

FOREWORD

Mississippi Delta Community College Crisis Response Plan (CRP) is a guide to conduct an all-hazard response. It is designed to be flexible and adaptable in response to emergencies on campus. The plan describes specific authorities and best practices for managing emergencies ranging from catastrophic natural disasters to fires, to active shooter incidents. The CRP defines the scope of preparedness activity necessary to make it an effective operational guide. In order to become familiar with their responsibilities and acquire the skills necessary to perform required tasks, crisis response personnel must attend training sessions regularly. In addition, exercises provide a means to validate plans, checklists, procedures, and evaluate the skills of emergency response personnel. An effective crisis response hinges upon well-trained leaders, motivated and dedicated staff and responders who have invested in emergency preparedness knowledge, tactics and training. The Crisis Response Plan(CRP) is a working document that is to be updated annually.

Mississippi Delta Community College does not discriminate based on age, race, color, national origin, religion, sex, sexual orientation, gender identity or expression, physical or mental disability, pregnancy, or veteran status in its educational programs and activities or its employment practices. The following person has been designated to handle inquiries regarding the non-discrimination policies: Dr. Steven J. Jones, Vice President of Administrative and Student Services, Stauffer-Wood Administration Building, Moorhead, MS 38761, 662-246-6304; EEOC@msdelta.edu.

CRISIS RESPONSE PLANNING PROCESS

The Mississippi Delta Community College Crisis Response Planning Process is a collaborative effort involving several local partner agencies aimed at developing a comprehensive crisis response plan. The key objective is to establish an effective and efficient system that can mitigate the effects of any unforeseen crisis that might occur on the college premises.

One of the primary activities of this process was a planning workshop held on March 21, 2023, in the Herman Thigpin Cafeteria spearheaded by Assistant Chief Marcus Davis and Chief Markricus Hibbler. The recommendation to hold this workshop came from the MDCC Vice President, Steven Jones. During the workshop, participants worked together to identify potential crisis scenarios that the college may face in the future and develop strategies to tackle them.

The multi-agency approach taken in this process ensures that all stakeholders, including faculty, staff, and students, are involved in the development of the crisis response plan. This collaborative effort fosters a sense of shared responsibility and ownership of the plan, which is crucial in ensuring its effectiveness.

To achieve the goal of establishing a comprehensive crisis response plan, reliable and accurate information from various sources was collected, collated, and analyzed. This information was then used to develop a comprehensive plan that would guide the college community in dealing with any crisis that might arise.



March 21, 2023 @ MDCC Herman Thigpin Cafeteria

Documentation of the process and findings were accurately and appropriately cited to ensure credibility, and all credible sources were consulted in the research process. The organization of the material was structured to ensure clarity, cohesion, and ease of understanding. Agencies involved consisted of: Mississippi Highway Patrol, Washington County Sheriff's Office, Washington County Emergency Management, Greenville Police Dept., Sunflower County Sheriff's Office, Indianola Police Dept., Sunflower County Emergency Management, Moorhead Police Dept., Leflore County Sheriff's Office, Greenwood Police Dept., and Leflore County Emergency Management.

PROMULGATION STATEMENT

The primary role of government is to provide for the welfare of its citizens. The welfare and safety of citizens is never more threatened than during emergencies. The goal of crisis management is to ensure that mitigation, preparedness, response, and recovery actions exist so that the public's welfare and safety is preserved.

Mississippi Delta Community College Crisis Response Plan (CRP) provides a comprehensive framework for campus-wide emergency management. It addresses the roles and responsibilities of government organizations and provides a link to local, state, federal, and private organizations and resources that may be activated to address emergencies at Mississippi Delta Community College.

Mississippi Delta Community College CRP ensures consistency with current policy guidance and describes the interrelationship with other levels of government. This plan will continue to evolve, responding to lessons learned from actual emergency experiences, ongoing planning efforts, training and exercise activities, and federal guidance.

Mississippi Delta Community College CRP acknowledges that the state government shares a responsibility with county and municipal governments to be prepared in the event of a natural, technological, or man-made emergency or disaster that threatens life, property, or the environment. The Mississippi Emergency Management Law, MS Code Ann. § 33-15 (1972) confers emergency powers on the Governor, the Mississippi Emergency Management Agency, executive heads of governing bodies of municipalities, and counties of the state to meet this responsibility.

Therefore, in recognition of the emergency management responsibilities of the institution and with the authority vested in me as the President of Mississippi Delta Community College, I hereby promulgate the Mississippi Delta Community College Crisis Response Plan.

Dr. Tyrone Jackson MDCC President

Date

Approval and Implementation

This plan will be effective upon submission by the Mississippi Delta Community College Campus Police Chief and approval by the President of Mississippi Delta Community College.

This plan will be executed upon order the President of Mississippi Delta Community College or his authorized representative.

This document replaces all previous versions of Mississippi Delta Community College's Crisis Response or Emergency Response plans.

SUBMITTED:

APPROVED:

Chief Markricus Hibbler

Date

MDCC Campus Police

President Tyrone Juckson

MDCC

RECORD OF CHANGES

Change Number	Date of Change	Date Entries	Changes Made By:
Ex: 1	Ex: 7/01/2023	Ex: 7/01/2023	Ex: Signature

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TELEPHONE DIRECTORY

Moorhead Campus (Moorhead, MS)	
Campus Emergency Line	662-246-8011
Campus Police	662-246-6470
Facilities Management	662-246-6441
Public Relations	662-246-6456
Student Services	662-246-6442
Information Technology	662-246-6330
Local Law Enforcement	
Moorhead Police Department	662-246-5461
Sunflower County Sheriff's Office	662-887-2121
Mississippi Highway Patrol Troop D	662-453-5743
Other Local Government Agencies	
Moorhead Fire Department	662-246-5611
Sunflower County Health Department	662-887-4951
Sunflower County Emergency Management	662-887-6253
MS Homeland Security	601-987-1278
First Responders	
Sunflower County EMS Director	662-887-6253
Moorhead Police Chief	662-897-6901
Moorhead Fire Chief	662-207-3364
Utilities	
Atmos Energy	866-322-8667
City of Moorhead	662-246-5461
Entergy	800-968-8243

Charlie Capps Center Campus (Indianola, MS)	- Elizabeta Ve
Campus Emergency Line	662-246-8011
Campus Police	662-246-6470
Facilities Management	662-246-6441
Public Relations	662-246-6456
Student Services	662-246-6442
Information Technology	662-246-6330
Local Law Enforcement	
Indianola Police Department	662-887-1811
Sunflower County Sheriff's Office	662-887-2121
Mississippi Highway Patrol Troop D	662-453-5743
Other Local Government Agencies	
Indianola Fire Department	662-887-4955
Sunflower County	662-887-1252
Sunflower County Health Department	662-887-4951
Sunflower County Emergency Management	662-887-6253
MS Homeland Security	601-987-1278
First Responders	
Sunflower County EMS Director	662-207-6415
Indianola Police Chief	662-207-4529
Indianola Fire Chief	662-207-3364
Utilities	
Atmos Energy	866-322-8667
The City of Indianola	662-887-3101
Entergy	800-968-8243

Greenwood Center Campus (Greenwood, MS)	
Campus Emergency Line	662-246-8011
Campus Police	662-246-6470
Facilities Management	662-246-6441
Public Relations	662-246-6456
Student Services	662-246-6442
Information Technology	662-246-6330
Local Law Enforcement	
Greenwood Police Department	662-246-5461
Leflore County Sheriff's Office	662-887-2121
Mississippi Highway Patrol Troop D	662-453-5743
Other Local Government Agencies	
Greenwood Fire Department	662-246-5611
Leflore County	662-453-1428
Leflore County Health Department	662-453-0284
Leflore County Emergency Management	662-453-1423
MS Homeland Security	601-987-1278
First Responders	
Leflore County EMS Director	662-299-2600
Greenwood Police Chief	662-897-6901
Greenwood Fire Chief	662-207-3364
Utilities	
Atmos Energy	866-322-8667
The City of Greenwood	662-246-5461
Entergy	800-968-8243

Greenville Higher Education Center (Greenville, MS)	
Campus Emergency Line	662-246-8011
Campus Police	662-379-7305
Facilities Management	662-332-8464
Public Relations	662-246-6456
Student Services	662-246-6442
Information Technology	662-246-6330
Local Law Enforcement	
Greenville Police Department	662-378-1515
Washington County Sheriff's Office	662-334-4523
Mississippi Highway Patrol Troop D	662-453-5743
Other Local Government Agencies	
Greenville Fire Department	662-246-5611
Washington County	662-334-2667
Washington County Health Department	662-332-8177
Washington County Emergency Management	662-335-1945
MS Homeland Security	601-987-1278
First Responders	
Washington County EMS Director	662-820-9919
Greenville Police Chief	662-897-6901
Greenville Fire Chief	662-207-3364
Utilities	
Atmos Energy	866-322-8667
The City of Greenville	662-378-1534
Entergy	800-968-8243

1.0 BASIC PLAN

1.1 Purpose Statement

Mississippi Delta Community College is committed to supporting the welfare of its students, faculty, staff, and visitors. The college offers this support by preparing a Crisis Response Plan and allocating resources to respond to possible emergencies. The plan is designed following appropriate laws, regulations, and policies that govern crisis/emergency preparedness and reflect the best and most current thinking in the area.

The Crisis Response Plan is designed to maximize human survival and preservation of property, minimize danger, restore normal operations of the college, and assure responsive communications with the college community, surrounding neighborhoods, and the municipality. This plan is set in operation whenever a natural or induced emergency affecting the college reaches proportions that established measures cannot handle. A crisis may be sudden and unforeseen, or there may be varying periods of warning. This plan is intended to be sufficiently flexible to accommodate contingencies of all types, magnitudes, and durations.

The plan provides for aiding the local community when appropriate, although the primary responsibility of the plan is for the college community for which it is designed. This plan is a tool to accomplish the above-referenced purpose with minimal confusion and wasted effort.

1.2 Objective

The primary objective of the Crisis Response Plan is to establish, promote, implement, and maintain good safety and health policies for the student body, faculty, staff, and visitors. Ancillary objectives of the Crisis Response Plan include:

- Assemble and maintain an effective Crisis Response Team to provide a safe campus, assure compliance with standards, and facilitate communication between the committee and the campus community.
- Comply with the Federal Student Right-to-Know requirements and the Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act.
- Conduct periodic evaluations of each college unit to assure compliance with the college's safety plan and all regulations issued by local, state, and federal agencies.
- Develop and preserve information on safety and health as an educational resource for the college. This also applies to requirements under the Clery Act.

- Develop and recommend procedures that ensure the college's compliance with local, state, and federal regulations.
- Facilitate technical problem-solving activities to ensure compliance with local, state, and federal regulations.
- Provide effective and beneficial training programs to assure safety and awareness.
- Provide the President of the college with information on safety and health activities.
- Submit required reports to local, state, and federal agencies as required.
- Support college units individually in the implementation of their safety and health processes.

1.3 Situation Overview

FEMA identifies an "Emergency" as 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 of the Mississippi Delta Community College, 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.

With the large number of employees and students on campus, safety is always a top priority. If the need to render assistance in an emergency arises, the institution has developed systems for effectively managing emergency situations. The institution has prepared this CRP to guide response actions that require a high level of coordination.

The most crucial element during an emergency is the need to act quickly and appropriately. Employees should become familiar with the CRP and their specific responsibility as a faculty member.

Additionally, all employees must become knowledgeable about the following issues in their specific work environments:

- Evacuation routes
- Locations of designated shelter areas.
- · Locations of fire alarms.
- · Locations of fire extinguishers.
- Locations of Automated External Defibrillators (AEDs).

1.4 Planning Assumptions

This CRP serves as a practical guide with modifications made to meet the demand of each emergency: because no plan can anticipate or predict every scenario, emergency management personnel must quickly adapt to events as they unfold. To this end it is assumed:

- Emergency situations individually, or in combination, may cause grave impacts on the institution. These situations can vary in scope and intensity, from isolated areas of minimal impact to wide-ranging devastation.
- Planning is universal, based on the "all-hazards" approach.
- Planning recognizes and supports the principles of the Mississippi Emergency Management Agency (MEMA), the National Incident Management System (NIMS), and the National Response Framework.
- Employees prepare for and assume responsibility for assigned duties.
- Employees attend staff development dedicated to emergency response training.
- Planning incorporates all physical locations and settings for which the institution has responsibility.
- Close professional working relationships are established with appropriate external agencies prior to an emergency, i.e., local, state, and federal law enforcement; fire departments; emergency management services; public health agencies; as well as medical facilities and volunteer organizations such as the American Red Cross.
- Public information is of vital importance and, as all emergencies are newsworthy and may receive media coverage including social media, the institution will monitor and respond appropriately.
- The EOC procedures provide for the centralized locating of five functional sections of incident response consistent with NIMS: Command; Operations. Planning; Logistics; and Finance.
- The Emergency Operations Center (EOC) procedures will be adequate for most disaster conditions that could arise on campus.
- During response and recovery phases, officials under this CRP have the
 responsibility to save lives, protect property, relieve human suffering,
 sustain survivors, support constituencies, restore services, repair essential
 facilities and protect the environment.

2.0 CONCEPT OF OPERATIONS

2.1 General

In any emergency, the top priorities are:

- · Life safety
- · Incident stabilization
- Protection and preservation of property and the environment

The Crisis Response Team (CRT) will immediately respond to an emergency incident occurring at the college, and will request additional external and internal resources as necessary to address the situation. The CRT, in conjunction with designated information technology personnel, will issue alerts and instructions to the campus community as the situation warrants.

If a prolonged emergency operation occurs, the CRT and Emergency Operations Center (EOC) will be activated to coordinate support for the college staff, faculty, and students during and after an incident, and to ensure continuity of operations. The Incident Command Center (ICC) will be used to manage and control the emergency response.

Based on the severity and magnitude of the emergency, the institution's President may declare a campus "State of Emergency." When a state of emergency is declared; the campus may be closed, or access restricted to certain buildings. Persons who do not have an emergency response role or who cannot show proper identification or authorization may be denied entry.

This Crisis Response Plan (CRP) is supported by the local, state and federal organization levels of emergency management. Preparedness, prevention, response, recovery and mitigation are general responsibilities of all levels of government working together to provide a delivery system to meet the needs of the response community. Emergency operations will be initiated at the lowest level of government able to respond effectively and efficiently.

2.2 Mississippi Emergency Management Plan

The Mississippi Emergency Management Plan, promulgated in accordance with the provisions of the Mississippi Emergency Management Agency, provides statewide authorities and responsibilities and describes the functions and operations of government at all levels during extraordinary emergencies. MS Code Ann. § 33-15 (1972) states in part that "the State Emergency Plan shall be in effect in each political

subdivision of the state, and the governing body of each political subdivision shall take such action as may be necessary to carry out the provisions thereof." Mississippi Delta Community College Crisis Response Plan is, therefore, considered to be an extension of the State Emergency Plan.

2.3 Proclamation of a State of Emergency by the Governor

The Governor is empowered to proclaim a State of Emergency when the existence of conditions of disaster or of extreme peril to the safety of persons and property within the state caused by such conditions as air pollution, fire, flood, storm, epidemic, riot, terrorism, or earthquake or is requested to do so by local authorities or finds that local authority is inadequate to cope with the emergency. See MS Code Ann. § 33-15 (1972) for additional information.

MS Code Ann. § 33-15 (1972): The of Mississippi has long recognized its responsibility to mitigate the effects of natural, manmade, or war-caused emergencies which result in conditions of disaster or in extreme peril to life, property, and the resources of the state, and generally to protect the health and safety and preserve the lives and property of the people of the state. To insure that preparations within the state will be adequate to deal with such emergencies, it is hereby found and declared to be necessary:

(e) To authorize the establishment of such organizations and the taking of such actions as are necessary and proper to carry out the provisions of this chapter. It is further declared to be the purpose of this chapter and the policy of this state that all emergency services functions of this state be coordinated as far as possible with the comparable functions of its political subdivisions, of the federal government including its various departments and agencies, of other states, and of private agencies of every type, to the end that the most effective use may be made of all manpower, resources, and facilities for dealing with any emergency that may occur.

2.4 Local Agency Defined

MS Code Ann. § 33-15 (1972) "Local agency" means any city, county, county office of education, community college, school district, or special district.

2.5 Declaration of Emergency

Mississippi Emergency Management Agency and NIMS defines an emergency as "Conditions of disaster or of extreme peril to the safety of persons and property..." by natural or human causes. Environmental considerations are also a factor. Presidential Declaration of an Emergency

Declaring an official campus State of Emergency gives the institution the right to control access to campus facilities, including removing or arresting non-authorized personnel who may interfere with emergency response or engage in criminal activities such as looting.

During any major campus emergency, MDCC Campus Police Department in collaboration with school employees present shall immediately begin appropriate procedures to meet the emergency, and safeguard persons and property. In the event of earthquakes, aftershocks, fires, storms, or major disasters occurring in or about the campus, or which involve school property, campus police will attempt to determine the extent of any damage to school property. The Campus Police Chief shall also consult with the President, of Mississippi Delta Community College designated administrator or Incident Command Team regarding the emergency and the possible need for a declaration of a campus state of emergency.

When this declaration is made, only registered students, faculty, staff and affiliates (e.g., persons required by employment) are authorized to be present on campus. Campus Police will ask those who cannot present proper identification (Registration or employee/student identification card, or other identification) showing their legitimate business on campus to leave the campus.

The President of Mississippi Delta Community College or his/her designee is authorized to order evacuation of all or part of the campus and direct students, faculty, staff, and affiliates to evacuation zones or to leave campus.

Unauthorized persons remaining on campus may be subject to arrest in accordance with the Mississippi Penal Code. Authorized personnel include (but are not limited to) campus administrators and managers, faculty and staff members who have been assigned emergency response duties, and mutual aid personnel (e.g., law enforcement, fire fighters, EMS, American Red Cross, CERT members from adjoining jurisdictions, etc.). All others must be issued an emergency pass by Mississippi Delta Community College Campus Police before being allowed to enter the immediate disaster site.

2.6 Plan Activation

This CRP is activated in response to an actual or potential emergency which occurs or is likely to occur on or within the immediate area of the college's campus locations. However, the institution maintains an active approach to prevention, preparedness, response, recovery and mitigation always.

Once an emergency has been declared, the members of the Crisis Response Team, whose responsibilities are described below, and other support personnel are, to the extent possible, relieved of routine duties, to more fully concentrate on the tasks at hand.

The President of Mississippi Delta Community College maintains executive control of the CRP. School personnel and equipment will be utilized to provide priority protection of life, preservation of property, and restoration services to the campus. The members of the CRT will determine the way resources are utilized. The CRP master copy will be housed at the MDCC Campus Police Department. The CRP is to be updated at least once a year.

PROCLAMATION OF A CAMPUS STATE OF EMERGENCY (FORM)

WHEREAS MISSISSIPPI DELTA COMMUNITY COLLEGE

Crisis Response Plan and procedures empower the President or designee to proclaim a campus State of Emergency, when the campus has been affected by a significant incident, major emergency or disaster; and

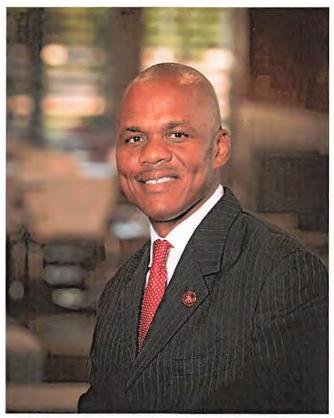
WHEREAS the President or designee does hereby find: That conditions of peril to the safety of persons and property have arisen within the campus caused by_____ , commencing at or about location on the date of at approximately (time) , warranting the necessity for, and proclamation of, a Campus State of Emergency; NOW, THEREFORE, IT IS HEREBY PROCLAIMED AND ORDERED that said Campus State of Emergency shall be deemed to continue to exist until its termination is proclaimed by the President of Mississippi Delta Community College or designee. IT IS FURTHER ORDERED that a copy of this proclamation be forwarded to the County of Sunflower, Mississippi. Name Date

Title

3.0 DIRECTION, CONTROL AND COORDINATION

3.1 Authority

The authority to declare a campus state of emergency lies with the college President or designee.



Dr. Tyrone Jackson, President

3.2 Succession Authority

The authority to declare a campus state of emergency rests with the President, but to avoid any unnecessary delay in his/her absence the authority may be designated using the succession list below.

3.3 Order of Succession

In the President's absence, the first administrator from the below "Chain of Command" list who can be reached will be the acting EOC Director until the EOC Management Section assembles to assume control. The administrator may

make decisions on behalf of the President in emergency situations including the declaration of a campus State of Emergency. The "Chain of Command" is as follows:

- 1. President
- 2. Vice President of Administrative and Student Services
- 3. Dean of Student Services
- 4. Campus Police Chief
- 5. Director of Facilities Management

The declaring official must complete and sign a Proclamation of a Campus State of Emergency.

3.4 Responsibility for the Decision to Close

On the rare occasions when MDCC is forced to close college operations, the President, Campus Police Chief, Vice President of Administrative and Student Services, Vice president of Instructions, Dean of Student Services, Director of Facilities Management, and the Director of Public Relations will meet and decide.

Official Announcements

If the decision is to close the college, the MDCC administration will make all official College announcements through the Director of Public Relations. Announcements of an emergency closing will, to the extent possible, specify the starting and ending times of the closing and whether the closing includes specific College services, events, evening classes, athletic events, and programs.

The College website is the primary source of information on college closings. Announcements are also distributed via email and text message. To the extent possible, local radio and television stations will be notified. In these situations, calling College offices does not guarantee that the caller will receive the latest or most accurate information.

Therefore, college announcements will be made available as follows:

- College email to all employees and students with active email addresses
- College website: www.msdelta.edu
- Social Media: Facebook, Twitter, and Instagram
- Radio: Local AM & FM stations will be notified
- Television: Delta News, WABG-ABC and WXVT-CBS
- MDCC Alerts (Note: Requires registration of your mobile number)

4.0 CAMPUS SITES



Moorhead Campus Hwy 3 & Cherry St. Moorhead, MS 662-246-6322



Charlie Capps Center 920 Hwy 82 West Indianola, MS 662-887-2876



Greenwood Center 204 East Church St. Greenwood, MS 662-453-7377



Greenville Higher Education Center 2900 MS Hwy 1 Greenville, MS 662-332-8500

5.0 BUILDING SAFETY COORDINATORS

5.1 Building Coordinator List

Each building has an assigned Safety Coordinator responsible for directing persons to the assembly areas in an emergency.

Building Coordinator(s)

Bullang	Coordin	ator (5)
Allen Foley Career-Technical Building	Becky Zuehlke	Steele Robbins
Boggs-Scroggins Enrollment Services Center	Jay Gary	Janet Buford
Capps Center	Douglas Freeze	Carole Stamps
Catherine and Allen Snowden Center	Leigh Lovelace	Claire Green
Edwards-Stonestreet Men's Residence Hall	Robert Mallet	D'Aries Byrd
Greenville Higher Education Center	Linda Clark	Glen Kirkham
Greenwood Center	Katie Jones	Mary Peyton-Rodgers
Greer-Stafford Allied Health Building	Wendy Hayes	Andrea Richardson
Hargett-Lee Women's Residence Hall	Tangela Banks	D'Aries Byrd
Herman Thigpen Cafeteria	Shiquita Williams	Ashley Arendale
Horton Hall	Sarah Buchanan	Allyson Lofton
Information Technology Office	Dana Vance	Torrey Moore
Jack E. Harper Science Building	Barbara Smith	Jason Zuehlke
Jack Harris Maintenance Building	David Tedford	Nancy Dill
J.T. Hall Coliseum	Jason Conner	Luke Stanley
Law Enforcement Training Academy	Kate Ware	Amy Vanderford
Lineman Training Center	Ronnie Williams	Randle Whitworth
Stanny Sanders Library	Pearlean Nash	Kristy Bariola
Stauffer-Wood Administration Building	Angela White	Waunita Roberts-Jones
Tanner Hall	Claire Green	Dawn Herring
Vandiver Student Union	Christopher Lee	Rosalyn Tucker
Veteran's Apartments	Marcus Davis	Burnadette McDonald
Yeates Fine Arts Building	Jennifer Woodard	Ben Folk

5.2 Emergency Evacuation Assembly Areas

When a campus emergency is identified, Campus Police will contact coordinators of all building that require evacuation. Each building coordinator will inform all personnel in their respective buildings of the type of emergency and of proper evacuation procedures. Each building will be evacuated to the designated assembly areas as follows:

Allen Foley Career-Technical Building Soccer Field

Boggs-Scroggins Enrollment Services Fenced Area on West side of Cherry Street

Charlie Capps Center Capps Cent

Edwards-Stonestreet Men's Residence Hall Soccer Field

Greer-Stafford Allied Health Building Soccer Field

Greenville Higher Education GHEC Campus Parking Lot

Greenwood Center Delta Streets Academy Parking Lot

Hargett-Lee Women's Residence Hall Football Field

Herman Thigpen Cafeteria Football Field

Horton Hall Football Field

Jack E. Harper Science Building Football Field

Jack Harris Maintenance Building Practice Football Field

J.T. Hall Coliseum Football Field

Law Enforcement Training Academy Baseball Field

Law Enforcement Barracks Open lot behind Faculty Row

Lineman Training Center Baseball Field

Stanny Sanders Library Fenced Area on West side of Cherry Street

Stauffer-Wood Administration Building Open lot behind the building

Tanner Hall Fenced Area on West side of Cherry Street

Vandiver Student Union Football Field

Veterans Apartments Football Field

Yeates Fine Arts Building Fenced Area on West side of Cherry Street

When conditions improve, Campus Police will give the "ALL CLEAR" and allow occupants to return to their buildings.

5.3 Severe Weather On-Campus Daytime Assembly Areas

When severe weather or tornado threatens, you will hear the citywide alarm. Building coordinators will initiate the severe weather procedures.

Allen Foley Career-Technical Building

Move to the hallway of the Main building next to the Administration offices.

Boggs-Scroggins Enrollment Services Center

Move to the vault in the business office or financial aid office hallway.

Charlie Capps Center

Move to Conference Room

Edwards-Stonestreet Men's Residence Hall

Move into the bathroom or under your bed.

Greer-Stafford Allied Health Building

Move to the hallway across from room 15, restrooms, or storage rooms 10 and 11.

Greenville Higher Education Center

Move to the GHEC Library, Students Lounge, Hafter Room, and Office Suites

Greenwood Center

Move to Room #4

Hargett-Lee Women's Residence Hall

Move to the east hallways on the first floor or move into the bathroom with a pillow.

Herman Thigpen Cafeteria

Move to the basement under the main floor.

Horton Hall

Move to the ground floor on the Northeast side hallway of Horton Hall.

Jack E. Harper Science Building

Move to the inside laboratory.

Jack Harris Maintenance Building

Move to the inner file room in the inner office.

J.T. Hall Coliseum

Move to the football locker room.

Law Enforcement Training Academy

Move to the west wing of the Hargett-Lee Women's Residence Hall.

Lineman Training Center

Move to the hallway by restrooms.

Stanny Sanders Library

Move to the hallway next to the conference rooms or Horton Hall.

Stauffer-Wood Administration Building

Move into the vault.

Tanner Hall

Move to the four downstairs classrooms on the north side.

Vandiver Student Union

Move to the hallway by the restrooms.

Veteran's Apartments

Move to the inner hall on the first floor.

Yeates Fine Arts Building

Move to the hallway.

Do not seek cover under laboratory tables or benches as chemicals could spill and cause injury. Do not use elevators to get to lower floors. For disabled or impaired individuals, please refer to Appendix I (Guidelines for Persons with Disabilities).

5.4 When Severe Weather Threatens at Night Assembly Areas

- As soon as a warning is issued, campus police will open the Horton Science Building
- Campus Police will inform the women's residence hall, men's residence hall, library, and any classes in session.
- Campus Police will instruct everyone to listen for the citywide warning alarm system. This alarm gives off a high-low modulating sound.

6.0 CRISIS RESPONSE PLAN

6.1 Policies and Procedures

College policies, procedures, and practices are in place to respond to specific crises. For example, Campus Police have procedures to respond to crime reports, the Office of Counseling and Disability Support Services has procedures for responding to students in emotional distress, the Office of Facilities Management has a disaster plan for responding to natural disasters, and the Office of Student Services has a plan for responding to events in residence halls. While most of these plans outline procedures for immediate responses to events, they should be viewed as part of a more significant, coordinated college response to a crisis.

6.2 Goals

The college's goals when a crisis occurs are to:

- Communicate openly, honestly, and proactively with the college's constituents, recognizing the importance of avoiding panic, speaking with one voice, and balancing individuals' legal rights to privacy with the public's need to know about the situation.
- Demonstrate through its management of the crisis that the college is maintaining responsible control of the situation, viewing each crisis as an opportunity to establish trust and build the college's credibility and reputation.
- Ensure appropriate follow-through on commitments made during the crisis and, after the crisis has subsided, evaluate the college's response to improve procedures.
- Initiate internal review of the crisis as appropriate.
- Protect the human, physical, and financial assets of the college.
- Respond quickly to immediate threats to the well-being of students, faculty, staff, and visitors.
- Respond to the emotional and physical trauma sustained by victims, family members, and the greater college community.

6.3 Scope

The College and site-specific plans encompass all campuses and address a broad range of potential significant emergencies. Such types of incidents are as follows:

- Person-caused—assault, hostage, the threat of suicide, vandalism, violence
- · Natural—fire, flood, freeze-up, high winds, snowstorm
- Situational—chemical, explosion, gas leak, oil spill, plane crash, toxic substance

- Medical—injury accidental, injury crime, infectious disease, terminal illness
- Mechanical—computers, electrical, heat, telephones, structural

6.4 Crisis Response Team

The college has established a Crisis Response Team that may be called together to develop and manage the institution's response to a crisis. In the event of a crisis on campus, the President has designated the Campus Police Chief to serve as Incident Commander for the campus. The team consists of the following members:

Title	Name	Office #
Campus Police Chief	Markricus Hibbler, Chair	662-246-6462
Assistant Campus Police Chief	Marcus Davis, Vice Chair	662-246-6470
Dean of Student Services/ Title IX Coordinator	Christopher Lee	662-246-6444
Dean of Business Services	Staci Miller	662-246-6356
Vice President of Instruction	Teresa Webster	662-246-6317
Director of Facilities Management	David Tedford	662-246-6441
Director of Public Relations	Melaney Emerson	662-246-6456
Director of Information Technology	Torrey Moore	662-246-6374
Dean of Enrollment Management	Jay Gary	662-246-6302
Coordinator of Student Housing and Residence	DAries Byrd	662-246-6449
Dean of GHEC Operations	Linda Clark	662-332-8750
Vice President of Effectiveness and Enrollment	Dr. Ben Cloyd	662-246-6256
VP of Workforce & Economic Development	Douglas Freeze	662-445-1989
Assistant Director of PR / Yearbook Advisor	Gabby Hayes	662-246-6272
Greenwood Site Supervisor	Mary Payton Rodgers	662-453-7377
Dean of Health Sciences	Patricia Kelly	662-246-6417
Assistant Director of Nursing/PN Chair	Veronica Caradine	662-246-6513
Grounds Team / General Maintenance Technician	Andrew Ransfer	662-246-6430
Director of Nursing / ADN Chair	Traci Beckham	662-246-6415
Public Safety Specialist	Lillie Nash	662-246-6470
President	Dr. Tyrone Jackson	662-246-6300
VP of Administrative and Student Services	Dr. Steven Jones	662-246-6304

6.5 Team Responsibilities

- Assign responsibility for carrying out plans.
- Determine overall college response to an event.
- Gather and share information about the event.
- Identify individuals or groups affected by the event.
- Plan appropriate responses for each group.
- Recommend initiation of an internal investigation of the incident.
- Separate and clarify issues; define terms; identify additional information needed.

6.6 Activating the Crisis Response Team

In an emergency, the Crisis Response Team will be activated.

1. The first person on the scene will assess the situation and implement the initial action plan. This may include calling for campus police, emergency medical, fire, or law enforcement support. The Campus Police Chief will mobilize the Crisis Response Team by notifying the VP of Administrative and Student Services, Dean of Student Services, and texting or calling members when appropriate.

To assemble the Crisis Response Team at the Incident Command Center (ICC), one of the following text messages will be sent:

NOTE: The response team member will communicate the status of the situation and immediate needs to the President and the college community as information becomes available.

- 2. The Campus Police Chief will identify emergencies as "Level 1" or "Level 2" emergencies.
 - Level 1: A situation that will not involve outside agencies or media. The Campus Police Chief will decide if it is necessary to mobilize the entire Crisis Response Team, specific members of the Crisis Response Team, or none.
 - Level 2: The situation is such that outside agencies and media will most likely be involved. MDCC Administration will be informed immediately, and the Crisis Response Team will be mobilized.
- 3. All campus emergencies will be debriefed at the next Crisis Response Team Meeting to discuss the provided response. The debriefing will identify what worked and what needs to be revised.

6.7 Cyber Incident Response Team (CIRT)

During a cyber-security incident, the Director of Information Technology will assemble a team. Members will vary depending on the skill sets required to assist during an incident. Teams will vary in size depending on the need. This team will remain active until the incident is closed. This team will be responsible for both response and recovery. The CIRT may be called up during a critical incident and assisting in the collection of evidence during an incident investigation.

Response Phase: The response duties of the team are to conduct a triage of the incident, assist in containment of the incident, collect evidence for the postmortem report and if necessary, conduct or assist in a forensic investigation.

Recovery Phase: The response aspects of the team are centered on damage assessment, return to normal operations, rebuilding servers and systems, etc.

- Determining whether affected systems can be restored from backup tapes, or must be reinstalled
- Scrubbing all data before making it ready for reinstall
- Determining what data is lost and cannot be recovered or restored
- Reloading data on affected systems
- Restoring normal operations

7.0 INCIDENT COMMAND CENTER

The Incident Command Center (ICC) is a communications center staffed with personnel who gather information and coordinate responses to an emergency. The ICC expedites reaction to a situation by providing appropriate staff to gather, process, retrieve, analyze, and display data rapidly in a readily useable form to assist in making accurate and timely decisions.

7.1 Purpose

The ICC's primary purpose is to minimize injuries and damages by directing the response of internal resources, requesting the assistance of external agencies, and coordinating the efforts of both.

7.2 Locations

- *Moorhead Campus: Moorhead City Hall (801 Johnny Russell Dr., Moorhead, MS)
- *Charlie Capps Center: Dollar General Warehouse (914 US-82, Indianola, MS)
- *Greenwood Center: Greenwood Fire Department (404 Main St., Greenwood, MS)
- *GHEC: Dollar General Store (2682 MS-1 South., Wayside, MS)

7.2 Assignment

- 1. To be thoroughly familiar with the overall situation.
- 2. To maintain a continuous flow of information on the changing events.
- 3. To know what internal resources are available.
- 4. To direct or redirect resources to meet the highest priority needs.
- 5. To request assistance from or aid other units or organizations as appropriate.
- 6. To know what external resources are available to meet the needs of the college.
- 7. To maintain records of the flow of information into and out of the ICC and actions taken.
- 8. To act as a clearinghouse for information, verify the accuracy, and correct inaccurate information.
- 9. To initiate follow-up actions as appropriate.

- 10. To pass correct information to other organizations who have a need-to-know.
- 11. To operate continuously during the crisis.
- 12. To maintain records/logs of calls, assignments, and actions.

7.3 Staff

The Campus Police Chief oversees the operation of the ICC, which is staffed by the Crisis Response Team and management personnel from Administrative Services, Business Services, Campus Police, Counseling, Facilities Management, Information Technology, Instruction, Public Relations, and Student Services. Each member is responsible for contributing expertise and necessary information from their respective areas.

7.4 Backup ICC

The backup ICC serves as an alternate if the primary ICC is compromised or seriously damaged. It is the responsibility of the Campus Police Chief to activate and designate the location of the backup ICC. The scope of the disaster and the extent of damages to the primary ICC will dictate where the backup ICC is positioned.

If the primary ICC is destroyed, a portable radio unit can become the backup ICC, or the radio can be detached and taken to the building or area selected for the backup ICC. Operations will remain the same but may be tempered by the physical location and staffing accommodations.

- *Moorhead Campus: James Rosser Elementary (601 Ingram St., Moorhead, MS)
- *Charlie Capps Center: Hampton Inn (913 US-82, Indianola, MS)
- *Greenwood Center: Greenwood Police Department (406 Main St., Greenwood, MS)
- *GHEC: TRU Hotel (600 Rayner Rd., Greenville, MS)

7.5 Telephone Communications

During a disaster, the in-house telephone telecommunications network can be affected to different degrees depending upon the type and scope of the disaster:

- Loss of outside dial tone.
- 2. Loss of inside or outside dial tone affecting specific portions of the campus

property.

- 3. Loss of all inside and outside dial tones. A devastating event has the potential to damage or incapacitate MDCC telephone company equipment.
- 4. Loss of power.

7.6 Unified Command

As local public safety (Law Enforcement/Fire) arrive on scene and take charge of field response activities a Unified Command Center (UCC) should be considered. A Unified Command Post is part of the Incident Command Center (ICC). It is an authority structure in which the role of incident commander is shared by two or more individuals, each already having authority in a different responding agency. Should an EOC activation occur, real time intelligence would be shared immediately between the field incident commanders in the "Unified" Command Center and the Operations Coordinator assigned to the EOC.

8.0 CAMPUS LOCKDOWN

Lockdown is a condition requiring complete separation and protection of college occupants from any existing internal or external situation that could directly threaten their safety.

An emergency lockdown is declared when, in the opinion of a college administrator, a situation exists that threatens the safety of college occupants and requires them to remain in their classrooms. When a dangerous person or condition exists in or near the college, the primary objective is to protect college occupants from danger.

During a lockdown, doors should be locked, and no one is to enter or leave a room. Windows should be covered and shut. It is safest to move students away from doors and windows. Ensure everyone is quiet and remains in a lockdown until the Incident Commander gives the "ALL CLEAR" notice.

8.1 MDCC Alerts

MDCC Alerts is the college emergency notification system that sends instant alerts and time-sensitive messages via email or text to inform students and employees of campus lockdowns, emergencies, and campus closings.

Employees and students text the message MDCCALERTS (No Caps) to the number 79516 to sign up. A text message is immediately received in response to confirm the registration. MDCC Alerts messaging is the responsibility of the Director of Public Relations and is should be tested periodically.

8.2 Active Shooter Alert

Active Shooter Alert is a crisis term used to initiate a campus lockdown. An Active Shooter Alert will be announced by the building coordinator or by a text message stating: "Students and Staff, we have an Active Shooter Alert. Please follow the appropriate procedures." The general procedures listed below should be followed when an Active Shooter Alert is called.

8.3 General Procedures

If an Active Shooter Alert is called, the Active Shooter Alert procedures will be implemented in all buildings. The Incident Commander or designee will control the situation and administer the Active Shooter Alert.

- 1. A Crisis Response Team member will be sent to await the arrival of the police or emergency personnel. Custodial staff should lock any other doors to eliminate access to the building other than emergency personnel.
- 2. After the incident has been contained, the building coordinators will give an "ALL CLEAR" or text message.
- 3. All classes in the Coliseum will move to the locker rooms or storage areas.
- 4. Any student in the Residence Halls during Active Shooter Alert will be required to go to their rooms and lock their doors. Residential Hall Directors will secure the outside doors and listen for the "ALL CLEAR" on the two-way radio in the residence hall.
- 5. Every student who is out of class and not under the supervision of an adult will go to the nearest assembly area.
- 6. Only college officials or emergency personnel shall be allowed to enter the building.
- 7. PE classes outside will remain there until notified to move to another location.
- 8. Police or medical help will be summoned. Based upon the available information, Campus Police will notify the appropriate agencies to assist with the situation.
- 9. Students in the Trojan Shield or outside will follow the instructions of the on-duty staff person.
- 10. Teachers who have their classes outside the college will keep them there until notified to do differently. Notification will come only from your Division Chair or the Vice President of Instruction.
- 11. Teachers will close doors immediately and create a list of students in the class. If doors do not lock, use all available items, including desks, tables, chairs, or other furnishings, to barricade doors. If the crisis does not immediately impact the room, teachers will lock the doors, close the shades in the classrooms, cover door windows completely, turn off lights, and keep students away from doors and windows. All outside doors of the buildings should be locked.

9.0 SHELTER-IN-PLACE

Sheltering-in-Place is a protective action taken inside a building to protect the building occupants from external hazards, minimizing the chance of injury and/or providing the time necessary to allow for a safe evacuation. Circumstances that may warrant a shelter-in-place activity could include:

- · Severe weather
- · Biological incident
- · Active Shooter
- · Civil unrest such as riot
- · Radiological incident
- · Accidental chemical exposure

9.1 General Guidelines

Shelter-in-Place is a method of providing protection from environmental factors harmful to individuals. Depending on the type of event, shelter-in-place procedures may vary. For example, simply staying indoors and closing doors, windows and turning off the HVAC (Heating/Air Conditioning) system to reduce the air intake will provide the basic protection from weather and some hazardous material events. Remaining in place until inaccessible roadways are reopened or waiting until lightning storm passes are also applications of Shelter-In-Place. More protective actions may be required by other events, such as a hostile intruder or damage-causing winds and falling debris. Where and how we protect ourselves will be based on circumstances of the event and the time available to react.

9.2 Procedures

In the event of an incident that may present a hazard to life safety if individuals are exposed, the Campus President or designee will direct a Shelter-In-Place response.

If the hazard is imminent, such as a toxic gas release, the person identifying the emergency will direct that persons in the vicinity take shelter in a safe area and will then report the incident to campus security. Campus Security and administration staff will assist in coordinating the Shelter-in-Place response, directing students, employees, and visitors to safe areas.

In general, persons directed to shelter-in-place should:

Stay inside the building (or get inside a building as quickly as possible);

- Go to a room or corridor where there are no windows and few doors, if possible.
- Close and lock all windows and doors.

9.3 Shelter-in-Place / Chemical Release

In the event of a chemical release, go to an above ground level of the building; some chemicals are heavier than air and may seep into basements even if windows are closed.

- Turn off the HVAC system (heat, ventilation, air conditioning) if local control of the systems are available.
- Drink bottled or otherwise stored water, not water from the tap.
- Circumstances permitting, individuals in out-buildings, modular, portable, or shedtype structures should seek shelter in the main campus buildings.

9.4 Shelter-in-Place / High-Wind

In a high-wind event, evacuate rooms with windows, close the doors to those rooms, and move to an interior space of the building, a basement, or stairwell to provide as much shielding from the wind and protection from flying debris.

- Individuals should crouch down close to the floor and cover their heads with their hands to minimize the risk from falling debris.
- Interior activities will be suspended until the threat passes, damage is assessed, and it is safe to resume indoor activities.
- Hazards may still exist outdoors including downed trees, power lines, structural damage to buildings, and blocked roadways.

9.5 Shelter-in-Place / Civil Unrest

Unsafe conditions may be created within a building or on a campus by events such as civil unrest, hostile intruders, etc. These events may require individuals using their best judgment in seeking the safest available shelter quickly. Evacuation or flight may only put more people in harm's way and control of the situation may quickly be lost. In such circumstances, the presumption is that one or more individuals have or will gain access to the interior of one or more buildings on campus. Protection of individuals will require calm, quick action to safeguard as many individuals as possible in their present location. Closing and locking or barricading doors, turning off lights, gathering occupants in the safest place within the room and calling authorities are some of the first objectives to take.

10.0 ACCOUNTING FOR ALL PERSONS

- 1. The following basic steps must be followed when evacuating a building or campus: a. Instructors should bring their class roster books with them.
 - b. Instructors should ensure that all students are out of their classrooms and adjoining restrooms and workrooms.
 - c. If evacuating because of a Bomb Threat, make sure students take personal belongings with them.
- 2. Instructors should close the doors after following their students out of the building.
- 3. The first student in line should be instructed to hold open the exit door(s) until all persons in the class have evacuated.
- 4. Classes should proceed to a designated evacuation assembly points. Once there, instructors should make note of students who are not present and furnish those names to school administrators as soon as possible.
- 5. Instructors should remain with their students until an administrator provides an "All clear" signal.
- 6. When an off-campus evacuation is called, instructors should follow the same basic steps as outlined in evacuating a building on campus.

11.0 TRAINING, DRILLS AND EXERCISES

11.1 Training Goal

The goal of the School's Emergency Management training, drills and exercises is to ensure the EOC and campus community is prepared to carry out emergency response functions during any emergency. Training, drills and exercise are designed to meet the following goals:

- Provide general instructions to the campus population regarding potential hazards, methods of alerting and protective actions.
- Familiarize the campus community with evacuation procedures and routes to reduce panic during an actual emergency.
- Provide training to members of the EOC staff.
- Provide problem-solving drills to the members of the EOC to enhance skills.
- Continually improve emergency management and response training incorporating new ideas and lessons learned.

11.2 Training Scope

Training, drills, and exercises are conducted in a no-fault learning environment wherein systems and processes are evaluated. An After-Action Report (AAR) will be written after a training, exercise and/or drill. The AAR results will provide an opportunity to identify weaknesses, enhance strengths and improve capabilities. Because the school tests emergency plans, skills, resources, and relationships in response to a dynamic homeland security environment, drills and/or exercises may result in multiple findings and recommendations for improvement.

11.3 Emergency Services Coordinator

The Emergency Services Coordinator role is tasked to the EOC Coordinator. The Emergency Services Coordinator will ensure campus employees are aware of this plan and are trained to levels required by the guiding directives in SEMS/NIMS.

11.4 Training Requirements

Current training requirements include ICS (ICS 100, ICS 200), SEMS, and NIMS (IS 700) as required by State and Federal guidelines. The Emergency Services Coordinator will inform Campus Staff of training opportunities associated with emergency management. Those with responsibilities under this plan must ensure their personnel are properly trained to carry out these responsibilities.

12.0 SPORTING, CONCERT, AND MAJOR EVENTS

12.1 Purpose

Mississippi Delta Community College is known for its strong athletic programs, particularly in football, basketball, softball, and baseball. MDCC also hosts concerts, graduations, and many other major events on campus. These major events are primarily located at the main campus in Moorhead, MS that attract many fans, making it essential to have an effective crisis response plan in place to ensure the safety and well-being of attendees. The importance of crisis response planning cannot be overstated. Major events, such as football games, basketball games, softball games, and baseball games, can potentially face emergencies such as severe weather, medical emergencies, security threats, and other unforeseen situations. A well-developed crisis response plan helps to mitigate risks, maintain order, and protect the safety of all participants involved.

12.2 Safety Policies and Prohibited Items

Clear Bag Policy

MDCC has implemented a clear bag policy for all major events. Attendees are required to enter the event with clear bags, which allows for easy inspection and prevents the concealment of prohibited items.

· No Animals

Except for service animals, MDCC strictly prohibits animals from being present at major events. This policy is in place to ensure the comfort and safety of all attendees.

No Drones or Aircraft

In order to protect the safety, security, and privacy of attendees, MDCC has a strict nodrones or aircraft policy during major events. Unauthorized drone flights are strictly prohibited.

· No One Around Trojan Lake

MDCC has implemented a policy that restricts attendees from being in the vicinity of Trojan Lake during major events. This policy aims to prevent accidents and potential drowning incidents.

No Weapons

In order to prevent active shooters, and ensure the safety of attendees, MDCC has a strict no weapons policy. These major events are ticketed private establishment events and do permit open carry on a college campus.

12.2 Training Programs for Staff and Volunteers

To ensure the successful implementation of crisis response strategies, MDCC conducts regular training programs for staff and volunteers involved in major events. These programs provide essential knowledge, skills, and protocols to handle emergency situations effectively. MDCC has strategically placed emergency tools throughout the venues to provide immediate assistance in case of emergencies. These tools are equipped with communication systems, emergency supplies, and trained staff to coordinate response efforts.

Cooling Stations

To ensure the comfort and well-being of attendees, MDCC has established cooling stations during major events. These stations provide a respite from high temperatures and offer hydration options to prevent heat-related illnesses.

First Aid Kits

MDCC ensures the availability of first aid kits at critical locations, including one on the field and one in the press box. Trained medical personnel are also present to provide immediate medical assistance in case of injuries or medical emergencies.

Defibrillators (AEDs)

In recognition of the importance of prompt defibrillation during cardiac emergencies, MDCC has installed automated external defibrillators (AEDs) at key locations. One AED is placed on the field and another in the press box for quick access and potential lifesaving interventions.

12.3 Staff and Volunteers

To ensure the successful implementation of crisis response strategies, MDCC conducts regular training programs for staff and volunteers involved in major events. These programs provide essential knowledge, skills, and protocols to handle emergency situations effectively.

12.4 Collaborative Partnerships

Coordinate with Local Emergency Management Agencies
MDCC maintains close coordination with local emergency management agencies,
including fire departments, law enforcement agencies, and medical facilities. This
collaboration ensures efficient emergency response and enhances the overall safety
preparedness during major events.

1.Communication with Law Enforcement Officials
MDCC has established effective communication channels with law enforcement
officials to promptly address any security-related concerns. This collaboration allows
for a timely response and ensures a secure environment for all attendees.

2.Cooperation with Medical Personnel MDCC works closely with medical personnel, including paramedics, nurses, and doctors, to provide immediate medical attention in case of emergencies. This collaboration ensures a coordinated and effective medical response during major events.

Helicopter Landing

MDCC has designated a helicopter landing spot near the Allied Health Building. This spot allows for the rapid transport of critically injured or ill individuals to nearby medical facilities in cases where ground transportation is not feasible.

CAMPUS EMERGENCY GUIDLINES

ACTIVE SHOOTER (page 1)

Violent incidents can include acts of terrorism, an active shooter, assaults, or other incidents of workplace violence, can occur on college grounds or near little or no warning. An active shooter is a suspect or assailant who uses a firearm to cause serious injury or death. Mississippi Delta Community College has adopted nationally accredited law enforcement response procedures to contain and terminate such threats as quickly as possible.

The following information regarding law enforcement responses will enable you to take appropriate action. Try to remain calm as your actions will influence others. The following instructions are intended for emergent incidents (i.e., imminent or in progress).

Actions You Should Take Immediately:

- 1. Secure the Immediate Area. Whether in a classroom, residence hall room, office, or restroom:
 - Barricade or lock the door. Block the door using whatever is available, such as
 desks, tables, file cabinets, or other furniture.
 - If it is safe for you to do so, allow others to seek refuge with you.
 - If the assailant enters your room and leaves, lock or barricade the door behind him.
 - Next secure the door, stay behind solid objects away from the door as much as possible.
- 2. Protective Actions. Take appropriate steps to reduce your vulnerability:
 - Block windows
 - · Close blinds.
 - · Keep people calm and quiet.
 - Once the room is secure, people should remain out of sight.
 - Silence cell phones.
 - Turn off radios and computer monitors.
- 3. Open Areas. If you find yourself in an open area, immediately seek protection:
 - Consider trying to escape if you know where the assailant is and if there appears to be an escape route immediately available to you.

ACTIVE SHOOTER (page 2)

- Create separation between you and the assailant.
- If in doubt, find the nearest and safest assembly area available.
- **4.** Call 911. Emergencies should be reported to law enforcement by dialing 9-1-1. To report an incident to the campus police dial:

Moorhead Campus (Moorhead, MS): 662-246-8011 Charlie Capps Center (Indianola, MS): 662-246-8011 Greenwood Center (Greenwood, MS): 662-453-3311

Greenville Higher Education Center (Greenville, MS): 662-379-7305

You may hear multiple rings but stay on the line until it is answered. Do not hang up. Be prepared to provide the Police Officer with as much information as possible, such as the following:

- Begin by stating your name, the building name, and room number.
- Describe the nature of the emergency
- The number of people at the location.
- Injuries, if any, include the number of injured and types of injuries.

Try to provide information in a calm, clear manner so that the Police Officer can quickly relay your information to responding law enforcement and emergency personnel.

- 5. What to Report. Try to note as much as possible about the assailant, including:
 - Clothing color and style.
 - · Description of any backpack or bag.
 - Do you know their name(s)?
 - Do you recognize the assailant(s)?
 - Gender, race, and age of the assailant(s).
 - Language or commands used by the assailant(s).
 - Physical features, e.g., height, weight, facial hair, glasses.
 - Specific location and direction of the assailant(s).
 - The number of assailants.
 - Type of weapons, e.g., handgun, rifle, shotgun, explosives.
 - What exactly did you hear (e.g., explosions, gunshots)?

ACTIVE SHOOTER (page 3)

6. When to Leave

- Always consider the risk of exposure by opening the door for any reason.
- An assailant may not stop until their objective(s) have been met or until engaged and neutralized by law enforcement.
- Attempts to rescue people should only be made if it can be done without further endangering yourself or the persons inside the secure area.
- Be aware that the assailant may bang on the door, yell for help, or otherwise attempt to entice you to open the door of a secured area.
- If there are concerns about the safety of the individuals inside the room, the area must remain secure.

It is best to remain in a secured area until the "ALL CLEAR" is issued by law enforcement.

What to Expect from a Law Enforcement Response Team

Mississippi Delta Community College Police Officers will respond immediately to the area and may be assisted by other law enforcement agencies. Law enforcement's purpose is to stop the active shooter as soon as possible. The first officers to arrive on the scene will not stop to help injured persons. Expect rescue teams comprised of additional officers and emergency medical personnel to follow the initial officers (this will not occur until the threat is neutralized, and the area is secure). Remember:

1. Help is on the way.

- Law enforcement will locate, contain, and stop the assailant.
- Stay inside the secure area, so long as it is safe to do so.
- The assailant may not flee when law enforcement enters the building but may target arriving officers.
- The safest place is in a locked/barricaded room.

2. When law enforcement arrives:

Always follow the officers' instructions.

- Always keep hands visible.
- Discard any items in your hands, e.g., bags, jackets.
- Immediately raise hands and spread fingers.
- Refrain from making sudden movements toward officers.

ACTIVE SHOOTER (page 4)

- Refrain from pointing, screaming, or yelling.
- **3. Injured Persons.** Initial responding officers will not treat the injured or begin evacuation until the threat is neutralized and the area is secure.
 - Once the threat is neutralized, officers will assist EMS with treatment and evacuation of injured and other personnel.
 - You may need to explain this to others to calm them.
- 4. Evacuation. Responding officers will establish safe corridors for persons to evacuate.
 - Exiting a building can be time-consuming.
 - Follow the directions of law enforcement personnel.
 - Remain in secured areas until instructed otherwise.
 - You may be instructed to keep your hands on your head.
 - · You may be searched.

After evacuation, you may be taken to a staging or holding area for medical care, interviewing, counseling, etc.

AIRCRAFT DOWN (CRASH) ON CAMPUS

If an aircraft crashes on campus, take the following action:

- Take cover under tables, desks, and other objects which will give protection against falling glass or debris.
- After the effects of the explosion and/or fire have subsided, notify Campus Police. Give your name and describe the location and nature of the emergency. Stay on the line until told to hang up.
- If necessary, activate the building fire alarm.
- When the fire alarm is sounded or when told to leave by MDCC officials, walk quickly to the nearest exit and ask others to do the same.
- Do not use elevators in case of fire. DO NOT PANIC. Disabled persons should move to the nearest stairwell. Rescue personnel should be informed of any persons remaining in the building.
- Once outside, move to a clear area that is at least 500 feet away from the affected area.
- **DO NOT** return to an evacuated building/area until the all-clear is given by emergency services.

CIVIL PROTEST (page 1)

In many cases, campus protests (marches, meetings, picketing, and rallies) will be peaceful and non-obstructive. A protest should not be disrupted unless one or more of the following conditions exist(s) as a result of the demonstration.

- Interference with the normal MDCC operations.
- Prevention of access to offices, buildings, or other MDCC facilities.
- Threat of physical harm to persons or damage to MDCC facilities.

If any of these conditions exist, Campus Police should be notified and will be responsible for contacting and informing the Director of the campus site and the President. The Campus site Director or designee will notify School Representatives, and/or President. Depending upon the nature of the protest, the appropriate procedures listed below should be followed: Peaceful, Non-Obstructive Protest Generally, protests of this kind should not be interrupted. Protests should not be obstructed or provoked, and efforts should be made to conduct MDCC business as normally as possible. If protesters are asked (at the request of the MDCC Administration) to leave, but refuse to leave by regular facility closing time:

- Arrangements will be made by the MDCC Administration to monitor the situation during non-business hours, or
- Determination will be made to treat the violation of regular closing hours as a disruptive protest.

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Non-Violent, Disruptive Protest. In the event that a protest blocks access to the facilities or interferes with the operation of Mississippi Delta Community College:

- The Campus Police Chief will ask protesters to terminate the disruptive activity.
- The Campus Police Department will consider having a photographer or video taper available.
- The Campus Police Chief and personnel will go to the area and persuade the protesters to cease and desist.
- The Campus Police Chief will go to the area and ask the protesters to leave or to discontinue the disruptive activities.
- If the protesters persist in disruptive activity, they will be apprised that failure to discontinue the specified action within a determined amount of time may result in disciplinary action (suspension, expulsion, possible intervention by civil

CIVIL PROTEST (page 2)

authorities). Except in extreme emergencies, the partner school Presidents or their designees will be consulted before such disciplinary actions take place.

- To facilitate later testimony, efforts should be made to secure positive identification (including photographs if available) of protestors in violation.
- After consultation with the administrators, the need for an injunction and intervention by Campus Police will be determined

Violent, Disruptive Protests. If a violent protest in which injury to persons or property occurs or appears eminent, the administrators will be notified.

During Business Hours:

- If advisable, the Campus Police Chief may ask a photographer or video taper to report to an advantageous location for photographing or taping the protesters.
- The Campus Police Chief will determine the possible need for an injunction.
- · Campus Police will provide assistance as needed.

After Business Hours:

- Campus Police should be immediately notified of the disturbance.
- Campus Police will investigate the disruption and report findings to the Campus Director or designee and President of Mississippi Delta Community College.

Directive to Terminate Protest

(Identify Self). Then say, "This assembly and the conduct of each participant is seriously disrupting the operations of the campus and is in clear violation of the rules. You have been called upon to disperse and terminate the demonstration. [Optional directives: a) You will be given the opportunity to discuss your grievances in the manner appropriate to Mississippi Delta Community College. b) In no event will the administration accede to demands backed by force.] Accordingly, you are directed to terminate this protest. If you have not done so within 15 minutes, Campus Police Chief will take whatever measures are necessary to restore order—including calling other police for assistance. Any person who continues to participate in this protest is subject to possible arrest, criminal prosecution, and/or suspension from college."

CIVIL PROTEST (page 3)

Directive to Terminate Demonstration with the Assistance of the Police

(Identify Self). Then say, "You have previously been directed to terminate this protest, and you have been put on notice as to the consequences of your failure to do so. Since you have chosen to remain in violation of the rules and regulations of Mississippi Delta Community College, each of you is hereby suspended, subject to later review. The Campus Police will now be called to assist in dispersing this assembly. Those who fail to leave immediately will be subject to arrest."

CRIMINAL OR VIOLENT BEHAVIOR

In a life-threatening emergency, dial 911.

- Everyone is asked to assist in making the campus a safe place by being alert to suspicious situations and promptly reporting them.
- If you are a victim or a witness to any on-campus offense, avoid risks!
- Promptly notify the Campus Police as soon as possible and report the incident. Be sure to include the following information:
- Nature of the incident
- Location of the incident
- Description of the person(s) involved.
- Description of the property involved.
- If you observe a criminal act or whenever you observe a suspicious person on campus, immediately notify Campus Police) and report the incident.
- Assist the officers when they arrive by supplying them with all additional information and ask others to cooperate.
- Should you hear gunfire or discharged explosives; you should take cover immediately using all available concealment.

Practice crime prevention and learn self-defense techniques. If you do so, the likelihood of being involved as a victim of violent or criminal behavior may be reduced. Don't just leave the job of preventing crime to others; you can be your own best security.

DEATH ON CAMPUS

Notify Campus Police and/or 911 immediately. Campus Police will notify the campus night Director or designee and other appropriate personnel. The room or area where the death occurred should be secured, pending the arrival of the police department personnel.

- No one should enter the area.
- Nothing should be moved or removed.
- Witnesses should remain in the area. They may be located in another room.
- Campus Police will coordinate the response and ensure that the following occurs:
- · Secure the area.
- Identify the people who discovered or have information about the incident.
- Contact appropriate administrators.

It is the policy of Mississippi Delta Community College that no information will be released except through the MDCC Public Relations Department.

ATTEMPTED SUICIDE

You may come in close contact with a wide variety of students daily. You get to know some of these individuals very well and are familiar with their moods and behaviors. Thus, you are in an excellent position to notice attitudinal or behavioral changes that might indicate an adjustment difficulty or emotional problem. Working together, we may identify and assist students who need additional support to remain enrolled and be successful at MDCC.

If a suicidal attempt appears imminent, notify Campus Police. If the attempt is threatened but does not appear to be imminent, notify the Dean of Student Services Office with detailed information.

The following are observable signs that may indicate a student referral:

- A sudden decrease in class attendance, participation, or performance
- Change in peer groups
- Comments about suicide, depression, abuse, or other trauma
- · Crying or sleeping in class
- · Dramatic weight loss or gain
- Inability to concentrate in class
- Sudden lack of interest in hygiene or appearance
- Under the influence of drugs/alcohol in class
- Unusually high (or low) energy level
- Withdrawal or isolation from others

Guidelines for referring a student for counseling services (non-emergency):

- Encourage the student to contact the Counseling Office.
- Give the student the Counseling Office number.
- Speak directly to the student and express your concern.

The counselor at MDCC can:

- Answer your questions concerning how to assist students
- Offer information about personal concerns and problems
- Provide community referral services for students and employees of MDCC

SEVERE WEATHER/ TORNADO

Severe Weather/Tornado Watch: A watch is an indication of where and when the probabilities of highest that severe weather and/or a tornado could occur. A watch is a statement that severe weather/tornado conditions are present, represent a potential threat, and could occur. The National Weather Service will issue a watch bulletin to local authorities, as well as to the local radio and TV stations.

Severe Weather/Tornado Warning: When a severe weather/tornado sighting occurs, the National Weather Service alerts all weather stations and local authorities. If severe weather or a tornado is approaching, a continuous sounding of the city's emergency sirens will signal the warning. Campus maintenance will sound the short, intermittent rings of bells to notify the Campus Police Department personnel and others present on campus of the warning.

Standard terms used during severe weather include:

Tornado Warning- Tornado detected. Take shelter. Tornado Watch- Tornados are possible.

If a TORNADO WARNING is issued:

- Avoid all windows.
- Go to the basement or lowest floor possible. Disabled individuals will be assisted as needed.
- If in the classroom, go to an interior hallway or designated area.
- If outdoors without shelter, lie flat in a nearby ditch and shield your head.

EARTHQUAKE

Earthquakes occur without warning. Some earthquakes are instantaneous tremors, and others are significant, sustained events followed by aftershocks. Once a significant earthquake begins, building occupants must take immediate action. Individuals should take emergency action to ensure their safety, and more actions will be implemented after the quake stops. An earthquake may cause noticeable shaking of the ground and buildings. This shaking will vary in intensity (i.e., mild tremors to shaking sufficient to destroy buildings). When a significant earthquake occurs, occupants should immediately take cover. Some forms of covers include standing under a doorway and bracing your hands and feet against each side; getting under a desk or heavy table; standing flat against an interior wall.

Do not seek cover under laboratory tables or benches as chemicals could spill and cause injury. Do not use elevators to get to lower floors. For disabled or impaired individuals, please refer to Appendix I (Guidelines for Persons with Disabilities).

Immediate Action Plan

1. SEEK SHELTER IMMEDIATELY.

- Indoors: Watch for flying glass, falling plaster, bricks, light fixtures, and other objects. Stay clear of high bookcases, shelves, and other furniture, which might slide or topple, as well as windows and mirrors.
- Outside: Avoid tall buildings, walls, power poles, and other objects, which could fall. If possible, move to an open area, large parking lot or, lawn area away from all hazards.
- In a car: Stop in the safest place available in an open area.
- 2. If it is safe, remain in place until the "ALL CLEAR" signal is given.

FIRE (page 1)

Residence Hall Emergency Fire Plan

Despite all precautions to prevent our MDCC students from fire hazards, fires can happen. The following information will help in the event of a fire.

PLEASE READ THE FOLLOWING INFORMATION CAREFULLY.

- Know where exits are located.
 - Make sure the windows in your room are not blocked.
 - Know the nearest hall exit.
- <u>Know</u> the location of fire extinguishers in your hall. Never play with fire extinguishers or fire alarms.
- When you are notified of a fire, do the following immediately:
 - A. Check to see if heat or smoke is coming in the cracks around the door.
 - B. If you see smoke coming under the door, DO NOT OPEN IT.
 - C. If you do not see smoke, touch the door. If the door is hot or very warm, DO NOT OPEN IT.
 - D. If you do not see smoke and the door is not hot, use your fingers to touch the doorknob lightly. If the doorknob is hot or very warm, DO NOT OPEN IT.
 - E. If the doorknob feels cool to the touch and you cannot see any smoke around the door, open the door very carefully and slowly. When you open the door, if you feel a burst of heat or smoke pours into the room, quickly shut the door and make sure it is closed. If there is no smoke or heat when you open the door, go toward your escape route exit.
 - F. Should you encounter smoke in the hall or your room, crawl to the nearest exit
 - G. If you become trapped in your room, open the window and exit through it. If the window is stuck, break it out and exit through the window.
 - H. Disabled individuals will receive help from the Residence Hall Director or other housing staff during the emergency.
- 1. Any time you see smoke or fire, carefully investigate, and call for help.
- 2. Each time you leave your room, check to make sure **EVERYTHING IS OFF!** This includes hot combs, irons, hairdryers, curlers, and other electrical devices.
- 3. **NEVER** cook in your room!

Fire Safety Protocol for the Classroom

In case of a fire, proceed according to the following directions:

FIRE (page 2)

- Call the 9-1-1, in case of a fire, and if capable notify the Campus Police
 Emergency Line at 662-246-8011.
 Instructors should inform students where to exit the building. Instructors will also
 help disabled individuals with exit procedures. Students are to walk quietly and
 calmly, always keeping to the right without taking time to gather any personal
 belongings before leaving the classroom. Always listen to the instructor's
 directions.
- Confine the fire by closing the door to the area involved.
 Notify facilities management of a break or suspected break-in lines that might present an additional hazard.
- Keep the path to the emergency area open for emergency vehicles. No one should return to the building until the authorities declare the area safe.

FLOOD (page 1)

Building:

Notify Campus Police. Please provide sufficient information regarding floor, room, degree of flooding, or potential damage due to the flooding.

Campus:

Preplanning (For Maintenance, Campus Police, and Administrators)

- A battery-operated, two-way radio is located in the Campus Police Office.
- Be familiar with where electrical panels, gas mains, and water mains are located.

During a Flood Watch (For Maintenance and Campus Police)

- Listen to the radio for latest storm information.
- Move people and valuable records to upper floors or safe ground, if time permits.
- Be prepared to evacuate.

During a Flood

If indoors

- Listen to radio for community instructions.
- If told to evacuate:
- Exit using the stairwells. Elevators may not work, due to utility shut down.
- Disabled persons who are unable to move down the stairwells should move to a stairwell. Caution should be used to avoid blocking traffic. Rescue personnel should be notified of any persons remaining in the building.

If outdoors

- Climb to high ground. STAY THERE.
- Avoid walking through flood waters. As little as six inches can have enough force to cause loss of balance. Water may also carry electrical current.

If in a car

- If you come to a flooded area, turn around and go another way.
- If your car should stall, immediately abandon the vehicle and climb to higher ground.

FLOOD (page 2)

During an Evacuation

- If advised to evacuate, do so immediately. Evacuation is much simpler and safer before floodwaters become too deep for ordinary vehicles to drive through.
- Listen to a battery-operated radio for evacuation instructions.
- Follow recommended evacuation routes—shortcuts may be blocked.
- Leave early enough to avoid being marooned by flooded roads.

After the Flood has occurred

Flood dangers do not end when the water begins to recede. Listen to a radio or television and do not return to campus until authorities indicate it is safe to do so.

- Inspect foundations for cracks or other damage.
- Stay out of buildings if floodwaters remain around or within the building.
- When entering buildings, use extreme caution:
 - All utilities should be turned off before entering a building.
 Maintenance will give authorization to enter a building.
 - Wear sturdy shoes and use battery-powered lanterns or flashlights when examining buildings.
 - Examine walls, floors, doors, and windows to make sure that the building is not in danger of collapsing.
 - Watch for loose plaster and ceilings that could fall.

Look for fire hazards.

- Broken or leaking gas lines
- Flooded electrical circuits
- Submerged electrical appliances
- Flammable or explosive materials coming from upstream

Sewage

 A TD (tetanus/diphtheria) shot is needed by anyone who comes into contact with sewage

Note: Special caution should be used by anyone entering a basement or low-lying area because of the possibility of sewage exposure.

SEXUAL ASSAULT/ RAPE

- Response for students reporting a sexual assault:
- All reports or allegations of sexual assault (acquaintance rape, rape, attempted rape, etc.) will be immediately reported to Camus Police.
- The Campus Police Officer will contact the Director and President.
- If the victim declines Police involvement, the contacted office may call upon the Domestic Violence and Rape 24-Hour Hotline to be available to support students during the campus reporting process. (In the event of a medical emergency, medical response personnel will be contacted by Campus Police.)
- The general procedure of the reporting process will include the following information:
- Student may choose to report
- Student may choose to not report
- Explanation is given that the incident may be reportable excluding identifiers (name, time, location of assault)
- Explanation is given of the requirement to investigate and possibly issue a Timely Warning for the safety of the campus community.
- Students have the right to refuse the involvement of support of personnel in the process.

TERRORISTIC THREATS

- Keep talking to the caller on the line as long as possible.
- Record the following information:
 - Time of call
 - · Name of caller
 - · Age and gender of caller
 - Speech pattern, accent, possible nationality, etc.
 - · Emotional state of caller
 - Background noise.
- Immediately after hanging up from caller, report the call to Campus Police.

UTILITY FAILURE

- In the event of a major utility failure occurring during regular business hours, immediately notify the Maintenance Supervisor.
- If telephone service is not available, go to the Maintenance office.
- If there is potential danger to the building and/or its occupants, call Campus Police.
- If an emergency exists, evacuate the building.
- Once outside move at least 500 feet away from the building. Keep the walkways, fire lanes, and hydrants clear for emergency crews.
- A Crisis Command Post may be set up near the emergency site. Keep clear of the command post unless you have official business.
- Do not return to an evacuated building until the all-clear is given by emergency personnel.

Additional Procedures:

- Electrical Light Failure: All stairwells and emergency corridors are equipped with emergency lighting with battery backup for safe exiting of a building during a light failure.
- Elevator Failure: If you are trapped in an elevator, turn on the emergency alarm (located on the front panel), which will signal for help.
- Plumbing Failure/Flooding: Cease using all equipment. If necessary, vacate the area.
- Serious Oil Leak: Cease all operations. Do not switch on lights or any electrical equipment.
- Steam Line Failure: Immediately notify Maintenance Supervisor. If necessary, evacuate the building.
- Ventilation Problem: If smoke or odors come from the building ventilation system, immediately notify Maintenance Supervisor. If necessary, evacuate the building.

WINTER STORMS (page 1)

Closing of the Mississippi Delta Community College or Cancellation of Classes or Activities Due to Inclement Weather or Other Emergencies

Purpose

This policy articulates the procedures that are followed by Mississippi Delta Community College (MDCC) or cancel academic or non-academic activities due to inclement weather or other emergency conditions. A second purpose is to describe MDCC is work conditions that prevail during the time that MDCC is closed. A third purpose is to describe procedures that are followed when a MDCC employee is unable to meet work responsibilities because of inclement weather.

Definitions

- Closing MDCC: Closing the MDCC means to cease all operations for all other than those operations deemed essential to the protection of life and property.
- Closing MDCC results in the cancellation of classes, student and staff activities and meetings, and all general offices.
- **Delayed Opening:** Delayed opening refers to opening of all operations for all three (3) institutions at a later-than-usual time, other than those operations essential to the protection of life and property.
- Cancellation of Classes: Cancellation of classes (off-campus or on-campus)
 means to cancel one, several, or all classes of either a single institution, several
 of the institutions, or all the institutions, in the absence of officially closing the
 entire MDCC.
- Cancellation of Non-Academic Activities: Cancellation of non-academic activities refers to the cancellation of an event, such as community meetings, theatrical productions, concerts, or workshops.

Authority

The decision to close MDCC or to have a delayed opening when severe weather conditions or other emergency exists will be a collaborative decision among the partner-institution Presidents (or designee) and the campus site Directors.

WINTER STORMS (page 2)

The decision to cancel classes or other activities may occur either by individual institution, or collaboratively with all institutions. Individual institutional differences, such as ITV or weekend events classes commuting faculty, etc., may necessitate class cancellation for a single institution. The authority for cancellation of MDCC classes is the MDCC President (or designee). The decision to cancel a non-academic event or activity may be delegated to the director of that event or activity, in consultation with Facilities-Rental Coordinator.

Procedures and Notification:

In times of weather or other emergency conditions, assessment of conditions will be the collaborative responsibility of the partner school Presidents (or designees) and the Director (or designee). Personnel at the regional office of the will be consulted regarding existing travel and safety conditions prior to any decisions regarding cancellation and/or closure.

The School Representatives and Director will identify and inform essential personnel who must report to work during the times is closed or there is a delayed opening due to an emergency. School Representatives and the Moorhead, MS Director must develop procedures for notification of such personnel at those times. Director (or designee) and man Maintenance Supervisor are designated as essential for purposes of closing due to inclement weather or other emergencies.

School Representatives will provide notification to their respective Instructors and employees on duty at the time the emergency closing is determined. School Representatives and/or Instructors will be responsible for notifying students. The Director (or designee) will provide notification to employees.

Whenever possible, the decision to close the MDCC, have a delayed opening, or cancel day classes will be made prior to 6:00 a.m. Special attention will be given to night classes, as many of these students and faculty travel considerable distances.

WINTER STORMS (page 3)

Each institution will be responsible for notifying their constituents according to their respective communications plan. MDCC's policy for official announcements is as follows:

If the decision is to close the college, the MDCC administration will make all official College announcements by way of the Public Relations Director. Announcements of an emergency closing will, to the extent possible, specify the starting and ending times of the closing, and whether the closing includes specific College services, events, evening classes, athletic events and programs.

The College website is the primary source of information on college closings. Announcements are also distributed via email and text message. To the extent possible, local radio and television stations will be notified. Calling College offices will not guarantee that the latest or most accurate information is provided to the caller. Therefore, college announcements will be made available as follows:

- College website: www.msdelta.edu
- College email to all employees and students with active email addresses
- MDCC Alerts (note: registration of your mobile number is required)
- Social Media: Facebook, Twitter, Instagram
- Radio: Local AM & FM stations will be notified
- Television: WABG-ABC and WXVT-CBS

The School Representatives will be responsible for providing notification back to their respective main campuses in the above situations. In the case when class cancellation affects only a single institution, the President (or designee) of that institution will be responsible for notifying the media.

The partner school Presidents (or designees) will be responsible for dissemination of this policy throughout their respective institutions. Posting on bulletin boards, supervisors discussing this at staff meetings, providing information to student clubs and organizations, providing copies to local

representatives of each bargaining unit, incorporating this in faculty and staff handbooks (as well as any student handbooks) are all appropriate methods of dissemination. All employees who are designated as essential will be provided a copy of this policy.

Work responsibilities when he is closed, or classes and non-academic activities are canceled.

WINTER STORMS (page 4)

- When the wrist is closed due to an emergency which threatens the health and safety of individuals, employees not deemed essential for the safe operation of they may be excused from duty with full pay. Regarding such closure, the following additional guidelines will prevail:
- When the institution is closed, employees are excused from work with pay. Essential employees who are not excused from work will be paid their regular rate of pay during the weather or other emergency.
- Employees who reported for work and were sent home should not be paid for more than their regular scheduled hours. Employees will not be enriched through additional compensation, including compensatory time, or increased benefits as a result of an emergency.
- Employees who were required by their appointing authorities to remain at work should not be paid for more than their regular scheduled hours or the actual hours worked inclusive of any overtime.
- Employees on approved sick or pre-arranged vacation/leave will not have such leave time restored to their balances.
- Employees on any approved leave without pay will not be paid for this emergency leave time.
- On the day of the emergency, employees who are called in from vacation time, compensatory time, or leave without pay will be credited with emergency leave from the point of the declaration of the emergency to the end of the scheduled shift, if the appointing authority ceased operation during their regular shift.
- Employee time reports should indicate the number of emergency hours used in the remarks section on their time report.
- When classes are canceled but the MDCC is not closed, appropriate curricular adjustments will be made by the faculty on an individual basis.
- When non-academic activities are canceled, the activities will be rescheduled when appropriate and possible.
- Work responsibilities during inclement weather when the MDCC is not closed:
- Due to personal circumstance (such as place of residence) during inclement weather, employees might find it necessary to leave work early, even though the MDCC has not been closed. Further, employees might be unable to get to work, even though the MDCC is open. In such cases, emergency/personal leave or vacation leave may be granted or, if working conditions permit, the time may be made up.

HOSTAGE SITUATION

If taken hostage:

- Be patient. Time is on your side. Avoid drastic action.
- Follow instructions, be alert and stay alive. Don't make mistakes that could endanger your well-being.
- Don't speak unless spoken to and then only when necessary. Don't talk down to captor, who may be in an agitated state.
- Avoid appearing hostile.
- Try to rest.
- · Avoid speculation.
- Comply with instructions as best you can.
- Avoid arguments
- Expect the unexpected
- Be observant. You may be released or escape. The personal safety of others may depend upon memory.
- Be patient; wait.
- Attempt to establish rapport with the captor.
- If medications, first aid, or restroom privileges are needed by anyone, say so

CHEMICAL/HAZARDOUS SUBSTANCE SPILL (page 1)

Hazardous Spill Assessment:

In the following situations, call Campus Police.

- For spills that involve injury requiring medical treatment
- For spills that involve fire or explosion hazards
- For spills which are potentially life threatening
- For all chemical spills after work hours (4:30 p.m. 8:00 a.m.)
- For spills of one pint (half liter) or more of a chemical, or any quantity of a highly reactive or toxic material
- For metallic mercury spills
- For spills of an unknown chemical
- For spills for which you do not have proper training or proper protective equipment to do the cleanup
- For spills for which you have any questions or doubts about your ability to adequately/appropriately/safely clean up
- Information needed by Campus Police:
- State that this is an emergency.
- Give your name, telephone number, and location.
- Tell the location of the incident.
- Give the name and quantity of material involved.
- Note the extent of injuries, if any.
- Explain the possible hazards to human health or the environment.
- Warn emergency responders of any other hazards they may encounter (large onsite quantities of stored chemicals, radioactive materials, biohazards, etc.).
- Outline the safest route to approach the spill. Evacuate and Secure
- Alert others in area and evacuate everyone from the spill area.
- Direct personnel to the nearest fire exit. Do not use elevators.
- Shut off electrical equipment as you leave the area.
- Attend to the victims First Aid
- Remove the victims from the spill area to fresh air (if possible). Do not endanger your own life by entering areas with toxic gases.
- Immediately remove contaminated clothing.
- Flush skin or eyes with running water for 15 minutes.
- Get medical attention for victims.
- Do not use neutralizing chemicals, unguents, creams, lotions, or salves.

CHEMICAL/HAZARDOUS SUBSTANCE SPILL (page 2)

Chemical spills over large body areas:

- Remove contaminated clothing while under shower.
- Flush affected body area with lukewarm water for at least 15 minutes.
- Resume wash if pain returns.
- Isolate area.
- Establish exhaust ventilation if possible.
- Vent fumes only to outside of building
- Open windows, if possible, without exposing yourself to fumes.
- If vapor or gasses are in room that is not vented to outside of building, close off the room.
- Make sure personnel understand exactly which chemicals are involved.
- Until emergency responders arrive on the scene, Campus Police and Administrators will have to block off the entrances to the spill site and prevent people from entering the contaminated area.
- Lock doors leading to the chemical spill and post signs on doors warning of the spill.
- Tape or rope off stairwells and elevators leading to the spill and hang signs on the tape.
- When chemical vapors or gases are being spread through the building's air handling system, call Maintenance (to have the ventilation system shut off. Evacuate the building and secure the Entire building from the outside.
- Post staff by commonly used entrances to the spill site, so they can warn people to use other routes.
- For large outdoor chemical spills, keep uphill, upstream, and upwind of the site.

Clean Up:

Department Hazardous Waste team will clean up or stabilize spills that are considered high hazard (fire, health, or reactivity). Facilities Management and/or Campus Police may be asked to act as technical advisors to the emergency response personnel.

GAS LEAK EMERGENCIES

If a gas leak is suspected, immediately report the incident to the Campus Police. Be prepared to provide information such as your name, exact location of the suspected leak, and injuries or property damage. Facilities Management will be notified and will contact Atmos if needed.

Facilities Management will be called to assess the potential hazard of a suspected gas leak inside or near a building. Campus Police will also assess the hazard to occupants, the public, and property. Once a leak has been identified, all affected occupants will be notified to evacuate the immediate area. Campus Police will ensure that occupants evacuate the building to a safe distance in an orderly manner. Occupants will be instructed not to turn on or off electrical switches, use phones (both landline and cellular), light matches or cigarettes, nor start machinery or other equipment. Atmos and other local emergency responders such as the fire department will be notified if needed. Campus Police will give the "ALL CLEAR" when it has been determined to be safe to return to the area.

Facilities Management will ensure that all flames or burners are extinguished. If MDCC personnel cannot safely extinguish a fire, the local fire department will assist in the emergency. The local fire department will handle explosions due to a gas leak. Campus Police will secure the scene and ensure that affected occupants remain a safe distance from the danger.

In a natural disaster such as a tornado, Facilities Management will assess the scene to determine the extent of the damage. The main valve will be closed to prevent a gas leak if needed. If a leak has occurred, Atmos will be notified to assist in the emergency. Local authorities will be notified as needed.

BOMB THREATS (page 1)

1. SEEK SHELTER IMMEDIATELY.

- Listen carefully. Be polite and show interest. Try to keep the caller talking so that you can gather more information about the device, the validity of the threat, or the caller's identity. Listen carefully for background noises.
- Notify a supervisor or co-worker and have them immediately to notify Campus Police. Note the phone number of the caller if your telephone has a display.
- Gather as much information as possible. Use the bomb threat checklist and ask
 questions in a polite and non-threatening manner. WRITE DOWN THE EXACT
 WORDS OF THE CALLER AND ANY THREATS.
- Remain available to answer questions from responding officers.
- Outside: Avoid tall buildings, walls, power poles, and other objects, which could fall. If possible, move to an open area, large parking lot or, lawn area away from all hazards.
- If another individual received the threat and relayed information to you, use the checklist to gather as much information as possible.

The form below is for documenting and printing only. It is not sent to MDCC Police or any other law enforcement agency.

Date of Call:	Phone # of Caller:
Time Call Received: AM PM	Time Call Concluded: AM PM
Person Receiving Call:	Phone # Call Received On:

What were the EXACT WORDS of the caller? Ask them to repeat the message, if necessary.

Ask the following questions:

- Are you aware that it could kill or injure innocent people in addition to those you intend to hurt?
- Did you place the bomb?
- What does the bomb look like?
- What is your address?

BOMB THREATS (page 2)

- What is your name?
- What kind of bomb is it?
- What will make the bomb explode?
- When did you put it there?
- When is the bomb going to explode?
- Where are you?
- Where exactly is the bomb?
- Why did you plant the bomb?

Characteristics of Call Origination:	□ Local	☐ Long Distance	☐ Cell Phone	□ Unknown
Message:	☐ Live	☐ Recorded	☐ Message read l	
Wessage.	□ Live	□ Recorded	□ Message read	by carrer
Characteristics of	the Caller			
Sex of Caller:		☐ Female	☐ Unknov	vn
Estimated Age: Adult	□ Child/T	Ceen ☐ Young Ac	lult 🗆 Middle-a	aged Adult
Voice Qualities:				
□ Clear			☐ Distorted / Muff	fled
□ Loud			□ Soft	
☐ Pitch-High			☐ Pitch-Low/Deep	
□ Raspy			□ Smooth	
☐ Pleasant			☐ Unpleasant	
Comments:				
Speech Pattern:				
□ Deliberate			□ Fast	
☐ Hesitant			- ~1	
□ Distinct (Describe)□ Slurred			☐ Speech Impedin	
Comments:			☐ Accent (Describ	00)
Comments.				
Language:				
☐ Educated			☐ Irrational	
☐ Uneducated			□ English	
□ Well-spoken			□ Non-English	
□ Foul			☐ Unusual Phrase	s/Slang
☐ Rational				
Comments:				
Behaviors:				
□ Calm			□ Angry	
☐ Confident			□ Nervous	
☐ Blaming			☐ Fearful	

□ Depressed	☐ Agitated	1
☐ Laughing	☐ Crying	
Comments:		
Background Sounds		
☐ Airport / Airplanes	☐ Office Machinery	☐ Train
☐ Animals / Birds	☐ PA System	☐ Traffic / Street
□ Children	□ Quiet	☐ Water / Wind
☐ Factory Machinery	☐ Restaurant / Bar	☐ Weapons
☐ House Noises	☐ Talking / Voices	
□ Music	☐ Television	
Comments:		
Observation/Comments:		
Did you recognize the voice? V	Who do you think it is?	
Did the caller indicate in-depth	knowledge of the facility?	
Did the caller attempt to disgui	se their voice?	
C		
Comments:		

CYBER SECURITY/COMPUTER SECURITY ATTACK

A computer security incident is any adverse event that threatens the confidentiality, integrity, or availability of university information assets, information systems, and the networks that deliver the information. Any violation of computer security policies, acceptable use policies, or standard computer security practices is an incident.

Adverse events may include unauthorized access to systems and information, denial-of-service attacks, loss of accountability, or damage to any part of the system. If an incident has happened or there is suspicion of an incident, the Director of Information Technology must be notified to help determine the level of the incident and next steps in response as defined in this document.

APPENDIX

I: GUILDLINES FOR PERSONS WITH DISABLITIES

If you are disabled, follow the below guidelines:

- If you cannot speak loudly, carry a whistle, or have some other means for attracting the attention of others.
- Know how to help others help you. Give clear instructions about your needs or preferences.
- Practice using escape routes.
- Tell a co-worker, classmate, or instructor in each area or class if you will need assistance during an emergency evacuation from the building.
- You are responsible for preparing yourself for emergencies by learning the location of exits, stairwells, and fire alarms in each building you use frequently.

Evacuation Procedures

Faculty and staff are responsible for directing evacuations from their classrooms and work areas. When the situation involves a person with a disability, use these guidelines to assist them:

- Do not move disabled persons without first asking them if they need help.
- If asked, assist the person to the nearest safe exit. If a stairwell is used and smoke is not present, assist them inside and close the fire door.
- If you cannot assist in the evacuation, alert emergency personnel to the person's location.
- Know the evacuation routes.
- · Remain calm.

Use of Elevators

- DO NOT USE the elevator during a fire!
- If the emergency is other than fire, persons with disabilities have priority using the elevators for evacuation.
- If you can physically use the stairways, you should NOT use the elevators during any emergency.
- If you do not know the nature of the emergency, assume it to be a fire.

Visually Impaired Persons

In an emergency, inform the person of the nature of the emergency and offer to guide them. Tell the person where you are and advise of any obstacles as you walk. Always remain calm. When you have reached the assembly area, inform the person about where they are and ask if further assistance is needed.

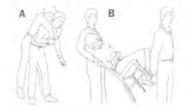
Hearing Impaired Persons

Persons with impaired hearing may not perceive emergency alarms, and an alternative warning technique is required. Two methods of warning that may be used include:

- Turning the light switch on and off. Then indicate through gestures or writing what is happening and what to do.
- Writing a note telling what the emergency is and the nearest evacuation route.

Persons Using Crutches, Canes, or Walkers

Ask if the person needs assistance to evacuate. Offer to guide them to the emergency exit. If necessary, carrying options include using a two-person lock arm position (A) or having the person sit in a sturdy chair (B), preferably one with arms.



Persons in Wheelchairs

- Alert emergency personnel to the location.
- Ask the person how you can help.
- Ask what type of assistance they will need after evacuation.
- Determine if the person wants to be carried down a flight of stairs (forward or backward)
- Determine if the person wants to be removed from the chair.

II: MDCC DINING ROOM (Aladdin)

General Safety Rules

- All Aladdin employees have a job requirement to wear approved slip-resistant shoes.
- All employees involved in heavy lifting over 40 pounds or awkward lifting will wear a back support belt. Proper lifting techniques will be always followed.
- All employees using a knife will wear a glove on the opposite hand. All employees using or cleaning a slicer will wear gloves on both hands.
- Any accident must be reported immediately to the Manager.
- Employees must disclose to their manager the use of any substances, legal or illegal, that create drowsiness, slowed reaction time, hallucinations, or other impairments.
- High traffic areas must be cleaned in stages and in a manner that will always provide a dry walking surface.
- Keep floors clean and free of grease residue. Clean up food and water spills immediately. Post "Wet Floor" signs when needed.
- Machinery and tools, including knives and slicing equipment, must be used only for the purpose for which they were intended.
- Promptly replace all safety guards after cleaning machinery. Horseplay, running, and practical jokes are prohibited.
- Protective equipment or clothing must be worn as required. Oven mitts and apron when preparing over, fryer, or grill. Rubber gloves, apron, and goggles when handling chemicals, hot grease, or over cleaner.
- Report any hazardous condition or unsafe work habits immediately to your supervisor.
- Report promptly to your manager any item or equipment that appears defective or in need of repair.

III: CAMPUS SAFETY EVACUATION CHECKLIST

	Yes	No
Are floors, aisles, and inside passageways kept clean and dry and all spills cleaned up immediately?		
Are floor holes, such as drains covered?		
Are yards maintained to minimize tripping and falling hazards?		
Are there handrails on all stairways having four or more steps?		
Are all exits marked with an exit sign and illuminated by a reliable source?		
Are all exit routes always kept free of obstructions?		
Are all containers labeled as to their contents?		
Are persons required to wear eye and skin protection when handling unsafe materials?		
Have procedures been set for clean-up of hazardous spills?		
Are flammable liquids kept in closed containers when not in use?		
Are all spills of flammable or combustible liquids cleaned up promptly?		
Are gasoline and other flammable liquids stored in approved containers?		
Are restrooms and washrooms kept in a clean and sanitary condition?		
Are extinguishers selected for the types of combustibles and flammables in the areas where they are to be used? Class A Ordinary combustible material fires		
Class B Flammable liquid or grease fires		
Class C Energized electrical equipment fires		
Are extinguishers fully charged and kept in designated places?		
Are extinguishers located along the typical path of travel?		
Are extinguisher locations not obstructed or blocked?		
Have all extinguishers been serviced, maintained, and tagged at intervals not exceeding one year?		

Last Date Evaluation Completed:		
Signed:		
Location Inspected:		

IV: MINI SAFETY BULLETINS

Fire

If a fire is discovered in the building, the alarm should be pulled immediately. When the fire alarm is sounded:

- Evacuate the building immediately using the existing evacuation plans. ASSUME THAT THE
- Report to predetermined assigned areas outside of the building for accountability.
- Stay calm and low to the ground if smoke is present, and cover mouth and nose.
- · Teachers should take their grade books.
- •If trapped in a room, close as many doors as possible between you and the fire. Place clothes around and under the door to stop smoke from coming in.

ALARM IS SOUNDED FOR A FIRE HAZARD AND EVACUATE THE BUILDING. THERE WILL BE NO OTHER ANNOUNCEMENT TO EVACUATE.

Earthquake

At the first sign of the ground shaking or when vibration begins, the teacher or person in charge should give the following commands:

- · All teachers, students, and other building personnel report to assigned areas outside
- Building is evacuated using the existing evacuation
- · Drop and take cover.
- · Listen for instructions.
- · Stay under shelter until shaking stops.
- · Teachers take their grade books.
- Turn away from windows.

Further instructions will be given by a member of the Crisis Response Team or designee.

If evacuation is necessary: Campus Police orders evacuation via the intercom, if of the building for accountability.

plans.

possible.

NOTE: TEACHERS MAY NEED TO MAKE THEIR DETERMINATION ABOUT EVACUATION IF NO ANNOUNCEMENT IS MADE.

Rape

If a rape occurs on campus involving either a student or staff member:

- · Campus Police will notify the President of the College.
- Follow existing ACTIVE SHOOTER ALERT procedures.

- If it is determined the assailant is still on the premises, an ACTIVE SHOOTER ALERT condition will be announced.
- Notify the Campus Police Office in person or by telephone (246-8011). **DO NOT USE TWO-WAY RADIOS.**
- The Dean of Student Services contacts the college counselor to shield the victim from contact with others and give care until authorities arrive.

Student/Staff Member Medical Emergency

- Call Campus Police by telephone (662-246-8011)
- Dean of Student Services calls President of the College.
- Dean of Student Services contacts the college counselor.
- •Campus Police will contact appropriate agencies to assist with the handling of the situation.
- •Campus Police will notify the Dean of Student Services Office.

Suicide

- An employee or student having any reason to believe someone is considering or threatening suicide is to contact the Dean of Student Services Office immediately (246-6442).
- Dean of Student Services will contact the college counselor.
- The counselor will meet with the student in the case of a suicide threat or attempt.

Bomb Threat

- Call the Campus Police Office (662-246-8011). Provide as much information as possible.
- Campus Police informs the Dean of Student Services, who informs the Crisis Response Team.
- Campus Police will contact appropriate agencies to handle the bomb threat.
- Dean of Student Services orders evacuation (if necessary) via radio and by way of Building
- Coordinators. Immediately evacuate the building using the existing evacuation plans.
- Do not disturb, move, shake, or touch any suspicious packages.

V: CRISIS RESPONSE CHECKLIST

This list is intended to focus on discussion during a volatile situation and should not be considered a limit to potential responses. Some team members will automatically assume specific responsibilities based upon the nature of their positions.

Gather information

Define:

- Date, time, and location of the event
- Names, ages, phone numbers, and status (e.g., student, staff) of those involved, including any witnesses
- · Nature of event
- Nature of immediate response (what has already happened)
- Nature/number of injuries
- Property damage/estimate of loss/nature of insurance

Define Issues

____Does the situation involve, for example:

- Arson
- Controlled substances
- Gender/sexual orientation
- Guns
- International/overseas student
- Race
- Safety
- Security
- Sexual/other assault

Define Overall Institutional Response

____Prepare statement if necessary

Identify affected groups and groups needing information

- Alumni and donors
- · Community members
- · Faculty and staff
- Legislators, government agencies
- Media

- Prospective students, families
- Students
- Trustees
- Victims
- · Victims' family, friends, roommates

Define response actions and assign responsibilities

- Allow free phone calls home
- Cancellation of events
- · Closing facilities
- · Contact victim, family
- Expanded escort service on and off-campus
- · Grief counseling
- Increased security
- Letters to families/alumni/donors
- Meeting with student organizations
- · News conference
- Special housing arrangements

VI: ROLES AND RESPONSIBILTY IN INCIEDNT COMMAND

INCIDENT COMMANDER (IC)

The Incident Commander (IC) is solely responsible for emergency, disaster, and crisis operations and shall remain at the Incident Command Center (ICC) to observe and direct all operations. The (IC) shall assess the type and scope of the emergency, determine the threat to human life, implement the Crisis Response Plan, and assign functions and positions as needed. The (IC) will ensure the safety of the students, staff members, and others on college grounds.

Pre	paredness
	Ensure that Crisis Response Team members are selected annually and are adequately trained.
	Ensure the college Crisis Response Plan is all-inclusive, having contingency plans in place for every type of emergency.
	Place equipment, food, first aid, and emergency kits in a place with easy access; inventory and monitor shelf-life expirations at least annually.
	Review and update the Crisis Response Plan with Crisis Response Planning Team annually.
	Update internal and external phone lists at the beginning of each college year and throughout the year as needed.
Resp	onse
	Constantly monitor the situation and get updates from all resources.
	Decide to remain at status or prepare to Evacuate or Lockdown.
	Develop and implement a plan of action. Have a backup plan ready.
	Ensure that 911 is called if needed.
	Ensure that a member of the CRT meets external emergency responders at the emergency access point (e.g., main doors of college).
	Ensure that all college occupants reach the designated assembly area or sheltering area.
	Ensure that the college's Crisis Response Team (CRT), emergency responders, and college officials are notified.
	Gather facts on the incident, and assess the situation based on those facts.
	Make an internal notification to teachers and staff to carry out the plan.
	Meet with external emergency responders IC and form Unified Command (UC).
Reco	very
	Assess damage to the facility.
	Conduct a post-incident critique with CRT, campus police, external emergency responders, and key stakeholders.

☐ Debrief the college president, faculty, staff, parents/guardians,	and students
as appropriate.	
Ensure that proper clean-up/decontamination occurs.	
Initiate incident report.Prepare college for reopening.	
Trepare conege for reopening.	
CAMPUS POLICE CHIEF (CPC)	
A crime or other situation in or near a college may require the college	staff to take steps
to secure the college from internal or external threats quickly. T	
developing specific assignments for college personnel during such a	
creating a system to make sure the college is secure. The (CPC) will	
with the agency handling the local event.	det de the halson
mana and angenre) amounting the recent of care	
Preparedness:	
Ensure the Crisis Response Plan is current.	
☐ Participate in drills and tabletop exercises.	
Response:	
☐ Assist with searching the college.	
Assist with the evacuation and lockdown.	
☐ Under the order of the Incident Commander (IC), secure the en	tire college and
report back to the IC.	8
Recovery:	
☐ File a report with the local law enforcement agency if needed.	
☐ Participate in the post-incident critique.	
Work logistics and prepare to return the college to a normal con	ndition

EVACUATION COORDINATOR

The duties of this position focus on organizing the offsite Evacuation location during an emergency. This includes planning the movement of college occupants to the location and assisting with the accounting of the occupants once they are moved. Key aspects of this assignment involve planning for the use of a location and planning the evacuation route and process to move the students safely. When organizing an evacuation, consider persons with special needs and plan how to move them and what assistance may be required.

Pre	paredness
	Develop contingency plans to evacuate persons with special needs to the offsite
	emergency evacuation assembly area.
	Identify all routes to offsite evacuation assembly areas.
	Identify on-site and offsite evacuation assembly areas and review annually.
	Note evacuation assembly areas in the college's CRP.
Res	ponse
	Assist Faculty and Staff with the accounting process at the evacuation
	assembly area.
	Assist Faculty and Staff with the evacuation of the college.
	Assist with the needs of the students at the evacuation assembly area.
	Check-in with the owner/facility manager of the secondary evacuation assembly
	area.
Rec	<u>overy</u>
	Assist (IC) with an incident report.
	Participate in the post-incident critique.

VII: MITIGATION PREVENTION CHECKLIST

This Mitigation Prevention Checklist will reduce exposures to the college and should be referred to often to ensure a safe and secure environment.

All emergency exit doors, windows, and hatches should be marked appropriately and visible from the outside of the building.
All exterior cameras should be in good working order.
All sides of the college and athletic facilities should be illuminated to reduce the risk of criminal activity on college grounds.
Athletic facilities should be secured when not in use.
Be aware of the surrounding neighborhood. If anything looks suspicious, report it to
local law enforcement.
Doors and windows should be in good working order and locked 24/7 except for the
main entrance.
Dumpsters/garbage cans should remain away from the college. Garbage cans should be secured so they cannot be used to damage or enter college property.
Ensure all external utilities are secure and protected.
Ensure all gates are secured.
Ensure all roof hatches are secured and locked.
Exterior doors should be numbered appropriately.
Exterior doors should not be propped open with blocks or other objects.
Keep college grounds well-manicured and reduce blind spots or hiding areas by
cutting down shrubs to no higher than 3 feet.
나가 가면 가득 없어. 이 맛있는데 하이 있어요. 이 가지 하는데 하는데 이렇게 되었다. 요요님, 그는 그렇게 모든 모든 모든 모든 모든 모든 모든 그리는 모든 모든 모든 모든
Parking lots should be well-lit, free of debris, and adequate parking spaces should
be provided with signs for handicapped parking, visitors, teachers, and students (if

INTERIOR OF COLLEGE

applicable).

EXTERIOR OF COLLEGE

All cafeteria staff should be trained yearly on basic emergency procedures and proper food preparation safety procedures.
All chemicals should be stored correctly in their original containers. Chemicals
should be secured when not in use.
All classrooms should be secured when not in use.
All classrooms should be secured when not in use.

☐ The college should adopt pro-active, off-premises procedures for field trips, sporting

events, and other events that occur off college grounds.

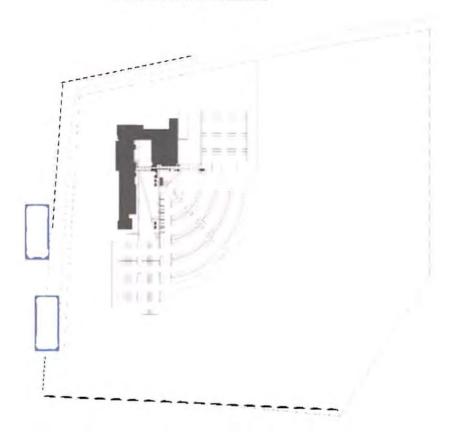
☐ Ventilation intakes should be appropriately secured from intrusion.

	All doorways and exits should be free from obstructions that hamper or delay an effective Evacuation.
	All emergency exit doors, windows, and hatches should be marked.
	All exit lights should be in good working order.
	All interior doors should be numbered appropriately or identified with a label.
	All knives, box cutters, and other sharp instruments should be secured when not in use.
	An emergency procedures guide should be placed in all classrooms.
	Boiler rooms & mechanical rooms should be clean, locked, and organized.
	Classrooms should be organized and clear of obstructions that hamper or delay an
	effective Evacuation.
	Computer/server rooms should be always secured, and access should be limited. Appropriate ventilation and climate control systems should be installed in the server rooms.
	food and chemicals should never be stored together in a refrigerator or other area.
	Only authorized personnel should have access to the kitchen.
	Paper hanging in the hallways and classrooms should be minimized to reduce the amount of combustible material in the college, especially in Evacuation egress
	areas. The auditorium should have universal Evacuation signage and properly illuminated
	exit lights.
	The custodian should implement a maintenance logging system for
	preventive maintenance, including heating, ventilation, air conditioning
	(HVAC), fire suppression, fire extinguishers, smoke detectors, and security
	alarms.
	The gym should have universal Evacuation signage and properly illuminated exit
	lights.
	Universal Evacuation signage should be posted in every room at adult eye level, near the door, and in hallways.
	Utility shut-offs should be labeled appropriately for shut-off.
IN	TERIOR OF COLLEGE
	All amplements the handle the mail about the trained to identify avantaious
Ш	All employees who handle the mail should be trained to identify suspicious packages and envelopes.
	All public safety agencies shall have access to the college's Crisis Response
-	Plan and accurate floor plans.
Ц	College Crisis Response Plans MUST be updated on a bi-annual basis. If no changes are needed, a memorandum acknowledging such must be forwarded to all
	faculty and staff
	Hallways should be appropriately numbered or identified.
	Hallways should be free from obstruction, including furniture, musical instruments,
	large art displays, and any other item that could impair an effective Evacuation.

ID cards should be always worn by college staff. This policy should be enforced.
Lockdown procedures should be implemented and tested a minimum of one time
per year.
Missing and damaged ceiling tiles should be replaced.
Primary and secondary evacuation assembly areas should be designated.
Proper evacuation procedures should be implemented, and faculty, staff, and students should participate in drills each year.
Restrooms should be clean and organized. College staff should make periodic
checks to reduce the opportunity for property damage and criminal activity.
Sheltering areas should be identified and marked. All students and faculty should
know where they are located.
Sheltering areas should be in areas that protect college occupants from glass and flying debris and provide the best possible structural protection.
The college Crisis Response Team should work with local public safety agencies to
find ways to reduce risks.
The college should keep an up-to-date list of special needs students and staff,
including those with temporary disabilities (e.g., crutches, pregnancy, broken
bones) Additional contingency plans should be established for persons with
special needs. These contingencies include specific evacuation and lockdown
procedures.
Visitors and vendors should receive a pass that indicates where they are going within the college.
Visitors and vendors should report to the Main Office and sign in. Identification
should be asked for.

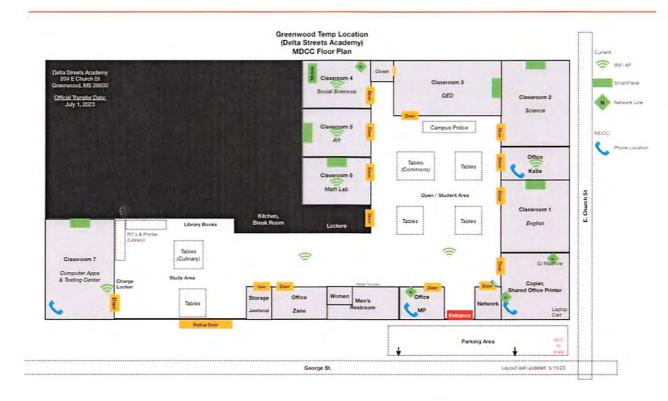
VIII: EVACUATION EXIT MAPS

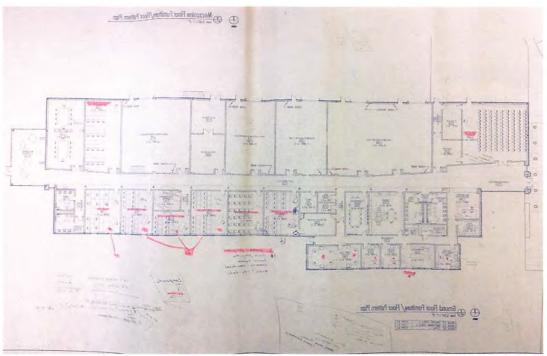
GHEC FLOOR PLANS



Main Campus MISSISSIPPI DELTA COMMUNITY COLLEGE CAMPUS GAS SERVICE UNGRADES NOORHEAD, MISSISSIPPI IAN20295 DVERALL SITE PLAN - NEW WORK MS1.0 CONSTRUCTION DOCUMENTS

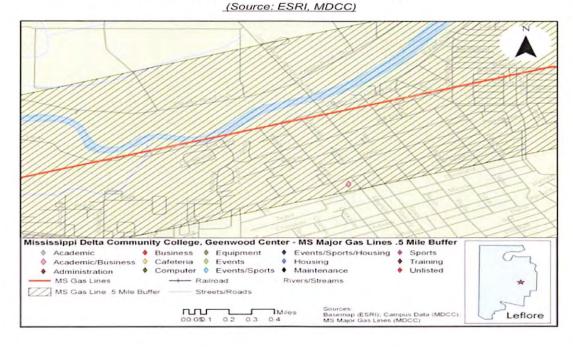
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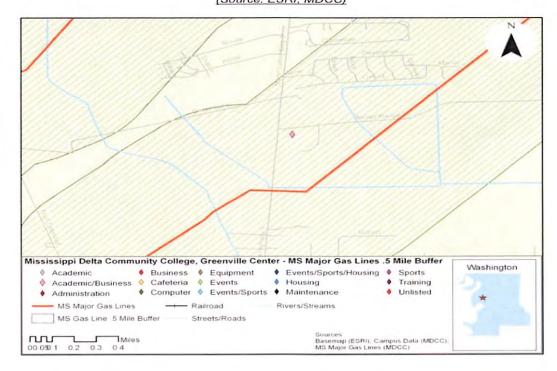


IX: MAJOR GAS LINES MAPS

Map 3-21: Major Gas Lines – Greenwood Campus



Map 3-20: Major Gas Lines – Greenville Campus (Source: ESRI, MDCC)



Mississippi Delta Community College, Capps Center - MS Major Gas Lines .5 Mile Buffer

Academic Business Equipment Events/Sports/Housing Sports
Academic/Business Cafeteria Events
Administration Computer Events/Sports Maintenance Unlisted

MS Gas Lines Railroad Rivers/Streams

MS Gas Lines Cafeteria Rivers/Sports Maintenance Unlisted

MS Gas Lines Railroad Rivers/Streams

MS Gas Lines Streets/Roads

Sunflower County

Dica

Indication County

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Map 3-19: Major Gas Lines – Capps Center (Source: ESRI, MDCC)

Map 3-18: Major Gas Lines –Moorhead Campus (Source: ESRI, MDCC)

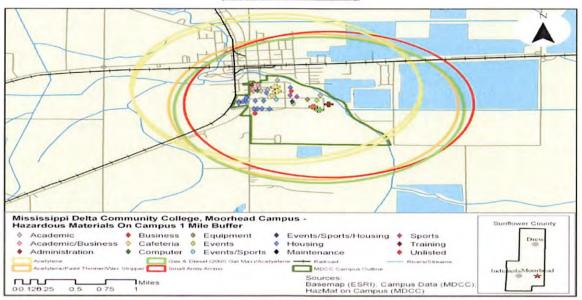
Mississippi Delta Community College, Moorhead Campus MS Major Gas Lines 1/2 Mile Buffer

Academic
Academic
Academic/Business
Cafeteria
Events
Housing
Training
Administration
Rivers/Streams
MS Gas Lines
Sources
Basemap (ESR1), Campus Data (MDCC).

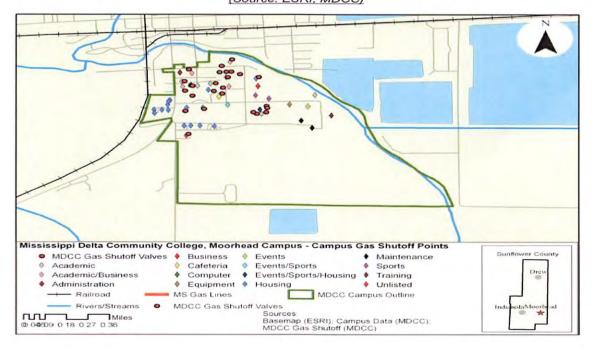
MS Gas Lines (MDCC)

X: MOORHEAD CAMPUS MAJOR GAS SHUT OFF & HAZARDOUS MATERIAL MAPS

Map 3-16: Location and Types of Hazardous Materials – Moorhead Campus (Source: ESRI, MDCC)



Map 3-17: Location of Natural Gas Shut-off Points – Moorhead Campus (Source: ESRI, MDCC)



XI: HAZARD MITIGATION PLAN



Mississippi Delta Community College Dr. Tyrone Jackson, President

Hazard Mitigation Plan January 2023

In association with Homeland Preparedness & Security, LLC

Special thanks to all who assisted with this plan update, especially the members of MDCC's Hazard Mitigation Planning Council led by:

Dr. Steven Jones
Vice President of Administrative
and Student Services
Mississippi Delta Community College

FOR MORE INFORMATION, VISIT http://www.msdelta.edu/hazard-mitigation

Mississippi Delta Community College does not discriminate based on race, color, national origin, sex, disability, or age in its programs and activities. The following person has been designated to handle inquiries regarding the non-discrimination policies: The Associate VP for Institutional Effectiveness, Stauffer-Wood Administration Building, P.O. Box 668, Moorhead, MS 38761, 662-246-6558.

U.S. Department of Homeland Security Region 4 3005 Chamblee Tucker Road Atlanta, GA 30341



October 12, 2022

Ms. Jana Henderson, CFM State Hazard Mitigation Officer Mississippi Emergency Management Agency Post Office Box 5644 Pearl, MS 39208

Reference: Mississippi Delta Community College Hazard Mitigation Plan

Dear Ms. Henderson:

The Federal review of the draft Mississippi Delta Community College Hazard Mitigation Plan for compliance with the planning requirements contained in 44 CFR §201.6 is complete. The plan is compliant with Federal requirements, subject to formal community adoption.

For our office to issue formal approval of the plan, the jurisdiction(s) must submit adoption documentation. Upon receipt of the adoption resolution(s) to our office, we will issue formal approval of the Mississippi Delta Community College Hazard Mitigation Plan. Once approved, please submit a final copy of the Plan, without draft notations and track changes.

If you or any plan participant need assistance, please do not hesitate to contact Darlene Booker, of my staff, at (404) 434-9815.

Sincerely.

Kristen M. Martinenza, P.E., CFM Branch Chief, Risk Analysis Branch

Knote M. Matury

FEMA Region 4

HAZARD MITIGATION PLAN RESOLUTION

On the 8th day of December 2022, at a meeting of the Board of Trustees of Mississippi Delta Community College, held in the Stauffer-Wood Administrative Building at Moorhead, Sunflower County, Mississippi, with a quorum of trustees present, the following matters were taken into consideration:

WHEREAS, the purpose of the Hazard Mitigation Grant Program (HMGP) is to assist States, territories, federally-recognized tribes, and local communities by (a) significantly reducing or permanently eliminating future risk to lives and property from natural hazards; (b) providing funds to implement projects in accordance with priorities identified in State, tribal, or local hazard mitigation plans; and (c) enabling mitigation measures to be implemented during the recovery following a major disaster declaration.

WHEREAS, pursuant to Hazard Mitigation Grant No. 4551-7 (FEMA Project Number), Mississippi Delta Community College (Sub-Recipient) was awarded the Hazard Mitigation Grant in the amount of \$29,700.00 (90%; Federal Cost Share). The College agreed to provide the required 10% Local Cost Share in the amount of \$3,300.00; bringing the total project fund amount to \$33,000.00.

WHEREAS, Mississippi Delta Community College agreed to have the above-referenced disaster relief project completed by July 9, 2024.

WHEREAS, this governing body acknowledges and understands that the Hazard Mitigation Plan meets the requirements of 44 CFR §201.6 and was acknowledged by the Federal Emergency Management Agency (hereafter referred to as "FEMA") on October 12, 2022 as complete and in compliance with federal requirements, subject to formal community adoption.

WHEREAS, Kent W. Buckley, MCEM, of Homeland Preparedness & Security, LLC,

presented the proposed Hazard Mitigation Plan to this governing body for consideration and

adoption on the 19th day of January, 2023.

WHEREAS, this governing body understands that in order for FEMA to issue its formal

approval of the plan, Mississippi Delta Community College must submit adoption documentation,

and upon receipt of the adoption resolution, FEMA will issue formal approval of the Mississippi

Delta Community College Hazard Mitigation Plan.

NOW, THEREFORE BE IT RESOLVED, that the Board of Trustees of Mississippi

Delta Community College fully adopts the proposed Hazard Mitigation Plan.

The above resolution is passed by a majority of those members present and voting in

accordance with applicable laws, bylaws, policies and procedures of this governing body.

RESOLVED this Aday of January, A. D., 2023.

MISSISSIPPI DELTA COMMUNITY COLLEGE

BY:

DR. TYRØNE JACKSON

MDCC President

STATE OF MISSISSIPPI

COUNTY OF Warrew

NOTARY PUBLIC

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Chapter 1: Introduction

1. Introduction

1.1 Purpose and Background of the Plan

Mississippi Delta Community College (MDCC or "the college") initiated development of this Hazard Mitigation Plan ("the Plan") because of awareness of the risks associated with natural hazards and the desire to better prepare for such events. The purpose of a hazard mitigation plan is to document the evaluation of hazards and the anticipated risks and damage to determine how hazards are addressed by the College and to help the College identify feasible and cost-effective pre-disaster actions to reduce risks.

The College applied for and received a \$33,000 matching grant through the Hazard Mitigation Grant Program (HMGP) to update the hazard mitigation plan. The HMGP is sponsored by the Mississippi Emergency Management Agency (MEMA). Of the project costs, the Federal share is \$29,700.00 (90%). The non-Federal share is \$3,300.00 (10%) which will be paid by Mississippi Delta Community College. The period of performance for the matching grant is February 24, 2022, to July 9, 2024. This update should be completed and submitted to MEMA for review by August 30, 2022, with the FEMA review and approval to follow when found to be in compliance with the federal Hazard Mitigation Planning standards contained in 44 CFR 201.6(b).

1.2 Plan Mission Statement

The mission of the Mississippi Delta Community College Hazard Mitigation Plan is to develop, promote and implement measures to minimize or eliminate the impacts of disasters and emergencies to people, property, the economy, and the environment to maximize the school's ability to deliver quality educational opportunities.

In accordance with the purpose of the Plan, the MDCC Hazard Mitigation Planning Council adopted the following mission statement to guide the planning process:

1.3 MDCC Its History, Mission, and Locations

1.3.1 History of MDCC

Mississippi Delta Community College, one of the oldest community colleges in the country, is a rural, residential, and commuter college. It is headquartered in Moorhead with satellite locations in Greenwood, Greenville, and Indianola. Its service area includes the counties of Bolivar, Humphreys, Issaquena, Leflore, Sharkey, Sunflower, and Washington. The College was fully accredited as a two-year college in 1922 by the Accrediting Commission of the Senior Colleges of Mississippi and was admitted to full membership in the Southern Association of Colleges and Schools in December 1930. The College is now a member of the American Association of Community Colleges, the American Association of Community College Trustees, the Mississippi Association of Colleges, as well as the MS Library Association, and the Mississippi Community/Junior College Association, which is the 4th ranked system of its kind nationally.

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1.3.2 Mission and Goals of the College

The college mission statement follows:

Mississippi Delta Community College (MDCC) provides quality education through academic, career, technical, health sciences, and workforce training programs. MDCC is dedicated to improving the community through intellectual, social, cultural, and recreational opportunities.

MDCC is committed to fulfilling this mission by providing:

- I. Academic programs of study which lead to the Associate of Arts Degree and/or meet requirements for students who plan to transfer to a senior college or university
- II. Career and technical programs of study which lead to the Associate of Applied Science Degree and/or a certificate, which will qualify students for entry-level employment
- III. Health science programs of study which lead to the Associate of Applied Science Degree and/or a certificate, which will qualify students for entry-level employment
- IV. Activities and/or facilities which foster productive citizenship, enhance personal growth, enrich quality of life, and promote economic development and partnerships in the communities served by the College
- V. Workforce training for business and industry to enhance knowledge and skills
- VI. Continuing and adult education for personal growth
- VII. College infrastructure in support of student services, instructional programs, administrative processes, and community services

1.3.3 Planning Area for Hazard Mitigation Plan

The planning area for the MDCC Hazard Mitigation Plan includes the main campus at Moorhead, the MDCC Charles W. Capps Jr. Technology Center in Indianola, the Greenville Higher Education Center (GHEC), and the Greenwood Center (see map of campus locations). All are within the area commonly referred to as the "Mississippi Delta." A description of this region may be found in Section 1.4.



The **Moorhead Campus** is the main campus for the college and is located at the intersection of Hwy 3 & Cherry Street in Moorhead, Mississippi. Students have access to administrative offices, academic classrooms, laboratories, student support services, library, cafeteria, men's dormitory, women's dormitory, and athletic facilities.



The Greenville Higher Education Center (GHEC) is a collaborative effort of three state supported higher education institutions: Delta State University (DSU), Mississippi Valley State University (MVSU), and Mississippi Delta Community College (MDCC).

Located south of Greenville, Mississippi, on Highway 1, the three-story facility provides over 88,000 square feet of assignable space.



The GHEC houses eighteen classrooms, two distance learning classrooms, two media centers, a multi-purpose room, a center for learning, four computer labs, two art classrooms, a nursing lab, an A & P lab, chemistry lab, physics lab, biology lab and thirty-five offices.

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The MDCC Charles W. Capps Jr. Technology Center, a division of Mississippi Delta Community College, provides customized training, education, and skills improvement to new and existing businesses and industries within the MDCC service area. The Capps Center's 30,000 square feet physical plant houses an office wing, a seminar room, food preparation area, and four high bay areas that occupy a total of 8,000 square feet of training space for mechanical electrical, process and assembly skills. Classroom space, three computer labs, and a distance learning lab complete the accommodations available in the Capps Center.



The Capps Center was opened in 2001 and is in Indianola, Mississippi, on U. S. Highway 82, seven miles west of the Moorhead campus. This location strategically places the Capps Center at the geographical center of the seven-county service area of Mississippi Delta Community College. A Cleveland native and longtime appropriations chairman of the House of Representatives, Charles W. Capps Jr., is honored in the naming of the center.

The Greenwood Center was opened in response to the continued demand for class offerings in Greenwood which is only 20 miles east of the College's main campus. The College entered into a lease agreement for 5,000 square feet of space in downtown Greenwood during the spring 2003 semester to offer classes in academic, technical, work force training and GED beginning during the late spring of 2003.

Demand for classes increased in Greenwood during the summer of 2005; therefore, the College leased a 10,000-square foot facility on Park Avenue and begin offering classes in the new facility that fall. The Greenwood Center offers academic, technical, and GED classes as well as workforce training sessions.



1.4 SACSCOC Principles of Accreditation

The hazard mitigation plan aligns with SACSCOC Standard 13.7 and 13.8. The purpose of the hazard mitigation plan is to document the evaluation of hazards and the anticipated risks and damage to determine how hazards are addressed by the College and to help the College identify feasible and cost-effective pre-disaster actions to reduce risks to ensure a healthy, safe, and secure learning environment for all members of the campus community (Standard 13.8). The hazard mitigation plan presents an opportunity for the College to have direct access to federal resources through the Federal Emergency Management Agency (FEMA) should a disaster strike. These available resources assist the College in ensuring adequate physical facilities and resources, on campus, that appropriately serve the needs of the institution's educational program, support services, and other mission-related activities (Standard 13.7).

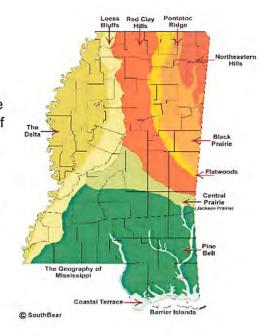
1.5 Strategic Plan 20121 – 2024: Gearing Up for Success

The hazard mitigation plan aligns with Mississippi Delta Community College's 2021-2024 Strategic Plan by supporting goal 4.1 – infrastructure (i.e., maintain and support existing infrastructure). The hazard mitigation plan presents an opportunity for the College to have direct access to federal resources through the Federal Emergency Management Agency (FEMA) should a disaster strike. These available resources assist the College in ensuring adequate physical facilities and resources, on campus, that appropriately serve the needs of the institution's educational programs, support services, and other mission related activities.

1.6 Geography, Climate and Population

1.6.1 Geography

All the counties served by MDCC are located within The Mississippi Delta," a region characterized by its flat and fertile soil. The Mississippi Delta is technically not a delta but part of an alluvial floodplain, created by regular flooding of the Mississippi and Yazoo rivers over thousands of years. For over two centuries, agriculture has been the mainstay of the economy with the primary crops being cotton, soybeans, corn, and catfish farming. Recent trends in mechanization of farm operations and other economic factors have influenced out-migration of this area.



1.6.2 Climate

Mississippi has a humid, subtropical climate with long summers and typically short, mild winters. Temperatures between 88 and 95 degrees Fahrenheit are typical for summer months extending into mid-October. Although winters are short and mild, there are extremes in temperatures, ice storms, and occasional snow. Violent thunderstorms are commonplace which can contribute to flash flooding. River

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flooding is also a concern to communities located close to the Mississippi and Yazoo rivers as well as their tributaries.

On average, Mississippi has around 50 tornadoes annually, primarily between November and April. Two of the five deadliest tornadoes in US history have occurred in the state. One of these struck Natchez, located in southwest Mississippi (see The Great Natchez Tornado) and the other Tupelo, located in the northeast corner of the state. About three F5 tornadoes have been recorded in the MDCC Planning Area between 1968 and 2020.

Weather at all campus locations is typical with an average rainfall of 54 inches, an average high temperature of 91 degrees Fahrenheit in July and an average low of 44 degrees Fahrenheit in January.

1.6.3 County and City Population Trends

The seven counties served by MDCC vary greatly in terms of size and population. <u>Table 1-1</u> shows Census 2010 and 2021 population counts, the % of decrease, area in square miles and the population density of each county.

	Tab	le 1-1 County Po	pulation Trend	ls	
County	2010 Population	2021 Population	% Increase or Decrease	Total Square Miles	Population Density per sq. mile
Bolivar	34,145	30,308	-2.2%	876.57	39.0
Humphreys	9,375	7,551	-3.0%	418.49	22.4
Issaquena	1,406	1,280	-4.3%	413.05	3.4
Leflore	32,317	27,557	-2.8%	592.54	54.5
Sharkey	4,916	3,663	-3.6	431.72	11.4
Sunflower	29,450	25,402	-2.2%	697.75	42.2
Washington	51,137	43,687	-2.7%	724.74	70.6

Census Data reveals that all counties served by MDCC have experienced a decline in population ranging from -2.2% to -4.3% during the period of 2010 to 2021. It is believed this is largely attributable to the historic agricultural economy which has become less labor intensive. Delta counties have historically been sparsely populated compared to more urbanized areas of the state.

Cities where MDCC facilities are located range in size and population. The City of Greenville in Washington County is the largest with a population of 27,605. <u>Table 1-2</u> shows Census 2010 and 2021 population counts, the % of decrease, area in square miles and the population density of each community.

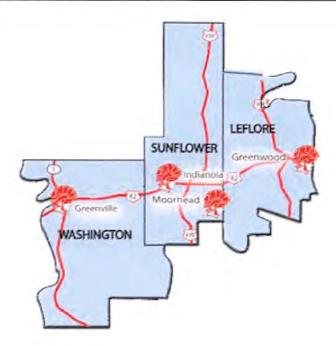
Chapter 1: Introduction

		Table 1-2 C	ity Population	Trends		
City	County Location	2010 Population	2021 Population	% Decrease	Total Sq. Miles	Population Density per sq. mile
Greenville	Washington	34,400	27,605	-19.67%	27.7	153
Greenwood	Leflore	15,205	13,151	-18.63%	9.5	159
Indianola	Sunflower	10,863	8,579	-19.14%	8.6	149
Moorhead	Sunflower	2,405	1,975	-17.74%	1.3	227

1.6.4 Transportation Routes

All locations are in proximity to major thoroughfares or Mississippi Highways. Many farming vehicles and tractor trailers utilize these routes for transporting materials such as fuel, fertilizer, chemicals, and compressed gases.

Table 1-3: Transportation Routes			
Greenville	U.S. Highway 82	State Highway 1	
Greenwood	U.S. Highway 82	U.S. Highway 49E	
Indianola	U.S. Highway 82	U.S. Highway 49W	
Moorhead	U.S. Highway 82		



1.7 Plan Adoption

As a multi-campus effort, the MDCC Hazard Mitigation Plan meets the requirements of Section 201.6(c)(5) and was approved by the Federal Emergency Management Agency and the Mississippi Emergency Management Agency. A meeting of the Board of Trustees of Mississippi Delta Community College was held January 18, 2023, in which the board unanimously adopted the Plan as recommended by the President.

The 2022 plan update began in April of 2022. The plan update was in MEMA review by August 2022. A multi-campus effort, which included research and community input, incorporated into the original Plan to ensure continuity of the planning process and use of pertinent information already researched.

The information collected from the two on-line surveys, via Survey Monkey, was incorporated into the Plan. The updated information compiled, as a result from the April 4th meeting, was also incorporated into the Plan. This information brought the goals and actions, included in the Plan, up to date.

The Senior Leadership Team and the Hazard Mitigation Planning Council are confident that the updated plan meets all required elements and includes supporting documentation. To avoid repeated attempts to adopt the plan prior to FEMA approval, the leadership team has opted to obtain a notice from FEMA that the plan is APA before adopting the plan. Per the *FEMA Guide to Local Mitigation Planning (March 2013)*, "communities are encouraged to submit the final draft of the mitigation plan to the State and FEMA for review prior to formal adoption by the elected officials or other authorized governing body. If FEMA determines the plan is not approvable and requires revisions, the community will be able to make revisions before initiating the plan adoption process, therefore avoiding unnecessary delays in plan approval."



January 18, 2023 Board Meeting

2 The Planning Process

Requirement §:201.6(c)(1) Plan content. To be effective, the plan must include the following elements: Documentation of the planning process used to develop the plan, including how it was prepared, who was involved in the process, and how the public was involved.

According to the Federal Emergency Management Agency (FEMA), any successful planning activity, such as the development of a comprehensive mitigation plan, involves bringing together a cross-section of the public to reach consensus on how to achieve a desired outcome or resolve a community problem. This process helps the public gain a better understanding of the challenges they face while aiding in the development of a common set of community values and widespread support for directing financial, technical, and human resources to an agreed-upon course of action.

MDCC and members of the Hazard Mitigation Planning Council (HMPC) support and embrace this concept by taking great care in developing a living mitigation plan that will not only serve the students and citizens of MDCC but will also strengthen emergency preparedness initiatives beyond the footprint of each location. By inviting participation from surrounding counties, cities, businesses, and organizations in the mitigation planning process, MDCC moves closer to achieving its objective of saving lives and reducing future losses resulting from natural disasters.

2.1 Documentation of the Planning Process

The process for revising the MDCC Hazard Mitigation Plan (the Plan) was based on FEMA and Mississippi Emergency Management Agency (MEMA) guidelines. More importantly, it was based on lessons learned by emergency responders, government officials, businesses, medical providers, academia, volunteers, and the citizens who call MDCC home.

MDCC's first step in continuing its planning process was to redefine a broad-based, multiple committee or team approach for guiding the Plan's update process. Committee members bring to the effort years of experience, knowledge, expertise, and a willingness to be open to change. The committees remained intact and active during the period for which the Plan was revised.



Members of the MCCC Hazard Mitigation Planning Council – April 4, 2022, Planning Meeting

MDCC reorganized its Hazard Mitigation Planning Council. The President appointed key campus staff to assume the leadership role for this planning effort. The HMPC's primary responsibility is to guide the revision of the Plan and to recruit participation from key stakeholders. All members of the HMPC are also on the Crisis Response Team, The HMPC members are listed in <u>Table 2-1</u>.

Table 2-1: MDCC Hazard M	litigation Planning Council
Dr. Steven Jones Vice President of Administrative and Student Services	David Tedford, Director of Facilities Management
Derrick Fields, Dean of Student Services	Melaney Emerson, Director of Public Relations
Clifton King, Assistant Chief of Police	Gary Hays, Public Relations Specialist
Christy Mangrum, Senior Accountant	Dr. Kate Failing, Dean of Planning and Assessment
Teresa Webster, Vice President of Instruction/ Business Department Chair	Dr. Ben Cloyd, Vice President of Effectiveness and Enrollmen
Torrey Moore, Director of Information Technology	Todd Donald, Vice President of Workforce Development
Linda Clark, Dean of Greenville Higher Education Center	Mary Payton Rogers, Greenwood Site Supervisor/Admissions Coordinator

The HMPC updated the Resource Group to further explore the mitigation strategies at each MDCC facility and present their findings to the Council for review and approval. Committee members are presented in <u>Table 2-2</u>.

Table 2-2: MDCC Resource Group		
Dr. Tyrone Jackson,	Dr. Kate Failing,	
President Mississippi Delta Community College	Dean of Planning and Assessment	
Dr. Steven Jones Vice President of Administrative and Student Services	Christy Mangrum, Senior Accountant	
Derrick Fields,	David Tedford,	
Dean of Student Services	Director of Facilities Management	
Bubba Pilgrim,	Steele Robins,	
Drafting and Design Instructor	Precision Agriculture Instructor	
Alan Crews, Assistant to the Vice President for Public Relations		

The Senior Leadership Team consists of MDCC staff along with the consulting firm that is revising and updating the Plan. This team will work closely with the Resource Group to obtain needed information and guidance to amend the plan. Team members are presented in <u>Table 2-3</u>.

Table 2-3: MDCC Senior Leadership Group
Dr. Steven Jones
Vice President of Administrative
and Student Services
Mr. Kent Buckley Manager/Owner Homeland Preparedness and Security LLC
Christy Mangrum,
Senior Accountant
David Tedford, Director of Facilities Management

In addition, the Advisory Committee was updated to assist the HMPC by providing specialized knowledge from the state and federal emergency management arenas. Members of the Advisory Committee are listed in Table 2-4.

Table 2-4: MDCC Advisory Committee
Jana Henderson,
Director Office of Mitigation
Mississippi Emergency Management Agency
Mr. Frank Hill,
Hazard Mitigation Planning Specialist
Mississippi Emergency Management Agency
Ashley Smith,
Mitigation Grants Specialist
Mississippi Emergency Management Agency

Additional input for the plan was accomplished by inviting specific stakeholders (i.e., those who have a stake in seeing that their needs are considered, and plans are developed to address them) to serve as a Focus Group for the plan. Members of the Focus Group were encouraged to actively participate in the public meetings that were scheduled throughout the original planning process (2022-2026 Plan). Some members furnished technical data and other valuable information needed for analysis during the plan update. Not all group members were able to participate in the plan update. An asterisk by an agency name in <u>Table 2-5</u> indicates that a representative from that agency participated, either by email, phone, or online survey in the plan update; therefore, a position or title is placed by the agency's name for participants. Although some previous participants were unable to contribute to this update, their name/agency remains listed in our Focus Group in hopes of their future participation in ongoing plan maintenance. Table 2-5 lists the Focus Group by agency.

Table 2-5: MDCC Hazard	Mitigation Focus Group	
State Ag	jencies:	
*Mississippi Emergency Management Agency- Bureau Director of Hazard Mitigation Planning	*Mississippi Department of Transportation – Central District Commissioner & Engineer	
Mississippi State Department of Health	Mississippi Levee Board	
Yazoo Mississippi Delta Joint Water Management District	Greenville Port Commission	
*Mississippi Insurance Department – Local agent		
Educational	Institutions:	
Mississippi State Board for Junior and Community Colleges	Greenville Public School District	
Mississippi Institute of Higher Learning	Greenwood Public School District	
Sunflower County School District *MS Valley State University - Ca		
Indianola School District		
Business / C	Community:	
South Delta Planning and Development District	*Garner Engineering - Sunflower County Engineer	
North Central Planning and Development District		
Representatives from C	ity and County Offices:	
*City of Moorhead - Mayor	*Sunflower County - Sheriff	
*City of Indianola - Mayor		
*City of Greenville - Mayor & CFO	*Washington County – Sheriff & Co Admin	
Yazoo Mississippi Delta Joint Water Management District		
Medical Con	mmunities:	
*Delta Regional Medical Center - Administrator		
Public U	Itilities:	
CenterPoint Energy	*Atmos Energy – Local Representative	
Entergy		
Emergency Managem	ent Agencies (EMA):	
*Leflore County EMA - Director	*Washington County EMA - Director	
*Sunflower EMA - Director		
Volunteer O	rganization:	
- A W. W. 1995 W. M.	Salvation Army	

2.2 Stakeholder Involvement: Building the Plan

Council involvement during the drafting stage of the Plan was achieved by inviting participation in planning sessions and public meetings.

2.2.1 Planning Sessions

A preliminary kick-off meeting was held on March 28, 2022, via conference all with MEMA. This meeting served as an informational meeting to focus on the revision and update of the Plan and the grant process. Meeting attendees were encouraged to begin considering possible goals and projects for revising and updating the Plan. MEMA Mitigation Office explained the grant process and the importance of the reporting process. The attendees at the meeting were Dr. Steven Jones, MDCC, Amber Clincy, MEMA, Kent Buckley, Homeland Preparedness & Security, LLC.

The Planning teams, consisting of the Hazard Mitigation Planning Council, the Resource Group, the Technical Advisory Committee, and the MDCC Board of Trustees, affirmed that once completed, the MDCC Hazard Mitigation Plan will allow for the following:

- Federal Emergency Management Agency (FEMA) grant funding
- Strategies and objectives that integrate with the local hazard mitigation plans in Sunflower, Leflore, and Washington Counties and the State of Mississippi Standard Hazard Mitigation Plan
- Risk and vulnerability assessments that are unique to MDCC campus locations in the cities of Moorhead, Greenwood, Greenville, and Indianola
- Opportunities to lessen future impacts to MDCC's students, faculty, staff, and property through development of mitigation actions

The second meeting of the HMPC was held April 4, 2022. (See **Appendix A** for meeting documents including Agenda and Sign-in Sheet.) The meeting focused on the adoption of the mission plan statement, progress made on the revision of hazard risk assessment, discussion of mitigation goals with action assignments, and review and approval of the outreach methods. The HMPC added three hazards to the Hazard Identification Worksheet – arson, cyber threat, and pandemic.

A survey to be used in obtaining feedback from the students, faculty, staff, and residents was discussed with the Council. Several ideas were suggested for the survey and approval was given to proceed with the survey via Survey Monkey. The survey will be placed on the MDCC home page at www.msdelta.edu and on Facebook for the benefit of all people who want to be involved in the Plan survey.

Assignments were given to different personnel to help in improving and updating the Plan. Dr. Jones will put together a committee to rewrite the development trends; Dean Rice will handle information on Entergy; David Tedford will handle the pipelines and the levee status; other various staff were asked to research specific areas.

Kent Buckley, Homeland Preparedness & Security, presented a PowerPoint on the importance of plan updating. Updating the Plan will include re-evaluating planning area hazards and risks and all other information within the plan that needs to be revised. Committee members reviewed the hazard

identification table (<u>Table 2-6</u>) from the 2018 plan which is based on a prior qualitative hazard ranking exercise with the following criteria:

- · Probability of each hazard event at all four campus and center locations
- · Possible impacts based on campus characteristics, type of buildings
- Hazards related to highway and railway transportation and their proximity to each campus location
- · Historic events and expertise of committee members

General discussions followed with an emphasis on identification of certain issues and possible projects. On-going or recent projects were discussed that are relevant to mitigation from hazards; some projects have been completed and are updated in the plan; most project completions are based on funding, which is at a minimum now.

Table 2-6: Hazard I	dentification Wo	rksheet	
FEMA's List of Natural Hazards	Hazards Identified in MS State Plan	Hazards Identified in County Plans	Hazards Considered for 2022 MDCC Plan
Avalanche			
Coastal Erosion			
Coastal Storm			
Drought	X	х	Х
Earthquake	X	Х	Х
Expansive Soils		Х	Х
Extreme Heat		х	Х
Flood	X		Х
Fog			
Hailstorm		X	Х
High-Wind			Х
Hurricane	X	Х	Х
Land Subsidence		Х	
Landslide			
Levee Failure	Х		Х
Sea Level Rise			
Severe Winter Storm/Extreme Cold/Ice Storms	Х	х	Х
Tornado	X	X	X
Tsunami			
Volcano			
Wildfire	Х	X	Х

Table 2-6: Hazar	d Identification Wo	rksheet	
FEMA's List of Natural Hazards	Hazards Identified in MS State Plan	Hazards Identified in County Plans	Hazards Considered for 2022 MDCC Plan
Lightning			Х
Thunderstorm			Х
Human-Caused Hazards			
Arson			X
Biohazard/Pandemic			х
Civil Disorder			
Dam Failure	х	х	
Hazardous Materials Incident		х	Х
Cyber Threat			X
Nuclear Facility Incident			
Terrorism/WMD		Х	

Following the identification of hazards, the HMPC was presented guidelines to rank impacts to people, buildings, infrastructure, and college mission based on the hazards selected.

Categories of low, moderate, and high were defined and agreed upon by the HMPC. (See section 3 for details regarding the ranking process).

In a previous exercise the HMPC ranked hazardous events based upon the possible impact to people, buildings, infrastructure, and college mission. Parameters were discussed and expressed as follows:

- Impacts to People: Percentage of people impacted including psychological impact to students, staff, and faculty.
- Impacts to Buildings: Percentage of buildings affected based on number or type of building damages as well as degree of structural damage, continuity of operations and available mitigation measures.
- Impacts to Infrastructure: Number of days a loss of function is experienced to transportation, communications, and utilities.
- Impacts to College Mission: Based on length of disruption and the long-term effects on economic viability or sustainability.

The third planning meeting was held on June 6, 2022 (See **Appendix A** for a copy of the Agenda, Signin Sheets, Minutes, and Survey Results.) The purpose of the meeting was to report the progress on the Plan, Survey Monkey results, and the elements that are required during the updating of the plan, to committee members.

Kent Buckley presented the results of the first Survey Monkey which included students, faculty, and staff. Planning committee members chose to use an on-line survey as opposed to having a physical public meeting. The committee deemed that more results would come out of an on-line survey, due to

the fact, that public meetings are not well attended. As of May 15, 2022, there were at least 102 responses to the on-line survey.

Kent Buckley discussed the progression of the Plan and how the required elements were being met and implemented in the Plan update. The timeline for the review and approval of the Plan from MEMA and FEMA was discussed, along with other future mitigation projects. The Board of Trustees approved of the results of the input from the survey and the progression of the plan.

The plan maintenance strategy was also discussed, and the individual charged with the task of implementation of the plan was identified as Dr. Steven Jones.

2.2.2 Public Input/Meetings/Surveys

Requirement §:201.6(b): In order to develop a more comprehensive approach to reducing the effects of natural disasters, the planning process shall include: (1) an opportunity for the public to comment on the plan during the drafting stage and prior to Plan approval; (2) an opportunity for neighboring communities, local and regional agencies involved in hazard mitigation activities, and agencies that have the authority to regulate development, as well as businesses, academia, and other private and non-- profit interest to be involved in the planning process.

Public meetings are the traditional means through which the public is invited to provide input into a given project. Because MDCC uses modern technology and social media for a lot of the campus outreach, on-line surveys were selected as the means for including the public to participate in the development of the plan with the students, faculty, and staff.

Members of the community to include: first responders, elected officials, citizens, various agencies, MDCC Board of Trustees, faculty, and staff were provided with invites to participate in the public surveys via emails and Facebook. A link was provided for ease of completing the survey. The invites explained the purpose of the survey which was to gather information for research and compiling input for updating the MDCC Hazard Mitigation Plan.

Public Input - Survey Setup and Purpose

For more collaborative input, on-line surveys were presented to MDCC faculty, staff, students, and the public. Participants were asked to complete the on-line surveys to rank their concerns regarding preparedness for natural and human-caused hazards and were encouraged to comment on the hazard mitigation plan. Participation was beneficial, in that valuable input was received due to a healthy involvement.

A total of 224 responses were received from both surveys. The survey provided a valuable perspective of MDCC's preparedness plans and actions. (See **Appendix B** for survey forms and survey results.)

Results of Online Surveys

The MDCC Hazard Mitigation Planning Survey was prepared and disseminated on the College website, Facebook, and via email links. The surveys were made available during the timeframe of April 20, 2022 – May 12, 2022. The surveys consisted of ten and eleven questions, most of which were multiple choice responses. Survey participants were offered the opportunity to place comments about MDCC and its planning procedure at the end of the survey. Comments from both surveys focused mainly on the importance of more training and education, specifically geared toward active shooter events.



Over sixteen percent (16.67%) of respondents were students, 79.31% were faculty and staff. The remaining were alumnus or others that are associated with MDCC. Over eighty seven percent (87.25%) of respondents who are students, faculty or staff had a majority of classes or work assignments at the Moorhead Campus while five percent (5.88%) were assigned to the Greenville campus; three percent (3.92%) to Greenwood; one percent (1.96%) to Indianola; on-line and distance learning was one percent (.98%).

Over one-half (88.24%) of respondents were familiar with the Campus Emergency Plan. The remaining respondents were not familiar (11.76%).

2.2.2.1 Natural and Man-Made Hazard Concerns

The first survey was geared toward MDCC faculty, staff, students, and Board of Trustees.

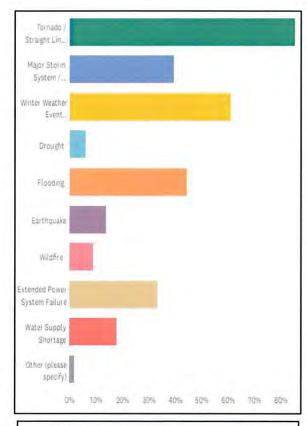
Over eighty percent (85.29%) of respondent indicated they are most concerned about tornados/straight line winds as a natural hazard. Severe winter weather was the next highest concern at over sixty percent (60.78%); flooding concerns were at 44.12%; major storm system/hurricane 39.22%; power failure was at 33.33%; water supply shortage 17.65%; earthquakes 13.73%; wildfire 8.82%; drought 5.88%.

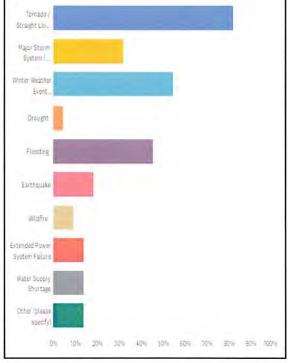
Nearly eighty percent (78.43%) ranked criminal acts as the manmade hazard of most concern and posed the greatest threat to MDCC campus and center locations. Cyber security breach was ranked second at nearly fifty percent (48.04); fire/arson next at 43.14%; terrorism 42.16%; pandemic 34.31%; a hazardous material incident was ranked at 20.59%. Other incidents were at 0.98%.

The second survey was geared toward MDCC supporters, elected/appointed officials, first responders, and local citizens/residents.

Over eighty one percent (81.82%) of respondents indicated they are most concerned about tornados as a natural hazard. Severe winter weather and flooding was the next highest concern at over fifty percent (54.55%); extended power failure was at 13.64%; earthquakes – 18.18%; hurricanes/tropical storms – 31.82%; water supply shortage – 13.64%; drought – 4.55%; wildfire – 9.09%; others – 13.64%.

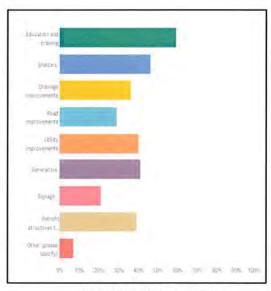
Almost sixty percent (59.09%) ranked criminal acts as the manmade hazard of most concern and posed the greatest threat to MDCC campus and center locations. Fire/arson was ranked second at over fifty percent (54.55%) and cyber security breach incident was ranked at 40.91%. Pandemic was 36.36% and terrorism 31.82%.



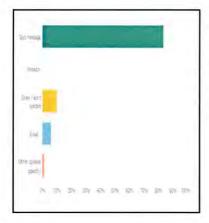


2.2.2.2 Suggested Hazard Mitigation Projects

The results of the surveys continue to indicate that education and training programs should be the priority project that MDCC should consider in being better prepared for natural and man-made disasters. The two on-line surveys were averaged together to indicate the priorities of the mitigation projects. The survey that was completed by the students, faculty, and staff is to the right. Averages from the two surveys are as follows: Education/training - 65.7%; shelters – 53.4%; generators – 47.2%; signs – 27.9%; roads – 26.9%; retrofit structures – 25%; drainage – 23.7%; utility upgrade – 21.7%.



.MDCC Campus Survey



The survey showed that a majority (83.33%) of personnel and students preferred to receive emergency notifications via text message. During orientation, MDCC students are encouraged to sign up to receive emergency alert notifications and text messages. Also, teachers instruct students on the process of signing up for the alerts at the beginning of each semester.

2.2.3 Draft Plan Review Prior to Approval

In accordance with both FEMA and MEMA requirements, the public was afforded the opportunity to review the draft of the MDCC Hazard Mitigation Plan via a weblink emailed to internal and external stakeholders. The timeframe for reviewing the plan draft was June 6, 2022 – June 30, 2022. Links to the draft plan were made available online and included in emails beginning on June 6, 2022. The draft plan was also made available to the public via the MDCC website on June 6, 2022. The purpose of the review was to give students, faculty, staff, and the public an opportunity to review the plan, and to incorporate input, prior to plan adoption. Individuals provided feedback regarding the draft plan via the online survey. The community viewed the MDCC Hazard Mitigation Plan Draft and were given the opportunity to provide suggestions such as changes or comments. (See **Appendix B** for copies of the survey summary, compilation of written comments, & emails.)

2.3 Review of Existing Technical Information and Plans

Requirement §:201.6(b): To develop a more comprehensive approach to reducing the effects of natural disasters, the planning process shall include: (3) review and incorporation, if appropriate, of existing plans, studies, reports, and technical information.

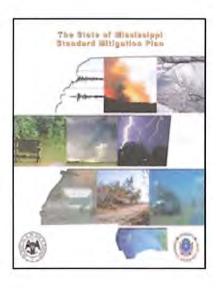
To better use resources and planning efforts across Sunflower, Washington, and Leflore Counties, the existing planning initiatives listed in Section 2.3 were reviewed and incorporated in the hazard identification and risk assessment and growth trends sections. A review of plans and development regulations for jurisdictions within which MDCC facilities are located was conducted to determine unresolved issues and relevant data. <u>Table 2-7</u> provides a list of the plans reviewed followed by a summary of the Hazard Mitigation and MDCC Plans reviewed.

Table 2-7: Loc Ordi		d Count s and R	7		t Plans	,	
	Counties			Citie	s		
	Leflore	Sunflower	Washington	Moorhead	Greenwood	Indianola	Greenville
Comm	nunity	Plannir	ng Initia	atives			
Comprehensive Plan			X		X	Х	X
Land Use Plan	Х				Х	Х	X
Capital Improvements Plan					х		
CEMP	Х	Х	Х		Х		
Hazard Mitigation Plan	Х	Х	Х	Х	Х	Х	Х
Co	odes a	nd Reg	ulation	s			
Zoning Ordinance	Х		Х		Х	Х	Х
Subdivision Regulations			х		Х	Х	Х
Building Codes/ Permitting	Х		Х		Х	Х	X
Flood Plain Management	Х	Х	X	X	X	X	X
Storm Water Management	Х	Х	Х	Х	Х	Х	Х

MDCC also has their own regulatory, crisis response, administrative, student handbooks, and other various plans. Some of these plans are discussed and mentioned on page 22 of this plan. All MDCC campuses fall under all MDCC rules, policies, and regulations.

State of Mississippi Hazard Mitigation Plan, October 2018

Developed by the State of Mississippi Emergency Management in 2018, the State Hazard Mitigation Plan outlines risks, mitigation capabilities, strategies, and actions on a state level. The MDCC plan will roll up to the state plan to ensure their mitigation needs are addressed in future planning initiatives.

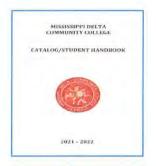


District Three Regional Hazard Mitigation Plan

The Sunflower, Washington, and Leflore Counties' Hazard Mitigation Plans have been updated and merged into one plan, along with the counties of Bolivar, Humphreys, Carroll, Holmes, Montgomery, and Attala, as the District Three Regional Hazard Mitigation Plan. The Plan was adopted in May 2021. The planning area includes the counties of Sunflower, Washington, and Leflore. Sunflower County includes the cities of Moorhead, Indianola, and Drew; Washington County includes the cities of Arcola, Greenville, Hollandale, Leland, and Metcalf; Leflore County, the cities of Greenwood, Itta Bena, Morgan City, Schlater, and Sidon are included. The planning district staff worked with the Emergency Management Agency Directors in each of these three counties, to include representatives from each municipality as part of the Hazard Mitigation Task Force for assistance and participation in the planning process. This District Three Regional Hazard Mitigation Plan, representing the three counties with MDCC physical locations, and the other six counties, offers relevant hazard mitigation planning information for inclusion in this MDCC Hazard Mitigation Plan.

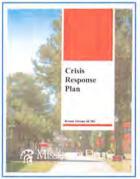
Mississippi Delta Community College Catalog/Student Handbook

This handbook provides students an emergency plan quick reference section for responding to various events such as bomb threats, civil disturbance, severe weather, and smoke/fire. In addition, the handbook provides procedures for building evacuations and how to report electrical and plumbing issues.



Mississippi Delta Community College Master Crisis Response Plan

Provides students, faculty, and staff information on the policies and procedures for how to prepare for and respond to emergency situations such as fire, severe weather, and gas leak incidents. The manual also provides contact information for safety coordinators and local first responders and the campus crisis response plan.



Mississippi Delta Community College Natural Gas Master Meter System Operation & Maintenance Manual Emergency Response Plan and Public Awareness

A procedural manual for operating and maintenance activities and for emergency response as required of natural gas master meter system operators by state, federal pipeline safety regulations, 49 CFR Part 192, Subpart L, Section 192.605, and Section 192.615.



Mississippi Delta Community College Distribution Integrity Management Plan

A natural gas distribution system plan developed in accordance with 49 CFR Part 192, Subpart P Distribution Integrity Management Programs (DIMP). The plan was developed based on the design, construction, operation, and maintenance records of MDCC including incident and leak history, corrosion control records, continuing surveillance records, patrolling records, maintenance history, and excavation damage experience. The specific elements of knowledge of the infrastructure used to evaluate each threat and prioritize risks are listed in the Threat



Evaluation and Risk Prioritization sections of the plan. These sections also list additional information needed and the plan for gaining this currently unknown information over time through normal activities. his plan will be reviewed annually.

Chapter 3: Hazard Identification and Risk Assessment

3 Hazard Identification and Risk Assessment

3.1 Overview of the Risk Assessment Process

Requirement CFR §201.6(2) A risk assessment that provides the factual basis for activities proposed in the strategy to reduce losses from identified hazards. Local risk assessments must provide sufficient information to enable the jurisdiction to identify and prioritize appropriate mitigation actions to reduce losses from identified hazards.

Risk assessment requires the collection and analysis of hazard-related data to enable the participating jurisdictions to identify and prioritize appropriate mitigation actions that will reduce/eliminate losses from potential hazards. Six of the eight following risk assessment steps have been integrated where applicable for each hazard identified as a significant or moderate threat to the campus and MDCC - owned facilities served under this planning effort:

- Identifying hazards
- Profiling hazards
- Assessing Vulnerability: Overview
- Assessing Vulnerability: Identifying Structures
- Assessing Vulnerability: Addressing Repetitive Loss Properties
- Assessing Vulnerability: Estimating Potential Losses
- · Assessing Vulnerability: Analyzing Development Trends
- Multi-Jurisdictional Risk Assessment

MDCC does not participate in the NFIP and has no college-owned Repetitive Loss properties at any of the campus facilities in Sunflower, Leflore, and Washington Counties. The MDCC Hazard Mitigation Plan is not a multijurisdictional plan. Although the College owns and operates facilities in three counties, they fall under one governing structure. A single plan adoption will cover all MDCC facilities. Therefore, this plan will not address Repetitive Loss Structures or a Multi-Jurisdictional Risk Assessment.

3.2 Risk Assessment

Section 3.2 incorporates all the related steps of the risk assessment for MDCC. The section is organized by CFR regulations. The Crisis Response Team previously, conducted an exercise to review 31 natural and human-caused hazards and then narrowed the list to the 15 hazards profiled in this plan. The Hazard Mitigation Planning Council added Arson, Pandemic, and Cyber Threat to the hazard list. For the purposes of this plan, the components and products of thunderstorms are combined into a single hazard, as are the products of winter weather events, and fire. The hazards are identified as:

- Drought
- Earthquake
- Expansive Soils
- Extreme Heat

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- Flood
- Hail/High Wind/Thunderstorm/Lightning
- Hurricane
- Levee Failure
- Severe Winter Storm/Extreme Cold/Ice Storm
- Tornado
- Wildfire
- Structural Fire/Arson
- · Hazardous Materials Incidents
- Pandemic
- Cyber Threat

3.3 Identifying and Profiling Hazards

Requirement CFR §201.6(2)(i) [The risk assessment shall include a] description of the type, location, and extent of all natural hazards that can affect the jurisdiction. The plan shall include information on previous occurrences of hazard events and on the probability of future hazard events.

Hazard identification is the process of recognizing risk-related events that threaten a community. Events are described as natural or human-caused hazards that inflict harm on people or property or interfere with commerce or human activities. Such events would include, but are not limited to hurricanes, floods, tornadoes, structure fires and other incidents that can affect populated areas.

Hazard profiling involves describing the physical characteristics of the hazards through analysis of past occurrences, location, extent, and probability. This process was accomplished by creating base maps of the MDCC campuses in Sunflower, Leflore, and Washington Counties, and collecting, documenting, and analyzing hazard events obtained from various sources. The degree to which hazards were profiled was dependent on the availability of data. Data limitations are addressed per hazard. The level of risk for each hazard was also estimated and assigned a rank of high, medium, or low by the Hazard Mitigation Planning Council based upon factors unique to that particular hazard. See Chart 3-1 for definitions of low, medium, and high as pertaining to MDCC hazards and risk assessment.

Chart 3-1 Defining Low, Medium, & High as pertaining to MDCC Hazard Occurrence

Low Risk Probability = 0.25% Medium Risk Probability = 26-75% High Risk Probability = 75-100%*

		_1			
Probability	Co	nseque	ence of Occu	rrence	
of Occurrence	Very Low	Low	Moderate	High	Very High
Very Low					
Low					
Moderate					
High					
Very High					

^{*}The planning team, in collecting data from multiple sources which each have their own slightly different definition of probability, adopted one standard for this plan as referenced above <u>Chart 3-1</u>.

3.3.1 Drought

Description of the Hazard

Drought is a normal hazard occurrence in virtually all climactic regions, including areas with high and low average rainfall. Drought is a result of significantly lower amounts of precipitation received in a region over an extended period of time (usually a season or more in length).

Drought occurs under differing conditions, based on the reference points:

- Meteorological drought is defined by a period of substantially diminished precipitation duration and/or intensity. The commonly used definition of meteorological drought is an interval of time, generally in the order of months or years, during which the actual moisture supply at a given place consistently falls below the average moisture supply.
- Agricultural drought occurs when there is inadequate soil moisture to meet the needs of a crop
 at a particular time. Agricultural drought usually occurs after or during meteorological drought,
 but before hydrological drought and can affect livestock and other dry-land agricultural
 operations.
- Hydrological drought refers to deficiencies in surface and subsurface water supplies from
 deficiencies in precipitation. It is measured as stream flow, snowpack, and as lake, reservoir,
 and groundwater levels. There is usually a delay between lack of rain or snow and less
 measurable water in streams, lakes, and reservoirs. Therefore, hydrological measurements
 tend to lag behind other drought indicators.

Chapter 3: Hazard Identification and Risk Assessment

 Socio-economic drought occurs when physical water shortages start to affect the health, wellbeing, and quality of life of the people, or when the drought starts to affect the supply and demand of an economic product.

3.3.1.1 Hazard Profile

A drought's severity depends on numerous factors, including duration, intensity, and geographic extent as well as regional water demands by humans, livestock, crops, and vegetation. The severity of drought can be aggravated by other climatic factors such as prolonged high winds and low relative humidity. Due to its multi-dimensional nature, drought is difficult to define in exact terms and poses difficulties in terms of comprehensive risk assessments.

In 1965, Wayne Palmer developed an index to "measure the departure of the moisture supply." This index was based on the supply-and-demand concept of the water balance equation, taking into account more than merely the precipitation deficit at specific locations. The objective of the Palmer Drought Severity Index (PDSI) was to provide a measurement of moisture conditions that were "standardized" so that comparisons using the index could be made between locations and between time periods. While Palmer's indices are water balance indices that consider water supply (precipitation), demand (evapotranspiration) and loss (runoff), another commonly used drought index, the Standardized Precipitation Index (SPI), is a probability index that considers only precipitation. Therefore, and for the purposes of this plan, drought will be analyzed using the PDSI.

The PDSI varies roughly between -4.0 and +4.0. Weekly Palmer Index values are calculated for the Climate Divisions during every growing season and are available from the Climate Prediction Center. MDCC could expect to experience the entire range of drought severity and classification. <u>Table 3-1</u> lists the Palmer Drought Severity Index.

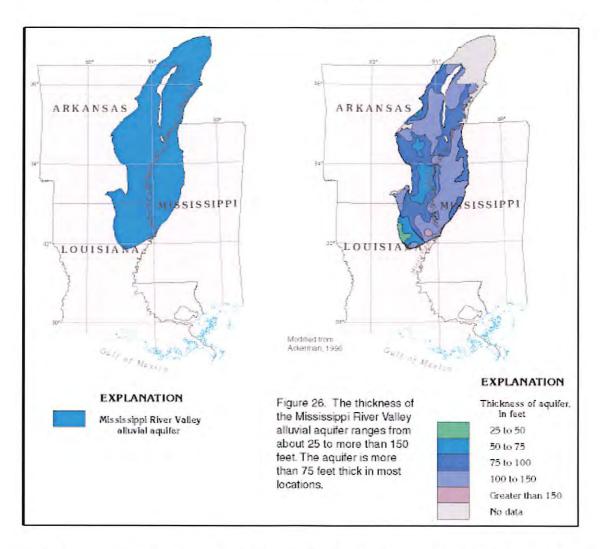
PDSI Classifications for Dry and Wet Periods	
Index Value	Classification
4.00 or more	Extremely wet
3.00 to 3.99	Very wet
2.00 to 2.99	Moderately wet
1.00 to 1.99	Slightly wet
0.50 to 0.99	Incipient wet spell
0.49 to -0.49	Near normal
0.50 to -0.99	Incipient dry spell
1.00 to -1.99	Mild drought
2.00 to -2.99	Moderate drought
3.00 to -3.99	Severe drought
-4.00 or less	Extreme drought

3.3.1.2 Assessing Vulnerabilities

Drought is not a location specific hazard. All MDCC counties are equally vulnerable to drought. <u>Map 3-1</u> shows the location of the Mississippi River Valley Alluvial Aquifer, which includes Sunflower, Leflore, and Washington counties.

Map 3-1: Mississippi River Valley Alluvial Aquifer

(Source: USGS)



A severe and prolonged drought could have negative and lasting impacts on both people and property at MDCC. Emergency and critical services that rely on water for response could be compromised. When available water tables decline and potable water becomes harder to obtain, the health, and welfare of all students, faculty, and staff of MDCC are exposed to greater risk. Any water-dependent functions at MDCC are also exposed to greater risk. In addition to the health and welfare risks, drought could lead to severe economic impacts. If water-dependent businesses fail, the loss of revenue tightens

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the available funds, leading to potential reductions in available services, up to and possibly including college mission essential activities and services.

3.3.1.3 Previous Occurrences and Probability

The current and continued dry conditions that plague the South put all MDCC campus facilities in areas of Moderate and Severe Drought. Historically, Mississippi is the third wettest state in the nation behind Hawaii and Louisiana, receiving an average of 59.23 inches of rain per annum. Recent meteorological trends have caused most of the southern continental United States to suffer moderate to exceptional drought conditions. Since 2000, the longest duration of drought in Mississippi lasted 107 weeks beginning April 20, 2010 and ending May 1, 2012. The most intense period occurred the week of October 31, 2000, where Exceptional Drought affected 63.81% of Mississippi land. Since the forecast period is a snapshot of current or foreseeable conditions over a reasonably long planning period, seasonal weather trends and use of the U.S. Drought Monitor can provide indicators of oncoming drought conditions.

All three counties that house MDCC facilities have suffered from drought. In February 1997, a Federal Emergency Declaration (FEMA-EM-3032) was issued for "Drought and Freezing". The counties were listed as eligible for both Category A and B (debris removal and emergency protective measures) of Public Assistance. A lack of recorded historical drought data and forecasting limitations makes estimating probability of drought unrealistic within the context of this plan process. Given statewide drought indices, the probability of future drought conditions is high as determined by the U.S seasonal drought outlook and in concordance with the Mississippi State Hazard Mitigation Plan. With high being defined as greater than average or moderate. See Chart 3-1, for definition of high drought risk as pertaining to the probability of occurrence and its qualitative risk.

The last drought condition to affect the Delta area with recorded property damage, other than crops, occurred in July 2016 with approximately \$30,000.00 in Leflore County. (Source NCEI) Chart 3-2 depicts recent drought history in the planning area. Very dry conditions were experienced in November 2016 which resulted in an area of severe drought (D2). This eventually turned into extreme (D3) drought across MDCC area counties by the end of November. These same conditions continued into December 2016 still effecting crops.

	rought History 2006 - 2021 ource NCEI)	
Does not include crop damage		
Dates of Occurrence	Property Damage Recorded	
December 1-12, 2016	None	
November 15-30, 2016	None	
July 26-August 9, 2016	\$30,000	
Sept. 1-Oct. 27, 2015	None	
October 1-31, 2010	None	
May 1-July 4, 2007	\$50,000	

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Chart 3-2 Recent D	Prought History 2006 - 2021
(Se	ource NCEI)
Does no	t include crop damage
Dates of Occurrence	Property Damage Recorded
October1-16, 2006	None

Long range predictions for occurrences of drought events are not available. The probabilities and predictions are seasonal and anything longer term is pure conjecture. Each year NOAA lines up their summaries and possibilities according to the jet stream action in the Pacific Ocean. Therefore, probabilities and projections for any given year is made solely on a year-to-year basis. The NOAA and the National Weather Service are the authority for climate and weather events in the U.S. and they do not provide percentages, probabilities, or predictions beyond a season; and that is subject to change. (Source: Alan Gerard, NOAA National Severe Storms Laboratory, Norman, OK; Jim Stefkovich, NWS, retired).

Figure 3-1 shows current drought data for Mississippi (the smallest unit of data available)

Figure 3-2 shows current national drought data.

Figure 3-3 shows the latest available U.S. Seasonal Drought Outlook

Figure 3-1: Current Drought Data for Mississippi

(Source: USDA)

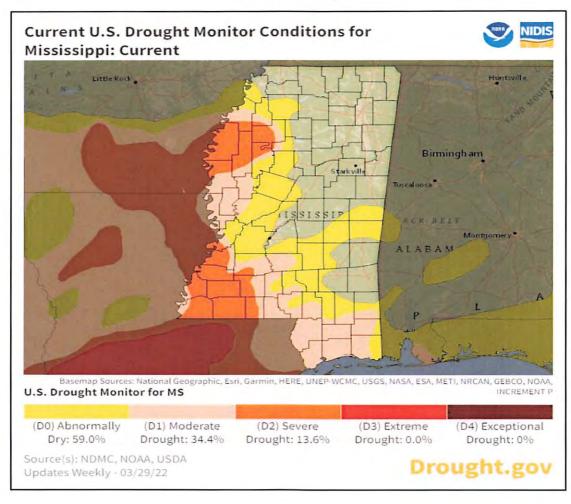


Figure 3-2: Drought Monitor Data for United States

(Source USDA)

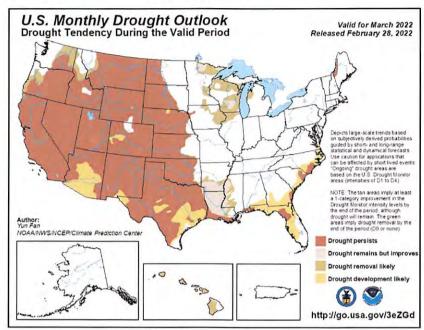
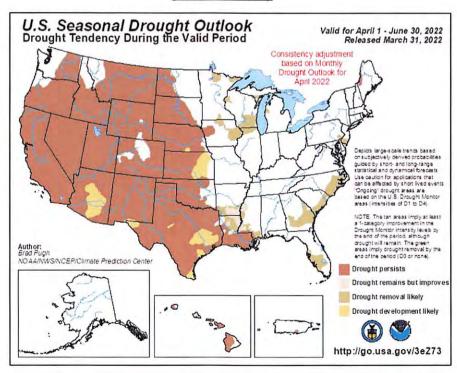


Figure 3-3: U.S. Seasonal Drought Outlook

(Source: USDA)



3.3.2 Earthquake

3.3.2.1 Description of the Hazard

Earthquake is a term used to describe ground motion and related seismic activity resulting from a slip or movement along a fault, by volcanic or magmatic activity, or other sudden stress changes in the earth. Ground motion is described as seismic waves traveling through the earth and along its surface which, depending on the magnitude of an earthquake event, can cause noticeable movement from a tremble under foot to catastrophic collapse of land, buildings, bridges, and roads. Ground motion is measured as peak ground acceleration (PGA), or the largest acceleration recorded by a particular station during an earthquake.

3.3.2.2 Hazard Profile

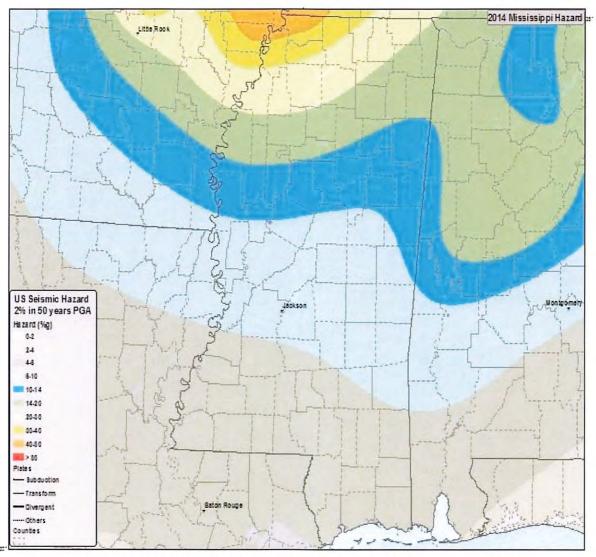
Earthquake severity is measured on the Richter Scale which assigns a single number to quantify the amount of seismic energy released by an earthquake. <u>Table 3-2</u> describes the typical damage one can expect for an event with a specific magnitude. Given MDCC's location and distance to known faults, the greatest likelihood is for events that register on the lower end of the table described below with a 2% chance of 10-20% PGA in the next 50 years based on a New Madrid fault event.

Table 3-2: Typical Effects of Specific Earthquake Magnitudes (Source: USGS)				
Richter Scale Number	Typical Effects			
< 3.4	Detected only by seismometers.			
3.5 - 4.2	Sometimes noticeable indoors.			
4.3 - 4.8	Most people notice them: windows rattle.			
4.9 - 5.4	Everyone notices them: dishes may break, and open doors swing.			
5.5 - 6.1	Slight damage to buildings: plaster cracks and bricks fall.			
6.26.9	Much damage to buildings: chimneys fall, and houses move on foundations.			
7.0 - 7.3	Serious damage: bridges twist: walls fracture; and buildings may collapse.			
7.4 - 7.9	Great damage: most buildings collapse.			
> 8.0	Total damage: surface waves seen, and objects thrown in the air.			

Map 3-2 depicts peak acceleration with 2% probability of exceedance in the next 50 years in the State of Mississippi.

Map 3-2: Peak Acceleration with 2% Probability of Exceedance in 50 Years
State of Mississippi

Source (USGS)



Peak Acceleration (0%) with 2% Probability of Exceedance in 50 Years Site: NEHRP B-C boundary National Seismic Hazard Mapping Project (2014)

Map 3-3 is a seismic map of the United States from the United States Geologic Survey. Although Central Mississippi is not rated as a high risk, historical events show that the potential for an earthquake does exist.

WSGS
science for a changing world

Lowest hazard

Map 3-3: Seismic Map of the United States (Source: USGS)

3.3.2.3 Assessing Vulnerabilities

All facilities at MDCC are vulnerable to the earthquake hazard. Based on data collected in the 2013 Mississippi Hazard Mitigation Plan, all three MDCC counties are listed as having a "very high" potential for liquefaction, a phenomenon that occurs when water-saturated sediment temporarily loses its strength and acts like a fluid. This potential is based on the counties' geographic locations in relation to the New Madrid Seismic Zone, the White River Fault Zone, and the respective Mississippi River and Yalobusha River Floodplains and a 2007 HAZUS model scenario. Liquefaction studies have not been conducted since 2007, and only one earthquake has been reported in the state (Sherman, MS) since the models were developed. It is assumed by the State of Mississippi Emergency Management Agency, and for the purposes of this plan, that the datasets are accurate to date.

Earthquakes have the potential to impact life, property, and infrastructure. At risk, are buildings and the populations within those structures at the time of an earthquake. Health and life safety risks during earthquakes are generally related to structural failure or falling objects caused by ground movement. Ceiling and wall materials, parapets, bookcases, and other unsecured objects can collapse or fall onto building occupants causing injury or death.

Windows can also break and cause injuries. Generally, an earthquake must exceed a 5.5 magnitude to cause structural damage of any significance, though smaller earthquakes can jeopardize the structural

integrity of a building, can create enough ground movement cause injuries, and can leave components of infrastructure cracked or damaged.

3.3.2.4 Previous Occurrences

The largest earthquake of record in Mississippi was a 4.7 magnitude event in 1911 at Tutwiler, approximately 35 miles north of the Moorhead campus. Two earthquakes occurred roughly 18 miles north of Greenville, Mississippi in June of 1967. On June 4, a 3.8 magnitude earthquake was felt over an area of approximately 25,000 square miles. The affected region included the Northwest quadrant of Mississippi and parts of Arkansas, Louisiana, and Tennessee. A few instances of cracked plaster and a ground crack 1/4 to 1/2-inch-wide and 39 feet long were reported near the epicenter. On June 29, the second earthquake occurred with a magnitude of 3.4. The region experiencing ground movement was limited to parts of Bolivar, Sunflower, and Washington Counties.

<u>Table 3-3</u> shows occurrences of the earthquake hazard in Mississippi from 1911 to 2013. Note that 26 occurrences have been documented in Mississippi and 8 have epicenters in or adjacent to MDCC Counties including Sunflower, Bolivar, Grenada, and Tallahatchie. All events had magnitudes of less than 4.8, which is strong enough for people to notice them, but well below a level that would cause structural damage (usually 5.5 or stronger). Events with epicenters in proximity to MDCC facilities are highlighted in the table.

Table 3-3: Location of Seismic Activity in MS, 1911-2013 (Source: 2013 MSEMA HMP)					
Date	Latitude	Longitude	Magnitude	City/Town	County
March 31, 1911	34	-91.8	4.7	Tutwiler	Tallahatchie
March 27, 1923	34.6	-89.8	Not available	Barr	Tate
October 28, 1923	34.9	-88.1	Not available	Eastport	Tishomingo
November 13, 1927	32.8	-90.2	Not available	Linwood	Adams
December 17, 1931	33.8	-90.1	4.6	Oxberry	Grenada
June 28, 1941	32.4	-90.9	Not available	Vicksburg	Warren
June 1, 1962	34.98	-90.18	Not available	Walls	Desoto
October 22, 1964	31.23	-89.56	Not available	Pine Grove	Benton
June 4, 1967	33.55	-90.84	4.4	Shaw	Bolivar
June 29, 1967	33.55	-90.81	Not available	Shaw	Bolivar
January 1, 1973	33.78	-90.62	3.5	Ruleville	Sunflower
May 25, 1973	33.94	-90.63	Not available	Lombardy	Sunflower
September 9, 1975	30.66	-89.25	2.9	Riceville	Harrison
October 23, 1976	32.2	-88.73	3	Meridian	Lauderdale
November 4, 1977	33.83	-89.28	3.4	Calhoun City	Calhoun
June 9, 1978	32.09	-88.58	3.3	Quitman	Clarke

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			mic Activity in I 3 MSEMA HMP)	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Date	Latitude	Longitude	Magnitude	City/Town	County
October 12, 1980	34.26	-89.13	Not available	Turnpike	Pontotoc
February 5, 1983	34.7	-88.37	2.9	Cairo	Clay
September 25, 1984	34.06	-89.82	Not available	Long Branch	Jackson
August 11, 1996	33.58	-90.87	3.5	Meltonia	Bolivar
February 25, 1999	34.1	-89.87	2.9	Oakland	Yalobusha
August 11, 2002	34.34	-90.17	2.8	Batesville	Panola
October 26, 2002	34.03	-90.68	3.1	Duncan	Bolivar
May 10, 2008	34.35	-88.83	3.1	Sherman	Pontotoc

The most recent seismic event in proximity to MDCC was a 3.1 magnitude earthquake that occurred on October 26, 2002. The epicenter was recorded near Duncan, MS in Bolivar County. Table 3-3 states seismic data monitoring though 2013, but there have been no measurable events since May 10, 2008, in Pontotoc County. There has been no measurable seismic activity in the planning area since 2002.

3.3.2.5 Probability

No agency has an official or reliable methodology for determining the probability of future occurrences of the earthquake hazard. Given historical data and the lack of significant historical earthquakes, the probability for a major earthquake in Mississippi is low, with low being defined as less than average or moderate. The low probability is defined by the USGS as 10% chance of a major earthquake in the next 50 years. See Chart 3-1, on page 25, for definition of low earthquake risk as pertaining to the probability of occurrence and its qualitative risk.

3.3.3 Expansive Soils

3.3.3.1 Description of the Hazard

Expansive soils are described as earth products that contain minerals capable of absorbing water. As the soils absorb water, they increase in volume. Several physical, chemical, and mineralogical soil properties influence shrink-swell behavior, with no one property accurately predicting shrink-swell potential for all soil types. Often most expansive soils are clayey with high liquid limits. Dry clay soils with low moisture content (less than 15%) easily absorb water and swell. Most of the soil expansion occurs by the time the moisture content reaches 30%. In some cases, expansive soils can increase in volume by more than 10 percent. Conversely, expansive soils will shrink when they dry out. Fissures can develop in the soil causing deep cracks in the earth. As such, a clay soil that maintains a 30% or greater moisture content isles likely to significantly change its volume as the moisture content increases. Hazard impacts would be more likely in expansive soils with moisture content fluctuations below 30%.

Changes in the volume and stability of the earth can put pressure on structures with enough force to create cracks in foundations. The same forces can cause buried pipes to bend, crack, and fail, and road surfaces to bulge or crack. As the soils dry out and shrink, the same buildings and infrastructure can lose support resulting in damaging subsidence.

3.3.3.2 Hazard Profile

A 1993 expansive soil study in Mississippi used a soil classification parameter known as the Coefficient of Linear Extensibility (COLE). Under the COLE, clayey soils with values of 0.09 or greater are considered expansive. These soils, which include Alligator and Sharkey, usually have severe limits for buildings, roads, and foundations because of the high shrink-swell characteristics. COLE is a reliable laboratory test of expansive soils, but in the field soil volume change is dependent upon factors such as weather, drainage, crops, and land use.

Soil moisture is also a function of depth in expansive soils. Bowdrie soils in the Delta Region have up to 20 inches of expansive clay overlaying loamy material. Tunica soils have 20-26 inches of clay over non-swelling loam. In contrast, Alligator, Sharkey, and Dowling soils have expansive clay extending from the surface to six feet or more. Research in Mississippi shows that for expansive soils, 80% of the moisture variation occurs in the top or surface 20 inches, indicating that the above listed soil series are equally susceptible to significant shrink-swell behavior. Table 3-4 lists the types of expansive soils found in the Mississippi Delta Region, and the approximate acreage for each type.

Table 3-4: Delta Region Expansive Soils (Source: MSU MAFES)			
Soil Series	Approx. Acreage		
Alligator	650,356		
Bowdrie	32,273		
Dowling	537,257		
Forestdale	454,948		
Sharkey	862,093		
Tunica 123,019			
Tensas	20,800		

3.3.3.3 Assessing Vulnerabilities

All MDCC buildings and infrastructure are in the Mississippi Delta Region where expansive soils are common. Buildings and their foundations are susceptible to the change in volume of the earth beneath them. Roadways owned by MDCC are also at risk to bulging, cracking, or collapsing as the earth swells and shrinks. Periods of extended drought followed by significant river flooding or monsoon rains can exacerbate the problem by allowing these soils to dry below 15% moisture content, then supersaturating the soils causing significant shifts in the stability of the earth beneath engineered surfaces.

Underground water and gas pipelines are also at risk of failure due to expansive soils. Lines that are buried in or pass-through beds of expansive soils may move or shift as the soils swell and shrink. Weak pipes, joints, and couplings may fail and cause leaks. For gas lines, this creates a significant health and safety problem if not quickly identified and repaired. Water line leaks, though not a health risk, can cause sand boils and undermining of earth near the leak which can lead to failures in engineered surfaces. It is also possible for contaminants to enter a sanitary water supply and lead to health risks for MDCC residents and staff who consume water from municipal supply lines.

3.3.3.4 Previous Occurrences

The MDCC Crisis Response Team reported that the college has suffered repeated damage to utility pipelines on campus. Expansive soils put pressure on gas and water lines causing ruptures and increasing risk to other hazards. (Gas line risks are addressed in the hazardous materials subsection.) Water pipeline ruptures could contribute to water damage and undermining foundations beneath structures. No loss values were provided for the risk assessment.

3.3.3.5 Probability

The State and local hazard mitigation plans indicate that expansive soils have not historically been a problem, but MDCC has experienced problems with their infrastructure. Given historical data, significant recent meteorological and hydrological events, and the supporting data, the probability of an expansive soil event at MDCC is high. High is defined as greater than average or moderate. See <u>Chart 3-1</u>, for definition of high expansive soil risk as pertaining to the probability of occurrence and its qualitative risk. For the sake of the Plan, high, as defined by percentage, would be from 75% - 100% probability due to dry weather conditions during seas3onal weather changes.

3.3.4 Extreme Heat

3.3.4.1 Description of the Hazard

Temperatures that are significantly above normal high summertime temperatures are considered extreme heat. There is no specific point when air temperatures are defined as significantly above normal. However, the National Weather Service will initiate alert procedures such as special weather statements when the heat index is expected to exceed 105°F-110°F (depending on local climate), for at least two consecutive days. The heat index is determined by combining the actual temperature and relative humidity. When humidity is low, the heat index may cause the air to feel cooler than the actual temperature. Conversely, high humidity coupled with high temperatures can cause as much as a 45-degree increased divergence between the actual temperature and the heat index. Figure 3-4 captures the combined effects of heat and humidity on populations, including the MDCC campus and facilities.

how hot the combination of temperature and humidity feels Relative humidity (percent) 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 80 | 85 | 90 | 95 | 100 140 Extreme Danger (130°F or higher) 135 Danger (105 - 129%). Sunstroke, muscle cramps, and/or heat exhaustion likely. Heatstroke possible with prolonged 130 131 141 125 exposure and/or physical activity Extreme Caution (90 - 105°F). Sunstroke, muscle cramps, and/or heat exhaustion possible with 120 130 139 148 Temperature (°F) 135 143 151 115 Caution (80 - 90°F) 110 137 143 150 Fatigue possible with prolonged 105 135 142 149 97 99 101 104 100 95 93 94 98 101 104 90 91 93 95 96 98 100 102 106 84 85 86 87 95 97 99 102 105 10 83 74 75 76 77 77 78 79 79 81 81 82 83 85 80 86 86 87 74 74 75 75 76 76 77 77 78 78 79 69 70 71 72 72 73 73

Figure 3-4: Heat Index
(Source: Oklahoma Climatological Survey)

3.3.4.2 Hazard Profile

The severity of extreme temperature events is measured by temperature, duration, and humidity. Most events are less than a week in duration. In the United States, periods of warmer than normal temperatures typically occur several times a summer. Extreme heat waves may occur about once every five years or so where maximum daily temperatures exceed 100°F for an extended period of time. The passing of a cold front usually moderates temperatures after a few days to a week.

The major human risks associated with extreme heat that pertain to its severity are described as follows:

- Heatstroke A substantial rise in the core body temperature, often fatal.
- Heat Exhaustion Fluid and electrolyte imbalance causing weakness or fatigue with slight body temperature elevation.
- Heat Syncope A circulatory instability response to heat that causes a sudden loss of consciousness.
- Heat Cramps Muscular pain due to mild fluid and electrolyte imbalances.

3.3.4.3 Assessing Vulnerabilities

Impacts from the extreme high temperature hazard are generally confined to effects on humans as identified in the above, although occasionally there may be relatively minor effects on building roofing materials and infrastructure, such as electric grids. Although extreme heat events are rare at MDCC, the extreme heat hazard is always a possibility during the hot summer months. The greatest risk

applies to year-round staff and students who are regularly exposed to the elements of nature, primarily maintenance staff, grounds keepers, coaches, and athletes.

3.3.4.4 Previous Occurrences

Between 2005 and 2017, the NCEI database lists one extreme heat event in Sunflower, Washington, and Leflore counties. The event occurred between the dates of 8/1/2010 and 8/4/2010. The heat index was near 110 degrees Fahrenheit. One death was related to this extreme heat event in the MDCC counties during this12 year period. There were no monetary crop losses. The HMPC recognizes that additional extreme heat events have occurred in the past and were captured during the research of the original plan. See the 2012 Hazard Mitigation Plan for this information.

3.3.4.5 Probability

Though long-term forecasting of extreme high temperatures is not possible, the geographic location of the planning area makes recurring extreme heat events likely. Based on the recorded historical data, an annualized average of .56 events can be expected across the planning area. Therefore, the probability of a future occurrence of the extreme heat hazard is high or greater than 75% chance.

3.3.5 Flood

3.3.5.1 Description of the Flooding Hazard

Floods are naturally occurring events for rivers, streams, and low-lying areas. Excess water from snowmelt, rainfall, or storm surge accumulates and either overflow riverbanks or backs up into adjacent floodplains. Hundreds of floods occur annually in the United States, including overbank flooding of rivers and streams and shoreline inundation.

Flash flooding can occur during periods of intense rainfall on areas with impervious surfaces, such as parking lots, building roofs, and roadways. Flash floods may also affect areas of extreme drought when earthen surfaces become caked and less capable of absorbing rapid- onset monsoon rains. Unlike riverine and shoreline flooding, flash floods usually come with little warning for preparation or response.

Most floods typically result from large-scale weather systems generating prolonged rainfall or significant snowmelt in the Spring. They can also occur because of man-made control structures. Control structures, such as levees, dams, and floodwalls may fail from direct water pressure, scouring from friction as waters move across them, or from overtopping due to water levels rising above the structure. Catastrophic failures, such as a levee or dam breach, can cause significant uncontrolled water inundation with a velocity and strength to destroy structures in the immediate breach area. Flood waters from this type of failure can affect hundreds of square miles of low-lying areas along floodplains and deltas. Overtopping is usually less significant but may affect localized areas along a levee or dam protection zone.

Some dams, levees, and control structures are designed to be opened during extreme risk periods so that water may be diverted from main river channels to designated floodways, relieving pressure from stressed levees and embankments. When the control structures are opened, the areas of development in and along those floodways are at risk to flooding.

The National Flood Insurance Program (NFIP) defines flood in the following way:

A general and temporary condition of partial or complete inundation of two or more acres of normally dry land area or of two or more properties from overflow of inland or tidal waters, from unusual and rapid accumulation or runoff of surface waters from any source, or from mudflow.

In support of the NFIP, FEMA identifies those areas that are more vulnerable to flooding by producing Flood Hazard Boundary Maps (FHBM), Flood Insurance Rate Maps (FIRM), and Flood Boundary and Floodway Maps (FBFM). Several areas of flood hazards are commonly identified on these maps. One of the areas identified is the Special Flood Hazard Area (SFHA), which is a high-risk area defined as any land that would be inundated by a flood having a 1% chance of occurring in any given year (also known as the base flood). The flood zone designations are defined as follows:

- Zone A (1% annual chance flooding). Areas with a 1% annual chance of flooding and a 26% chance of flooding over the life of a 30-year mortgage. Because detailed analyses are not performed for such areas, no depths or base flood elevations are shown within these areas.
- Zone AE (1% annual chance of flooding). Areas with a 1% annual chance of flooding and a 26% chance of flooding over the life of a 30-year mortgage. In most instances, base flood elevations derived from detailed analyses are shown at selected intervals within these zones.
- Zone AH (1% annual chance of flooding). Areas with a 1% annual chance of flooding where shallow flooding (usually areas of ponding) can occur with average depths between one and three feet.
- Zone AO (1% annual chance of flooding). Areas with a 1% annual chance of flooding, where shallow flooding average depths are between one and three feet.
- X500 (0.2% annual chance of flooding). Represents areas between limits between the 1% annual chance flooding and the 0.2% annual chance flooding.
- Zone X. Areas outside of the 1% annual chance floodplain and 0.2% annual chance floodplain, areas of 1% annual chance sheet flow flooding where average depths are less than one (1) foot, areas of 1% annual chance stream flooding where the contributing drainage area is less than one (1) square mile, or areas protected from the 1% annual chance flood by levees. No Base Flood Elevation or depths are shown within this zone.

3.3.5.2 Hazard Profile

Historical documentation of flooding indicates that flooding may occur during any season of the year. For the planning area, the most damaging floods have occurred during the spring and fall seasons. Floods are more likely to occur during the fall, winter, and spring months, but summer floods have also been recorded.

Flooding is a frequent hazard in the MDCC planning area. Severity ranges from localized to county-wide and regional events. Flood events can last from a few hours to a few days, leaving roads and bridges rendered impassible. The primary flooding sources for the planning area are flash flooding from torrential rains. The costliest floods were attributed to Mississippi River flooding in March 1997 and May 2011. In 1997, the river rose above the 48-foot flood stage on March 9 and crested at 54.5 feet between March 21 and March 22. Seven Mississippi counties in the Delta Region were impacted by the floods which caused an estimated \$7.3M in property damages. In 2011, the Mississippi River crested

between May 5 and May 31 causing \$5.0M in damages to low-lying farmland and urban areas. A crest of 64.24 feet was reached May 16, the MS River remained above flood stage from April 28 – June 13. Sixty-two homes, 3 public buildings, and 1 business were destroyed by the flood.

Map 3-4_and Map 3-5 show the identified Special Flood Hazard Areas (SFHA) and their relation to MDCC facilities within the planning area. Sunflower County does not have an available DFIRM, but a HAZUS run was performed to determine the flood zones. None of MDCC's Sunflower facilities are in or near the SFHA, so no map was provided. Other MDCC facilities are mapped on the following pages.

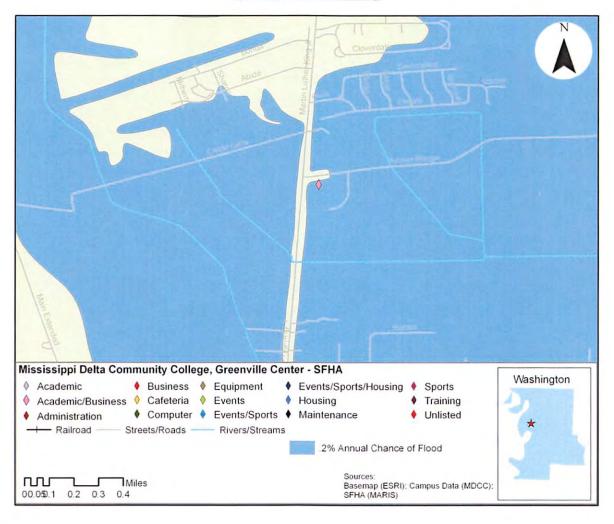
(Source: ESRI, FEMA) Mississippi Delta Community College, Greenwood Center - SFHA ♦ Academic ♦ Business ♦ Equipment ♦ Events/Sports/Housing Academic/Business Cafeteria Events Housing Training Computer ♦ Events/Sports ♦ Maintenance Unlisted Administration Streets/Roads Rivers/Streams 0.2% Annual Chane of Flood Sources: Γ Miles Basemap (ESRI); Campus Data (MDCC); Leflore 00.050.1 0.2 0.3 0.4 SFHA (MARIS)

Map 3-4: SFHA and MDCC Facilities, Greenwood Center

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Map 3-5: SFHA and MDCC Facilities in Leflore County

(Source: ESRI, FEMA)



Assessing Vulnerabilities

MDCC does not currently participate in the NFIP and has no record of Repetitive Loss or Severe Repetitive Loss structures. The Greenville Higher Education Center is the only building in the designated 1% flood zone, but it is important to consider that floods, especially flash floods, can occur outside the floodplain.

3.3.5.3 Previous Occurrences

The entire MDCC planning area suffers from street flooding associated with torrential rain frontal systems and is also at risk from riverine flooding associated with the Mississippi River and its tributaries. Since 2016, 33 reported flooding events have caused an estimated \$3,395,000 in property damage across the planning area. A breakdown of events by county is listed in <u>Table 3-5</u>:

Table 3-5: Pla	nning Area Historical Flood Dan (Source: NCEI)	nage 2016 - 2021
-County	Total Flood Events	Estimated Total Loss
Sunflower	12	\$925,000
Washington	14	\$695,000
Leflore	07	\$1,775,000

<u>Table 3-6</u> provides examples of the extensive, recent history of flooding. Note that this listing is not all-inclusive and is only meant to illustrate serious or unusual flood events.

Table 3-0. I		cts History for the MDCC Planning Area rce: NCEI)
Date of Event	County/Location	Description of Event/Effects
March 30-31, 2016	Sunflower, Leflore, Washington	Widespread severe weather and some flash flooding occurred over the MS Delta. High winds came with several rounds of high winds and tornados. Many places experienced up to golf ball size hail. 15 homes had to be evacuated in Moorhead with some primary and secondary roads flooded. There was additional river flooding with this slow- moving system.

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Table 3-6: Recent Flood Event/Effects History for the MDCC Planning Area (Source: NCEI)					
Date of Event	County/Location	Description of Event/Effects			
March 12, 2016	Sunflower, Washington	The high-pressure system over the East Coast continued to cause rounds of torrential rains over the MS Delta. The prolonged rains resulted in widespread flash flooding with numerous rivers reaching moderate to major flood stages. This caused flooding in many homes and businesses with many primary and secondary road closures. Some secondary roads washed out. This weather system also produced hail, damaging winds and a tornado touched down in the area.			
March 9-10, 2016	SUDTIONER Washington I and domaging winds occurred Many				
June 16, 2017 Leflore		An upper-level disturbance and the remnants of a convective complex triggered severe storms as they encountered an unstable airmass across the ArkLaMiss region. A line of storms began over North MS during the early afternoon of the 16 th , with additional storms developing and consolidating into highly organized system. By early evening they produced widespread damage with gusts up to 75 mph. Rising waters backed into a number of houses.			
August 14, 2017	Sunflower, Washington	An air mass remained in place across the ArkLaMiss during mid-August. A stalled front allowed for a significant coverage of showers and thunderstorms. These resulted in flash flooding for several locations as a strong upper-level disturbance also moved through the region. Multiple streets were flooded with up to 3 feet of water also entering homes.			

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Table 3-0. I		cts History for the MDCC Planning Area rce: NCEI)
Date of Event	County/Location	Description of Event/Effects
February 22, 2018	Sunflower, Leflore, Washington	A cold front stalled across the western portions of the ArkLaMiss region causing storms that produced hail and damaging winds. As it remained stalled it produced heavy rainfall and flooding during this prolonged period. Roads and city streets were significantly flooded with some closed and some homes flooded.
August 19-20, 2018	Washington	Showers and thunderstorms developed in association with a cold front moving through the region. Some of these storms produced damaging winds, a tornado, and flash flooding. Numerous streets with flooded in Greenville.
September 6, 2018	Leflore	Tropical Storm Gordon made landfall Sept. 4 th near Ala/Miss coast border and continued to track inland across much of central MS on the 5 th . It brought wind gusts and rain bands causing downed trees and a tornado in nearby Montgomery County. Numerous road and streets were flooded which triggered a vehicle rescue in Greenwood at an underpass.
February 20-23, Sunflower, Leflore, 2019 Washington		Heavy rains and thunderstorms developed as a frontal system stalled along the coast and a series of disturbances moved through the central MS region. Some locations received from 10 to over 15 inches of rain, resulting in significant flooding. Some storms produced damaging wind gusts and hail. Many streets were flooded and some houses.
May 8-11, 2019	Sunflower, Leflore, Washington	A slow-moving low-pressure system from the High Plains toward the Great Lakes initiated squall lines that spread eastward across much of the Gulf Coast region. These squall lines produced damaging winds and a few tornados along with repeated rounds of heavy rain leading to flash flooding and flooding. Some highways, roads and streets were flooded. Water entered buildings and some motorists were rescued from their flooded vehicles.

Table 3-6: Recent Flood Event/Effects History for the MDCC Planning Area (Source: NCEI)				
Date of Event	County/Location	Description of Event/Effects		
June 24, 2019	Sunflower	An organized line of showers and thunderstorms developed as a disturbance approached from the northeast and moved through the county. Some of these storms produced flashing flooding, damaging winds and 3 tornados.		
January 14, 2020	Washington	A worm front and disturbance brought numerous thunderstorms with heavy rain producing 2 to 6 inches. This resulted in widespread flash flooding as additional rain fell on already saturated ground.		
September 23, 2020	Washington	Tropical Depression Beta moved across the central MS region brining heavy rainfall. Rainfall amount ranged from 1 to 2 inches to 3 to 6 inches resulting in flash flooding. Street flooding occurred in Greenville and gusty winds brought down some trees.		
Jun 8-10, 2021 Sunflower, Leflore		A slow-moving system produced a few rounds of thunderstorms with severe weather and flooding rains. Many homes and roads were flooded. US Highway 49 North was closed, US Highway 82 was also flooded in places. Some parked cars with flooded. Stranded motorists and some residents had to be rescued from flooded roads and neighborhoods.		
August 14, 2021	Sunflower	Thunderstorms developed in the afternoon with some producing slow-moving rainfall. This resulted in flash flooding of some streets Gusty winds produced some localized damage.		

3.3.5.4 Probability

The MDCC planning area is subject to both flash flooding and riverine flooding. An annualized average of 1.44 flood events can be expected with varying degrees of impact in Washington and Leflore Counties. Sunflower County can expect an annualized average of 1.06 flooding events per year. Therefore, the probability of a future occurrence of the flooding hazard is high, greater than 75% chance.

3.3.6 Hail/High Wind/Thunderstorm/Lightning

3.3.6.1 Description Hazard

Hail is defined as falling ice, roughly round in shape and at least 0.2' in diameter. Hail develops in the upper atmosphere as ice crystals that are bounced about by high velocity updraft winds; the ice crystals accumulate frozen droplets and fall after developing enough weight. The size of hailstones varies and is a direct consequence of the severity and size of the storm that produces them – the higher the temperatures at the Earth's surface, the greater the strength of the updrafts and the amount of time hailstones are suspended, the greater the size of the hailstone.

High winds are a general term associated with sustained or gusting winds of significant strength to cause risk or damage to crops, vegetation, buildings, infrastructure, or transportation. High winds are typically associated with weather frontal systems that often bring other severe weather products such as hail and lightning.

Lightning is a visible electrical discharge produced by a thunderstorm. The discharge may occur within or between clouds, between the cloud and air, between a cloud and the ground or between the ground and a cloud. Lightning is created by static electrical energy and can generate enough electricity to set buildings on fire and electrocute people.

For the purposes of this plan, hail, high winds, and lightning are analyzed together as products of those systems.

3.3.6.2 Hazard Profile

Hail, high winds, thunderstorms, and lightning have the potential to cause significant impacts on the MDCC campus. Open structures and automobiles are particularly at risk from hail, while metal buildings and structures, open fields, and swimming pools are at greater risk of lightning strikes. High winds can damage property by carrying projectile debris or breaking building envelopes as wind buffets weak points around doors, windows, and roof structures. Winds can increase speed as they pass between closely situated buildings through a venture effect that may increase the potential for damage.

The National Weather Service and TORRO both have Hailstorm Intensity Scales. <u>Table 3-7</u> describes these combined intensity scales. The largest hail recorded in the planning area was 3" hailstones during storms in Sunflower County (May 16, 1968) and Washington County (April 1, 1974). These hailstones are considered "very destructive" by the hailstorm intensity scales. The most common hail size reported in the planning area is between .75" and 1.75", making that portion of this hazard "severe" to "destructive" as described on the chart below.

	Table		NOAA/TORRO H	Hailstorm Intensity Scales www.torro.org)
Size Code	Intensity Category	Typical Hail Diameter (inches)	Approximate Size	Typical Damage Impacts
НО	Hard Hail	up to 0.33	Pea	No damage

Table 3-7: Combined NOAA/TORRO Hailstorm Intensity Scales

(Source: www.noaa.gov and www.torro.org)

Size Code	Intensity Category	Typical Hail Diameter (inches)	Approximate Size	Typical Damage Impacts
H1	Potentially Damaging	0.33-0.60	Marble or Mothball	Slight damage to plants, crops
H2	Potentially Damaging	0.60-0.80	Dime or grape	Significant damage to fruit, crops, vegetation
НЗ	Severe	0.80-1.20	Nickel to Quarter	Severe damage to fruit and crops, damage to glass and plastic structures, paint and wood scored
H4	Severe	1.2-1.6	Half Dollar to Ping Pong Ball	Widespread glass damage, vehicle bodywork damage
H5	Destructive	1.6-2.0	Silver dollar to Golf Ball	Widespread destruction of glass, damage to tiled roofs, significant risk of injuries
H6	Destructive	2.0-2.4	Lime or Egg	Aircraft bodywork dented; brick walls pitted
H7	Very destructive	2.4-3.0	Tennis ball	Severe roof damage, risk of serious injuries
H8	Very destructive	3.0-3.5	Baseball to Orange	Severe damage to aircraft bodywork
H9	Super Hailstorms	3.5-4.0	Grapefruit	Extensive structural damage. Risk of severe or even fatal injuries to persons caught in the open
H10	Super Hailstorms	4+	Softball and up	Extensive structural damage. Risk of severe or even fatal injuries to persons caught in the open

The National Weather Service recognizes and defines three levels of wind events:

- Wind Advisory Sustained winds of 30 mph or more or gusts of 45 mph or greater for a duration for one hour or longer.
- High Winds Sustained winds of 40 mph or greater for at least one hour, or frequent gusts of wind to 58mph or greater.
- Extreme Wind Warnings Sustained winds of 115 miles per hour or greater during landfalling hurricane.

Winds and related damages can also be defined through the Beaufort Wind Scale as shown in <u>Table 3-8</u>:

Table 3-8: Beaufort Wind Scale MPH

(Source: NOAA Storm Prediction Center)

	Wind	Wind WMO Appearance of Wind Eff		
Force	MPH	Classification	On the Water	On Land
0	Less than 1	Calm	Sea surface smooth and mirror- like	Calm, smoke rises vertically
1	1-3	Light Air	Scaly ripples, no foam crests	Smoke drift indicates wind direction, still wind vanes
2	4-7	Light Breeze	Small wavelets, crests glassy, no breaking	Wind felt on face, leaves rustle, vanes begin to move
3	8-11	Gentle Breeze	Large wavelets, crests begin to break, scattered whitecaps	Leaves and small twigs constantly moving, light flags extended
4	12-18	Moderate Breeze	Small waves 1-4 ft. becoming longer, numerous whitecaps	Dust, leaves, and loose paper lifted; small tree branches move
5	19-24	Fresh Breeze	Moderate waves 4-8 ft. taking longer form, many whitecaps, some spray	Small trees in leaf begin to sway
6	25-31	Strong Breeze	Larger waves 8-13 ft., whitecaps common, more spray	Larger tree branches moving, whistling in wires
7	32-38	Near Gale	Sea heaps up, waves 13-20 ft., white foam streaks off breakers	Whole trees moving, resistance felt walking against wind
8	39-46	Gale	Moderately high (13-20 ft.) waves of greater length, edges of crests begin to break into spindrift, foam blown in streaks	Whole trees in motion, resistance felt walking against wind
9	47-54	Strong Gale	High waves (20 ft.), sea begins to roll, dense streaks of foam, spray may reduce visibility	Slight structural damage occurs, slate blows off roofs
10	55-63	Storm	Very high waves (20-30 ft.) with overhanging crests, sea white with densely blown foam, heavy rolling, lowered visibility	Seldom experienced on land, trees broken or uprooted, "considerable structural damage"
11	64-73	Violent Storm	Exceptionally high (30-45 ft.) waves, foam patches cover sea, visibility more reduced	

Table 3-8: Beaufort Wind Scale MPH (Source: NOAA Storm Prediction Center)						
Force	Wind	WMO	Appearance of W	ind Effects		
	MPH	Classification	On the Water	On Land		
12	74+	Hurricane	Air filled with foam, waves over 45 ft., sea completely white with driving spray, visibility greatly reduced			

The strongest high wind event recorded in the planning area was documented at the Greenwood Airport on July 22, 2002, at nearly 98 mph. This wind event caused approximately \$175,000 damage on the airport property. NCDC recorded wind events averaging 58-69 mph across the area.

Lightning can strike anywhere and anytime thunderstorms are present. Almost all lightning will occur within 10 miles of the parent thunderstorm, but in rare cases it can strike as much as 50 miles away. There are two major categories of lightning:

- Cloud Flashes Cloud Flashes sometimes have visible channels that extend out into the air around the storm but do not strike the ground. This is often further defined as cloud-to-air, cloud-to-cloud, or intra-cloud lightning.
- Ground Flashes Lightning channels that travel from cloud-to-ground or ground-to-cloud.
 There are two categories of ground flashes: natural and artificially initiated/triggered. Artificially initiated lightning includes strikes to tall structures, airplanes, rockets, and towers on mountains. Artificially initiated lightning goes from ground to cloud while natural lightning goes from cloud to ground.

3.3.6.3 Assessing Vulnerabilities

Hail, high wind, and lightning are not location-specific hazards; all areas within the planning area are vulnerable to these hazards. People, buildings, and property are at risk from this hazard. Buildings, automobiles, and infrastructural components (such as electrical feed lines) can suffer damage from hail, winds, and lightning. Outdoor populations are vulnerable to injury of death from hail and lightning. High winds can carry and cause debris to strike people, buildings, and property, which in turn can cause significant injuries, death, and property damage.

3.3.6.4 Previous Occurrences

Table 3-9 shows a summary of the magnitude of recorded hail events in the planning area from 1996-2021. As illustrated by the table, MDCC can expect to experience the entire range of hail severity across the entire planning area. No injuries or deaths have been recorded from historic hail events.

Table 3-9: Occurrence and Magnitude of Hail Events (Source: NCDC)						
County	Mag. <.89"	Mag. <1.60"	Mag. >1.60"	Injuries	Deaths	Damage
Sunflower	33	39	16	0	0	\$2,551,000
Washington	44	39	20	0	0	\$1,240,000
Leflore	39	32	10	0	0	\$2,554,000

<u>Table 3-10</u> shows the summary of tornado events from 1/1/1971-12/31/2020 for the planning area. Tornados may, also, be associated with thunderstorms, hurricanes, and other frontal systems that may or may not include rain, hail, snow, or lightning. Tornado events can occur during all seasons in the planning area. The entire planning area is assumed to be at equal risk from tornado events.

Table 3-10: Occurrence and Magnitude of Historical Tornado Events (Source: NCEI)						
County	F0-F2	F3-F4	F5	Injuries	Deaths	Damage
Sunflower	25	2	2	348	28	\$8,275,000
Washington	20	3	1	26	1	\$10,750,000
Leflore	30	7	0	196	16	\$33,416,000

In May 2007 and June 2008, high winds caused a total of \$66,459 in roof damages to the Moorhead Campus men's residence hall.

<u>Table 3-11</u> shows the summary of lightning events for the planning area. Lightning is typically associated with thunderstorms and severe thunderstorms which occur regularly and during all seasons in the planning area. The entire planning area is assumed to be at equal risk from lightning events.

Table 3-11: Occurrence of Historical Lightning Events (Source: NCEI)					
County	Events	Injuries	Deaths	Damage	
Sunflower	2	0	0	\$202,000	
Washington	3	0	0	\$140,000	
Leflore	2	0	0	\$53,000	

3.3.6.5 Probability

Potential impacts to life are low, as the hail, high wind, and lightning are primarily a threat to property. Vulnerable populations, such as those who congregate outdoors for activities and sporting events may be at risk. Early warning systems that are in place and activated prior to a hazard event may reduce this risk. Impacts to property are designated as low and are equal across the planning area.

Though there has been some effort to develop a model to predict future occurrences of hail, high wind, and lightning events, but no efforts have yet been successful at predicting future probabilities. There have been 272 recorded hail events between 1996 and 2021. This means that the hail hazard occurs, on average, 11.33 times per calendar year. There has been 2 recorded high wind events between 1996 and 2020. There have been 7 recorded lightning events between 2009 and 2020. This means that the lightning hazard occurs, on average, less than 1 time per calendar year. Though lightning strike and high wind incidents are low, hail events have a high annualized average, therefore the probability of occurrence is determined to be high. (Source NCEI)

3.3.7 Hurricane

3.3.7.1 Description of the Hazard

Tropical storms and hurricanes are large-scale systems of severe thunderstorms that develop over tropical or subtropical waters and have a defined, organized circulation. Tropical storms have wind speeds of 39 mph to 73 mph; hurricanes have a maximum sustained (meaning 1 minute average) surface wind speed of at least 74 mph. Hurricanes and tropical storms get their energy from warm waters and lose strength as they move over land. Hurricanes and tropical storms have proven to be Mississippi's costliest and deadliest natural phenomenon.

Hurricanes, tropical storms, and typhoons, collectively known as tropical cyclones, are among the most devastating naturally occurring hazards in the United States. They present flooding, storm surge, and high wind hazards to the communities that they impact.

The distinguishing feature of a hurricane is the eye around which winds rotate. The eye, the storm's core, is an area of low barometric pressure that is generally 10 to 30 nautical miles in diameter. The surrounding storm may be 100 to 500 miles in diameter.

Hurricanes present one of the greatest potentials for substantial loss of life, property damage, and economic impact. More than 36 million U.S. residents live in the coastal counties from Texas to Maine that have the greatest exposure to hurricanes.

3.3.7.2 Hazard Profile

The Atlantic hurricane season begins June 1 and typically ends November 30, but hurricanes have developed outside of the designated season.

Hurricane wind intensity is measured with the Saffir-Simpson Hurricane Scale. The Saffir-Simpson Hurricane Scale is a 1-5 rating based on the hurricane's present intensity. This is used to give an estimate of the potential property damage expected along the coast from a hurricane landfall. Wind speed is the determining factor in the scale. Note that all winds are using the U.S. 1-minute average.

Storm surge values are highly dependent on the slope of the continental shelf, the diameter of the storm, shape of the shoreline, and angle of approach by the storm. The Saffir-Simpson Hurricane Scale

no longer predicts storm surge on a grand scale. Storm surge is predicted by the NOAA Weather Field Office (WFO) for each storm and is updated as the storm approaches landfall.

<u>Table 3-12</u> depicts the Saffir-Simpson Scale by category and associated wind speeds and example damages from a particular event.

Table 3-12: Saffir-Simpson Hurricane Scale (Source: National Hurricane Center)					
Category	Winds	Effects on Land			
One	74-95 mph	No real damage to building structures. Damage primarily to unanchored mobile homes, shrubbery, and trees. Also, some coastal road flooding and minor pier damage.			
Two	96-110 mph	Some roofing material, door, and window damage to buildings. Considerable damage to vegetation, mobile homes, and piers. Coastal and low-lying escape routes flood 2-4 hours before arrival of center. Small craft in unprotected anchorages break moorings.			
Three	111-130 mph	Some structural damage to small residences and utility buildings with a minor amount of curtain wall failures. Mobile homes are destroyed. Flooding near the coast destroys smaller structures with larger structures damaged by floating debris. Terrain continuously lower than 5 feet ASL may be flooded inland 8 miles or more.			
Four	131-155 mph	More extensive curtain wall failures with some complete roof structure failure on small residences. Major erosion of beach. Major damage to lower floors of structures near the shore. Terrain continuously lower than 10 feet ASL may be flooded requiring massive evacuation of residential areas inland as far as 6 miles.			
Five	greater than 155 mph	Complete roof failure on many residences and industrial buildings. Some complete building failures with small utility buildings blown over or away. Major damage to lower floors of all structures located less than 15 feet ASL and within 500 yards of the shoreline. Massive evacuation of residential areas on low ground within 5 to 10 miles of the shoreline may be required.			

The following terms are used to describe Tropical Systems/Hurricanes:

- Tropical Wave: A Tropical Wave is a trough or cyclonic curvature maximum in the trade- wind easterlies. The wave may reach maximum amplitude in the lower middle troposphere.
- Tropical Depression: A Tropical Depression is a tropical cyclone in which the maximum sustained surface wind speed (using the U.S. 1-minute average) is 33 kt (38 mph or 62 km/hr) or less.
- Tropical Storm: A tropical cyclone in which the maximum sustained surface windspeed (using the U.S. 1-minute average) ranges from 34 kt (39 mph or 63 km/hr) to 63 kt (73 mph or 118km/hr).

Hurricane: A tropical cyclone in which the maximum sustained surface wind (using the U.S. 1-minute average) is 64 kt (74 mph or 119 km/hr) or more.

3.3.7.3 Assessing Vulnerabilities

MDCC is subject to the threat of hurricane winds, but not storm surge. A direct or indirect impact from these systems can produce damage from flooding, high wind, and isolated tornadoes at all MDCC facilities. The entirety of MDCC's facilities can be affected by a hurricane.

The NCDC databases indicate that MDCC has experienced 3 hurricane and tropical storm related events between 2002 and 2011. During this period there were 15 deaths, 104 injuries, and over \$5,900,985,000 in property damage for the Mississippi region that included Sunflower, Washington, and Leflore Counties. The Hazard Mitigation Planning Council noted that MDCC suffered damage from straight line winds associated with Hurricane Katrina in 2005.

Beyond the recovery costs related to storm damage, there are significant impacts to the college that are associated with interrupted business, lost wages, utility disruption, and accommodating students from coastal colleges. These impacts are difficult to quantify but are important metrics for determining the impact.

The entire planning area is subject to the wind effects from hurricanes. The Hazard Mitigation Planning Council has ranked the impact to the hazard uniformly across all facilities.

The hurricane risk in the United States extends along the entire east coast from Maine to Florida, the Gulf Coast (including Florida, Alabama, Louisiana, Mississippi, and Texas), and Hawaii. The southeast United States is at a moderate risk based on historical storm tracks and the number of hurricanes that have made landfall along the Atlantic and Gulf of Mexico coastline.

Due to geographic location, MDCC cannot expect any storm surge effects from hurricanes. That hazard only affects coastal communities.

3.3.7.4 Previous Occurrences

Table 3-13: Historical Planning Area Hurricane Damage (Source: NCEI)					
County	Total Hurricane Events	Estimated Loss Values			
Sunflower	2	\$510,000			
Washington	3	\$586,430			
Leflore	3	\$1,081,000			

Notable hurricane events over the past ten years are summarized below:

October 2002 – Hurricane Lili: Hurricane Lili made landfall along the South-Central Louisiana coast during the morning hours of October 3 as a category 2 system. Lili tracked north and slightly east through Louisiana during the day, weakening by evening to a tropical depression near Monroe, Louisiana. The center of the decaying system eventually migrated across the Mississippi Delta through the overnight hours. Thunderstorm bands, strong winds, and associated tornadoes created damage

across central Mississippi from midday on October 3 through the early morning hours of the October 4. One band of thunderstorms produced 5 weak tornadoes across Smith and Scott counties. Most of the damage in central Mississippi was in the form of (or caused by) downed trees. The highest actual wind gust was 56 miles per hour. The ground over most of the area was saturated from the combined rainfall of Lili and Isadore (which affected the same areas a week earlier) and this situation allowed tropical storm force winds to easily push down trees across the region. Rainfall amounts were over 3 inches underneath the most persistent rain bands, but only a few instances of street flooding occurred in Bolivar and Clarke counties. Estimated damage across central Mississippi was \$500,000.

August 2005 - Hurricane Katrina: Hurricane Katrina was one of the strongest and most destructive hurricanes on record to impact the coast of the United States. It will likely be recorded as one the worst natural disaster in the history of the United States to date resulting in catastrophic damage and numerous casualties in southeast Louisiana and along the Mississippi coast. Damage and casualties resulting from Hurricane Katrina extended as far east as Alabama and the panhandle of Florida. Post event analysis by the National Hurricane Center indicates that Katrina weakened slightly before making landfall as a strong category 3 storm in initial landfall in lower Plaguemines Parish. The storm continued a north-northeast track with the center passing about 40 miles southeast of New Orleans with a second landfall occurring near the Louisiana and Mississippi border as a category 3 storm with maximum sustained winds estimated around 121 mph. Katrina continued to weaken as it moved north northeast across Mississippi during the day but remained at hurricane strength 100 miles inland near Laurel, Mississippi. Damage across coastal Mississippi was catastrophic. Hurricane force winds caused damage to roofs, power lines, signage, downed trees, and some windows were broken by wind and wind driven debris in areas away from storm surge flooding, wind damage was widespread with fallen trees taking a heavy toll on houses and power lines. Excluding losses covered by the Federal Flood Insurance Program, insured property losses in Mississippi were estimated at 9.8 billion dollars. Uninsured and insured losses combined were estimated to exceed 100 billion dollars across the Gulf Coast.

September 2005 – Hurricane Rita: Hurricane Rita made landfall during the morning of September 24th near the Texas, Louisiana border at the Sabine Pass. The outer bands of Rita affected portions of Southwest Mississippi, all Northeast Louisiana, and a portion of Southern Arkansas early Saturday into Sunday. The major impacts from this hurricane were the large severe weather/tornado outbreak, heavy rainfall and lastly, tropical storm force winds and gusts across the west and southwest portion of the area. The severe weather outbreak, spawned from the outer edges of Rita, lasted about 36 hours from Saturday into Sunday evening. Officially, 55 tornadoes occurred across the Jackson, MS, NWS County Warning Area (CWA). This makes the tornado outbreak during Rita the largest tornado outbreak in the NWS Jackson CWA in recorded history. Of the 55 total tornadoes, 1 was rated an EF3, and 7 were rated EF2.

Additionally, 1 fatality occurred in Humphreys County and there was a total of 16 injuries. As a final note, tornado outbreaks are not uncommon during landfalling tropical cyclones. Heavy rain became a problem as a large area across Western Mississippi, A small corridor of the region, generally along the Big Black River, received 7 to 10 inches early Sunday morning. This heavy rain caused areas of flooding for many locations with the worst flooding occurring in an area close to the Big Black River. The most significant flooding occurred in Warren and Yazoo Counties where many homes were flooded as well several as roads washed out. Tropical storm force winds extended out far enough from Rita to give a portion of the region sustained winds between 25 and 35 mph with wind gusts as high as 40 to

50 mph. These gradient winds from Rita were mainly confined to areas west of Interstate 55 from Grenada to Jackson, and then south-eastward from Jackson to Columbia. These winds were responsible for downing many trees and power lines across the western portion of the NWS Jackson CWA, as well as having some trees fall on homes.

3.3.7.5 Probability

Numerous hurricanes have impacted Mississippi including Sunflower, Washington, and Leflore Counties, the MDCC Campus and facilities. The planning area has experienced hurricane effects three times in the past 15 years, or on average, one storm per year, making the probability of hurricane impacts moderate.

3.3.8 Levee Failure

3.3.8.1 Description of the Hazard

Levees and floodwalls are flood control barriers constructed of earth, concrete, or other materials. For the purposes of this plan, levees are distinguished from smaller flood barriers (such as berms) by their size and extent. Berms are barriers that only protect a small number of structures, or at times only a single structure. Levees and floodwalls are barriers that protect significant areas of residential, agricultural, commercial, or industrial development; at a minimum, they protect a neighborhood or small community.

Levee failure involves the overtopping, breach, or collapse of the levee or floodwall. Such failure is especially destructive to nearby development during flood and tropical cyclone events.

Levees can fail for three main reasons:

1. Overtopping

When high river discharge leads to a river stage that is higher than the lowest point on a levee, the water will overtop the levee and start to flow onto the floodplain. Because the initial gradient from the river to flood plain is relatively high, the velocity of the water as it overtops the levee will also be high. High velocities can result in high rates of erosion.

The levee that is initially overtopped may become scoured, creating a channel through the levee.

2. Undercutting and Slumping

High river discharge causes increased velocities within the stream which in turn leads to higher rates of erosion along the inner walls of levees, undercutting and slumping the levee into the river. Heavy rainfall or seepage into the levee from the river can increase fluid pressure in the levee and lead to slumping on the inner or outer parts of the levee. If the slumps grow to the top of the levee, large sections of the levee may slump into the river or onto the floodplain and lower the elevation of the top of the levee, allowing it to be more easily overtopped.

3. Seepage and Piping

Increasing water levels in the river will cause the water table in the levee to rise. This increases fluid pressure within the earth and may result in seepage (water being pushed

through the levee to rise as springs on the surrounding flood plains). If a high flow rate develops due to increased fluid pressures, then a high velocity pathway to the flood plain may occur. This is known as piping. Piping erodes the material under the levee, undermining it and causing it to collapse and fail.

3.3.8.2 Hazard Profile

The Mississippi River has the third largest drainage basin in the world, exceeded in size only by the watersheds of the Amazon and Congo Rivers. It drains 41 percent of the 48 contiguous states of the United States. The basin covers more than 1,245,000 square miles, includes all or parts of 31 states and two Canadian provinces, and roughly resembles a funnel which has its spout at the Gulf of Mexico. Waters from as far east as New York and as far west as Montana contribute to flows in the lower river.

The lower alluvial valley of the Mississippi River is a relatively flat plain of about 35,000 square miles bordering on the river which would be overflowed during time of high water if it were not for man-made protective works. This valley begins just below Cape Girardeau, Missouri, is roughly 600 miles in length, varies in width from 25 to 125 miles, and includes parts of seven states - Missouri, Illinois, Tennessee, Kentucky, Arkansas, Mississippi, and Louisiana.

Map 3-6: Mississippi Drainage Basin

* Mississippi River and Tributary (MR&T) Project Area Shown in Pink

(Source: USACE)



Failure due to overtopping of levees is relatively "predictable" based on design and performance expectations for individual structures. If properly constructed and maintained, a levee designed to

provide protection against a "100-year event" of a definable magnitude would have a 1% chance of being overtopped in any year. The concept would appear to be simple enough: if it can be predicted how high the water will rise for different recurrence intervals, the levee can be built to the desired level of protection or elevation. Typically, some freeboard is added to the height of the levees to allow for errors or imprecision in the calculations.

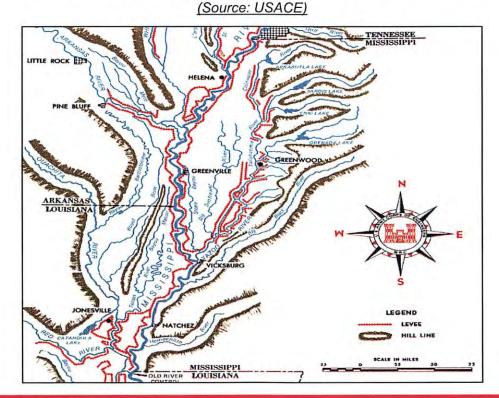
Failure due to breach or collapse of levees is not easily predicted on a broad scale even with extensive investigations. Factors such as sub-grade soil conditions, construction practices, and maintenance programs must be evaluated. Even with extensive data, the predictive value is limited to areas that are directly examined in detail as specific site conditions can vary widely in just a short distance.

3.3.8.3 Assessing Vulnerabilities

Although considered an unlikely event, MDCC is subject to the threat of levee failure. The impact from levee failure can produce damage from water rise at all MDCC facilities with water rise and velocity damage possibilities at the Greenwood, Greenville, and Moorhead facilities. The entirety of MDCC's facilities could be affected by a significant levee breach.

<u>Map 3-7</u> shows the levee system that flanks the planning area along the Mississippi, Yazoo, and Tallahatchie Rivers and tributaries that transect the Big Sunflower River Basin which is part of the Yazoo River Basin.

Levee failure is less likely than the more frequently reported flash and riverine floods, but levees have historically failed along the Mississippi and other rivers.



Map 3-7: USACE Mississippi River and Tributaries Levees and Hill Lines

3.3.8.4 Previous Occurrences

March 09, 1997 (NCDC Report)

The Mississippi River rose above flood stage* around the 9th of March and crested between the 21st and 26th. Considerable damage occurred on the Mississippi side of the river. The following is a summary of property damage for each county. Bolivar County - a total of 68 homes were damaged; Claiborne County - a total of 5 homes were damaged; Issaquena County - a total of 23 homes were damaged; Jefferson County - a total of 9 homes were damaged; Warren County - a total of 177 homes were damaged; Washington County - a total of 68 homes were damaged. Thousands of acres of farmland were flooded. The total cost of this event was recorded at \$7.3 Million.

April-May 2011

Persistent rainfall (nearly 300 percent over normal amounts in the Ohio Valley) combined with melting snowpack caused historical flooding along the MS River and its tributaries. Economic damages not including crops in Mississippi were \$800 million in Mississippi.

December 2015

A powerful storm system packing strong tornados and intense rainfall triggered historic flooding in several states including MS that broke many river gauge records and caused overtopped levees in some states. Total storm damage caused at least 50 deaths and over 2 billion in damage over 6 states.

July 2019

Major flooding in Mississippi and ten other states affected lots of infrastructure with high water levels disrupting barge traffic on the river, which negatively impacted a variety of dependent industries. Total damage costs were 6.2 billion dollars and 4 deaths.

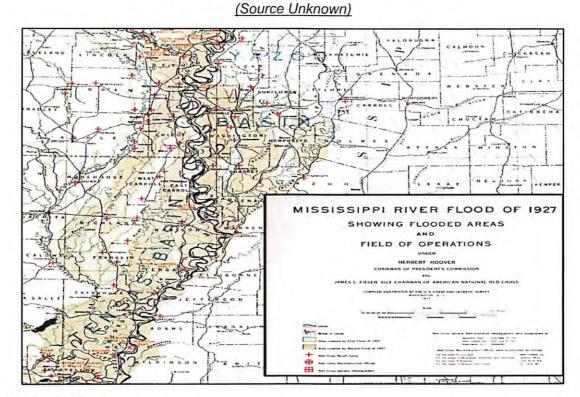
* There is no data available to indicate whether the recorded flood stages are above the levee walls along the Mississippi River. NCDC records indicate flooding caused by river rise, but overtopping/levee failure is not reported.

April 21, 1927 (USACE Report)

A United States Army Corps of Engineers report regarding the 1927 floods provided the following synopsis of the April 21 levee breach at Mounds Landing, near Greenville:

At Mounds Landing near Greenville, MS., for example, a flood surge blew out a levee where thousands of terrified workers were building a bunker of sandbags. Swirling eastward, the flood ravaged 2.7 million acres of farmland before rejoining the main stem of the Mississippi at Vicksburg, Miss.

The levee break at Mounds Landing was the greatest single crevasse ever to occur on the Mississippi River. It flooded an area 50 miles wide and 100 miles long with up to 20 feet of water. It put water over the tops of houses 75 miles away. The total U.S. cost of the 1927 floods is estimated at \$1 Billion at a time when the entire federal budget was just \$3 Billion. Map 3-8 shows the levee breach.



Map 3-8: 1927 Mounds Landing Levee Breach

3.3.8.5 Probability

Levee failure is difficult to predict. Factors such as snow melt, rainfall, levee maintenance, and flood fight operations contribute to risk and management of the levees in the MR&T project area. Since the development of the levee system, there has been only one recorded significant levee failure in the planning area. The Spring 2011 floods created the greatest risk to the Mississippi Delta Region since 1927. The Vicksburg gauge read 1.1 ft. higher than in 1927 at 57.1 ft setting a new record. USACE managed flood fight operations proved successful by using water diversion, sandbags, and related preparedness measures prior to significant river rise. Based on the history of events and proven technological/hydrological tactics during periods of risk, the probability of this hazard occurring is low.

3.3.9 Severe Winter Storm/Extreme Cold/Ice Storm

3.3.9.1 Description of the Hazard

Severe winter storms, extreme cold, and ice storms usually consist of freezing temperatures and precipitation in the form of rain, freezing rain, sleet, or snow. Severe winter storms include all forms of significant frozen precipitation.

3.3.9.2 Hazard Profile

MDCC facilities are in central Mississippi where the effects of extreme cold and winter weather can affect campus populations and facilities. <u>Figure 3-5</u> depicts the National Weather Service's methodology for determining wind chill, using wind speed and actual temperature.

Wind Chill Chart Temperature (°F) 40 30 10 -25 Calm 35 25 20 15 -10 -15 -20 -30 -35 36 31 25 7 -16 -22 -28 -34 -40 -52 19 13 1 -46 -57 10 34 27 21 15 9 3 -4 -10 -16 -28 -35 -41 -47 -53 -59 -66 -72 15 25 -32 -39 -45 -58 32 19 13 0 20 30 24 17 11 4 -2 -9 -15 -22 -29 -35 -42 -48 -55 -61 -68 -74 -81 25 29 23 16 9 3 -4 -11 -17/ -24 -31 -37 -44 -51 -58 -64 -71 30 28 22 15 8 1 -5 -12 -19 -26 -33 -39 -46 -53 -60 -67 -73 -80 -87 35 -48 -55 28 21 14 7 0 -7 -14 -21 -27 -34 -41 -62 -69 -76 -82 -89 -43 -50 -22 -29 -36 -57 40 27 20 13 6 -1 -8 -15 45 -9 -16 -23 -30 -37 -44 -51 -58 -65 -72 -79 -86 -93 26 19 12 5 -2 50 26 19 12 4 -3 -10 -17 -24 -31 -38 -45 -52 -60 -67 -81 -25 -32 -39 -46 -54 55 25 11 -3 -11 -61 -68 -75 -82 -97 18 4 17 10 3 -4 -48 60 25 -11 -26 -33 -55 -62 -69 -76 -98 **Frostbite Times** 30 minutes 10 minutes 5 minutes

Figure 3-5: Methodology for Determining Wind-chill (Source: National Weather Service)

3.3.9.3 Assessing Vulnerability

All locations within the MDCC planning area are subject to the severe winter storms, extreme cold, and ice storm hazards.

Winter weather events are relatively infrequent but can cause significant damage when they occur. Most southern government entities do not have the supplies for a proper emergency or preparedness response to a winter storm. Therefore, even the smallest winter storm can have a dramatically intense impact on everyday life.

3.3.9.4 Previous Occurrences

<u>Table 3-14</u> lists significant occurrences of the winter storm hazard around the MDCC Campus and facilities, as well as deaths, injuries, and property damage, where such data is available. It is likely that there are more instances where severe winter storms, extreme cold, or ice storms have impacted MDCC, but they were not recorded as such by the NCDC and participants in the planning process were unable to discover sufficient detail for inclusion.

Table 3-14: Occurrences of the Severe Winter Storm/Extreme Cold/Ice Storm Hazard

(Source: NCEI)

Date	Location	Type of Event	Injuries	Deaths	Property Damage
February 15-17, 2021	Sunflower, Washington, Leflore	Heavy Sleet up to 4.5 "	0	0	\$250,000
January 16, 2018	Sunflower, Washington, Leflore	Heavy Snow & Ice 3"	0	0	\$50,000
February 25, 2015	Sunflower, Washington	Heavy Snow 6-8"	0	0	\$7,000
January 14-15, 2013	Sunflower, Washington, Leflore	Ice Storm .25"	0	0	\$140,000
February 09, 2011	Sunflower, Washington, Leflore	Heavy Snow 2-5"	0	0	\$1,300,000
February 03, 2011	Washington, Leflore	Ice Storm .255"	0	0	\$400,000
January 09, 2011	Sunflower, Washington, Leflore	Heavy Snow Ice Storm .575"	0	0	\$110,000
February 11, 2010	Washington	Heavy Snow 1-2"	0	0	\$10,000
January 1, 2010	Sunflower, Washington, Leflore	Extreme Cold	0	0	\$1,400,000
March 07, 2008	Sunflower, Washington, Leflore	Heavy Snow 2-4"	0	0	\$20,000
January 25, 2008	Sunflower Washington, Leflore	Ice Storm .25"	0	0	\$550,000

3.3.9.5 Probability

Given the frequency of winter weather in central Mississippi and within the planning area over the previous twenty years, the annualized probability of .50 events per year ranks this hazard with a high probability of occurrence or greater than 75% chance.

3.3.10 Tornado

3.3.10.1 Description of the Hazard

Tornadoes are defined as a violently rotating column of air in contact with the ground and extending from the base of a thunderstorm. A debris cloud beneath a thunderstorm is all that is needed to confirm the presence of a tornado, even in the total absence of a condensation funnel. Most of the time, vortices remain suspended in the atmosphere. When the lower tip of a vortex touches earth, the tornado becomes a force of destruction. They are created during severe weather events such as thunderstorms and hurricanes, when cold air overrides a layer of warm air, causing the warm air to rise rapidly. The instability created results in the rotation of air and formation of the tornado.

3.3.10.2 Hazard Profile

Tornado damage severity is currently measured by the Enhanced Fujita Tornado Scale. Prior to February 1, 2007, severity was measured by the Fujita Scale. The Fujita Scale assigns numerical values based on wind speeds and categorizes tornadoes from 0 to 6. The letter "F" often precedes the numerical value. On February 1, 2007, the Fujita scale was decommissioned in favor of the more accurate Enhanced Fujita Scale. None of the tornadoes recorded on or before January 31, 2007 were re-categorized. Therefore, maintaining the Fujita scale will be necessary when referring to previous events.

The Enhanced Fujita Scale, or EF Scale, is the scale for rating the strength of tornadoes in the United States estimated via the damage they cause. Implemented in place of the Fujita scale, it was used starting February 1, 2007. The scale has the same basic design as the original Fujita scale, six categories from zero to five representing increasing degrees of damage. It was revised to reflect better examinations of tornado damage surveys, to align wind speeds more closely with associated storm damage. The new scale considers how most structures are designed and is thought to be a much more accurate representation of the surface wind speeds in the most violent tornadoes.

Table 3-15: Pre-2007 Fujita Scale				
F-Scale Number	Intensity Phrase	Wind Speed	Type of Damage	
F0	Gale tornado	40- 72mph	Some damage to chimneys; breaks branches off trees; pushes over shallow-rooted trees; damages sign boards	
F1	Moderate tornado	73- 112mph	The lower limit is the beginning of hurricane wind speed peels surface off roofs; mobile homes pushed off foundations or overturned; moving autos pushed off the roads; attached garages may be destroyed	
F2	Significant tornado	113- 157mph	Considerable damage; Roofs torn off frame houses; homes demolished; boxcars pushed over; large trees snapped or uprooted; light object missiles generated	
F3	Severe tornado	158- 206mph	Roof and some walls torn off well-constructed houses; trains overturned; most trees in forest uprooted	

Chapter 3: Hazard Identification and Risk Assessment

	Table 3-15: Pre-2007 Fujita Scale				
F-Scale Number	Intensity Phrase	Wind Speed	Type of Damage		
F4	Devastating tornado	207- 260mph	Well-constructed houses leveled; structures with weak foundations blown off some distance; cars thrown, and large missiles generated		
F5	Incredible tornado	261- 318mph	Strong frame houses lifted off foundations and carried considerable distances to disintegrate; automobile sized missiles fly, through the air, in excess of 100 meters; trees debarked; steel reinforced concrete structures badly damaged		
F6	Inconceivable tornado	319- 379mph	These winds are very unlikely. The small area of damage they might produce would probably not be recognizable along with the mess produced by F4 and F5 wind that would surround the F6 winds. Missiles, such as cars and refrigerators would do serious secondary damage that could not be directly identified as F6 damage. If this level is ever achieved, evidence for it might only be found in some manner of ground swirl pattern, for it may never be identifiable through engineering studies		

Table 3-16 describes the Enhanced Fujita Scale ratings in use as of this Plan.

	Table 3-16: Enhanced Fujita Scale				
Enhanced Fujita Category	Wind Speed (mph)	Potential Damage			
EF0	65-85	Light damage. Peels surface off some roofs; some damage to gutters or siding; branches broken off trees; shallow-rooted trees pushed over			
EF1	86-110	Moderate damage. Roofs severely stripped; mobile homes overturned or badly damaged; loss of exterior doors; windows and other glass broken			
EF2	111-135	Considerable damage. Roofs torn off well-constructed houses; foundations of frame homes shifted; mobile homes destroyed; large trees snapped or uprooted; light- object missiles generated; cars lifted off ground			
EF3	136-165	Severe damage. Entire stories of well-constructed houses destroyed; severe damage to large buildings such as shopping malls; trains overturned; trees debarked; heavy cars lifted off the ground and thrown; structures with weak foundations blown away some distance			
EF4	166-200	Devastating damage. Well-constructed houses and whole frame houses completely leveled; cars thrown and small missiles generated			
EF5	>200	Incredible damage. Strong frame houses leveled off foundations and swept away; automobile-sized missiles fly through the air in excess of 100 m (109 yd); high-rise buildings have significant structural deformation; incredible phenomena will occur			

<u>Figure 3-6</u> shows wind zones across the United States; note that the planning area falls in Zone 4 (250MPH).

Figure 3-7 shows tornado activity nationwide.

WIND ZONES IN THE UNITED STATES* Olympia Great Falls Minot Glendive Fargo Billings Challis * Boise Buffalo @Pierre Jackson Rochester • Buffalo Caspe Sacramento Cheyenne Salt Lake City San Francisco Denver & Springfield Topeka • Washington, D.C. Pucblo . St. Louis 🤏 Lexington Springfield Owensboro Flagstaff® Sante Fe Tulsa Los Angeles Fort Smith Columbia Little
Rock Fort Worth . Dallas El Paso Abilene Montgomery WIND ZONES ZONE I New Orleans (130 mph) ZONE II (160 mph) OTHER CONSIDERATIONS **ZONE III** ALASKA 800 (200 mph) Special Wind Region **ZONE IV** + Hurricane-Susceptible Region AAWAII+ (250 mph) Design Wind Speed measuring criteria are consistent with ASCE 7-05 - 3-second gust - 33 feet above grade - Exposure C

Figure 3-6: Wind Zones in the United States

(Source: FEMA)

Figure 3-7: Tornado Activity in the United States
(Source: FEMA)

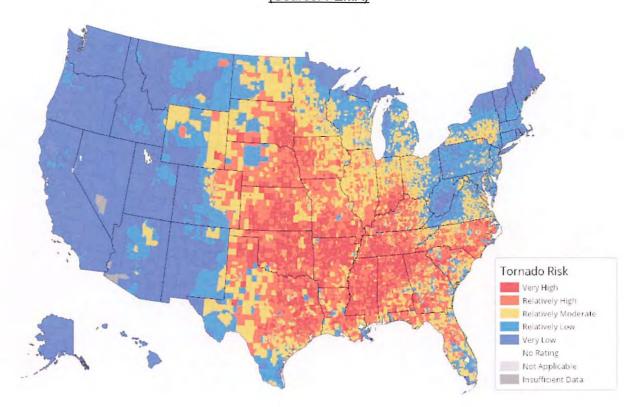


Table 1: Tornado occurrences in FEMA Region IV

States in FEMA Region IV	Total Tornado Occurrences (1950–2010)	Total Fatalities (1950–2010)	Total Injuries (1950–2010)	Fatality Rank
Alabama	1,695	441	6,808	4
Florida	3,052	161	3,307	16
Georgia	1,381	190	4,059	14
Kentucky	741	180	3,310	15
Mississippi	1,790	443	6,223	2
North Carolina	1,116	114	2,536	17
South Carolina	894	60	1,693	23
Tennessee	960	399	5,114	5
TOTAL	11,629	1,988	33,050	

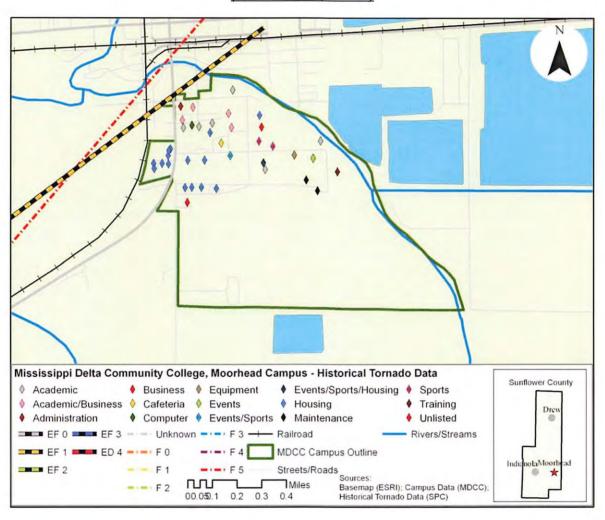
Values do not include Spring 2011 tornadoes.

SOURCE: TornadoHistoryProject.com, which compiles NOAA Storm Prediction Center data found at http://www.spc.noaa.gov/wcm/#data

3.3.10.3 Assessing Vulnerabilities

All locations within the MDCC planning area are subject to tornadoes. Map 3-9, Map 3-10, Map 3-11 and Map 3-12 show the tracks of the closest recorded, confirmed tornadoes as they relate to MDCC facilities.

Map 3-9: Location of Tornado Touchdowns near the Moorhead Campus (Source: ESRI, NCDC)



Mississippi Delta Community College, Capps Center - Basemap Sunflower County ♦ Events/Sports/Housing ♦ Sports ♦ Academic ♦ Business ♦ Equipment ♦ Academic/Business ♦ Cafeteria ♦ Events ♦ Housing ♦ Training Drew ♦ Computer ♦ Events/Sports ♦ Maintenance Unlisted Administration - Railroad - Streets/Roads —— Rivers/Streams Sources: Miles Basemap (ESRI); Campus Data (MDCC); 0.2

Map 3-10: Location of Tornado Touchdowns near the Capps Center (Source: ESRI, NCDC)

0 0.05 0.1

0.3

L

00.150.3 0.6 0.9

--- F2

EF 2

Mississippi Delta Community College, Greenville Center - Historical Tornado Data

Academic

Business

Equipment

Events/Sports/Housing

Training

Academic/Business

Cafeteria

Events

Housing

Training

Administration

Computer

Events/Sports

Housing

Training

Administration

Computer

Er 3

Railroad

Rivers/Streams

Sources:

Basemap (ESRI); Campus Data (MDCC); Historical Tornado Data (SPC)

Miles

1.2

Map 3-11: Location of Tornado Touchdowns near the Greenville Center (Source: ESRI, NCDC)

Mississippi Delta Community College, Geenwood Center - Historical Tornado Data ♦ Business ♦ Equipment ♦ Events/Sports/Housing ♦ Sports Academic/Business O Cafeteria Events Housing ♦ Training ♦ Computer ♦ Events/Sports ♦ Maintenance ♦ Unlisted ♦ Administration EF 0 === EF 3 --- Unknown = --- F 3 -+-MDCC Campus Outline - Railroad EF 1 EF 4 --- F 0 Streets/Roads Rivers/Streams EF 2 Sources: Miles Basemap (ESRI); Campus Data (MDCC); Historical Tornado Data (SPC) -- F2 TJ 0 0.150.3 0.9 1.2

Map 3-12: Location of Tornado Touchdowns near the Greenwood Center (Source: ESRI, NCDC)

3.3.10.4 Previous Occurrences

The strongest and most damaging confirmed tornado in Sunflower and Washington Counties was an F-5 on February 21, 1971, killing 25 people, injuring an additional 342, and causing an estimated \$2.5 Million in property damages. In Leflore County, the same tornado is listed as the strongest recorded event and most damaging event but is recorded as an F-4 storm.

The tornado reports to the NCDC for the planning area ranged in severity from an F0 on 26 occasions to an F5 on one occasion. A breakdown of tornado events between 2000 and 2020, for the planning area, is listed in <u>Table 3-17</u>. There have been no updated data from NCDC since January 2020.

	Table	3-17	: Hist	oric 1			vents by C	ounty (2000-	-2020)
County	F0	F1	F2	F3	F4	F5	Injuries	Deaths	Damage
Leflore	6	9	1	1	0	0	0	0	\$4,575,000.00
Sunflower	7	8	3	0	0	0	3	0	\$2,850,000.00
Washington	8	1	2	0	1	0	14	1	\$4,680,000.00

In general, vulnerable populations for this hazard are described as those that reside in mobile homes or wood-frame housing. For MDCC, vulnerable on-campus populations include those who reside, work, or study in temporary structures, wood frame buildings, structures with membrane or light-truss roof construction, buildings with significant glass buildings envelopes, and those who congregate for outdoor activities such as sporting events. The described structures have a lower resistance to the devastating impacts of violently rotating winds.

A tornado which impacts the communities in MDCC's planning area may also impact the mission and operations of the college; many of the staff and students commute to the college from neighboring areas. An event that impacts the living conditions of the community will also have a secondary impact on the ability of the college to maintain operations.

The unpredictable nature of tornadoes results in minimal, if any warning time, which can result in higher injury and fatality rates. People are less able to protect themselves when they have little or no warning time to prepare for the arrival of tornadoes.

3.3.10.5 Probability

The State of Mississippi ranks 9th in the nation for tornado occurrences, with an average of 50 tornadoes per year. The MDCC planning area has experienced 94 confirmed tornadoes since 1968, which equates to an average of 1.88 tornadoes every year, giving a high probability of occurrence in the planning area.

3.3.11 Wildfire

3.3.11.1 Description of the Hazard

Wildfire is an uncontrolled fire spreading through vegetative fuels, exposing and possibly consuming structures. Wildfires can be caused by human acts such as arson, or careless accidents from discarded cigarettes to hotbox railcars, or by the natural occurrences of lightning.

3.3.11.2 Hazard Profile

<u>Table 3-18</u> demonstrates the Fire Danger Rating System, from the US Forest Service's Wildland Fire Assessment System.

	Table 3-	18: Fire Danger Rating System					
4	(Source: USFS via http://www.wfas.net/content/view/34/51/)						
Rating	Basic Description	Detailed Description					
CLASS 1: Low Danger (L) COLOR CODE: Green	Fires not easily started	Fuels do not ignite readily from small firebrands. Fires in open or cured grassland may burn freely a few hours after rain, but wood fires spread slowly by creeping or smoldering and burn in irregular fingers. There is little danger of spotting.					
CLASS 2: Moderate Danger(M) COLOR CODE: Blue	Fires start easily and spread at a moderate rate	Fires can start from most accidental causes. Fires in open cured grassland will burn briskly and spread rapidly on windy days. Woods fires spread slowly to moderately fast. The average fire is of moderate intensity, although heavy concentrations of fuel – especially draped fuel may burn hot. Short-distance spotting may occur but is not persistent. Fires are not likely to become serious and control is relatively easy.					
CLASS 3: High Danger (H) COLOR CODE: Yellow	Fires start easily and spread at a rapid rate	All fine dead fuels ignite readily, and fires start easily from most causes. Unattended brush and campfires are likely to escape. Fires spread rapidly and short-distance spotting is common. High intensity burning may develop on slopes or in concentrations of fine fuel. Fires may become serious and their control difficult, unless they are hit hard and fast while small.					
CLASS 4: Very High Danger (VH) COLOR CODE: Orange	Fires start very easily and spread at a very fast rate	Fires start easily from all causes and immediately after ignition, spread rapidly and increase quickly in intensity. Spot fires are a constant danger. Fires burning in light fuels may quickly develop high- intensity characteristics - such as long- distance spotting - and fire whirlwinds when they burn into heavier fuels. Direct attack at the head of such fires is rarely possible after they have been burning more than a few minutes.					
CLASS 5: Extreme (E) COLOR CODE: Red	Fire situation is explosive and can result in extensive property damage	Fires under extreme conditions start quickly, spread furiously, and burn intensely. All fires are potentially serious. Development into high intensity burning will usually be faster and occur from smaller fires than in the Very High Danger class (4). Direct attack is rarely possible and may be dangerous, except immediately after ignition. Fires that develop headway in heavy slash or in conifer stands may be unmanageable while the extreme burning condition lasts. Under these conditions, the only effective and safe control action is on the flanks, until the weather changes or the fuel supply lessens.					

3.3.11.3 Assessing Vulnerabilities

Wildfires do not stop at predetermined mapped boundaries. Wildland Urban Interface (WUI) studies make a best-case judgment on a list of factors including forestation and vegetative growth as they relate to distance from developed areas. Given the amount of forested and agricultural land in Sunflower, Washington, and Leflore Counties, the entire MDCC planning area is equally at risk for the wildfire hazard and is not inside the WUI interface or intermix areas, indicating that the area is not prone to intermingling structures and wildland vegetation. Map 3-13 shows the Wildland Urban Interface for Mississippi; Map 3-14 shows the related housing block density data.

LEGEND

Wildland-Urban Interface (WUI)

Interface
Intermix

Non-WUI Vegetated

No housing

Very low housing density

Non-Vegetated or Agriculture

Low & very low housing density

Medium & high housing density

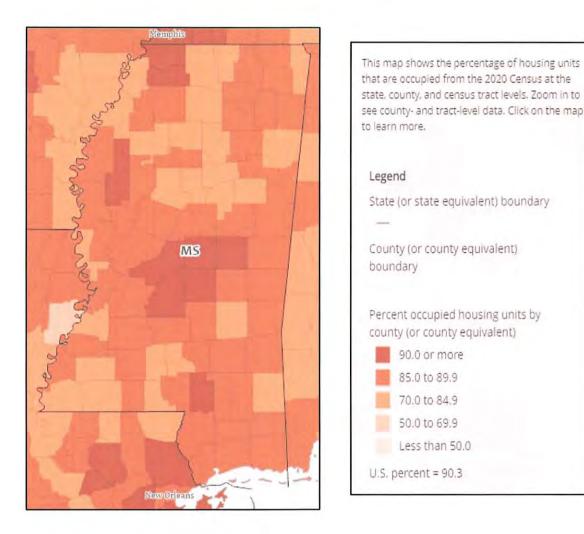
Water

Map 3-13: Mississippi Wildland Urban Interface

(Source: MWUI)

Map 3-14: Mississippi Housing Block Data Map

(Source: APL, SILVIS)



The primary objectives of the Mississippi Forestry Commission are the detection, suppression, and prevention of wildfires in the forestlands of Mississippi. There were 2,318 wildfires in 2017 in Mississippi burning over 33,574 acres. There were 38 structures damaged or destroyed with the average size fire covering 16.4 acres. In addition to the destruction of valuable forestland and the impacts on the economy through the loss of this important natural resource, wildfires threaten structures and equipment on a daily basis. Millions of dollars-worth of property is severely threatened by wildfire, but damage can be minimized by timely and effective wildfire suppression and mitigation actions.

3.3.11.4 Previous Occurrences and Probability

According to the NCEI, there have been no reported wildfires between 1950 and 2021 in any of the MDCC campus counties making it difficult to determine probabilities. Drought conditions coupled with forestation around MDCC facilities bear consideration for this hazard. The likelihood of wildfires varies

with the amount of rainfall received during a season. Moderate to high rainfall can constitute a less than a 50% chance of a wildfire; a low rainfall can constitute a greater than 50% chance of a wildfire occurring in the planning area. The probability is lower than normal due to lack of rain. See <u>Chart 3-1</u>, for definition of high wildfire risk as pertaining to the probability of occurrence and its qualitative risk.

The Fire Simulation (FSim) System was developed by the U.S. Forest Service Missoula Fire Sciences Laboratory to estimate probabilistic components of wildfire risk. The FSim System includes modules for weather generation, wildfire occurrence, fire growth, and fire suppression. FSim is designed to simulate the occurrence and growth of wildfires under tens of thousands of hypothetical contemporary fire seasons to estimate the probability of a given area. The area in this planning area does not have enough events to generate scientific probabilities. (Source: U.S. Forest Service and USDA)

3.3.12 Structural Fire/Arson

3.3.12.1 Description of the Hazard

For the purposes of this plan, structure fire is defined as fire involving the contents and/or structural components of a fixed or temporary building. Structure fires are usually caused by human actions such as arson or a carelessly discarded cigarette, to omissions such as leaving a burner on. Structure fires can also be started by lightning strikes.

Fires are a deadly phenomenon that take lives and destroy property. They can occur anywhere at any time where the right combination of heat, fuel, and oxygen are triggered into a chemical chain reaction.

3.3.12.2 Hazard Profile

The National Fire Protection Association reports in 2019 that fires in student housing cause an average of 1 death, 32 injuries, and 415 million in property damage per year. Three out of four of these fires began in a kitchen or cooking area. The likelihood of a fire is much greater on weekends and on weekdays from 5-9pm. The most common months for student housing fires are September and October. Between 2014-2018, there were estimated 3,230 structure fires in the United States in schools each year. Fires that were intentionally set were the leading cause of school fires, accounting for almost 2 of every 5 fires. (Source: NFPA)

Even the smallest of structural fires can cause loss of life, loss of property, and interruptions in business operations. Flames are often the least damage inducing product of fire. Most modern furnishings and daily use "consumable" products are made with synthetic products that produce caustic black smoke. Smoke inhalation causes acute health conditions and even death. Black smoke particles also damage unburned structural components and contents. Fires that develop in business offices and residential housing will typically double in size every 60 seconds and can pose fast, eminent danger. Buildings with lower fire loads may develop slower and conversely, buildings with high fire loads such as storage facilities may double in size every 30 seconds.

Firefighting operations can cause as much or more structural damage than the fire itself. Water used to extinguish most fires can damage electrical equipment, furniture, walls, ceilings, and floors. Water weighs approximately 8.3 lbs. per gallon. As firefighting operations proceed, water weight can cause stress and failure of unburned structural components. Clean up and repairs from fire are expensive and time consuming. Burned, smoke damaged, or water damaged building contents may be irreplaceable items such as historical documents, records, research, or museum pieces.

Fire can cause burn injuries from direct flame content, hot smoke, and unburned gases. Burns can vary from a first degree "pinking" of the skin to third degree burns that lead to disfigurement and death. Structural fire smoke is hot and full of carcinogens. Smoke inhalation can cause minor respiratory distress, permanent damage to respiratory passages, cancer, and death.

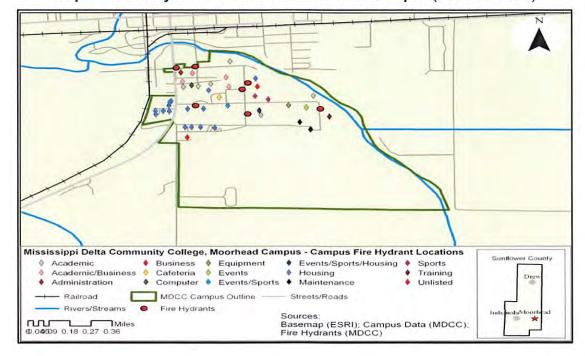
3.3.12.3 Assessing Vulnerabilities

The structural fire hazard is considered an equal threat across the MDCC Campus planning area. By the nature of use, buildings that are used for housing, laboratory sciences, and facilities maintenance may have a higher risk for fire.

The MDCC administration implemented a policy that requires all MDCC buildings constructed after 1991 to be fully sprinklered for fire protection. Fire sprinklers are known to reduce the effects of fire and save lives. In the United States, there has never been a multiple fatality fire (where occupants were not intimate with the fire inception) in a sprinklered building, and most fires in sprinklered buildings are controlled or extinguished with only one sprinkler head activation.

The Stauffer-Wood Administration Building was the scene of arson in 2017, with heavy damage to the building as multiple fires were set. The damages were over \$2,000,000.00 to the recently remodeled building. The arsonist was caught and arrested. It took several years to clean and rebuild the inside.

Map 3-15 depicts the location of fire hydrants on the MDCC Moorhead Campus. Hydrants were geocoded by MDCC GIS students and data was provided for this plan. The same data will be shared with the local fire departments for improved response capabilities.



Map 3-15: Fire Hydrant Locations on Moorhead Campus (Source: MDCC)

3.3.12.4 Previous Occurrences and Probability

MDCC has experienced two recorded structure fires. One fire occurred in the Science Building and resulted in \$2,000,000 in damages. The other was a small clothes dryer fire in a veteran's apartment building. Damage values for that fire were not available.

The threat for fire in any of the MDCC facilities is a constant risk. It is, however, impossible to determine the probability of occurrence of a structure fire. Active fire code enforcement, installed fire protection features, and proper prevention measures minimize the probability of occurrence.

3.3.13 Hazardous Materials Incident

3.3.13.1 Description of the Hazard

Hazardous materials incidents are technological events that involve accidental or intentional releases of reportable quantities of chemical, biological, radiological, nuclear, and explosive materials as defined in 40 CFR 117.3 "Reportable Quantities of Hazardous Substances".

Hazardous materials come in the form of explosives, flammable and combustible substances, toxic releases and waste materials. These substances are most often released because of transportation accidents or because of accidents in industrial facilities. Hazardous materials in their various forms can cause death, serious injury, long-lasting health effects, and damage to buildings, homes, and other property. Many products containing hazardous chemicals are used and stored in small quantities in homes and businesses. These consumer products are also shipped daily on the nation's highways, railroads, waterways, airways, and pipelines.

3.3.13.2 Hazard Profile

The threat from the hazardous materials is primarily to structures located along transmission lines and transportation routes near the MDCC campus and facilities. Facilities in proximity and generally downwind from industrial facilities with known hazardous processes or materials storage are also vulnerable to this hazard.

The severity of this hazard can be minor incidents that would likely cause no damage and little disruption of time or services. Major incidents could have fatal and disastrous consequences. The severity of a hazardous materials release relates primarily to its impact on human safety and welfare and on the threat to the environment.

Threats to human safety and welfare includes poisoning of water or food sources and/or supply, presence of toxic fumes or explosive conditions, damage to personal property, temporary or extended evacuation of people, and interference with transportation and business operations in the affected area.

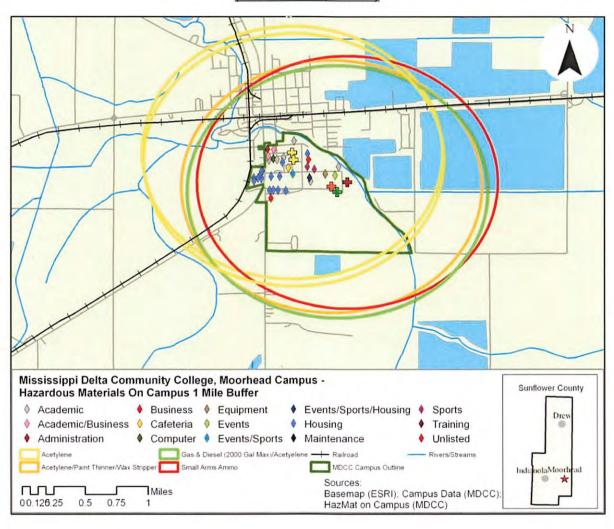
Threats to the environment include injury or loss of animals or plants or habitats that are of economic or ecological importance such as commercial, recreation, or subsistence fisheries (marine plants, crustaceans, shellfish, aquaculture facilities) or livestock, and bird rookeries. Other environmental impacts include ecological reserves, forests, parks, archaeological, and cultural sites.

3.3.13.3 Assessing Vulnerabilities

Local Tier II chemical inventory reports will show the presence, if any, of Extremely Hazardous Substances (EHS) and Non-Extremely Hazardous Substances products. These products often stored at fixed site facilities and transported via pipelines, rail, and road.

Map 3-16 shows the location and types of the hazardous materials at MDCC. Map 3-17 shows the natural gas shut-off petcock locations at MDCC.

Map 3-16: Location and Types of Hazardous Materials – Moorhead Campus (Source: ESRI, MDCC)



Mississippi Delta Community College, Moorhead Campus - Campus Gas Shutoff Points Sunflower County MDCC Gas Shutoff Valves ♦ Business ♦ Events ♦ Maintenance ♦ Cafeteria ♦ Events/Sports ♦ Academic Sports Academic/Business ♦ Computer ♦ Events/Sports/Housing ♦ Training ♦ Equipment ♦ Housing Unlisted ♦ Administration MDCC Campus Outline +- Railroad MS Gas Lines Rivers/Streams MDCC Gas Shutoff Valves Sources: Miles \mathbf{n} Basemap (ESRI); Campus Data (MDCC); @.04509 0.18 0.27 0.36 MDCC Gas Shutoff (MDCC)

Map 3-17: Location of Natural Gas Shut-off Points – Moorhead Campus (Source: ESRI, MDCC)

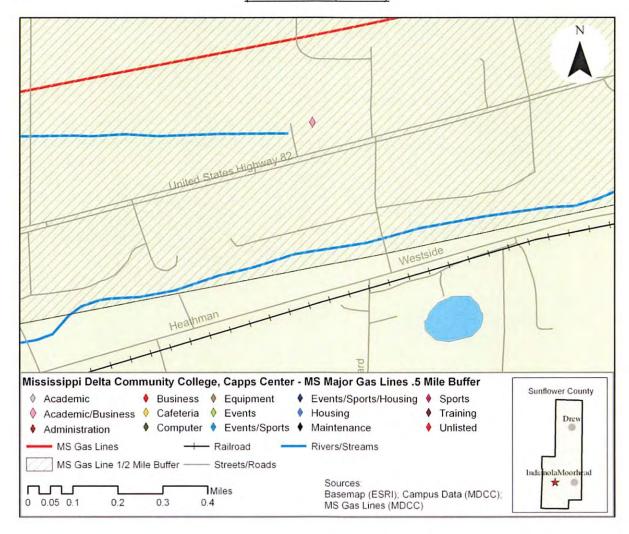
Map 3-18 through Map 3-21 show the locations of major gas lines and their proximity to MDCC facilities.

Mississippi Delta Community College, Moorhead Campus -MS Major Gas Lines 1/2 Mile Buffer Sunflower County ♦ Business ♦ Equipment ♦ Events/Sports/Housing ♦ Sports ♦ Academic Drew ♦ Housing ♦ Academic/Business ♦ Cafeteria ♦ Events ♦ Training ♦ Unlisted ♦ Administration ♦ Computer ♦ Events/Sports ♦ Maintenance - Railroad MS Gas Line 1/2 Mile Buffer MDCC Campus Outline Rivers/Streams MS Gas Lines Sources: LLL Miles Basemap (ESRI); Campus Data (MDCC); 0 0.10.2 0.4 0.6 0.8 MS Gas Lines (MDCC)

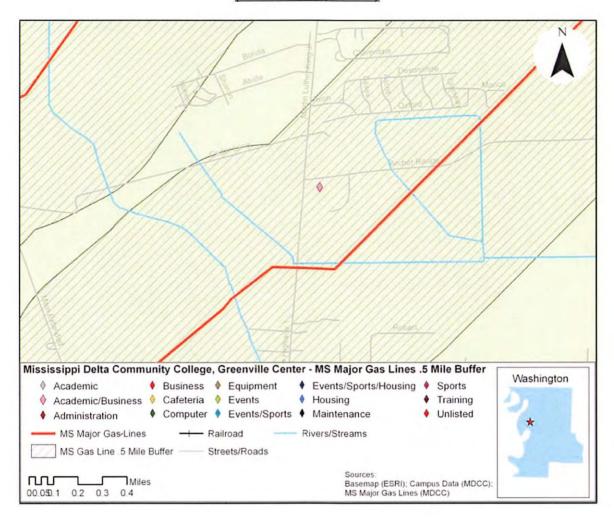
Map 3-18: Major Gas Lines – Moorhead Campus (Source: ESRI, MDCC)

In 2021 MDCC upgraded gas lines on the east and back side of the Moorhead Campus, as shown in the construcion doucment in **Appendix D**.

Map 3-19: Major Gas Lines – Capps Center (Source: ESRI, MDCC)



Map 3-20: Major Gas Lines – Greenville Campus (Source: ESRI, MDCC)



Mississippi Delta Community College, Geenwood Center - MS Major Gas Lines .5 Mile Buffer ♦ Academic ♦ Business ♦ Equipment ♦ Events/Sports/Housing ♦ Sports Academic/Business Ocafeteria Events ♦ Housing Training ♦ Computer ♦ Events/Sports ♦ Maintenance Unlisted Administration MS Gas Lines --- Railroad Rivers/Streams MS Gas Line .5 Mile Buffer Streets/Roads ПП Miles Basemap (ESRI); Campus Data (MDCC); Leflore 0.2 0.3 MS Major Gas Lines (MDCC)

Map 3-21: Major Gas Lines – Greenwood Campus (Source: ESRI. MDCC)

Hazardous materials incidents refer to uncontrolled releases of hazardous materials through a transportation-related incident or at a fixed-site facility which poses a risk to the health, safety, property, and the environment. The most well-known example of a large-scale fixed-site hazardous materials incident is that which occurred at the Union Carbide plant in Bhopal, India in 1984. This incident caused 2,500 deaths and injuries to many others. Although incidences of this scale are rare, smaller scale incidents—those requiring a response and evacuation, or other protective measures are relatively common.

Depending on the severity of the incident, the potential impact to life and property is great at MDCC. Major roads and rail lines are near MDCC facilities. A single up-wind incident with a hazardous materials release could cause immediate health concerns or force campus operations to halt until the hazard is mitigated.

Hazardous materials incidents are often dependent on external factors. An incident can be caused intentionally or accidentally and may or may not involve human action. Incidents can be caused by inundation of flood waters, from high winds that damage structures or infrastructure, or from expansive

soils that create pressure and voids on supply/distribution pipelines or wastewater treatment lines. Hazardous materials incidents can also be caused by faulty processes at fixed facilities or when filling/emptying transportation containers. Vehicle accidents and train derailments may also result in hazardous materials releases.

3.3.13.4 Previous Occurrences and Probability

For this plan, hazardous material transportation incidents involving highway, rail, or water travel that result in the release of hazardous materials, may also result in the death or injury of persons involved. There are numerous historical reports for the hazardous materials incident hazard, however, there have been no major incidents that have caused injury or death in Greenville, Indianola, Moorhead, or Greenwood, as researched through the MEMA Call Log reports from 2017 to early 2022. According to Mississippi Department of Environmental Quality (MDEQ), any spill amount in Mississippi is a reportable amount, which is why "self-reporting" is highly encouraged. There have been many small releases or spills for each of the campus counties over the last 10 years for the MDCC campus counties, but none have been significant. In the last five years, 2017 forward, there have been small amounts of diesel and bilge in Washington County, but the MDCC facility is nearly 4 miles from the MS River and about 3 ½ miles from Lake Ferguson. The locations in Indianola, Moorhead; and Greenwood have not had any significant spills or releases during this time. Most reported releases and spills were in Washington County and primarily related to the port operations. Releases and spills there range from wastewater and bilge, diesel fuel, to highly caustic or flammable chemicals. Incidents were generally determined to be accidental, but were reported for all categories of storage, use, and transportation. Considering that all the reported releases were small quantity amounts of petroleum products, used at the ports area service stations, the probability of significant hazardous materials incident occurring on or near and affecting MDCC facilities is moderate. There were no reported rail or pipeline incidents during this time. No data could be obtained from NRC, MDOT, DOT, Bureau of Transportation Statistics, EPA or MDEQ. Websites are either not updated or not available. MDEQ has no electronic means of reporting, therefore, all reporting information was retrieved through a paid public records request to MEMA Communications Dispatch

3.4 Vulnerability Assessment

3.4.1 Overview of Vulnerability Assessment

Requirement CFR §201.6(2)(ii) [the risk assessment shall include a] description of the jurisdiction's vulnerability to the hazards described and shall include an overall summary of each hazard and its impact on the community.

Vulnerability is susceptibility to physical injury, harm, damage, or economic loss and is dependent on location, construction, contents, and the value of the function of a facility. Understanding vulnerability is essential in mitigation planning for MDCC as it leads to an understanding of the types and costs of injury and damages that may result from a future hazard event.

This plan as revised, is expected to greatly assist in preparing and protecting the college from hazard events. The concepts learned will be used as a baseline for ongoing efforts in future planning.

For each hazard addressed in the plan, the Hazard Mitigation Planning Council was asked to provide qualitative damage/loss estimates, using low/medium/high designations, and based upon their knowledge of the campus community and its facilities. Committee members looked at potential risk to people/life safety (loss of life or injury), risk to buildings and critical facilities (primarily damage to the physical structure), risk to infrastructure (utilities and roads), and college mission. <u>Table 3-19</u> shows the methodology used to determine the qualitative results provided in <u>Table 3-20</u>.

Table 3-19	9: MDCC Proposed Qualitative Hazard Ranking Assessment Methodology
	Impacts to People
Low	10% or less of people impacted
Moderate	11% to 30% of people impacted
High	31% or more of people impacted
Additional Parameters	Psychological impacts: "people" includes students, staff, and faculty; disruptions that occur to people off campus; and, on campus residents vs. commuters
	Impacts to Business
Low	10% or less of buildings impacted; or, limited to L5 facilities
Moderate	11% to 30% of buildings impacted; or, limited to L4 and L5 facilities
High	31% or more of buildings impacted
Additional Parameters	Degree of structural damages; available mitigation measures; continuity of operations; and loss of function
	Impacts to Infrastructure
Low	Loss of Function for 1 to 2 days
Moderate	Loss of Function for 3 days to a week
High	Loss of Function for greater than a week
Additional Parameters	Includes transportation, communications, electricity or gas for heat, water, sanitary sewer, and access to campus. Considerations include the percentage of people impacted or areas of the campus impacted
	Impacts to College Mission
Low	Minor class disruption
Moderate	Some classes cancelled or relocated for less than a week
High	A campus closure of longer than a week
Additional Parameters	This is very tied into the other impact categories. Long term effects on economic viability or sustainability are possible

3.4.1.1 Impacts to Buildings, Infrastructure and College Mission

While specific areas of concern or increased vulnerability are discussed in the hazard profile section, the overall impact to the college was determined and is shown in <u>Table 3-20</u> that follows:

Table	3-20. Summary of C	Qualitative Risk Assess	ment
People	Buildings	Infrastructure	Mission
	Dr	ought	
Moderate	Moderate	Moderate	Moderate
	Eart	hquake	
Moderate	Moderate	Moderate	Moderate
	Expan	sive Soils	
Low	High	High	Moderate
	Extre	me Heat	
High	Moderate	High	Moderate
	F	lood	
Low	Low	Low	Low
	Hail	Storm	
Low	Low	Low/Moderate*	Low
	High	n Wind	
Low	Moderate	Low	Low
	Hur	ricane	
Low	Low	Low/Moderate*	High
	Leve	Failure	
Moderate	Moderate	Moderate	Moderate
	Lig	htning	
Moderate	Low	Moderate	Low
S	evere Winter Storm/	Extreme Cold/Ice Storn	n
Moderate	Moderate	Moderate	Moderate
	Struc	ture Fire	
Moderate	Moderate	Low	Low
		rnado	
High	High	High	High
	Wi	ldfire	
Low	Low	Low	Low

Table	3-20: Summary of C	Qualitative Risk Assessi	ment
People	Buildings	Infrastructure	Mission
	Hazardous M	aterials Incident	
Moderate	Low	Low	Low

^{*} The Crisis Response Team has indicated a moderate risk to exposed, roof-mounted equipment for the hail and hurricane hazards.

3.4.2 Identifying Structures

Requirement CFR §201.6(2)(ii)(A) The plan should describe vulnerability in terms of the types and numbers of existing buildings, infrastructure, and critical facilities located in the identified hazard areas.

The risk assessment describes and analyzes the risks and vulnerabilities from the profile's hazards. The assessment includes a vulnerability description and information as to the identified risk to assets where data is available.

MDCC owns 49 facilities that are located on 4 sites or locations in Sunflower, Washington, and Leflore counties. The Moorhead Campus, located in Sunflower County, hosts most of the facilities with 46 separate structures. There is also 1 building at the Capps Center in Indianola (Sunflower County), 1 building at the Greenville Center on Highway 1 and 1 building at 1677 S Main Street in Greenville (Washington County), and 1 building at the Greenwood Center in Greenwood (Leflore County). The asset inventory by campus/center is provided in **Appendix C.**

The Crisis Response Team looked at each building and prioritized them for mitigation actions based on a series of criteria from Level 1 to Level 5, with Level 1 being the most critical buildings on campus. <u>Table 3-21</u> lists the methodology and results for building ranking.

Table 3-21: Building Ranking Methodology					
Criticality Level	Description	Number of Buildings			
Level 1	Buildings that house populations during sleeping hours where people may not be aware of imminent, short notice dangers. Buildings that house reportable quantities of hazardous materials, research facilities, cafeterias, and public safety buildings to include police, fire, and medical services where applicable.	30			

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Level 2	Buildings that provide services or support to essential operations. These facilities include pump houses, physical plants, water/waste management systems, and buildings used to maintain records/documents, and historical archives/artifacts such as archive buildings, libraries, and museums.	1
Level 3	Administrative buildings, classroom buildings, or multi-use buildings where the primary use is for administrative or classroom purposes.	12
Level 4	Buildings that support day-to-day and recreational activities on campus such as stadiums/arenas, gymnasiums, and student union buildings.	5
Level 5	Non-essential support buildings and structures such as sheds, fencing, scoreboards, signs, etc.	1

Quantitative Risk Assessments were conducted based on the best data available at this time. These assessments are summarized in the following table.

Table 3-22: Summary of Quantitative Risk Assessment							
Hazard Type	Exposed Buildings	Level 1	Level 2	Level 3	Level 4	Level 5	Unranked
Expansive Soils	49	29	2	12	5	1	0
Flood	1	0	0	1	0	0	0
Hail/High Wind/Lightning	49	29	2	12	5	1	0
Hurricane	49	29	2	12	5	1	0
Severe Winter Storm/ Extreme Cold/ Ice Storm/	49	29	2	12	5	1	0
Structural Fire/Arson	49	29	2	12	5	1	0
Tornado	49	29	2	12	5	1	0
Hazardous Materials	48	29	2	11	5	1	0
Cyber Threat	44	39	0	0	0	5	0

The following hazards identified for the risk assessment discuss the methodology and results for the given hazard. Each of the loss calculations is based on the best available data, but they must be considered estimates only, as highly detailed engineering was not performed as part of the planning process.

Given data available at this time, it is only possible to assess the location of MDCC facilities as either "in" or "out" of hazards area. The hazard subsections include the methodology for determining the hazard impact areas for the facilities that fall within them.

For the sake of consistency in this plan, facilities will include buildings, stadiums, press boxes, scoreboards and light poles, ticket booths, and restrooms. MDCC's facility assets are equal to \$133,062,542; contents are equal to \$19,977,000; the total for facility and content assets is equal to \$153,039,542.

3.4.3 Expansive Soils

Expansive soils are located throughout the planning area and can potentially affect any of the MDCC facilities. All MDCC facilities are considered equally threatened by expansive soils. Since this hazard does not pose a major threat to contents, the risk assessment will be based solely on the buildings which are exposed to the hazard.

An expansive soil hazard event causing damage to 5% of the MDCC facility assets would equal estimated structural damages of \$6,653,127.

3.4.4 Flood

The quantitative assessment for flood is based on several data sources, including NCEI data, Digital Flood Insurance Rate Maps (DFIRMs), Flood Insurance Rate Maps (FIRMs), and the Mississippi Delta Community College campus asset inventory. The following data limitations and considerations should be noted regarding this assessment:

- · Only buildings within an identified SFHA are included,
- . This estimate assumes a 1% annual chance event, and
- Estimates for contents losses are possibly low, given the specialized nature of the contents of these buildings.

The Greenville Center is the only MDCC facility located within the SFHA 1% zone and has an estimated replacement value of \$18,472,777 for facility and contents.

3.4.5 Hailstorm/High-Wind/Thunderstorm/Lightning

The land area affected by individual thunderstorm-related events is not much smaller than that of a parent storm with an average of 15 miles in diameter around the center of a storm, or 176 square miles. Thunderstorms can occur anywhere in the planning area at any given time. All MDCC facilities are considered equally threatened by hail, high wind, thunderstorms, and lightning. Since this hazard does pose a major threat to contents, the risk assessment will be based on the facilities and contents which are exposed to the hazard.

A thunderstorm-related event (hail/high wind/thunderstorm/lightning) causing damage to 5% of the MDCC facility and content assets would equal estimated damages of \$7,651,977.

3.4.6 Hurricane

The quantitative assessment for hail is based on several data sources, including NCDC data, NOAA hurricane data, HAZUS, and the MDCC asset inventory. Limitations to the data include a lack of precise flood depths resulting from historic hurricane events in the planning area and content values of MDCC facilities.

The central Gulf of Mexico coastline is among the most tropical cyclone-prone locations in the United States. Peak gulf coast tropical cyclone activity usually occurs in September. Hurricanes can bring severe winds, storm surge flooding along coastal regions, high waves, coastal erosion, heavy rainfall, thunderstorms, lightning, inland flooding, and tornadoes. All campus facilities and assets are subject to the hazard.

A hurricane event causing damage to 20% of the MDCC's facility and content assets would equal estimated damages of \$30,607,908.

3.4.7 Severe Winter Storm/Extreme Cold/Ice Storm

The quantitative assessment for severe winter storm is based on several data sources, including the NCDC and the MDCC asset inventory.

Given the frequency of severe winter storms in central Mississippi and the amount of reported damage across the planning area in over the past twenty years, significant impacts from a severe winter storm at the MDCC are unlikely. Property and asset losses associated with this hazard are considered negligible.

A severe winter storm event causing damage to 5% of MDCC's facility assets would equal estimated damages of \$6,650,127. Impacts would likely be heaviest to people and infrastructure, to ensure dorms, dining halls, etc. were habitable in the event of significant disruptions in utility services, particularly electricity and heating. A severe winter storm event would have the potential to impact 100% of campus residents, at least until utility service was restored.

Buildings that house people, dining services, health clinics, emergency services, labs/research, and infrastructure are considered more vulnerable to the winter storm hazard.

3.4.8 Structural Fire/Arson

The quantitative assessment for structural fire is based on data provided by the MDCC Crisis Response Team and the MDCC assets inventory.

The greatest risk that structural fire poses to MDCC is at those residential facilities which do not have automatic sprinkler systems. However, all structures are a risk of fire. It is unlikely that more than one building would have a fire at any given time, so potential loss was calculated for an averaged single building total replacement value of \$2,620,000. It is important to note that a recent fire in the Science Building resulted in \$2,000,000 in damages. The Stauffer-Wood Admin Building arson fire in 2017 had an insurance report total of \$2,228,302.

3.4.9 Tornado

The quantitative assessment for a tornado is based on several data sources, including NCEI data and the MDCC asset inventory.

While it is highly unlikely that a single tornado event would cause campus-wide damage at the Moorhead Campus, the entire campus is subject to the tornado hazard. It is possible for a single tornado event to destroy any of the single structure regional centers including the Greenville Higher Education Center and the Capps Center. Total losses at those facilities are listed in <u>Table 3-23</u>:

Table 3-23: MDCC Regional (Source:		
Building Name	Estimated Replacement Cost (Facilities and Contents)	
Greenville Higher Education Center and Yarber Building	\$18,774,777	
Capps Center	\$6,388,325	

The Greenwood Center is a leased property. A tornado strike at this facility would impact lives, contents, and college mission, but structural damage would not be a liability of MDCC. There are no structural values for this facility, however; building content values available for this facility can be determined at \$385,000.

A tornado event causing damage to 10% of the MDCC's assets would equal estimated structural damages of \$13,306,254.

3.4.10 Hazardous Materials Incidents

While the likelihood of a hazardous materials incident occurring on the MDCC campus may be low, the risk extends from transportation corridors, rails, and fixed-site facilities that are near the MDCC facilities. The risk to buildings and infrastructure is relatively low; damages would likely come from exposure to chemical plumes that would contaminate the buildings. The risk is highest to campus populations from contact through inhalation, or direct contact with a substance.

Recent events are described in the hazard identification subsection. Events have included significant hazardous substance releases from transport trucks, rail cars, fixed-site storage tanks, and industrial facilities.

The quantitative assessment for hazardous materials is based on data provided by MDCC and the MDCC assets inventory.

It is unlikely that a single hazardous materials event would devastate the entirety of MDCC facilities. A 20% impact to MDDC would cause approximately \$26,612,508.

3.4.11 Pandemic

Beginning in 2020 and extending through 2022, the world has experienced a pandemic virus called *COVID-19. MDCC bases* their plans and policies for dealing with a pandemic on appropriate health practices as recommended by the Mississippi Department of Health and the Mississippi Community College Board.

A pandemic has the following characteristics:

- It is a global disease outbreak
- · Occurs when a new (flu or flu like) virus emerges
- People have little or no immunity

- · There is no vaccine
- · It spreads easily from person to person
- It can spread across the country and around the world quickly
- No matter where it starts everyone around the world is at threat How does it spread?
- It spreads by inhalation of airborne droplets released by the coughing and sneezing of an infected person.
- · By touching contaminated objects or people, then touching your face
- Please note that infected people will spread the virus for several days before they show symptoms.

Pandemic Phases:

Period 1: Interpandemic Period

Phase 1: No new influenza virus subtypes have been detected in humans. An influenza virus subtype that has caused infection may be present in animals.

If present in animals, the risk of human infection or disease is low.

Phase 2: No new influenza virus subtypes have been detected in humans.

However, a circulating animal influenza virus subtype poses a substantial risk of human disease.

Period 2: Pandemic Alert Period

Phase 3: Human Infection(s) with a new subtype, but no human-to-human spread, or at most rare instances of spread to a close contact.

Phase 4: Small cluster(s) with limited human-to-human transmission but spread is highly localized, suggesting that the virus is not well adapted to humans.

Phase 5: Larger cluster(s) but human-to-human spread will still be localized, suggesting that the virus is becoming increasingly better adapted to humans, but may not yet be fully transmissible (substantial pandemic risk).

Period 3: Pandemic Period

Phase 6: Pandemic: increased and sustained transmission in the general population. (Source; World Health Organization)

College students live and learn in a closer proximity to each other than most of the public. A high percentage of immune persons on campus and careful, health wise behaviors will limit the spread of a virus on campus.

Since conditions and level of threat varies widely, MDCC issues notices and statements as they are needed at the time for faculty, staff, and students.

3.4.12 Cyber Threat

From 2019 to 2020, ransomware attacks against universities jumped by 100%. Attackers also started demanding larger sums of money from colleges; the average cost of a ransomware attack in 2020 was \$447,000. Total cost to institutions was nearly \$2.73 million. In July 2019 an attack on Monroe College was one of the first large attacks with a ransom amount around 2 million dollars. The attackers demanded payment in Bitcoin so it couldn't be traced. Since then, ransomware attacks against schools have continued to rise. That same year attacks affected about 80 universities, colleges, and school districts. Attacks increased another 18% in 2020.

Threat preparation includes securely storing data, creating access control list with firewalls, good policies on secure maintenance and responsible/acceptable use, and monitoring the college's network

carefully. The IT Department at MDCC oversees the computer and network services and has policies and protocols in place to help prevent attacks and misuse of the system.

3.5 Estimating Potential Losses

Requirement CFR §201.6(2)(ii)(B) [the plan should describe vulnerability in terms of an] estimate of the potential dollar losses to vulnerable structures identified and a description of the methodology used to prepare the estimate.

Based on risk assessments for the given hazards, MDCC can assume that the following losses could be assumed from exposure to hazard events. Due to data limitations, loss values are figured as a total loss value of buildings for the hazard. There is insufficient data available about campus populations to determine exposure or risk to people. The planning process may be improved for the next update through time and movement studies of campus populations. Summary loss data is shown in <u>Table 3-24</u>.

Hazard Type	Exposed Buildings	Estimated Loss	
Expansive Soils	47	\$6,653,127	
Flood	1	\$18,472,777	
Hail/High-Winds/ Thunderstorm/Lightning	47	\$7,651,977	
Hurricane	47	\$30,607,908	
Severe Winter Storm/ Extreme Cold/Ice Storm	47	\$6,653,127	
Structural Fire/Arson	47	\$2,620,000	
Tornado	47	\$13,306,254	
Hazardous Materials	46*	\$26,227,508	

^{*}The Greenwood Center is not within the defined buffer zones for on-site hazardous materials or exposure to gas main lines. This structure is a leased property so its inclusion or exclusion into the risk assessment does not affect the total dollar loss figures.

3.6 Analyzing Development Trends

Requirement CFR §201.6(2)(ii)(C) [the plan should describe vulnerability in terms of] providing general description of land uses and development trends within the community so that mitigation options can be considered in future land use decisions.

MDCC has experienced a fluctuation in enrollment over the past five years due to general population and high school enrollment changes in its seven-county service area. From 2017 through 2019 enrollment increased. When the Covid pandemic occurred, enrollment dropped dramatically in 2020 and then a little more in 2021. Enrollment will more than likely increase again for MDCC, as there will continue to be growth in the demand for career related programs and workforce training due to local industry. Current enrollment will require MDCC to continue to upgrade its existing facilities and replace outdated and aging buildings. MDCC will rely on the hazard mitigation plan as a basis for analyzing possible impacts from the identified hazards on site selection and construction design and development.

Requirement CFR §201.6(d)(3) A local jurisdiction must review and revise its plan to reflect changes in development, progress in local mitigation efforts, and changes in priorities, and resubmit it for approval within 5 years in order to continue to be eligible for mitigation project grant funding.

The Hazard Mitigation Planning Council reviewed the original plan and determined that there have been no changes in development that would impact MDCC's overall vulnerability; therefore, there have not been any changes in the priorities of the mitigation actions. There has been some progress made in local mitigation efforts. See <u>Table 4-1</u> to review the updated and pending mitigation actions.

4 Mitigation Strategy

4.1 Mississippi Delta Community College's Mitigation Strategy

The primary goal of the HMPC is to protect human life and property. The adoption and implementation of the Mississippi Delta Community College Hazard Mitigation Plan will support the efforts of this council in providing an enhanced quality of life by addressing the safety of the students, faculty, and staff in advance of potential natural disasters.

4.2 Mitigation Goals and Objectives

Requirement §201.6(c)(3)(i): [The hazard mitigation strategy shall include a] description of mitigation goals to reduce or avoid long-term vulnerabilities to the identified hazard.

Throughout the planning process the HMPC reflected on appropriate and effective mitigation planning goals and objectives for the main campus and other facilities. The Council elected to base their goals and objectives on those adopted by the surrounding local jurisdictions of Sunflower County, Washington County, Leflore County, and the State of Mississippi in an effort to effectively support a statewide initiative for mitigation planning. The Council reached consensus and formally approved the following goals and objectives for the Mississippi Delta Community College Hazard Mitigation Plan:

Goal 1:	Objectives:				
Eliminate/reduce vulnerabilities to campus property and infrastructure from natural and man-made hazards	1.1 Minimize interruption to campus lifelines.1.2 Implement measures to protect equipment investments				
Goal 2:	Objectives:				
Protect the health, safety and welfare of students,	 Improve accessibility to building and grounds (i.e., fire protection, ADA, etc.) 				
faculty, and staff at all MDCC campus/center	2.2 Provide safe areas that will provide maximum protection during disaster events				
locations	 Develop coordinated action plan for various types of emergencies 				
	2.4 Explore the adequacy of campus safety personnel and local first responders and enhance wherever possible				

Goal 3:	Objectives:	
Implement the Hazard Mitigation Plan through a coordinated effort by seeking funding and interaction with other agencies/governments.	3.1 Make emergency preparedness and mitigation a feasible goal for MDCC	
	3.2 Identify funding opportunities and apply for grants on projects identified in the Plan	
	3.3 Coordinate hazard mitigation efforts with local and state officials	
	3.4 Educate MDCC on mitigation funding opportunities	
Goal 4:	Objectives:	
Provide education and outreach to students,	4.1 Maintain and/or enhance communication between MDCC and local jurisdictions	
faculty, staff and local jurisdictions and enhance emergency preparedness.	4.2 Increase awareness and communications between faculty/staff and students regarding safety during natural disasters	
	4.3 Enhance emergency preparedness activities	
	4.4 Establish training schedule and exercise program	

4.3 Identification and Analysis of Mitigation Actions

Requirement §201.6(c)(3)(ii): [The mitigation strategy shall include a] section that identifies and analyzes a comprehensive range of specific mitigation actions and projects being considered to reduce the efforts of each hazard, with particular emphasis on new and existing buildings and infrastructure.

With the goals and objectives in place, the HMPC identified specific actions that will help accomplish the MDCC's overall mitigation strategies and can be addressed as a college-wide initiative. Not every campus identified a specific action under each goal, but they will continue to identify necessary actions to reduce vulnerabilities and include them in the plan as they are developed. Some of the goals and objectives are more long-term and specific actions will be developed as they are identified throughout the plan life as well along with each plan update.

Each mitigation action has been assigned to a responsible department and is defined below:

Prevention: Government administrative or regulatory actions or processes that influence the way land and buildings are developed and built. These actions also include public activities to reduce hazard losses. Examples include planning and zoning, building codes, capital improvement programs, open space preservation, and storm water management regulations.

Property Protection: Actions that involve the modification of existing buildings or infrastructure to protect them from a hazard or remove from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, flood proofing, storm shutters, and shatter-resistant glass.

Public Education and Awareness: Actions that inform and educate citizens, elected officials, and property owners about potential risks from hazards and potential ways to mitigate said risks. Such actions include outreach projects, real estate disclosure, hazard information centers, and school-age and adult education programs.

Natural Resource Protection: Actions that not only minimize hazard losses but also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.

Emergency Services: Actions that protect people before, during, and after a hazard event. Certain critical facilities such as administrative and emergency operations offices that provide critical and vital services; coordinate warnings, responses, and recovery from a disaster are identified. Actions include protection of warning system capability, protection or hardening of critical facilities, and protection of infrastructure needed for emergency response.

Structural Projects: Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include storm water controls (i.e., culverts), floodwalls, seawalls, retaining walls, and safe rooms.

Technical Assistant Projects: Actions that involve support/education from MEMA/FEMA and other agencies as required.

4.4 Implementation of Mitigation Actions

Requirement §201.6(c)(3)(iii): [The mitigation strategy section shall include] an action plan describing how the actions identified in section (c)(3)(ii) will be prioritized, implemented, and administered by the local jurisdiction. Prioritization shall include a special emphasis on the extent to which benefits are maximized according to a cost benefit review of the proposed projects and their associated costs.

Priorities

The MDCC HMPC elected to use a basic methodology to prioritize their projects based on the criteria used in the Sunflower County Hazard Mitigation Plan. A priority number was based upon the following five factors: risk to people, risk to infrastructure (loss of function), cost effectiveness, increase public awareness, and availability of funds. Actions were assigned a number between 1 and 5, with 1 being the lowest and 5 the highest. The factors were combined for an overall priority for the action with the highest possible score of 25 as defined below:

Low – total score of 1-11 Moderate – total score of 12-18 High – total score of 19-25

<u>Table 4-2</u> presents the results of the original priority ranking to include updated actions approved by the MDCC HMPC.

Implementation

As funding is identified, the mitigation actions will be developed into projects. For those projects that are eligible for mitigation funding, the STAPLE/E method will be used to determine the effectiveness of the mitigation actions. This technique is used to identify, evaluate, and prioritize mitigation actions based on existing conditions and is also used by the State to assist in the development of statewide mitigation actions. MDCC will refer to the FEMA Hazard Mitigation Assistance Unified Guidance (February 2015) as further development of applications for the identified mitigation actions in this plan that are eligible under the program.

STAPLE/E is defined as follows:

Social: Is the project supported by the college?

<u>Technical:</u> Is the project technically feasible and will it reduce losses in the long term with minimal secondary impacts? Is there an alternative action?

<u>Administrative:</u> Does the college have the appropriate administrative capabilities, staffing, and funding requirements for effective mitigation action? Will additional resources be needed?

Political: Will the college and local/state political leadership support this action?

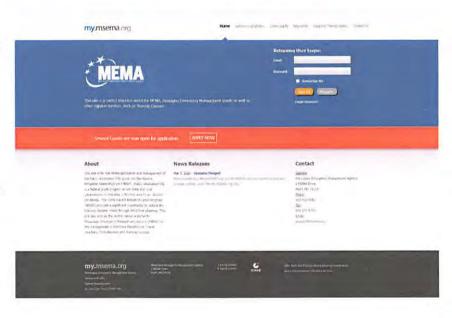
Legal: Does the college have legal authority to implement the action?

Economic: Is the mitigation action cost effective? Can it be funded in current or upcoming budgets?

Environmental: Will the mitigation action have a negative effect on the environment?

Administration

The Institutional Research and Effectiveness Department will be responsible for the administration of mitigation actions as they are implemented. Administration will include completing grant applications including www.mitigationms.org or other grant sources and complete quarterly progress reports.



4.4.1 Mitigation Actions

Requirement §201.6(c)(3)(iv): For multi-jurisdictional plans, there must be identifiable action items specific to the jurisdiction requesting FEMA approval or credit of the plan.

Throughout the planning process, the HMPC identified the following mitigation actions to reduce their vulnerabilities to disasters for each of their facilities. The HMPC will continue to develop and enhance the projects listed in <u>Table 4-1</u> as they implement the plan maintenance process as described in Section 5. The timeframe for implementing all actions will be 2022–2027. The completion of each action will be subject to funding availability. There are funding sources available that can be used toward the actions listed in the Mitigation Actions table – mitigation grant funds, state budget/grant funds, and county millage support. The federal grant sources are listed further in the plan, pages 112-114.

The actions listed in <u>Table 4-1</u>, that have been completed, are marked with a single asterisk. Actions that are in progress (pending funding approval) are marked with double asterisks; ongoing actions, are actions that will continue to be performed for the life of the plan. Mitigation Actions listed in Table 4-1 include actions that are included in the MDCC Master Crisis Response Plan, MDCC Distribution Integrity Management Plan, and the MDCC Natural Gas Master Meter System Operation & Maintenance Manual Emergency Response Plan and Public Awareness.

All natural hazards identified in this plan can affect all buildings/infrastructure, but not necessarily for every event.

There was progress made on certain mitigation actions listed in <u>Table 4-1</u>. The actions that include progress are marked with a double asterisk.

Table 4-1: Mitigation Actions			
Mitigation Action 1			
Explore options for maintaining/updating the natural gas service lines connected to master meter on the Moorhead campus for new and existing properties and infrastructure. **Installed and upgraded gas lines on East and back side of campus; 2021-2022			
Hazard Addressed	All Hazards		
Entity:	MDCC		
New, Reoccurring, or Completed	Re-occurring		
Priority (Low, Medium, High)	Moderate		
Estimated Cost:	\$10,000 annually		
Potential Funding Sources:	General Funds from College		
Responsible Department	Director of Maintenance		
Implementation Schedule:	Ongoing as needed		
	Mitigation Action 2		

1200 1200 1200 1200	energy conservation and sustainability; 2022 All Hazards
Hazard Addressed	
Entity:	MDCC
New, Reoccurring, or Completed	Re-occurring
Priority (Low, Medium, High)	Moderate
Estimated Cost:	\$5,000 match
Potential Funding Sources:	General Funds from College/Entergy Grant
Responsible Department	Director of Maintenance
Implementation Schedule:	Ongoing as needed
	Mitigation Action 3
	r new and existing properties and infrastructure. e some sewer, water, and drainage projects.
Hazard Addressed	All Hazards
Entity:	MDCC
New, Reoccurring, or Completed	Re-occurring
Priority (Low, Medium, High)	Low
Estimated Cost:	\$15,000 match
Potential Funding Sources:	General Funds from College/HMG
Responsible Department	Director of Maintenance
Implementation Schedule:	Ongoing as needed
	Mitigation Action 4
LETA dorm drainage improvement	
Hazard Addressed:	All Hazards
Entity:	MDCC
New, Reoccurring, or Completed	Re-occurring
Priority (Low, Medium, High)	Moderate
Estimated Cost:	\$10,000 annually
Potential Funding Sources:	General Funds from College
Responsible Department	Director of Maintenance
Implementation Schedule:	Ongoing as needed
	Mitigation Action 5
*MDCC has moved forward from a def	ferred maintenance model to a preventive maintenance model; 2022
Hazard Addressed	All Hazards
Entity:	MDCC
New, Reoccurring, or Completed	Re-occurring
Priority (Low, Medium, High)	Moderate

Estimated Cost:	\$100,000 annually
Potential Funding Sources:	General Funds from College
Responsible Department	Director of Maintenance
Implementation Schedule:	Ongoing as needed
	Mitigation Action 6
Storm Water Retention Study for new a due to funding it couldn't be carried out.	nd existing properties and infrastructure. A quote was obtained for this action, bu
Hazard Addressed	All Hazards
Entity:	MDCC
New, Reoccurring, or Completed	Reoccurring
Priority (Low, Medium, High)	Low
Estimated Cost:	\$40,000 plus annually
Potential Funding Sources:	General Funds from College
Responsible Department	Director of Maintenance
Implementation Schedule:	Ongoing as needed
	Mitigation Action 7
Purchase weatherproofing materials for	
Hazard Addressed	All Hazards
Entity:	MDCC
New, Reoccurring, or Completed	Reoccurring
Priority (Low, Medium, High)	Low
Estimated Cost:	\$10,000 annually
Potential Funding Sources:	General Funds from College
Responsible Department	Director of Maintenance
Implementation Schedule:	Ongoing as needed
	Mitigation Action 8
'Upgrade to larger culvert (at levee)	
Hazard Addressed	All Hazards
Entity:	MDCC
New, Reoccurring, or Completed	Completed
Priority (Low, Medium, High)	Low
Estimated Cost:	\$1,800
Potential Funding Sources:	General Funds from College
Responsible Department	Director of Maintenance
Implementation Schedule:	Completed
	Mitigation Action 9

Hazard Addressed:	All Hazards
Entity:	MDCC
New, Reoccurring, or Completed	Completed
Priority (Low, Medium, High)	High
Estimated Cost:	\$25,000
Potential Funding Sources:	General Funds from College
Responsible Department	Director of Public Safety
Implementation Schedule:	Ongoing as needed
	Mitigation Action 10
Develop a Campus Emergency Responsarious events	onse Team (CERT) of trained personnel capable of assisting in response to
Hazard Addressed	All Hazards
Entity:	MDCC
New, Reoccurring, or Completed	Reoccurring
Priority (Low, Medium, High)	High
Estimated Cost:	\$1,500
Potential Funding Sources:	General Funds from College
Responsible Department	Director of Public Safety & Public Relations
Implementation Schedule:	Ongoing as needed
	Mitigation Action 11
Meet and assist local jurisdictions to re resources in place to respond to various	eview equipment and personnel protocols to insure they have necessary us events
Hazard Addressed:	All Hazards
Entity:	MDCC
New, Reoccurring, or Completed	Reoccurring
Priority (Low, Medium, High)	High
Estimated Cost:	\$1,000
Potential Funding Sources:	General Funds from College
Responsible Department	Director of Public Safety & Public Relations
Implementation Schedule:	Ongoing as needed
	Mitigation Action 12
Seek funding for Outdoor Warning Siren	System. This will be pending until funds are made available.
Hazard Addressed	All Hazards
Entity:	MDCC
	B. III III III III III III III III III I
New, Reoccurring, or Completed	Reoccurring
New, Reoccurring, or Completed Priority (Low, Medium, High)	High

Potential Funding Sources:	General Funds from College
Responsible Department	College Advancement
Implementation Schedule:	Ongoing as needed
	Mitigation Action 13
Seek funding for Safe Rooms to be built	. This action will be pending until funds are made available.
Hazard Addressed	All Hazards
Entity:	MDCC
New, Reoccurring, or Completed	Reoccurring
Priority (Low, Medium, High)	High
Estimated Cost:	\$50,000 match
Potential Funding Sources:	General Funds from College
Responsible Department	College Advancement
Implementation Schedule:	Ongoing as needed
	Mitigation Action 14
* Installed ADA compliant devices suc	h as elevators, ramps, sidewalks, doors, and evacuation chairs/slides
Hazard Addressed	All Hazards
Entity:	MDCC
New, Reoccurring, or Completed	Completed
Priority (Low, Medium, High)	Low
Estimated Cost:	\$4,000 maintenance
Potential Funding Sources:	General Funds from College
Responsible Department	Director of Maintenance
Implementation Schedule:	Completed
	Mitigation Action 15
* Developed an evacuation plan that in	ncludes ADA procedures
Hazard Addressed	All Hazards
Entity:	MDCC
New, Reoccurring, or Completed	Completed
Priority (Low, Medium, High)	High
Estimated Cost:	N/A
Potential Funding Sources:	General Funds from College
Responsible Department	Director of Public Safety & Public Relations
Implementation Schedule:	Completed
	Mitigation Action 16
Installed appropriate fire protection sys	stems
Hazard Addressed	All Hazards

Entity:	MDCC
New, Reoccurring, or Completed	Completed
Priority (Low, Medium, High)	High
Estimated Cost:	\$2,000 maintenance
Potential Funding Sources:	General Funds from College
Responsible Department	Director of Maintenance
Implementation Schedule:	Ongoing as needed
	Mitigation Action 17
*Identified shelter-in-place areas and p	posted signs at all locations
Hazard Addressed	All Hazards
Entity:	MDCC
New, Reoccurring, or Completed	Completed
Priority (Low, Medium, High)	High
Estimated Cost:	\$200
Potential Funding Sources:	General Funds from College
Responsible Department	Director of Public Safety & Public Relations
Implementation Schedule:	Ongoing as needed
	Mitigation Action 18
Attend training courses and all-hazard	conferences offered by MEMA/FEMA
Hazard Addressed	All Hazards
Entity:	MDCC
New, Reoccurring, or Completed	Completed
Priority (Low, Medium, High)	Moderate
Estimated Cost:	\$1,800
Potential Funding Sources:	General Funds from College
Responsible Department	Director of Public Safety & Public Relations
Implementation Schedule:	Ongoing as needed
	Mitigation Action 19
Schedule annual meetings with emerg (Planning area) and city officials to dis	ency management directors in Sunflower, Washington, and Leflore Counties
Hazard Addressed	All Hazards
Entity:	MDCC
New, Reoccurring, or Completed	Reoccurring
Priority (Low, Medium, High)	Moderate
Estimated Cost:	N/A
Potential Funding Sources:	General Funds from College
Responsible Department	Director of Public Safety & Public Relations

Implementation Schedule:	Ongoing as needed
	Mitigation Action 20
* Conduct HMPC and Resource Grou	p Meetings
Hazard Addressed	All Hazards
Entity:	MDCC
New, Reoccurring, or Completed	Completed
Priority (Low, Medium, High)	Moderate
Estimated Cost:	N/A
Potential Funding Sources:	General Funds from College
Responsible Department	Director of Public Safety & Public Relations
Implementation Schedule:	Ongoing as needed
	Mitigation Action 21
* Participate in the District 3 Regional	Hazard Mitigation Plan planning process
Hazard Addressed	All Hazards
Entity:	MDCC
New, Reoccurring, or Completed	Completed
Priority (Low, Medium, High)	Moderate
Estimated Cost:	N/A
Potential Funding Sources:	General Funds from College
Responsible Department	Director of Public Safety, Public Relations, college personnel
Implementation Schedule:	Ongoing as needed
	Mitigation Action 22
	d response training programs for faculty and staff policies, procedures, and practices (August)
Hazard Addressed	All Hazards
Entity:	MDCC
New, Reoccurring, or Completed	Ongoing
Priority (Low, Medium, High)	High
Estimated Cost:	\$1,500
Potential Funding Sources:	General Funds from College
Responsible Department	VIP Student Services & Director of Public Safety
Implementation Schedule:	Ongoing as needed
	Mitigation Action 23
그렇게 살아 하는 아니는 얼마나 이 나를 느낌하는 얼룩하는 말이 그렇게 살아가 되었다.	ents, faculty, staff, and CERT to reinforce goal , fire drills and building safety meetings with each building/campus
Hazard Addressed	All Hazards
Entity:	MDCC

New, Reoccurring, or Completed	Reoccurring	
Priority (Low, Medium, High)	High	
Estimated Cost:	N/A	
Potential Funding Sources:	General Funds from College	
Responsible Department	Director of Public Safety & Public Relations Student Services	
Implementation Schedule:	Ongoing as needed	
	Mitigation Action 24	
* Provided an emergency response con **Established a professional developme	nponent to the required orientation program for new and returning students. ent program for all full-time employees.	
Hazard Addressed	All Hazards	
Entity:	MDCC	
New, Reoccurring, or Completed	Completed	
Priority (Low, Medium, High)	High	
Estimated Cost:	N/A	
Potential Funding Sources:	General Funds from College	
Responsible Department	Director of Public Safety & Public Relations Student Services	
Implementation Schedule:	Completed	
	Mitigation Action 25	
* Distributed illustrated handouts, rega	arding safety and emergency actions, have been posted to all campus buildings.	
Hazard Addressed	All Hazards	
Entity:	MDCC	
New, Reoccurring, or Completed	Completed	
Priority (Low, Medium, High)	High	
Estimated Cost:	\$1,000	
Potential Funding Sources:	General Funds from College	
Responsible Department	Public Relations, Student Services & Director of Public Safety	
Implementation Schedule:	Ongoing as needed	

4.5 Grant Sources

Federal Hazard Mitigation Assistance Grants

The Federal Emergency Management Agency (FEMA) provides funding for five Hazard Mitigation Assistance grant programs. These programs, described in detail in FEMA's Hazard Mitigation Assistance Unified Guidance, June 1, 2010, are summarized here for future reference as mitigation activities are implemented. The grant programs are administered within the State of Mississippi by the Mississippi Emergency Management Agency, Office of Mitigation. Listed below is a brief description of each program:

Hazard Mitigation Grant Program (HMGP) is authorized by Section 404 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act. The key purpose of HMGP is to ensure that the opportunity to take critical mitigation measures to reduce the risk of loss of life and property from future disasters is not lost during the reconstruction process following a disaster. (HMGP funds are available when authorized under a Presidential disaster declaration in the areas of the State requested by the Governor.)

Pre-Disaster Mitigation Program (PDM) is authorized by Section 203 of the Stafford Act to assist States, Indian Tribal governments, and local communities to implement a sustained pre- disaster natural hazard mitigation program to reduce risk to the population and structures from future hazard events and to reduce reliance on Federal funding from future disasters. (Funds provided annually subject to the availability of appropriation funding)

Flood Mitigation Assistance (FMA) is authorized by Section 1366 of the National Flood Insurance Act of 1968 (NFIA) with the goal of reducing or eliminating claims under the National Flood insurance Program (NFIP). (Funds provided annually subject to the availability of appropriation funding.)

Repetitive Flood Claims Program (RFC) is authorized by Section 1323 of the NFIA with the goal of reducing flood damages to individual properties for which one or more claim payments for losses have been made under flood insurance coverage and that will result in the greatest savings to the National Flood Insurance Fund (NFIF) in the shortest period. (Funds provided annually subject to the availability of appropriation funding.)

Severe Repetitive Loss Pilot Program (SRL) is authorized by Section 1361 of the NFIA with the goal of reducing flood damages to residential properties that have experienced severe repetitive losses under flood insurance coverage and that will result in the greatest savings to the NFIF in the shortest period of time. (Funds provided annually subject to the availability of appropriation funding.)

Eligibility

<u>Table 4-2</u> lists activities that are eligible in each Program listed above.

Table 4-2: Eligible Activities by Program					
Eligible Activities	НМСР	PDM	FMA	RFC	SRL
1. Mitigation Projects	X	Х	Х	Х	Х
Property Acquisition and Structure Demolition	Х	Х	Х	Х	Х
Property Acquisition and Structure Relocation	X	Х	Х	Х	X
Structure Evaluation	X	Х	Х	Х	X
Mitigation Reconstruction					Х

Table 4-2: Eligible Activities by Pro	gram				
Eligible Activities	HMGP	PDM	FMA	RFC	SRL
Dry Floodproofing of Historic Residential Structures	X	X	Х	Х	Х
Dry Floodproofing of Non-Residential Structures	X	Х	Х	Х	
Minor Localized Flood Reduction Projects	X	X	Х	Х	Х
Structural Retrofitting of Existing Buildings	X	X			
Non-Structural Retrofitting of Existing Buildings and Facilities	X	X			1
Safe Room Construction	X				
Infrastructure Retrofit	X	Х			
Soil Stabilization	X	Х			
Wildfire Mitigation	X	X			
Post-Disaster Code Enforcement	X				
5% Initiative Projects	X				
2. Hazard Mitigation Planning	X	X	Х		
3. Management Costs	Х	Х	Х	Х	Х

Source: FEMA Hazard Mitigation Assistance Unified Guidance, June 1, 2010

Examples of Eligible Mitigation Projects:

Property Acquisition and Structure Demolition – Voluntary acquisition of an existing at-risk structure and conversion of the land to open space through demolition of the structure.

Property Acquisition and Structure Relocation – Voluntary physical relocation of an existing structure to an area outside of a hazard-prone area.

Structure Elevation – Physically raising an existing structure to the Base Flood Elevation (BFE) or higher if required by FEMA or local ordinance.

Mitigation Reconstruction – Construction of an improved, elevated building on the same site where an existing building and/or foundation has been partially or completely destroyed.

Dry Floodproofing – Techniques applied to keep structures dry by sealing the structure to keep floodwaters out.

Dry Floodproofing of Historic Residential Structures – permissible only when other techniques that would mitigate to the BFE would cause the structure to lose its status as a Historic Structure.

Dry Floodproofing of Non-residential Structures – must be performed in accordance with NFIP Technical Bulletin (TB) 3-93, *Non-Residential Floodproofing—Requirements and Certification*, and the

requirements pertaining to dry floodproofing of non-residential structures found in 44 CFR Sections 60.3(b)(5) and (c)(4).

Minor Localized Flood Reduction Projects – Projects to lessen the frequency or severity of flooding and decrease predicted flood damages, such as the installation or modification of culverts and storm water management activities such as creating retention and detention basins.

Structural Retrofitting of Existing Buildings – Modifications to the structural elements of a building to reduce or eliminate the risk of future damage and to protect inhabitants.

Non-structural Retrofitting of Existing Buildings and Facilities – Modifications to the non-structural elements of a building or facility to reduce or eliminate the risk of future damage and to protect inhabitants.

Safe Room Construction – Safe room construction projects are designed to provide immediate lifesafety protection for people in public and private structures from tornado and severe wind events, including hurricanes.

Infrastructure Retrofit - Measures to reduce risk to existing utility systems, roads, and bridges.

Soil Stabilization – Projects to reduce risk to structures or infrastructure from erosion and landslides, including installing geo-textiles, stabilizing sod, installing vegetative buffer strips, preserving mature vegetation, decreasing slope angles, and stabilizing with rip rap and other means of slope anchoring.

Wildfire Mitigation – Projects to mitigate the risk to at-risk structures and associated loss of life from the threat of future wildfire.

Post-Disaster Code Enforcement – Projects designed to support the post-disaster rebuilding effort by ensuring that sufficient expertise is on hand to ensure appropriate codes and standards, including NFIP local ordinance requirements, are utilized and enforced.

5% Initiative Projects – Provide an opportunity to fund mitigation actions that are consistent with the goals and objectives of the State or Tribal (Standard or Enhanced) and local mitigation plans and meet all HMGP program requirements, but for which it may be difficult to conduct a standard benefit/cost analysis to prove cost effectiveness.

Hazard Mitigation Planning

Mitigation plans are the foundation for effective hazard mitigation. A mitigation plan is a demonstration of the commitment to reduce risks from natural hazards and serves as a strategic guide for decision makers as they commit resources. The mitigation planning process includes hazard identification and risk assessment leading to the development of a comprehensive mitigation strategy for reducing risks to life and property. The mitigation strategy section of the plan identifies a range of specific mitigation actions and projects being considered to reduce risks to new and existing buildings and infrastructure.

Management Costs

Management costs are any indirect costs and administrative expenses that are reasonably incurred by a Grantee or Sub grantee in administering a grant or sub grant award.

For more information concerning applications for FEMA Hazard Mitigation Assistance Grants, contact:

Mississippi Emergency Management Agency Office of Mitigation 601-933-6362

Listed below are agencies/other grant sources that provide programs to support communities with the development and implementation of various projects. MDCC will utilize these agencies and other sources, when possible, to further their mitigation goals.

Mississippi Development Authority	CDBG Program PO Box 849 Jackson, MS 39205 601-359-3179
Mississippi Department of Environmental Quality	515 E. Amite Street Jackson, MS 39201 601- 961-5171
Mississippi Office of Homeland Security	Post Office Box 958 Jackson, MS 39205 601-346-1500
Mississippi State Department of Health	570 East Woodrow Wilson Drive Jackson, MS39216 601-576-7400
USDA Rural Development	100 W. Capitol St., Suite 831 Jackson, MS 39269 601- 965-4316

The purpose of the MDCC Hazard Mitigation Plan is to avoid, minimize, and mitigate the impacts of natural and human disasters on life and property.

The MDCC HMPC recognizes the importance of using this Plan as a living document to ensure that mitigation planning is taken very seriously.

5 Plan Maintenance

Requirement §:201.6(c)(4)(i) The plan maintenance process shall include a section describing the method and schedule of monitoring, evaluating, and updating the mitigation plan within a five-year cycle.

5.1 Monitoring, Evaluating, and Updating the Plan Monitoring

The MDCC HMPC will be responsible for ensuring that the Plan is monitored for effectiveness and when necessary, provide updates to the plan. At minimum, the plan will be reviewed on an annual basis. Monitoring will include, but is not limited to, the following processes:

- · Annual review of mitigation actions identified in the Plan
- Address any issues that may not have been identified during the plan development
- Assess natural and man-made events that impact the College to determine if changes in the plan are required
- Evaluate the effectiveness of the planning team

To assist in monitoring, evaluating, and updating the plan, the Plan Maintenance Worksheet is included in **Appendix F.**

If any changes in the plan or planning team are identified, the Committee will notify appropriate state and federal officials.

Evaluation

On an annual basis, the MDCC HMPC will develop a yearly report detailing the status of mitigation activities undertaken over the past year as well as document any mitigation activities that have been completed. The report should address the followings points:

- Evaluate the goals and objectives to ensure they address current and expected conditions
- Determine if the nature or magnitude of risks identified in the plan has changed
- Evaluate whether the current resources are adequate for implementing the Plan
- Document any implementation problems such as technical, political, legal or coordination issues with other agencies
- Discuss whether the outcomes that have occurred are as expected
- Document agency and other partner participation
- Document public participation opportunities.

Updating

The MDCC Hazard Mitigation Plan will be updated every five years, in accordance with federal regulations. In the event of a significant disaster or any other substantial changes in land use planning or regulations that could impact the mitigation actions identified within this plan, more frequent updates should be made.

Updates made within the plan life will basically follow the same procedures as developing the original plan and will incorporate opportunities for the public to have input and provide comments - specifically.

individuals who indicated willingness to participate in ongoing plan maintenance and updates. During the public on-line survey, two questions lead participants to volunteer to assist with future maintenance of the plan, by inputting their name and contact information.

Documentation of Future Impacts

MDCC utilizes the campus police to identify and track all incident damages at their facilities. A standardized form is used for consistency and accuracy. This process enables MDCC HMPC in developing statistical data to further support new mitigation projects and provide evidence of the project needs.

5.2 Incorporation into Existing Planning Mechanisms

Requirement §:201.6(c)(4)(iii): [The plan shall include a process by which local governments incorporate the requirements of the mitigation plan into other planning mechanisms such as comprehensive or capital improvement plans, when appropriate.

The MDCC HMPC will facilitate meetings with stakeholder groups, as outlined in the subsequent section, to ensure the College's mitigation goals and objectives are met on all levels of planning. The process of creating the MDCC Hazard Mitigation Plan greatly enhanced the awareness of other public risks and threat assessments; therefore, understanding the need for a Crisis Response Plan. The planning process helped to educate/train the faculty/staff involved in the plans.

5.3 Continued Public Involvement

Requirement §:201.6(c)(4)(iii): The plan maintenance process shall include a discussion on how the community will continue public participation in the plan maintenance process.

In an effort to strive to reach out to stakeholder groups and citizens, the MDCC HMPC will conduct annual meetings to address specific concerns regarding mitigation strategies and planning. The intent of these meetings is to provide an opportunity to strengthen partnerships and leverage resources throughout the MDCC community.

During the next five years, MDCC has identified the following agencies that they would like to pursue, in an effort, to increase awareness of capabilities and partnerships. This listing is not inclusive of all the agencies they are interested in pursuing but rather a starting point.

- Mississippi State Department of Health, Bureau of Emergency Planning and Response District 3 Office
- Mississippi Emergency Management Agency
- · Leflore, Sunflower, and Washington County Emergency Management Agencies
- Local Responders (Fire, Police, Medial, etc.)
- American Red Cross

<u>Table 5-1</u> below was developed to assist MDCC in documenting any public/agency involvement activities for this plan cycle, as well as provide valuable information that will be needed in future updates.

	Table 5-1: Public	Involvement Activities
Date	Event	Results
Annually	Gas Safety Meeting	Acquaint, Identify, Plan
Annually	Supervisor Training	Discuss policies, procedures, practices
Quarterly	Fire Drills	Good participation
Tri-Annually	Gas Safety Seminar	August, September, November
2/15/22	Fire Safety	Womens Residence Hall – Good participation
2/16/22	Campus Safety Seminar	Men and Women Residents
2/16/22	Safety Seminar	Welding Students
2/21/22	Fire Safety	Mens Residence Hall
2/23/22	Fire Safety	Greenwood Center
2/24/22	Safety Seminar & Crisis Response Team Drill	All Faculty – Slips, trips, and falls
3/2/22	CTE Safety Seminar	Career Tech Students
3/3/22	Fire Safety	Greenville Higher Ed. Center – Good Participation
3/8/22	Fire Safety	Capp Center - Good Participation
3/27/22	Crisis Response Plan Review	
7/13/22	Fire Safety Plan Meeting	MDCC Officers – Good Participation
4/04/22	General Planning Session	MDCC Senior Leadership Group for Hazard Mitigation Planning. Established update process and timelines.
4/20/22 – 5/12/22	Strategic Planning Session	Hazard Mitigation Planning Council Meeting: The meeting focused on the adoption of the mission plan statement, progress made on the revision of hazard risk assessment, discussion of mitigation goals with action assignments, and review and approval of the outreach methods.
6/6/22	Solicitation of Input – Planning Survey	The MDCC Hazard Mitigation Planning Survey was prepared and disseminated on the College website, Facebook, and via email links from the College President to students, faculty, staff, and the public. Participation was beneficial; valuable input was received through significant involvement.
6/6/22 – 6/30/22	Progress Report & Solicitation of Input	MDCC Board of Trustees (Governing Board). The Senior Leadership Group presented an update. Board members provided verbal feedback in addition to completing the planning survey.

6/6/22 – 6/30/22	Draft Plan Dissemination, Review & Public Input	The purpose of the review was to give students, faculty, staff, and the public an opportunity to review the plan, and to incorporate input, prior to plan adoption. A total of 38 individuals provided feedback regarding the draft plan via the online survey. More than 300 people viewed the MDCC Hazard Mitigation Plan Draft. All internal and external constituents were given an opportunity to provide suggestions via an online survey.
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Appendices

APPENDIX A	Documentation from all MDCC Committee Meetings
APPENDIX B	Public Outreach and Input Information
APPENDIX C	Schedule of General Property Values
APPENDIX D	Gas Line Upgrade Map
APPENDIX F	MDCC Plan Maintenance Worksheet

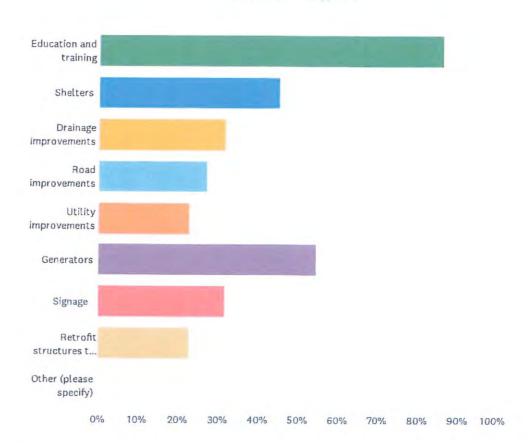
Q7 Of the natural and manmade hazards listed in the two previous questions, what one hazard presents the greatest risk to MDCC?

Answered: 22 Skipped: 0

#	RESPONSES	DATE
1	Fire and rescue	6/21/2022 9:34 AM
2	Tornado	6/20/2022 8:54 AM
3	Fire/Arson	6/14/2022 11:04 AM
4	Fire	6/13/2022 7:16 PM
5	paper copy – no response	6/9/2022 3:14 PM
6	cyber	6/9/2022 3:13 PM
7	pandemic	6/9/2022 3:11 PM
8	earthquake	6/9/2022 3:10 PM
9	paper copy - no response	6/9/2022 3:07 PM
10	pandemic	6/9/2022 3:06 PM
11	criminal	6/9/2022 3:05 PM
12	personnel	6/9/2022 3:03 PM
13	no response	6/9/2022 3:02 PM
14	tomado flooding	6/9/2022 3:01 PM
15	tornado	6/9/2022 2:59 PM
16	cyber security	6/9/2022 2:53 PM
17	cyber attack	6/9/2022 2:52 PM
18	terrorism	6/9/2022 2:50 PM
19	no response	6/9/2022 2:48 PM
20	Arson	6/7/2022 1:26 PM
21	Arson	6/7/2022 1:22 PM
22	Damage from high winds or tomado.	6/7/2022 11:39 AM

Q8 To better prepare for natural and manmade disasters, what steps should MDCC consider taking? Check all that apply.





ANSWER CHOICES	RESPONSES	
Education and training	86.36%	19
Shelters	45.45%	10
Drainage improvements	31.82%	7
Road improvements	27.27%	6
Utility improvements	22.73%	5
Generators	54.55%	12
Signage	31.82%	7
Retrofit structures to current/higher building codes	22.73%	5
Other (please specify)	0.00%	0
Total Respondents: 22		
# OTHER (PLEASE SPECIFY)	DATE	

Administrative Services | HAZARD MITIGATION PUBLIC SURVEY

There are no responses.

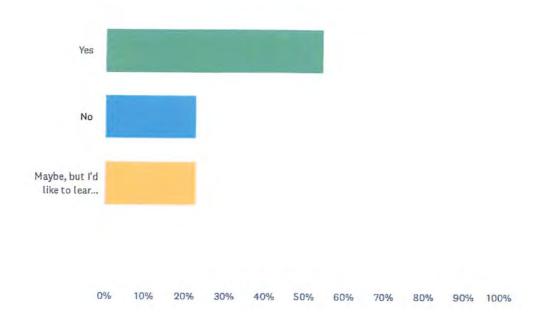
Q9 In the space below, please list any challenges or situations that may negatively affect MDCC's emergency preparedness and/or response.

Answered 22 Skipped 0

# 1	RESPONSES fire personnel In regards to extended power outages due to Tornadoes. Generators are needed, but funding would be a challenge.	DATE 6/21/2022 9:34 AM 6/20/2022 8:54 AM
	In regards to extended power outages due to Tornadoes. Generators are needed, but funding	
2		6/20/2022 8·54 AM
2	3-1	0/20/2022 8.34 AIVI
3	During this time, there are no negative effects concerning MDCC's emergency preparedness response.	6/14/2022 11:04 AM
4	I don't know of any	6/13/2022 7:16 PM
5	better awareness of hazard mitigation plans	6/9/2022 3:14 PM
6	gap in communication	6/9/2022 3:13 PM
7	paper copy no response	6/9/2022 3:11 PM
8	paper copy no response	6/9/2022 3:10 PM
9	none	6/9/2022 3:07 PM
10	paper copy no response	6/9/2022 3:06 PM
11	lack of training and knowledge of safe places	6/9/2022 3:05 PM
12	paper copy no response	6/9/2022 3:03 PM
13	paper copy no response	6/9/2022 3:02 PM
14	communication, evacuation of dorms	6/9/2022 3:01 PM
15	congestion upon evacuation	6/9/2022 2:59 PM
16	no response	6/9/2022 2:53 PM
17	not having an evacuation plan and not enforcing it	6/9/2022 2:52 PM
18	money	6/9/2022 2:50 PM
19	NA	6/9/2022 2:48 PM
20	Not enough education and no plan	6/7/2022 1:26 PM
21	None	6/7/2022 1:22 PM
22	Students not knowing what to do or where to go. Not receiving notification or not signing up for them.	6/7/2022 11:39 AM

Q10 Would you be willing to meet and discuss disaster risks as part of MDCC's hazard mitigation planning process?





ANSWER CHOICES	RESPONSES	
Yes	54.55%	12
No	22.73%	5
Maybe, but I'd like to learn more first.	22.73%	5
	0.00%	0
TOTAL		22
# FDC	d	

FDS DATE

There are no responses.

Q11 OPTIONAL: If you would like to participate in meetings or just stay informed about MDCC's hazard mitigation efforts, please provide contact information.

Answered: 11 Skipped: 11

ANSWI	ER CHOICES	RESPONSES	
Name		100.00%	11
Job Titl	9	36.36%	4
Organiz		27.27%	3
Address	5 2	0.00%	0
City/Tov	wn	36.36%	4
State/P	rovince	0.00%	0
ZIP/Pos	stal Code	0.00%	0
Country		0.00%	0
Email A	ddress	36.36%	4
Phone N	Number	36.36%	4
#	NAME		DATE
1	Orlando		6/21/2022 9:34 AM
2	George Holland		6/14/2022 11:04 AM
3	mitch ramage		6/13/2022 7:16 PM
4	Board Member left blank		6/9/2022 3:14 PM
5	Board Member – left blank		6/9/2022 3:13 PM
6	Board Member – left blank		6/9/2022 3:11 PM
7	Board Member left blank		6/9/2022 3:10 PM
8	Board Member left blank		6/9/2022 3:06 PM
9	Board Member left blank		6/9/2022 3:05 PM
10	Frank Dantone		6/9/2022 2:50 PM
11	Board Member who left this blank		6/9/2022 2:48 PM
#	JOB TITLE		DATE
1	Chief		6/21/2022 9:34 AM
2	Mayor		6/14/2022 11:04 AM
3	EMA Director/Fire Coordinator		6/13/2022 7:16 PM
4	Trustee		6/9/2022 2:50 PM
#	ORGANIZATION		DATE
1	Indianola Fire Department		6/21/2022 9:34 AM

Administrative Services | HAZARD MITIGATION PUBLIC SURVEY

2	City of Moorhead	6/14/2022 11:04 AM
3	Sunflower County EMA/Fire	6/13/2022 7:16 PM
#	ADDRESS 2	DATE
	There are no responses.	
#	CITY/TOWN	DATE
1	Indianola	6/21/2022 9:34 AM
2	Moorhead	6/14/2022 11:04 AM
3	Indianola	6/13/2022 7:16 PM
4	Greenville	6/9/2022 2:50 PM
#	STATE/PROVINCE	DATE
	There are no responses,	
#	ZIP/POSTAL CODE	DATE
	There are no responses.	
#	COUNTRY	DATE
	There are no responses.	
#	EMAIL ADDRESS	DATE
1	firechief@indianolams.gov	6/21/2022 9:34 AM
2	geoholland50@yahoo.com	6/14/2022 11:04 AM
3	emadirector@sunflowerms.net	6/13/2022 7:16 PM
4	fjd@dhpa.com	6/9/2022 2:50 PM
#	PHONE NUMBER	DATE
1	6622077157	6/21/2022 9:34 AM
2	662-207-5380	6/14/2022 11:04 AM
3	6622076415	6/13/2022 7:16 PM
4	662-820-5523	6/9/2022 2:50 PM

Administrative Services | HAZARD MITIGATION PUBLIC SURVEY

Q12 Is there anything else you would like us to know about hazard mitigation?

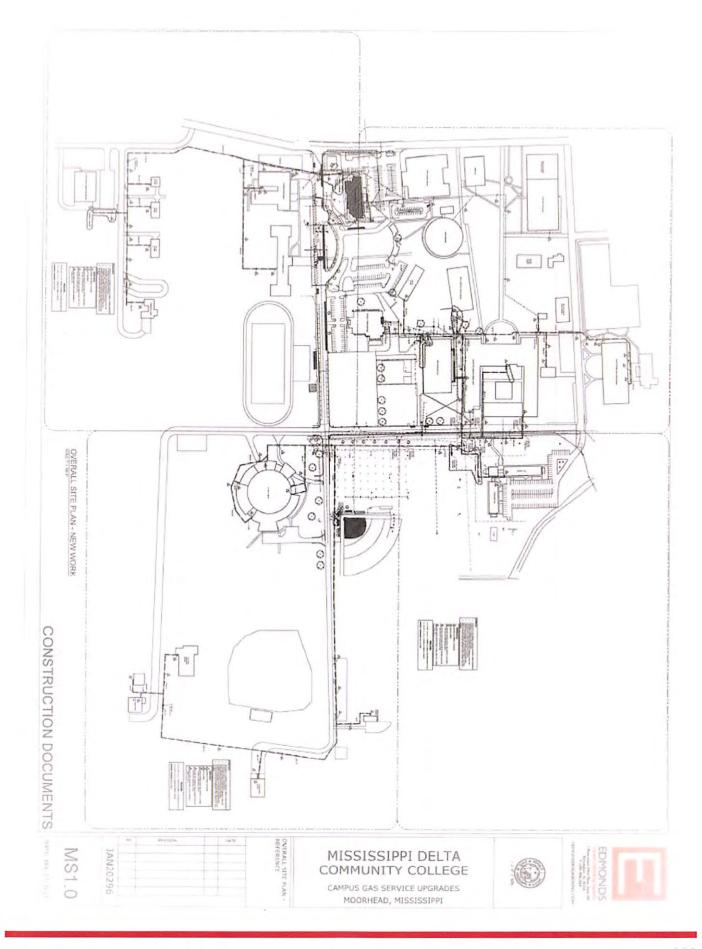
Answered: 4 Skipped: 18

#	RESPONSES	DATE
1	There is no additional information at this time.	6/14/2022 11:04 AM
2	N/A	6/13/2022 7:16 PM
3	No	6/7/2022 1:26 PM
4	Thank you for being concerned enough to plan for things that could happen.	6/7/2022 11:39 AM

Nexsure Policy Scheduled Items Date: 2/8/23

Page 1

Loc	Bldg	Description	Address	City	Subj	Value
1	1	CTE Class Rooms	106 Sturdivant St	Moorhead	В	8603103
1	1	CTE Class Rooms	106 Sturdivant St	Moorhead	BPP	4000000
1	2	Industrial Maint	311 Cherry St.	Moorhead	В	102000
1	2	Industrial Maint	311 Cherry St.	Moorhead	BPP	275000
1	3	Auto Repair Classrooms	106(A) Sturdivant St.	Moorhead	В	1844179
1	3	Auto Repair Classrooms	106(A) Sturdivant St.	Moorhead	BPP	250000
1	4	Special Pops Classroom	106(B) Sturdivant St.	Moorhead	В	630206
1	4	Special Pops Classroom	106(B) Sturdivant St.	Moorhead	BPP	100000
1	5	Henderson Hall	108 Sturdivant St.	Moorhead	В	4313271
1	5	Henderson Hall	108 Sturdivant St.	Moorhead	BPP	1500000
1	6	Boggs Scroggins Fine Art	289 Cherry St.	Moorhead	В	6861908
1	6	Boggs Scroggins Fine Art	289 Cherry St.	Moorhead	BPP	2050000
1	7	Greer-Stafford Allied Health	312 Cherry St.	Moorhead	В	3985525
1	7	Greer-Stafford Allied Health	312 Cherry St.	Moorhead	BPP	1615000
1	8	J.T. Hall Coliseum	129 Sturdivant St.	Moorhead	В	9477195
1	8	J.T. Hall Coliseum	129 Sturdivant St.	Moorhead	BPP	650000
1	9	Horton Science	420 B Olive Street	Moorhead	В	6517969
1	9	Hortan Science	420 B Olive St.	Moorhead	BPP	1015000
1	10	Snowden	420 A Olive St.	Moorhead	В	271400
1	10	Snowden	420 A Olive St.	Moorhead	BPP	80000
1	11	Stanny Sanders Library	418 Olive St	Moorhead	В	5697423
1	11	Stanny Sander Library	418 Olive St.	Moorhead	BPP	3735000
1	12	Library plant & Bolier	418 A Olive St.	Moorhead	В	128277
1	12	Library plant & Boiler	418 A Olive St.	Moorhead	BPP	5000
1	13	Tanner Hall	420 Olive St.	Moorhead	В	2717358
1	13	Tanner Hall	420 Olive St.	Moorhead	BPP	335000
1	14	Herman A. Thigpen Cafeteria	113 Lucas St.	Moorhead	В	2333723
1	14	Herman A. Thigpen Cafeteria	113 Lucas St.	Moorhead	BPP	335000
1	15	Police Academy/LETA	100 Lucas St.	Moorhead	В	2139349
1	15	Police Academy/LETA	100 Lucas St.	Moorhead	BPP	110000
1	16	Edwards-Stonestreet	105 Sturdivant St.	Moorhead	В	4350192
1	16	Edwards-Stonestreet	105 Sturdivant St.	Moorhead	BPP	425000



Appendix E: Plan Implementation Worksheet

Action	Current ASU	Proposed,	%	Funding	Completion	Comments
Measure Number	Committee Priority	Active, Complete, or On-going	Complete	Status	Date	Comments
	110					

Homeland Preparedness & Security, LLC

Consulting / Planning / Training Kent W. Buckley, MCEM



MDCC Preliminary Kick-off Meeting March 28, 2022

Location: Via conference call

Attendees: Dr. Steven Jones, MDCC; Amber Clincy, MEMA; Kent Buckley, Homeland

Preparedness & Security, LLC.

Purpose: To inform Dr. Jones how the plan will be updated: Homeland Preparedness & Security,

LLC will be responsible for updating the plan, but the information will come through MDCC. During the meeting Dr. Jones established himself as the contact person for information exchange to Homeland Preparedness & Security, LLC. Amber Clincy reviewed the grant requirements including reporting updates. The first on campus

meetings is set for April 4, 2022.

1. Welcome & introduction

- 2. Review of plan process
- 3. Establish contact for information exchange
- 4. Set date for HMPC campus meeting



MDCC Hazard Mitigation Planning Meeting April 4, 2022 AGENDA

- 1. Introductions
- 2. Power Point Overview of Plan Process
- 3. Discussion of Hazard & Risk Analysis Sheet/List
- 4. Plan process will review buildings & needs
- 5. Plan will reflect potential mitigation actions/priorities
- 6. Public input of Risks & Hazards
- 7. Later public input on Draft Plan
- 8. Other discussion
- 9. Adjourn meeting

Hazard Mitigation Plan Meeting Mississippi Delta Community College April 4, 2022

Sign-In Roster

Church Marguen	Trisa Welster
Morey Region Rodger	Gerdyn Helen
DAVID Tollerel	
Jay Mare	
Skeen Jones	
1 2 2 3	
Ceffe Ca	



MDCC Hazard Mitigation Planning Meeting April 4th Minutes

Dr Steven Jones opened the meeting by introducing Kent Buckley, Homeland Preparedness & Security, LLC

Kent Buckley presented a powerpoint on the planning process
How the planning process works
The community and public has to be involved
Will use survey monkey for community and public input

The hazard mitigation worksheet was reviewed and revised

Decision was made to add three hazards to the identification worksheet – arson, cyber, pandemic

Floor was opened for questions

Adjourn meeting



MDCC Hazard Mitigation Planning Meeting AGENDA June 6, 2022

- 1. Introductions
- 2. Discuss Survey Monkey Results for 1st Survey
- 3. Discussion of Questions for Next Survey Monkey
- 4. Discuss Cyber Threat Losses?
- 5. Discuss potential mitigation actions/priorities and collect documentation from prior actions
- 6. Other discussion
- 7. Adjourn meeting



MDCC Hazard Mitigation Planning Workshop MDCC Campus, Moorhead, MS June 6, 2022

Name:	Title:
Carolyn Weller	Con suetant
Kent Brickles	Consultant
Swid Sufford	FACILITYS DIRECTOR
Gary Hays Jr. Come Stere	Public Relations
Torrey Moore	IT Director
Markeicus Hibbler	Chief of Police



MDCC Hazard Mitigation Planning Workshop MDCC Campus, Moorhead, MS June 6, 2022

Name:	Title:
Melaney Emerson	Director & PR
Steven Fores	UP of Admin & Stade & Server
Kate Failing	Dean of Planing 5' Assessive.
BFN CLOYD	UP OF EFFECTUNES, & FURNILLMAS



MDCC Hazard Mitigation Planning Meeting

June 6, 2022 Minutes

Dr Steven Jones opened the meeting by explaining the purpose of the meeting.

Kent Buckley presented the findings of the first survey monkey results.

Questions for the second and final public meeting/survey monkey were discussed. Also, discussed were ways of communicating to the public about the survey monkey and plan review.

The plan draft will be sent in a link for review and input.

Cyber Threat losses were discussed with the IT Director.

Mitigation goals, objectives and actions were discussed.

The Crisis Response Plan/Team was discussed

Floor was opened for questions

Adjourn meeting



MS Delta Community College Help

1 message

Kent Buckley <kbuckleyllc@gmail.com>
To: rtrainer@live.com

Mon, Jun 13, 2022 at 12:46 PM

Dear Chief,

We are updating/revising the Hazard Mitigation Plan for Mississippi Delta Community College. This is a five year update and we are seeking the required input of public officials and responders in the MDCC area. Please take a few moments to answer a short twelve question survey for this plan. The Survey Monkey link is https://www.surveymonkey.com/r/HazardInputPublicAY22 and we also have a link to the draft plan for you to review if you would like. The plan link is https://www.msdelta.edu/campus-safety/docs/mdcc-hazard-mitigation-plan-2022-draft-lr.pdf

We thank you for helping the college by taking the short survey and we thank you for your service to the community.

Respectfully,

Kent W. Buckley, MCEM
Homeland Preparedness & Security, LLC
Consulting - Planning - Training
200 Overland Lane
Brandon, MS 39047
662-719-7184





MS Delta Community College Assistance

1 message

Kent Buckley <kbuckleyllc@gmail.com> To: leflore42so1@yahoo.com

Mon, Jun 13, 2022 at 12:04 PM

Dear Sheriff Banks.

We are updating/revising the Hazard Mitigation Plan for Mississippi Delta Community College. This is a five year update and we are seeking the required input of public officials and responders in the MDCC area. Please take a few moments to answer a short twelve question survey for this plan. The Survey Monkey link is https://www.surveymonkey.com/r/HazardInputPublicAY22 and we also have a link to the draft plan for you to review if you would like. The plan link is https://www.msdelta.edu/campus-safety/docs/mdcc-hazard-mitigation-plan-2022-draft-lr.pdf

We thank you for helping the college by taking the short survey and we thank you for your service to the community.

Respectfully,

Kent W. Buckley, MCEM Homeland Preparedness & Security, LLC Consulting - Planning - Training 200 Overland Lane Brandon, MS 39047 662-719-7184







to me, Kate, Steven, Carolyn

Mr. Buckley,

I've uploaded the draft to our web server, so you can share the PDF via this link: https://www.msdelta.edu/campus-safety/docs/mdcc-hazard-mitigation-plan-2022-draft-lr.pdf

Melaney S. Emerson

Director of Public Relations
Mississippi Delta Community College
memerson@msdelta.edu
662.246.6456
msdelta.edu

From: Kent Buckley < kbuckleyllc@gmail.com>
Date: Wednesday, June 8, 2022 at 8:30 AM

To: Kate Failing < kfailing@msdelta.edu >, Melaney Emerson

<memerson@msdelta.edu>

Cc: Steven Jones <siones@msdelta.edu>, Carolyn Nelson <cnelson1974@gmail.com>

Subject: MDCC

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

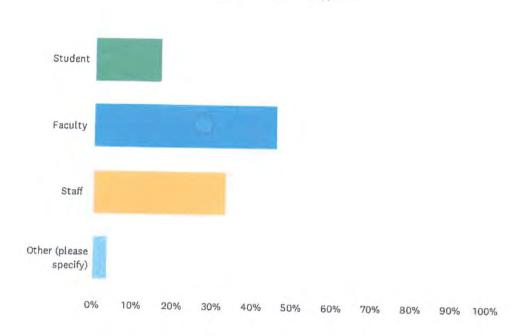
Good morning, everyone. Attached is the working draft of the plan to be used on the link so that others can view the plan if they wish.

Respectfully.

Kent W. Buckley, MCEM Homeland Preparedness & Security, LLC Consulting - Planning - Training 200 Overland Lane Brandon, MS 39047 662-719-7184

Q1 What is your current role with MS Delta Community College?

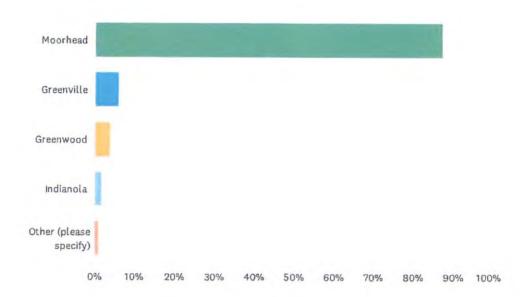




NENA	ER CHOICES	RESPONSES	
Studer	rt .	16.67%	17
Faculty	1	46.08%	47
Staff		33.33%	34
Other (please specify)	3.92%	4
TOTAL			102
#	OTHER (PLEASE SPECIFY)		DATE
1	Alumni		5/9/2022 5:27 PM
2	Alumni		5/9/2022 1:22 PM
3	Director Facilitys Management		4/20/2022 12:36 PM
4	Administration		4/20/2022 12:36 PM

Q2 At what location do you work or take classes?

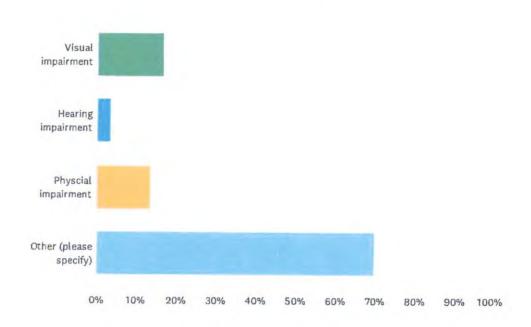
Answered: 102 Skipped: 0



ANSWER CHOICES	RESPONSES		
Moorhead	87.25%	89	
Greenville	5.88%	6	
Greenwood	3.92%	4	
Indianola	1.96%	2	
Other (please specify)	0.98%	1	
TOTAL		102	
# OTHER (PLEASE SPECIFY)		DATE	
1 Online		5/12/2022 3:20 PM	

Q3 Do any of the following functional limitations apply to you?

Answered: 30 Skipped: 72



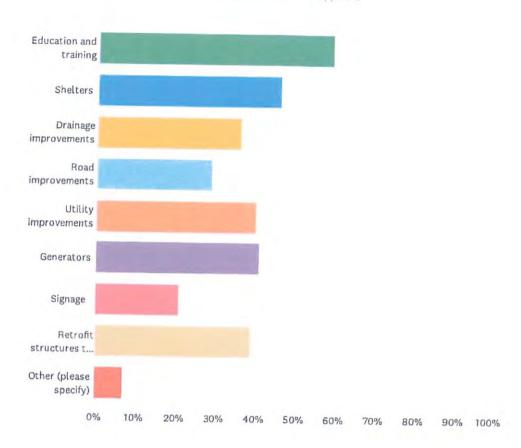
ANSWER CHOICES	RESPONSES	
Visual impairment	16.67%	5
Hearing impairment	3.33%	1
Physcial impairment	13.33%	4
Other (please specify)	70.00%	21
Total Respondents: 30		

#	OTHER (PLEASE SPECIFY)	DATE
1	No	5/12/2022 10:25 AM
2	none	5/12/2022 10:25 AM
3	None	5/10/2022 12:42 PM
4	Neither	5/4/2022 4:06 PM
5	None	5/4/2022 3:45 PM
6	NA	5/4/2022 3:44 PM
7	Issues standing/walking for longer than 15 minutes	4/27/2022 8:40 AM
8	n/a	4/21/2022 9:00 AM
9	no	4/20/2022 2:22 PM
10	None	4/20/2022 1:26 PM
11	None	4/20/2022 1:23 PM

12	N/A	4/20/2022 12:44 PM
13	None	4/20/2022 12:36 PM
14	n/A	4/20/2022 12:30 PM
15	NA	4/20/2022 12:25 PM
16	none	4/20/2022 11:45 AM
17	none	4/20/2022 11:30 AM
18	N/A	4/20/2022 11:01 AM
19	No	4/20/2022 10:54 AM
20	none	4/20/2022 10:40 AM
21	None	4/20/2022 10:33 AM

Q9 To better prepare for natural and manmade disasters, what steps should MDCC consider taking? Check all that apply.





ANSWER CHOICES	RESPONSES	
Education and training	59.00%	59
Shelters	46.00%	46
Drainage improvements	36.00%	36
Road improvements	29.00%	29
Utility improvements	40.00%	40
Generators	41.00%	41
Signage	21.00%	21
Retrofit structures to current/higher building codes	39.00%	39
Other (please specify)	7.00%	7
Total Respondents: 100		

OTHER (PLEASE SPECIFY)

#

DATE

1	Communication	5/12/2022 10:25 AM
2	Plans	5/9/2022 5:27 PM
3	Plans	5/9/2022 1:22 PM
4	Yes	4/22/2022 10:26 AM
5	Screen the participants better who are coming in and out of the buildings.	4/20/2022 12:44 PM
6	For security, a staff member should be authorized to carry a firearm.	4/20/2022 11:45 AM
7	Building/structure repairs like roofs leaking and better security presence	4/20/2022 10:42 AM

Q10 Hazard Mitigation Planning helps us reduce their impact on Ife and property by preparing before they happen. List any challenges or situations at your MDCC location that might prevent employees or students from being prepared for emergencies.

Answered: 44 Skipped: 58

4/20/2022 12:07 PM

ANSWER (CHOICES	RESPONSES		
Challenge A	4	100.00%		44
Challenge E	3	56,82%		25
Challenge (36.36%		16
- · · · · · · · · · · · · · · · · · · ·				10
#	CHALLENGE A		DATE	
1	Not knowing the preparedness plan		5/12/2022 3:20 PM	
2	Not enough signage		5/12/2022 10:40 AM	
3	Communication		5/12/2022 10:25 AM	
4	Severe Weather shelter locations		5/12/2022 10:04 AM	
5	Multiple story buildings		5/10/2022 12:42 PM	
6	Vast amount of entrances and exits to my building, Horton		5/10/2022 9:43 AM	
7	the lack of getting information to everyone in the school		5/9/2022 7:27 PM	
8	Training more		5/9/2022 5:27 PM	
9	Training more		5/9/2022 1:22 PM	
10	Tornado warnings		5/4/2022 4:06 PM	
11	Lack of communication		5/4/2022 3:44 PM	
12	not being properly trained on how and where to evacuate		5/3/2022 2:08 PM	
13	Flooding - the MS Delta has this issue as a whole.		4/27/2022 8:40 AM	
14	Inadequate door locks in classrooms		4/25/2022 9:39 AM	
15	not being informed		4/24/2022 5:34 PM	
16	I do not know		4/22/2022 10:26 AM	
17	non-caring attitudes		4/21/2022 2:14 PM	
18	Only 1 parking lot exit at large Allied Health parking lot		4/21/2022 10:02 AM	
19	classes open during threatening weather conditions-could go virtua	ai	4/21/2022 9:00 AM	
20	lack of knowledge of emergency plans		4/21/2022 8:01 AM	
21	nothing		4/20/2022 2:22 PM	
22	None		4/20/2022 1:23 PM	
23	education on the procedures		4/20/2022 12:44 PM	
24	training		4/20/2022 12:25 PM	

Consistent MDCC alerts via text and email so that all employees and students are notified

25

simultaneously.

	•	
26	Not reading critical information to be informed.	4/20/2022 12:04 PM
27	lack of funding for capital improvements	4/20/2022 11:56 AM
28	Lack of alternative power	4/20/2022 11:45 AM
29	bomb threat	4/20/2022 11:43 AM
30	None	4/20/2022 11:40 AM
31	probably need funding for cybersecurity	4/20/2022 11:31 AM
32	old building	4/20/2022 11:28 AM
33	Lack of means	4/20/2022 11:27 AM
34	Finances	4/20/2022 11:19 AM
35	Not knowing what to do or where to go in case of an emergency	4/20/2022 11:16 AM
36	Drills	4/20/2022 11:01 AM
37	No Shelter	4/20/2022 10:55 AM
38	training needs to happen so everyone will be aware of what to do.	4/20/2022 10:54 AM
39	Early Contact	4/20/2022 10:49 AM
40	miscommunication	4/20/2022 10:41 AM
41	shootings	4/20/2022 10:37 AM
42	A place to shelter in place during bad weather.	4/20/2022 10:36 AM
43	none	4/20/2022 10:34 AM
44	communication	4/20/2022 10:33 AM
#	CHALLENGE B	DATE
1	not enough training	5/12/2022 10:40 AM
2	Properly functioning elevators	5/12/2022 10:04 AM
3	Poorly secure building	5/10/2022 9:43 AM
4	Frequent reviews	5/9/2022 5:27 PM
5	Frequent reviews	5/9/2022 1:22 PM
6	Flash Flood warnings	5/4/2022 4:06 PM
7	Lack of training for students	5/4/2022 3:44 PM
8	Is the building able to stand up to a tomado	4/25/2022 9:39 AM
9	not knowing what to do in an emergency	4/24/2022 5:34 PM
10	I do not know	4/22/2022 10:26 AM
11	Lack of student/faculty preparedness for natural disaster	4/21/2022 10:02 AM
12	driving to and from campus-most students commute.	4/21/2022 9:00 AM
13	lack of confidence in administration for decisions	4/21/2022 8:01 AM
14	None	4/20/2022 1:23 PM
15	shelter facilities	4/20/2022 12:25 PM
16	Not signing up for sever weather notifications when asked to do so.	4/20/2022 12:04 PM
17	tornado drill	4/20/2022 11:43 AM

1	18	lack of access to protection	4/20/2022 11:28 AM
1	19	Lack of technology	4/20/2022 11:27 AM
2	20	Alternative plans of instruction	4/20/2022 11:19 AM
2	21	Supplies/equipment	4/20/2022 11:01 AM
2	22	No sprinkler system	4/20/2022 10:55 AM
2	23	improper training	4/20/2022 10:41 AM
2	24	none	4/20/2022 10:34 AM
2	25	central locations	4/20/2022 10:33 AM
#	;	CHALLENGE C	DATE
1		not enough safe spaces	5/12/2022 10:40 AM
2	!	Handicap accessible doors	5/12/2022 10:04 AM
3	1	Lack of police presence at campus	5/10/2022 9:43 AM
4		Fire hazards	5/4/2022 4:06 PM
5	i	Lack of care to an intent	5/4/2022 3:44 PM
6		Are the students trained in emergency disaster responses?	4/25/2022 9:39 AM
7		I do not know	4/22/2022 10:26 AM
8		over-reactive administration in closing anytime a "threat" is predicted	4/21/2022 8:01 AM
9		None	4/20/2022 1:23 PM
1	0	equipment	4/20/2022 12:25 PM
1:	1	Depending on others to know what to do in case of emergencies instead of having first hand knowledge.	4/20/2022 12:04 PM
13	2	Poor internet connectivity	4/20/2022 11:19 AM
1:	3	Staff lack of knowledge	4/20/2022 11:01 AM
14	4	No notification alert	4/20/2022 10:55 AM
1!	5	building safety	4/20/2022 10:41 AM
16	5	none	4/20/2022 10:34 AM

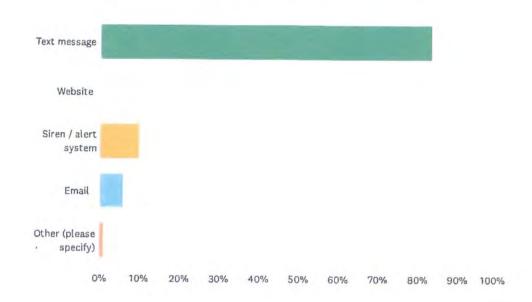
Q11 Is there anything else you would like us to know about hazard mitigation?

Answered, 24 Skipped 78

#	RESPONSES	DATE
1	No	5/12/2022 11:36 AM
2	Standing around waiting for a bomb threat is very dangerous, it leaves us open to gun attack or people using their cell phones to make calls during this time. We have had a situation like this in the past. Of course, no one drove by and starting shooting and no cell phones triggered bombs, but it seemed like the steps to move out of buildings to outside in the streets was just as dangerous as the bomb threat itself.	5/12/2022 10:40 AM
3	N/a	5/12/2022 10:25 AM
4	All around better communication	5/12/2022 10:25 AM
5	Nope	5/10/2022 12:42 PM
6	The continuity of security is an issue. The parking and proximity to buildings are unprotected and not in close range.	5/10/2022 9:43 AM
7	The specific training on how to act upon these certain hazard warnings.	5/4/2022 4:06 PM
8	Everything that would better campus life and safety!	5/4/2022 3:44 PM
9	Push button doors are not available at all buildings on the Moorhead campus for those with handicaps that may need them.	4/27/2022 8:40 AM
10	No	4/22/2022 10:26 AM
11	don't overcomplicate and distribute plans and correct information	4/21/2022 8:01 AM
12	no	4/20/2022 2:22 PM
13	None	4/20/2022 1:26 PM
14	NO	4/20/2022 12:25 PM
15	No	4/20/2022 12:04 PM
16	No	4/20/2022 11:45 AM
17	None	4/20/2022 11:40 AM
18	NA	4/20/2022 11:06 AM
19	NA	4/20/2022 11:01 AM
20	по	4/20/2022 10:54 AM
21	in case of an emergency our panic buttons should be responded to immediately and they should know the exact location.	4/20/2022 10:42 AM
22	no	4/20/2022 10:41 AM
23	no	4/20/2022 10:34 AM
24	No	4/20/2022 10:33 AM

Q4 For emergency notifications, how do you wish to be contacted?

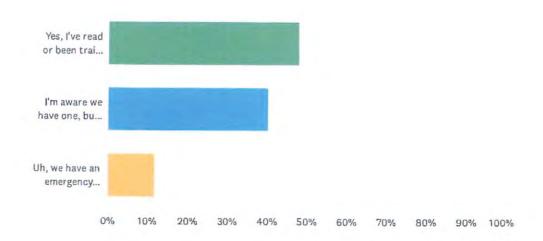




ANSWER CHOICES		RESPONSES		
Text me	essage	83.33%	85	
Website	e	0.00%	0	
Siren /	alert system	9.80%	10	
Email		5.88%	6	
Other (p	please specify)	0.98%	1	
TOTAL			102	
#	OTHER (PLEASE SPECIFY)		DATE	
1	both text message and email		4/20/2022 10:54 AM	

Q5 Are you familiar with the Campus Emergency Response Plan?

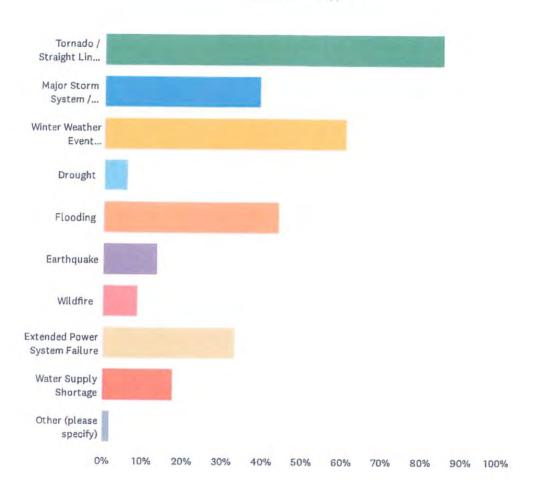
Answered: 102 Skipped: 0



ANSWER CHOICES	RESPONSES	
Yes, I've read or been trained on it.	48.04%	49
I'm aware we have one, but I'm not familiar with it.	40.20%	41
Uh, we have an emergency response plan?	11.76%	12
TOTAL		102

Q6 Which natural hazards concern you the most? Check all that apply.





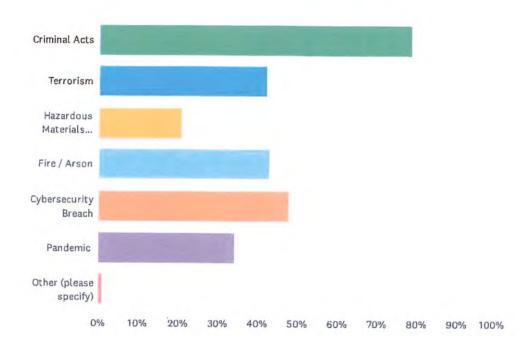
ANSWER CHOICES	RESPONSES	
Tornado / Straight Line Winds	85.29%	87
Major Storm System / Hurricane	39.22%	40
Winter Weather Event (ice/extreme cold/snow)	60.78%	62
Drought	5.88%	6
Flooding	44.12%	45
Earthquake	13.73%	14
Wildfire	8.82%	9
Extended Power System Failure	33,33%	34
Water Supply Shortage	17.65%	18
Other (please specify)	1.96%	2

#	OTHER (PLEASE SPECIFY)	DATE
1	really concerned about these	4/20/2022 1:44 PM
2	none	4/20/2022 12:30 PM

Total Respondents: 102

Q7 Which manmade hazards concern you the most? Check all that apply.

Answered: 102 Skipped: 0



ANSWER CHOICES RESPONSES		
Criminal Acts	78.43%	80
Terrorism	42.16%	43
Hazardous Materials Incident	20.59%	21
Fire / Arson	43.14%	44
Cybersecurity Breach	48.04%	49
Pandemic	34.31%	35
Other (please specify)	0.98%	1
Total Respondents: 102		

#	OTHER (PLEASE SPECIFY)	DATE
1	active shooter or bomb threat that would cause us to leave the buildings and then make us	5/12/2022 10:40 AM

Q8 Of the natural and manmade hazards listed in the two previous questions, which poses the greatest risk at your MDCC location?

Answered: 82 Skipped: 20

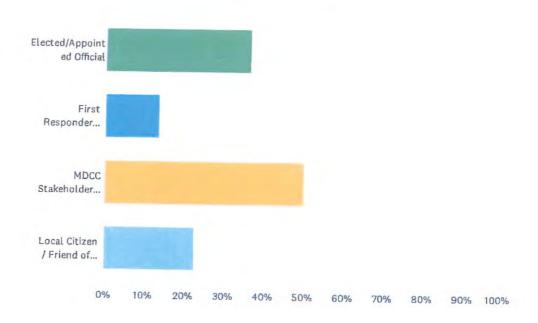
#	RESPONSES	DATE
1	Probably cybersecurity breach	5/12/2022 3:20 PM
2	Criminal acts	5/12/2022 1:01 PM
3	active shooter	5/12/2022 10:40 AM
4	Criminal acts	5/12/2022 10:39 AM
5	Pandemic and severe weather	5/12/2022 10:25 AM
6	Criminal Acts	5/12/2022 10:25 AM
7	Criminal Acts	5/12/2022 10:04 AM
8	I don't think any of those pose a great risk on my MDCC location.	5/11/2022 10:43 PM
9	Pandemic	5/11/2022 1:34 PM
10	pandemic & Tornado	5/10/2022 6:40 PM
11	Tomado	5/10/2022 12:42 PM
12	Fire and criminal	5/10/2022 9:43 AM
13	A school shooter	5/9/2022 9:25 PM
14	Fire/Arson and Criminal acts	5/9/2022 7:27 PM
15	criminal act and power system failure.	5/9/2022 5:57 PM
16	Arson	5/9/2022 5:27 PM
17	Arson	5/9/2022 1:22 PM
18	The inclement weather that could cause power damage on Campus.	5/4/2022 4:06 PM
19	On campus faculty.	5/4/2022 3:44 PM
20	criminal acts	5/3/2022 2:08 PM
21	Pandemic	4/29/2022 5:43 PM
22	Criminal acts (which includesd arson)	4/27/2022 8:40 AM
23	cybersecurity	4/26/2022 10:42 AM
24	criminal acts	4/25/2022 3:15 PM
25	Extended Power System Failure	4/25/2022 11:34 AM
26	Active shooter situation	4/25/2022 9:39 AM
27	cybersecurity breach	4/24/2022 5:34 PM
28	Tornado	4/22/2022 10:26 AM
29	Tornado and major storm system	4/21/2022 2:29 PM
30	tornado Winter weather	4/21/2022 2:14 PM
31	Storm systems and cybersecurity breach.	4/21/2022 10:02 AM

32	Storms and pandemic.	4/21/2022 9:57 AM
33	weather-including tornado/extreme winds and ice/snow	4/21/2022 9:00 AM
34	Weather notices including tomadoes and severe storms. MDCC often time disregard the offsite campuses weather situations. We are not dismissed in a timely manner to make it safely home.	4/21/2022 8:41 AM
35	weather related	4/21/2022 8:01 AM
36	Power failure	4/20/2022 4:38 PM
37	Criminal Acts	4/20/2022 4:16 PM
38	pandemic	4/20/2022 2:22 PM
39	flooding and terrorism	4/20/2022 1:44 PM
40	Terrorism and major storm system/hurricane	4/20/2022 1:26 PM
41	Severe weather	4/20/2022 1:23 PM
42	Criminal Acts because of the number of ex criminals in the GED classes	4/20/2022 12:44 PM
43	Pandemic	4/20/2022 12:36 PM
44	criminal acts	4/20/2022 12:31 PM
45	I don't think any	4/20/2022 12:30 PM
46	flooding	4/20/2022 12:25 PM
47	Weather events seem increasingly unpredictable and more intense, and cybersecurity is the most pressing risk on a day to day basis.	4/20/2022 12:07 PM
48	Cybersecurity Breach	4/20/2022 12:04 PM
49	Cybersecurity breach or power outage	4/20/2022 11:56 AM
50	criminal acts	4/20/2022 11:45 AM
51	Tornado	4/20/2022 11:43 AM
52	Cybersecurity Breach	4/20/2022 11:40 AM
53	tornado and fire	4/20/2022 11:31 AM
54	Criminal Acts	4/20/2022 11:30 AM
55	Weather and Active Shooter	4/20/2022 11:28 AM
56	Terrorism	4/20/2022 11:27 AM
57	Tornado and cybersecurity breach	4/20/2022 11:22 AM
58	Severe weather	4/20/2022 11:20 AM
59	Weather related events Long term power outages	4/20/2022 11:19 AM
60	Pandemic & Winter Weather Event	4/20/2022 11:16 AM
61	NA	4/20/2022 11:06 AM
62	tomado	4/20/2022 11:05 AM
63	Flooding	4/20/2022 11:04 AM
64	Tornado	4/20/2022 11:04 AM
65	None	4/20/2022 11:01 AM
66	Tornado & Arson	4/20/2022 10:55 AM
67	I think the selected items in questions 6 and 7 could be equal risk.	4/20/2022 10:54 AM
68	Tomado/Straight Line Winds	4/20/2022 10:50 AM

• .		
69	Tornado/straight line winds and criminal acts	4/20/2022 10:43 AM
70	Criminal Acts	4/20/2022 10:42 AM
71	Tomado	4/20/2022 10:41 AM
72	Storms/Criminal Acts	4/20/2022 10:40 AM
73	storm	4/20/2022 10:40 AM
74	water	4/20/2022 10:37 AM
75	shootings	4/20/2022 10:37 AM
76	Both	4/20/2022 10:36 AM
7 7	Cyber breach & tornado	4/20/2022 10:36 AM
78	inclement weather	4/20/2022 10:35 AM
79	Cybersecurity Breach and Criminal Acts	4/20/2022 10:34 AM
80	None	4/20/2022 10:34 AM
81	criminal	4/20/2022 10:33 AM
82	Rain/winds	4/20/2022 10:33 AM

Q1 What is your current role with regard to MS Delta Community College? Check all that apply.



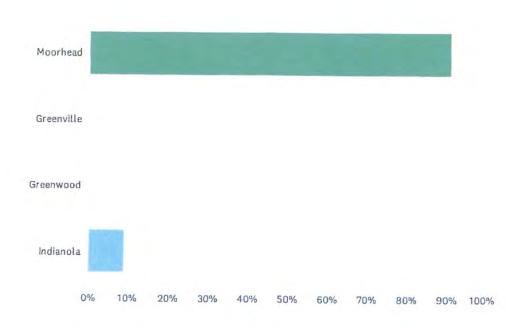


ANSWER CHOICES	RESPONSES	
Elected/Appointed Official	36.36%	8
First Responder (police, fire, medic, etc.)	13.64%	3
MDCC Stakeholder (trustee, alumnus, donor, etc)	50,00%	11
Local Citizen / Friend of MDCC	22.73%	5
Total Decondents: 22		

Total Respondents: 22

Q2 Which MDCC location are you most familiar with?

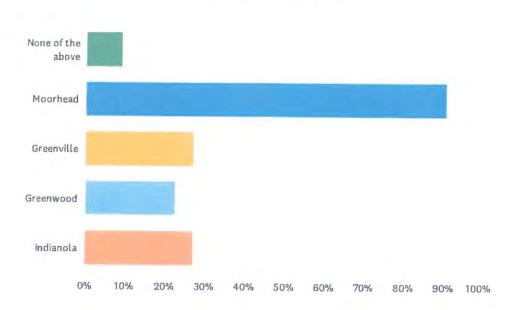




ANSWER CHOICES	RESPONSES	
Moorhead	90.91%	20
Greenville	0.00%	0
Greenwood	0.00%	0
Indianola	9.09%	2
TOTAL		22

Q3 Which MDCC location(s) have you visited in the past 12 months? Check all that apply.

Answered: 22 Skipped: 0

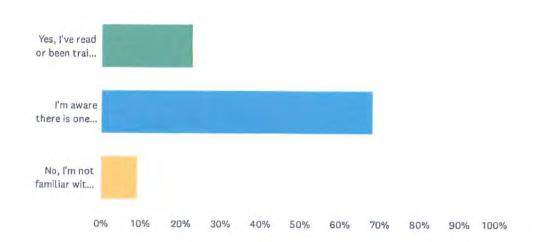


ANSWER CHOICES	RESPONSES	
None of the above	9.09%	2
Moorhead	90.91%	20
Greenville	27.27%	6
Greenwood	22.73%	5
Indianola	27.27%	6

Total Respondents: 22

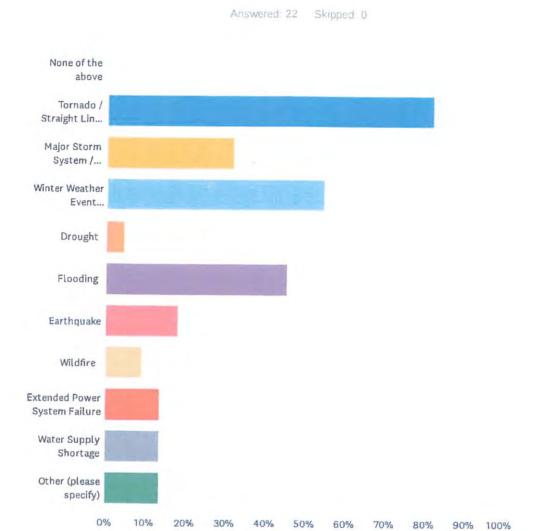
Q4 Are you familiar with the Campus Emergency Response Plan?





ANSWER CHOICES	RESPONSES	
Yes, I've read or been trained on it.	22.73%	5
I'm aware there is one, but I don't know it well.	68.18%	15
No, I'm not familiar with it.	9.09%	2
TOTAL		22

Q5 Which natural hazards concern you the most? Check all that apply.

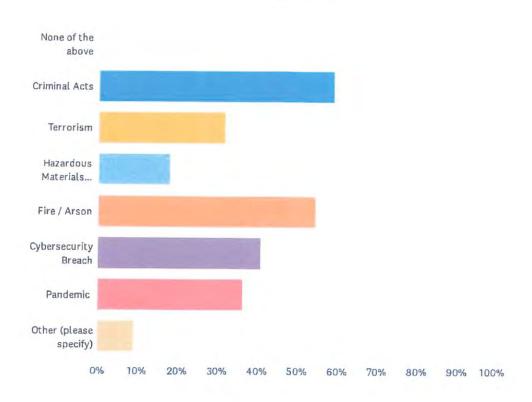


ANSWER CHOICES	RESPONSES	
None of the above	0.00%	0
Tornado / Straight Line Winds	81.82%	18
Major Storm System / Hurricane	31.82%	7
Winter Weather Event (ice/extreme cold/snow)	54.55%	12
Drought	4.55%	1
Flooding	45.45%	10
Earthquake	18.18%	4
Wildfire	9.09%	2
Extended Power System Failure	13.64%	3
Water Supply Shortage	13.64%	3
Other (please specify)	13.64%	3
Total Respondents: 22		

#	OTHER (PLEASE SPECIFY)	DATE
1	Fire and Rescue	6/21/2022 9:34 AM
2	paper copy – no response	6/9/2022 3:14 PM
3	paper copy no response	6/9/2022 3:02 PM

Q6 Which manmade hazards concern you the most? Check all that apply.





ANSW	ER CHOICES	RESPONSES	
None o	of the above	0.00%	0
Crimina	al Acts	59,09%	13
Terroris	sm	31.82%	7
Hazard	lous Materials Incident	18.18%	4
Fire / A	rson	54.55%	12
Cybers	ecurity Breach	40.91%	9
Pandemic		36.36%	8
Other (please specify)		9.09%	2
Total R	espondents: 22		
#	OTHER (PLEASE SPECIFY)	DATE	
1	paper copy - no response	6/9/2022	2 3:14 PM

2

paper copy - no response

6/9/2022 3:02 PM