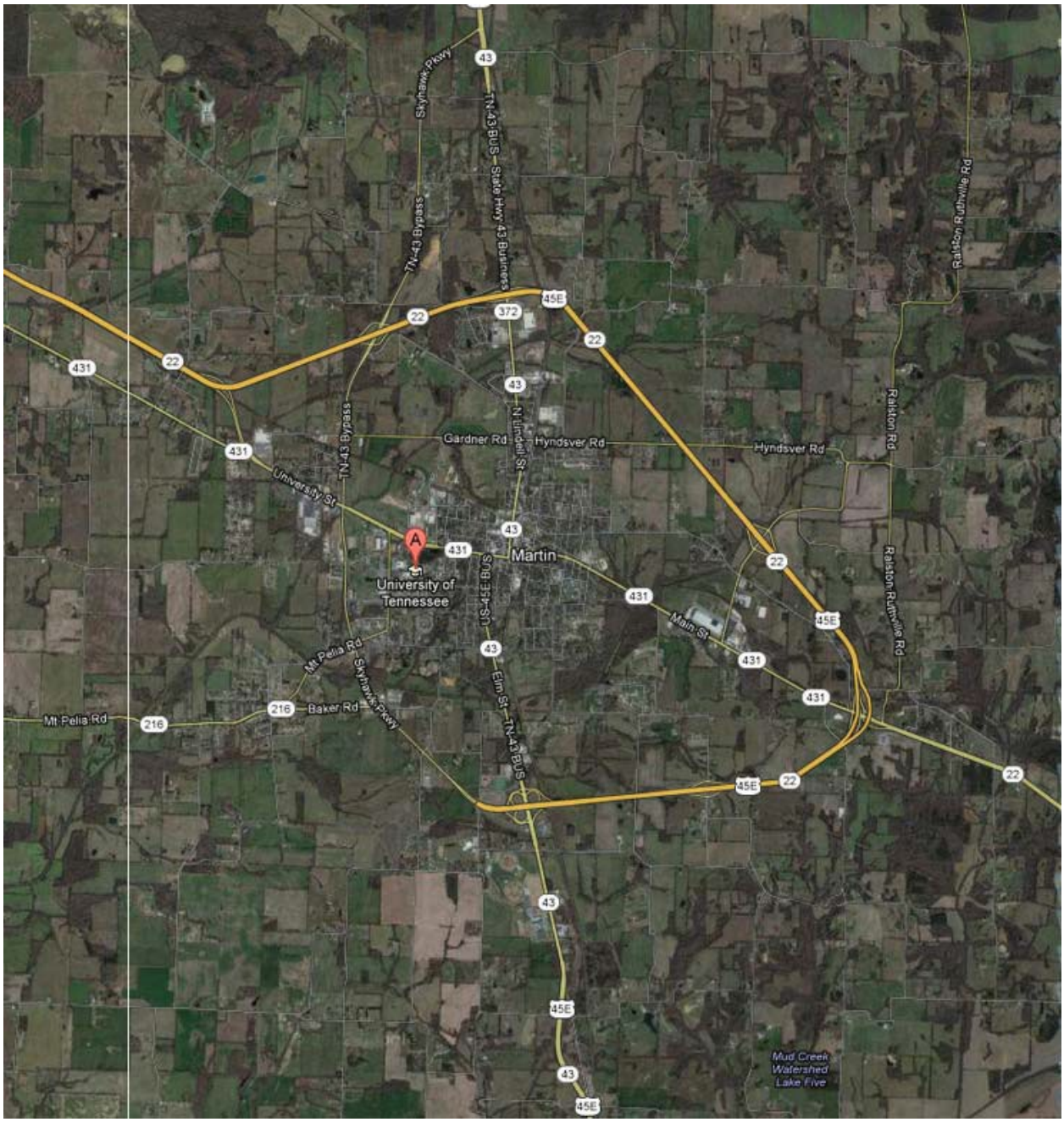


Figure 3: Weakley County Major Roadways

Appendix D – Resources

Animal Feed	
Type	By-product Cattle Feed
Quantity	3T
Location Stored	Storage bin at Beef Feedlot
Delivery Schedule	As called
Supplier	Weakley Farmers Co-op
Supplier Phone	731-587-9531
Supplier Location	Martin, TN
Alternate Supplier	
Alternate Supplier Phone	
Alternate Supplier Location	
Type	13% Horse Feed
Quantity	3T
Location Stored	Storage Bin at Graves Stables
Delivery Schedule	As called
Supplier	Weakley Farmers Co-op
Supplier Phone	731-587-9531
Supplier Location	Martin, TN
Alternate Supplier	
Alternate Supplier Phone	
Alternate Supplier Location	
Type	Sheep and/or Goat Pelleted Feed
Quantity	500lb
Location Stored	Sheep Unit
Pickup Schedule	As called/picked up
Supplier	Weakley Farmers Co-op
Supplier Phone	731-587-9531
Supplier Location	Martin, TN
Alternate Supplier	
Alternate Supplier Phone	
Alternate Supplier Location	

Water Source	
Type (City or Fresh water)	City
Storage Location	
Supplier	City of Martin
Supplier Phone	731-587-3126
Supplier Location	Martin, TN
Alternate Supplier Location	

Equipment – Agricultural System Vehicles	
Type	John Deere sprayer
Quantity	1
Location Parked	Farm shop
Type	John Deere 1780 planter
Quantity	1
Location Parked	Farm shop
Type	3pt sprayer
Quantity	1
Location Parked	Farm shop
Type	Chevrolet 3500
Quantity	1
Location Parked	Farm shop
Type	Ford F150
Quantity	1
Location Parked	Diagnostics Lab
Type	Chevrolet cargo van
Quantity	1
Location Parked	Diagnostics lab
Type	Dodge 2500
Quantity	1
Location Parked	Farm shop
Type	Ford F250
Quantity	1
Location Parked	Farm shop

Equipment – Other	
Type	John Deere Gator
Quantity	1
Location Stored	Farm shop
Type	Kubota UTV
Quantity	1
Location Stored	Graves Stables
Type	Kubota UTV (DART)
Quantity	1
Location Stored	Diagnostics Lab
Type	Polaris UTV (DART)
Quantity	1
Location Stored	Farm shop
Type	Hay wagon
Quantity	1
Location Stored	Hay barn
Type	Flat trailer
Quantity	3
Location Stored	Farm shop
Type	Gooseneck stock trailer
Quantity	1
Location Stored	Swine facility, building 7
Type	Bumper hitch stock trailer
Quantity	1
Location Stored	Swine facility, building 7
Type	WW horse trailer
Quantity	1
Location Stored	Swine facility, building 7

Fuel	
Type	Diesel
Quantity	100 gallon
Location Stored	Motor pool
Security	locked
Delivery Schedule	As called
Supplier	
Supplier Phone	
Supplier Location	
Alternate Supplier	Weakley Farmers Co-op
Alternate Supplier Phone	731-587-9531
Alternate Supplier Location	Martin, TN

Chemicals	
Type	2-4D
Quantity	5 gallon
Location	Chemical room
Type	Roundup
Quantity	40 gallon
Location	Chemical room
Type	MSMA
Quantity	5 gallon
Location	Chemical room

Appendix E – Mutual Aid Agreements

APPENDIX W: Mutual Aid Agreement with City of Martin

MEMORANDUM OF UNDERSTANDING/MUTUAL ASSISTANCE AGREEMENT

This MEMORANDUM OF UNDERSTANDING/MUTUAL ASSISTANCE AGREEMENT (MOU/MAA) is made and entered into this the 1st day of April, 2006, by and between the City of Martin, on behalf of the Martin Police Department (MPD), and the University of Tennessee at Martin, on behalf of the UTM Department of Public Safety (DPS).

WHEREAS, the parties are charged with the enforcement of the laws of the State of Tennessee, City ordinances, and University of Tennessee at Martin Rules and Regulations, as applicable to each.

WHEREAS, jurisdiction of the two agencies often overlaps; and
WHEREAS, in order to update the roles and area jurisdiction of each agency, the parties enter into this MOU/MAA to replace an earlier MOU/MAA dated October 17, 2000.

FROM AND AFTER EXECUTION OF THIS DOCUMENT, THE MPD AND DPS will follow the guidelines set forth in this document. For purposes of this document, "University area means any property owned, leased or operated by UTM and any public roads or right-of-ways contiguous to, or within the perimeter of, such facilities or properties". This document will remain in effect until updated or superseded.

1. PARKING CITATIONS. Both agencies will issue citations for violations of all regulations on streets and roadways within the University area as needed. The DPS has the primary responsibility of enforcement of parking on the UTM campus. The MPD has the primary responsibility of enforcement of parking in the City of Martin and on streets contiguous to the University. The MPD will provide to the DPS City of Martin parking citation forms to be used by the DPS to enforce City parking regulations.

2. TRAFFIC REGULATIONS. The MPD and DPS will enforce traffic regulations, including DUI and DWI, in the University area in order to maintain a safe and secure environment for both University and City of Martin residents. Each department will take an active role in traffic enforcement in all areas of the University area as well as upon the street and roadways traveled upon by each agency in order to perform their duties. It is understood that the MPD has the primary duty and responsibility for traffic enforcement in the City of Martin, however, the MPD and the DPS both have the responsibility to render aid and assistance and perform traffic stops should such action be warranted to ensure the safety of the University community. When aid or assistance is needed by either agency, they may call upon the other to aid or assist in working accidents or other traffic situations as needed.

Should either agency need assistance during a traffic stop or in order to make a traffic stop, they may call upon the other agency for assistance. The MPD will provide to the DPS moving violation citation forms to be used by the DPS to enforce traffic regulations on public streets and roadways. When making traffic stops on streets not contiguous to University, UTM DPS officers should check out with the MPD dispatcher.

3. TRAFFIC ACCIDENTS. The DPS will investigate all vehicular accidents on University property. The MPD will investigate all motor vehicle accidents in the City of Martin including those which occur on streets contiguous to the University. The MPD or the Tennessee Highway Patrol may be called for assistance if an accident on University property involves fatalities or serious bodily injuries which may result in death.

4. RESPONSE TO CALLS. When the DPS receives a call concerning an incident on campus, they will respond to the call. If the MPD receives a call concerning an incident on the UTM campus, the MPD will immediately notify the DPS of the call, and dispatch an officer if requested by DPS personnel or when appropriate. A DPS officer will also be dispatched to the scene of the call. If a call concerning an off campus incident is received by the DPS, the MPD will be notified immediately and an MPD officer will be dispatched if appropriate. Either agency may request assistance from the other agency when responding or at the scene of a call which is on or off campus when such assistance is deemed necessary to protect the property or personal safety of members of the University community. The DPS will notify the MPD of emergency medical calls received on campus if an ambulance has been requested.

5. INVESTIGATIONS OF CRIMES AND INCIDENTS. DPS officers will respond to all reported crimes and incidents on campus. The MPD will respond to all reported crimes and incidents in the City of Martin and on City streets contiguous to the University. If the crime or incident is such that either agency requires additional technical assistance, special equipment, personnel resources, or expertise not available in the agency with primary jurisdiction, the other agency will respond and provide assistance. Primary investigative and operational jurisdiction for crimes and incidents which occur on campus will lie with the DPS. Primary investigative and operational jurisdiction for crimes and incidents which occur off campus or on streets contiguous to the University will lie with the MPD. If a single series of offenses occur on both University property and off campus but within the City of Martin, primary investigative jurisdiction will lie with the agency having jurisdiction over the most serious offense committed during the single series of offenses.

If either agency makes an arrest or becomes involved in an investigation of an incident which occurred in the primary jurisdiction of the other agency, the agency with primary jurisdiction will have operational and investigative jurisdiction. In all on campus cases involving death, the MPD will assume primary investigative responsibility, and will receive assistance from the DPS as requested. In all cases of rape reported on campus, the DPS will have primary investigative responsibility, and the MPD will be notified as the secondary investigative agency. In both instances, communication and cooperation between both agencies will be maintained.

6. ORDER MAINTENANCE. The DPS will have primary responsibility for maintaining order on University property. The MPD will have primary responsibility for maintaining order in the City of Martin and on roadways contiguous to the campus. However, the DPS shares the responsibility of maintaining order on roadways contiguous to the University and on/in properties/facilities in the immediate vicinity of the University which are used exclusively by campus sanctioned organizations. Either agency may call upon the other in order to maintain order, regardless of the location of the incident.

7. INVESTIGATIVE/INTELLIGENCE. Investigative and intelligence information on matters of mutual concern will be delivered by the department receiving such information to the other department in a timely manner. Should either department request specific officer/investigator assistance in specific cases, the department will make ever reasonable effort to approve the request. If either agency intends to execute an arrest or search warrant within the primary jurisdiction of the other agency, the other agency will be advised prior to warrant execution.

8. E-911 CALLTAKER/DISPATCH RESPONSIBILITY. Responsibility for receiving and dispatching all 911 emergency calls originating within the city limits of the City of Martin lies within the City of Martin E-911 Communications Department jurisdiction. Calls received as 911 calls concerning incidents on campus will be dispatched immediately to UTM DPS personnel with appropriate secondary services dispatched. UTM will be responsible for maintenance of the 911 locator database for all phones included in the UTM telephone system. UTM will assume responsibility for expenses associated with routing 911 calls to the City of Martin E-911 Communications Department.

9. CRIMES AGAINST PERSONS. During the normal course of their duties, officers of both the MPD and the DPS are responsible for assisting one another in preventing the consequences of violent crimes in the University area and the City of Martin.

10. **LEGAL STATUS AND LIABILITY.** When acting pursuant to this written agreement, officers shall be covered by the liability provisions applicable to their respective agencies.

11. **AMENDMENT OR TERMINATION.** This MOU/MAA may be amended at any time by written agreement of the parties. It may be terminated by either party upon written notification of the other party.

RANDY BRUNDIGE
MAYOR
CITY OF MARTIN, TENNESSEE

Dr. NICK DUNAGAN
CHANCELLOR
UNIVERSITY OF TENNESSEE AT MARTIN

[Return to Table of Contents]

APPENDIX X: Mutual Aid Agreement with Weakley County Emergency

MEMORANDUM OF UNDERSTANDING

This Memorandum of Understanding (MOU) establishes a reciprocal agreement between the University of Tennessee, on behalf of its Martin campus, and the Weakley County Emergency Management Agency to provide mutual assistance when necessary during emergency situations.

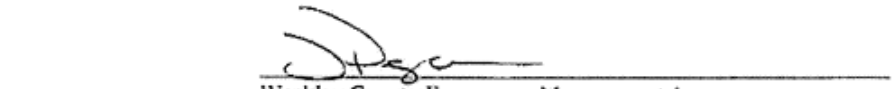
The University of Tennessee at Martin will make available facilities, equipment, personnel, and expertise as dictated by the situation. The University of Tennessee at Martin will maintain sovereign control of these resources and their availability will be prioritized first to the necessity of the campus community and then dispersed as feasibility allows.

The University of Tennessee at Martin will have present a representative authorized to make decisions involving University Resources at the highest level practical in the National Incident Management System (NIMS) hierarchy of control. Once the resources are deployed, they may be placed under the span of control of the forward agency, but the University of Tennessee at Martin reserves the authority to re-call or supersede any directives involving University resources through the Unified Command System.

The Weakley County Emergency Management Agency (EMA) will make available facilities, equipment, personnel, and expertise as dictated by the situation. They further agree to make requests for assistance to State Emergency Management Agencies if necessary and activate the established protocol to mobilize Federal Emergency Management assistance as required.

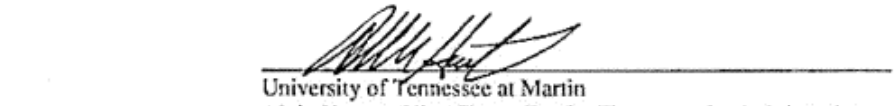
The Weakley County EMA will coordinate the utilization of University Resources through the NIMS Unified Command System and will make available those deployed resources if re-call is demanded to address the imminent needs of the University. This determination will be made by the Senior University Representative in command present and will be a strategic agreement by members of the Unified Command Staff.

The signatures below indicate an understanding and dedication of compliance with the integrities of this MOU and the approval thereof:



Weakley County Emergency Management Agency
Jamison Peevyhouse, Director

2-6-2009
Date



University of Tennessee at Martin
Alvin Hooten, Vice Chancellor for Finance and Administration

2/4/09
Date

[Return to Table of Contents]

Appendix F – Exercise and Training

Trained and knowledgeable personnel are essential for the prompt and proper execution of this Plan. The UTM Agricultural System Emergency Response Coordinator will ensure that all UTM Agricultural System response personnel have a thorough understanding of their assigned responsibilities in a disaster or emergency situation, as well as, how their role and responsibilities interface with the other response components of this Plan. All personnel will be provided with the necessary training to execute those responsibilities in an effective and responsible manner.

The UTM Agricultural System Emergency Response Coordinator is responsible for the development, administration, and maintenance of a comprehensive training and exercise program customized to the needs of the UTM Agricultural System. This program will be comprised of a general, core, functionally specific, as well as, on-going refresher training programs designed to attain and sustain an acceptable level of emergency preparedness for the UTM Agricultural System.

Training will be based on federal, state, and local guidance. Instructors may be selected from the UTM Agricultural System personnel, local, state, and federal government officials, private industry, the military, and/or volunteer groups trained in emergency services and response. All training and exercises conducted for the UTM Agricultural System will be documented. Training needs will be identified and records maintained for all personnel assigned emergency response duties in a disaster.

The UTM Agricultural System Emergency Response Coordinator will develop, plan, and conduct an emergency response exercise annually. These exercises will be designed to not only test the Plan, but to train all appropriate officials, emergency response personnel, and UTM Agricultural System personnel. Emergency response organizations, quasi-public, volunteer groups, and/or agencies will be encouraged to participate. Deficiencies identified by the exercise will be addressed immediately.

It is strongly recommended that exercises be conducted in accordance with the Homeland Security Exercise and Evaluation Program (HSEEP). HSEEP is a capabilities- and performance-based exercise program that provides a standardized policy, methodology, and terminology for exercise design, development, conduct, evaluation, and improvement planning. HSEEP also provides tools and resources to facilitate the management of self-sustaining exercise programs.

In accordance with HSPD-8 and the National Preparedness Goal, HSEEP uses a capabilities-based approach to individual exercises and exercise program management. In the spirit of NIMS, HSEEP promulgates standardized policies and terminology usable by officials and emergency responders at all levels of government.

The Independent Study (IS) Courses listed below are self-paced courses offered free of charge online through the Emergency Management Institute (EMI). These courses can be accessed at http://training.fema.gov/IS/.

Recommended Training

Course ID	Course Title
IS-100.b	Introduction to Incident Command System
IS-700	National Incident Management System (NIMS), An Introduction
IS-111	Livestock in Disasters

Appendix G – Glossary of Key Terms

After Action Report/Improvement Plan
The main product of the evaluation and improvement planning process is the AAR/IP. The AAR/IP has two components: an AAR, which captures observations of an exercise and makes recommendations for post-exercise improvements; and an IP, which identifies specific corrective actions, assigns them to responsible parties, and establishes targets for their completion.

American Red Cross
A humanitarian organization led by volunteers, that provides relief to victims of disasters and helps prevent, prepare for, and respond to emergencies. It does this through services that are consistent with its Congressional Charter and the Principles of the International Red Cross Movement.

Assessment
The process of acquiring, collecting, processing, examining, analyzing, evaluating, monitoring, and interpreting the data, information, evidence, objects, measurements, images, sound, etc., whether tangible or intangible, to provide a basis for decision making.

Command
The act of directing, ordering, or controlling by virtue of explicit statutory, regulatory, or delegated authority.

Communications
The process of transmission of information through verbal, written, or symbolic means.

Continuity of Operations
An effort within individual organizations to ensure that Primary Mission Essential Functions continue to be performed during a wide range of emergencies.

Coordinate
To advance an analysis and exchange of information systematically among principals who have or may have a need to know certain information to carry out specific incident management responsibilities.

Corrective Actions
The implementation of procedures that are based on lessons learned from actual incidents or from training and exercises.

Critical Infrastructure
Assets, systems, and networks, whether physical or virtual, so vital to the United States that the incapacitation or destruction of such assets, systems, or networks would have a debilitating impact on security, national economic security, national public health or safety, or any combination of those matters.

Decontamination
The process of making people, objects, or areas safe by: absorbing, destroying, neutralizing, making harmless, or removing hazardous materials.

Emergency
Any incident, whether natural or manmade, that requires responsive action to protect life or property. Under the Robert T. Stafford Disaster Relief and Emergency Assistance Act, an emergency means any occasion or instance for which, in the determination of the President,

Federal assistance is needed to supplement State and local efforts and capabilities to save lives and to protect property and public health and safety, or to lessen or avert the threat of a catastrophe in any part of the United States.

Emergency Alert System

A network of broadcast stations interconnecting facilities authorized by the Federal Communications Commission (FCC) to operate in a controlled manner to warn and inform the public of needed protective actions in the event of a disaster or emergency situation.

Emergency Management/Response Personnel

Includes Federal, State, territorial, tribal, sub-state regional, and local governments, non-governmental organizations (NGOs), private sector-organizations, critical infrastructure owners and operators, and all other organizations and individuals who assume an emergency management role. (Also known as emergency responder.)

Emergency Management Plan/Emergency Operations Plan

An ongoing plan for responding to a wide variety of potential hazards.

Emergency Operations Center

The physical location at which the coordination of information and resources to support incident management (on-scene operations) activities normally takes place. An EOC may be a temporary facility or may be located in a more central or permanently established facility, perhaps at a higher level of organization within a jurisdiction. EOCs may be organized by major functional disciplines (e.g., fire, law enforcement, medical services), by jurisdiction (e.g., Federal, State, regional, tribal, city, county), or by some combination thereof.

Emergency Support Function

A functional area of response activity established to facilitate the delivery of federal assistance required during the immediate response phase of a disaster to save lives, protect property and public health, and maintain public safety.

Evacuation

The organized, phased, and supervised withdrawal, dispersal, or removal of civilians from dangerous or potentially dangerous areas, and their reception and care in safe areas.

Exercise

An exercise is an instrument to train for, assess, practice, and improve performance in prevention, protection, response, and recovery capabilities in a risk-free environment. Exercises can be used for: testing and validating policies, plans, procedures, training, equipment, and interagency agreements; clarifying and training personnel in roles and responsibilities; improving interagency coordination and communications; identifying gaps in resources; improving individual performance; and identifying opportunities for improvement. (Note: an exercise is also an excellent way to demonstrate community resolve to prepare for disastrous events).

Federal Disaster Assistance

Aid to disaster victims and/or state and local governments by federal agencies under provisions of the Robert T. Stafford Relief and Emergency Assistance Act of (PL 93-288).

Hazardous Materials

Substances or materials which may pose unreasonable risks to health, safety, property, or the environment when used, transported, stored or disposed of, which may include materials which are solid, liquid, or gas. Hazardous materials may include toxic substances, flammable and ignitable materials, explosives, or corrosive materials, and radioactive materials.

Incident
An occurrence, natural or manmade, that requires a response to protect life or property. Incidents can, for example, include major disasters, emergencies, terrorist attacks, terrorist threats, civil unrest, wild-land and urban fires, floods, hazardous materials spills, nuclear accidents, aircraft accidents, earthquakes, hurricanes, tornadoes, tropical storms, tsunamis, war-related disasters, public health and medical emergencies, and other occurrences requiring an emergency response.

Incident Command
The Incident Command System organizational element responsible for overall management of the incident and consisting of the Incident Commander (either single or unified command structure) and any assigned supporting staff.

Incident Commander
The individual responsible for all incident activities, including the development of strategies and tactics and the ordering and release of resources. The IC has overall authority and responsibility for conducting incident operations and is responsible for the management of all incident operations at the incident site.

Incident Command System
A standardized on-scene emergency management construct specifically designed to provide an integrated organizational structure that reflects the complexity and demands of single or multiple incidents, without being hindered by jurisdictional boundaries. ICS is the combination of facilities, equipment, personnel, procedures, and communications operating within a common organizational structure, designed to aid in the management of resources during incidents. It is used for all kinds of emergencies and is applicable to small as well as large and complex incidents. ICS is used by various jurisdictions and functional agencies,both public and private, to organize field-level incident management operations.

Incident Management
The broad spectrum of activities and organizations providing effective and efficient operations, coordination, and support applied at all levels of government, utilizing both governmental and nongovernmental resources to plan for, respond to, and recover from an incident, regardless of cause, size, or complexity.

Jurisdiction
A range or sphere of authority. Public agencies have jurisdiction at an incident related to their legal responsibilities and authority. Jurisdictional authority at an incident can be political or geographical (e.g., Federal, State, tribal, local boundary lines) or functional (e.g., law enforcement, public health).

Liaison
A form of communication for establishing and maintaining mutual understanding and cooperation.

Livestock
Cattle, equine (horses), sheep, goats, swine (pigs), poultry and other animals designated by the State Department of Agriculture.

Local Emergency
The condition declared by the local governing body when, in its judgment, the threat or actual occurrence of a disaster is or threatens to be of sufficient severity and magnitude to warrant coordinated local government action to prevent, or alleviate loss of life, property damage, or hardship. Only the Governor, upon petition of a local governing body, may declare a local

emergency arising wholly or substantially out of a resource shortage when he deems the situation to be of sufficient magnitude to warrant coordinated local government action to prevent or alleviate, the hardship or suffering, threatened or caused thereby.

Local Emergency Planning Committee

Appointed representatives of local government, private industry, business, environmental groups, and emergency response organizations responsible for ensuring that the hazardous materials planning requirements of the Superfund Amendments and Reauthorization Act of 1986 (SARA Title III) are complied with.

Logistics

The process and procedure for providing resources and other services to support incident management.

Mitigation

Activities providing a critical foundation in the effort to reduce the loss of life and property from natural and/or manmade disasters by avoiding or lessening the impact of a disaster and providing value to the public by creating safer communities. Mitigation seeks to fix the cycle of disaster damage, reconstruction, and repeated damage. These activities or actions, in most cases, will have a long-term sustained effect.

Mutual Aid Agreement or Assistance Agreement

Written or oral agreement between and among agencies/organizations and/or jurisdictions that provides a mechanism to quickly obtain emergency assistance in the form of personnel, equipment, materials, and other associated services. The primary objective is to facilitate rapid, short-term deployment of emergency support prior to, during, and/or after an incident.

National Incident Management System

A set of principles that provides a systematic, proactive approach guiding government agencies at all levels, nongovernmental organizations, and the private sector to work seamlessly to prevent, protect against, respond to, recover from, and mitigate the effects of incidents, regardless of cause, size, location, or complexity, in order to reduce the loss of life or property and harm to the environment.

National Response Framework

A guide to how the Nation conducts all-hazards response.

National Weather Service

The federal agency which provides localized weather information to the population, and during a weather-related emergency, to state and local emergency management officials.

Nongovernmental Organization

An entity with an association that is based on interests of its members, individuals, or institutions. It is not created by a government, but it may work cooperatively with government. Such organizations serve a public purpose, not a private benefit. Examples of NGOs include faith-based charity organizations and the American Red Cross. NGOs, including voluntary and faith-based groups, provide relief services to sustain life, reduce physical and emotional distress, and promote the recovery of disaster victims. Often these groups provide specialized services that help individuals with disabilities. NGOs and voluntary organizations play a major role in assisting emergency managers before, during, and after an emergency.

Preparedness
A continuous cycle of planning, organizing, training, equipping, exercising, evaluating, and taking corrective action in an effort to ensure effective coordination during incident response. Within the National Incident Management System, preparedness focuses on the following elements: planning; procedures and protocols; training and exercises; personnel qualification and certification; and equipment certification.

Prevention
Actions to avoid an incident or to intervene to stop an incident from occurring. Prevention involves actions to protect lives and property. It involves applying intelligence and other information to a range of activities that may include such countermeasures as deterrence operations; heightened inspections; improved surveillance and security operations; investigations to determine the full nature and source of the threat; public health and agricultural surveillance and testing processes; immunizations, isolation, or quarantine; and, as appropriate, specific law enforcement operations aimed at deterring, preempting, interdicting, or disrupting illegal activity and apprehending potential perpetrators and bringing them to justice.

Private Sector
Organizations and individuals that are not part of any governmental structure. The private sector includes for-profit and not-for-profit organizations, formal and informal structures, commerce, and industry.

Protocol
A set of established guidelines for actions (which may be designated by individuals, teams, functions, or capabilities) under various specified conditions.

Public Information Officer
A member of the Command Staff responsible for interfacing with the public and media and/or with other agencies with incident-related information requirements.

Recovery
The development, coordination, and execution of service- and site-restoration plans; the reconstitution of government operations and services; individual, private-sector, nongovernmental, and public assistance programs to provide housing and to promote restoration; long-term care and treatment of affected persons; additional measures for social, political, environmental, and economic restoration; evaluation of the incident to identify lessons learned; post-incident reporting; and development of initiatives to mitigate the effects of future incidents.

Reimbursement
A mechanism to recoup funds expended for incident-specific activities.

Resources
Personnel and major items of equipment, supplies, and facilities available or potentially available for assignment to incident operations and for which status is maintained. Resources are described by kind and type and may be used in operational support or supervisory capacities at an incident or at an Emergency Operations Center.

Response
Activities that address the short-term, direct effects of an incident. Response includes immediate actions to save lives, protect property, and meet basic human needs. Response also includes the execution of emergency operations plans and of mitigation activities designed to limit the loss of life, personal injury, property damage, and other unfavorable outcomes. As indicated by the situation, response activities include applying intelligence and other information to lessen the

effects or consequences of an incident; increased security operations; continuing investigations into nature and source of the threat; ongoing public health and agricultural surveillance and testing processes; immunizations, isolation, or quarantine; and specific law enforcement operations aimed at preempting, interdicting, or disrupting illegal activity, and apprehending actual perpetrators and bringing them to justice.

Shelter in Place

In the event of a large chemical spill or a biological weapons attack, the safest course of action may be to "shelter in place." Close all windows and doors, arrange to get HVAC systems shut down and remain in the indoor safe area until you receive further instructions.

State of Emergency

The condition declared by the Governor when, in his judgment, a threatened or actual disaster in any part of the state is of sufficient severity and magnitude, to warrant disaster assistance by the state, to supplement local efforts to prevent/alleviate loss of life and property damage.

Superfund Amendments and Reauthorization Act of 1986

Established federal regulations for the handling of hazardous materials.

Terrorism

As defined in the Homeland Security Act of 2002, activity that involves an act that is dangerous to human life or potentially destructive of critical infrastructure or key resources; is a violation of the criminal laws of the United States or of any State or other subdivision of the United States; and appears to be intended to intimidate or coerce a civilian population, to influence the policy of a government by intimidation or coercion, or to affect the conduct of a government by mass destruction, assassination, or kidnapping.

Threat

Natural or manmade occurrence, individual, entity, or action that has or indicates the potential to harm life, information, operations, the environment, and/or property.

Tornado Warning

A tornado warning indicates a tornado has been sighted or is spotted on radar. Listen for local weather forecasts so that you know if you will be affected. You should be prepared to take cover immediately.

Tornado Watch

A tornado watch indicates that conditions are right for a tornado to develop. When a tornado watch is issued, you should prepare to take cover.

Unified Command

An Incident Command System application used when more than one agency has incident jurisdiction or when incidents cross political jurisdictions. Agencies work together through the designated members of the UC, often the senior persons from agencies and/or disciplines participating in the UC, to establish a common set of objectives and strategies and a single Incident Action Plan.

Volunteer

For purposes of the National Incident Management System, any individual accepted to perform services by the lead agency (which has authority to accept volunteer services) when the individual performs services without promise, expectation, or receipt of compensation for services performed. See 16 U.S.C. 742f(c) and 29 CFR 553.101.

Appendix H – List of Acronyms

AAR/IP	After Action Report/Improvement Plan
APHIS	Animal and Plant Health Inspection Service
AVIC	Area Veterinarian in Charge
CBRNE	Chemical, Biological, Radiological, Nuclear, Explosive
CERCLA	Comprehensive Environmental Response Compensation and Liability Act
CPR	Cardiopulmonary Resuscitation
DART	Disaster Animal Response Team
EAS	Emergency Alert System
EMI	Emergency Management Institute
EMS	Emergency Medical Service
EOC	Emergency Operations Center
EOP	Emergency Operations Plan
EPA	Environmental Protection Agency
ESF	Emergency Support Function
FCC	Federal Communications Commission
FEMA	Federal Emergency Management Agency
HSEEP	Homeland Security Exercise and Evaluation Program
HSPD	Homeland Security Presidential Directive
HVAC	Heating, Ventilation, and Air Conditioning
ICS	Incident Command System
IS	Independent Study
MSDS	Material Safety Data Sheet
NGO	Non-Governmental Organization
NIMS	National Incident Management System
NOAA	National Oceanic and Atmospheric Administration
NWS	National Weather Service
PIO	Public Information Officer
PPE	Personal Protective Equipment
SARA	Superfund Amendments and Reauthorization Act
SMS	Short Message Service
TDEC	Tennessee Department of Environment and Conservation
TEMA	Tennessee Emergency Management Agency
USDA	United States Department of Agriculture
UTM	University of Tennessee Martin

Appendix I – Annual Review

Date	Person(s) Conducting Review	Notes